



MATRIX

Basic

User Documentation

1073G-00-B3a -Version 3.7

EN

dormakaba 

dormakaba EAD GmbH

Albertistrasse 3

78056 Villingen-Schwenningen

Germany

www.dormakaba.com

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1 Introduction

dormakaba MATRIX is a web application for access control, attendance recording, time management and escape route security.

This user documentation describes and explains the operation of the basic module and the device administration of dormakaba MATRIX.

In the first part you will find examples and procedures for the most common tasks. The main body of the user documentation is aligned with the menu structure of the system module and device administration.

Note: The dialogs displayed in the user documentation contain all available options of the system. Depending on the licence and the activated options your dialogs may differ from the descriptions.

2 Getting started

Note: Setup, commissioning and maintenance of a MATRIX system must be performed by trained expert personnel.

If you have never worked with dormakaba MATRIX before, this section provides information on installing and starting the software.

It contains an introduction of the user interface and the necessary steps for creating a new system.

Tip: The menu structure of all modules in the system is set up in such a way that when you create a new system, you always work "from bottom to top". In this way, you form the structure of your data from the bottom upwards.

2.1 Installation and update

dormakaba MATRIX requires a web server and a database in addition to the actual application data. These are installed in your system together with MATRIX.

MATRIX is a multilingual application. The user interface is displayed in the language that corresponds to your browser's language setting. At the start of the installation, you select a language, which is then defined as the default language for the application. You can change the application language at any time using the browser's language settings. The default language is also used if no language package is available for the language set in the browser.

Further information on multilingual capability can be found under ► [Maintain multilingual systems](#).

System requirements

Please take note of the current system requirements. These can be found in the installation package in the "Documentation" folder.

Note: The latest Windows updates (service packs) must be present to enable MATRIX to be correctly installed.

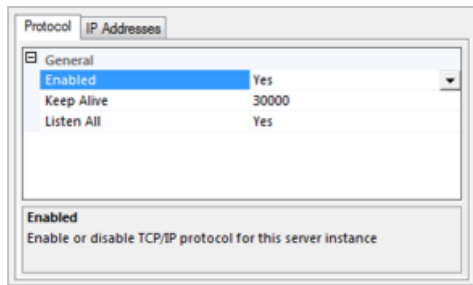
Preparation: Install the database on an existing SQL Server

Note: The following steps are only necessary if you would like to install MATRIX with an already-existing SQL Server which was not included with MATRIX.

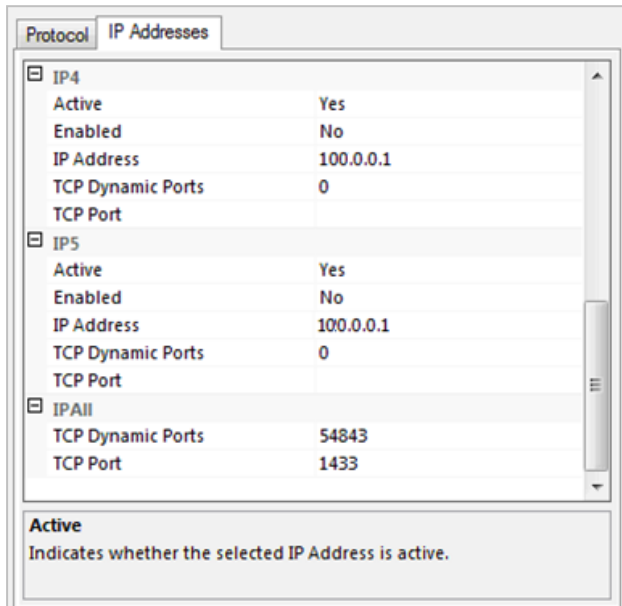
1. Run the **SQL Server Configuration Manager**. Based on the version, you can execute it using the command prompt with the following path:

SQL Server 2017	C:\Windows\SysWOW64\SQLServerManager14.msc
SQL Server 2016	C:\Windows\SysWOW64\SQLServerManager13.msc
SQL Server 2014 (12.x)	C:\Windows\SysWOW64\SQLServerManager12.msc
SQL Server 2012 (11.x)	C:\Windows\SysWOW64\SQLServerManager11.msc

2. Click the instance you require under '**SQL Server Network Configuration**' in the left-hand window.
3. Ensure that the **TCP/IP** option is selected in the right-hand area of the dialog field. If this is not the case, right-click to open the context menu for the applicable entry and select **Properties**. Select **Yes** under **Enabled**.



4. Select the **IP Addresses** tab in the TCP/IP properties to open the **TCP/IP properties** dialog.



5. The application requires that the named instance is configured in such a way that the TCP/IP protocol runs on a fixed port. Dynamic ports must be deactivated for this. The following settings must be configured:

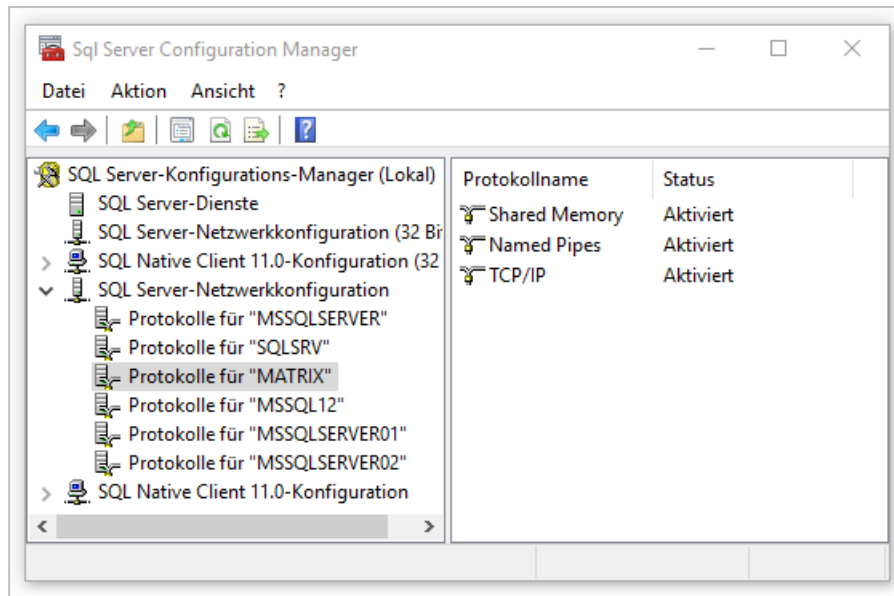
IPAll: TCP dynamic ports: (blank)

IPAll: TCP port: 1433

Warning: If another SQL server instance already uses port 1433, a different port, e.g. port 1533, must be selected.

Alternatively, dynamic ports can be used as well. To do so, the SQL server browser service must be started. MATRIX can establish the connection using the names of the stated instance.

6. Confirm with **OK**.
Once the settings have been configured, the dialog should appear as shown:



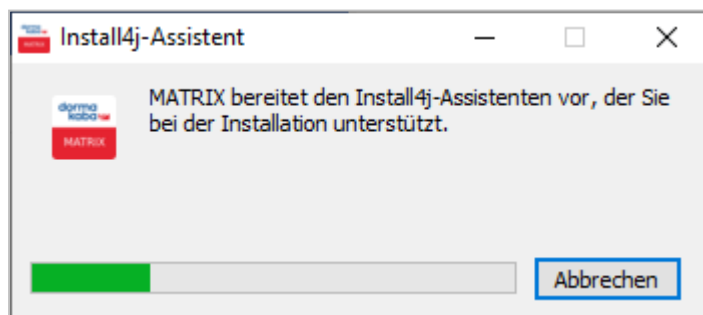
Note: If the setting had to be changed, the SQL server service needs to be restarted.

- dormakaba MATRIX can now be installed.
During the "Data retention" step of the installation, select "Use existing Microsoft SQL Server". Enter the port used in Step 5 when the database port is requested. If using dynamic ports, the name of the specified instance must be used instead of the port.

How to install dormakaba MATRIX on Microsoft® Windows®

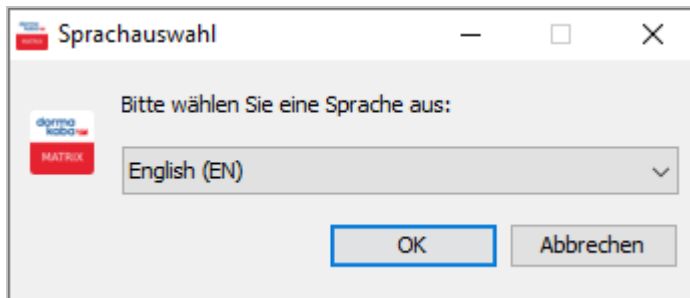
Note: The following section describes the installation of MATRIX. To install further additional applications at the same time, select the setup option using "install.exe" and follow the instructions given by the setup wizard.

- Open the installation package and run the file "MATRIX_PRO_windows_setup_x_x_x.exe", where x_x_x stands for the version number.
- The wizard initialises installation during the startup phase.

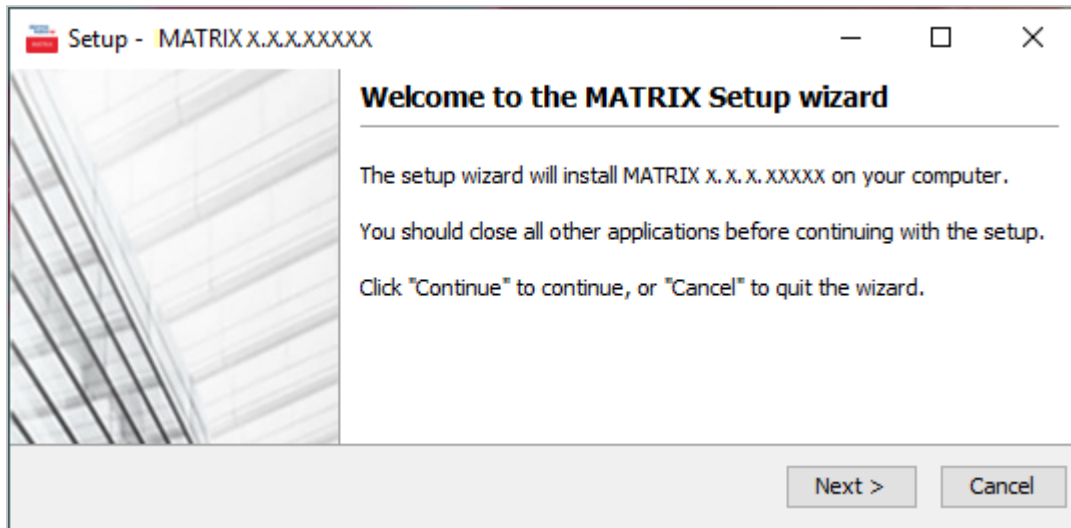


Please wait until this step is completed.

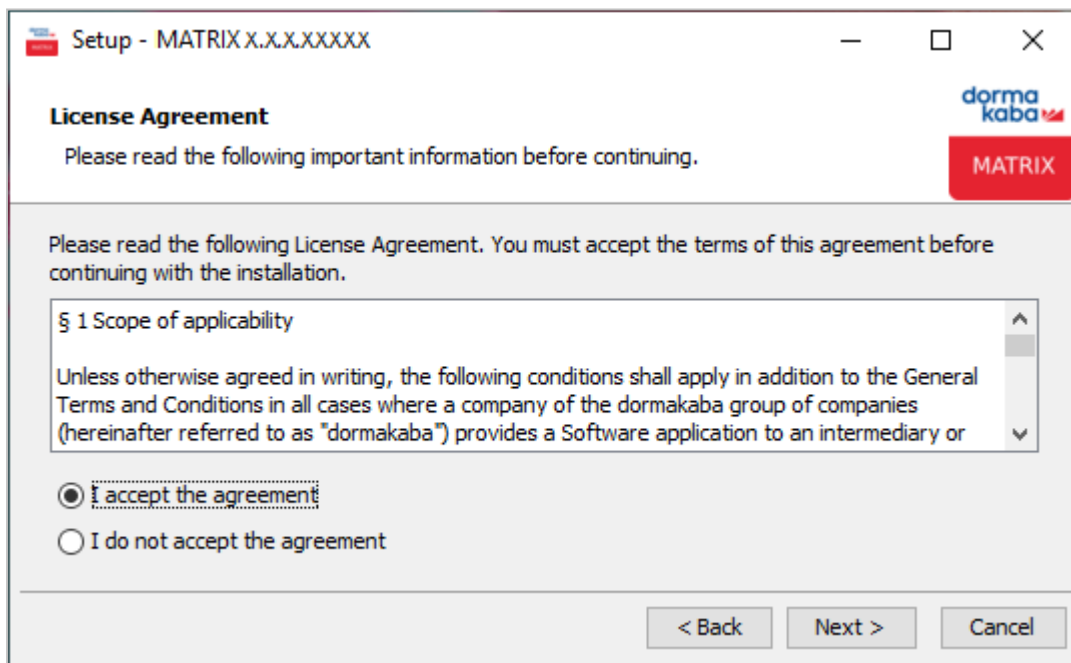
- Select a language version and click **OK**. The selected language is used for the rest of the installation and is also configured as the application's default language.



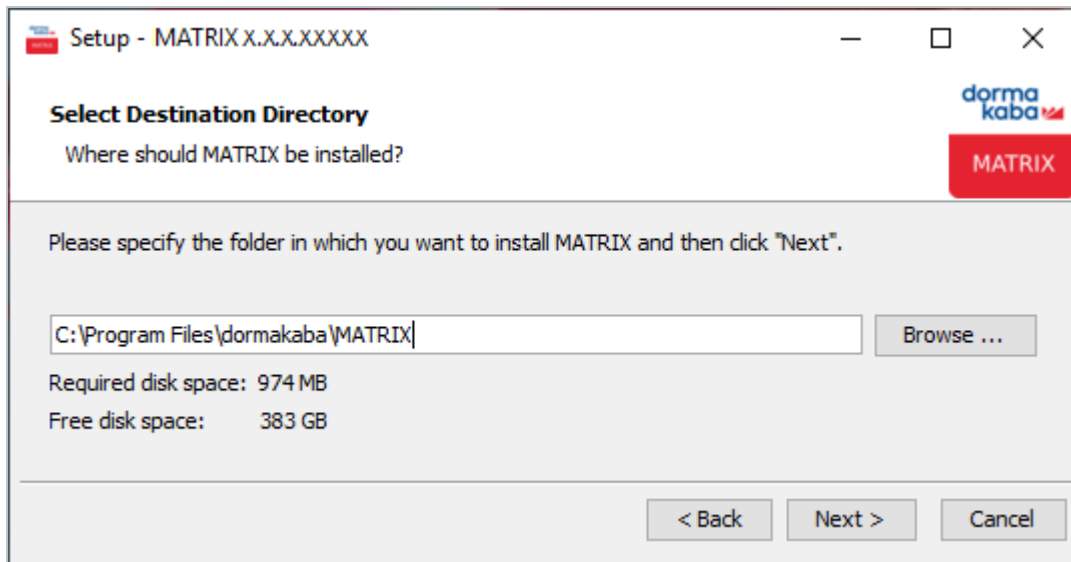
4. The set-up wizard will start. Click **Next**.



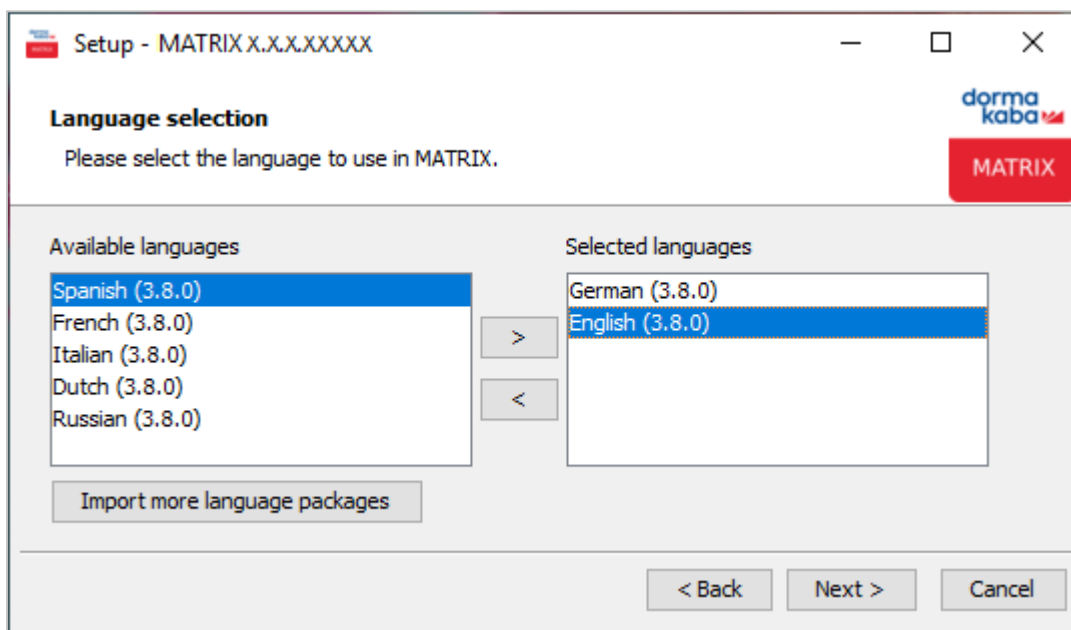
5. Read the licence agreement. Select the option **I accept the agreement**. Click **Next**.



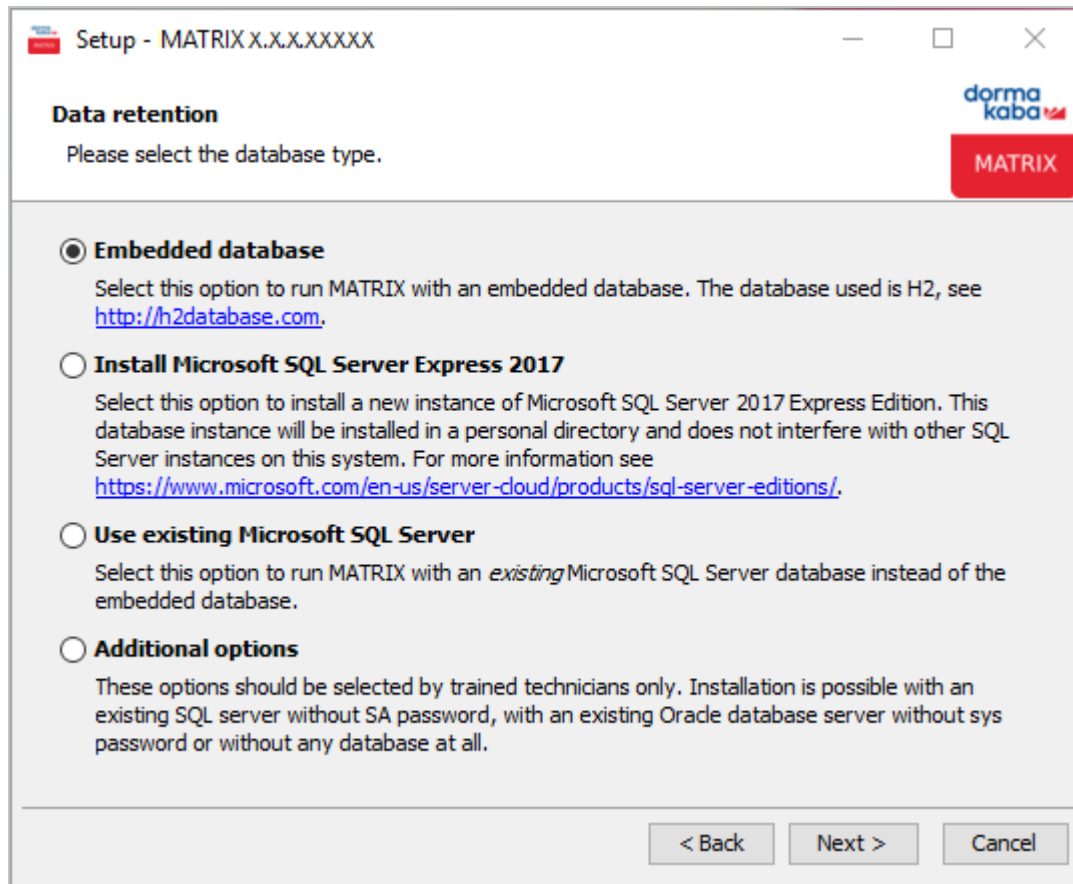
6. Select the target folder where you would like all application data to be installed. The default folder is "C:\Program Files\dormakaba\MATRIX\", but you can also select a different folder. Click **Next**.



7. Select the languages that should be available for the MATRIX user interface. These contain the online help systems for the respective language version, if available. German and English are installed by default; other languages can be added. Further language packages can be imported. Click **Next**.



8. Select the type of database with which you want to operate dormakaba MATRIX, and click **Next**.



Use existing Microsoft SQL Server: Connects to an existing SQL Server present on the system. The database must be empty.

- Enter either the host name or the IP of the SQL Server instance in the additional **Database configuration** dialog field. Notations including "\Instancename" are not supported.
- The port configuration needs to be entered for the port database on which the named SQL server instance runs when the port is configured.
- You require the password for the "sa" administrator account.

Additional options:

Script installation with existing Microsoft SQL Server: Connects to an existing SQL Server present on the system without using the "sa" login. The database and corresponding logins must be created by the database administrator with a script. A predefined script can be found on the MATRIX installation DVD in the "Support" folder. MATRIX then only requires the user "matrix" with the role "db_owner" during the installation. This user has the rights necessary to create the database tables, but no rights outside the MATRIX database.

- Enter the address data of the SQL Server database and the login data for the "matrix" user in the additional **Database configuration** dialog field.

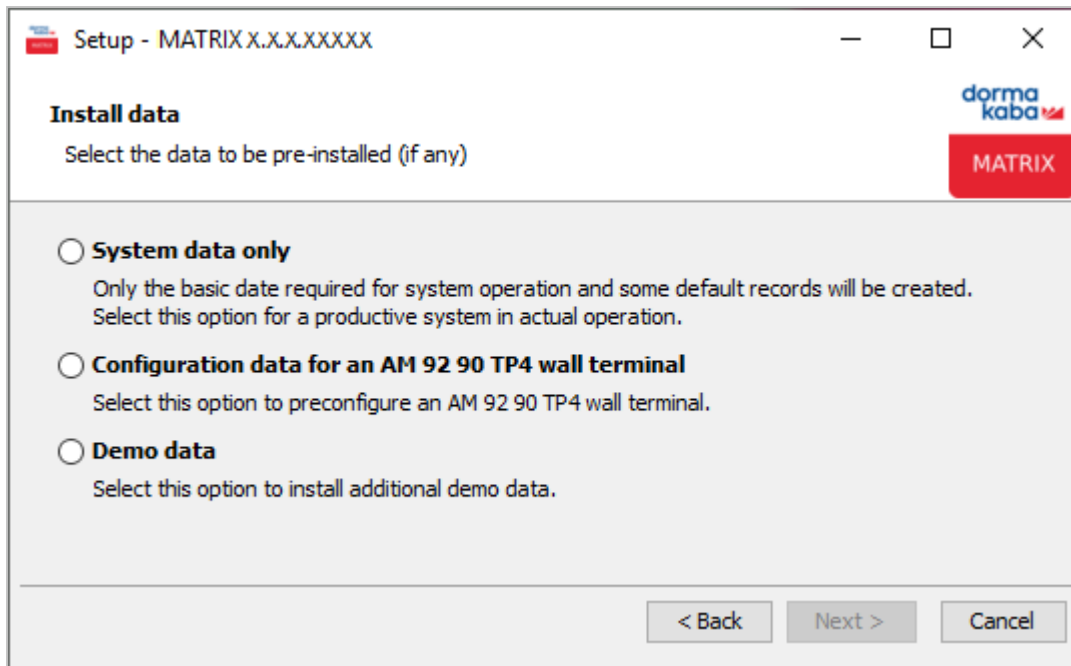
Script installation with existing Oracle database server: Connects to an existing Oracle Server present on the system. The database and corresponding logins must be created by the database administrator with a script. A predefined script can be found on the MATRIX installation DVD in the "Support" folder. MATRIX then only requires the user "matrix" with the role "db_owner" during the installation. This user has the rights necessary to create the database tables, but no rights outside the MATRIX database.

- Enter the address data of the Oracle database and the login data for the "matrix" user in the additional **Database configuration** dialog field.

Without database: Installation is performed without connecting to a database. An SQL server database is still required, however.

- Enter the address data of the SQL Server database and the login data for the "matrix" user in the additional **Database configuration** dialog field. No validation or initialisation is performed.

9. Select whether configuration or demo data should be installed and, if so, which data; then click on **Next**.

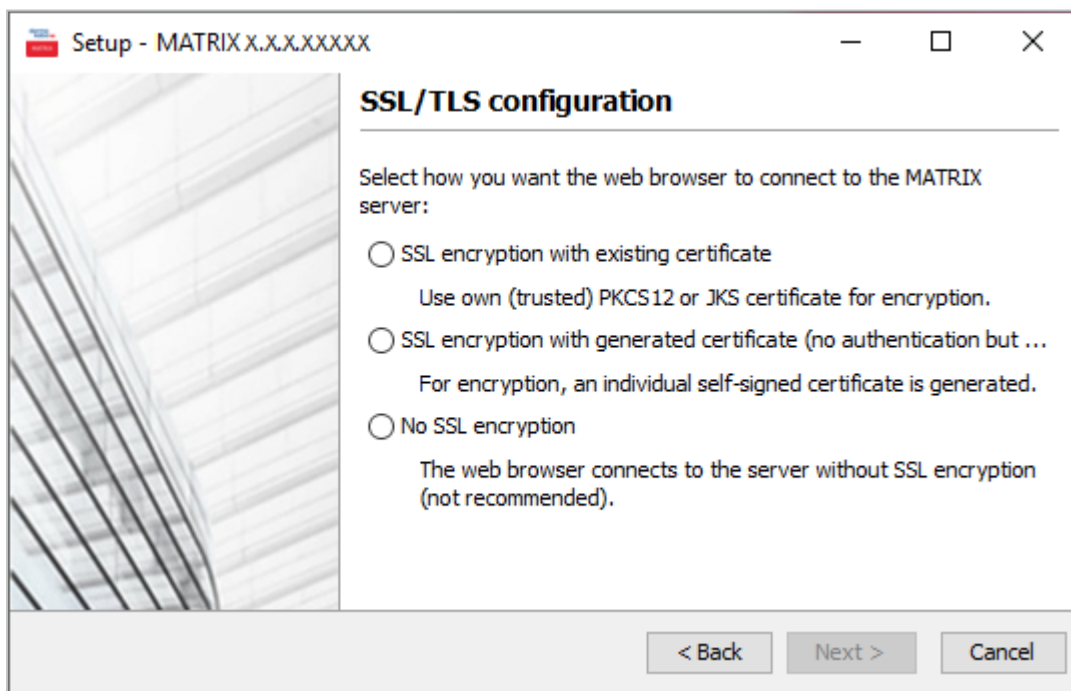


10. Select how a connection to the MATRIX server should be established and click **Next**.

SSL encryption with existing certificate: A separate certificate in PKCS#12 or Java Keystore format is required. Select this in the next step.

SSL encryption with generated certificate: A self-signed certificate is generated for encryption. In the next step, enter the host name of the computer on which MATRIX is being installed. Also enter the company name under which the self-signed certificate will be used. You can integrate a separate trusted certificate at a later time using the MATRIX SSL configurator. See also: [Configuring TLS/SSL](#)

No SSL encryption: Using this option, MATRIX runs without SSL encryption. This option is not recommended if MATRIX is accessed via a network.



11. Enter the port numbers. The default values are predefined as follows:
 Communication with LAN terminals: Port 3000
 Web server: Port 8080

SSL port: Port 8443

Communication with XS/evolo offline components: Port 9008

Click **Next**.

Note: A red identifier will be displayed if a port is already in use. In this case, you are required to change the port number and enter a valid port number in order for the system to run properly.

Setup - MATRIX x.x.x.xxxxx

Port configuration
Which ports should MATRIX use?

Communication with LAN terminals 3000
Please note that you must open this port in your firewall to allow incoming traffic for MATRIX. Please check your firewall for the correct setting as otherwise proper operation with devices won't work.

Web server 8080

SSL port 8443

Communication with XS components 9008
Please note that you must open this port in your firewall to allow incoming traffic for MATRIX if you intend to use the applications remotely.

Please note that you may have to open other ports in your firewall as well to allow outgoing traffic.

< Back Next > Cancel

12. For checking purposes, a summary of all the information entered is displayed again before the installation. If all the information is correct, click **Install**.

Setup - MATRIX x.x.x.xxxxx

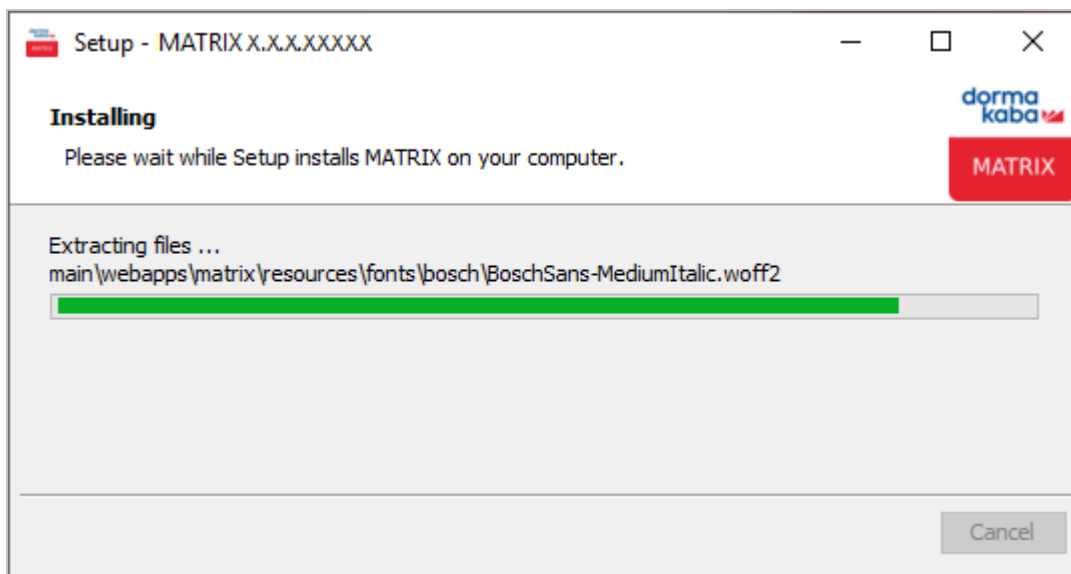
Summary
Your installation details

Please review your existing input before continuing, then click "Install" to start the installation.

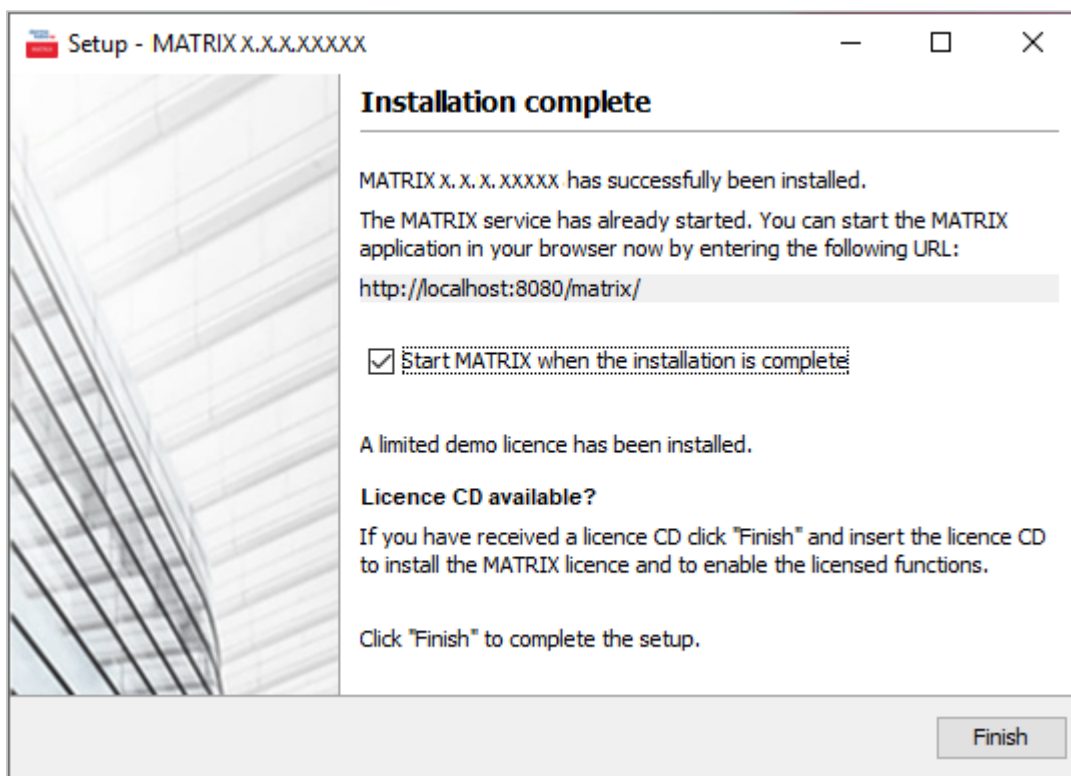
Destination directory	C:\Program Files\dormakaba\MATRIX
Data retention	Embedded database
Install data	System data only
Port configuration	
Communication with LAN terminals	3000
Web server	8080
Web server (SSL)	8443
Communication with XS components	9008

< Back Install Cancel

13. The database is now configured on your computer. This procedure can take a few minutes. Please wait until the installation is complete.



14. Then click on **Finish** to complete the installation.



15. Start dormakaba MATRIX using the **Programs** menu or the shortcut on your desktop.

Note: After installation, it is advisable to check that the required ports are not blocked by a firewall.

The following ports are normally used:

Port 8080 for the web server

Port 8443 for the web server via SSL

Port 9092 for the SQL database

Port 3000 for the terminal manager, server command port for bookings and events

Port 3001 for the terminal manager, communication with the terminals

Port 3500 for Desktop Reader Manager
Port 9008 for the communication with the XS/evolo offline components

How to update dormakaba MATRIX in Microsoft® Windows®

Note: The following section describes how to install an MATRIX update. To install updates for all additional applications at the same time, select the setup option using "install.exe" and follow the instructions given by the setup wizard. If these additional applications are located on another computer, you must conduct the updates for these applications on the respective computers.

1. Backup the database as described in the [Setting up and restoring backups](#) section.
2. Close MATRIX and all additional applications. The web server and database do not need to be closed. The service is stopped automatically during the update and subsequently started again.
3. Launch the file "MATRIX_PRO_windows_setup_x_x_x.exe", where x_x_x stands for the version number.
4. Select a language version and click **OK**. The selected language will be used for the rest of the installation.
5. The set-up wizard will start. Click **Next**.
6. Read the license agreement, select **I accept the terms of the agreement** and click **Next**.
7. The application data will now be installed on your computer. This procedure can take a few minutes. Click **Finish** to complete the installation.
8. When updating to a new main version (x.x), you now have to import the corresponding new licence file.

Follow these instructions to update SQL Server Express.

Note: Updating SQL Server Express requires you to reinstall MATRIX.

1. Backup the database as described in the [Setting up and restoring backups](#) section.
2. Close MATRIX and all additional applications.
3. Uninstall MATRIX.
4. Uninstall SQL Server Express.
5. Reinstall MATRIX along with the new version of SQL Server Express.
6. Finally, re-upload the backed up MATRIX data.

2.2 MATRIX activation

The first time dormakaba MATRIX is started, you will be prompted to activate the product.

MATRIX activation

Select one of the following options to license MATRIX:

- ☒ **Product key** On the next page you can enter your product key and get a MATRIX license.
- ☐ **Hardware dongle** If you have purchased a license based on a hardware dongle, insert the installation medium now to install the dongle-based license.
- ☐ **Demo mode** You can activate MATRIX at a later time.

Apply

1. Select the licence type.
 - **Product key:** Select this option to enter the product key of your MATRIX licence. dormakaba MATRIX is automatically activated via the MATRIX activation server. Alternatively, activation can be performed manually using a web interface.
 - **Hardware dongle:** Select this option to activate a dongle licence.
 - **Demo mode:** Select this option to test MATRIX in demo mode. You can activate the licence at a later time.
2. Click **Apply**. The following steps depend on which option was selected.

Activate with a product key using a web service

The dormakaba MATRIX server requires an internet connection for this form of activation.

1. In the **System** main menu, open the menu item **Service** and select **Activation**.
2. Enter the 16-digit product key and click **Start activation**.
3. The software will be activated directly by the MATRIX activation server. Successful activation is reported by a notification text.
4. Then, restart the MATRIX service.

Activate with product key using the web interface

If the MATRIX server does not have an Internet connection, activation can be executed on a client computer using the dormakaba MATRIX web interface.

1. Open MATRIX on the server.
2. In the **System** main menu, select the menu item **Service** and select **Activation**.
3. Enter the 16-digit product key and click **Start activation**. A notification stating that the activation server is not available will appear in the dialog. An activation code will also be displayed.
4. Open MATRIX on a client computer.
5. In the **System** main menu, select the menu item **Service** and select **Activation**. The activation code will be displayed in the dialog.
6. Click the button **To activation website** or open the web interface in the browser at <https://matrix-activation.mydormakaba.com/> and enter the activation code.
7. Click **Start activation**.
8. Download the licence file and copy it to the MATRIX server.
9. Then, restart the MATRIX service.

2.3 Running the start wizard

The first time you log onto the system, the start wizard runs to help you with setting the basic system properties.

Note: Some of the settings affect the system parameters and are therefore valid for all users. Other settings only influence the user permissions and only affect the user role "matrix". The user role for the administrator remains unaffected by the settings.

If you close the browser or open another dialog before you close the wizard, the wizard will open again the next time the application is started.

General operating instructions:

If you require help with the individual fields while entering data, click the information icon, which is displayed next to each input field. A tooltip provides further information on the input field.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Back button:

Click this button if you want to review the previous step or to make changes.

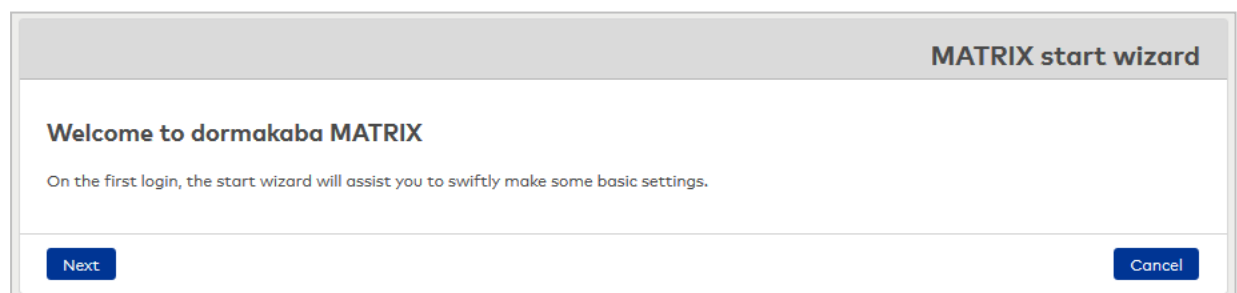
Cancel button:

Click this button to close the start wizard prematurely.

The dialogs for the process steps are explained below. The individual steps depend on the existing licence and may therefore deviate from the description.

Start dialog

The wizard opens with the start dialog.



Demo licence

Making a selection determines the modules for installation.

Note: This step is only available if you are using a demo licence.

Configuration for demonstration purposes

Here you configure the modules you want to use and make available for the "matrix" user.
 You can access the start wizard again at any time under the "Wizards" menu option.
 Attention: with activated time recording, the person administration functions are limited for persons from the demo data.

Access	☒	
Time recording	☐	
Time management	☒	
Devices	☒	

Back
Next
Cancel

Access checkbox:

Activates the Access program group to configure and monitor access control.

Time recording checkbox:

Activates the Time program group containing the range of attendance recording functions. Time bookings (at terminals) are only recorded and passed on to a parent system (such as SAP) for evaluation of the bookings. Activating this option means that the time management option cannot be used.

Time management checkbox:

Activates the Time program group containing the range of time management functions. Time bookings (at terminals) are recorded and the bookings are evaluated in MATRIX. The functions include flexitime, time accounts, overtime, shift administration, cost centre registration. Activating this option means that the attendance recording option cannot be used.

Devices checkbox:

Activates the Device program group to configure monitoring of periphery devices such as registration units, readers, I/O modules, controllers and terminals. The necessary settings are made on all devices. The data exchange modules are part of device administration.

Change e-mail configuration

In this step, you can configure access to your e-mail server and the conditions for sending e-mails.

Change e-mail configuration

Here you can change the e-mail server settings.

Server settings

active

☐

SMTP server

Port

User name

Password

Security

Unencrypted

Sender

Misconduct

Number of repetitions

Interval

Minutes

Base URL for e-mail links

Base URL

E-mail to text message gateway

active

☐

E-mail to text message gateway

Back

Next

Cancel

Server settings

Specifying the SMTP server usually suffices if this is used as the default port and does not request authentication.

Some e-mail servers also require further parameters.

active checkbox:

Indicates if sending of e-mails is authorised.

SMTP server input field:

Contains the address of the SMTP server.

Input format: A-Z, a-z and dots. Maximum 255 characters.

Port input field:

Contains the port of the SMTP server.

Value range: 1–65535

User name input field:

Contains the user name for authentication if this is requested by the e-mail server. Maximum 255 characters.

Password input field:

Contains the password for the user name. Maximum 255 characters.

SSL checkbox:

Indicates if SSL encryption is used.

Sender input field:

Contains the e-mail address of the sender.

Misconduct

Allows configuration of the number and interval of repetitions, if an error occurred during sending.

Number of repetitions input field:

Specifies the number of repeated attempts by the server to send the e-mail.

Interval input field:

Specifies the time in minutes after which a new attempt is to be made to send the e-mail.

Base URL for e-mail links

Enables a login link to be configured that is inserted into all e-mails. If a URL is entered, a **Login** button will be shown in the e-mails. The base URL is also used for "Forgotten password" functions in the MATRIX login dialog.

Base URL input field:

Specifies the URL for automatically generated links in e-mails.

E-mail to text message gateway

This section contains the activation for sending e-mails to a text message gateway.

Note: An active SMTP server must be present to allow e-mails to be sent to a text message gateway. The fields in this section are therefore only activated if the SMTP server is activated.

active checkbox:

Indicates if sending of e-mails is activated.

Default value: Not activated.

E-mail to text message gateway input field:

Contains the details of the text message gateway.

Password rules

In this step, you can adapt the rules for user passwords to suit your company regulations, if necessary.

Note: It is advisable to apply the standard settings to ensure comprehensive data protection.

Change password rules

Here you can change the rules for user passwords.

Minimum number of characters	8	
At least one lower/upper case letter each	☒	
At least one digit (0-9)	☒	
At least one special character	☒	
Validity period	150	Day(s)
Rejection of the last	10	Passwords
User block after	6	Unsuccessful attempt(s)
User block for	30	Minutes
Forgotten password on login screen	☐	
Validity period for "Forgotten password" link		Minutes

Minimum number of characters input field:

Contains the minimum number of characters that has to be entered to define a password.

Default value: 10

At least one lower/upper case letter each checkbox:

Specifies that the password must contain upper case and lower case letters.

Default value: Activated

At least one digit (0–9) checkbox:

Specifies that the password must be alphanumeric and contain at least one digit.

Default value: Activated

At least one special character checkbox :

Specifies that the password must contain at least one special character, such as _ or &.

Default value: Activated

Validity period input field:

Contains the number of days for which an entered password is valid. When this time expires, the user is requested to specify a new password.

Rejection of the last __ passwords input field:

Contains the number of different passwords that a user has to define before a password can be used again.

Default value: 10

User block after __ unsuccessful attempt(s) input field

Contains the number of incorrect login attempts that a user can make before their password is blocked.

Default value: 6

User block for __ minutes input field:

Contains the time in minutes for which a user will be blocked if they log on incorrectly (incorrect password).

Value range: 1–9999 minutes, empty = permanent block, can only be revoked by being manually unblocked.

Default value: 30

Forgotten password on login screen checkbox:

Specifies that a "Forgotten password" link is displayed in the login dialog that users can use to create a new password.

Note: A connection between MATRIX and an e-mail server must be configured in order to be able to use this function.

Validity period for "Forgotten password" link input field:

Contains the duration in minutes for which the link for resetting the password remains valid. It is advisable not to set this value too high for security reasons.

System parameters

The system parameters define the general properties of the system.

General

Automatic generation of employee numbers ☒ ⓘ

Numeric employee numbers ☐ ⓘ

Large system selection fields ☐ ⓘ

Session timeout ⓘ

Data housekeeping limit ⓘ

Alarm management ☐ ⓘ

Data rights

Number of data groups ⓘ

Data groups display options ⓘ

Buttons: Back, Next, Cancel

General:

Use this area to determine general system parameters.

Automatic generation of employee numbers checkbox:

Determines if employee numbers should be generated automatically. If activated, the employee numbers cannot be changed by user input. If the function is not activated, the employee number must be entered manually.

Numeric employee numbers checkbox:

Specifies if only numeric employee numbers are allowed. If the function is not activated, alphanumerical employee numbers are allowed.

Large system selection fields checkbox:

Determines whether selection fields and selection reports or selection dialogs should be used in different dialogs when very large quantities of data are available. In selection dialogs, the records are only displayed after an explicit search. Activated: The selection is made using selection dialogs. Not activated: The selection is made using selection fields or report fields.

Session timeout input field:

Specifies the maximum period a user session is valid in minutes when there is no activity. You must log in to the system again if the session timeout expires.

Value range: 1–1440

Default value: 10 minutes

Data housekeeping limit input field:

Number of days for which the notifications, histories and motion data (not master data!) are saved in the system as standard. The values can be individually adjusted for the different types of data in the **Data housekeeping limit** dialog.

Default value: 60

Lowest value: 14

Alarm management checkbox:

Specifies whether alarms can be configured and managed in the system. This can be used to display errors or alarms on the peripherals in an alarm monitor, with reference to the floor plan location if configured. Video images can also be displayed.

Data rights:

Use this area to determine the various data rights options.

Number of data groups selection field:

This field determines the number of data groups to which a record can be allocated. Data groups are used to limit the data shown to individual users. Example: In a company with various sites, only the site manager should be able to view the data relating to that site (e.g. employees, access profiles, devices). You can configure the dialogs to which this setting should apply.

Options:

- Not activated: No data groups can be allocated. The data groups option is disabled.
- 1: One data group can be allocated per record.
- 2: Two data groups can be allocated per record.
- 3: Three data groups can be allocated per record.

Default value: Not activated

Data group display options selection field:

Determines how records that are outside the access permission of the user are displayed. Options:

- Greyed out: Records are greyed out when displayed.
- Hidden: The records are hidden.

Devices

In the next step, the devices to be managed by the system are specified.

PC reader usage	☒	
Use TP4 devices	☒	
AM controllers only	☒	
Use dormakaba terminals	☒	
Use evolo standalone components	☒	
Use evolo wireless components	☒	
Use XS offline components	☐	
Use XS online components	☐	
Use KCP compact/remote reader	☒	
Use DP1 components	☐	
Use DCW components	☐	
Use PHG components	☐	
Use TMS devices	☐	

Back
Next
Cancel

PC reader usage checkbox:

Indicates whether the local computer supports desktop readers to automatically import ID card numbers.

Use TP4 devices checkbox:

Indicates if TP4 devices are supported by the system.

The devices include:

- B6L-(19")
- B6L-WM
- TP4-LANRTC
- M6L
- L6L
- B6L-RR
- B6L-RR15
- B6R-WM
- B6R-HS
- B6R-(19")
- M6R
- L6R
- AM 92 00 T
- AM 92 30 T
- AM 92 90 T rack
- AM 92 90 T wall

Options:

- Activated: All TP4 devices are supported.
- Not activated: TP4 devices are not supported when new devices are added. The dialogs for variable TP4 booking instructions, TP4 terminal classes and TP4 terminal texts are also inactivated.

AM controllers only checkbox:

Indicates if AM controller components are supported by the system.

The devices include:

- AM 92 00 T
- AM 92 30 T
- AM 92 90 T rack
- AM 92 90 T wall

Use dormakaba terminals checkbox:

Indicates whether the system supports dormakaba terminals.

The devices include:

- dormakaba 96 00 terminals
- dormakaba 97 00 terminals

Options:

- Activated: dormakaba terminals are supported.
- Not activated: dormakaba terminals are not supported when entering new devices. The dialogs for dormakaba variable booking instructions, dormakaba terminal classes and dormakaba terminal texts are also inactivated.

Use evol0 standalone components checkbox:

Indicates whether evol0 standalone components are supported by the system.

Options:

- Activated: evol0 standalone components are supported.
- Not activated: evol0 standalone components are not supported when new devices are added.

Use evol0 wireless components checkbox:

Indicates whether the system supports evol0 wireless components.

Use XS offline components checkbox:

Indicates if XS/evol0 offline components are supported by the system.

The devices include:

- XS fitting offline
- XS cylinder offline
- XS reader offline
- XS Manager

Use XS online components checkbox:

Indicates whether XS online components are supported by the system.

The devices include:

- DP1 XS Fitting
- DP1 XS reader
- DP1 XS traffic point
- DP1 XS cylinder

Use KCP components checkbox:

Indicates whether KCP components are supported by the system. KCP is a protocol between the controller and reader.

The devices include:

- Compact reader 91 04, 91 10, 91 12
- Remote reader 91 15, 91 25
- Interface 90 10

Use DP1 components checkbox:

Indicates if DP1 components are supported by the system.

The devices include:

- DP1 S6 reader
- DP1 M6D
- DP1 S6-KP/reader
- DP1 IO 8/9 MD
- DP1 S6-DM
- DP1 XS traffic point

Use DCW components checkbox:

Indicates if DCW components are supported by the system.

The devices include:

- DCW S6D reader
- DCW S6D-KP
- DCW S6D-KP/reader
- DCW IO 4/4 MD
- DCW In 15 MD
- DCW Out 15 MD
- DCW S6D DM

Use PHG components checkbox:

Indicates if PHG components are supported by the system.

The devices include:

- PHG
- PHG-KP/reader
- PHG-KP/reader with display
- PHG-KP

Use TMS devices checkbox:

Indicates whether the TMS connection is activated in the system and whether TMS devices (escape route control devices) are used. This option must be activated for data exchange with the TMS system. If there is an active TMS connection, the relevant TMS devices for access are displayed in the device administration and can be used when granting access permissions.

The devices include:

- TMS PC gateway
- TMS terminal LAN and LON
- TMS Comfort LAN and LON
- TMS Basic LAN and LON
- ER MSVP LAN and LON
- ER SVP S4X LAN and LON
- ER SVP LAN LON

ID cards

In the next step, you determine the specific properties of the ID cards and the ID card administration.

ID card administration level: One ID card per person

ID card type:

[Upload individual compatible ID card type](#)

Back Next Cancel

ID card administration level selection field:

The ID card administration level specifies how many ID cards are used per person and in what format. The range of options depends on the respective licence.

Value range:

- 1 = One ID card per person with basic entry of the ID card number directly in the employee record.
- 2 = Multiple ID cards per person with ID card data entered directly in the employee record.
- 3 = Complex ID card management with dedicated ID card dialog for managing ID card data, ID card permissions and references in the employee record.

Default value: 1

ID card type selection field:

Specifies what type of ID card is used. The selected ID card type is automatically system assigned to all added devices. If multiple ID card types are used in the system, the selection field remains empty.

Options:

- Empty, no input.
- All ID card types created in the system.

Default value: Empty, no input.

Upload individual compatible ID card type link:

Allows individual ID card types to be selected.

Note: This ID card type must be compatible with the devices.

Access

The general specifications for the access system are defined in this step.

Note: This step is only available if the access licence is activated.

Access permission		Additional functions	
Locking plans	☐	External company administration	☐
Access profiles	☒	Visitor administration	☐
Door profiles	☐	With ID card assignment	☐
VBI permissions	☐	Room administration	☐
AoC functionality	☐	Patrol	☐
Max. validity period for AoC cards	7	Interlocks	☐
Default validity duration for AoC cards	1	Lifts	☐
DoC functionality	☐	Intruder detection systems	☐
Mobile Access (access via smart phone)	☐	Attendance display	☐
Infinilink validity period	200	Corrections	☒
Infinilink refresh interval	80	Access workflow	☐
Virtual ID card number range	10000 - 19999		
Access functions			
Room zones	☒		
Further related room zones	☐		
Security areas	☐		
Counting information	☐		
Door monitoring	☒		

Access permission:

This area contains the settings which are relevant to the allocation of access permissions.

Locking plans checkbox:

Indicates if locking plans are used in the system. A locking plan is a cross-classified table of persons and doors. At the intersections, you can define if and (where necessary) when a person is permitted access. It is only recommended for use with a manageable number of persons and doors per locking plan.

Access profiles checkbox:

Indicates if access profiles are used in the system. An access profile is a collection of door permissions and/or room zone permissions with associated access times. You can allocate one or more access profiles to a person. You can add special permissions to profiles.

Door profiles checkbox:

Indicates whether door profiles (door weekly profiles/door daily programs) are used for access control in the system.

VBI permissions checkbox:

Indicates if VBI permissions are used in the system. In special cases, you can use VBI permissions to allocate permissions to individual persons at a variable booking instruction level.

AoC functionality checkbox:

Indicates whether the AccessOnCard function is activated in the system. AccessOnCard can be used to write (temporary) access permissions on an ID card using a reader connected to a write station.

Note: This value can only be set if evolvo or XS components are used.

Maximum validity period for AoC cards input field:

Indicates the maximum number of days to which the validity of an AoC ID card can be set. AOC IDs can be reallocated once the validity period has expired. This field is a mandatory field if the **AoC function** option is activated.

Value range: 1–3287

Default value: 7

Default validity duration for AoC cards input field:

Specifies the standard period for which an AoC ID card is valid in days. If the access rights are written to the ID card at an access point that is accessed daily, a value of 1 is recommended for security reasons. This field is mandatory if the AoC function option is activated.

Value range: 1-3287

Default value: 1

DoC function checkbox:

Indicates whether the DataOnCard function is activated in the system. You can use this function to write the battery state of the evolvo and XS components to the ID card and notify the MATRIX system online via the write station.

Note: This value can only be set if evolvo or XS components are used.

Mobile Access (access via smart phone) checkbox:

Indicates whether access is possible via smartphone (Mobile Access).

Infinilink validity period input field:

Indicates the number of days for which an Infinilink is valid on the smart phone. This field is a mandatory field if the **Mobile Access (access via smartphone)** option is activated.

Value range: 1–999

Default value: 200

Infinilink refresh interval input field:

Indicates the Infinilink refresh interval as a percentage of the Infinilink-validity period. This field is a mandatory field if the **Mobile Access (access via smartphone)** option is activated.

Example: If the Infinilink validity = 7 days and the refresh interval is specified as 50 (%), the Infinilink data will be refreshed after 3.5 days.

Value range: 20–80

Default value: 80

Virtual ID card number range input field:

Number range from which the ID card numbers are generated for access via Mobile Access. This field can only be edited if the **Mobile Access (access via smartphone)** option is activated.

Value range: any

Access functions:

Further access functions are defined in this area.

Room zones checkbox:

Indicates whether room zones are used in area/door administration. Room zones can either form spatially connected areas with multiple doors (access points) or be used as door groups with shared permissions.

Further related room zones checkbox:

Indicates if further related room zones are used in the system. You can use this to combine multiple room zones into a route leading to a room zone.

Example: The "Development department" room zone on floor 23 of the building contains the further related room zones "Foyer" and "Floor 23". If access permission is granted for the "Development department" room zone, the system also automatically suggests that access permission be granted to the further related room zones.

Security areas checkbox:

Indicates if security areas are managed in the system. Security areas require the use of room zones. They are used in area/door administration and define access functions such as monitoring of duration of stay, counting information or anti passback. Options:

- Activated: Systems can be managed without affecting the AoC ID.
- Not activated: No systems are managed.

Counting information checkbox:

Indicates if counting information is used in the system. Counting information can record how many persons and (depending on configuration) which specific persons are present in a certain area. Counting information is a component function of security areas, so the option can only be selected if security areas are activated.

Door monitoring checkbox:

Indicates if door monitoring is used in the system. Door monitoring allows the door access status to be displayed, doors to be directly controlled using the user interface (e.g. short-term release, permanent release) and the video image to be displayed (if alarm management is activated).

Additional functions:

Additional access system functions can be specified in this area.

External company administration checkbox:

Indicates if external company administration is activated in the system. External company employees form a separate person group in the system and can be granted separate access permissions.

Visitor administration checkbox:

Indicates if visitor administration is activated in the system. Visitors form a separate person group in the system. Visits that are scheduled for the day can be activated using visitor reservations.

With ID card assignment checkbox:

Indicates if visitors can be allocated an ID card for access bookings. Otherwise, visitor administration is used to document the visit procedure without separate visitor access permissions. This option can only be activated in combination with visitor administration.

Room administration checkbox:

Indicates if room administration is active. Room administration includes the definition of rooms and room reservations. When a room is reserved, the allocated persons automatically receive temporary access permissions.

Patrol checkbox:

Indicates if patrols are used in the system. Each security patrol includes a list of readers that must be passed in a specified order. If necessary, you can monitor the time for the stage between two readers. A status display is provided for pending patrols and patrols that are underway and a protocol dialog is provided for completed security patrols.

Interlocks checkbox:

Indicates if interlocks are used in the system. An interlock defines a pass-through area with internal and external readers that prohibits both doors of the interlock being open simultaneously. Contact mats, motion detectors or buttons can act as sensors.

Lifts checkbox:

Indicates if lifts are used in the system. If lifts are used, you can define which room zone is allocated to which floor. This allows access permissions to be assigned to individual floors. Booking at a reader in an elevator activates the buttons for the appropriate floors.

Intruder detection systems checkbox:

Indicates if an intruder detection system is used in the system. The system features a dialog for integrating an intruder detection system. The dialog provides various options such as blocking readers, tamper monitoring, signalling access blocks and maximum activation durations.

Attendance display checkbox:

Indicates if attendance displays are used in the system. The attendance status of a person in a certain area is determined by access bookings at the readers defined as entry and exit points. A pop-up dialog in the web browser shows the status of a selectable group of persons.

Corrections checkbox:

Indicates if corrections are used. Changes can be made to the master data records using corrections. These can be alterations to individual records or many records at the same time (mass corrections).

Access workflow checkbox:

Indicates whether the system supports the access system workflow functions. You can use these functions to define a workflow for access right allocation, for example by requiring a superior or room zone manager to approve access rights.

Time

The specific properties of the time system are defined in the next step.

Note: This step is only available if the time licence is activated. The default settings vary depending on the attendance recording and time management options.

The screenshot shows a configuration window for the start wizard. On the left, there are three checkboxes: 'VBI permissions', 'Time booking with web browser', and 'Employee record configuration'. The 'Employee record configuration' is set to 'Extended time system'. On the right, there is a list of features with checkboxes and information icons: 'Break plans' (checked), 'Paid breaks' (unchecked), 'Rounding plans' (checked), 'Variable work schedules' (checked), 'Time workflow' (unchecked), 'Shift administration' (unchecked), 'Data transfer to payroll program' (checked), 'Attendance display' (unchecked), 'Cost centre registration' (set to 'Cost centre registration via time allocation'), and 'Passive time recording' (unchecked). At the bottom, there are 'Back', 'Finish', and 'Cancel' buttons.

VBI permissions checkbox:

Indicates if VBI permissions are used in the system. In special cases, you can use VBI permissions to allocate permissions to individual persons at a variable booking instruction level.

Time booking with web browser checkbox:

Indicates whether time bookings via web browser are possible in addition to bookings at the terminal. If this function is activated, bookings can be made via the **Bookings** dialog.

Employee record configuration selection field:

Indicates which employee record configuration is set up for the time system.

Options:

- Flexitime system: Employee record configuration contains the standard accounts for the basic flexitime system.
- SAP attendance recording: Employee record configuration for SAP attendance recording contains the special accounts used for attendance recording with SAP.
- Time system extended: Employee record configuration for the extended time system contains fields belonging to the basic flexitime system. It also contains further fields and tabs for calculating and reconciling additional accounts for extra work, overtime, extra pay and wage types.

Default value: Time system extended.

Break plans checkbox:

Indicates whether break plans can be used in the system beyond fixed and variable breaks. Break plans map working time-dependent breaks.

Paid breaks checkbox:

Indicates whether paid breaks can be used in the system beyond fixed and variable breaks.

Rounding plans checkbox:

Indicates whether rounding plans are used in the system. Rounding plans define the rules and parameters for rounding time bookings.

Variable work schedules checkbox:

Indicates whether variable work schedules of more or less than 7 days are used in the system.

Note: Variable work schedules must not be confused with shift-type (fixed) work schedules in shift administration.

Note 2: The checkbox is only available when time management is activated.

Time workflow checkbox:

Indicates whether time system workflow functions are used in the system. You can use this function to define, for instance, that holiday applications or retroactive attendance time recordings entered by employees using the Self-service system require approval by a superior.

Shift administration checkbox:

Indicates whether shift administration is supported in the system. This option provides all components required to implement any shift models to be implemented. These include 2-shift and 3-shift operation, partial shift operation, continuous shift operation and basic working hours models for flexitime operation, e.g. for IT jobs, job sharing or for porters.

Note: The checkbox is only available when time management is activated.

Data transfer to payroll program checkbox:

Indicates whether data transfer to payroll programs is used in the system.

Note: The checkbox is only available when time management is activated.

Attendance display checkbox:

Indicates whether attendance displays are used for the time system. The attendance status of a person is determined on the basis of their time bookings and absences. A pop-up dialog shows the attendance status of a selectable group of persons.

Cost centre registration selection field:

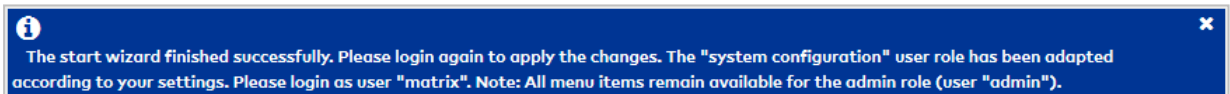
Indicates whether cost centre registration is used in the system. If cost centre registration is active, the tab **Cost centres** is added to the employee record. Cost centre management and reports are available for evaluating cost centres.

Passive time recording checkbox:

Indicates whether passive time recording is to be used in the time system.

Finish

All of your inputs are verified again in this step. If the verification is successful, the input values are saved.



Note: To ensure that all changes to the system configuration become effective, you have to log in to the system again.

2.4 User guide

dormakaba MATRIX is a browser-based application. The display thus depends on your individual browser settings. You can edit these using the options in the browser **Tools** menu.

As is highly typical in web applications, dormakaba MATRIX can be navigated via the menu as well as by clicking icons and buttons. Double-clicks are acknowledged with a warning, but can lead to an error message in exceptional cases.

Note: dormakaba MATRIX is a multilingual application. You can change the language at any time using the browser's language setting.

Mozilla Firefox®: Go to **Options** in the menu, choose **General**, select **Languages** and then click the **Choose** button.

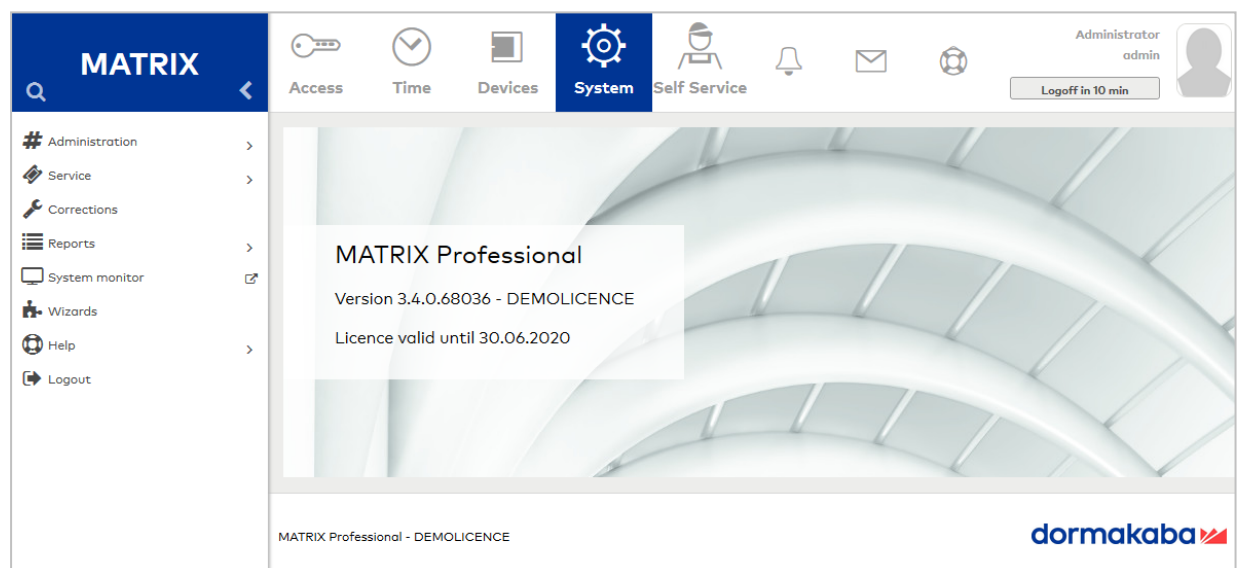
Microsoft® Internet Explorer®: Go to the **Tools** menu, choose **Internet options**, click the **General** tab and then on the **Languages** button.

The language selection also affects the data that you create if you are maintaining multilingual records.

General interface elements

Homepage and application window

dormakaba MATRIX starts up by displaying the homepage shown here.



The application window generally consists of the following elements:

- Menu bar in the top section: provides direct access to individual modules. The logged-in users and the time until automatic logoff are shown at the right.
- Menu tree on the left-hand side: This shows the menu options of the selected module.
- Main window: This contains the currently selected dialog.

Note: Most browsers allow you to use the F11 key to switch the browser window to full screen mode. The browser frame will then be hidden and you have more space for the actual application. Close the full screen mode by pressing F11 again.

Menu bar

The menu bar contains buttons for the installed modules and buttons for the info centre, emails, help and information about the logged-in user. When you click on a button in the menu bar, the menu tree changes to the menu of the corresponding module or the corresponding dialog is opened.



The following icons are used for the modules:



Other icons in the menu bar are:



Colour codes in the info centre indicate whether important jobs are pending. If the status display is red, you should launch the info centre to see information on the jobs pending.

The online help icon opens the context-sensitive help topic for the respective dialog.

Note: The duration of the user session until automatic logout is specified using the system parameter System 102.

Note: If you are registered as an approver for work flows, work flows pending approval are displayed next to the info centre. Click the approvals icon to directly open the dialog for editing work flows.

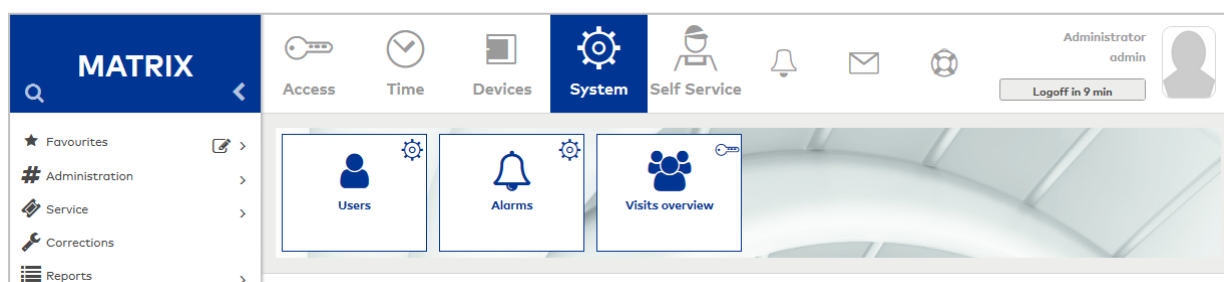
Working with favourites

All dialogs containing the "Favourites" button can be assigned to the favourites selection. These are usually selection dialogs and some other frequently used dialogs. Favourites are user-dependent.

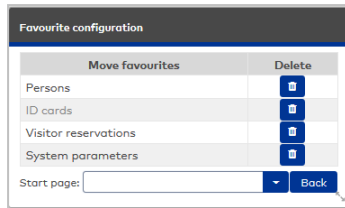
If a user has flagged dialogs as favourites, the "Favourites" menu will be inserted at the uppermost position in the menu tree. It can be used to call up the flagged dialogs directly without having to navigate through the menu structure.



In addition, the favourites are shown with their icon in the main window if no dialog is selected or the main menu is changed.



Configure the "Favourites" menu



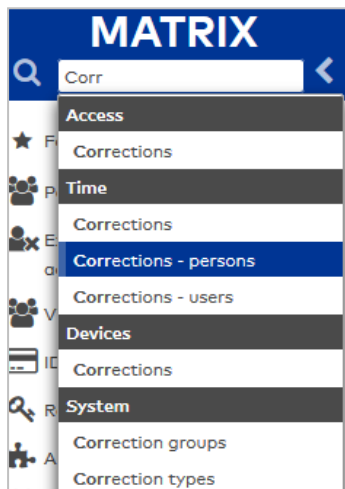
Click the  button to open the **Favourite configuration** dialog. This is used to remove dialogs from the favourites and change the order of the display.

The favourites are shown in the table in the order of the display.

To change their order, mark a row and move it up or down to the desired position.

Close the configuration window again by pressing the **Back** button.

Search for menu items



Search for menu entries by clicking the magnifying glass above the menu. A search field will be displayed.

Enter the menu item you are searching for. All items that correspond to the input will be displayed.

Searching is conducted across all modules. This enables users to access all functions quickly and easily.

Selection dialog elements

Display and selection options

When you click on a menu command in the menu tree, in most cases the relevant selection dialog opens and displays all records that have been created. You only need place the cursor over a few menu items where no selection is necessary to reach the display or edit dialog directly.

Toolbar in the selection dialog

The toolbar provides direct access to all possible functions in the respective dialog.



	Create new record	Opens an empty edit dialog in which you can create a new record.
	Edit marked search results	Opens all records that are selected in the table in the edit dialog.
	Edit all search results	Opens all available records in the edit dialog.
	Open search	Opens the search fields for searching for individual or several records.

	Open expanded search	Opens the expanded search mode in some selection dialogs.
	Close search	Closes the search fields.
	Cancel search	Empties the search fields. Now click Search to display all records again.
	Mark as favourite	Assigns the dialog to the favourites.
	Print PDF	Prints the data to a PDF document.
	CSV export	Exports the data in CSV format. Note: If the exported data is to be displayed in Excel, import the file and do not open it with a double-click, as this causes negative balances to be incorrectly interpreted. When importing, you must specify "Unicode (UTF-8)" encoding to ensure that all characters are correctly displayed.
	Print record	Opens a dialog for printer selection. Note: It must be possible to connect to a network printer from the MATRIX server to print.

Selection dialog header with search function

The selection dialog header provides a search function. Use the search fields to search for individual records or a group of records.

Please note the language setting of your browser on multilingual systems.

Number

Name

Short name

Find

Search fields:

The input fields made available for the search function depend on the dialog currently in use. The fields **Number**, **Name** and **Short name** are present as default. The fields issued in the table are also usually offered for searches.

The fields **Name** and **Short name** are alphanumeric fields and support alphanumeric search strings (text range expressions). The field **Number** is a numerical field and, therefore, only supports numerical search strings (number range expressions).

Wildcard expressions can be used in all search fields to perform range searches.

Note: When searching for a range in texts, you must also insert a blank space before and after the hyphen. The search function is not case-sensitive.

Examples of search strings:

a - m	Searches for all entries from "a" to "m"
- m	Searches for all entries up to "m"
n - z	Searches for all entries from "n" to "z"
n -	Searches for all entries starting from "n"
sa - sch	Searches for all entries between "sa" and "sch"
sch	Searches for all entries beginning with "sch"
%sch	Searches for all entries that contain "sch"
%1	Searches for all entries that contain a "1", e.g. 1, 11, 110
10-19; 25	Searches for all entries between "10" and "19" as well as the entry "25"
a - d; s - t; 50	Searches for all entries from "a" to "d" and "s" to "t" as well as the entry "50"

For searching in **free text fields**: Searches always cover the entire contents in the case of free text fields. The % sign does not need to be entered. Enter "ve" to view all entries that contain "ve".

Note: To limit the data volume, only the fields with an entry are included. If all fields remain empty and no checkboxes are activated, you will accordingly be shown all records.

Start search button:

Click this button to start the search. The search result will be displayed in the table. To display all entries again, clear the search fields and click on **Start search** again.

**Advanced search**

dormakaba MATRIX provides an advanced search in some dialogs. The expanded search is based on search profiles created and is particularly suitable to search for persons.

Selection Persons

Search profiles ▼
Start search

☐	Last name ▲	First name	Department	Employee number	ID card number	ID card label	Blocked	Delete
☐	Ackreiter	Thorsten		1	9001	001	☐	
☐	Cermans	Paul	2 - Production	7	8203	203	☐	
☐	Hochmeyer	Gertrud	4 - Sales	5	8201	201	☐	
☐	Kamp	Karsten	2 - Production	9	8205	205	☐	

Search profile selection field:

Selects the profile for the search. All search profiles created in the system are available for selection, regardless of whether they contain these specific values for the search or if the formula parameters still need to be populated with specific values prior to the actual search.

Note: If the search profile contains formula parameters, a dialog is shown prior to the search in which you can enter specific values or value ranges for wildcards.

To limit the data volume, only the fields with an entry are included. If all fields are empty, you will obtain all records.

Start search button:

Click this button to start the search. The search result will be displayed in the table.

Display persons who have left the company

Persons for whom a leaving date has been set can be included in the selection dialog selected for searching for persons.

The screenshot shows a 'Selection Persons' dialog box. At the top, there is a toolbar with icons for adding, editing, deleting, and other functions. Below the toolbar, there are several search fields: 'Last name', 'First name', 'Department' (with a dropdown arrow), 'Cost centre' (with a dropdown arrow), 'Employee number', 'ID card number', 'Work schedule' (with a dropdown arrow), and a checkbox labeled 'Include persons who have left the company'. A red button labeled 'Start search' is located at the bottom left of the dialog box.

Include persons who have left the company checkbox:

Options:

- Activated: Persons who have left the company will also be displayed.
- Not activated: Persons who have left the company will not be displayed.



Search with multiple selection

In addition to the single selection fields, multi-select fields are used in the search fields of some selection dialogs. You can then also use an either-or multiple search for search fields with an auto-complete function and predefined values.

The screenshot shows a multi-select search field. It consists of a dropdown menu with 'Half-day holiday' selected, a plus sign button to its right, and a label 'Absence times' to its left. Below the dropdown menu, there are two more empty dropdown menus, each with a downward arrow.

After the initial selection is made, click on the "+" symbol to display a further selection field for additional search criteria, which can then be used in an either-or function in the search. Empty selection fields are not taken into account and are automatically removed after you click on **Start search**. Emptying the selection fields thus reduces the number of search fields again.

When you click in a selection field, an existing text is highlighted and the selection box opens automatically. Entered text overwrites the highlighted text.

Select records from the selection dialog

All records created in MATRIX are displayed in the form of tables.

☐	Number ▲	Name	Short name	Delete
☐	1	Always	Always	
☐	10	Administration and others	AdmAndCo	
☐	20	Production	Prod	
☐	21	Sales - customers	SalesCust	
Number of records: 4				

To edit a record, click directly on the desired entry in the table.

If you wish to edit more than one record, highlight the required records in the first column and then click **Edit selected search results** in the toolbar. Or select **Edit all search results** in the toolbar for all records.

Note: You can also then select all displayed records using the checkbox in the column heading over the first column and then de-select all the records that you do not want to edit. Note that the selection applies to the displayed records only.

Special case: Major customer option

You can activate the **Major customer** option in the system parameters to make it easier to handle large quantities of data for Persons and Doors.

The **Major customer** option affects dialogs where you select or allocate doors or persons, as is the case when door or person groups are edited, for example.

The report or selection fields are replaced by tables in the corresponding dialogs. You can add further records to the table by opening a selection dialog with the relevant button.

There is then no direct allocation via selection fields on the configuration pages. You need use buttons to open the respective selection dialogs instead.

Note: The selection dialogs do not display any data after an invocation since large quantities of data are assumed. This may result in long loading times for displaying the dialogs.

In the selection dialog, enter the values or value ranges in the input fields that correspond to your search and start the search.

Use the buttons in the toolbar to return to the invoking dialog with or without transferring data.

Edit dialog elements

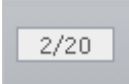
Edit dialog functions

As soon as you open one or more records, the edit dialog is displayed in which you can edit the selected records and create new ones. The toolbar provides direct access to the available functions.

Toolbar in the edit dialog



	Navigate to the first record	Opens the first record in the selection.
	Navigate to the previous record	Opens the previous record of the selection.

	Number of records	Displays the sequential number of the current record in the edit dialog and the total number of selected records.
	Navigate to the next record	Opens the next record in the selection.
	Navigate to the last record	Opens the last record in the selection.
	Create new record	Opens an empty edit dialog in which you can create a new record.
	Create copy	Creates a new record based on the currently open record; only selected fields are applied, depending on the object.
	Save record	Saves the entries.
	Cancel changes	Rejects the last changes that you made and restores the original record. The system displays a confirmation request.
	Delete record	Deletes the record that is currently open. The system displays a confirmation request. Deletion is prohibited if it could lead to data inconsistencies.
	Back to selection	Closes the edit dialog and returns to the selection dialog.
	Print PDF	Prints the data to a PDF document.
	CSV export	Exports the data in CSV format Note: If the exported data is to be displayed in Excel, import the file and do not open it with a double-click, as this causes negative balances to be incorrectly interpreted. When importing, you must specify "Unicode (UTF-8)" encoding to ensure that all characters are correctly displayed.
	Print record	Opens a dialog for printer selection. Note: It must be possible to connect to a network printer from the MATRIX server to print.
	Dependent data	Displays the relations between the record and the dependent data. Note: In some case, records cannot be deleted if they are still related to other data.

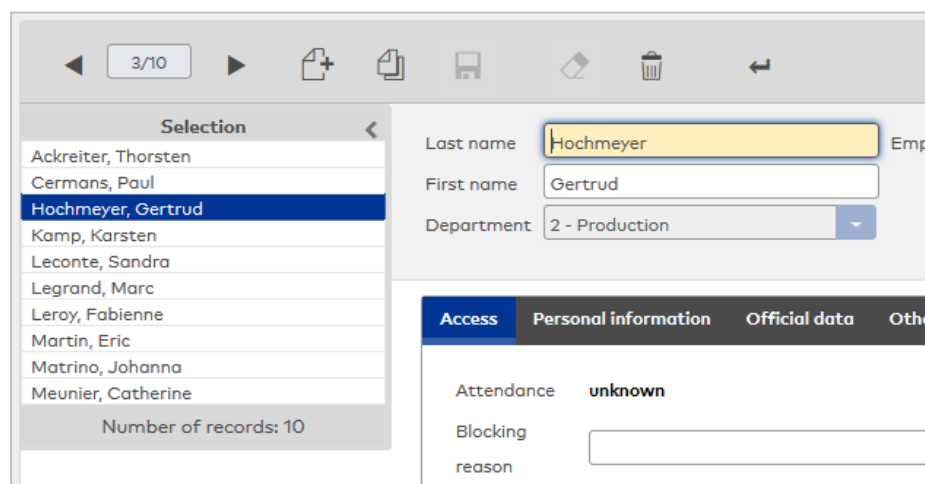
Special functions

Some edit dialogs include additional functions in the toolbar.

	Save and back	In the toolbar for dialogs which have been opened via a link. Closes the current dialog while accepting changes.
	Back	In the toolbar for dialogs which have been opened via a link. Closes the current dialog without accepting any changes. The system asks whether you wish to reject the changes.
	Allocate selection	Opens a selection dialog where you can define a new selection quantity.
	Start actions	Starts actions, such as the correction process.
	Update	Updates the dialog display.
	Move	Allows to move devices in the device tree.
	Print form	Prints out forms from person administration, external company employee administration and visitor administration.

Selection panel

A selection panel allows you to switch systematically between individual records in the edit dialog for persons, external company employees, ID cards and users. The selection panel is only present if a multiple selection has been made. It contains the respective records that were previously selected.



The screenshot shows a software interface with a 'Selection' panel on the left. The panel contains a list of 10 records, with 'Hochmeyer, Gertrud' highlighted. Below the list, it says 'Number of records: 10'. To the right of the list is a right-pointing arrow. To the right of the panel is a form with fields for 'Last name' (Hochmeyer), 'First name' (Gertrud), and 'Department' (2 - Production). Below these fields are tabs for 'Access', 'Personal information', 'Official data', and 'Other'. The 'Access' tab is active, showing 'Attendance' (unknown), 'Blocking' (empty), and 'reason' (empty).

Click the arrow pointing left to hide the panel. Click the arrow pointing right to show the panel. The last setting is saved in a cookie.

Tables

Data is entered using tables in some edit dialogs. You can add new entries, edit ore delete existing entries using the symbols in the table. The procedure is always the same.

Door (Reader) ^	Room zone/range	Access weekly profile			New entry
	3 - Administration and others	1 - Always			
107 - Seminar room (107 Seminar room)		1 - Always			
Number of records: 2					

To edit an entry, click the **Edit** symbol in the input line. The input line will open and the values can be changed. To save the changes click **Save** in the toolbar.

To delete an entry, click the **Delete** column symbol in the input line Accept the prompt by pressing **OK**.

Note: After deletion, the input line is initially only removed from the table. The entry is not permanently deleted until the dialog is saved.

To create a new entry, click the **New entry** button in the table. A new input line will open below the table header. Enter the values and then click **Save** in the toolbar. You can also click the **New entry** button again directly to create several new entries instead of saving each time.

Door (Reader) ^	Room zone/range	Access weekly profile			New entry
	4 - Head of adminis	1 - Always			
	3 - Administration and others	1 - Always			
107 - Seminar room (107 Seminar room)		1 - Always			
Number of records: 2					

Note: The open input line is automatically included when saving if all required fields have been completed. You will receive a warning message if the input line is incomplete or incorrect.

Symbol in the **Accept** column:
Click the symbol to close the current input line and to accept the changes.

Symbol in the **Cancel** column:
Click the symbol to close the current input line without accepting the changes.

Selection reports

Data is entered using selection reports in some edit dialogs. The desired data is selected by simply assigning single or multiple entries. The elements available for the particular type of data can be selected.

Available employee record fields

1 - WT 25%

2 - WT 50%

3 - WT 100%

Balance

Cost centre

Function

Holiday taken

Planned holiday

Remaining holiday

Remaining holiday - next year

>

>>

<

<<

Allocated employee record fields

Last name

Employee number

First name

Department

<

<<

>

>>

Available elements:

This list contains all elements that can still be allocated. Highlight an element and click the arrow pointing right to allocate it. The selected element is now allocated.

Allocated elements:

Contains all elements that are currently allocated. Highlight an element and click the arrow pointing left. The allocation has now been revoked.

Note: To select multiple elements simultaneously, hold down the Ctrl key while clicking.

The order of entries can be adjusted in some allocations. If so, corresponding arrows will be shown. Highlight one or more entries and click the upwards or downwards arrow to define the order of the fields.

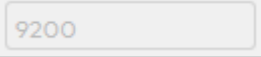
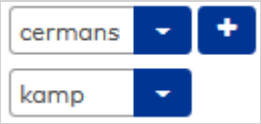
Jump to

Many edit dialogs contain the **Details**  icon next to the selection fields. Use this to jump to the relevant information. When you click the icon, the record currently shown in the selection field is opened in the corresponding edit dialog. The **Back** button in the toolbar takes you back to the launch dialog.

This allows you to display or edit the detailed information for a selection with just one click. You can also create new records. A newly created record is transferred directly to the selection field when you jump back.

Field types

Various field types are used in the dialogs. To enter or select values, click directly on the relevant field. As a rule, you only need to click on the corresponding field name to position the cursor in the corresponding input field or selection field.

Input field, mandatory field		Mandatory fields are highlighted in yellow and must be filled with a valid value.
Optional input field		Optional fields are highlighted in white. These fields do not have to be filled with values.
Display field		Display fields are highlighted in grey and cannot be edited (read only). A typical example is the Number field for master data that can no longer be altered after it has been saved for the first time.
Selection field		Selection fields contain all possible, valid values for the field context. They have an auto complete function, i.e. if you enter an alphanumeric character or character string, the feature shows all entries in which contain this character or character string. Press the enter button to accept the highlighted text. This makes it easier to select items from long lists.
Multiple selection		Click the + icon. An additional selection field will be shown in which a further parameter can be selected. This allows multiple criteria to be linked together.
Date field		Enter data into date fields using the calendar or manually using the keyboard. Data fields provide the following functions for simplified keyboard input: • Enter the day (e.g. "18") -> current month and current year will be added • Enter the day and month (e.g. "18.05.") -> current year will be added • Enter a full stop (".") -> the current date will be entered

3 Working with MATRIX

This section provides support for setting up and maintaining your MATRIX system.

The "How to" instructions are grouped by the MATRIX modules.

3.1 System instructions

This section will help you to configure the MATRIX system.

The procedure for creating a new MATRIX system is described in the [Getting started](#) section.

Search strings and wildcards in MATRIX

- ▶ Maintain multilingual systems
- ▶ Set up and restore backups
- ▶ Set up single sign-on
- ▶ Configure TLS/SSL
- ▶ Encode and print ID cards
- ▶ Set up master media and master medium keys
- ▶ Work with search profiles and search profile reports
- ▶ Set up and print forms
- ▶ Work with data groups
- ▶ Set up an LDAP interface
- ▶ Work with workflows

3.1.1 # Search strings and wildcards in MATRIX

Search expressions

The search function provided in MATRIX supports the following expressions:

Number range expression:

-	Minus character without spaces	Range search from x to y	Example: 15-25
%	Percent character without spaces	Contains x	Example: %1
<		Less than x	<50
>		Greater than x	>50
<=		Less than or equal to x	<=50
>=		Greater than or equal to x	>=50

Text range expression:

-	Minus character with spaces	Range search from a to z	Example: a - m
%	Percent character without spaces	Contains x	Example: %sch

Note: When searching for a range in texts, you must also insert a blank space before and after the hyphen. The search function is not case-sensitive.

Examples of search strings:

a - m	Searches for all entries from "a" to "m"
- m	Searches for all entries up to "m"
n - z	Searches for all entries from "n" to "z"
n -	Searches for all entries starting from "n"
sa - sch	Searches for all entries between "sa" and "sch"
sch	Searches for all entries beginning with "sch"
%sch	Searches for all entries that contain "sch"
%1	Searches for all entries that contain a "1", e.g. 1, 11, 110
10-19; 25	Searches for all entries between "10" and "19" as well as the entry "25"
a - d; s - t; 50	Searches for all entries from "a" to "d" and "s" to "t" as well as the entry "50"

The semicolon ; stands for an OR operator.

Wildcards

The following wildcards can be used to define search profiles:

@EMPTY	Searches for missing or empty fields
@NOTEMPTY	Searches for any values
@(number)	For specifying flexible value ranges. Example: Type @1, @2, @3 etc., where 1 stands for the first parameter, 2 for the second parameter etc. Specific values will be queried if a search profile is used.

3.1.2 ► Maintain multilingual systems

dormakaba MATRIX is a multilingual browser application. The language of the user interface that is displayed depends on the browser's language settings. To satisfy your company's international requirements, you can also maintain the texts for your records, such as doors, daily programs and so on, in multiple languages. These are then displayed accordingly depending on the browser language setting.

This does not apply to the device names, such as reader or terminal names. These are not provided in multiple languages. The names are displayed as they were entered, regardless of the pre-set language.

Note: You can only maintain multilingual data in the languages that were created in your system during installation. However, if further languages are required, these language packages can be installed at a later time.

Data input

When a new record is created, it is always saved in the language version that corresponds to the browser's current setting. Example: If your browser is currently set to English, the data entered in the system is stored in the English column, regardless of the language in which the text is actually entered.

Therefore, the appropriate language setting must always be selected in the browser when creating new records.

Enter multilingual data

Proceed as follows to maintain multilingual data:

1. In the menu bar, click **System** and open **Administration** in the menu tree.
2. Click **Texts**. The **Selection Texts** dialog displays a list of all of the database contents that can be maintained in multiple languages.
3. Select the texts you require and click in the toolbar on **Edit selected search results** to edit selected texts only, or click **Edit all search results** if you wish to edit all texts.
4. Enter the appropriate texts in the rows for the respective languages in the **Edit texts** dialog.
5. In the toolbar, click **Save** to save your entries and open the next record, if required.

Install language packages at a later time

Further language packages can be installed at a later time using the MATRIX installer. Use the installer of the last-installed version to do this.

Proceed as follows to install further language packages:

1. Save the new language packages on the MATRIX computer.
2. Start the installer of the last-installed version. The Update dialog will be opened.
3. Click **Install language packages**.
4. Existing language packages can be directly added to the selection.
To add new language packages, click **Import more language packages** and select the language package.
5. Click **Install** and then on **Finish**.

Note: If available, localised online help will also be installed along with the language package.

3.1.3 ▶ Set up and restore backups

dormakaba MATRIX provides assistance for backing up data and restoring the database.

Backups are usually created automatically once a day. You set the days and times that backups are to be carried out in the backup dialog.

This dialog allows you to make an extra, non-scheduled backup.

Note: This function is only available if the database has been installed locally on the MATRIX server. If the database is saved on a network server, data must be backed up and restored with the aid of SQL Server Management Studio.

Determine backup schedule

To set the backup times, follow these steps:

1. In the menu bar, click **System** and then click **Administration** in the menu tree.
2. Click **Backup** to open the **Backup settings** dialog.
3. In the dialog, highlight the desired days and enter the time for the backup. If necessary, the backup directory can also be selected or the time for the retention period.
4. Click **Save** in the toolbar to save the entries.

Recover data from backup

To recover data from a backup generated by MATRIX, proceed as follows:

1. To start the restore program, select the program group **dormakaba MATRIX** from the Windows menu **Programs** and click **Restore Matrix database**.
2. In the dialog, mark the backup that you wish to restore.
3. In the actions, click **Restore** to start the restore procedure.
4. Confirm the acknowledgement query.

3.1.4 ► Set up a single sign-on

Single sign-on login (SSO) is supported in addition to the classic MATRIX form-based login procedure. After logging in using this process, users can utilise all applications for which they have authorisation without having to log in to the respective individual applications again.

During this procedure, the actual authentication, i.e. the determination of a user's identity, is conducted by an external system; the application only checks the authorisation and therefore the user's rights.

Three SSO login process variants are available in MATRIX in addition to the classic form-based login procedure :

- Kerberos
- Request header
- Windows

Note: System parameter System 190 determines which login procedure is used.

Possible login procedures

Login form	This refers to the classic login process during which the user enters their user name and password in the login dialog. This is the default procedure and can be used as a substitute login for the other procedures if these are ever unavailable.
Kerberos	Kerberos is an authentication method that works like a ticket system. Users enter a user name and password to log in to a ticket server once and can then obtain further tickets for all applications for which they have the necessary rights without having to log in again. Windows domain servers provide the necessary functions for Windows Clients. Users log in once to the Windows domain and can then access all the applications configured for them without having to log in again. For Linux, implementations with MIT Kerberos or Heimdal Kerberos are available.
Request header	Can be used if external authentication software installed on a web server is connected between the user and application. Requests from the web browser are sent to the web server from where they are forwarded to the application. This software checks user authentication, authenticates the user and forwards the request to the application along with all the information concerning the user. If there is not yet a session for the current user, the user name is identified and the user's data is loaded into a newly created session. CA Siteminder can be used as authentication software, for example.
Windows	MATRIX also allows single sign-on login via the Windows domain user.

Configure system settings

Note: Administrator permissions are required to configure the login procedure.

Use the system parameters to determine which login procedure is used and how the system should behave in the event of a login error.

Depending on the settings, the necessary menu items for configuration are displayed.

Proceed as follows to change the login process in system settings:

1. Select the **Administration** menu item from the main **System** menu and click **System parameters**.
2. Open the "System" node followed by the "Web" node options in the System Parameters tree.
3. Click system parameter 190 and enter the desired login procedure.
Options:
0 = Login form
1 = Kerberos
2 = Request header
3 = Windows
4. Click **Save** in the toolbar to save the entries.
5. Click system parameter 191 to set the procedure for the event of an incorrect login.
Options:
0 = Redirect to error screen
1 = Redirect to login form. You do not have to allocate passwords when creating users in this case.
Likewise, no passwords are required when importing users.

Note: During setup, system parameter 191 should be set to 1, so that login is still possible in the event of an error.

6. Click **Save** in the toolbar to save the entries.

Note: Restart the MATRIX service after changing system parameters.

To log into the system to conduct further configuration activities, you must then enter the address of the login page in the browser.

Proceed as follow to configure the login process:

1. Select the **Administration** menu item from the main **System** menu and click the **Single sign on** menu item.
2. Enter the appropriate Groovy instructions for transforming the user name in the field.
Further details may be required depending on the login process.
3. Click **Save** in the toolbar to save the entries.

Configure Kerberos settings

A number of settings must be configured for the Kerberos single sign-on login procedure. These include:

- I. Setting up a service principal for MATRIX and generating a keytab for the service principal
- II. Creating a Kerberos configuration file
- III. Check and adjust the operating system as necessary
- IV. Check and adjust the browser settings as necessary

I. Setting up a service principal

The way that you set up a service principal depends on the operating system concerned

Proceed as follows to set up the service principal:

1. Create a new user. Use a meaningful name, if possible. Create a password. This password must never expire. The user must not be prompted to change this the first time they log in.
2. Map the service principal HTTP/matrixcomputername.domain.com@DOMAIN.COM for the user previously created.

Example for Windows:

```
C:\>setspn -a HTTP/matrixcomputername http-matrix-web
C:\>setspn -a HTTP/matrixcomputername.domain.com@DOMAIN.COM http-matrix-web
C:\>ktpass -princ HTTP/matrixcomputername@domain.com -pass <password> -mapuser http-matrix-
web@domain-com -out
c:\http-matrix-web.keytab -ptype KRB5_NT_PRINCIPAL
```

The last of the four instructions creates the keytab required by Matrix at c:\http-matrix-web.keytab.

Example for Linux:

```
$ kadmin
$ kadmin: addprinc -randkey HTTP/matrixcomputername.domain.com
$ kadmin: ktadd -k /http-matrix-web.keytab HTTP/matrixcomputername.domain.com
```

II. Create the Kerberos configuration file

This is a conventional text file in .ini format.

Example:

```
[libdefaults]
    default_realm = MYDOMAIN.COM
[realms]
    MYDOMAIN.COM = {
kdc = DC1.mydomain.com
    }
```

Default values are specified in the first section, such as the default realm that is used if a principal does not use a specific realm.

The "realms" section then provides a report of realms with the applicable configurations.

In the example, the Kerberos server that MATRIX should use to check a ticket received from the browser is configured.

III. Check and adjust the operating system as necessary

Further settings may be required depending on the server operating system in use.

AllowTgtSessionKey

Windows 2000 and above no longer allow access to the TGT session key by default. However, MATRIX requires the session key to check a service ticket. To enable access to the session key, one of the registration keys below must be entered into the computer on which MATRIX is installed. Two registration files can already be found in the directory "main\conf". Double-click and confirm these to enter the applicable value in the registration:

For Windows XP and Windows 2000:

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Lsa\Kerberos

Value Name: allowtgtsessionkey

Value Type: REG_DWORD

Value: 0x01

File: allowTgtSessionKey2000XP.reg

For Windows 2003 and above:

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\Lsa\Kerberos\Parameters

Value Name: allowtgtsessionkey

Value Type: REG_DWORD

Value: 0x01

File: allowTgtSessionKey2003AndNewer.reg

IV. Check and adjust the browser settings as necessary

Further settings may be required depending on the browser in use.

If using Mozilla Firefox:

Normally Firefox does not respond to the request to authenticate a user. However, this can be achieved using the following settings:

1. Enter 'about:config' in the Firefox address line then press Enter.
2. Acknowledge the dialog that appears.
3. Enter 'negotiate' in the search field on the page that is displayed and set the following values for the properties displayed by double-clicking the applicable entry:
 - network.negotiate-auth.allow-non-fqdn: Value = true
 - network.negotiate-auth.trusted-uris: Value = http://,https://
 - network.negotiate-auth.using-native-gsslib: Value = true

If using Microsoft Internet Explorer:

1. Open **Internet options** in Internet Explorer and open the **Advanced** tab.
2. Activate the checkbox **Activate integrated Windows authentication**.
3. Ensure that the application's URL appears in the trusted sites list on the 'Security' tab unless it is part of the local network.

If using Google Chrome:

Chrome does not require any special settings and can be used directly.

Configure request header settings

No further settings are required for this login process.

Configure Windows settings

A number of settings must be configured for the Windows single sign-on login procedure. These include:

- I. Creating the MATRIX user
- II. Adjusting the browser settings

I. Creating the MATRIX user

The user ID of the MATRIX user must be identical to the ID of the Windows domain user (sAMAccountName = user ID).

Password settings can be the same for all users as these are no longer relevant after switching to single sign-on login.

Create the required user in MATRIX under **System > Administration > User**.

II. Adjusting the browser settings

Further settings may be required depending on the browser in use.

If using Mozilla Firefox:

Normally Firefox does not respond to the request to authenticate a user. However, this can be achieved using the following settings:

1. Enter "about:config" in the Firefox address line then press Enter.
2. Acknowledge the dialog that appears.
3. Enter "negotiate" in the search field on the page that is displayed. Then set the following values for the properties displayed by double-clicking the applicable entry:
 - network.negotiate-auth.allow-non-fqdn: Value = true
 - network.negotiate-auth.trusted-uris: Value = http://,https://

If using Microsoft Internet Explorer:

1. Open **Internet options** in Internet Explorer and open the **Advanced** tab.
2. Activate the checkbox **Activate integrated Windows authentication**.
3. Ensure that the application's URL appears in the trusted sites list on the **Security** tab if it is not part of the local network.

If using Google Chrome:

Chrome does not require any special settings and can be used directly.

Further information on single sign-on via Windows**Call up MATRIX:**

MATRIX must be called up via the browser using the server name (without the domain).

It can only be called up by a client in the domain and only by a user created in and logged in to Matrix.

Note: If MATRIX cannot be called up by the client, check the firewall port on the MATRIX-server.

ISS redirect:

You can set up a redirect via the IIS manager (Internet information service manager) on the MATRIX server to prevent possible login problems. This allows the port data to be omitted or possible incorrect entries to be corrected.

To set up an ISS redirect, first install the web server role on MATRIX and then set up the redirect in the ISS Manager.

Caution: This step must only be performed in consultation with the administrator.

Proceed as follows to install the web server role on the MATRIX server:

1. Open the server manager.
2. Click **Manage** and select **Add roles and features**.
3. Select the server role "Web server (IIS)" and the displayed features.
4. Click **Next**.
5. Select **Role services** and activate the **HTTP redirect** entry.
6. Click **Continue** to finish installation.
7. Restart the MATRIX server.

Proceed as follows to set up a redirect in the ISS Manager:

1. Open the ISS Manager.
2. Select the appropriate server node and double-click **HTML redirect**.
3. Activate the checkbox **Redirect requests to this target:** and enter the MATRIX server address.
4. Finally, click **Apply**.

3.1.5 ▶ Configure TLS/SSL

It is advisable for communication between the MATRIX server and client computers and between the MATRIX server and terminal periphery to be conducted via TLS/SSL.

Notes on communication between MATRIX server and terminals

- TP4 terminals with firmware 2.05 and above support SSL encryption.
- Terminals which are to communicate with the server or with one another using SSL encryption must be placed in an infrastructure node in the device tree since this node specifies the identifier for SSL encryption and the communication zone for the terminals.

Note: Information on safe initial commissioning and configuration of the TP4 terminal can be found in the documentation of the relevant device.

General information and recommendations about certificates

- Do not use weak signature algorithms (e.g. sha1, md5) for certificates.
- It is advisable to use a key that is at least 2048 bits long for the SSL/TLS public key.
- It is advisable to use your own trusted certificate that has been signed by a certificate authority, such as VeriSign, Thawte or Let's Encrypt.
- The certificate must be available in PKCS12 or JKS format.

To obtain an SSL certificate for secure encryption, a certificate request (certificate signing request, CSR) must first be submitted to a certification authority.

To generate a CSR, you must create a pair of keys for your server consisting of a private key and the CSR. The CSR contains information concerning the applicant, the domain that is to be encrypted and the public key. The private key remains with you and must not be made public. Later on, the certificate will be inextricably linked to the private key. Therefore, this must be safely stored and, for example, backed up on an external data carrier.

Every SSL certificate provider assists the applicant when creating the CSR.

Use the MATRIX SSL configurator to set up SSL encryption between MATRIX server and client

Configuring SSL encryption is a constituent part of the installation routine for new installations. The MATRIX SSL configurator is provided for making changes to the SSL configuration in an existing MATRIX system.

1. In the Windows **Programs** menu, select the group **dormakaba**, then **MATRIX** and click **MATRIX SSL configurator**.
2. Select the language in which the MATRIX SSL configurator should be executed.
3. Select the desired option.

SSL encryption with existing certificate: A separate trusted certificate in PKCS#12 or Java Keystore format is required. Select this in the next step. This option is recommended and provides the best possible security.

SSL encryption with generated certificate: A self-signed certificate is generated for encryption. In the next step, enter the host name of the computer on which MATRIX is installed. Also enter the company name under which the self-signed certificate will be used. This option ensures that communication between the MATRIX server and clients is encrypted but does not protect against man-in-the-middle attacks. Therefore, this option should only be selected in exceptional cases.

No SSL encryption: Using this option, MATRIX runs without SSL encryption. This option is not recommended if MATRIX is accessed via a network.

4. Click **Next** and then **Next** again. The web server is configured and the MATRIX service is restarted.

3.1.6 ▶ Encode and print ID cards

MATRIX provides the option of using the Desktop Reader Manager to directly encode ID cards. Either a 9108 desktop reader or a MAGiCARD ID card printer can be used as the ID card creation system.

ID cards can also be printed using a MAGiCARD ID card printer. The layouts can be created and managed in MATRIX.

The ID card numbers and keys for applications are managed in MATRIX. This guarantees that it is not possible for an ID card to be encoded twice.

A. Encode ID cards using a 9108 desktop reader

Requirements

- Desktop Reader Manager installed
- 9108 desktop reader connected
- Type of ID card used: MIFARE DESFire or LEGIC advant
- System parameter System 121: Value = 3 (ID card creation using desktop reader)
- System parameter System 130: Value = 1 (use of PC reader activated)

I. Configure the ID card and Desktop Reader Manager

1. Start the device initialisation wizard.
2. In step 1, select the 9108 desktop reader and activate the **ID card encoding** checkbox.
3. Select one of the preconfigured ID card types: MIFARE DESFire blank or LEGIC advant Kaba CID.
4. Select all further required devices and click **Next**:
5. If you use DESFire ID cards, you will have to generate the key for encoding ID cards.
If you use LEGIC advant ID cards, you must scan the Security Card C1.
6. Continue through the device initialisation wizard in line with your further requirements until it is completed.

Note: If multiple PC reader are configured or if proxies are used for communication between peripheral equipment and the Desktop Reader Manager, the user must select the PC reader to be used from Self Service a single time.

II. Encode ID cards

Note: The encoding function is subject to permissions management. Ensure that the user role possesses the necessary permissions (Edit user role > Other > Encode ID cards).

If all encoding function permissions are configured, the **Edit person**, **Edit external company employee** and **Edit ID card** dialogs will feature an **Encode ID card** button.

1. Open the editing dialog for the person, external company employee or ID card.
2. Place the non-encoded ID card on the desktop reader and click the **Encode ID card** button. The ID card will now be encoded in line with the settings.

B. Encode and print ID cards using a MAGiCARD ID card printer

Requirements

- Desktop Reader Manager installed
- MAGiCARD ID card printer connected and configured
- Type of ID card used: MIFARE DESFire or LEGIC advant

- System parameter System 121: Value = 2 (ID card creation using MAGiCARD)

I. Configure the ID card and Desktop Reader Manager

1. In Device management, click **Class administration** and then **ID card types**.
2. Select the preconfigured ID card type MIFARE DESFire blank or LEGIC advant Kaba CID and enter the configuration data.
3. Click **Devices** and create an encoding station.
4. Select the previously configured ID card type.
5. Save the device.

Note: If multiple encoding stations are configured or if proxies are used for communication between peripheral equipment and the Desktop Reader Manager, the user must select the encoding station to be used from Self Service a single time.

II. Create ID card layouts

1. Click **System** in the menu bar. Then click **Administration** in the menu tree and then **Application**.
2. Click **ID card layouts**.
3. Create a new record or open an existing record.
4. Enter the width and height of the ID card in the **Edit ID card layout** dialog. Read the information given in the documentation of the ID card printer.
5. Design the front and, if necessary, the back of the card using the integrated editor.
6. Click **Save** in the toolbar to save the entries.

III. Encode and print ID cards

Note: The encoding function is subject to permissions management. Ensure that the user role possesses the necessary permissions (Edit user role > Other > Encode ID cards).

If all encoding function permissions are configured, the **Edit person**, **Edit external company employee** and **Edit ID card** dialogs will feature an **Encode and print ID card** button.

1. Open the editing dialog for the person, external company employee or ID card.
2. Click the **Encode and print ID card** button: A **Print ID card** pop-up dialog will open.
3. Select the ID card layout. The pop-up dialog will show a preview of the layout.
4. Execute the required commands using the following buttons:
 - **Print and encode** button: The print and encode job for the ID card is submitted to the ID card printer.
 - **Encode** button: The encode job for the ID card is submitted to the ID card printer.
 - **Print** button: The print job for the ID card is submitted to the ID card printer.
5. Click **Close** to exit the pop-up dialog.

Note: If you wish to print the back of the ID card in colour, check the printer settings beforehand. The printer may be set to monochrome printing by default.

3.1.7 ▶ Work with master media and master medium keys

Master media are required to

- Synchronise evolo components and the 1460 evolo Programmer
- Transfer Mifare ID card keys to devices that only accept these keys in the special format of a master medium key

MATRIX supports master media of the types Master A und Master B for Legic and Mifare ID card types respectively. There are no functional differences between Master A and Master B media, but Master B media are usually used in the MATRIX environment. Master media of the type Master T are not supported in MATRIX.

What are master medium keys?

A master medium key is a specially coded and encrypted data package in which a Mifare ID card key is packed.

The following devices require Mifare ID card keys in the form of a master medium key:

- evolo components: The ID card keys must be packed in master medium keys and saved on master media for transfer to the components.
- Kaba terminals: The ID card keys must be packed in master medium keys. The master medium keys can then either
 - Be saved on master media for transfer to the terminals or
 - The master media keys can be saved in the MATRIX ID card type to be transferred when data is loaded on the terminal.
- KCP compact/remote readers: The ID card keys must be packed in master medium keys. The master media keys are saved in the MATRIX ID card type to be transferred to the readers when data is loaded on the higher-level controller. Therefore, a master medium is not required here but the key to be transferred must be transferred in the data format of a master medium key.
- 91 08 desktop reader: The 91 08 desktop reader (connected to a desktop reader manager) requires the ID card number read key in the form of a master medium key to read the ID card numbers from ID cards of the type Mifare Classic Kaba CID (MATRIX ID card type 41) und Mifare Desfire Kaba CID (MATRIX ID card type 43) This must be saved in the MATRIX ID card type for transfer to the reader when data is loaded in the desktop reader manager.

General information on generating master medium keys

A desktop reader manager with connected 91 08 desktop reader is always required to write and read master media and to package ID card keys in master medium keys.

A distinction is made between two cases when generating master medium keys:

- Master medium keys for ID cards of the types Mifare Classic Kaba CID (MATRIX ID card type 41) and Mifare Desfire Kaba CID (MATRIX ID card type 43) do not have to be generated using MATRIX. These ID card types are always delivered from the factory with master media that already contain the required master medium keys. The ID card keys packed in these master medium keys are not known in MATRIX.
- Master medium keys for other types of ID cards (particularly MATRIX ID card types 11 and 13) can be generated in MATRIX based on the ID card keys entered in the ID card types and applied to master media as required.

Two dialogs interact when generating master medium keys:

- **Master media** dialog:
 - Application of master medium keys to master media
 - Reading master medium keys from master media
 - Saving master medium keys in the ID card types

- **ID card types** dialog, **Reader parameters** tab for Mifare Classic and Mifare Desfire ID card types:
 - Enter the master medium key index (0-7) for all ID card keys that are to be applied to master media in the form of master medium keys. The master medium key index writes in the memory of the master medium key on the master medium.
 - Press the **Generate master medium key** button to generate the master medium key for all ID card keys that must be transferred to a device in the form of a master medium key when loading the device with data.
Alternatively, use the **Apply master medium key to ID card type** button in the **Master media** dialog to read master medium keys from a master medium and enter them into the **Master medium key** or **Master medium key for ...** input field of an ID card type.

Apply Mifare ID card key to Mifare master media

Applications:

- Mifare Classic or Mifare Desfire ID cards are used (not Mifare Classic Kaba CID or Mifare Desfire Kaba CID).
- ID card keys are required to write/read the ID cards.
- A master medium must be created for transferring the ID card key to evolo components or Kaba terminals.

Requirements:

- A desktop reader manager as a PC reader or an AccessOnCard station, if AoC or DoC keys are also used
- A connected 91 08 desktop reader

Procedure:

1. In the **Devices** module, open **Class administration** and click **ID card types**.
2. Open the corresponding ID card types and open the **Reader parameters** tab.
3. Select the storage location for master medium keys using the **Master medium key index** selection fields. The default settings can usually be retained here.
4. Enter the desired ID card key, if this has not yet been done. The **Master medium key** and **Master medium key for ...** input fields do not need to be changed.
5. Click **Devices** in the menu tree, open the PC reader or the AccessOnCard station and assign the previously edited Mifare ID card type.
6. If the system will be using DoC keys, activate the **DoC active** checkbox for the AccessOnCard station.
7. Load data for the PC reader or the AccessOnCard station.
8. Place the master medium on the connected 91 08 desktop reader.
9. Click **Master media** in the menu tree and create a new master medium or open an existing record.
10. In the **Edit Master medium** dialog, click the **Check Master medium** button to check the current assignment of the master medium against the desired assignment stated in the ID card type.
11. If the check detects deviations, click **Update Master medium** to update the assignment of the master medium.
12. Save the master medium.

Importing master medium keys into an ID card type

Case study:

- Mifare Classic or Mifare Desfire ID cards are used.
- ID card keys are required to write/read the ID cards.
- The master medium key must be saved in an ID card type for transferring the master medium keys to Kaba terminals, KCP compact/remote readers or (in the case of Mifare Classic Kaba CID or Mifare Desfire Kaba CID ID cards) to a desktop reader manager.

Requirements:

- An existing master medium with master medium keys
- A desktop reader manager as a PC reader or an AccessOnCard station, if AoC or DoC keys are also used
- A connected 91 08 desktop reader

Procedure:

1. In the **Devices** module, open **Class administration** and click **ID card types**.
2. Open the corresponding ID card types and open the **Reader parameters** tab.
3. Select the storage location for master medium keys using the **Master medium key index** selection fields. The default settings can usually be retained here.
4. Enter the desired ID card key, if this has not yet been done. The **Master medium key** and **Master medium key for ...** input fields do not need to be changed.
5. Click **Devices** in the menu tree, open the PC reader or the AccessOnCard station and assign the previously edited Mifare ID card type.
6. If the system will be using DoC keys, activate the **DoC active** checkbox for the AccessOnCard station.
7. Load data for the PC reader or the AccessOnCard station.
8. Place the master medium on the connected 91 08 desktop reader.
9. Click **Master media** in the menu tree and create a new master medium or open an existing record.
10. In the **Edit Master medium** dialog, click the **Check Master medium** button to check the current assignment of the master medium against the desired assignment stated in the ID card type.
11. If the check detects deviations, click **Update Master medium** to update the assignment of the master medium.
12. If the check does not detect any deviations, click the **Apply master medium key to ID card type** button to transfer the master medium key from the master medium to the ID card type.
13. Save the master medium.

Generating a master medium key without using a master medium

Case study:

- Mifare Classic or Mifare Desfire ID cards are used (not Mifare Classic Kaba CID or Mifare Desfire Kaba CID).
- ID card keys are required to read/write the ID cards
- These ID card keys must be packed in master medium keys and saved in an ID card type for transferring the ID card key to Kaba terminals or KCP compact/remote readers.

Requirements:

- A desktop reader manager as a PC reader or an AccessOnCard station, if AoC or DoC keys are also used

Procedure:

1. In the **Devices** module, open **Class administration** and click **ID card types**.
2. Open the corresponding ID card types and open the **Reader parameters** tab.
3. Enter the desired ID card key, if this has not yet been done. The **Master medium key** and **Master medium key for ...** input fields do not need to be changed.
4. Click the **Generate master medium key** button. This packs the ID card keys in master medium keys and enters them in the **Master medium key for ...** input fields.
5. Save the ID card types.

Linking evolo components with master media

The master medium with which every evolo component can be linked must be defined.

Note: Please note that master media with suitable ID card technology must always be used, i.e. Mifare master media for evolo components with a Mifare ID card type and Legic master media for evolo components with a Legic ID card type.

Procedure:

1. In the **Devices** module, open **Class administration** and click **Master media**.
2. Create a record for every existing master medium. When doing so, the ID card number of a master medium can be imported using a locally installed desktop reader manager with a connected 91 08 desktop reader.
3. Save the master medium.
4. Click **Devices**, open the evolo component and assign the desired master medium.
5. Save the changes on the device.

3.1.8 ▶ Work with search profiles and search profile reports

Search profiles for persons can be created in the Access, Time or System modules and are always available from all modules. Search profiles for external company employees, visitors and movements are created in the System module. These search profiles are used in the advanced search areas (double magnifying glass) of selection dialogs for person groups.

Furthermore, search profiles can be used to create individual reports with the aid of the report configurator.

Create search profiles

1. In the **System** main menu, open the **Administration** menu followed by the **Search profile management** menu.
2. Click on **Search profiles** to open the **Selection Search profiles** dialog.
3. Click on **Create new record** in the toolbar. In the **New search profile** dialog, select the desired data type depending on the person group to which the search will apply.
4. Enter a suitable name that will simplify selecting the search profile in the advanced search.
5. Click on the **New entry** button and use the table to specify the search criteria and value ranges.

Possible parameters:

- The parameters depend on the selected criterion. A tooltip in the opened input line shows all possible values and operators for the criterion.
 - Use the wildcard @EMPTY if you wish to search for missing or empty fields.
 - Use the wildcard @NOTEMPTY if you wish to search for arbitrary values.
 - To keep the value range flexible, use wildcards of the type @1, @2, @3 etc., where 1 stands for the first parameter, 2 stands for the second parameter etc. Specific values will be queried if a search profile is used.
 - An OR operator can be created within a row using a semicolon ;.
6. Click **Save** in the toolbar to save the new search profile.

Note: The possible search criteria for each data type are preset in the system. Use the **Edit search profile fields** dialog to expand or limit the available search criteria.

Use search profiles to search for persons

The search profile for searching will be provided in person administration, external company administration or visitor administration, depending on the selected data type.

1. Open the desired selection dialog, e.g. the **Selection Persons** dialog.
2. Click on **Open search via profiles** (double magnifying glass) in the toolbar.
3. Select a search profile from the selection report and click on **Start search**.
4. If the search profile contains wildcards with value entries, the **Apply filter** dialog will open. Enter the values for your search in the fields and click on **Continue**.
5. The following selection dialog contains all persons (or visitors, external company employees) that match the search criteria.

Create search profile reports

Every search profile report requires a search profile report layout. These are created by defining the fields that the report will contain.

I. Create search profile report layouts

1. In the **System** main menu, open the **Administration** menu followed by the **Report configurator** menu.
2. Click on **Search profile report layout** to open the **Selection Search profile report layouts** dialog.
3. Click on **Create new record** in the toolbar. In the **New search profile report layout** dialog, select the desired data type depending on the person group to which the search will apply.

4. Enter a suitable name.
5. Click on the **New entry** button and use the table to specify the fields that will be shown in the report. Specify lead objects, print widths and headers to determine the layout of the report.
6. Save your search profile report layout.

II. Create search profile reports

1. Now, click on **Report configurations** to open the **Selection Report configurations** dialog.
2. Click on **Create new record** in the toolbar and select the desired search profile type from the **New report configuration** dialog.
3. Enter a suitable name. This name will be displayed in the MATRIX report menu.
4. Select the program group in which the report should be made available.
5. Select the search profile report layout and the search profile that are to be used.
6. If no lead objects are defined in the search profile report layout, the print output can be sorted in the table.
7. Click on **Save** in the toolbar.

Note: You must log in to MATRIX again in order to view the new report in the MATRIX menu.

3.1.9 ▶ Set up and print forms

Forms are used in ID card administration, person administration, external company administration and visitor administration.

The layouts for all forms are based on the HTML format.

The form templates are saved in the dormakaba MATRIX database.

Information on migrating OpenOffice form templates: OpenOffice form templates from previous versions can be saved in HTML format using OpenOffice. In the converted file, the previously used wildcards must be replaced with the format used in HTML form templates {%WildcardName%}. The HTML form template can then be loaded as described above.

Create a template file

The template file must be available in HTML format. You can create a file of this type, e.g. using MS Word, and then save it in HTML format.

Syntax for text tags: Text tags function as wildcards, e.g. for employee record fields or ID card fields. They must be entered in the format {%MyTextTag%}. After the template file is loaded in the **Edit Form** dialog, all text tags found will be displayed. Allocate the text tags to the respective employee record field or ID card field. The respective content will then be output in the form instead of the text tag.

Examples of text tags:

```
{%EmployeeNumber%}
{%Name%}
{%DateOfBirth%}
{%FileDate%}
{%VisitorFirstName%}
{%VisitorName%}
```

Embed images

If you wish to use images in your template, it must be possible to access these either via URL from the MATRIX server or they must be stated in a data URL in Base64 format.

Example of an HTTP URL:

```

```

Example of a data URL:

```

```

Embed a signature field for touchscreens

Position the wildcard %%%SIGNATURE%%% at the location where the signature is to be shown.

Embed a signature field for signature pads

Position the wildcard %%%SIGNATURE%%% at the location where the signature is to be shown.

Create forms in MATRIX

Once you have created the template file and saved it in a directory on the server, you must load the forms into MATRIX and configure them.

1. In the **System** main menu, open the **Administration** menu followed by the **Application** menu.
2. Click **Forms** to open the **Select form** dialog.
3. Then click **Create new record** in the toolbar and select the required **Form types** in the selection dialog.
4. Give the form a suitable name.
5. Click the **Select template file** button.
6. The table displays the form's text tags.
7. Allocate the corresponding field to each text tag.
8. If the form is intended to be digitally signed, select the appropriate option. Please note that the corresponding device configuration must have been selected (touchscreen or signature pad).
9. In the toolbar, click **Save** to save the new form.

Print forms

If a form (e.g. visitor form) has been set up, a **Print form** button will be shown in the toolbar of the corresponding editing dialog (e.g. "Visits overview" in visitor administration).

1. Open the record for which you wish to print a form.
2. Click **Print form** in the toolbar. The **Selection Form** dialog for choosing the record will open.
3. Select the form that you wish to print and click **Print selection**. The browser's Print dialog will be displayed.

Note: Not all browsers support a print preview in their Print dialogs. Open the browser settings to display a print preview or to change the page formats. Settings made in the browser will be saved.

4. Select a printer and click **Print**. You can print on all the server's local printers or on network printers for which MATRIX is authorised as a system service.

Sign forms digitally and save them

If a form with digital signature has been set up, the **Sign** button will be shown in the **Selection Forms** dialog.

1. Open the record for which you wish to call up a form.
2. Click **Print form** in the toolbar. The **Selection Forms** dialog will open for the record in question.
3. Click **Sign** in the table row of the form. The form will open in a popup dialog.
4. The form recipient then signs the form and confirms their signature using the connected device.
5. Click **Save and close** to save the signed form and close the window.

Click **Save and download PDF** to save the signed form in MATRIX and also convert it to PDF.

Note: The forms saved in MATRIX are allocated to the person, the external company employee or the visit, depending on the form type, and can be called up again for viewing at any time.

3.1.10 ► Work with data groups

The access rights to certain data can be restricted for users with the aid of data groups. To do so, data groups are created first to which records are assigned. Each record can be assigned to a maximum of three data groups.

Records are accessed using data groups which have been assigned to a user. Each user can receive the rights to several data groups.

Data groups can be set up for:

- Lifts
- ID cards for ID Card Administration Level 3 only
- ID card layouts
- Users
- User roles
- Visits
- Intruder detection systems
- Forms
- External companies
- Devices:
 - Infrastructure nodes
- Calendar
- Correction types
- Reports
- Report layouts
- Manual special days
- Persons, if the system parameter 172 basic search profiles is switched off.
- Room reservation
- Rooms
- Room zone administration:
 - Reader
 - Room zones
 - Security areas
 - Folder
- Interlocks
- Security area daily programs
- Security area weekly profiles
- Search profiles
- Door weekly profiles
- Door daily time
- Door selection
- Access profiles
- Access weekly profiles

Proceed as follows to manage access rights to data using data groups:

Setting system parameters

The data groups and their number specified using system parameter 170 number of data groups.

1. In the menu bar, click **System**. In the menu tree, click **Administration** and then **System parameters**.
2. Under the **System** node, select the system parameter **170 Number of data groups** and enter the number of data groups.

Possible values are:

0: Data groups are deactivated and the allocation fields for the data groups in the data objects are hidden from view.

1-3: Data groups are activated and the data objects may be assigned to one, two or three data groups as per the system parameter.

3. Then click **Save**.
4. Log off and then log on again to refresh the menu structure.

Use the system parameter **171 Data groups display options** to define how to display data for which the user does not have access permission.

1. In the menu bar, click **System**. In the menu tree, click **Administration** and then on **System parameters**.
2. Under the **System** node, select the system parameter **171 Data groups display options** and specify how the records are to be displayed for the users.

Possible values are:

0: Records without access rights are inactivated/greyed out when displayed.

1: Records without access rights are not displayed.

3. Then click **Save**.
4. Log off and then log on again to refresh the menu structure.

Setting up data groups

Data groups are first created in the system and then allocated records.

Proceed as follows to create data groups:

1. Click **System** in the menu bar and then select **Administration** in the menu tree.
2. Click the **Data groups** menu item to open the **Selection Data groups** dialog.
3. Click **Create new record** in the toolbar to create a new data group.
4. Enter a meaningful name in the **Name** and **Short name** fields. These fields are language-dependent.
5. Click **Save** in the toolbar to save the data group.
6. Repeat steps 3 to 5 until you have created all the required data groups.

Allocate data groups to records

Since allocation is the same for all data objects, this is described using correction types as an example.

Proceed as follows to allocate correction types to a data group:

1. Click **System** in the menu bar, followed by **Administration** in the menu tree and then **Application**.
2. Click the **Correction types** menu item to open the **Select Correction types** dialog.
3. Click the correction type which you would like to assign to a data group.
4. You may assign one, two or three data groups to the correction type in the selection field for data groups, depending on the number of data groups.
5. In the toolbar, click **Save** to save the changes.
6. Repeat steps 2 to 5 until you have assigned all correction types to the required data groups.

Note: You may also make data group assignments using corrections for some data objects, such as correction types, persons, ID cards and access profiles. This is particularly helpful if you want to allocate the same data groups to more than one record.

Grant access rights

The access rights to a data group's data are implemented by assigning data groups to a user.

More than one data group can be assigned to each user.

This is how you assign data groups to a user:

1. Click **System** in the menu bar and then select **Administration** in the menu tree.
2. Click the **Users** menu item to open the **Selection User** dialog.
3. Click the user that you would like to assign to one or more data groups.
4. Switch to the **Data groups** tab and assign the required data groups to the user.
5. In the toolbar, click **Save** to save the changes.

Display records

Every time you search for data objects within the access rights of the data groups, the data groups that are allocated to the user are used as a filter. While data objects to which the search directly relates are not shown, the linked data objects are displayed in accordance with the setting for system parameter 171.

Example:

ID card search when system parameter 171 is set to 0: Display data deactivated/greyed out.

☐	ID card number	ID card label	ID card user	Personalised	Replacement ID card	Blocked	Person	Employee number	Delete
☐	8202	202	Employee	☒	☐	☒	Legrand, Marc	6	
☐	8203	203	Employee	☐	☐	☐	Cermans, Paul	7	
☐	8204	204	Employee	☐	☐	☐	Meunier, Catherine	8	
☐	8206	206	Employee	☐	☐	☐	Leconte, Sandra	10	
☐	9002	002	Employee	☐	☐	☐	Martin, Eric	2	
☐	9011	011	Employee	☒	☐	☐	Leroy, Fabienne	4	
Number of records: 6									

Example:

ID card search when system parameter 171 is set to 1: Data is not displayed. With this setting, the records for which no access rights exist are indicated as unknown objects.

☐	ID card number	ID card label	ID card user	Personalised	Replacement ID card	Blocked	Person	Employee number	Delete
☐	8202	202	Employee	☒	☐	☒	Legrand, Marc	6	
☐	8203	203	Employee	☐	☐	☐	Unknown object	Unknown object	
☐	8204	204	Employee	☐	☐	☐	Meunier, Catherine	8	
☐	8206	206	Employee	☐	☐	☐	Leconte, Sandra	10	
☐	9002	002	Employee	☐	☐	☐	Martin, Eric	2	
☐	9011	011	Employee	☒	☐	☐	Leroy, Fabienne	4	
Number of records: 6									

3.1.11 ► Set up an LDAP interface

dormakaba MATRIX provides technology in the general interfaces for importing data from an LDAP server.

In addition to person data, you can also import users and their passwords.

Setting up a new interface

To set up a new general interface:

1. Select the **Administration** menu item in the **System** main menu.
2. Click **Interfaces** to open the dialog for selecting interfaces.
3. Click **Create new record** in the toolbar and select the **General interface** as the new interface.
4. Select **LDAP** as the technology in the **Configure interface** dialog.
5. Specify the data types for the import.
6. Click **Save** in the toolbar to save the entries.

Note: When using an LDAP server, only import functions are available; it is not possible to export data.

Setting parameters for an LDAP server connection

Use this tab to enter the required connection data if you wish to establish a connection to an LDAP server. You can then use the **Check connection** button to check whether a connection can be established using the data entered. The status line always displays a response.

1. Select the **LDAP** tab.
2. Enter the LDAP server's name or IP address in the **Server** input field.
3. Check the port information. The default port is 389. Change this value if required.
4. Enter your user name and password if it is necessary to log on to the LDAP server.
5. Click the **Check connection** button. A response appears in the status line.
6. Click **Save** in the toolbar to save the entries.

Setting import data

In the next step, you specify how the relevant data types from the LDAP server are mapped onto the application data.

For each data type to be imported, a section for selecting the LDAP data and mapping the attributes received is displayed on the fields for the records to be imported. The **distinguished name** of a branch of the LDAP tree can be specified in the upper part of each section. The LDAP query entered in the **Filter expression** field should be executed within this branch.

To set how data should be mapped:

1. Select the **Import** tab.
2. Highlight the **Delete existing records** checkbox: If the checkbox is activated, records that still exist in MATRIX but no longer exist in the LDAP server are deleted in MATRIX if a record import is repeated.
3. Enter the branch of the LDAP tree from which the search should begin in the **Base DN** input field.
4. Enter the query in the **LDAP query** input field.

Note: The attributes of the first object found are always determined. Since different types of objects with different attributes are returned during a LDAP query, not all required attributes may be identified with the initial query. In such cases, modify your query to determine the attributes and re-create the original query after transferring the attributes to the fields in MATRIX.

5. Click the **Determine attributes** button to start the query. The query completes the **Attributes** selection field in the table.
6. To connect an attribute with a field in MATRIX, click the **New entry** button on the right and select an attribute from the selection field.

7. Select the field that needs to be linked to the attribute.
8. If the selected field has a type other than a string or a digit, such as a date for example, you can select this type in the **Field type** column. The available formats can be configured and supplemented on the **Transformation** tab.
9. If the configured attribute is not available in the imported object or has no value, a value can be specified in the **Default value** column. You can also simply specify the default value and not select an attribute so as to transmit the same value to the application in every record.
10. Repeat steps 6 to 9 until you have linked all the desired attributes to a field.
11. If you have selected multiple data objects, proceed for these as described in steps 3 to 9.
12. Click **Save** in the toolbar to save the entries.

Importing users

The **User role** and **Password fields** are directly related to the import of users. The **User roles** field allows you to transmit not only an individual user role but also a comma-separated report of user roles.

If passwords are imported, these must be available in either clear text or in a form that can be processed.

If the **Password encryption** field is selected, a procedure supported by MATRIX can be selected in the **Default value** column to be applied to the user password entered during the login process before it is compared with the password saved in the database. This means that if an encrypted password is imported from the LDAP server, this should be the procedure used to encrypt this password. If the value PLAIN (i.e. non-encrypted) is selected as the encryption procedure, any imported passwords are given the default encryption SHA-1 before they are imported and correspondingly saved in the database.

Set the import interval

Use the **Control** tab to specify when the import is cyclically conducted.

Proceed as follows:

1. Select the **Control** tab.
2. Enable the **Active** checkbox.
3. Enter the cycle time in minutes. The import is cyclically repeated in line with the value entered.
4. Enter the time in the **Daily at** input field if the import should only occur once a day.
5. Click **Save** in the toolbar to save the entries.

3.1.12 ► Work with workflows

Workflows enable you to map and run application and approval processes. Common examples are permission applications or holiday applications. An organisational structure that maps the responsibilities and relationships within the company is required.

Note: Workflow administration must be activated in the system parameters be activated to be able to use these functions.

Workflows can be defined by organisational units for specific corrections as well as for persons. On execution of a correction it is checked, if an approval is required for the combination of the correction type and the executing user. The workflow is only used if the correction is made in the dialogs in the **Self Service** main menu. Corrections executed by time managers in the person administration dialogs or the general dialog for corrections are allocated directly and therefore without a workflow.

Note: Workflows are triggered by users. To do so, the persons must also be created as a user with a user role to enable them to use the Self Service system after logging in.

The functional scope of the workflow includes:

- Organisational structure
- Correction groups
- Approval groups
- Workflow definitions
- Substitute settings
- E-mail templates

Create organisational structure

The organisational structure forms the basis for allocating superiors and employees.

To create an organisational structure:

1. Select the **Administration** menu item in the **System** main menu.
2. Click **Workflow administration** in the menu bar and then select **Organisational structure**.
3. Open the tree structure and click the entry for which you want to add a new organisational structure.
4. Select a manager and, if required, one or more substitutes.
5. Click **Save** in the toolbar to save the entries.
6. Repeat steps 3 to 6 until you have created all organisational units.

Filling the organisational structure with data

Once the organisational structure is created, you must add the users to the organisational units to map the dependencies.

To add members to an organisational unit:

1. Select the **Administration** menu item in the **System** main menu.
2. Click **User** and select the user that you wish to add to an organisational unit.
3. Switch to the **Personal information** tab and select the desired organisational unit from the **Organisational unit** selection field in **Workflow settings**.
4. Click **Save** in the toolbar to save the entries.

Creating correction groups

Correction types that are valid for a certain workflow definition are combined into correction groups.

To create the correction groups:

1. Select the **Administration** menu item in the **System** main menu.
2. Click **Workflow administration** and then **Correction groups**.
3. Create a new correction group with a name and a short name.
4. Allocate the required correction types to the correction group.
5. Click **Save** in the toolbar to save the entries.

Creating approval groups

Approving persons are not always the superiors of the requester.

Examples include:

- HR employees
- Members of the works council

Use approval groups to incorporate these approving persons into the workflow. You can combine any users to form approval groups. One user must always be defined as the main approving person. The other users are entered as substitutes.

To create an approval group:

1. Select the **Administration** menu item in the **System** main menu.
2. Click **Workflow administration** and then **Approval groups**.
3. Create a new approval group with a name and a short name.
4. Add one or more users to the group and specify the main approving person.
5. Click **Save** in the toolbar to save the entries.

Creating workflow definitions

A workflow definition describes an approval process. This consists of one or more steps that are sequentially processed. An approval step can be approved or declined. The workflow is only completed and the approval issued once all the steps have been approved. If an approval step is declined, the workflow is terminated as declined.

In addition to approval steps, there are also information steps. In the case of an information step, the approving person simply confirms receipt of the information. Information steps do not hold up the approval process. Processing continues immediately with the next step.

How to edit a workflow definition

1. Select the **Administration** menu item in the **System** main menu.
2. Click **Workflow administration** and then **Workflow definition**.
3. Create a new workflow definition with a name and a short name.
4. Select the correction group and organisational unit for the requester.
You can also select a higher-level organisational unit. The definition then applies to all members of this unit as well as all members of the lower-level organisational units.
5. If necessary, enter the additional attributes for the requester. The requesters of a workflow definition are always determined via the organisational structure. The department or cost centre details are independent of this. They can, however, be additionally used to restrict the requesters selected according to the organisational structure.
6. Enter the workflow steps by making entries in the **Workflow steps** table. Select an action and an approving person who should conduct this action or an approval group.
The **Approve** action creates an approval step; the **Information** action creates an information step.
7. Click **Save** in the toolbar to save the entries.

Specifying substitute settings

Substitutes can be specified for managers of organisational units and for main approving persons in approval groups.

For organisational units, the involvement of the substitute in the workflow definition can be fostered through a separate step in which the substitutes are appointed as the approving persons.

Note: If there are multiple approving persons for an approval step including the substitute, the first approval or rejection will count.

If an approval is issued for a step, all other approval entries for the same step are converted into an information entry.

Every superior and main approving person can determine their own substitute in their personal settings.

This is how you determine the substitute in your personal settings:

1. Select the **Substitute settings** menu item from the **Self Service** main menu.
2. In the **Settings for all substitutes** selection field, choose when and under which conditions your substitutes are permitted to issue approvals.
3. Specify which substitutes are active in the table.
4. Click **Save** in the toolbar to save the entries.

Workflow sequence

Workflows involve two steps.

- The application, triggered by the requester.
- The approval or rejection by the approving person.

Submit a request as follows:

1. Select the **Yearly overview** menu item in the **Self Service** main menu.
2. Enter an absence for the desired period.
3. Apply the absence. If the absence type has an existing workflow definition, the workflow is started and the approver receives a corresponding notification.

Note: Your workflows and their current statuses are displayed under the **My requests** menu item.

Process workflows as an approver as follows:

1. Select the **Approvals** menu item from main **Self Service** menu to open the **Selection Approvals** dialog. The outstanding workflows and their current statuses are displayed in the table.
2. Click the icon in the left column of the table to directly approve or reject the workflow or click a workflow to open it for editing.

Further information on the individual elements of workflow administration can be found in the corresponding dialog descriptions.

3.2 Device management instructions

This section will help you to configure the connected devices.

Diagnostics and debugging during commissioning

- ▶ Commission a site server
- ▶ Set up an HTTPS connection to the evolO Programmer service
- ▶ Set up a dormakaba 96 00/97 00 terminal
- ▶ Change the network parameters using the Device Scanner
- ▶ Set up a PC reader
- ▶ Work with OSS components
- ▶ Work with the door management system (TMS) via TMS-Soft
- ▶ Work with the door management system (TMS) via terminal manager

3.2.1 # Diagnostics and debugging during commissioning

The following sections will help you to perform advanced diagnostics if errors occur when commissioning devices:

[# Overview of diagnostic options in MATRIX](#)

[# Debug in MATRIX: Desktop readers](#)

[# Debug in MATRIX: evolo Programmer 1460](#)

[# Debug in MATRIX: Wireless gateway 90 40](#)

[# Debug in MATRIX: evolo components](#)

[# Debug in MATRIX: Access manager](#)

3.2.1.1 # Diagnostic options in MATRIX

The Reader events report contains the events that have occurred on a reader.

The [Terminal events](#) report contains important information on terminal events that have occurred along with the event codes (native code) and the corresponding notification.

The [Diagnosis](#) section provides a series of dialogs that help with commissioning and searching for errors in connection with the terminal peripherals.

- Data analysis: Shows which data is loaded into a terminal and which functions are supported.
- Check communication zones: Checks the communication zones of the security areas and the configured functions.
- Function overview: Provides an overview of which functions are possible using the terminals.
- Terminal manager data export: The entire data set of the terminal manager can be exported for diagnosis.
- Job log: Shows all actions, such as loading data into terminals or downloading firmware to components.

The status displays in the [Devices dialog](#) and [Device state dialog](#) can provide initial pointers to the causes of errors.

Status displays

State column:

Show the current online status of online components.

 Online	The device is listed as "Online" in the terminal manager. It sends the monitoring message at regular intervals.	
 Offline	The device is listed as "Offline" in the terminal manager. No monitoring messages are received from the device.	Possible causes: • Device not connected • Connection data such as IP address or port incorrect • Firewall preventing connection • Other network components defective or incorrectly configured • Physical defects of devices or cables • Temporary maintenance work
 Inactive	The device is marked as inactive. There is no communication with the device. The terminal manager is not accepting jobs for the device.	Possible cause: • The device is not activated

Data status column:

Shows the current configuration status of standalone components.

 Up to date	The device has the current configuration data.	
 Not up to date	More recent configuration data is present that has not yet been transferred to the device.	The device must be synchronised. evolo whitelist components require • Either a subsequent "Load terminal" action for the evolo Programmer 1460 • Or an additional "Load traceback" event using the evolo Programmer 1460 beforehand XS offline components require • A "Load terminal" event using XS Manager
 Inactive	The device is marked as inactive.	The device must be set to "Active".

3.2.1.2 # Debug in MATRIX: Desktop readers

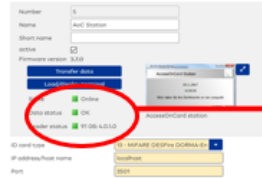
Error		Cause	Solution
Desktop reader not working	1	Incorrect desktop reader type	MATRIX requires an MRD desktop reader. The device name and firmware name can be found on the back of the device.
	2	Outdated LEGIC OS on desktop reader	The MRD desktop reader requires LEGIC OS version SM 4500 or newer. The latest firmware can be found in the ETO system. A video on the updating process is also available from "Videos + manuals".
	3	Desktop Reader Manager is not running.	Launch Desktop Reader Manager on the computer. The Desktop Reader Manager application is located in the MATRIX installation package.
	4	Client IP address incorrect or not free	On the client computer, re-enter the IP address/host name in the Devices dialog of the desktop reader. Note: The address "localhost" is created as default. If the environment is changed, "localhost" is no longer recognised as the computer has been assigned a new IP address (e.g. in the customer's network).
	5	Device driver has crashed	Relaunch the service "9108 reader service" on the computer. OR Restart the computer.
	6	Device driver will not start	This occurs in rare cases on Windows 10 computers and when using the Edge browser. If the Windows system has 'Secure boot' set in the boot segment, only Windows-signed drivers will be accepted. If necessary, disable the secure boot. Caution: This step must not be performed without consulting the administrator.
	7	Kaba evolo Manager (KEM) runs in parallel	End KEM.
The AoC ID card number is not transferred to MATRIX	1	Edge is being used as a browser	Use a different browser, e.g. Firefox, Google Chrome or Internet Explorer
Master B cannot be imported Notification 127.0.0.1:18080 - No	1	Internet Explorer is being used as a browser The browser on the client computer is	Use a different browser, e.g. Firefox or Google Chrome

access to desktop reader

blocking access to the
local desktop reader
port.

Debug in MATRIX: Desktop readers

- In the "Devices" dialog:



If **red**: incorrect IP address or app not launched

Offline

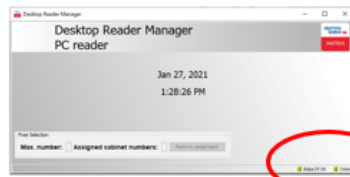
State **Online**
Data status **OK**
Reader status **9108; 4.0.1.0**

If **red**: changes have been made (e.g. to the ID card definition) and have not yet been transferred

If **red**: The hardware cannot be found

Is the latest Legic OS installed?

- In Desktop Reader Manager:



If **red**: The hardware cannot be found
(Caution: updated approx. every 60 s)

If **red**: incorrect IP address in MATRIX or IP connection interrupted
(Caution: updated approx. every 60 s)

- In the "Device state" dialog:



If **red**: incorrect IP address or app not launched

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3.2.1.3 # Debug in MATRIX: evol0 Programmer 1460

Error		Cause	Solution
evol0 Programmer not working	1	Driver not installed	Install the latest driver. The latest driver is available from the ETO system.
	2	Incorrect firmware present	Install latest firmware. The latest firmware can always be found in the ETO system.
	3	Client IP address incorrect or not free	Re-enter the IP address/host name of the client computer in the Devices dialog of the evol0 Programmer. If the network assigns the addresses via DHCP, the host name must be used.
	4	KEM service has not yet been closed and is blocking the newer evol0 Programmer service	Close the old service using Windows Service Manager and reconnect the evol0 Programmer to the computer via USB.
	5	evol0 Programmer service has crashed	Relaunch the evol0 Programmer service on the computer. OR Restart the computer.
	6	Incorrect password	Re-enter the password in the Devices dialog of the evol0 Programmer and click on Load data .
	7	Device driver will not start	This occurs in rare cases on Windows 10 computers and when using the Edge browser. If the Windows system has 'Secure boot' set in the boot segment, only Windows-signed drivers will be accepted. If necessary, disable secure boot. Warning: This step must not be performed without consulting the administrator.
HTTP - Error 403	1	The password assigned during installation does not match the password stored in the Devices dialog.	Reinstall the evol0 Programmer service. Enter the password entered during installation in the Devices dialog.

Debug in MATRIX: evolvo Programmer

- In the "Devices" dialog:

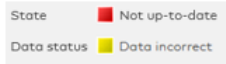


If **red**: all data not yet transferred to evolvo component or Programmer status missing



If **red**: incorrect client IP address or Programmer not connected

If not communicating with MATRIX



then



1 click

in the "Select terminals" dialog:



2

in the "Terminal jobs" dialog:



Solutions:

- Disconnect/connect Programmer
- Restart the service
- Reset/check the USB port
- Use a different USB port
- Check the IP address

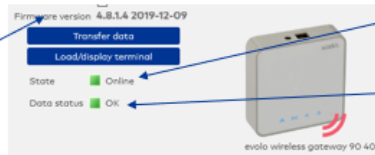
3.2.1.4 # Debug in MATRIX: Wireless gateway 90 40

Error		Cause	Solution
Wireless gateway does not start up	1	Incorrect firmware present	Install latest firmware. The latest firmware can always be found in the ETO system.
	2	Firmware update not completed	Check under: Devices> Diagnosis > Job log The process can take up to 15 minutes and must not be interrupted.
	3	Device not responding after firmware update	Restart the device.
	4	No IP address assigned (Symbol <left icon> on the device is off)	Check the IP address using the MATRIX Device Scanner, enter the IP address and load data.
	5	IP address incorrect or not free	Check the IP address using the MATRIX Device Scanner, enter the IP address and load data.
	6	Device uses a different installation code or different password	This can occur if the device has previously been used in another system. Reset the device to delivery status.
Wireless gateway responds slowly	1	Multiple devices nearby are using the same transmission channel	Open the Web interface of the device and change the transmission channel.
No communication between wireless gateway and MATRIX	1	Firewall is blocking ports	Check whether the ports can be accessed using a browser and the IP address assigned to the device. If not, enable the ports required for communication between the MATRIX server and device in the firewall.

Debug in MATRIX: Wireless gateway

■ In the "Devices" dialog:

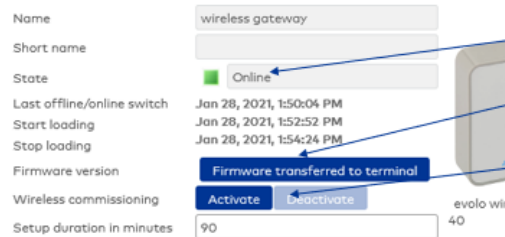
Is the latest
firmware installed?



If **red**: Check the IP address and connection

If **red**: configurations changes have not yet been transferred

■ In the "Device state" dialog:



If **red**: Check the IP address and connection

Check and update the firmware

Wireless components join function;
--> deactivate after commissioning (vital)

■ In the "Job log" dialog:



Overview of all jobs in MATRIX

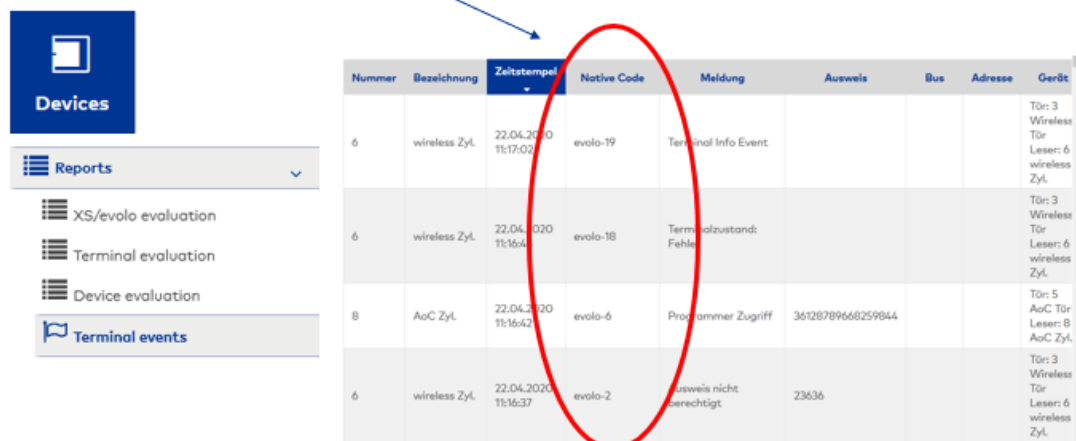
3.2.1.5 # Debug in MATRIX: evolvo components

Error		Cause	Solution
Terminal status: Error	1		Check the event code. A list of event codes can be found in the ETO system.
Digital cylinder flashes red	1	Battery flat	Replace the battery
	2	Mechanics impaired	Restart the device.
	3	No permission present or permission not yet granted	Grant the permission for a door, in the profiles, in the locking plan or as a special permission in MATRIX and then load the data.
	4	AoC data on the ID card not up to date	Update the AoC either online or using a desktop reader
A component time has been lost	1		Use any programmer and a master ID card to reprogram the time via the menu item Read actuator > Traceback in the Programmer.
Office open time not working in MATRIX. Only working in Office mode	1		Check the settings of the evolvo TimePro used for the affected doors (under Room zones – Doors). Check the firmware versions of the Programmer and evolvo components and update to the latest versions if necessary.

Debug in MATRIX: evolvo components

Perform component traceback in evolvo Programmer:

- The "Terminal events" dialog shows the event code (native code) of the device state



The screenshot shows the 'Terminal events' dialog in the evolvo Programmer. On the left, a sidebar contains a 'Devices' icon and a 'Reports' dropdown menu with options: 'XS/evolvo evaluation', 'Terminal evaluation', 'Device evaluation', and 'Terminal events' (which is selected). The main area displays a table of terminal events. A red circle highlights the 'Native Code' column, which contains values like 'evolvo-19', 'evolvo-18', 'evolvo-6', and 'evolvo-2'. An arrow points from the text 'The "Terminal events" dialog shows the event code (native code) of the device state' to this column.

Nummer	Bezeichnung	Zeitstempel	Native Code	Meldung	Ausweis	Bus	Adresse	Gerät
6	wireless Zyl.	22.04.2020 11:17:02	evolvo-19	Terminal Info Event				Tür: 3 Wireless Tür Leser: 6 wireless Zyl.
6	wireless Zyl.	22.04.2020 11:16:4	evolvo-18	Terminalzustand: Fehler				Tür: 3 Wireless Tür Leser: 6 wireless Zyl.
8	AoC Zyl.	22.04.2020 11:16:42	evolvo-6	Programmer Zugriff	36128789668259844			Tür: 5 AoC Tür Leser: 8 AoC Zyl.
6	wireless Zyl.	22.04.2020 11:16:37	evolvo-2	Ausweis nicht berechtigt	23636			Tür: 3 Wireless Tür Leser: 6 wireless Zyl.

Further questions

Question	Answer
Can an ID card also be programmed in Mastercard mode?	No, Mastercard mode can only be used again once the component has been reset to factory settings. After resetting, hold the master ID card in front of the component for 3 seconds (short beep), then hold up the ID card being authorised (short beep), then hold up the master ID card again (long beep) to conclude the procedure.
How do I reset a component?	There are multiple options: a) Reset using Programmer 1460 and a master B ID card via the wrench menu. b) Reset using a master B ID card: hold the master ID card in front of the component for approx. 15 seconds. This is followed by two acknowledgement sounds. c) Short circuit to the head plate + master B ID card: After holding up the master ID card for 3 seconds, short circuit the two contacts to the head plate. Two short acknowledgement sounds will be emitted.
A component is not working correctly in MATRIX despite having the correct firmware version. What is causing this?	The LEGIC OS/Ember must be updated as well as the firmware itself. Perform another update using the Programmer + service cable.

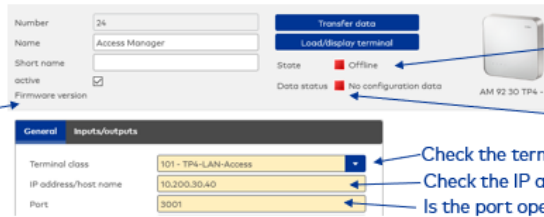
3.2.1.6 # Debug in MATRIX: Access manager

Error		Cause	Solution
Access manager will not start	1	Incorrect firmware present.	Install latest firmware. The latest firmware can always be found in the ETO system.
	2	Firmware update not completed.	Check under: Devices> Diagnosis > Job log The process can take up to 25 minutes and must not be interrupted.
	3	IP address incorrect or not free	Check the IP address using the MATRIX Device Scanner, enter the IP address and load data.
	4	Firewall is blocking ports	Check whether the ports can be accessed using a browser and the IP address assigned to the device. If not, enable the ports required for communication between the MATRIX server and device in the firewall.
	5	Device uses a different installation code or different password	This can occur if the device has previously been used in another system. Reset the device to delivery status.
	6	Terminal class incomplete or incorrectly configured	Configure all required functions in the terminal class via Devices > Class administration > Classes. Select a suitable terminal class from the Devices dialog.
	7	Variable booking instruction incomplete or incorrectly configured	Configure all required variable booking instruction functions via Devices > Class administration > Class settings.
	8	No relay assigned	Allocate a relay in the reader's Devices dialog.
Some features no longer work after performing a backup	1	Changed IP address	Check the IP address of the MATRIX server after uploading the backup.
The registration unit works but has a red (offline) device status.	1	The IP port (standard port: 3000) between the access manager to the server is blocked by the firewall.	Enable the ports required for communication between the MATRIX server and device in the firewall.

Debug in MATRIX: Access Manager

■ In the "Devices" dialog:

Is the latest
Firmware installed?



If **red**: Check the IP address and connection

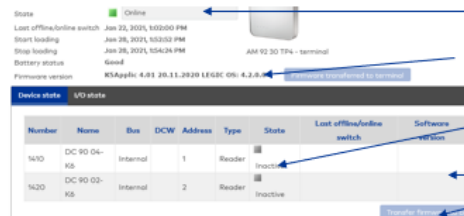
If **red**: configurations changes have not yet been transferred

Check the terminal class

Check the IP address

Is the port open in both directions in the firewall?

■ In the "Device state" dialog:

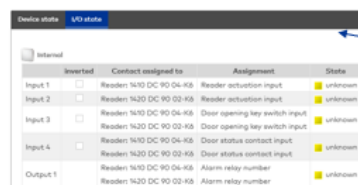


If **red**: Check the IP address and connection

Check the firmware + Legic OS and, if necessary, perform an update from this location

If **red**: device cannot be accessed. Check the cable to the reader or the on-site power supply

Check the reader's FW here and, if necessary, perform an update from this location.



Check the input and output states

dormakaba

3.2.2 ▶ Commission a site server

Note: Please note that the site server can only be used with the attendance recording and access functions. Time management is not supported.

A site server bundles devices that are physically located close together to simplify administration. The site server has a separate database that provides the required resources for supplying the connected devices with data and receiving bookings.

Note: Not all functions and devices of MATRIX can be used in site server mode. Further information can be found in the document MATRIX-Siteserver-Funktionsumfang (MATRIX site server functional range). All MATRIX functions are available for devices that are connected directly to the host system without a site server.

A separate MATRIX instance must be installed for every site server. The system parameter "Devices 10" specifies whether the instance functions as a site server master or as a site server client.

The site server master functions as the main instance. A separate site server is created in the device tree for every client instance to enable them to communicate with the site server client. The connected devices are then created below this site server. In the site server client instance, it is only necessary to set the system parameters and activate the site server interface.

Note: All devices, employee records and permissions are managed via the site server master. Only users, user roles, backup and data housekeeping limits are managed on the site server clients.

All system parameters are transferred from the site server master to the site server client if data loading is initiated.

The following system parameters are the exceptions that are not transferred to the server client:

- System 131: Port for PC reader
- System 211: Target directory for time-controlled reports
- System 190: Web option authentication method

These system parameters must be managed on the site server client.

The following system parameters are always transferred with the stated values:

- Devices 10: Use site server => Value 2
- System 76: Automatic generation of employee numbers => Value 0
- System 130: PC reader usage => Value 0

Note: Ensure that all changes to system parameters are only made on the site server master with the exception of the six system parameters named here.

1. Setting up the MATRIX main instance as a site server master

1. Perform MATRIX installation on the computer that will function as the site server master.
2. Activate the licence. The additional site server module must be included in the scope of the licence.
3. Execute the start wizard.
 - If you wish to install a time system, select the **Attendance recording** component in step 1.
 - Select **Complex ID card administration** in the **ID cards** dialog.
4. Switch to the **System** module and set the system parameter "Devices 10" to the value 1 (site server master).
5. Switch to the **Devices** module and create a site server as a new device in the devices tree.
6. If necessary, create further site servers.

II. Setting up the site server client

1. Perform MATRIX installation on a client computer. In the **Install data** step, select the option **System data only**.
2. Activate the licence using the same licence number as you used for the MATRIX main instance.
3. Execute the start wizard.
 - If you wish to install a time system, select the **Attendance recording** component in step 1.
 - Select **Complex ID card administration** in the **ID cards** dialog.
4. Switch to the **System** module and set the system parameter "Devices 10" to the value 2 (site server client).
5. Create a new site server interface and enter the communication data.
6. If you are operating further site server clients, repeat steps 1-4 on the other client computers.

III. Creating devices and transferring data

1. In the site server master, switch to the **Devices** module and open the device tree.
2. Click the site server and click **Transfer data**. It should then display the status "Online" and the data status "OK".
3. Create all devices that will be managed via a site server below the respective site server.
4. Once you have created all devices, click **Load/display terminal**.
5. Select the newly created devices and click **Transfer data**.

3.2.3 ▶ Set up a HTTPS connection to the evolvo Programmer service

HTTPS connections can be used to implement secure data exchange between MATRIX and the evolvo programmer.

Note: A trusted certificate is required to be able to use the procedure described here. You can use a self-signed, temporary certificate for test purposes, if necessary. It is not possible to provide instructions on creating a certificate of this kind at this point.

Proceed as follows to set up an HTTPS connection to the evolvo programmer:

1. Adjust **DccServiceForMatrix.exe.config** in evolvo programmer services as follows:

Original value:	Change to:
<code><add baseAddress=" http://localhost:3502/DccService"/></code>	<code><add baseAddress=" https://localhost:3502/DccService"/></code>
<code><endpoint address="" binding="basicHttpBinding" bindingConfiguration=" plainTransportWithBasicAuth" contract="Contracts.IDccService"/></code>	<code><endpoint address="" binding="basicHttpBinding" bindingConfiguration=" secureTransportWithBasicAuth" contract="Contracts.IDccService"/></code>
<code><behavior name="userNamePasswordValidation"> <serviceMetadata httpGetEnabled="false"/></code>	<code><behavior name="userNamePasswordValidation"> <serviceMetadata httpsGetEnabled="false"/></code>

2. Activate the certificate for the configured port number (e.g. 3502). Enter the following command in the Windows command line:

```
netsh http add sslcert ipport=0.0.0.0:3502 certhash=<CERTHASH> appid={d5517a4d-d30c-4926-b44e-6c24498fe2c6}
```

where <CERTHASH> is the fingerprint of the certificate.

Note: The fingerprint of a temporary certificate can be read using the Microsoft Management Console (mmc.exe).

3. If the certificate for MATRIX cannot be recognised as trusted, create a new truststore with the name "ProgrammerService.truststore" and import the certificate into this new truststore. To do so, enter the following command in the Windows command line (caution: a current Java Runtime Environment is required for this purpose):

```
keytool -import -trustcacerts -file YourCertificate.cer -keystore  
ProgrammerService.truststore -alias "ProgrammerService"
```

If the KeyTool prompts you to enter a new password, enter "dormakaba".

Next, copy the new, locally created file **ProgrammerService.truststore** into the **\matrix\conf** folder in the MATRIX installation directory.

4. Open evolvo programmer device configuration in MATRIX Device administration and activate the **Communication encrypted** checkbox.

3.2.4 ▶ Set up a dormakaba 96 00/97 00 terminal

Note: Please note that system parameter 16 "Use dormakaba terminals" must be set to the value 1.

In MATRIX, dormakaba 96 00/97 00 terminals are set up in the device management device tree, just like all other terminals.

Notes on devices as delivered:

Newly delivered devices will be in registration mode. Leave this mode by pressing the Back button. In newer devices, call up the Back button by swiping from the right edge of the screen to the middle. Please see the technical device manual for further information on operating the device.

Call up the test program:

1. Hold down the Back button for approx. 10 seconds. In 9600 V2 and 9700 V2 devices, call up the buttons by swiping from the right edge of the screen to the middle. In the 9600 V1, you call up the buttons by swiping from the top edge of the screen to the middle.
2. Enter the password in the password dialog and confirm with **OK**. (The password is empty when delivered.)
3. Click on **TP** to call up the test program.

Note on using ID cards with MIFARE DESFire DORMA encoding

Pay attention to the different device variants and firmware versions when using ID cards with MIFARE DESFire DORMA encoding.

- 9600 V1 and 9700 V1
These devices cannot handle ID cards of the type MIFARE DESFire DORMA encoding. They only support MifareClassic ID cards.
- 9600 V2 and 9700 V2
These devices support ID cards of the type MIFARE DESFire DORMA encoding. The 97 00 V2 requires current device firmware and at least version 4.0.1.0 of the Legic OS.

Determine the terminal's IP address

A. Determining the terminal's IP address when starting the device:

- After booting up and starting the HR application, dormakaba 96 00/97 00 terminals show their IP addresses in an info box.

B. Determining the terminal's IP address by calling the test program:

1. Call up the test program on the device using the **TP** button and switch to the **Info** tab.
2. Select the **Network configuration** menu item. You can find the IP address here.
3. Next, end the test program and start the HR application.

Set the reader type in the Service menu.

1. Hold down the Back button for approx. 10 seconds. In 9600 V2 and 9700 V2 devices, call up the buttons by swiping from the right edge of the screen to the middle. In the 9600 V1, you call up the buttons by swiping from the top edge of the screen to the middle.
2. Enter the password in the password dialog and confirm with **OK**. (The password is empty when delivered.)
3. Call up the test program on the device using the **TP** button, switch to the **Settings** tab and select the menu item **Select reader**.
4. Select the desired reader and type and configure the interface as necessary.
5. End the test program and start the HR application.

Create a dormakaba 96 00/97 00 terminal in the device tree

1. In MATRIX, open the **Device management** module and click on **Devices**.
2. Select either the server node or an infrastructure node and click **Create new record**.

3. Select the desired device type (9600 or 9700) from the list of device types.
4. Enter the necessary parameters and save the data.

Transfer MIFARE ID card keys to dormakaba 96 00/97 00 terminals



see also: Further information on transferring ID card keys can be found under [Working with master media and master medium keys](#)

A. Transferring keys on loading:

1. Create the master medium key in the ID card type.
2. Load data on the terminal.

B. Transferring keys using master media:

1. Apply the ID card key to a master medium as the master medium key.
2. Open the **Device status** dialog and select the terminal.
3. Activate the **Apply system key from master medium** checkbox.
4. Hold the master medium in front of the terminal. An acoustic signal confirms that the key has been scanned.
5. Deactivate the **Apply system key from master medium** checkbox.
6. Check that the key has been transferred into the **Terminal events** list.

3.2.5 ▶ Change the network parameters using the Device Scanner

The Device Scanner enables you to

- Search for and configure TP4 AM controllers and 90 40 wireless gateways 90 40 in LAN networks with or without DHCP.
- Search for dormakaba 96 00/97 00 terminals in a LAN network with DHCP.

All detected devices are displayed along with their MAC address or serial number and IP address.

Two configuration variants are possible:

- Configuration for using DHCP (alternatively, a host name can be assigned for TP4 AM controllers)
- Configuration for using a selectable static IP address with network mask and gateway IP address

Note on using TP4 AM controllers in networks without DHCP servers

The AutoIP service allocates TP4 AM controllers an IP address in the 169.254.x.y range. The notebook on which the device scanner is installed must also be equipped with an AutoIP service for the device scanner to be operated successfully. Therefore, it is advisable to use a notebook with Windows 10 that is configured for DHCP.

Note on using wireless gateways in networks without DHCP servers

If no DHCP server is present, the wireless gateways will use the default IP address 172.16.99.98 with the network mask 255.255.0.0 as standard. The device scanner finds the devices via the UPnP service and displays them along with their MAC address and the default IP address 172.16.99.98.

In this case, the notebook on which the device scanner is running must be appropriately reconfigured in order to be able to change the wireless gateways' network settings using the device scanner.

- To do so, change the internet protocol properties in the Windows Control Panel as follows:
IP address in the range 172.16.*.* with network mask 255.255.0.0.

If multiple devices with the same default IP address are present in the network at the same time, they cannot be specifically activated. In this case, the wireless gateways must be initialised one by one.

- Connect each of the wireless gateways separately and assign a different static IP address to each wireless gateway.

Note on using dormakaba 96 00/97 00 terminals

The Device Scanner can only find these terminals in networks with DHCP servers. In networks without DHCP servers, the network configuration of these terminals can be determined and edited using the terminal displays.

The Device Scanner provides a link to the Web GUI (service interface) of the detected terminals for configuring the networks of dormakaba 96 00/97 00 terminals. After logging in successfully, this can be used to edit the terminal's network configuration.

For dormakaba 96 00/97 00 terminals, the Device Scanner displays the MAC address of the terminal and also the serial number of the terminal. This is because all terminal housings are labelled with the serial number but not all housings show the MAC address.

Requirements

- TP4 AM controllers require at least TP4 firmware version 3.05.
- The devices are operational and connected to the LAN network.
- Ports for TP4 AM controllers: The (mDNS) UDP port 5353 is enabled (in both directions between device scanner and devices), as is (Telnet) TCP port 23. Ensure that these ports are not blocked by the firewall.
- Ports for 90 40 wireless gateways: The (SSDP) UDP port 1900 is enabled (in both directions between device scanner and devices) as is TCP port 4004. The devices can only be configured if the KATE API port 9000 is enabled. Ensure that these ports are not blocked by the firewall.
- Ports for dormakaba 96 00/97 00 terminals: The (SSDP) UDP port 1900 is enabled (in both directions between the Device Scanner and the devices), as is the (FTP) TCP port 22. The devices can only be configured if the HTTPS port 8443 is enabled. Ensure that these ports are not blocked by the firewall.
- dormakaba 96 00/97 00 terminals can only be found via SSDP (broadcast) if the terminals are in registration mode (see the terminal manuals for information on activating/deactivating registration mode). The Device Scanner attempts to find terminals that are not in registration mode by scanning the ports.

Install and initialise the device scanner

The device scanner must be installed on a notebook with DHCP configuration. The installation program is located on the MATRIX DVD.

After opening the device scanner, it automatically begins searching the connected subnet.

Note: If multiple local subnets are present, connect the notebook to the separate subnets one after the other.

File Search				
Type	MAC Address	IP Address	Action	Remark
AM 92 xx TP4	00:07:CC:19:F1:0A	16.166.66.657		Device already in use (device number 2010)
AM 92 xx TP4	00:07:CC:1A:33:E0	16.166.66.650		Device already in use (device number 15)
AM 92 xx TP4	00:07:CC:1A:5A:3A	16.166.66.697		Device already in use (device number 2010)
AM 92 xx TP4	00:07:CC:1A:9D:CB	16.166.66.642		Device already in use (device number 5)
AM 92 xx TP4	00:07:CC:1B:11:6C	16.166.66.687		Device already in use (device number 4)
AM 92 xx TP4	00:07:CC:1B:48:1E	16.166.66.613		Device already in use (device number 1300)
Wireless Gateway	00:15:BC:22:0A:D7	16.166.66.641		Device still in use (second connection refused)
Wireless Gateway	00:15:BC:22:0A:ED	16.166.66.640		Device already in use
Wireless Gateway	00:15:BC:22:74:C5	16.166.66.677	Change network settings...	
Wireless Gateway	00:15:BC:23:32:D6	16.166.66.670		Device already in use
Scanning for devices in local subnet: 166.666.677.*, 16.155.66.253/32 Additional subnet scans finished				

Type column:

Contains the device types.

SN / MAC address column:

Contains the serial number or MAC address of the device.

IPv4 address column:

Contains the IPv4 address of the device. Right click a line to copy the IP address.

IPv6 address column:

Contains the IPv6 address of the device. Right click a line to copy the IP address.

Action column:

Change network settings button: Opens the **Change network settings** dialog.

Nothing displayed: The device has already been configured or the network parameters cannot currently be changed.

Comment column:

- Nothing displayed: The network parameters can be adjusted.
- Device already in use (device number x): The device has already been configured by MATRIX and given the device number x there.
- Device already in use: The device has already been configured.
- Device still in use (secondary usage denied): Somebody else (probably MATRIX) has already established a connection to the device, meaning that the device scanner can no longer register there.
- Wait to reboot with a new IP address: After altering the settings, the device reboots and starts up with the new network settings.
- Target not accessible: The device port is currently not accessible (perhaps blocked by the firewall).

Search for devices and change device configuration

The device scanner automatically lists all TP4 AM controllers and 90 40 wireless gateways present in the subnet along with their MAC address and their IP address.

Every device can be newly configured as long as it has not yet been configured.

Note: If you wish to reconfigure devices that are already in use, first reset these devices to their factory settings.

TP4 AM controllers	Wireless gateways
In their delivered state, these are configured to use DHCP and are assigned an IP address via DHCP. The host name is the same as the MAC address.	In their delivered state, these are configured to use DHCP and are assigned an IP address via DHCP.
Starting from TP4 firmware version 3.05: the mDNS service (multicast DNS) allows devices to be found in the local subnet via broadcast.	The UPnP service allows devices to be found in the local subnet via broadcast.
Device configuration: • Allocating a host name when using DHCP • Allocating a static IP address.	Device configuration: • Allocating a static IP address.

Proceed as follows to change device configuration:

1. Connect the notebook to the subnet and start the device scanner.
2. Search for the device in the list using the type and MAC address.

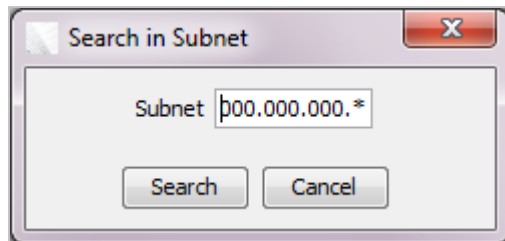
Note: The MAC address can be found on a label on the device.

3. Click **Change network settings**.
4. Change the network parameters in the dialog field and then click the **Change settings** button. The dialog field will be closed. After successfully changing the settings, the device reboots and starts up with the new network settings.

Connect to remote subnets

As well as searching in the local subnet using mDNS or UPnP broadcasts, the device scanner also enables users to search in remote subnets.

1. To do so, click **Search** and select **Search in subnet**.



2. Enter the subnet IP address in the dialog and click **Search**. The Device Scanner automatically lists all TP4 AM controllers, 90 40 wireless gateways and dormakaba 96 00/97 00 terminals present in the specified remote subnet. Configure these as described above.

3.2.6 ▶ Set up a PC reader

A desktop reader, e.g. the 9108 desktop reader, enables you to read ID cards and apply the identification string directly to the intended input fields of MATRIX. It can also be used to encode ID cards.

You will need to set up a PC reader in MATRIX in order to be able to use a desktop reader and exchange this data with the system.

Note: You must have administrator rights to set up a PC reader.

You also need to install the "AoC HTTP Service" on the client in parallel with the PC reader or the AoC manager in PC reader mode.

Installation of the application AccessOnCard-Station is required for PC reader to function (Desktop_Reader_Manager_windows_setup_X_X_X.exe) if you use the following hardware:

- Desktop reader 91 08 (Mifare Legic)
- Omnikey 5x21
- Omnikey 5422
- PHG Admitto-C-3100-A (DESfire)
- PHG-Admitto-C-1400
- PHG Admitto-A-1400 (Legic)
- PHG Admitto-A-1200 (Legic)
- PHG Admitto-A-2000 (Hitag)
- dormakaba 91 08-K5 SM-4500-M with firmware 4.0.0.0 and above

Enable use of PC reader

1. In the menu bar, click **System**. In the menu tree, click **Administration** and then on **System parameters**.
2. Select the system parameter System 130 "PC reader usage".
3. Set the parameter value to "1" and click **Save**.
4. Log in to MATRIX again.

Set up PC reader device in the MATRIX device tree

1. Click **Devices** in the menu bar, then **Devices** in the menu tree.
2. Select the infrastructure node or server node and click **New**.
3. Click **PC reader** in the selection dialog.
4. Enter the necessary parameters and click **Save**.

Activate PC reader

After you have configured the PC reader, you must now enable data exchange between MATRIX and the desktop reader. For this purpose, you must define and activate the corresponding port for the communication. This configuration is only available to certain users.

1. Click **Self Service** in the menu bar and click **PC reader** in the menu tree.
2. Port 18080 is used for communication with PC reader as default. Change the port number only if port 18080 is no longer available.
3. Finally, click the **Activate port** button.

3.2.7 ▶ Work with OSS components

dormakaba MATRIX supports the Open Security Standard OSS that allows access systems from any manufacturer to be used.

Note: You require a corresponding licence to use OSS.

The basic requirement is a dormakaba 96 00 or 97 00 terminal as an OSS writer and one or more OSS readers. Any evolo offline component identified in device definition as an OSS reader can be used as an OSS reader.

OSS is supported by the ID card types MIFARE DESFire and LEGIC Advant.

MATRIX provides dormakaba variable booking instructions and dormakaba VBI key allocations configured for OSS as standard.

OSS components only support the "Office release" access function.

Carry out the following steps to set up the system for OSS.

Note: The description calls for comprehensive knowledge in the use of MATRIX.

0. Check technical requirements

Ensure in advance that you have an OSS-enabled MATRIX licence and that the OSS functionality has been enabled using the system parameter Access 160.

I. Create OSS writer

1. Create the OSS writer in the device tree. Devices of the types dormakaba 96 00 terminal or dormakaba 97 00 terminal can be used as OSS writers.
2. Switch to the **Reader – General** tab and select the appropriate ID card types.

Note: OSS is supported by the ID card types MIFARE DESFire and LEGIC Advant. Ensure that the use of OSS is configured in the ID card type reader parameters.

3. Select the entry "AoC" from the **Affiliation** selection field.
4. Switch to the **Key allocation** tab and select the VBI key allocation that matches your device: "42 – 96 00 OSS" or "40 – 97 00 OSS".
5. Save the configuration.

II. Create an OSS reader

1. Create the OSS reader in the device tree. All devices of the type evolo offline can be used as OSS readers.
2. Select the appropriate ID card types.
3. Activate the **OSS** checkbox.
4. Save the configuration.

Note: OSS readers from third-party suppliers can be integrated using the device type "OSS SO third-party component". A separate licence is required for these.

3.2.8 ▶ Work with the door management system (TMS) via TMS-Soft

The door management system (TMS) dormakaba MATRIX enables you to configure access permissions for an escape route security system.

Note: The TMS option is only available with a corresponding license. If the TMS option is not activated, you cannot carry out the following steps.

The basic prerequisite is a TMS system (RZ-TMS emergency escape control or TL-G TMS compact terminal) and an installed TMS-Soft application for the physical configuration of the TMS system. TMS-Soft needs to be configured in such a way that the TMS PC gateway service does not shut down automatically.

To set up the system in MATRIX, you must carry out the following steps:

I. Activate the TMS option in system parameters

1. In the menu bar, click **System**. In the menu tree, click **Administration** and then **System parameters**.
2. Select the system parameter **Use TMS devices** under the **Devices** node and enter the value '1' to enable the TMS function for connection via TMS-Soft.
3. Then click **Save**.
4. Log off and then log on again to refresh the menu structure.

Note: The ID card type for the master ID card is on "ID card". If the ID card number should only be entered via ID card key or keypad, you have to change the ID card type for the master ID card to the value 1 (ID card key) or 2 (keypad input).

II. Set up TMS database connection

1. Click **Devices** in the menu bar, then **Devices** in the menu tree.
2. Click **Server** in the device tree.
3. Check the present values in the TMS configuration to make sure that they are correct.
4. In the **DBPasswd** field, enter the password for the TMS database and activate the **Active** checkbox.
5. Save the entry. If a successful connection is not possible, an error message is displayed.
6. In the menu tree, click again on **Devices** to update the view.

III. Set up access permissions

Note: The TMS device is regarded as a reader in terms of access control permissions. All physical readers on the TMS device have the same rights.

You can now assign permissions to the TMS device as with other readers in MATRIX. This means assigning the TMS device to a door and granting permissions regarding the door with access profiles, special permissions or locking schedules.

III. Download data

1. Click **Devices** in the menu bar, then **Reports** in the menu tree.
2. Click **TMS evaluation** in the device tree.
3. Click the **Data download** button in the table with the TMS devices for which you want to start a data download.

Note: The status will change from "Not up to date" to "Up to date". All other changes to the access data that affect the TMS devices require a new data download (red light at XS/TMS Info).

3.2.9 ▶ Work with the door management system (TMS) via terminal manager

The door management system (TMS) dormakaba MATRIX enables you to configure access permissions for an escape route security system.

Note: The TMS option is only available with a corresponding licence and installed TMS PC Gateway. If neither prerequisite is fulfilled, you cannot carry out the following work steps.

As a basic requirement, you need a TMS system (RZ TMS emergency escape control or TL-G TMS compact terminal). The physical configuration occurs using MATRIX's terminal manager.

To set up the system in MATRIX, you must carry out the following steps:

I. Activate the TMS option in system parameters

1. In the menu bar, click **System**. In the menu tree, click **Administration** and then on **System parameters**.
2. Select the system parameter **Use TMS devices** under the **Devices** node and enter the value '2' to enable the TMS function for connection via the terminal manager.
3. Then click **Save**.
4. Log off and then log on again to refresh the menu structure.

II. Set up TMS database connection

1. In the menu bar, click **Device administration** and click in the menu tree on **Devices**.
2. If the TMS PC gateway has already logged on using the automatic search in the application, the device is visible in the device tree. If the automatic search cannot be performed, the device must be added manually. To do so, click **Create new record** and select the **TMS PC gateway**.
3. Enter the computer's host name in the **General** tab on the computer where the **TMS PC Gateway** is installed and indicate whether the TMS devices should be connected via a LAN or a LON interface.
4. Click the tab for the interface used (LAN or LON) and check that the pre-set values are correct.
5. Save the entry. If a successful connection is not possible, an error message is displayed.

III. Create TMS devices

1. Click **Create new record** in the **Devices** dialog and select the desired types from the list of devices.
2. Enter the corresponding parameters in the **General** section.

Note: The TMS address may only be issued once per TMS PC gateway. The value of the address is between 1 and 65535.

3. Check the default values on the other tabs and change these if necessary.
4. Save the entry. If a successful connection is not possible, an error message is displayed.

IV. Set up access permissions

Note: The TMS device is regarded as a reader in terms of access control permissions. All physical readers on the TMS device have the same rights.

You can now assign permissions to the TMS device as with other readers in dormakaba MATRIX. This means assigning the TMS device to a door and granting permissions regarding the door with access profiles, special permissions or locking schedules.

III. Download data

1. Click **Devices** in the menu bar, then **Reports** in the menu tree.
2. Click **TMS evaluation** in the device tree.
3. Click the **Data download** button in the table with the TMS devices for which you want to start a data download.

Note: The status will change from "Not up to date" to "Up to date". All other changes to the access data that affect the TMS devices require a new data download (red light at XS/TMS Info).

4 Dialogs in the System module

Basic system configuration is performed in the **System** module.

The administration includes the central functions for the administration of users, system settings, start-up and maintenance of the system, and control functions for messages and revisions.

It also provides a service area with extensive diagnostic options.

Use the **Administration** menu to manage all data relating to the user and the system.

Use the **Service** menu, you can access system information and various log files.

Use the **Corrections** menu item to make changes to the master data of the basic system.

Note: The menu item is only available if the data groups option is enabled.

Use the **Reports** menu to open the reports.

Use the **Alarm monitor** menu item to open the alarm monitor.

Note: This menu item is only available if the alarm administration option is enabled.

Use the **System monitor** menu item to open the system monitor in order to access the various background processes and time-controlled jobs.

The **Wizards** menu item provides access to the wizards which will help you with various routine tasks.

Use the **Help** menu to access general information regarding the installed basis of dormakaba MATRIX and to start online help.

Log out of dormakaba MATRIX by selecting **Logout** from the menu.

4.1 Administration

In the **Administration** menu you manage all data relating to the user and the system.

Use the **User** menu item to manage the users in the system. You can block or release users for the system and display a login history for each user.

Use the **User roles** menu item to control the client users' access permissions for the system and the records.

Use the **Blocked list candidates** menu item to view and edit a list of blocked persons, if you have the corresponding permissions.

Use the **Revision** menu item to view and analyse revision entries.

Use the **Messages** menu item to access all messages and events in the system.

Use the **Backup** menu item to define the settings for backing up data. You can also start an unplanned backup.

Use the **Password rules** menu item to manage the rules for assigning passwords.

Use the **Interfaces** menu item to manage the interfaces to the connected external systems.

Use the **System parameter** menu item to display the system parameters specified for your system.

Use the **Data housekeeping limits** menu item to specify the period different data are stored in the system.

Use the **System key** menu item to define the system key for encrypting the specific keys.

Use the **Texts** menu item to edit the names and short names of the data records created in the system. This is especially necessary for multilingual systems.

Use the **Organisation groups** menu item to manage the organisation groups, which can simplify the allocation of persons to the company's organisational structures.

Use the **Access reports access log** menu item to open the access log for the access reports.

Use the **Fixed reports defaults** menu item to manage the settings in fixed reports.

Use the **E-mail configuration** menu item to manage the settings for sending e-mails.

Use the **Alarm administration** menu to manage the events for alarm administration and the action texts.

Use the **Report configurator** menu to manage your own reports.

Use the **Search profile management** menu to manage search profiles and search profile fields.

Use the **Attendance display** menu to define the attendance display templates.

Use the **Application** menu to manage additional applications for the system.

4.1.1 User

The user administration functions enable you to create, delete and edit users in the system and also to assign passwords.

The term user refers to persons operating the system and maintaining the various master data in the individual dialogs of the system. They are differentiated from persons, who only receive a booking permission for terminals.

The access permissions for the system functions are controlled via the user roles; the access permissions for the records are assigned via the data groups.

Dual control login

It may be necessary to use the principle of dual control to limit access to data in transactions with relevance to personnel law or other procedures.

If dual control login is activated for a user, a second user must enter their password for the first user to log in to MATRIX successfully. The second users with this authorisation are configured in the user records.

Access rights in MATRIX correspond to the rights possessed by the role of the first user to log in.

Note: The dual control login option in MATRIX is available if system parameter System 221 is activated.

"Selection user" dialog

The **Selection User** dialog displays all users with their user ID, name and user roles.

You can use the radio buttons to select all users or only the active or the blocked users for display.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection User

User ID:

Last name:

User role(s):

☐ Active users

☐ Blocked users

☒ All users

☐	User ID	Last name	First name	User role(s)	Blocked	Template	Delete
☐	ackreiter	Ackreiter	Thorsten	Superior	☐	☐	Delete
☐	admin	Administrator		admin	☐	☐	Delete
☐	cermans	Cermans	Paul	Superior	☐	☐	Delete
☐	hochmeyer	Hochmeyer	Gertrud	Superior	☐	☐	Delete
☐	kamp	Kamp	Karsten	Employee	☐	☐	Delete
☐	leconte	Leconte	Sandra	Superior	☐	☐	Delete
☐	legrand	Legrand	Marc	Superior	☐	☐	Delete
☐	leroy	Leroy	Fabienne	Superior	☐	☐	Delete
☐	martin	Martin	Eric	Superior	☐	☐	Delete
☐	matrino	Matrino	Johanna	Superior	☐	☐	Delete
☐	matrix	MATRIX	DORMA	System configuration	☐	☐	Delete
☐	meunier	Meunier	Catherine	Superior	☐	☐	Delete

Number of records: 12

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

User ID column:

Contains the ID of the user.

Last name column:

Contains the last name of the user.

First name column:

Contains the first name of the user.

User role(s) column:

Contains the user roles allocated to the user.

Blocked column:

Shows whether the user is blocked. A check mark indicates blocked users.

Template column:

Shows whether the user was derived from a template.

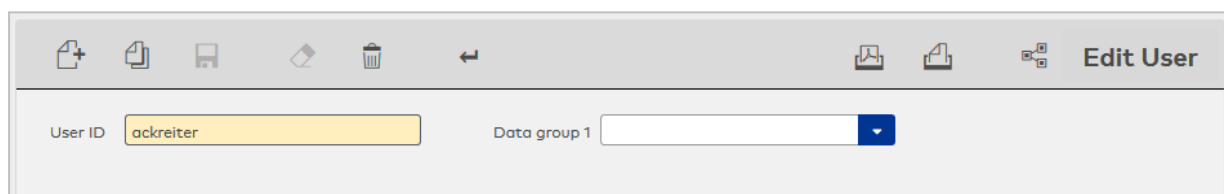
"Edit user" dialog

Use the **Edit User** dialog to create new users and edit existing users. Each user requires a unique user ID and a password; all other entries are optional. Each user has to be allocated one or more user roles and corresponding dialog configurations in order to be able to access the data and dialogs in the system.

Allocation is required if data groups are defined in the system.

The login history records the logins to the system.

You can use the buttons in the toolbar to navigate between records, to create, copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.


User ID input field:

Contains the system-wide unique user name. When you enter a new user ID, you can enter any combination of figures and letters. User ID is case-sensitive.

Note: After saving a new user the user ID will be displayed only and can no longer be changed.

User blocked display field:

If a reason for blocking exists for a user, it is displayed next to the user ID.

Personal data

Use this tab to define the basic configuration for a user.

Personal information | User roles | Person administration | Login history

Last name:

First name:

Mobile phone:

E-mail:

User template: ☐

Allocated person: Ackreiter, Thorsten (1)

Password settings

Send e-mail to set the password:

Password:

Verification:

Password never expires: ☐

Edit blocks

Administrative blocking reason:

Blocked from:

Organisational unit

Allocation to organisational unit:

User from level:

Workflow settings

Substitute - own requests:

Allocated substitutes

Last name	First name	User ID	
			New entry

Default substitute:

Start workflows for other persons: ☐

Last name input field:

Contains the last name of the user.

First name input field:

Contains the first name of the user.

Mobile phone input field:

Contains the mobile phone number of the user. The phone number is used with mobile devices for the Self Service or for alarm administration text messages.

E-mail input field:

Contains the business e-mail address of the user. This e-mail address is used for e-mail notifications.

User template checkbox:

Indicates whether this is a template. Templates can be copied and then changed for creating new users. It is not possible to log into the system with a user template.

Options:

- Activated: This is a user template.
- Not activated: This is a user.

Default value: Not activated.

Password settings area:

Send button:

Sends an email to the user requesting them to set the password.

Password input field:

Contains the password of the user for login to the system. This field is a mandatory field if it has been

defined in the [Edit password rules dialog](#) that the minimum length of the password is one or more characters. The password entered is not visible but always displayed as six bullet points.

Verification input field:

Contains the password of the user for login to the system a second time. This field is mandatory if a password has to be specified. Confirm by entering the password again.

Password never expires checkbox:

Suppresses the regular password change. Select this checkbox if the user does not have to change the password. If the checkbox is not selected, the interval specified in the [Edit Password rules](#) dialog applies.

Edit blocks area:

Administrative blocking reason selection field:

Contains the reason for the user lock. Select a reason from the list.

Blocked from date field:

Blocks the user at the specified date. Enter a date in the field or click the calendar icon and select a date. Blocking is not possible earlier than the current day.

Organisational unit area:

Allocation to organisational unit selection field:

Contains the organisational unit allocated to the person from the organisational structure.

User from level selection field:

Contains the organisational unit level from which the user is permitted to use the visitor records in Self Service. If no selection is made, the user cannot see any visitor records of other users.

Workflow settings area:

Note: The workflow settings are only available if workflow administration is active.

Substitute - own requests selection field:

Select whether substitutes can be selected manually from all users as default or only selected from the allocated organisational unit.

Options:

- **Manually define substitute:** The **Allocated substitutes** table is shown. It can be used to manually select one or more substitutes from all available users.
- **Substitutes from organisational unit:** Substitutes can only be selected from the organisational unit of the applicant.

Allocated substitutes table:

This table contains the allocated substitutes. These substitutes are automatically notified in the event of a workflow request, or can be entered with the correction if a substitute is required.

Default substitute selection field:

Select a default substitute that is preselected when a workflow is requested. The possible selection depends on the selection shown under **Substitute - own requests**.

Start workflows for other persons checkbox:

Identifier indicating whether the current user can start a workflow for other persons.

Dual control login area:

Dual control login required checkbox:

Identifier indicating whether the user requires confirmation by a second user via dual control login.

Users authorised for dual control login with password table:

The table contains the users who are authorised for dual control login.

Options: All users with passwords.

User roles

Use this tab to allocate one or more user roles to the user.

User roles selection reports:

Use the selection reports to allocate users one or more user roles. These are used to control the access permissions to the MATRIX system.

Allocated substitutes table:

This table contains the users for the substitute settings. The substitutes automatically receive a message when a workflow has approval for a substitute and no substitute is selected for the workflow request.

Last name column:

Contains the last name of the user.

First name column:

Contains the first name of the user.

User ID column:

Contains the user ID of the user.

Data group permissions

Use this tab to allocate the permissions for individual or multiple data groups.

Note: The tab is only available if the data groups option is enabled.

Default value selection field:

If a data group is to be allocated to a user directly on entering a new data element, select one of the data groups available here. The user must be authorised for the data group using the following options.

Options:

- All created data groups.

Data groups checkboxes:

Use the checkboxes to select the data groups for which the user is to be authorised. All data elements which are allocated to data groups for which a user is not authorised are not visible for this user.

Basic search profiles

Use this tab to assign the basic search profiles for the various person groups.

Note: The tab is only available if the basic search profiles option is activated.

Personal information	User roles	Data group permissions	Basic search profiles	Person administration	Login history
Persons Access			▼ »		
Persons Time			▼ »		
Security guard			▼ »		
External company employee			▼ »		

Persons Access selection field:

Contains the basic search profile for searching for persons in access.

Options:

- All created basic search profiles for persons.

Persons - Time selection field:

Contains the basic search profile for searching for persons in the time system.

Options:

- All created basic search profiles for persons.

Security guard selection field:

Contains the basic search profile for searching for security guards.

Options:

- All created basic search profiles for persons.

External company employee selection field:

Contains the basic search profile for searching for external company employees.

Options:

- All created basic search profiles for external company employees.

Person administration

Use this to define the configuration for employee record dialogs.

Personal information	User roles	Data group permissions	Person administration	Login history
Show absence details ☒				
Periods				
Show mobile geolocation ☐				
Employee record dialogs allocation				
Access				
Time 13 - Employee time allocation				
External company employee				
Daily correction				
Configuration				
Attendance display				
Time configuration				
Access configuration				
Fixed reports default - individuals				
Daily data				
Monthly data				
Monthly overview				
Fixed reports default - group				
Daily data				
Monthly data				
Monthly overview				
Yearly overview				
Absence statistics				
Period overview				
Daily overview				
Holiday report				
Absence times				

Show absence details checkbox:

Applies only for time management systems. Defines whether absences are displayed to users in anonymised format or with the absence type in the attendance display.

Options:

- Activated: Absence times are displayed with the absence type.
- Not activated: Absence times are displayed with the colour and the indicator from the system parameters.

Default value: Activated.

Periods selection field:

Periods specify the length of the data-viewing period for the user as well as the period during which corrections can be performed.

Options:

- All periods created in the system.

Show mobile geolocation checkbox:

Applies only for time management systems: Defines whether the location data of mobile bookings is displayed to users in the monthly or daily overviews.

Note: The identifier is only active if the time system parameter 110 is activated. Please observe the notice when activating.

If the location is to be shown in Google Maps, a corresponding API key is needed which is entered in the time system parameter 111.

Options:

- Activated: The location data is displayed.
- Not activated: The location data is not displayed.

Default value: Not activated.

Employee record dialogs allocation area:

Note: The selections are only active with the relevant licence and if the option is enabled.

Access selection field:

Determines the employee record dialog for opening the employee master data from the **Access** menu.

Options:

- All employee record dialogs created in the system.

Time selection field:

Determines the employee record dialog for opening the employee master data from the **Access** menu.

Options:

- All employee record dialogs created in the system.

External company employee selection field:

Determines the employee record dialog for opening the external company employees from the **External company administration** menu.

Options:

- All employee record dialogs created in the system.

Daily correction area:**Configuration** selection field:

Specifies the dialog for the daily corrections, which is accessed from a monthly overview of a person.

Options:

- All configurations for daily corrections created in the system.

Default: No selection.

Attendance display area:**Time configuration** selection field:

Specifies which global configuration is displayed in the attendance display (time).

Options:

- All global configurations for the attendance display (time) created in the system.

Default: No selection.

Access configuration selection field:

Specifies which global configuration is displayed in the attendance display (access).

Options:

- All global configurations for the attendance display (access) created in the system.

Default: No selection.

Fixed reports default – individuals area:

Defines the fixed reports which the user can use for individuals.

Daily data multiple selection field:

Contains the selection for the Daily data report.

Options:

- All the default data created for the Daily data report for individuals.

Default: No selection.

Monthly data multiple selection field:

Contains the selection for the Monthly data report.

Options:

- All the default data created for the Monthly data report for individuals.

Default: No selection.

Monthly overview multiple selection field:

Contains the selection for the Monthly overview report.

Options:

- All the default data created for the Monthly overview report for individuals.

Default: No selection.

Fixed reports default – groups area:

Defines the fixed reports which the user can use for groups.

Daily data multiple selection field:

Contains the selection for the Daily data report.

Options:

- All the default data created for the Daily data report for groups.

Default: No selection.

Monthly data multiple selection field:

Contains the selection for the Monthly data report.

Options:

- All the default data created for the Monthly data report for groups.

Default: No selection.

Monthly overview multiple selection field:

Contains the selection for the Monthly overview report.

Options:

- All the default data created for the Monthly overview report for groups.

Default: No selection.

Yearly overview multiple selection field:

Contains the selection for the Groups yearly overview report.

Options:

- All the default data created for the Groups yearly overview report

Default: No selection.

Absence statistics multiple selection field:

Contains the selection for the absence statistics report.

Options:

- All default data created for the absence statistics report.

Default: No selection.

Period overview multiple selection field:

Contains the selection for the Period overview report.

Options:

- All default data created for the Period overview report.

Default: No selection.

Daily overview multiple selection field:

Contains the selection for the Daily overview report.

Options:

- All default data created for the Daily overview report.

Default: No selection.

Holiday report multiple selection field:

Contains the selection for the Holiday report.

Options:

- All default data created for the Holiday report.

Default: No selection.

Absence times multiple selection field:

Contains the selection for the Absence times report.

Options:

- All default data created for the Absence times report.

Default: No selection.

Login history

This tab displays all login transactions of the user.

Personal information	User roles	Person administration	Login history	
Date	Type	Successful	Dual control required	Dual control login
01/15/2021 12:30:31	Login	☒	☒	leconte
01/15/2021 12:16:33	No valid user for dual control login	☐	☒	
01/15/2021 12:16:19	No valid user for dual control login	☐	☒	leconte
Number of records: 3				

Date column:

Contains the date and time of the login.

Type column:

Contains the type of the login.

Successful column:

Displays if the login was successful. A check mark indicates a successful login.

Dual control required column:

Indicates whether dual control login was required for the login procedure. This column is only present if system parameter System 221 is activated.

Dual control required column:

Shows the user name of the second person where dual control login is required. This column is only present if system parameter System 221 is activated.

4.1.2 User roles

User roles are used to manage the system permissions for all users. Access can be set individually for all system dialogs and functions for Full Access, Change, New and Delete, or as read-only access.

If a user is not allocated to any user role, no dialogs or commands in the interface are available.

The system parameter "220 Restricted permission transfer" allows to restrict permission assignment. If this parameter is set, the user can only assign dialog and field permissions he owns himself. He can also only save a user if he has either not assigned any new roles or only assigned roles for which he has all permissions. The predefined role "Admin" can only be transferred by users with the role "Admin".

"Selection user roles" dialog

The **Selection User roles** dialog displays all user roles created with their number, name and short name.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection User role				
☐	Number ▲	Name	Short name	Delete
☐	1	admin	admin	
☐	2	System configuration	System	
☐	3	User	User	
☐	9	Employee		
☐	10	Superior		
Number of records: 5				

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit user role" dialog

Use the **Edit User role** dialog to create new user roles and edit existing user roles. Each user role requires a unique number. It is recommended that you specify a name and a short name.

The **Import/Export** button can be used to export and import user roles in CSV format.

Unique permissions are allocated to each user role for reading, creating, changing and/or deleting the various data inventories.

Note: Permissions for the **admin** user role cannot be changed. This user role always has all permissions.

The permissions can be distributed in a hierarchical structure for each module or for individual dialogs or functions.

For device administration, permissions can be allocated at field level. Permissions cannot be restricted for individual devices. However, they can be controlled via the allocation to data groups.

Under the "Other" node, you can define whether a user role is shown detailed error messages (full access) or only a notification that an error has occurred (read access). You can also specify whether the persons with this user role are permitted to print out records or forms (including CSV and PDF exports). If permission has not been granted, the buttons are hidden in the toolbar.

Note: This does not affect the browser print function. This can still be employed by all users. However, this function is limited to the visible screen area.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Hierarchical display of permissions:

Defines the permissions for the individual system modules or functions.

Select the **Full access** checkbox if the user with the user role should be given permission to read, change and create records.

Select the **New** checkbox if the user with the user role should be given permission to read, change and create records.

Select the **Change** checkbox if the user with the user role should be given permission to read and change records.

Select the **Delete** checkbox if the user with the user role should be given permission to read and delete records.

Select the **Read** checkbox if the user should be able to display records but not change them.

If all checkboxes are deselected for a module or a dialog, the module or dialog is not available for the user in the interface. If all checkboxes are deselected for a function, the message "no access" is displayed.

Note: Permission for a higher hierarchy level always applies to all lower-level functions. If you select the checkbox at the top level (such as system), this permission applies to all functions in the corresponding module.

If a checkbox is grey, different permissions are allocated below this level. If a checkbox is white, all child elements have the same property (activated or inactivated) as the parent element.

4.1.3 Periods

Periods specify the length of the data-viewing period for the user as well as the period during which corrections can be performed. Periods are allocated to users.

"Selection Periods" dialog

The **Selection Periods** dialog displays all periods created in the system with their number, name and short name.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Periods" dialog

Use the **Edit periods** dialog to create new periods and edit existing periods. Each period requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Edit Periods				
Number	1			
Name	Superior			
Short name	S			
Corrections				
Individual corrections possible for	2	Months until the	15	.day of the month
Group corrections possible for		Months until the		day of the month
Data view				
Individual data view possible for	2	Months until the	15	.day of the month
Yearly overview for	3	Years		
Group data view possible for		Months until the		day of the month
Yearly overview for		Years		

Corrections:

Contains the periods for personal and group corrections.

Global settings are applicable if nothing is entered.

Individual corrections possible for input field:

Contains the possible correction periods for personal corrections in months.

Value range: 1–99, empty

Default value: Blank

Group corrections possible for input field:

Contains the possible correction periods for group corrections in months.

Value range: 1–99, empty

Default value: Blank

Until the X day of the month input fields:

Contains the day in the earliest month of the correction period until which a correction is possible.

If the number of days is exceeded, no further correction is possible for the earliest month.

Value range: 1–31, empty

Default value: Blank

Data view:

Contains the periods for the individual and group views. If nothing is specified, no limitations are applicable.

Individual data view possible for input field:

Contains the possible period for displaying individual data in months.

Value range: 1–99, empty

Default value: Blank

Until the X day of the month input fields:

Contains the day in the earliest month up to which the individual data can be displayed.

If the number of days is exceeded, the earliest month can no longer be displayed.

Value range: 1–31, empty

Default value: Blank

Yearly overview for input field:

Contains the possible period for displaying the yearly overview in years.

Value range: 1–99, empty

Default value: Blank

Group data view possible for input field:

Contains the possible period for displaying group data in months.

Value range: 1–99, empty

Default value: Blank

Until the X day of the month input fields:

Contains the day in the earliest month up to which the group data can be displayed.

If the number of days is exceeded, the earliest month can no longer be displayed.

Value range: 1–31, empty

Default value: Blank

Group data view yearly overview input field:

Contains the possible period for displaying the groups yearly overview in years.

Value range: 1–99, empty

Default value: Blank

4.1.4 Basic search profiles

To always restrict access to a particular set of data, basic search profiles with specific search criteria are permanently allocated to a user. These search profiles are automatically applied in each case before searching the corresponding data. A preselection of the data records then takes place which then forms the basis for access or a further search.

In the person administration, basic search profiles determine the basic person group for which the user is responsible. Basic search profiles are used for all searches for person-related data. This applies to all selection dialogs and all reports, regardless of whether further search profiles or selection criteria are employed.

Different basic search profiles can be defined for the various person maintenance dialogs, whether for employees or external company employees, and can be allocated to the operating personnel along with the person maintenance dialogs.

For the basic search profiles, all elements with a direct relationship to the selected data group can be used for the selection. The selection quantity can be exactly specified through linkable search criteria.

"Selection Search profiles" dialog

The **Selection Basic search profiles** dialog displays all basic search profiles created in the system.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Number	Name	Short name	Type	Delete
1	Department		Persons	

Number of records: 1

Type column:

Contains the type for the basic search profile.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New basic search profile" dialog

This dialog displays the available types for basic search profiles. Click an entry to create a new basic search profile based on the types.

Use the **Back to selection** button in the toolbar to go to the selection dialog.

Name	Description
Persons	Specifies the group of persons for person administration.
External company employee	Specifies the group of persons for external company administration.

Name column:

Contains the name for the available types.

Description column:

Contains a short description of the types.

"Edit Search profiles" dialog

Use the **Edit Basic search profiles** dialog to create new basic search profiles and edit existing basic search profiles. Each search profile requires a unique number; it is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Criterion	Value range	
Department		

[New entry](#)

Table:

The search criteria table contains the search profile elements of the search profile. Within a row, an OR link can be created with the ; symbol. The search criteria table is based on the selected data group.

Criterion selection field:

Contains the search element for the search condition.

Value range input field:

Contains the value or value range describing your search quantity.

The use of wildcards is not possible for basic search profiles.

The following wildcards are exceptions to this rule:

- @EMPTY, for searching for blank fields
- @NOTEMPTY for fields that contain any value.

Persons

The table contains the search criteria for the basic search profile for persons.

Criterion	Value range			New entry
Department				

Criterion selection field:

Contains the search element for the search condition.

Options:

- All available employee record fields.

Value range input field:

Contains the value or value range describing the search quantity.

External company employees

The table contains the search criteria for the basic search profile for external company employees.

Criterion	Value range			New entry
Last name				

Criterion selection field:

Contains the search element for the search condition.

Options:

- All available employee record fields for the external company employees.

Value range input field:

Contains the value or value range describing the search quantity.

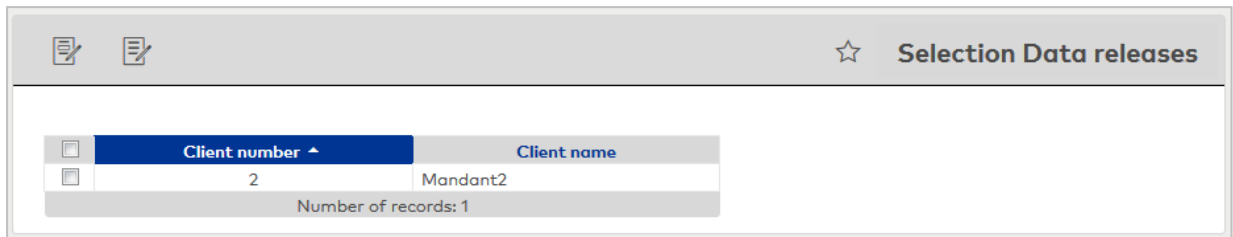
4.1.5 Data releases

Data releases grant access permissions to certain master data for other clients. In this way, other clients receive reading rights and can use the master data for various assignments. Primarily, releases are used for doors in the area of access rights with several clients using the same doors.

Note: Data release is only available with the corresponding **Client systems** option.

"Selection Data releases" dialog

The **Selection Data releases** dialog displays all clients created in the system.

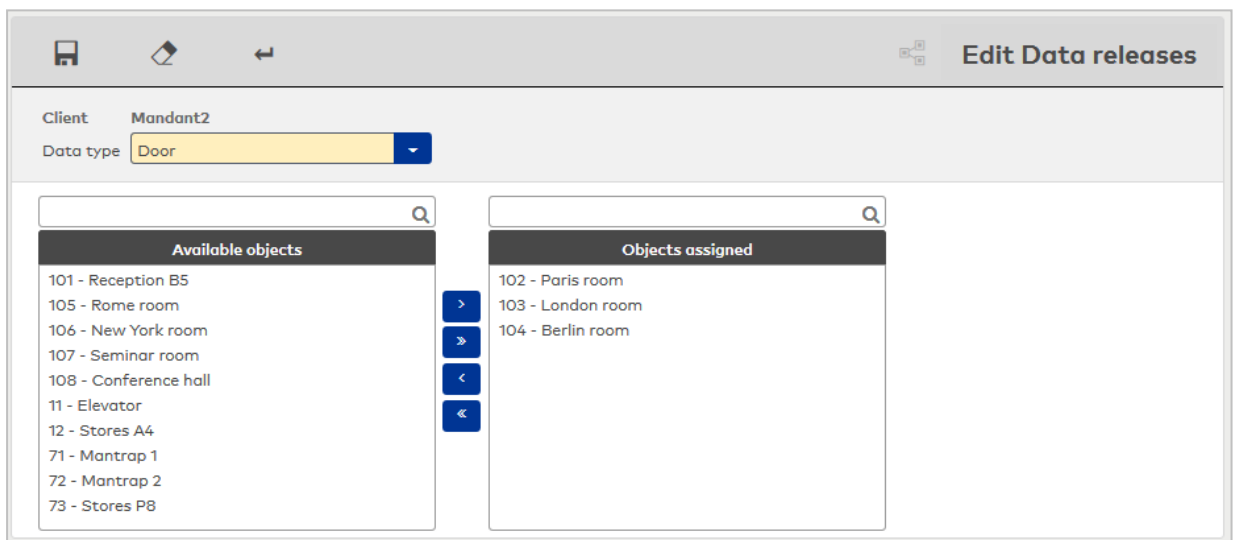


Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Data release" dialog

Use the **Edit Data release** dialog to grant access permissions for selected clients to master data.

You can use the buttons in the toolbar to navigate between records, to print records and to save or discard changes to the record. Use the **Back to selection** button to return to the selection dialog.



Data type selection field :

Here you select the data type for which you want to grant access permissions. The other clients receive reading rights for the released records.

Possible data types:

- Door
- Room zone
- Bank holiday template
- Bank holiday
- Day type

Available objects field:

Contains all data records for the selected data type not released for the client. Highlight an object and click the right arrow to assign it.

Objects assigned field:

Contains all objects released for the client. Click an object to select it and then click the left arrow to remove this object from its allocation. When you remove an object, its access rights are also removed.

Note: To select several entries simultaneously press the Ctrl key while clicking.

4.1.6 Data groups

Issuing data rights allows you to control access to data. This is done using data groups which records are assigned to. The users are allocated the rights to these data groups via the user configuration. A user can be assigned rights for any number of data groups. Up to three data groups can be allocated to a record.

Arrangement in a tree structure allows hierarchical user administration.

Example: With the hierarchical structure, you can grant a user access to all persons in a particular department with last names starting with A-L only, for example, and you can assign another user access to the persons starting with A-L in another department.

Note: You can configure a system parameter to specify if data groups can be allocated to a record and, if so, the number. You can also configure whether users can see objects which they do not have access rights to, or whether such objects are completely hidden.

Evaluation of rights

When allocating several data groups, a disjunction applies to the evaluation of permissions, i.e. if a record belongs to data groups "X" and "Y", it can be used by all users with access to either data groups "X" or "Y", or both.

If a record is not allocated to any data group, then all users may use it.

Access to connected records, such as ID card and person records, is an exception. A user always needs permission for both objects to edit the allocation of an ID card to a person. However, a user with permissions for a person record can assign the person additional ID cards or delete the person, even without access to one or more of the current allocated ID cards.

A user who creates a new data group is automatically assigned the right to that data group. The new data group is also allocated to the user **admin**.

If a user only has access rights for one data group, new records created by the user and for which allocation of data groups is required are automatically allocated the data group of the user.

Display of unauthorised fields

System parameter "171 Data groups display options" can be used to configure if entries for which the user has no permissions are still legible but greyed out or if dummy text ("unknown object") is displayed.

Entries in a data table to which the user has no access are also hidden or replaced by dummy text in accordance with the configuration. The elements **Edit** and **Delete** are inactivated so that the user cannot remove the existing allocation.

When printing or exporting PDF and CSV files, unauthorised texts are completely hidden or replaced by the dummy text "unknown object". Greyed out texts are not printed.

Further information can be found in the section "Working with Matrix" under the heading [► Work with data groups](#).

"Edit Data groups" dialog

Use the **Edit Data groups** dialog to create new data groups and edit existing data groups. Each data group requires a unique number; it is recommended that you specify a name and a short name.

Data groups are used to allocate records to users and do not require any other parameters.

The hierarchical structure of the permissions is displayed in a tree structure in the left-hand section of the dialog. To expand the tree, click the plus sign in front of each node. To edit a node, select it in the tree structure.

Use the buttons in the toolbar to create a new data group, move or delete a data group, print the structure and save or reject changes to the record. Use the **Back to selection** button to return to the selection dialog.

The screenshot shows the 'Edit Data groups' dialog. On the left, a tree structure is visible under the 'Data groups' header. The tree has four nodes: '1 - Administration' (which is selected and highlighted in blue), '2 - Purchase', '3 - Production', and '4 - Development'. On the right side of the dialog, there are three input fields: 'Number' with the value '1', 'Name' with the value 'Administration', and 'Short name' which is empty. The toolbar at the top includes icons for creating, saving, deleting, moving, and printing, as well as a star icon and a 'Back to selection' button.

4.1.7 Data group configuration

Use the data group configuration to define whether the allocation to data groups is required, not required or available as an option for the numerous groups of records such as person administration, visitor administration or ID card administration. You can use it to manage a standardised assignment of permissions that allows a hierarchy with any depth of nesting for convenient administration and provides an alternative to "Client management with shared hardware".

"Data group configuration" dialog

Use the **Data group configuration** dialog to select in a hierarchical structure if the use of data groups is deactivated, optional or mandatory. The conditions are defined at dialog level.

You can use the buttons in the toolbar to save or discard the changes to the record.

The screenshot shows the 'Data group configuration' dialog. On the left, a tree structure is visible under the 'Access' header. The tree has several nodes: 'Person administration' (which is expanded), 'External company administration', 'Visitor administration', 'ID card administration', 'Room administration', 'Area/door administration', 'Calendar administration', 'Additional functions', 'Door monitoring', 'Time', 'Devices', and 'System'. The 'Person administration' node is expanded, showing sub-nodes: 'Persons', 'Access profiles', 'Access weekly profiles', and 'Access daily times'. Each of these sub-nodes has a dropdown menu set to 'Optional'. The right pane of the dialog is currently empty. The toolbar at the top includes icons for saving and discarding changes, a star icon, and the dialog title 'Data group configuration'.

The tree structure is arranged on the basis of Module > Object > Dialog and is aligned with the menu structure of dormakaba MATRIX.

Note: Groups of connected records are indicated accordingly, as they require the same setting.

For each dialog, the following values can be selected:

Not activated: No data groups can be allocated.

Optional: The allocation of data groups is optional.

Mandatory: The allocation of at least one data group is mandatory.

Note: If allocations to a data group exist for an object and the value is later set to **Disabled**, a message to this effect appears. After saving, existing allocations are irrevocably removed.

4.1.8 Blocked list candidates

This function allows a list of blocked persons to be maintained. The list is synchronised with the employee records from person administration, external company administration and visitor administration.

Note: You require the appropriate user role rights to be able to make or cancel block list entries.

When creating new data or editing existing data for persons, visitors or external employees, a cross check is run against existing blocked list candidates. If a match is found, a message is displayed. If the found record concerns a different person with the same name, the user can then decide to block the record or save it without blocking.

Blocked list entries can be created from the employee records. In this case, a suitable blocked list candidate is generated.

A blocked list entry can only be cancelled from the employee record.

Note: A blocked list entry is not automatically cancelled if the associated blocked list candidate is deleted. You must always manually delete the block from the employee record.

All procedures connected with blocked lists are logged and output in the **Messages** dialog.

Matching an existing employee record when creating a new creating a new

When saving a newly created blocked list candidate or when saving alterations to a name or first name of an existing blocked list candidate, the system checks whether persons are present that match the new entry. If an exact match of first name and last name is found, a popup dialog is shown in which the person can be blocked directly.

Title	Name	First name	Date of birth
	Meunier	Catherine	

Enter in blocked list button:

Blocks the person with the reason for blocking "Blocked list" and saves the blocked list candidate.

No block button:

Saves the blocked list candidate without blocking the person.

Cancel button:

Cancels the saving process and closes the pop-up dialog.

Matching an existing blocked list candidate with saving persons

Every time a person or an external company employee is saved or a visit is activated, the system checks whether a blocked list candidate of the same name is present. If matching first name and/or last name and/or date of birth is found, a popup dialog is shown in which the person can be blocked directly. The necessary degree of correlation is specified in system parameter System 202.

Number	Title	Last name	First name	Date of birth	Comment
2		Bond	James		

Block due to button:

Blocks the record due to the presence of a blocked list candidate.

No block button:

Creates the record without blocking it.

Note: If the record is saved despite the blocked list entry, a notification is issued in the **Messages** dialog.

Cancel button:

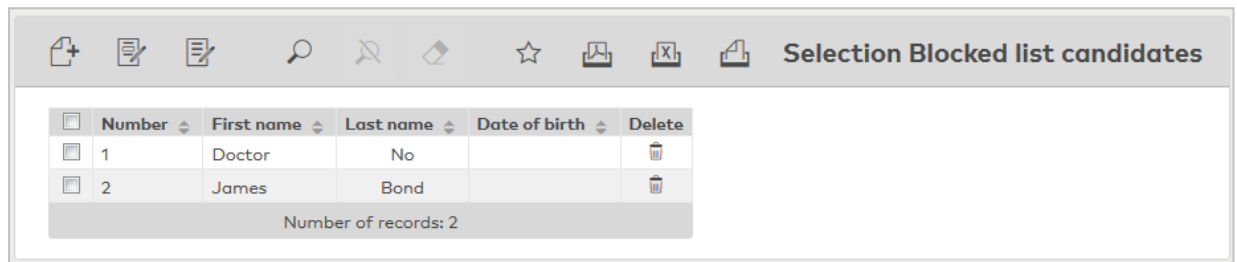
Cancels the saving process and closes the pop-up dialog.

"Selection Blocked list candidates" dialog

The **Selection Blocked list candidates** dialog displays all persons subject to a blocked list entry.

Note: This only applies if the logged on user has the right to an extended search. If extended searching is deactivated in the user role, the user can only search for an individual person by last name. Only the first search result is shown as the maximum output.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Number	First name	Last name	Date of birth	Delete
1	Doctor	No		
2	James	Bond		

Number of records: 2

Delete column:

Deletes the record. Before the record is finally deleted, the system displays a confirmation request. If you click **OK**, the record is irrevocably deleted and cannot be recovered.

Note: Only the entry in the list of blocked list candidates is deleted. Any block issued to a person, external company employees or visitors based on this blocked list candidate remains unaffected. To remove a blocked list entry, you must manually delete this reason for blocking in the employee record.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit blocked list candidates" dialog

Use the **Edit Blocked list candidate** dialog to view and edit existing blocked list candidates.

Note: When a new entry is created, the system checks whether persons exist that match the entered data. If so, you have the option of blocking the appropriate person directly.

Use the buttons in the toolbar to navigate between records, delete or print a record and save or reject changes to the record. Use the **Back to selection** button to return to the selection dialog.

The screenshot shows a software window titled "Edit Blocked list candidate". The window has a toolbar with icons for adding, deleting, and saving. The form inside contains the following fields:

- Number:** A text box containing the value "2".
- Title:** An empty text box.
- First name:** A text box containing the value "James".
- Last name:** A text box containing the value "Bond".
- Date of birth:** A date picker field with a calendar icon.
- Created by:** A text box containing the value "Administrator (admin)".
- Comment:** A large, empty text area.

Number input field:

Contains the unique number of the blocked list candidate. When you create a new record, the number increases automatically by an increment of one. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Title input field:

Contains the academic title of the person, where applicable.

Last name input field:

Contains the last name of the person. This field is mandatory.

First name input field:

Contains the first name of the person. This field is mandatory.

Date of birth date field:

Contains the date of birth of the person.

Created by input field:

Contains the name of the employee who created the blocked list candidate.

Comment input field:

Text field for comments.

4.1.9 Revision

Revision management includes log functions for changes on system data via the dialog interface as well as dialogs for displaying and analysing the changes.

The revision also provides: **Who** changed **what record** and **when** did they change it. Actions such as Create, Delete and Change are documented each time that they are carried out.

For changes, the field changed is also saved along with the new and previous field value. The changed data are displayed in a simplified format, condensed from the dialog concerned. That is why more in-depth expertise is required to interpret the specific changed value in some cases.

For revision, the term "data type" is a synonym for all objects such as daily programs and calendars as well as system parameters and device definitions.

"Revision" dialog

The **Revision** dialog displays all changed records and provides information on the user and date.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

A selection can only be made based on the client if client administration is active. The selection for the user is deactivated if client management is activated and a client is selected in the Client selection field.

Date/time	User	Module	Type	Number/ID	Reason
May 24, 2017 10:37:51 AM	admin	System	Search profiles	1	Changed
May 24, 2017 10:34:32 AM	admin	System	Data groups	1	Changed
May 24, 2017 10:33:55 AM	admin	System	Data groups	2	Changed
May 24, 2017 10:33:20 AM	admin	System	Data groups	4	Changed

Number of records: 4

Table:

The table displays all records corresponding to the specified search criteria.

Date/time column:

Contains the date and time of the change.

User column:

Contains the user ID of the user who made the change.

Module column:

Contains the module in which the change was made.

Dialog column:

Contains the dialog in which the change was made.

Number column:

Contains the number of the record created or changed.

Reason column:

Contains the type of change that was made.

Created = new record created

Changed = existing record edited

Deleted = existing record deleted

"Revision details" dialog

The **Revision details** dialog displays the details of a revision entry. These are represented in a tree structure based on the characteristics of the types and the changes performed.

The screenshot shows a window titled 'Revision details'. It contains a table with the following information:

User	admin
Date/time	May 24, 2017 10:34:32 AM
Module	System
Type	Data groups
Number/ID	1
Reason	Changed

Below the table, there is a section titled 'Details:' with a tree structure showing the changes:

- Data groups "1" changed
 - Texts changed
 - Texts for language "en" changed
 - Name: "Administration"
 - Short name: ""

User display field:

Displays the user who made the changes.

Date/time display field:

Displays the date and the time of the change.

Module display field:

Displays the module in which the change was made.

Type display field:

Displays the data type for which the change was made.

Number/ID column:

Contains the number of the record created or changed.

Reason column:

Contains the type of change that was made.

Created = new record created

Changed = existing record edited

Deleted = existing record deleted

Details:

Displays the details of the revision entry. Display mode for the individual changes is a tree structure. For more information regarding a node, click the node. With changes, the display shows the previous value next to the new value.

4.1.10 Messages

Messages notify users to processes in the system or of undefined, incorrect statuses or special situations.

In this way, user logins to the system are logged, or errors in transferring employee records to the terminals are reported. Dialog input messages, which are displayed directly in the relevant dialog if a wrong entry is made, are not indicated separately.

"Messages" dialog

The **Messages** dialog displays a log of all messages and events of the various modules in a selected period.

You can use the checkboxes to select the relevant modules and to determine to display messages or events only, or to display both.

Note: The modules available for selection depends on your licence.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Date/time	Module	Type	Number	Text/parameters	Delete
May 24, 2017 10:18:35 AM	System	E	1	Successful login of user "admin".	
May 24, 2017 10:11:17 AM	System	M	15	Data cleanup: 0 Datenweitergabe an Lohnprogramme outside data housekeeping limit 24.05.16.	
May 24, 2017 10:11:17 AM	System	M	15	Data cleanup: 0 TMS Historiensätze outside data housekeeping limit 24.05.16.	
May 24, 2017 10:11:17 AM	System	M	15	Data cleanup: 0 Abgelaufene Sonderberechtigungen outside data housekeeping limit 24.05.16.	
May 24, 2017 10:11:17 AM	System	M	15	Data cleanup: 0 Genehmigungen/Genehmigungsschritte outside data housekeeping limit 24.05.16.	
May 24, 2017 10:11:17 AM	System	M	15	Data cleanup: 0 Infocenter Meldungen outside data housekeeping limit 23.02.17.	
May 24, 2017 10:11:17 AM	System	M	15	Data cleanup: 0 Wächterrundgangprotokolle outside data housekeeping limit 13.02.17.	
May 24, 2017 10:11:17 AM	System	M	15	Data cleanup: 0 Alarme outside data housekeeping limit 23.02.17.	

Table:

Date/time column:

Contains the date and time of the message or the event.

Module column:

Contains the module in which the message or the event occurred.

Type column:

Contains the type. E = event and M = message.

Number/ID column:

Contains the number of the message or event.

Text/parameter column:

Contains the descriptive text for the message or event.

4.1.11 Backup

Backup comprises, on the one hand, system-related data such as person, door or calendar records, and on the other hand, the booking data.

The backup can be executed by the server based on time period or manually using the backup dialog. The system is not closed while a backup is running. In other words, users can be logged in and can continue to work unimpaired in the system.

Restoring a backup is only possible on the server. The restore program in the system is used for this purpose.

Further information can be found in the section "Working with Matrix" under the heading ► [Set up and restore backups](#).

"Edit backup settings" dialog

Use the **Edit backup settings** dialog to define the intervals for the backup as well as the backup directories and the retention period. You can also carry out an unplanned backup.

The backup is executed on the selected weekdays at the defined time.

You can use the buttons in the toolbar to save or reject changes to the backup settings.

The backup has been started. For more details see "Messages".

Last successful backup 6/15/17 1:55 PM

Days

☐ Sunday

☒ Monday

☒ Tuesday

☒ Wednesday

☒ Thursday

☒ Friday

☐ Saturday

Time

02:00

Backup directory

Directory for database and configuration settings backups

In this directory the database and configuration settings backups are stored. This directory may reside on a network drive. The MATRIX user account needs to have write access to this directory.

C:\Program Files\dormakaba\MATRIX\main\backup

Directory for booking backups

In this directory the terminal booking backups are stored. Due to the high usage frequency this directory has to reside on the hard disc. The MATRIX user account needs to have write access to this directory.

C:\Program Files\dormakaba\MATRIX\main\backup\bookings

Retention period

30 Days

Enter a password here to encrypt the database export. If you leave this field empty the backup is unencrypted. Attention: the database cannot be restored if the password is lost.

Password

Repeat password

Run unscheduled backup now

Last successful backup display:

Displays the last successfully performed backup with date and time. If no backups have been performed yet, this is indicated by a text.

Days Sunday to Saturday checkboxes:

Activates in a recurring backup on the corresponding weekday.

Options:

- Activated, a backup is performed on this weekday.
- Not activated, no backup is performed on this weekday.

Default value: Not activated.

Time input field:

Contains the time when the backup should run. Enter a time in hh:mm format.

Backup directories:

Directory for database and configuration settings backups input field:

Contains the directory in which the backup files are saved. This can be located locally on the server on which the system is installed, or on a different server. Enter the complete path of the directory in the

relevant field. Example: C:\xyz\abc\backup. Ensure that the directory is permanently available and that write permission exists.

Directory for booking backups input field:

Contains the directory in which the backup files with the terminal bookings are saved. This directory must be on the local hard drive. Enter the complete path of the directory in the relevant field. Example:

C:\xyz\abc\backup. Ensure that write permission for the directory exists.

Retention period input field:

Contains the number of days the backup files should be kept. Enter the required value. At the end of this period, the server deletes the data.

Password input field:

For specifying a password to protect the data backup. The password is requested before loading the backup.

Run unscheduled backup now button:

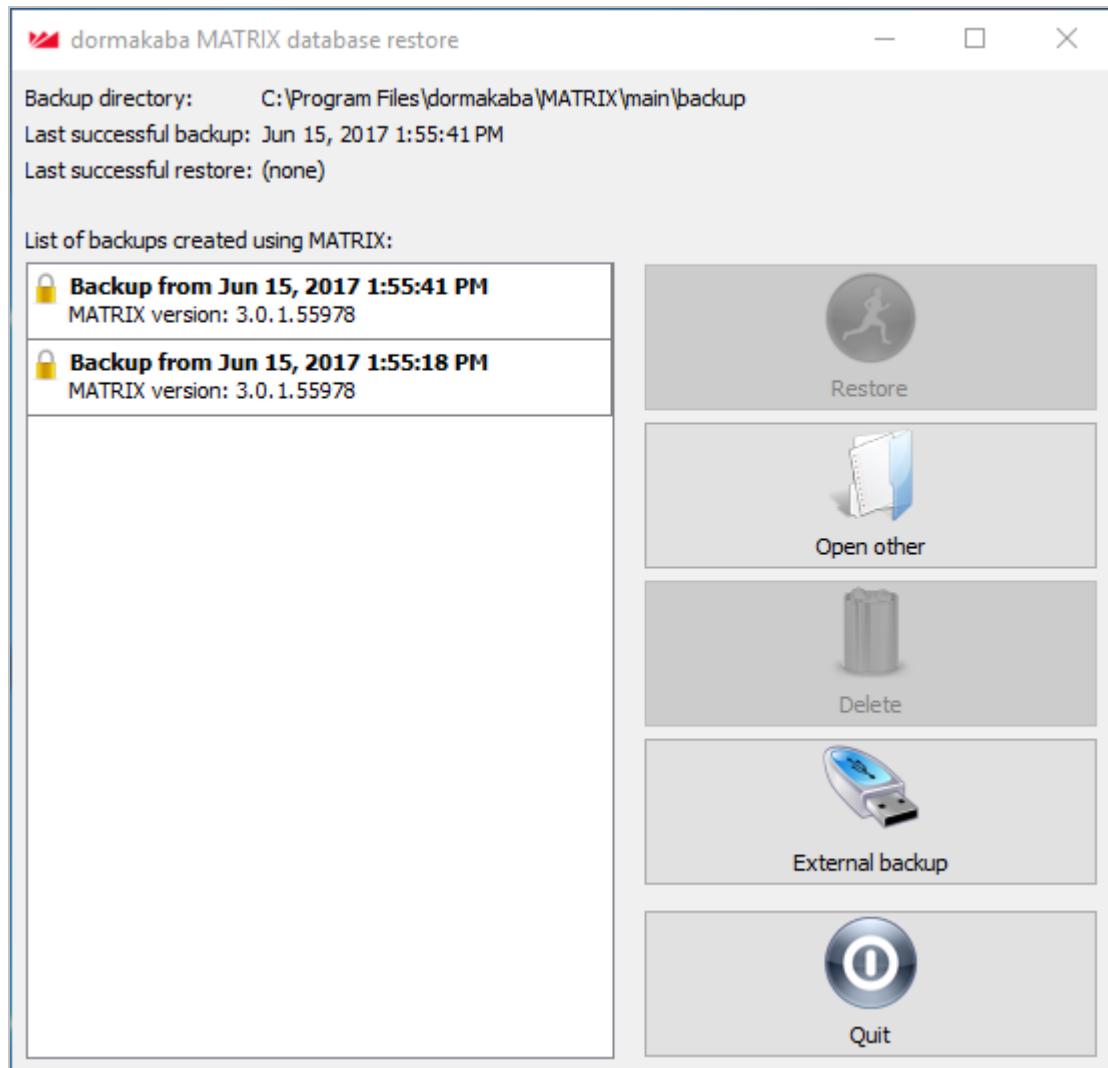
Activates in an immediate backup. Click the button to run a backup immediately regardless of the set intervals.

Database restore

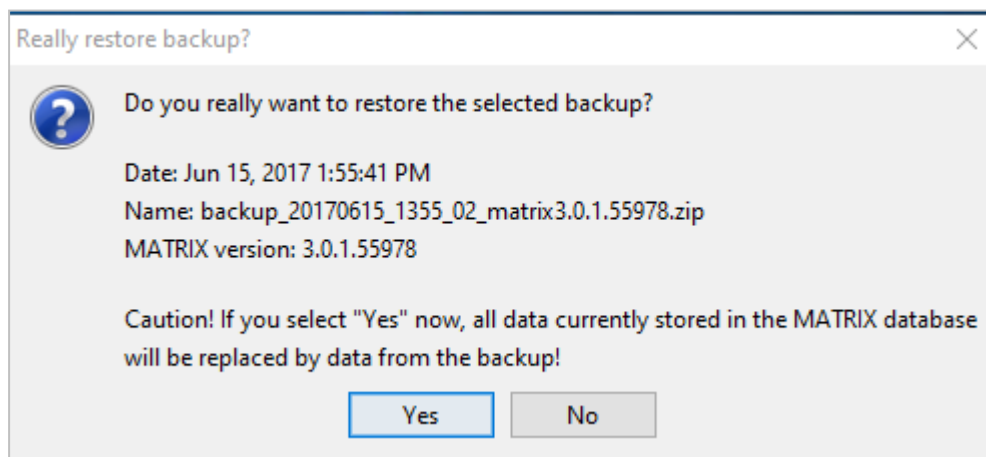
Use the restore program to import a backup into the system. This program is installed during installation and can be started from the server.

1. To start the program, select the program group **MATRIX** in the **Programs** menu and click **Restore Matrix database**.

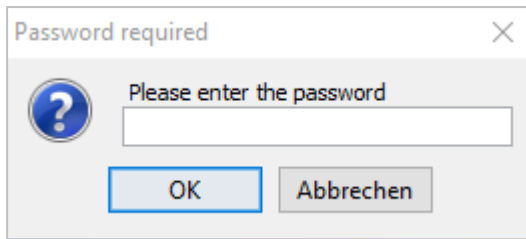
The **Restore Matrix database** dialog field lists the previously executed backups including the time. If the backup was already used in a restore procedure, the time of the last restore is also displayed. If no backups are listed, the restore program displays a corresponding message and ends.



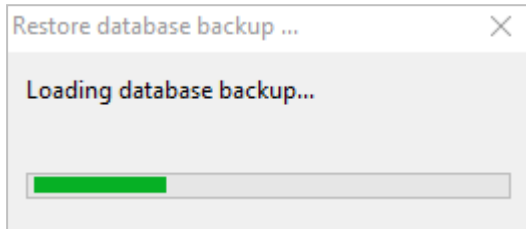
2. Select a backup and click **Restore**.
3. Confirm the acknowledgement query with **Yes**. The Matrix service stops and the restore procedure starts.



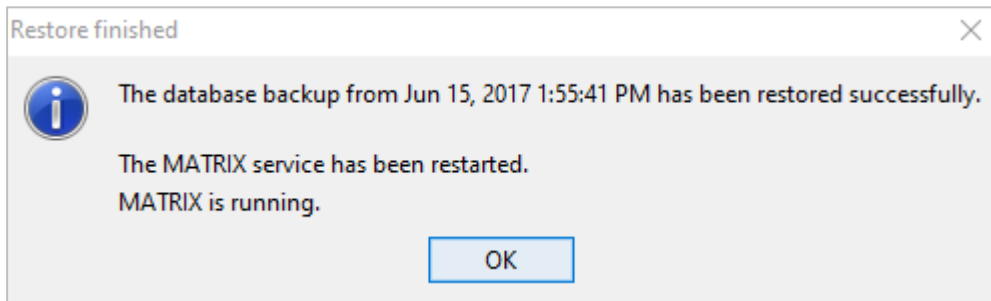
If the backup is protected by a password, this must be entered before the restore procedure. Confirm the entry with **OK**.



The progress is displayed during the restore procedure.



4. When the restore procedure is completed, the Matrix service starts automatically and the system is available again. Click **OK**.



If previous backups are no longer needed, you can remove them from the system by using the **Delete** command.

Caution: Deleted backups cannot be restored unless they have been saved with other media.

4.1.12 Single sign-on

Note: This function is only available if the system parameter System 190 is enabled.

In addition to the classic form-based login procedure, the application also offers a Single Sign On (SSO) login procedure. Once users have logged in to the external system, this enables them to use all the applications that they are entitled to use without having to log in to each individual application again.

The user is authenticated by an external system. The authenticated user name is then transferred to MATRIX in one of several possible ways. For this procedure to succeed, the user being logged in must have the user name (userID) that was transferred to MATRIX from the external system.

It is usually necessary to transform the transferred user name to ensure that it matches the user name present in MATRIX. This could include removing prefixes and postfixes from user names or adding client names or client numbers as prefixes.

If multiple clients are present in your MATRIX system, the client numbers or the client names must be prefixed to the user names and separated by a forward slash (/), e.g. *<client number>/<user name in MATRIX>* or *<client name>/<user name in MATRIX>*.

The user name can be appropriately transformed using the Groovy script programming language. The transformation syntax is entered in the configuration dialog.

Further information can be found in the section "Working with Matrix" under the heading [► Set up single sign-on](#).

"Edit Single sign-on" dialog

Use the **Edit Single Sign On** dialog to configure the login procedure for your system.

Note: The structure of the dialog depends on the login procedure used. This is set using the system parameter System 190.

Kerberos login

Use this dialog to configure the Kerberos single sign-on login procedure.

Click the toolbar buttons to store, discard or print your changes.

Kerberos login	
Service principal	HTTP/sscitw34304
URL of the Kerberos configuration file	file://c:/Program%20Files/DORMA/MATRIX/main/conf/kerberos/sample-krb5.conf
URL of the key table (keytab)	file://c:/Program%20Files/DORMA/MATRIX/main/conf/kerberos/sample-http-matrix-web.keytab
Groovy expression for client/user	
Logout URL	

Service principal input field:

Contains the service principal that is specified by the Kerberos administrator for the application. The full address is required with the complete name.

URL of the Kerberos configuration file input field:

Contains the path to the Kerberos configuration file. The path must be specified in the format 'file://path/to/file.conf'.

The format 'classpath://path/to/file/in/classpath.conf' is also possible but the file must not be placed in a jar archive.

URL of the key table (keytab) input field:

Contains the path to the Kerberos key file. The path must be specified in the format 'file://path/to/file.keytab'.

The format 'classpath://path/to/file/in/classpath.keytab' is also possible but the file must not be placed in a jar archive.

Groovy expression for client/user input field:

Contains the Groovy instructions for transforming the user name from external authentication for forwarding to the application. The user name transmitted is made available in the variable 'x'.

Logout URL input field:

Contains a page to which the user is forwarded on logging out. For example, this could be a portal homepage.

Request header Single Sign On login

Use this dialog to configure the request header single sign-on login procedure.

Click the toolbar buttons to store, discard or print your changes.

RequestHeadername of the user principal input field:

Contains the request header name in which authentication software (such as CA SiteMinder) enters the login name of the authenticated user on an upstream web server.

Default value: SM_USER

Groovy expression for client/user input field:

Contains the Groovy instructions for transforming the user name from external authentication for forwarding to the application. The user name transmitted is made available in the variable 'x'.

Logout URL input field:

Contains a page to which the user is forwarded on logging out. This could be a portal homepage, for example.

Windows login

Use this dialog to configure the Windows single sign-on login procedure.

Click the toolbar buttons to store, discard or print your changes.

Groovy expression for client/user input field:

Contains the Groovy instructions for transforming the user name from external authentication for forwarding to the application. The user name transmitted is made available in the variable 'x'.

Logout URL input field:

Contains a page to which the user is forwarded on logging out. This could be a portal homepage, for example.

4.1.13 Active Directory authentication

Active Directory authentication allows users to log in to MATRIX using Windows login data even if the user is not in the Windows domain.

During login, the user enters their Windows user name. The MATRIX server domain is entered automatically.

The user is authenticated by an Active Directory server and submitted to MATRIX.

Note: This function is only available if the system parameter System 193 is enabled.

Requirements for successful authentication:

- The MATRIX server can connect via the network to an AD/LDAP server, which is used to authenticate the user.
- The user must have a user account in the configured domain. It is not possible to log in via other domains.
- The user being authenticated must exist in the MATRIX database.

"Edit Active Directory authentication" dialog

Use the **Edit Active Directory authentication** dialog to specify data for accessing the Active Directory server.

Click the toolbar buttons to store, discard or print your changes.

Host name or IP address input field:

Input field for the host name or IP address of the Active Directory server.

Port input field:

Contains the network port used for communication with the Active Directory server.

Secure connection checkbox:

Indicates whether communication between the Active Directory server and MATRIX is encrypted.

- Activated: Communication is via SSL.
- Not activated: Communication is via a plain socket connection.

Default value: Not activated.

Domain input field:

Specifies the domain name of the Active Directory server.

Login verification against the Active Directory server area:

Enter a user name and password and test whether connection was successful by pressing the **Check login** button.

4.1.14 Password rules

A password is created for every user to guarantee the security of the system

The minimum password requirements are determined in the password rules. These standards form part of the start wizard but can be adjusted at any time by system administrators.

The password rules can also be used to define how user blocks are dealt with after a user has entered an incorrect password.

"Edit password rules" dialog

Use the **Edit password rules** dialog to edit the rules for defining passwords. The rules always apply to all users.

You can use the buttons in the toolbar to save or reject the changes or to print the record.

Minimum number of characters	10
At least one lower/upper case letter each	☒
At least one digit (0-9)	☒
At least one special character	☒
Validity period	Day(s)
Rejection of the last	10 Passwords
User block after	6 Unsuccessful attempt(s)
User block for	30 Minutes
Forgotten password on login screen	☐
Validity period for "Forgotten password" link	Minutes

Minimum number of characters input field:

Contains the minimum number of characters that has to be entered to define a password.

At least one lower/upper case letter each checkbox:

Specifies that the password must contain upper case and lower case letters.

At least one digit (0–9) checkbox:

Specifies that the password must be alphanumeric and contain at least one digit.

At least one special character checkbox :

Specifies that the password must contain at least one special character, such as _ or &.

Note: The system checks whether the password rules have been adhered to each time a user password is changed or created. This means that any changes made to the password rules have no effect on existing passwords.

Validity period input field:

Contains the number of days for which an entered password is valid. When this time expires, the user is requested to specify a new password.

Note: You can specify in the profiles for individual users that the password never expires. (See also: "'Edit user" dialog" on page 102)

Rejection of the last __ passwords input field:

Contains the number of different passwords that a user has to define before a password can be used again.

User block after __ unsuccessful attempt(s) input field

Contains the number of incorrect login attempts that a user can make before their password is blocked.

Note: You can remove a user block in the user profile. (See also: "'Edit user" dialog" on page 102)

User block for __ minutes input field:

Contains the time in minutes for which a user is blocked if the number of possible failed log in attempts is exceeded.

Value range: 1–9999 minutes, empty = permanent block, this can only be revoked by being manually unblocked.

Forgotten password on login screen checkbox:

Specifies that a "Forgotten password" link is displayed in the login dialog that users can use to create a new password.

Note: A connection between MATRIX and an e-mail server must be configured in order to be able to use this function.

Validity period for "Forgotten password" link input field:

Contains the duration in minutes for which the link for resetting the password remains valid. It is advisable not to set this value too high for security reasons.

4.1.15 Interfaces

dormakaba MATRIX provides system interfaces which enable integration with and data transfer from higher-level systems and other external systems. These interfaces are primarily designed for a once-off data transfer during commissioning. But the interfaces can also be used for daily or manual data synchronisations.

All interfaces have a suitable dialog interface for configuration.
Interfaces for simple import and export of employee records are standard features.

Note: Some interfaces are subject to licensing rights and are only available with the relevant licence. Other interfaces can only be created once in the system.

You can also create other interfaces in addition to predefined interfaces.

4.1.15.1 Integration manager

Time and access control systems are integrated into the company's IT structure. Most companies already have systems requiring the integration of dormakaba MATRIX. For example, some personnel management systems are the primary systems used to manage a company's employee data. The system receives current data from a personnel administration system during daily reconciliation.

To meet these requirements, dormakaba MATRIX provides an integration manager with extensive import/export functions based on various interface technologies.

Note: The integration manager can fully use the entire scope of import/export functions using special software.

Only some of the import/export functions are provided on general interfaces with dialog interfaces.

Description of interface

This section contains the key information on data import, data export and commands which the integration manager provides to connect dormakaba MATRIX to external systems. The interfaces are managed and operated by the integration manager.

Note: The integration manager can fully use the entire scope of interface description using special software. Special configuration files need to be produced for this purpose.

The configuration files of the integration manager are generally located in the installation directory of dormakaba MATRIX at: Program Files\C:\Program Files\dormakaba\MATRIX\Matrix\main\conf\integration.

Interface technologies

File system:

Data is transferred via data files based on a specified structure in defined transfer directories. The file does

necessarily need to be located on the local PC.

Database interface:

ODBC or JDBC interface: Data is transferred via the interface based on a specific data structure.

Socket connection:

Data exchange with specific structures via a socket connection.

Data import

You can import the following data via the interfaces:

1. **Department:**

- Number
- Name
- Short name

2. **ID cards:**

- ID card user (number)
- ID card label
- ID card number
- ID card version
- Validity start date
- Data groups
- Validity end date
- Calendar number
- ID card number type
- Employee number
- Reason for blocking ID card

3. **User:**

- Number of failed login attempts
- User is Admin
- User name
- User roles
- Data groups
- Data group permissions
- E-mail
- Last password change
- Name
- Organisational unit
- Password
- Password never expires
- Password encryption
- Person administration/time
- Person administration/access
- Reason for blocking
- Time of blocking
- Daily corrections/configuration
- First name

4. **Calendar:**

- Number
- Name
- Short name

5. **Calendar special days:**

- Calendar number
- Special day number

6. Reader:

Reader number
 Door number
 Door weekly profile number
 Calendar number

7. Employee master record:

Note: For more information on the formats of the individual fields see the [Employee record field description](#)

Department
 AoC validity period
 AoC tracking
 Work schedule
 Leaving date
 ID card label
 ID card number
 ID card version
 Comments
 User name
 Permission for access control for two persons
 Permission check for terminal bookings
 Counting group
 Image (path info.)
 VBI permission
 Office release
 Data groups
 Data transfer 1
 Data transfer 2
 Business authorisation permission
 Place of employment
 Business e-mail
 Personal e-mail
 Joining date
 External ID
 External employee number
 Marital status
 company code bookings
 bought system
 Company
 External company
 Function
 Date of Birth
 Vacation taken current year
 Vacation taken previous year
 Gender
 Employee groups/work schedules grouping
 Absence times credit
 Valid until
 Valid from
 Attendance/Absence reasons main group
 In room zone
 In security areas
 Info record 1
 Info record 2
 Info record 3
 Info record 4
 Info record 5
 Info record 6

Info record 7
Info record 8
Info record 9
Info record 10
ISO language code
Identifier
Account comparison profile
Account calculation profile
Cost centre
Country grouping
E-mail text
E-mail text type
Maximum working hours
Maximum business authorisation period
Name
Nationality
Offline employee record
Employee number
PIN code
Postcode and town/city
Remaining holiday - current year
Remaining holiday - current year from previous year
Remaining holiday - next year
Remaining holiday - next year from previous year
Remaining holiday - previous year
Remaining holiday - pre-previous year
Sequence checking flag
Balance
Balance previous day
Disability leave - current year
Disability leave - next year
Disability leave - previous year
Target time
Yearly predefined target hours
Monthly predefined target hours
Reason for blocking
Time of blocking
Status
Number or Name/Street
Business mobile number
Personal mobile number
Business telephone number
Home telephone number
Title
Door opening profile
Vacation entitlement - current year
Vacation entitlement - next year
Vacation entitlement - previous year
Comparison value for absence booking
Comparison value for wage type booking
Permission to work before/after work time
First name
Priority settings
Patrol time
Time display in decimal minutes, 0=no 1=yes
Time booking profile
Time recording from
Time recording until

Time calendar
 Time daily program
 Time processing
 Time weekly program
 Additional information
 Additional holiday 1 - current year
 Additional holiday 1 - next year
 Additional holiday 1 - previous year
 Additional holiday 2 - current year
 Additional holiday 2 - next year
 Additional holiday 2 - previous year
 Additional holiday 3 - current year
 Additional holiday 3 - next year
 Additional holiday 3 - previous year
 Access valid from
 Access valid until
 Access calendar
 Access profile

8. **Person groups:**

Number
 Name
 Short name

9. **Doors:**

Number
 Name
 Short name
 Door group number

10. **Door groups:**

Number
 Name
 Short name

11. **Door daily times:**

Number
 Name
 Short name
 Access period access (1-4) from time
 Access period access (1-4) until time
 Period (1-4) door permanently open from time
 Period door permanently open (1-4) until time
 Period office release (1-4) from time
 Period office release (1-4) until time
 Period no booking tracking (1-4) from time
 Period no booking tracking (1-4) until time
 Period no PIN code (1-4) from time
 Period no PIN code (1-4) to time
 Substitute door daily times (1-20) Day type
 Substitute door daily times (1-20) Door daily time number

12. **Door weekly profile:**

Number
 Name
 Short name
 Door daily time number Monday
 Door daily time number Tuesday
 Door daily time number Wednesday
 Door daily time number Thursday
 Door daily time number Friday
 Door daily time number Saturday
 Door daily time number Sunday

13. **Locking plans:**
 - Number
 - Name
 - Short name
 - Single time profile
 - Employee number/Person group number
 - Door number/door group number
 - Access weekly profile number
14. **Special days:**
 - Number
 - Name
 - Short name
 - Type
 - Day
 - Month
 - Year
 - Day type
15. **Door daily times:**
 - Number
 - Name
 - Short name
 - Access period (1-4) from time
 - Access period (1-4) until time
 - Substitute access daily times (1-20) Day type
 - Substitute access daily times (1-20) Access daily time number
16. **Access weekly profile:**
 - Number
 - Name
 - Short name
 - Access daily time number Monday
 - Access daily time number Tuesday
 - Access daily time number Wednesday
 - Access daily time number Thursday
 - Access daily time number Friday
 - Access daily time number Saturday
 - Access daily time number Sunday
17. **Access profiles:**
 - Number
 - Name
 - Short name
 - Door/reader permission (1-n) Door/reader number
 - Door reader permission (1-n) Access weekly profile number
 - Room zone permission (1-n) Room zone number
 - Room zone permission (1-n) Access weekly profile number
18. **Access permissions for employee master record:**
 - ID card number
 - Start of validity period
 - End of validity period
 - ID for external system employee record
 - Reader
 - Employee number
 - Special permission identifier
 - Room zone
 - Access weekly profile
 - Access profile number

Change commands

1. **Edit Group allocation of persons (Employee master record):**

Employee number
Person group

2. **System parameters:**

Module identifier
Parameter number
Parameter value

Data export

Via export, you can access the following data:

1. **Departments:**

Number
Name
Short name

2. **ID cards:**

ID card number
ID card label
Assigned employee number

3. **Individual permissions for persons:**

Reader permission
Employee number
Reader number
Room zone permission
Employee number
Room zone number

4. **Employee master data:**

Department
AoC validity period
AoC tracking
Work schedule
Leaving date
ID card label
ID card number
ID card version
Comments
User name
Permission for access control for two persons
Permission check for terminal bookings
Counting group
Image (path info.)
VBI permission
Office release
Data groups
Data transfer 1
Data transfer 2
Business authorisation permission
Place of employment
Business e-mail
Personal e-mail
Joining date
External ID
External employee number
Marital status
company code bookings
bought system

Company
External company
Function
Date of Birth
Vacation taken current year
Vacation taken previous year
Gender
Employee groups/work schedules grouping
Absence times credit
Valid until
Valid from
Attendance/Absence reasons main group
In room zone
In security areas
Info record 1
Info record 2
Info record 3
Info record 4
Info record 5
Info record 6
Info record 7
Info record 8
Info record 9
Info record 10
ISO language code
Identifier
Account comparison profile
Account calculation profile
Cost centre
Country grouping
E-mail text
E-mail text type
Maximum working hours
Maximum business authorisation period
Name
Nationality
Offline employee record
Employee number
PIN code
Postcode and town/city
Remaining holiday - current year
Remaining holiday - current year from previous year
Remaining holiday - next year
Remaining holiday - next year from previous year
Remaining holiday - previous year
Remaining holiday - pre-previous year
Sequence checking flag
Balance
Balance previous day
Disability leave - current year
Disability leave - next year
Disability leave - previous year
Target time
Yearly predefined target hours
Monthly predefined target hours
Reason for blocking
Time of blocking
Status
Number or Name/Street

Business mobile number
 Personal mobile number
 Business telephone number
 Home telephone number
 Title
 Door opening profile
 Vacation entitlement - current year
 Vacation entitlement - next year
 Vacation entitlement - previous year
 Comparison value for absence booking
 Comparison value for wage type booking
 Permission to work before/after work time
 First name
 Priority settings
 Patrol time
 Time display in decimal minutes, 0=no 1=yes
 Time booking profile
 Time recording from
 Time recording until
 Time calendar
 Time daily program
 Time processing
 Time weekly program
 Additional information
 Additional holiday 1 - current year
 Additional holiday 1 - next year
 Additional holiday 1 - previous year
 Additional holiday 2 - current year
 Additional holiday 2 - next year
 Additional holiday 2 - previous year
 Additional holiday 3 - current year
 Additional holiday 3 - next year
 Additional holiday 3 - previous year
 Access valid from
 Access valid until
 Access calendar
 Access profile

5. **Doors:**

Number
 Name
 Short name
 Door status
 Identifier whether readers exist on both sides

6. **Door daily times:**

Number
 Name
 Short name
 Access period access (1-4) from time
 Access period access (1-4) until time
 Period (1-4) door permanently open from time
 Period door permanently open (1-4) until time
 Period office release (1-4) from time
 Period office release (1-4) until time
 Period no booking tracking (1-4) from time
 Period no booking tracking (1-4) until time
 Period no PIN code (1-4) from time
 Period no PIN code (1-4) to time

7. Door weekly profiles:

Number
 Name
 Short name
 Door daily time number Monday
 Door daily time number Tuesday
 Door daily time number Wednesday
 Door daily time number Thursday
 Door daily time number Friday
 Door daily time number Saturday
 Door daily time number Sunday

8. Door daily times:

Number
 Name
 Short name
 Access period (1-4) from time
 Access period (1-4) until time

9. Access weekly profiles:

Number
 Name
 Short name
 Access daily time number Monday
 Access daily time number Tuesday
 Access daily time number Wednesday
 Access daily time number Thursday
 Access daily time number Friday
 Access daily time number Saturday
 Access daily time number Sunday

10. Access profiles:

Number
 Name
 Short name
 Access permissions
 Door/Reader permission with door/reader number and access weekly profile number
 Room zone permission and access weekly profile number

Commands

Commands are transmitted from the superordinate application to dormakaba MATRIX. Permitted commands are:

1. Door action:

Door number
 Action: open, permanent opening, stop permanent opening

2. Set person in room zone:

Employee number
 Room zone

Responses to commands are:

1. Unknown door number
2. Unknown employee number (Employee number)

Events/bookings and status information

Reports to the superordinate application as requests and events/bookings are:

1. **Bookings:**
 - ID card number
 - Booking time with date and time
 - Booking type
 - Terminal number
 - Door number
 - Reader number
 - Number of the trafficpoint (optional)
2. **Status information**, update for door required:
 - Door number
 - Time stamp with date and time

Employee record field description

The field description provides the value ranges and formats for the most important employee record fields.

Note: For the CSV import, the fields must correspond to the formats and value ranges specified by the application, so that the import can be run without errors.

When using a general interface, the formats are determined by the field type which contains the transformation rules for the data conversion.

Display name	Format
Department	1-999999
AoC validity period	1..3287 days
AoC tracking	"0" - off, "1" - on
Work schedule	1-999999
Leaving date	Date format in the interface configuration
ID card label	255 characters
ID card number	255 characters
ID card version	
Comments	255 characters
User name	255 characters
Office release	"0" - No door, "1" - All doors
Permission check for terminal bookings	Integer
VBI permission	1-999999
Data groups	
Data transfer 1	
Data transfer 2	
Business authorisation permission	"true" - yes, "false" - no
Place of employment	255 characters
E-mail	255 characters

Display name	Format
E-mail (private)	255 characters
Joining date	Date format in the interface configuration
External ID	255 characters
External employee number	255 characters
Marital status	"0" - single, "1" - married
Company	255 characters
(company code-specific bookings)	(for SAP import only)
External company	1-999999
bought system	255 characters
Function	255 characters
Date of Birth	Date format in the interface configuration
Vacation taken previous year	Decimal day string*
Vacation taken current year	Decimal day string*
Gender	"1" - male, "2" - female
Employee groups/work schedules grouping.	For SAP import only. Grouping of employee groups for work schedules (ZEITY).
Absence times credit	Elapsed time string**
Valid until	Date format in the interface configuration
Valid from	Date format in the interface configuration
(Main group reason for attendance/absence)	(for SAP import only)
Info record 1	255 characters
Info record 10	255 characters
Info record 2	255 characters
Info record 3	255 characters
Info record 4	255 characters
Info record 5	255 characters
Info record 6	255 characters
Info record 7	255 characters
Info record 8	255 characters
Info record 9	255 characters
ISO language identifier	255 characters
Identifier	255 characters
Account comparison profile	1-999999
Account calculation profile	1-999999

Display name	Format
Cost centre	1-999999
SAP cost centre	1-999999
Country grouping	255 characters
E-mail text	1-999999
E-mail text type	"true" - yes, "false" - no
Maximum working hours	Elapsed time string**
Maximum business authorisation period	Elapsed time string**
Name	255 characters
Nationality	See below: "Nationalities"
Offline employee record	"0" - no, "1" - yes
Employee number	255 characters
PIN code	255 characters
Town/Postcode	255 characters
Remaining holiday - next year from previous year	Decimal day string*
Remaining holiday - next year	Decimal day string*
Remaining holiday - pre-previous year	Decimal day string*
Remaining holiday - previous year	Decimal day string*
Remaining holiday - current year from previous year	Decimal day string*
Remaining holiday - current year	Decimal day string*
Balance previous day	Elapsed time string**
Balance	Elapsed time string**
Disability leave - next year	Decimal day string*
Disability leave - previous year	Decimal day string*
Disability leave - current year	Decimal day string*
Year target time	Elapsed time string**
Month target time	Elapsed time string**
Target time	Elapsed time string**
Reason for blocking	1-999999

Display name	Format
Number or Name/Street	255 characters
Telephone	255 characters
Telephone (mobile)	255 characters
Title	"1" - Dr., "2" - Dr. hc., "3" - Prof. Dr.
TMS alert resetting	"0" - no, "1" - yes
TMS special function 3	"0" - no, "1" - yes
TMS door release	"1" - Short-term release, "2" - Long-term release, "3" - Permanently open, "4" - Short, long opening, permanent release, "5" - Special function 1, "6" - Special function 2
Door opening profile	1-999999
Vacation entitlement - next year	Decimal day string*
Vacation entitlement - previous year	Decimal day string*
Vacation entitlement - current year	Decimal day string*
(comparison value for absence booking)	(for SAP import only)
(comparison value for wage type booking)	(for SAP import only)
Permission to work before/after work time	"true" - yes, "false" - no
First name	255 characters
Patrol time	Elapsed time string**
Time calendar	1-999999
Time processing	"true" - yes, "false" - no
Additional holiday 1 - next year	255 characters
Additional holiday 1 - previous year	255 characters
Additional holiday 1 - current year	255 characters
Additional holiday 2 - next year	255 characters
Additional holiday 2 - previous year	255 characters
Additional holiday 2 - current year	255 characters
Additional holiday 3 - next year	255 characters
Additional holiday 3 - previous year	255 characters

Display name	Format
Additional holiday 3 - current year	255 characters
Access valid until	dd.mm.yyyy (hh:mm:ss)
Access valid from	dd.mm.yyyy (hh:mm:ss)
Access calendar	1-9999
Access profile	1-9999

*) Decimal day string

[<prefix>]<Days>[<Separator><Decimal day>[<prefix>]]

Prefix: +, - after or before day and decimal day, optional

Days: 0, 1, 2, 3, etc.

Separator: ", " , ":" or "."

Decimal day: 0, 1, 2, 3, ..., 9 (one digit only), optional

Examples: +8:3 88,3+ -888.3 888

**) Elapsed time string

Depending on system parameter 101:

"0" (normal time): [<Prefix>]<Hours><Separator><Minutes>[<Prefix>]

Prefix: +, - at beginning or end, optional

Hours: 0, 1, 2, etc.

Separator: ", " , ":" or "."

Minutes: 0, 1, 2 ... 59

Examples: 5:59- -333.59 33,34

"1" (decimal minutes): [<Prefix>]<Hours><Separator><Decimal hour>[<Prefix>]

Prefix: +, - at beginning or end, optional

Hours: 0, 1, 2, etc.

Separator: ", " , ":" or "."

Decimal hour: 0, 1, ..., 9999 , decimal minute and decimal seconds, optional

Examples: +123:7788 123.7788- 123,7788+ -123 123:8

Nationalities

1 Afghan	50 Grenadian	98 Madagascan	147 Saudi Arabian
2 Albanian	51 Greek	99 Malawian	148 Sweden
3 Algerian	52 British	100 Malaysian	149 Swiss
4 Andorran	53 Guatemalan	101 Maldivian	150 Senegalese
5 Angolan	54 Guinean	102 Malian	151 Serbian
6 Antiguan	55 Guinea-Bissauan	103 Maltese	152 Seychellian
7 Argentinian	56 Guyanese	104 Moroccan	153 Sierra Leonean
8 Armenian	57 Haitian	105 Marshallese	154 Zimbabwean
9 Azerbaijan	58 Honduran	106 Mauritanian	155 Singaporean
10 Australian	59 Indian	107 Mauritian	156 Slovakian
11 Egyptian	60 Indonesian	108 Macedonian	157 Slovenian

12 Equatorial Guinean	61 Iraqi	109 Mexican	158 Somalian
13 Ethiopian	62 Iranian	110 Micronesian	159 Spanish
14 Bahamian	63 Irish	111 Moldovan	160 Sri Lankan
15 Bahraini	64 Icelandic	112 Monegasque	161 Saint Lucian
16 Bangladeshi	65 Israeli	113 Mongolian	162 Vincentian
17 Barbadian	66 Italian	114 Montenegrin	163 South African
18 Belgian	67 Jamaican	115 Mozambican	164 Sudanese
19 Belizean	68 Japanese	116 Burmese	165 Surinamese
20 Beninese	69 Yemeni	117 Namibian	166 Swazi
21 Bhutanese	69 Yemeni	118 Nauruan	167 Syrian
22 Bolivian	70 Jordanian	119 New Zealand	168 Tajik
23 Bosnia-Herzegovinian	71 Yugoslavian	120 Nicaraguan	169 Tanzanian
24 Botswanian	72 Cambodian	121 Dutch	170 Taiwanese
25 Brazilian	73 Cameroonian	122 Nigerien	171 Thai
26 Bulgarian	74 Canadian	123 Nigerian	172 Togolese
27 Burkinabe	75 Cape Verdean	124 Niuean	173 Tongan
28 Burundi	76 Kazakh	125 Norwegian	174 Trinidad Tobago
29 Chilean	77 Qatari	126 Omani	175 Chadian
30 Chinese	78 Kenyan	127 Austrian	176 Czech
31 Costa-Rican	79 Kirghiz	128 Pakistani	177 Tunisian
32 Ivorian	80 Kiribatian	129 Palauan	178 Turkish
33 Danish	81 Columbian	130 Panamanian	179 Turkmen
34 Bruneian	82 Comorian	131 Palestinian	180 Tuvaluan
35 German	83 Congolese	132 Papua New Guinean	181 Ugandan
36 Dominican	84 North Korean	133 Paraguayan	182 Ukrainian
37 Dominican	85 South Korean	134 Peruvian	183 Hungarian
38 Djiboutian	86 Croatian	135 Filipino	184 Uruguayan
39 Ecuadorian	87 Cuban	136 Polish	185 Uzbek
40 Salvadorian	88 Kuwaiti	137 Portuguese	186 Vanuatuan
41 Eritrean	89 Laotian	138 Puerto Rican	187 Venezuelan
42 Estonian	90 Lesotho	139 Rwandan	188 Vatican
43 Fijian	91 Latvian	140 Rumanian	189 American
44 Finnish	92 Lebanese	141 Russian	190 Vietnamese
45 French	93 Liberian	142 Solomonian	191 Belarusian
46 Gabonese	94 Libyan	143 Zambian	192 Central African
47 Gambian	95 Liechtenstein	144 Samoan	193 Cypriot
48 Georgian	96 Lithuanian	145 San Marinese	
49 Ghanaian	97 Luxembourgian	146 Sao Tomean	

"Selection interfaces" dialog

The **Selection Interfaces** dialog displays all interfaces created in the system. Each interface is represented by a unique number, a name, a short name and the interface type.

You can use the buttons in the toolbar to create new interfaces, modify selected interfaces or print a report containing the records that are displayed. You can use the search function to search for individual interfaces using their number, name or short name.

The table displays the corresponding search results. Click a column header to sort the report by a characteristic in ascending or descending order. Click an entry to open the relevant record.



	Number	Name	Short name	Interface type	Delete
☐	1	CSV import of employee record	CSV import	CSV_IMPORT	
☐	2	CSV export of employee record	CSV export	CSV_EXPORT	

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Number column:

Contains the unique number of the interface.

Name column:

Contains the name of the interface.

Short name column:

Contains the short name of the interface.

Interface type column:

Displays the type of the interface.

Delete column:

Deletes the record. Before the record is finally deleted, the system displays a confirmation request. If you click **OK**, the record is irrevocably deleted and cannot be recovered.

Note: The interfaces predefined by the system cannot be deleted.

"New interface" dialog

This dialog displays the available templates for the interface types: Click an entry to edit a new interface on the basis of the template.

Note: The available interfaces depend on the licence.

Use the **Back to selection** button in the toolbar to go to the selection dialog.

New interface	
Name	Description
Cyclical import of persons	Interface for cyclical import of employee records
Document import	Import interface for documents
Door manager	Interface for communication between MATRIX and dormakaba Doormanager or Winguard
General interface	General interface for import/export
OPC	Interface for communication between MATRIX and BIS
REST web service	REST web service for import/export
SAP HR-PDC	SAP HR-PDC interface for the R/3 employee time management to import/export employee records, master data and employee times
SAP KK1	SAP KK1 interface for the R/3 employee time management to import/export employee records, master data and employee times
TMS Mobile	Interface for communication between MATRIX and the door status visualisation application
Time booking export in CSV format	CSV interface to export time bookings
Time management master data	Time management master data import/export interface

Name column:

Contains the name of the available interface templates.

Description column:

Contains a short description of the interface function.

Note: Some interfaces can only be created once in the system. An appropriate message appears when these interfaces are selected.

4.1.15.2 CSV import of employee records

Importing employee data in CSV format allows you to import existing employee records from other systems into dormakaba MATRIX.

The data to be imported must be saved in a CSV file on an accessible drive. The import file must contain the relevant employee record fields. The sequence must correspond to the specified import configuration.

You can reload additional records or completely refill the system. If you refill, the existing records are deleted.

A log file is kept for the records which are not transferred during the import. The log file has the same name as the import file but with the extension .log, for example: import file Data.trs, log file: Data.trs.log.

If errors occur, a log window showing the import log opens on the page, with the option of saving the log as a ZIP archive.

Note: Import with AUTO ID for the employee number:

If the employee number is to be automatically created by the system during the import, the identifier **(AUTO ID)** must be specified at the position of the employee number in the import file. In the process, the import configuration needs to obtain the column for the employee number.

An example for import configuration:

Name, first name, employee number

An example for a CSV file:

Ackreiter,Karl,(AUTO ID)

Leconte,Susanne,(AUTO ID)

"CSV import of employee record" dialog

Use the **Employee record import in CSV format** dialog to define the data import of employee records in dormakaba MATRIX.

Use the **Data import** button to start the import from this dialog. You can use the buttons in the toolbar to save or reject changes to the import configuration.

Separator input field:

Contains the separator that is used in the import file. In CSV files, this is usually a semicolon (;) or a comma (,).

Encoding selection field:

Contains the encoding for imported data. Default value: UTF-8

Options:

ISO-2022-JP	US-ASCII	Windows-1250
ISO-2022-JP-2	UTF-8	Windows-1251
ISO-2022-KR	UTF-16	Windows-1252
ISO-8859-1	UTF-16BE	Windows-1253
ISO-8859-13	UTF-16LE	Windows-1254
ISO-8859-15	UTF-32	Windows-1255
ISO-8859-2	UTF-32BE	Windows-1256
ISO-8859-3	UTF-32LE	Windows-1257
ISO-8859-4		Windows-1258
ISO-8859-5		Windows-1259

ISO-8859-6		Windows-31j
ISO-8859-7		
ISO-8859-8		
ISO-8859-9		

Date format selection field:

Contains the date format that is used in the import file. Select the relevant date format from the list. If necessary, check the format that is used in the import file beforehand.

Skip header rows input field:

Contains the number of comment lines that are prefixed to the import file, where necessary. These are skipped during import. Enter the value "0" if the import should begin in the first line.

Delete existing employee records checkbox:

Deletes the employee records that are already contained in the database. Select the checkbox to delete the existing records. This option deletes the demo data that is supplied when you set up a new system, for example. Deselect this checkbox if you do not want to delete the existing records.

Employee record fields selection report:

Specify which employee record fields are imported using the selection reports. All employee record fields available in dormakaba MATRIX that can be filled by the import process can be selected. The sequence of the configuration has to be the same as the sequence in the import file.

Note: The import file fields must match the formats and values ranges specified by the application to ensure that import can be completed without any errors.

For more information, see the [Employee record field description](#).

File name input field:

Contains the name and path for the import file. Enter the complete path in the format C:\xy\name or click on the **Search** button to select a file.

Select button:

Click the button to search for the import file.

Data import button: Starts the data import according to the import configuration you saved. An import is only possible with all mandatory fields for employee data assigned or existing in the import file.

Note: The import may take a few minutes, depending on the amount of data and must not be interrupted by switching to another MATRIX page.

After completing the import process, the status line displays a message indicating successful completion or an error. A log file written to the directory of the import file after completing the import stores the status reports for each individual record. The log file has the same name as the import file plus a time stamp.

4.1.15.3 CSV export of employee records

The employee record export enables you to export employee records from the system for use in other applications.

The data is exported as a comma-separated file (.CSV).

"CSV export of employee record" dialog

dormakaba MATRIX Info record allocation Employee records to be exported are output in a CSV file. You specify the storage location and the file name of the export file while exporting in a browser-dependent dialog. The order of the employee record fields corresponds to the specified export configuration.

You can use the buttons in the toolbar to save or reject changes to the export configuration.

Comment input field:

Enter the text in this field that is also output as a comment in the first line of the export file.

Export structure selection field:

Contains a selection how the employee record fields and their content for the export file is created. It is possible, for example, to export the number, the name of the department or both in the "department" field.

Note: The selection is used only for those employee record fields which have a relation to a master data record.

Date format selection field:

Contains the date format that is used in the export file. Select the relevant date format from the list.

Separator input field:

Contains the separator that is used in the import file. In CSV files, this is usually a semicolon (;) or a comma (,).

Available employee record fields field:

Contains all employee record fields that are available in dormakaba MATRIX and can be used for the export operation. Select an entry and click the right arrow to select the field for the export configuration.

Allocated employee record fields field:

Contains all employee record fields that should be applied for the export. Select an entry and click the left arrow to remove the field from the export configuration. Select an entry and click the upwards or downwards arrow to define the sequence of the fields. The sequence of the configuration corresponds to the sequence in the export file.

Export data button:

Opens the dialog for downloading the data. This depends on the used operating system and the browser. Click **Save** and specify the directory and the file name.

4.1.15.4 Interface – General interface

As well as the existing, specific interface definitions, dormakaba MATRIX also offers you the option of setting up a simple interface to an external system.

You can choose whether data is to be exchanged via a database, a socket connection, via the file system or via an LDAP server.

The general interface supports both import and export functions whereas the interface with an LDAP server only permits the import function.

Extensive allocation rules allow the various data formats to be adjusted.

Multiple interfaces can also be set up as required.

"Configure interface" dialog

Use the **Configure interface** dialog to set the basic configuration of the interface. In the basic configuration, the technology of the interface and the data objects for import and export are defined.

Note: The selected technology cannot be changed after the interface has been set up.
The selected data objects can be added to or modified at a later time.

The toolbar allows you to apply or reject the settings.

The screenshot shows the "Configure interface" dialog box. It features a title bar with navigation icons. The main area is divided into sections for configuring the interface. The "Technology" section has four radio buttons: "File system/file" (selected), "Database", "Socket", and "LDAP". Below this is the "Fixed field lengths" checkbox. The "Import" and "Export" sections each have a list of data objects with checkboxes: "Person data", "Access permissions", "ID cards", "Departments", "User", and "All data in one file". A "Next" button is located at the bottom left of the dialog.

Technology selection:

The technology defines the basic features of the link between the systems.

- File system/file: for data exchange using files.
- Database: for data exchange based on direct access to the database of the external system.
- Socket: for data exchange via a socket connection.
- LDAP: for data imports from an LDAP server

Fixed field lengths checkbox:

Defines whether the data structure is based on fixed or variable field lengths. This option is only relevant for the 'File system' and 'Socket connection' technologies.

Options:

- Not activated: The data structure is based on a variable field length with separators.
- Activated: The data structure is based on a fixed field length.

Default: Activated.

Import of data objects:

This section allows you to define which data objects are imported from the external system.

All data in one file checkbox:

Indicates whether all data objects are located in a single file. This information is necessary for imports of files or a socket connection. For a database connection, this information is not used.

Options:

- Activated: All data objects are in one file. Each data record must have a suitable identifier to distinguish it.
- Not activated: Each data object has a separate file. A file must be specified for each data object.

Default: Not activated.

Person data checkbox:

Indicates whether person data is to be imported.

Options:

- Activated: Person data is imported
- Not activated: Person data is not imported

Default value: Not activated.

Bookings checkbox:

Indicates whether bookings are to be imported.

Options:

- Activated: Bookings are imported
- Not activated: Bookings are not imported

Default value: Not activated.

Access permissions checkbox:

Indicates whether access permissions are to be imported.

Options:

- Activated: Access permissions are imported
- Not activated: Access permissions are not imported

Default value: Not activated.

ID cards checkbox:

Indicates whether ID cards are to be imported.

Options:

- Activated: ID cards are imported
- Not activated: ID cards are not imported

Default value: Not activated.

Departments checkbox:

Indicates whether departments are to be imported.

Options:

- Activated: Departments are imported
- Not activated: Departments are not imported

Default value: Not activated.

User checkbox:

Indicates whether users are to be imported.

Options:

- Activated: Importing users
- Not activated: Users are not imported

Default value: Not activated.

Export of data objects:

This section allows you to define which data objects are to be exported for the external system.

All data in one file checkbox:

Indicates whether all data objects are located in a single file. This information is necessary for export from files or a socket connection. For a database connection, this information is not used.

Options:

- Activated: All data objects are in one file. Each data record must have a suitable identifier to distinguish it.
 - Not activated: Each data object has a separate file. A file must be specified for each data object.
- Default: Not activated.

Person data checkbox:

Indicates whether person data is to be imported.

Options:

- Activated: Person data is imported
- Not activated: Person data is not imported

Default value: Not activated

Bookings checkbox:

Indicates whether bookings are to be exported.

Options:

- Activated: Bookings are exported.
- Not activated: Bookings are not exported

Default value: Not activated.

"General interface" dialog

Use the **General interface** dialog to parametrise the interface. The structure of the dialog is determined by the basic configuration and therefore contains only the required interface parameters and the required settings for the data objects. These are distributed across various tabs depending on their functions:

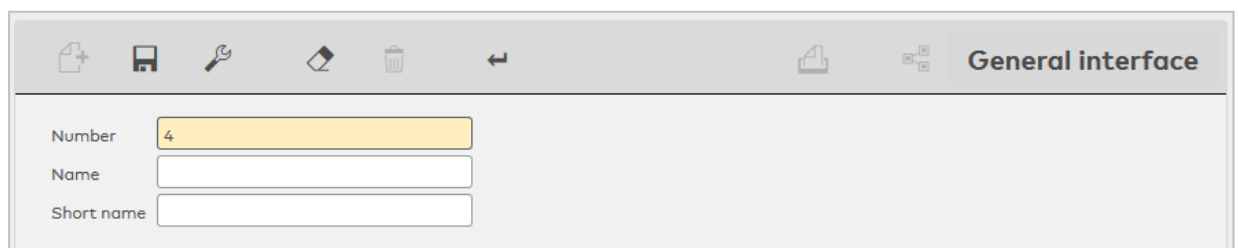
- Technology:
 - File/file system
 - Database
 - Socket connection
 - LDAP
- Import
 - Various data objects
- Export
 - Various data objects
- Transformation
- Export filter
- Control

Note: The **Transformation**, **Filter** and **Control** tabs form part of every interface and are only explained once in the description that follows.

For **more information** on the interfaces see the [Description of interface](#) and the [Employee record field description](#).

Use the buttons in the toolbar to navigate between records, create or delete a record and save or discard changes made to the record. Use the **Back to selection** button to return to the selection dialog.

If required, you can change the data objects for import and export. Click the **Configure** button in the toolbar to open the configuration dialog.



The screenshot shows a software window titled "General interface". At the top is a toolbar with icons for creating, saving, deleting, and navigating between records. Below the toolbar, there are three input fields: "Number" (containing the value "4"), "Name", and "Short name".

The specific features of the different interface variants are described below.

"File system/file" interface

The interface for the import and export of data via files in the file system is composed of the following tabs:

- Import
- Export
- Transformation
- Export filter
- Control

"Import" tab

The specific settings for the import are specified on this tab.

Import Export Transformation Export filter Control

External system name (for persons, users, permissions only) Apply external system name ☐

Skip header rows

Delete existing records ☐

Delta supply ☒

With revisioning ☐

Position	Field type
1	Command field

Employee data

Position	Field	Field type	Default value

New entry

File name (import)

ID cards

Position	Field	Field type	Default value

New entry

File name (import)

Permissions

Position	Field	Field type	Default value

New entry

File name (import)

External system name (for persons, users, permissions only) input field:

Identifier of the external system. If an external system receives a name, the respective imported records will be given this identifier. The identifier affects deletion during imports. During exports, this name can be used to filter data.

Application example: If an SAP interface is available, filtering will only return bookings of persons with the SAP identifier as an external system name. Permissions are displayed directly with the external system identifier; they cannot be manually deleted or altered.

Apply external system name checkbox:

Indicates whether an external system name is used. If the checkbox is activated, the input field is activated for the external system and the entered name is applied. If the field is left empty, this is also applied. If the checkbox is deactivated, the external system name of the object to be imported remains unchanged.

Skip header rows input field:

Contains the number of comment lines that are prefixed to the import file, where necessary. These are skipped during import.

Value range: 0–99

Default value: 0 = the import starts with the first line.

Delete existing records checkbox:

Causes the records that are already in the database to be deleted prior to the import.

Records with external system identifiers: After reimporting, all records of the same type with the same identifier will be deleted if they have not been reimported.

Elements without external system identifiers: All previously available records of the same type will be deleted during import

Note: If persons are imported and the checkbox is activated, persons who have not been re-imported are initially set to the reason for blocking: Blocked by import. Only when the data housekeeping limit has expired the records are physically deleted.

Options:

- Activated: Existing records are deleted prior to the import.
- Not activated: Existing records are retained and are overwritten by the new data.

Default value: Not activated.

Delta supply checkbox:

Indicates whether only additional data and changes are to be transferred during the import.

Options:

- Activated: Only changes are transferred during the import.
- Not activated: All data is always transferred during the import.

Default: Activated

With versioning checkbox:

Indicates whether the import is subject to versioning and, if so, the imported data records generate a revisioning entry

Note: This option should not be used for a daily import during which records are imported.

Options:

- Activated: The import is subject to versioning.
- Not activated: The import is not subject to versioning.

Default: Not activated

Import data:

In this section, the import data is mapped onto the fields of the data objects. The sequence of the specified fields has to be the same as the sequence of the fields in the import file. In cases where no value is transferred for a field, a default value can be defined.

A table is generated for each selected data type.

Note: The structure is the same for all data objects and is therefore only described once.

Type code checkbox:

If multiple data types are transferred to a file, each data object requires a type code.

Value range: 0–99999

Note: This field is only available if transfer of all data to one file was set in the basic configuration of the interface.

Position input field:

Indicates the position of the field in a data record of the import file. The numbering starts with position 1.

Value range: 1–999999

Field selection field:

Contains the field to which the data is to be written. Multiple options can be selected if required.

Options:

- All fields of the data object.

Field type selection field:

Indicates how the data is to be converted according to the transformation rules.

Options:

- All created field types.

Note: Selection of the corresponding field type is essential for date, time and elapsed time field to ensure the import functions correctly.

Default value input field:

Contains the default value for the field if no value is transferred in the import file. If no default value is

defined, the field content for the data record in question remains empty.

Value range:

- Depends on the field type.

Length input field:

Contains the number of characters for the field in question.

Value range: 1–999999

Note: This column is only available if the interface has been defined with fixed field lengths.

File name input field:

Contains the name and path for the import file. The full path is required using the format C:\xy\name.csv.

If only the file name is specified, an internal directory starting from the installation directory

...\integration\mandator1\StdImportExport_4 is used. The 4 in this example corresponds to the number of the interface.

Note: This field is present for each data type table if the data is to be transferred in a separate file in each case. If all data types are to be imported together in one file, this field is shown as the first field directly under the tab bar.

"Export" tab

The specific settings for the export are specified on this tab.

Export data:

In this section, the data fields are mapped onto the export data. The sequence of the specified fields must be the same as the sequence of fields in the export file.

In cases where no value is transferred for a field, a default value can be defined. Constants can be defined if required by specifying a default value without selecting a field.

Note: The structure is the same for all data objects and is therefore only described once.

Position input field:

Indicates the position of the field in a data record of the export file. The numbering starts with position 1.

Value range: 1–999999

Field selection field:

Contains the field from which the data is to be read. Multiple options can be selected if required.

Options:

- All fields of the data object.

Field type selection field:

Indicates how the data is to be converted according to the transformation rules.

Options:

- All created field types.

Note: Selection of the corresponding field type is essential for date, time and elapsed time fields to ensure the import functions correctly.

Default value input field:

Contains the default value for the field if no value is transferred for the field. If no default value is

defined, the field content for the data record in question remains empty.

Value range:

- Depends on the field type.

Length input field:

Contains the number of characters for the field in question.

Value range: 1–999999

Note: This column is only available if the interface has been defined with fixed field lengths.

File name input field:

Contains the name and path for the import file. The full path is required using the format C:\xy\name.csv.

If only the file name is specified, an internal directory starting from the installation directory

...\integration\mandator1\StdImportExport_5 is used. The 5 in this example corresponds to the number of the interface.

Note: This field is present for each data type table if the data is to be transferred in a separate file in each case. If all data types are to be imported together in one file, this field is shown as the first field directly under the tab bar.

"Database" interface

The interface for the import and export of data via a database connection is composed of the following tabs:

- Database
- Import
- Export
- Transformation
- Filter
- Control

"Database" tab

The access to the database of the external system is defined on this tab.

Database driver selection field:

Contains the driver for the database connection.

Options:

- H2 Embedded
- H2 Remote
- JDBC ODBC Bridge

Database URL input field:

Contains the address for the database.

Note: Because the address of the database depends on the database driver selected, an appropriate suggestion is displayed in the input field when the database driver is selected.

User name input field:

Contains the user name for logging into the database.

Password input field:

Contains the password for logging into the database.

Load tables button:

This button can be used to read the database schema which is used once the connection to the database

can be established. The database tables that are needed as the basis for configuring the import and export are important in this regard.

"Import" tab

In this section, the import data is mapped onto the fields of the data objects. In cases where no value is transferred for a field, a default value can be defined.

Note: The structure is the same for all data objects and is therefore only described once.

The screenshot shows the 'Import' tab interface with the following elements:

- Navigation tabs:** Database, **Import**, Export, Transformation, Export filter, Control.
- External system name (for persons, users, permissions only):** A text input field.
- Checkboxes:**
 - Delete existing records: ☐
 - Delta supply: ☒
 - With revisioning: ☐
- Employee data Table:** A dropdown menu with a 'Load columns' button.
- Table configuration for Employee data:**

Column	Field	Field type	Default value	
Command	Column			New entry
Acknowledgement	Column			
ID	Column			
- ID cards Table:** A dropdown menu with a 'Load columns' button.
- Table configuration for ID cards:**

Column	Field	Field type	Default value	
Command	Column			New entry
Acknowledgement	Column			
ID	Column			
- Permissions Table:** A dropdown menu with a 'Load columns' button.

Delete existing records checkbox:

Causes the records that are already in the database to be deleted prior to the import.

Note: When importing persons, persons who have not been re-imported are initially set to the "Blocked by import" reason for blocking. Only when the data housekeeping limit has expired are the records physically deleted.

Options:

- Activated: Existing records are deleted prior to the import.
- Not activated: Existing records are retained and are overwritten by the new data.

Default value: Not activated.

Delta supply checkbox:

Indicates whether only additional data and changes are to be transferred during the import.

Options:

- Activated: Only changes are transferred during the import.
- Not activated: All data is always transferred during the import.

Default: Activated

Import data:

In this section, the import data is mapped onto the fields of the data objects. In cases where no value is transferred for a field, a default value can be defined.

Note: The structure is the same for all data objects and is therefore only described once.

Table selection field:

Contains the tables of the external system from which the import data is read. If no tables are shown, go to

the **Database** tab and click the **Load tables** button.

Options:

- All loaded tables of the external system.

Load columns button:

This button is used to read the columns of the selected table and transfer them to the selection fields for allocating the columns to the fields of the data objects.

Column selection field:

Contains the column of the external system's database table. The selection is only possible once the columns have been filled using the **Load columns** button.

Options:

- All columns of the external system's database table.

Note: If a field in the data object is only filled with a default value, the blank selection is chosen as a column.

Field selection field:

Contains the field to which the data is to be written. Multiple options can be selected if required.

Options:

- All fields of the data object.

Field type selection field:

Indicates how the data is to be converted according to the transformation rules.

Options:

- All created field types.

Default value input field:

Contains the default value for the field if no value is present in the column. If no default value is defined, the field content for the data record in question remains empty.

Value range:

- Depends on the field type.

Command column selection field:

Contains the column in the external system's table that contains the commands for the import.

Options:

- All columns of the external system's database table.

Acknowledgement column selection field:

Contains the column in the external system's table to which an acknowledgement can be written.

Options:

- All columns of the external system's database table.

ID column selection field:

Contains the column for a counter in the external system's table. This column should have a unique key and an auto-increment function.

Options:

- All columns of the external system's database table.

"Export" tab

The specific settings for the export are specified on this tab.

The screenshot shows the 'Export' tab selected in a menu bar. Below the menu, there are two sections for data objects. The first section is for 'Employee data' and the second for 'Bookings'. Each section contains a 'Table' dropdown menu, a 'Load columns' button, and a table with the following columns: 'Column', 'Field', 'Field type', 'Default value', and a 'New entry' button.

Export data:

In this section, the export data is mapped onto the fields of the data objects. In cases where no value is transferred for a field, a default value can be defined.

Note: The structure is the same for all data objects and is therefore only described once.

Table selection field:

Contains the external system's table into which the data is written. If no tables are shown, go to the **Database** tab and click the **Load tables** button.

Options:

- All loaded tables of the external system.

Load columns button:

This button is used to read the columns of the selected table and transfer them to the selection fields for allocating the columns to the fields of the data objects.

Column selection field:

Contains the column of the external system's database table. The selection is only possible once the columns have been filled using the **Load columns** button.

Options:

- All columns of the external system's database table.

Field selection field:

Contains the field from which the data is to be read. Multiple options can be selected if required.

Options:

- All fields of the data object.
-

Note: If a column is only filled with a default value, the empty selection is chosen for the field.

Field type selection field:

Indicates how the data is to be converted according to the transformation rules.

Options:

- All created field types.

Default value input field:

Contains the default value for the column if no value is present in the field of the data object. If no default value is defined, the field content for the data record in question remains empty.

Value range:

- Depends on the field type.

"Socket" interface

The interface for the import and export of data via a socket connection is composed of the following tabs:

- Socket connection
- Import
- Export
- Transformation
- Filter
- Control

"Socket connection" tab

This tab is used to define the socket connection to the external system.

Socket connection	Import	Export	Transformation	Export filter	Control
Server name/IP					
Export port					
Import port					

Server name/IP input field:

Contains the host name or IP address of the external system.

Export port input field:

Contains the port for the export.

Value range: 1–99999

Default value: Not specified

Import port input field:

Contains the port for the import.

Value range: 1–99999

Default value: Not specified

"Import" tab

In this section, the import data is mapped onto the fields of the data objects. In cases where no value is transferred for a field, a default value can be defined.

Note: The structure is the same for all data objects and is therefore only described once.

External system for persons and users input field:

Identifier of the external system. Enter the identifier of an external system if you want to delete existing records of this external system.

If no identifier is entered, all persons and users are deleted.

Delta supply checkbox:

Indicates whether only additional data and changes are to be transferred during the import.

Options:

- Activated: Only changes are transferred during the import.
- Not activated: All data is always transferred during the import.

Default: Activated

General:

In the general section, the control and command fields of the import data are mapped. These fields are evaluated by the Integration Manager and control the processing of the data.

The general fields must be positioned at the start of data record.

The sequence of the specified fields has to be the same as the sequence of the fields in the import record.

Position input field:

Indicates the position of the field in a data record of the import file. The numbering starts with position 1.

Value range: 1–999999

Field type selection field:

Contains the information on the control or command field.

Options:

- Type code, contains the type code for the data record.
- Command field, contains a command field in accordance with the transformation rules.
- Empty field which is not evaluated during the import.

Default: Not specified

Length input field:

Contains the number of characters for the field in question.

Value range: 1–999999

Note: This column is only available if the interface has been defined with fixed field lengths.

Import data:

In this section, the import data is mapped onto the fields of the data objects. The sequence of the specified fields has to be the same as the sequence of the fields in the import data. In cases where no value is transferred for a field, a default value can be defined.

Note: The structure is the same for all data objects and is therefore only described once.

Position input field:

Indicates the position of the field in a data record of the import file. The numbering starts with position 1.

Value range: 1–999999

Field selection field:

Contains the field to which the data is to be written. Multiple options can be selected if required.

Options:

- All fields of the data object.

Field type selection field:

Indicates how the data is to be converted according to the transformation rules.

Options:

- All created field types.

Default value input field:

Contains the default value for the field if no value is transferred in the import file. If no default value is defined, the field content for the data record in question remains empty.

Value range:

- Depends on the field type.

Length input field:

Contains the number of characters for the field in question.

Value range: 1–999999

Note: This column is only available if the interface has been defined with fixed field lengths.

"Export" tab

The specific settings for the export are specified on this tab.

The screenshot shows the 'Export' tab interface. At the top, there are tabs: 'Socket connection', 'Import', 'Export' (selected), 'Transformation', 'Export filter', and 'Control'. Below the tabs, the 'General' section is visible. It contains a table with two columns: 'Position' and 'Field type'. The first row has '1' in the 'Position' column and 'Type code' in the 'Field type' column. Below this table, there are two sections: 'Employee data' and 'Bookings'. Each section has a 'Type code' input field. Below each 'Type code' field, there is a table with four columns: 'Position', 'Field', 'Field type', and 'Default value'. To the right of each of these tables is a 'New entry' button.

Export data:

In this section, the data fields are mapped onto the export data. The sequence of the specified fields must be the same as the sequence of export data fields.

In cases where no value is transferred for a field, a default value can be defined. Constants can be defined if required by specifying a default value without selecting a field.

Note: The structure is the same for all data objects and is therefore only described once.

Position input field:

Indicates the position of the field in a data record for the export. The numbering starts with position 1.

Value range: 1–999999

Field selection field:

Contains the field from which the data is to be read. Multiple options can be selected if required.

Options:

- All fields of the data object.

Field type selection field:

Indicates how the data is to be converted according to the transformation rules.

Options:

- All created field types.

Default value input field:

Contains the default value for the field if no value is transferred for the field. If no default value is defined, the field content for the data record in question remains empty.

Value range:

- Depends on the field type.

Length input field:

Contains the number of characters for the field in question.

Value range: 1–999999

Note: This column is only available if the interface has been defined with fixed field lengths.

"LDAP" interface

The interface for importing data from an LDAP server is composed of the following tabs:

- LDAP
- Import
- Transformation
- Control

Information on creating an LDAP interface can be found in the section "Working with Matrix" under the heading ► [Set up an LDAP interface](#).

"LDAP" tab

This tab is used to define the connection to the LDAP server.

Please use this tab to enter the required connection data if you wish to establish a connection to an LDAP server. You can then use the **Check connection** button to check whether a connection can be established using the data entered. The status line always displays a response.

The screenshot shows the 'LDAP' tab selected in a dark header bar. Below the header, there are five input fields: 'Server' (empty), 'Port' (containing '389'), 'Secured connection' (with an unchecked checkbox), 'User name' (empty), and 'Password' (empty). A blue button labeled 'Check connection' is positioned below the 'Password' field.

Server input field:

Contains the server name or IP address of the LDAP server from which the data should be imported.

Port input field:

Contains the LDAP server's port.

Value range: 1–99999

Default value: 389

Secured connection checkbox:

Indicates whether a TLS-secured connection is used.

Options:

- Activated: A secured connection is used.
- Not activated: No secured connection is used.

Default value: Not activated.

User name input field:

Contains the user name for authentication if this is requested by the LDAP server.

Password input field:

Contains the password for authentication.

"Import" tab

In this section, the import data is mapped onto the application's data objects.

Note: The structure is the same for all data objects and is therefore only described once.

Attribute	Field	Field type	Default value
New entry			

Delete existing records checkbox:

Indicates whether in the event of a repeated import, records that still exist in dormakaba MATRIX but no longer exist in the LDAP server should also be deleted in dormakaba MATRIX.

Note: When importing persons, persons who have not been re-imported are initially set to the "Blocked by import" reason for blocking. Only when the data housekeeping limit has expired are the records physically deleted.

Options:

- Activated: Activated: records that no longer exist are deleted.
- Not activated: records are not deleted.

Default value: Not activated.

Base DN input field:

Contains the distinguished name of the node in the LDAP tree from which the search should begin.

LDAP query input field:

Contains the LDAP query for the search.

Determine attributes button:

Starts the search on the basis of the base DN and the LDAP query. The search result is the list of attributes found in the selection field in the table.

Note: The attributes of the first object found are the ones always determined.

As an LDAP query can return a diverse range of objects that can all have different attributes, not all the attributes you require may be returned. In such cases, modify your query to determine the attributes and re-create the original query after transferring the attributes to the fields.

Table:

In the table, the attributes are assigned to the fields of the data objects to be imported. In cases where no value is transferred for a field, a default value can be defined.

Attribute selection field:

Contains the attributes determined during the LDAP query.

Options:

- All attributes determined

Field selection field:

Contains the attributes determined during the LDAP query.

Options:

- All attributes determined

Field type selection field:

Indicates how the data is to be converted according to the transformation rules.

Options:

- All created field types.

Default value input field:

Contains the default value for the field if no value is transferred in the import file. If no default value is defined, the field content for the data record in question remains empty.

Value range:

- Depends on the field type.

The tabs that are available for all variants of the interfaces are described below.

"Transformation" tab

This tab defines the transformation rules for the import and export which are used insofar as they are relevant for the current data.

The commands are only required if the **Delta supply** option is activated for an import, because in this case a command must be predefined for each record.

Acknowledgement values are only required if data exchange is via database table or socket communication.

The screenshot shows the 'Transformation' tab of a configuration interface. It features several input fields and dropdown menus for setting transformation rules. The 'Record separator' and 'Field separator' are text inputs. 'Encoding' is a dropdown set to 'UTF-8'. 'Time sum format', 'Date format', 'Time stamp format', and 'Time format' are dropdown menus with values like '-hh.mm', 'dd.MM.yyyy', 'yyyy-MM-dd hh:mm:ss', and 'hhmm' respectively. There are checkboxes for 'Decimal minutes' and 'Elapsed decimal minutes'. A 'Boolean value' section has 'Yes' (true) and 'No' (false) inputs. 'Commands' are defined for 'Insert' (I), 'Update' (U), and 'Delete' (D). At the bottom, there's a table for 'additional field types' with columns 'Name' and 'Formatting', and a 'New entry' button.

Record separator input field:

Contains the record separator used during import or export.

Input format:

- 1 character

Field separator input field:

Contains the field separator used during import or export. In CSV files, for example, this is usually a semicolon (;) or a comma (,).

Input format:

- 1 character

Encoding selection field:

Contains the character set used for the data exchange.

Options:

- Unicode, UTF-8 code is used
- Windows encoding, Windows encoding is used

Default value: Windows encoding

Time sum format selection field:

Contains the time sum information for import/export.

Options:

- pchh.mm
- hh.mmmpc
- pchh:mm
- hh:mmmpc

pc = preceding character

Date format selection field:

Contains the date format used in the import or export file.

Options:

- dd.mm.yyyy
- dd-mm-yyyy
- mm.dd.yyyy
- yyyy.mm.dd
- ddmmyyyy
- yyyymmdd

Default value: dd.mm.yyyy

Time format selection field:

Contains the time format information.

Options:

- hhmm
- hh.mm
- hh:mm

Default value: hhmm

Decimal minutes checkbox:

Indicates whether the time is shown in decimal or normal time.

Options:

- Active: Times are exchanged using decimal time.
- Not activated: Times are exchanged using normal time.

Default value: Not activated.

Elapsed decimal minutes checkbox:

Indicates whether elapsed times are shown in decimal or normal time.

Options:

- Active: Elapsed times are exchanged using decimal time.
- Not activated: Elapsed times are exchanged using normal time.

Default value: Not activated.

Boolean value Yes/No input fields:

Contains the values for the Boolean values 'yes' and 'no'.

Commands:

The values for the import commands are stipulated in the following fields.

Insert input field:

Contains the value for the 'Insert' command.

Update input field:

Contains the value for the 'Update' command.

Note: A new record is created if the record is not available.

Delete input field:

Contains the value for the 'Delete' command.

Acknowledgements:

The following fields contain the values for exchanging acknowledgements.

Note: The fields are only present if database and socket connection technology has been selected.

Positive input field:

Contains the value for a positive acknowledgement.

Negative input field:

Contains the value for a negative acknowledgement.

additional field types:

Freely definable field types for the import/export can be created in the table, and are then available in the allocation tables of the **Import** and **Export** tabs.

Name input field:

Contains the unique name for the field types. This name is displayed, together with the default types, in the field types selection report in the allocation tables.

Formatting input field:

Contains the formatting instructions in the form of a Groovy script. dormakaba MATRIX applies this script to the current field value, which is applied to the **x variable** when the script is run.

Example: Eight-digit date values with the format dd.mm.yy are to be imported from the external system. However, MATRIX only allows ten-digit data values including the separator. The following script can be defined for reformatting:

```
(Integer.parseInt(x.substring(6,8)) < 45 ? "20" : "19") + x.substring(6,8) + "-" + x.substring(3,5) + "-" + x.substring(0,2)
```

The reformatting of a date such as this, which cannot be mapped using the default transformation in the **Field type** selection report, must result in an internal date format with the syntax **yyyy-mm-dd**. In this example, therefore, a date of birth with the date format **17.05.84** is applied to the **x variable** on import and transformed into **1984-05-17**.

"Export filter" tab

Various filters for the export are stored on this tab. If no information is entered, no filters are applied to the data and all records are always exported.

Search profile selection field:

Contains the search profile for persons.

Options:

- All search profiles created in the system for persons without parameters. The query or input of parameters for the search profile is not supported or export
- Blank field

External system name input field:

Additional free string as a filter criterion for exporting bookings.

Person data checkbox:

Indicates whether person data is exported.

Options:

- Activated: person data is exported.
- Not activated: No person data is taken into account.

Default value: Not activated.

External company employee data checkbox:

Indicates whether external company employee data is exported.

Options:

- Activated: external company employee data is exported.
- Not activated: No external company employee data is taken into account.

Default value Not activated:

Bookings:

The table lists the booking types that are to be transferred to the external system.

The transfer value can be specified for each selected booking type.

Booking type selection field:

Contains the booking types to be transferred to the external system.

Options:

- All booking types created in the system.

Value input field:

Contains the transfer value of a booking type for the external system.

"Control" tab

This tab is used to set when the import or export is to be performed. If no information is entered, the functions can only be executed manually.

Import	Export
active ☒	active ☒
Cycle time (minutes)	Cycle time (minutes)
Daily at	Daily at
If file exists ☒	If file does not exist ☒

Import/Export:

The time-related control for executing the import and export function is defined in these fields.

active checkbox:

Indicates whether the import/export is activated.

Options:

- Active: The import/export is performed with the specified settings.
- Not activated: The import/export is not performed.

Default value: Activated

Cycle time input field:

Contains the time period in which the import/export is to be cyclically executed. When a cycle time is specified, the settings for the daily time and the **If file exists** selection are deleted.

Value range: 0-1440 minutes

Default value: 0

Daily at input field:

Contains the time when the import is to be performed. When the time is specified, the settings for the cycle time and the **If file exists** selection are deleted.

Value range: blank or 0:00-24:00

Default value: blank

If file exists checkbox:

Indicates whether the import/export is to be performed if the corresponding file exists. If the import/export is to be initiated by the existence of the file, the time specifications for the cycle time and the daily time are deleted.

Options:

- Activated: The import/export is performed if the file exists.
- Not activated: The import/export is not initiated by the existence of the file.

Default value: Not activated.

4.1.15.5 ID card creation system interface

The connection to the ID card creation system is established via a database interface. Data synchronisation runs automatically without any intervention by the user.

The configuration of the interface includes the necessary specifications for the database and the configuration of the employee record data that is exchanged between the systems.

Note: A Microsoft SQL server database is required for the ID card creation system interface.

The ID card creation system interface is not available with internal data management (H2). The interface is not offered as an option in this configuration despite the licence entry.

"ID card creation system" dialog

Use the **ID card creation system** dialog to manage the necessary settings for the ID card creation system interface.

The interface requires a unique number. It is recommended that you specify a name and short name.

You can use the buttons in the toolbar to save or reject the changes. Use the **Back to selection** button to return to the selection dialog.

Export data again button:

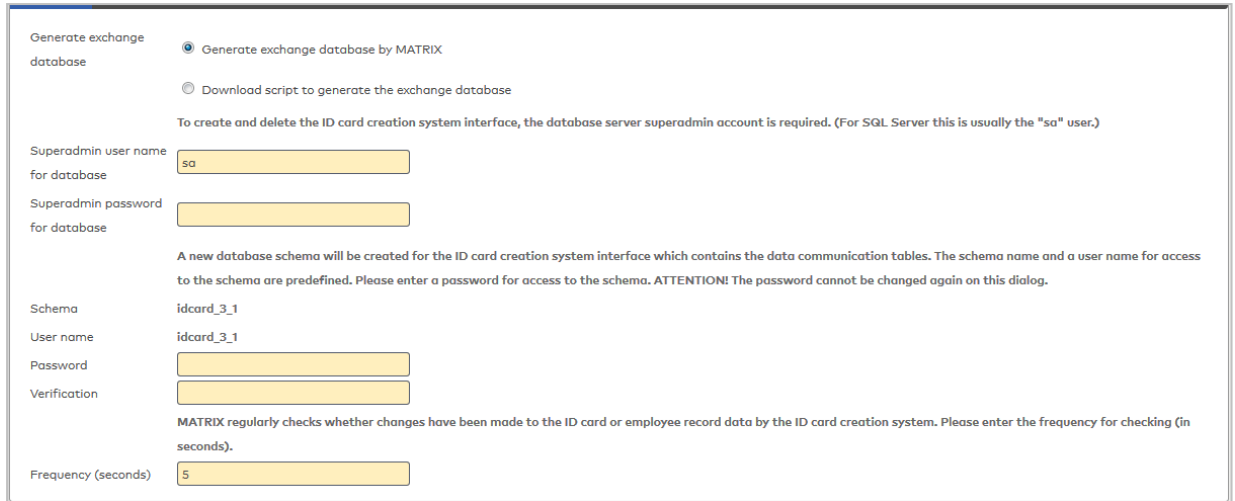
This button allows you to load all person data from MATRIX into the ID card creation system.

Note: The button appears after creating the interface, provided dormakaba MATRIX is configured as the primary system in the **ID card** tab.

Further configuration and settings of the interface can be found on three tabs.

"Database" tab

This tab contains the configuration for the database connection. When the new interface is created, the database schema for the data exchange is created too. Administrator rights are required.



Generate exchange database

☒ Generate exchange database by MATRIX

☐ Download script to generate the exchange database

To create and delete the ID card creation system interface, the database server superadmin account is required. (For SQL Server this is usually the "sa" user.)

Superadmin user name for database:

Superadmin password for database:

A new database schema will be created for the ID card creation system interface which contains the data communication tables. The schema name and a user name for access to the schema are predefined. Please enter a password for access to the schema. ATTENTION! The password cannot be changed again on this dialog.

Schema: idcard_3_1

User name: idcard_3_1

Password:

Verification:

MATRIX regularly checks whether changes have been made to the ID card or employee record data by the ID card creation system. Please enter the frequency for checking (in seconds).

Frequency (seconds):

Generate the exchange database option:

Selects how the database to exchange data is to be created.

Selection:

- Have MATRIX generate the exchange database.
- Download script to generate the exchange database.

Superadmin user name for database input field:

Contains the user name for the superadmin of the database.

Superadmin password for database input field:

Contains the password for the superadmin of the database.

Schema display field:

Contains the name of the database schema. The name is predefined and cannot be changed. It consists of 'idcard', the number of the interface and the client number. The client number is 1 if no clients are configured. Example: idcard_5_1

User name display field:

Contains the user name for the new database schema. The user name is the same as the schema name and cannot be changed.

Password input field:

Contains the freely selectable password for the user. Enter the password into the input field.

Note: The password can no longer be changed after it has been saved via this dialog.

Verification input field:

The password must be entered again in this field for security purposes.

Cycle time input field:

Specifies the frequency in seconds at which the application checks whether changes have been made to the ID card or employee record data.

Value range: 0-99

Default value: 5 seconds

"Employee record fields" tab

This tab allows you to define the freely configurable employee record fields for the data exchange between the two systems. You can find the meaning of these fields in the ID card creation system.

The standard configuration is shown as an example.

Field 1	Town/ Postcode	Field 16	
Field 2	Business telephone number	Field 17	
Field 3	Business mobile number	Field 18	
Field 4	Number or Name/Street	Field 19	
Field 5	Day of joining	Field 20	
Field 6	Date of leaving the company	Field 21	
Field 7	Date of birth	Field 22	
Field 8	Sex	Field 23	
Field 9	Business e-mail	Field 24	
Field 10	Function	Field 25	
Field 11	Nationality	Field 26	
Field 12	SAP cost centre	Field 27	
Field 13		Field 28	
Field 14		Field 29	
Field 15		Field 30	

Field 1–30 selection fields:

The ID card creation system provides 30 freely-configurable fields for the application. These can be filled with field content from the application as needed.

Options:

- All employee record fields created in the system.

Default value: No specification.

"Company fields" tab

On this tab, you can define the freely configurable company fields for the data exchange between the two systems. You can find the meaning of these fields in the ID card creation system. The standard configuration is shown as an example.

Field 1	Town/ Postcode
Field 2	Street/Number
Field 3	Telephone number
Field 4	Fax
Field 5	E-mail
Field 6	Name
Field 7	First name
Field 8	
Field 9	
Field 10	

Field 1-10 selection fields:

The ID card creation system provides 10 freely-configurable fields for the application. These can be filled with field content from the application as needed.

Options:

- All employee record fields created in the system.

Default value: No specification.

ID card

On this tab, you can configure the details for the ID cards.

ID card creation:

MATRIX is the master ID card system

☐ ID cards are created in MATRIX and automatically transferred to the ID card creation system.

☒ ID cards are created in MATRIX but can be updated by the ID card creation system.

The ID card creation system is the master ID card system

☐ ID cards are created in the ID card creation system and automatically imported in MATRIX.

At the moment, the site ID cannot be set per ID card. On this dialog, you can enter a default site ID for all ID cards (max. 4 digits).
Alternatively, you can create a new employee record field and map it to one of the ID card creation system fields 1 to 30.

Site identifier:

ID card creation:

The block for ID card creation specifies the system in which the ID cards are created and the system into which the ID cards are then automatically transferred.

MATRIX is the master ID card system option:

Activate this option if ID cards are generated in MATRIX and automatically transferred to the ID card creation system.

MATRIX is the master system for ID card creation. ID cards can be updated option:

Activate this option if ID cards are generated in MATRIX and automatically transferred to the ID card creation system. However, the ID cards can be updated by the ID card creation system.

The ID card creation system is the master ID card system option:

Activate this option if ID cards are generated in the ID card creation system and automatically transferred to MATRIX.

Site identifier input field:

Specifies the site identifier. The site identifier specification is valid for all ID cards and cannot be specified for each ID card on an individual basis.

Note: If individual site identifiers are required, a new employee record field must be created for the site identifier and allocated to one of the ID card creation system fields, Field1–Field30.

Value range: 0-9999

Default value: Not specified

4.1.15.6 Time booking export in CSV format

This interface is used to export bookings from the time range in the form of a CSV file.

The export can be conducted using one of the two following methods.

Trigger (reaction to system events)

A trigger is activated by an event on the server and generates a CSV file with bookings, which are saved in the specified directory on the server for further processing by external processes. To save the file you must specify the target directory and file name. In terms of content, the files generated by the trigger are based one upon the other.

The interface supports two triggers:

- The 'FileDeleted' trigger is active, if the configured file is collected and deleted by an external process. Based on the bookings already exported, a new CSV file is generated with the new bookings.
- The 'DayChange' trigger writes the bookings for an entire day in a single file and creates a new file with each day change. Therefore one file is generated per day with the relevant bookings. The generated files are retained until they are deleted by an external process.

Manual request of a CSV file by the user

The manual request for a CSV file is activated via the dialog interface. In this case, the bookings are not saved in the file on the server. Instead, they are offered as a download file in the browser to allow the user

to save the results directly on their local computer. To export the bookings you must specify the period for which the bookings should be exported.

The manual export does not affect the export of bookings per trigger and can be activated at any time for any period you require.

"Time booking export in CSV format" dialog

Use the dialog **Time booking export in CSV format** to export bookings from the system. The bookings to be exported are saved in a CSV file.

The configuration specifies which fields in the booking records that are to be transferred, together with the separator and the date format.

Specify the file name for the export file in the configuration. The file location is specified in a browser-specific dialog during the export.

You can use the buttons in the toolbar to save or reject changes to the export configuration.

Trigger selection field:

Specifies the event which causes the new export file to be generated.

Options:

- On deletion of the previous file. The trigger is activated if the file specified under target directory and file name no longer exists. The existence of the file is checked every 60 seconds.
- On day change: With a day change a new file for the bookings is created with the current date. The trigger is activated every 60 seconds and saves all new bookings in the file specified under target directory and file name. The current date is added to the file name. For example, the file name: Booking.csv, generates the file: Booking_01012010.csv.

Date format selection field:

Defines the format for the date in the export file.

Options:

- dd.mm.yyyy
- dd-mm-yyyy
- mm.dd.yyyy
- yyyy.mm.dd

Separator input field:

Contains the separator used to delimit the individual fields in the CSV.

Value range: 1 character, alphanumeric.

Target directory input field:

Contains the target directory in which the exported bookings are saved.

File name input field:

Contains the name of the export file in which the exported bookings are saved.

Booking types selection reports:

The selection reports determine which fields of the booking data are included in the export and which fields are not exported. The order of the exported fields corresponds to the order of the booking fields in the selection reports.

Export data button:

Opens the dialog for downloading the data. This depends on the operating system and the browser being used.

Note: The button is activated after the first saving and is inactive during the first configuration.

From date input field:

Contains the date from which the booking data is exported. Enter a date or click the calendar icon and select a date. If the field is empty, the export starts with the first booking.

Until date input field:

Contains the date until which the booking data is exported. Enter a date or click the calendar icon and select a date. If the field is empty, the export ends with the latest booking.

4.1.15.7 Document import

Documents can be imported via this interface and added to an employee record as an attachment.

This function can be used to save certificates or signed forms directly along with the employee record, for example.

"Document import" dialog

The **Document import** dialog is used to configure the interface for importing employee record attachments.

The import directory is checked for altered files every 10 seconds. After a successful import, the file will be deleted from the import directory and can then be found in the respective employee record under the **Documents** tab.

Note: If files cannot be imported, they will be moved to the "not_imported" subfolder.

Imports can fail for the following reasons:

- The file cannot be assigned to an employee record.
- A file with identical metadata has already been imported.
- The file is larger than 20 MB.
- The file is empty.

If an import fails, check the notifications in the system monitor.

Configure document import

Number: 5

Name: Annual statement

Short name:

Import active: ☒

Document type name to be displayed in MATRIX: Annual statement

Path to the import directory: C:\import\AS

Regular expression for the files to be included: .+\..pdf

Regular expression to determine the employee number: \\d+(?=\\.pdf)

Display context: Person (access)

Import active checkbox:

Identifier indicating whether the interface is active. If the checkbox is inactivated, files cannot be imported.

Document type name to be displayed in MATRIX input field:

Contains the name under which the imported documents are displayed in the employee record under the **Documents** tab.

Path to the import directory input field:

Contains the absolute path to the directory on the MATRIX server where the files to be imported are located.

Regular expression for the files to be included input field:

Contains the file types of the files being imported in the form of a regular expression. Example: ".+\..pdf" for PDF files. If this field remains empty, all file types present in the import directory will be imported.

Regular expression to determine the employee number input field:

Contains the regular expression of the file name. The file name must include the employee number to allow the document being imported to be allocated to a person. If the system uses numerical employee numbers, all leading zeros in the extracted numbers will be ignored.

Example: "\\d+(?=\\.pdf)": The file name can contain any number of alphanumeric characters. All digits before the string ".pdf" will be interpreted as the employee number.

Display context selection field:

Contains the MATRIX module to which the documents will be allocated. The documents can only be displayed under "Person administration" in the access or time modules. The Self Service view always displays all documents linked to a person.

4.1.15.8 Door manager

This interface is required when using the door manager or the Winguard building management system made by Advancis.

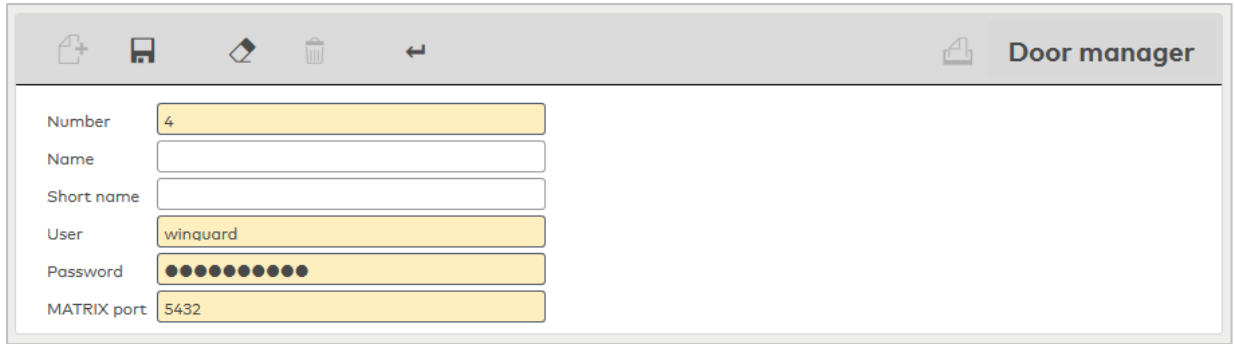
Communication is carried out using a socket connection with the appropriate settings.

"Door manager" dialog

Use the **Door manager** dialog to maintain the settings required for the interface.

The interface requires a unique number. It is recommended that you specify a name and short name.

You can use the buttons in the toolbar to save or reject the changes. Use the **Back to selection** button to return to the selection dialog.



The screenshot shows a 'Door manager' window with a toolbar at the top containing icons for save, print, delete, and back. Below the toolbar are six input fields: 'Number' with the value '4', 'Name' (empty), 'Short name' (empty), 'User' with the value 'winquard', 'Password' (masked with 10 dots), and 'MATRIX port' with the value '5432'.

User ID input field

Contains the user identification of the door manager for logging onto the application.

Value range: 30 character, alphanumeric.

Password input field:

Contains the door manager password for logging onto the application.

Value range: 30 character, alphanumeric.

Port input field:

Contains the port for the communication.

Value range: Up to 5 characters, numerical.

Default value: 5431

4.1.15.9 OPC interface

dormakaba MATRIX features an OPC interface which allows visual display of device and door statuses in external, OPC-compatible applications.

The OPC server software must be installed on the computer before this interface can be used. The software is contained as a separate setup on the MATRIX CD.

Note: This interface has been explicitly developed according to the specifications of the Bosch Building Integration System (BIS). Connection to other building management systems is generally not possible with making changes to the software.

"OPC" dialog

The **OPC** dialog is used to maintain the necessary connection information for communication with the OPC server.

The interface requires a unique number. It is recommended that you specify a name and short name.

You can use the buttons in the toolbar to save or reject the changes or to print details. Use the **Back to selection** button to return to the selection dialog.

User input field:

Contains the user name which the OPC server uses to logging into dormakaba MATRIX. This user name must also be saved in the OPC server's XML configuration file.

Password input field:

Contains the password for the user name. This password must also be saved in the OPC server's XML configuration file.

MATRIX port input field:

Contains the port which the OPC server is to uses to log into dormakaba MATRIX. This port must also be saved in the OPC server's XML configuration file.

OPC server name/IP input field:

This is where you may optionally enter the OPC server's name or IP address. If valid information is entered here, the system will only allow connections which come from this server or IP address.

4.1.15.10 REST web service

The REST interface can be used to access resources in MATRIX. In this context, resources are persons, ID cards or devices as well as bookings and events.

Furthermore, actions such as loading a device can be triggered via the REST interface.

Note: In MATRIX, multiple REST web services can be defined, each with different access rights.

"REST web service" dialog

Use the **REST web service** dialog to enter the necessary settings for the interface.

Note: Detailed documentation of the interface will contain accompanying documentation for the API that can be called up using the dialog.

Permission	Read	Write	Delete	Permission reference in API documentation
Persons	☐	☐	☐	Person
External company employee	☐	☐	☐	OutsideCompanyEmployee
Time bookings	☐	☐	☐	TimeBooking
Access bookings	☐	☐	☐	AccessBooking
Person administration	☐	☐	☐	PersonAdministration
Area/door administration	☐	☐	☐	DoorAdministration
Door status	☐	☐	☐	DoorMonitoring
Direct door effects	☐	☐	☐	DoorAction
Calendar administration	☐	☐	☐	CalendarAdministration
Devices	☐	☐	☐	Device
Device events	☐	☐	☐	DeviceEvent

Authentication checkbox:

Specifies whether the interface must be operated with or without authentication (user/password). It is strongly recommended to operate the interface with authentication for production systems.

User name input field:

User name for authentication.

Password input field:

Password for authentication.

With versioning checkbox:

Identifier indicating whether data exchange is conducted with or without revisioning in MATRIX. Revisioning affects performance and can be omitted, for instance, if revisioning is conducted in the master system.

Options:

- Activated: Data exchange is performed with revisioning.
- Not activated: Data exchange is performed without revisioning.

Default: Not activated.

With monitoring checkbox:

Identifier indicating whether the interface is subject to monitoring. This is displayed in the system monitor.

Please note that monitoring affects performance.

Options:

- Activated: The interface is subject to monitoring.
- Not activated: The interface is not monitored.

Default: Not activated.

Table:

Permission column:

Contains the names of permissions. A permission generally grants access to multiple resources of the same kind.

Read/Write/Delete columns:

Rights are granted by activating the checkboxes.

Permission reference in API documentation column:

Contains the reference to the rights described in the API documentation and used to access the respective resource.

Download API documentation button:

Downloads the current documentation as a ZIP archive. This contains comprehensive documentation of the REST web service in English including a description of all available resources and possible actions as well as the respective access rights required.

4.1.15.11 SAP HR-PDC interface

This interface in dormakaba MATRIX is a certified interface for SAP HR-PDC from release 4.5 onwards.

Note: Please note that this interface is only available with an active SAP HR-PDC licence.

The scope of the interface includes:

- Configuration dialogs
- Download of employee and control data
- Upload of booking data
- Monitoring functions

Overview

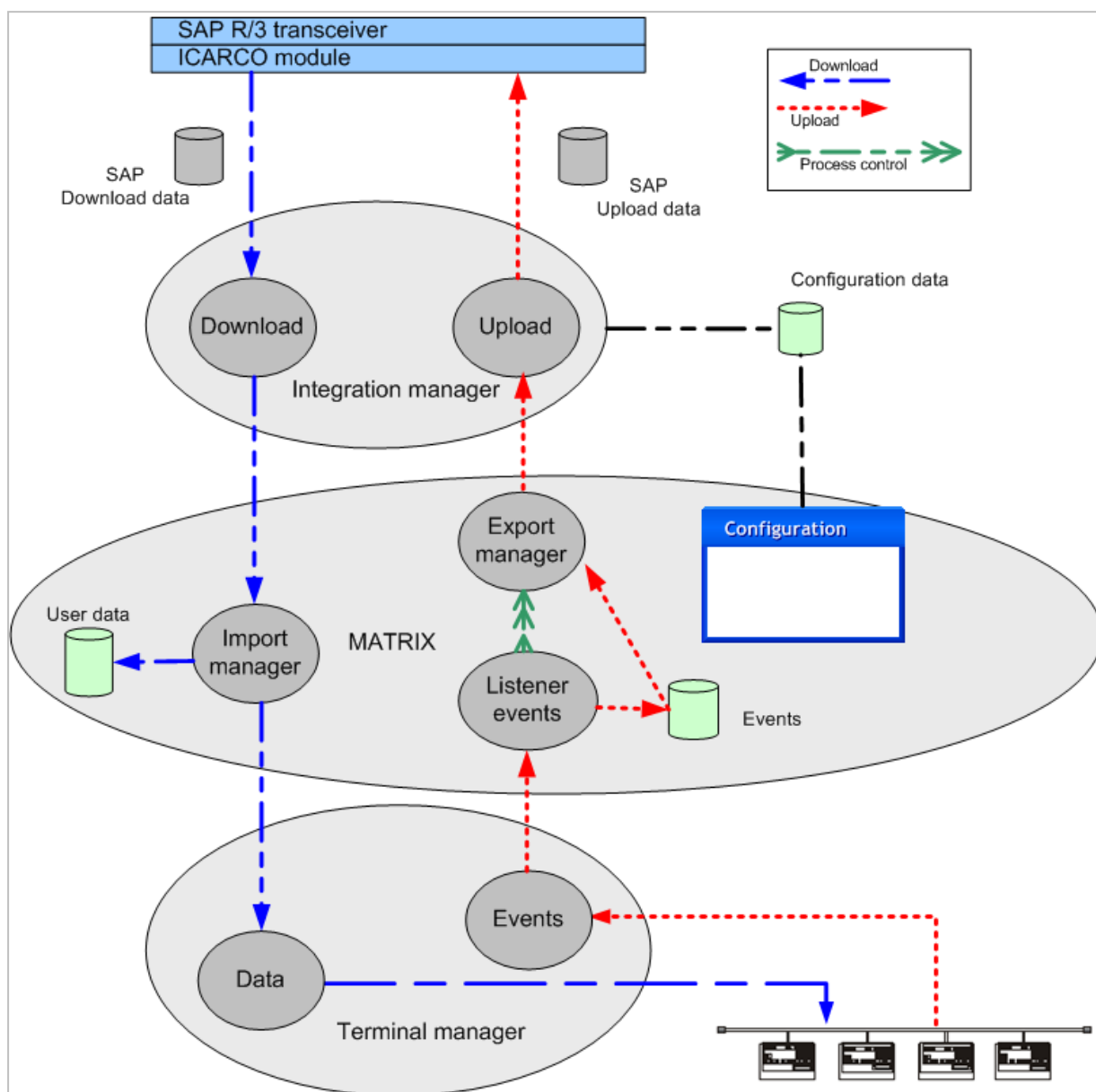
From the SAP point of view, dormakaba MATRIX is treated as a subsystem when it is coupled with SAP. The job of the interface is to provide data transport between the SAP transceiver and the booking terminal of the subsystem. SAP transfers employee master records, absences and external wage types to the subsystem in separate download files. The data is stored in the subsystem, converted and transferred to the booking terminal.

Conversely, the terminals send bookings to the subsystem, which are accepted by the subsystem, converted into the SAP format and forwarded to SAP in an upload.

The data exchange takes place in a configurable interface directory of the SAP transceiver.

The sub-system can be used for time recording and/or access control. As basic employee data, the SAP employee master records or the content of the time/access-relevant employee master record fields are transferred from SAP. The time recording and access permissions are then derived from the system application data defined in the subsystem, via these field contents, and are monitored directly in the booking terminals of the subsystem.

The following graphic shows the simplified data flow between SAP and the subsystem dormakaba MATRIX.



"SAP HR-PDC" dialog

Use the **SAP HR-PDC** dialog to edit the settings of the interface.

Each interface requires a unique number. It is recommended that you specify a name and a short name.

Note: Users can also be created for the system as well as persons. User data such as user name, user role and password for login is required for this in the additional fields table.

You can use the buttons in the toolbar to navigate between records and to save or discard changes to the record. Use the **Back to selection** button to return to the selection dialog.

Transceiver

The basic settings for the transceiver are specified on this tab.

Logical SAP system	Transceiver directory	Unicode	
TCNLR	C:\temp	☐	

Logical SAP system input field:

Name of the logical SAP system, the download files of which are processed and to which the booking data in the upload files is transferred.

Transceiver directory input field:

Interface directory of the SAP transceiver, in which the data exchange takes place for the upload and download between SAP and the subsystem.

Unicode checkbox:

Indicates whether the data is transferred from SAP as Unicode.

Options:

- Activated: The data is transferred as Unicode.
- Not activated: The data is not transferred as Unicode.

Default value: Not activated.

Employee record

On this tab, the fields from the SAP employee record are mapped onto the employee record of dormakaba MATRIX. If no allocation should take place, the selection field remains empty. Multiple allocations from SAP fields can be performed in the Additional fields table.

Transceiver	Employee record	Employee balances	Upload	Download	Record type allocation
Time ID No	ID card number		Default value		
From date	Valid from		Default value		
Until date	Valid until		Default value		
Time ID version			Default value		
EmplNo.			Default value		
EditName	Last name		Default value		
SortName			Default value		
Language			Default value		
Language ISO	ISO language code		Default value		
Ps Group Att Abs Type	Comparison value for absence bc		Default value		
Country grouping	Country group		Default value		
Sub-system grouping	Time booking profile		Default value		
Es group work schedule	Employee groups/work schedules		Default value		
Access control group	Access profile		Default value		
Employee code	PIN code		Default value		
E-mail indicator	E-mail text		Default value		
Att Abs Reason Group	Attendance/Absence reasons ma		Default value		
Ext. wage type group	Comparison value for wage type		Default value		
Time event type group	Permission check for terminal boi		Default value		
Comp code	Company code bookings		Default value		
Cost centre	SAP cost centre		Default value		
Customer field 1			Default value		
Customer field 2			Default value		
Additional fields					
SAP field name		MATRIX field name	Default value	New entry	

Note: A default value can be specified for all field allocations. This value is used when no value is transferred from SAP. If no default value should be used, the entry is left empty.

TIMEID_NO selection field:

Contains the allocation of the ID card number. Depending on the ID card administration and laser technology used, the ID card number can be transferred either directly or indirectly. For direct transfers, the following applies:

- The transferred ID card number agrees with the ID card number.
- ID card administration level 1 is set.
- Each person can be allocated only one ID card.

Default: ID card.

If the ID card number cannot be transferred directly, the selection remains empty. The ID card number must then be allocated manually.

Note: If there are persons without an ID card allocation in the system, they are displayed in the info centre.

FROM_DATE selection field:

Contains the allocation for the start of validity date for the person. Persons can only participate in time recording within their validity range.

Default: Time recording from.

TO_DATE selection field: Contains the allocation for the person's end of validity date.

Default: Time recording to.

TIMEID_VERSION selection field:

Contains the allocation for the ID card version. Transfer of the ID card version is tied to the direct transfer

of the ID card number.
Default: ID card version

PERNO selection field:

Contains the allocation of the employee number. If additional employees who are not featured in SAP or external company employees are also managed in the application, the employee ID numbers should not be transferred, because there is no guarantee against identical employee ID numbers.
Default: Employee number

EDIT_NAME selection field:

Contains the allocation of the name in editable form.
Default: No selection

SORT_NAME selection field:

Contains the allocation of the name in sortable form.
Default: Name

Note: If EDIT_NAME is assigned to the SAP EditName field and SORT_NAME is assigned to the SAP SortName field, MATRIX will analyse these two fields and fill in the MATRIX Name, First Name and Title fields correspondingly.
This setting enables the Name field to be filled from SAP without using the complete name of the person.

LANGU selection field:

Contains the allocation of the language.
Default: No selection

LANGU_ISO selection field:

Contains the allocation of the language.
Default: ISO language

PS_GRP_G_ATT_ABS_TYPE selection field:

Contains the allocation for the absence/attendance grouping.
Default: Main absence/attendance grouping

COUNTRY_GROUPING selection field:

Contains the allocation for the country grouping.
Default: Country grouping

SUBSYSTEM_GROUPING selection field:

Contains the allocation for the subsystem connection grouping.
Default: Time booking profile

ES_GRP_G_WORK_SCHED selection field:

Contains the allocation for the work schedule grouping.
Default: Time weekly program

ACCESS_CONTROL_GROUP selection field:

Contains the allocation for the access control group.
Default: Access profile

PERSONAL_CODE - Pincode selection field:

Contains the allocation for the PIN code.
Default: PIN code

MAIL_INDICATOR selection field:

Contains the allocation for the e-mail identifier.
Default: E-mail text

ATT_ABS_REASON_GRP selection field:

Contains the allocation for the absence/attendance grouping.
Default: Comparison value for absence bookings.

EX_WAGETYPE_GRP selection field:

Contains the allocation for the external wage types grouping.

Default: Comparison value for wage type groupings

TIME_EVENTTYPE_GROUP selection field:

Contains the allocation for the time event type group.

Default: Permission check for terminal bookings

COMP_CODE selection field:

Contains the allocation for the booking group.

Default: Company-specific bookings

COSTCENTER selection field:

Contains the allocation for the cost centre.

Default: No selection

CUSTOM_FIELD_1 selection field:

Contains the allocation for the free customer field 1.

Default: No selection

Selection field: **CUSTOM_FIELD_2**:

Contains the allocation for the free customer field 2.

Default: No selection

Additional fields table:

Further allocations can be made in the **Additional fields** table. It is thus possible to allocate one SAP field to several fields of the application.

Note on users: With the additional fields, users who are linked to the person in question can be created at the same time. This also gives persons access to the MATRIX Self Service functional area. The password is only transferred for the first import and any changes are then performed by users via the Self Service.

Matrix field name input field:

Employee record field from the application.

Options:

All employee record fields created in the system.

SAP field name:

Contains the SAP employee record field.

Options:

All SAP employee record fields

Default value input field:

Contains the default value used when no value is transferred from SAP.

Employee balances

On this tab, the fields from the SAP employee record balances are mapped onto the employee record of dormakaba MATRIX. If no allocation should take place, the selection field remains empty. Multiple allocations from SAP fields can be performed in the Additional fields table.

Transceiver	Employee record	Employee balances	Upload	Download	Record type allocation
Info field 1	Info record 1	▼	Default value		
Info field 2	Info record 2	▼	Default value		
Info field 3	Info record 3	▼	Default value		
Info field 4	Info record 4	▼	Default value		
Info field 5	Info record 5	▼	Default value		
Info field 6	Info record 6	▼	Default value		
Info field 7	Info record 7	▼	Default value		
Info field 8	Info record 8	▼	Default value		
Info field 9	Info record 9	▼	Default value		
Info field 10	Info record 10	▼	Default value		
TimeEvalMailIndicator	E-mail text	▼	Default value		
Customer field 1		▼	Default value		
Customer field 2		▼	Default value		
Additional fields					
MATRIX field name	SAP field name	Default value			New entry

Info field 1 - 10 selection field:

Balance values from SAP are transferred to the info fields to enable the information display for the bookings. Generally the first info value contains the balance.

Default: Info fields of the application

TimeEvalMailIndicator selection field:

Contains the allocation for the e-mail identifier. This e-mail text overwrites the e-mail text from the employee record transfer.

Default: E-mail text

CUSTOM_FIELD_1 selection field:

Contains the allocation for the free customer field 1.

Default: No selection

Selection field: **CUSTOM_FIELD_2:**

Contains the allocation for the free customer field 2.

Default: No selection

Additional fields table:

Further allocations can be made in the **Additional fields** table. It is thus possible to allocate one SAP field to several fields of the application.

Matrix field name input field:

Employee record field from the application.

Options:

All employee record fields created in the system.

SAP field name:

Contains the SAP employee record field.

Options:

All SAP employee record fields

Default value input field:

Contains the default value used when no value is transferred from SAP.

Upload

Various settings for feedback are specified on this tab.

Transceiver	Employee record	Employee balances	Upload	Download	Record type allocation
Upload active	☒	Round bookings to minutes	☐		
Upload frequency	60				
Time events	hrcc1upteven01	Default currency			
External wage types	hrcc1upextwt01	Currency ISO			

Upload active checkbox:

Indicates whether the upload and thereby the data transfer of the bookings and events to SAP is activated.

Options:

- Activated: Booking data is transferred to SAP.
- Not activated: Booking data is not transferred to SAP.

Default: Not activated

Round bookings to minutes checkbox:

Indicates whether the booking time for the transfer to SAP should be rounded to the nearest minute.

Options:

- Activated: The booking times are rounded to the nearest minute.
- Not activated: The booking times are not rounded.

Default value: Not activated.

Upload cycle time input field:

Contains the cycle time during which a check is performed to establish whether new upload data can be written.

Value range: 0–99 seconds

- 0 = as fast as possible
- 1-99 = time in seconds

Default: 60 seconds

Time events input field:

Specifies the file for booking data transfer to SAP.

External wage types input field:

Specifies the file for the data transfer of the external wage types bookings to SAP.

Default currency input field:

Specifies the currency in the default code for the data transfer to SAP of employee expenditures for external wage types.

ISO currency input field:

Specifies the currency in the ISO code for the data transfer to SAP of employee expenditures for external wage types.

Download

Various settings for the data transfer from SAP are specified on this tab.

Transceiver	Employee record	Employee balances	Upload	Download	Record type allocation
Download active	☒	Ignore empty files	☒		
Download frequency	60				
Import format for times	hrcc1dnperso01	Import format for time sums	hrcc1dncostc01		
Person data	hrcc1dnbalan01	Cost centres	hrcc1dninord01		
Employee balances	hrcc1dnattab01	Internal orders	hrcc1dnobjid01		
Attendance/Absence reasons	hrcc1dnnextwt01	Objects	hrcc1dnwbsel01		
External wage types	hrcc1dntevgr01	Projects			
Time event types					
☐ Include bookings not related to persons		of the last days			

Download active checkbox:

Indicates whether the download and thus the data transfer from SAP is activated.

Options:

- Activated: data is being transferred from SAP.
- Not activated: data is not being transferred from SAP.

Default: Not activated

Ignore empty files check box:

Indicates whether the download should ignore empty files. During basic supply, processing SAP files without content causes all data of the corresponding data type to be deleted.

Options:

- Activated: empty files are ignored.
- Not activated: empty files are not ignored.

Default: Activated

Download cycle time input field:

Time during which a check is performed to establish whether new download data has been provided by SAP.

Value range: 0-99

- 0 = as fast as possible
- 1-99 = time in seconds

Default: 60 seconds

Import format for times selection field:

Specifies how elapsed times are presented for import.

Options:

- Decimal time
- Normal time

Default: Not specified

Import format for elapsed times selection field:

Specifies how elapsed times are presented for import.

Options:

- Decimal time
- Normal time

Default: Not specified

Person data input field:

Contains the name of the SAP transceiver transfer file for employee records in the interface directory.

Default value: hrcc1dnperso01

Employee balances input field:

Contains the name of the SAP transceiver transfer file for employee records in the interface directory.

Default value: hrcc1dnperso01

Attendances/absences input field:

Contains the name of the SAP transceiver transfer file for absences in the interface directory.

Default value: hrcc1dnattab01

External wage types input field:

Contains the name of the SAP transceiver transfer file for external wage types or employee expenditures in the interface directory.

Default value: hrcc1dnextwt01

Time event type groups input field:

Contains the name of the SAP transceiver transfer file for time event types in the interface directory.

Default value: hrcc1dntevgr01

Cost centres input field:

Contains the name of the SAP transceiver transfer file for cost centres in the interface directory.

Default value: hrcc1dncostc01

Internal orders input field:

Contains the name of the SAP transceiver transfer file for internal orders in the interface directory.

Default value: hrcc1dninord01

Objects input field:

Contains the name of the SAP transceiver transfer file for objects in the interface directory.

Default value: hrcc1dnobjid01

Projects input field:

Contains the name of the SAP transceiver transfer file for projects in the interface directory. Default value: hrcc1dnwbsel01

Include bookings not related to persons of the last days checkbox and input field:

This setting enables you to define whether bookings not relating to persons are to be checked. The time period for the bookings is determined by the number of days. Bookings not relating to persons are possible if booking without employee record is set on the terminals. If, during the download, new persons are loaded onto the system with a corresponding ID card number, as stored in the booking record, the bookings that have not yet been allocated are allocated to these persons and transferred with the next upload.

Condition is fulfilled

- Not activated: Bookings not relating to persons are not included.
- Activated: Bookings not relating to persons are included.

Default: Not activated

Days input field:

Contains the number of days for checking the bookings. Input is only possible if the checkbox is activated.

Value range: 0-9999

Default value: Not specified

Record type allocation

On this tab, the booking types are allocated to the SAP record types for feedback. An SAP record type can be allocated several booking types.

Transceiver	Employee record	Employee balances	Upload	Download	Record type allocation	
						New entry
Booking type	SAP record type	Parameter value	Round minutes			
201 - Arrive	P10		☐			
202 - Leave	P20		☐			
203 - Info	P60		☐			
204 - Business authorisation end	P40		☐			
205 - Business authorisation start	P30		☐			
206 - Break start	P15		☐			
207 - Break end	P25		☐			

Booking type selection field:

Contains the booking type for the allocation.

Options:

- All booking types created in the system.

SAP record type:

Contains the SAP record type of the allocation. The bookings are transferred to SAP with this SAP record type.

Options:

- All SAP record types

Parameter value input field:

Contains an additional parameter, which is added to the feedback to SAP.

Round to minutes checkbox:

Indicates whether the booking time for the transfer to SAP should be rounded to the nearest minute.

Options:

- Activated: The booking times are rounded to the nearest minute.
- Not activated: The booking times are not rounded.

Default value: Not activated.

System monitor SAP HR-PDC

The **System monitor** SAP HR-PDC dialog displays information on the most recent transfers of the SAP HR-PDC interface.

Status

This tab displays the most important information on the most recent downloads and uploads.

The screenshot shows the 'BAS_JobMonitorSAP_HRPDC' dialog with the 'Status' tab selected. The dialog is divided into two main sections: 'Server data transfer status' and 'Server data deployment status'.

Server data transfer status:

	Number OK	Number of errors	Time
Person records			06/19/2017 07:26:49
Employee balances			06/19/2017 07:26:49
Time event types			06/19/2017 07:26:49
Absence times			06/19/2017 07:26:49
Wage types			06/19/2017 07:26:49
Cost centres			06/19/2017 07:26:49
Internal orders			06/19/2017 07:26:49
Objects			06/19/2017 07:26:49
Projects			06/19/2017 07:26:49

Server data deployment status:

	Number	Time
Bookings		06/19/2017 07:26:49
Employee expenditures		06/19/2017 07:26:49

Server data transfer status:

The number of positive and non-imported data records is shown for the various import files.

Number OK display fields:

Displays the positive imported data records.

Number of errors display fields:

Displays the number of non-imported data records.

Time display fields:

Contains the date and time of the import.

Status of server data transfer:

Contains information on the last export.

Number display fields:

Contains the number of exported data records.

Time display fields:

Contains the date and time of the import.

Details

As well as information on the times, the detail view also contains additional information on the actions.

BAS_JobMonitorSAP_HRPDC		
State	Details	
Time	Action	Value
06/19/2017 07:26:49	Creation in MATRIX	Job has been created in system monitor.

Time column:

Contains the date and time of the action.

Action column:

Contains the action performed.

Description column:

Contains a description of the action performed with additional parameters and values, if these are available.

Actions with comments or actions which could not be carried out are marked with a symbol, which is shown in the column before the description.

Data transfer SAP HR-PDC

The mapping of the SAP data to the MATRIX and terminal data is described in the tables below.

Employee master data (hrcc1dnperso01)

When it is imported, the employee master data is distributed to the employee data, the ID cards and, if necessary, to the booking and access permissions. After the import, the terminal-relevant data are sent to the terminal peripherals.

SAP	MATRIX	Terminal	Description
SOURCE_SYS	BAS_PERSREC:ExternalSystem		Unique identification of the SAP system. Always adopted internally.
TIMEID_NO	BAS_PERSREC:ExternalID		Fixed transfer of the external system ID card number. Used as unique key for the person from the external system for the bookings, so it is always filled during the import.
	BAS_BADGE:badgeNo	Ident number	When ID card is transferred directly. If the field is filled, the ID card is allocated or created. The ID card allocation cannot be deleted.
FROM_DATE	TIM_PERSREC:timeRecordingFrom	Valid from	Valid from (person)
TO_DATE	TIM_PERSREC:timeRecordingUntil	Valid until	Valid to (person)
TIMEID_VERSION	BAS_BADGE:badgeVersion	ID card version	External system ID card version. Only transferred in case of direct transfer of the ID card.

SAP	MATRIX	Terminal	Description
PERNO	BAS_PERSREC:ExternalPersNr		Fixed transfer of the external system employee number.
	BAS_PERSREC:PersNr		Only transferred if the AutoID option is not set. In this case, no other employees may be created in MATRIX.
EDIT_NAME	BAS_PERSREC:surname		Last name, first name; transfer of last name and first name to a field.
SORT_NAME			
LANGU			Language
LANGU_ISO	BAS_PERSREC:language		ISO language
PS_GRP_ATT_ABS_TYPE	TIM_PERSREC:PsGrpgAttAbsType	MOABW	Comparison value for an SAP absence booking with SAP absence reason evaluation
COUNTRY_GROUPING	BAS_PERSREC:CountryGroup	MOLGA	Country identifier
SUBSYSTEM_GROUPING	TIM_PERSREC:ExternaltimeBookingProfile	BDEGR	Time booking profile: With the field content, a time booking profile entry with the external system identifier is created in the person-related TIM authorisation set, which cannot be deleted or changed.
ES_GRP_WORK_SCHED	TIM_PERSREC: GrpgWorkSched		Grouping of employee groups for work schedules
ACCESS_CONTROL_GROUP	TIM_PERSREC:ExternalAccProfile	ZANBE	Access profile: an access profile entry with the external system identifier is created in the person-related authorisation set using the field content. This cannot be deleted or changed.
PERSONAL_CODE	BAS_PERSREC:pinCode	PIN code	PIN code
MAIL_INDICATOR	TIM_PERSREC:mailText	E-mail text number	E-mail text identifier as master data download.
ATT_ABS_REASON_GRP	TIM_PERSREC: attAbsReasonGroup	ZEITY	Main group for reasons for absence/attendance

SAP	MATRIX	Terminal	Description
EXT_WAGETYPE_GRP	TIM_PERSREC:wageTypeGroup	VPLOA	Comparison value for an SAP external wage type booking with SAP wage type evaluation
TIME_EVENT_TYPE_GROUP	TIM_PERSREC:TimeEventTypeGroup	Business authorisation permission	Permission check for terminal booking, example: business authorisation
COMP_CODE	TIM_PERSREC:compCode		Company code-specific bookings
COSTCENTER	TIM_PERSREC:costCenter		Cost centre
CUSTOMER_FIELD_1			Free customer field; utilisation via customer function
CUSTOMER_FIELD_2			Free customer field; utilisation via customer function

Note: Separate and transfer names and first names into the corresponding fields in MATRIX.

When importing data for SAP, the EditName and SortName fields taken from SAP are no longer mapped directly to Name. Instead, they are mapped to the Matrix SAP_EName and SAP_SName fields. Names and first names must not be used in the interface. Instead, they are retrieved from the SAP_EName and SAP_SName fields.

EditName	SAP EditName	▼	Standardwert	
SortName	SAP SortName	▼	Standardwert	
Language		▼	Standardwert	

The SName always starts with the first last name. This last name is searched for in EName.

The EName is converted into upper case letters and umlauts are replaced for this purpose.

If the first last name is found in EName, the original EName is taken as the complete last name from this position and is copied from the original EName to Name. Anything that comes before is taken as the first name, including any title. The title can be removed by comparing with the known titles.

Employee master balances (hrcc1dnbalan01)

During the import, the employee balance values are transferred to the employee record and sent to the terminals.

SAP	MATRIX	Terminal	Description
SOURCE_SYS*	BAS_PERSREC:ExternalSystem		Unique identification of the SAP system. Always adopted internally.
TIMEID_NO	BAS_PERSREC:ExternalID		Fixed transfer of the external system ID card number. Used as unique key for the person from the external system for the bookings, so it is always filled during the import.

SAP	MATRIX	Terminal	Description
	BAS_BADGE:badgeNo	Ident number	When ID card is transferred directly. If the field is filled, the ID card is allocated or created. The ID card allocation cannot be deleted.
PERNO	BAS_PERSREC:ExternalPersNr		Fixed transfer of the external system employee number.
	BAS_PERSREC:PersNr		Only transferred if the AutoID option is not set. In this case, no other employees may be created in MATRIX.
SUBSYSTEM_GROUPING	SUBSYSTEM_GROUPING		Time booking profile: With the field content, a time booking profile entry with the external system identifier is created in the person-related TIM authorisation set, which cannot be deleted or changed.
INFO_FELD_1	TIM_PERSREC:info1	Info record 1	Usually holds the person's balance
	TIM_PERSREC:balance		
INFO_FELD_2	TIM_PERSREC:info2	Info record 2	Usually holds the last allocation date
INFO_FELD_3	TIM_PERSREC:info3	Info record 3	
INFO_FELD_4	TIM_PERSREC:info4	Info record 4	
INFO_FELD_5	TIM_PERSREC:info5	Info record 5	
INFO_FELD_6	TIM_PERSREC:info6	Info record 6	
INFO_FELD_7	TIM_PERSREC:info7	Info record 7	
INFO_FELD_8	TIM_PERSREC:info8	Info record 8	
INFO_FELD_9	TIM_PERSREC:info9	Info record 9	
INFO_FELD_10	TIM_PERSREC:info10	Info record 10	
TIME_EVAL_MAIL_INDICATOR	TIM_PERSREC:mailText	E-mail text number	E-mail text identifier from master data balance download.

SAP	MATRIX	Terminal	Description
CUSTOMER_FIELD_1			Free customer field; utilisation via customer function
CUSTOMER_FIELD_2			Free customer field; utilisation via customer function

Time event type groups (hrcc1dntevgr01)

The SAP time event types are transferred to MATRIX in the table TIM_SAP_TIME_EVENT_TYPE. They are not transferred to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Description
SOURCE_SYS	sourceSys	Unique identification of the SAP system. Always adopted internally.
TIME_EVENT_TYPE_GROUP	timeEventTypeGroup	Time event type group
TEVENTTYPE	tEventType	Time event type

Absence times (hrcc1dnattab01)

The absence times are transferred to MATRIX in the table TIM_SAP_ABSENCE_REASON and to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Terminal	Description
SOURCE_SYS	mandator		Unique identification of the SAP system. Always adopted internally.
ATT_ABS_REASON_GRP	attAbsReasonGrpg		Attendance/absence reasons grouping
PS_GRP_ATT_ABS_TYPE	psGrpgAttAbsType		Attendance/absence times grouping
ES_GRP_WORK_SCH	esGrpgWorkSched		Work schedule grouping
ATT_ABS_REASON	attAbsReason		Attendance/absence reasons
FROM_DATE	fromDate		Start of validity
TO_DATE	toDate		End of validity
LANGU	langu		Language key
LANGU_ISO	languISO		ISO code language key
ATT_ABS_REASON_TEXT	attAbsReasonText		Text for attendance/absence reason

External wage types (hrcc1dnxtwt01)

The external wage types are adopted in MATRIX in the table TIM_SAP_EMPLOYEE_EXPENDITURE and transferred to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Terminal	Description
SOURCE_SYS	sourceSys		Unique identification of the SAP system. Always adopted internally.

SAP	MATRIX	Terminal	Description
EXT_WAGETYPE_GRP	extWagetypeGrpg	EXLGA	Employee expenditures connection grouping
COUNTRY_GROUPING	countryGrouping	VPLOA	Country grouping
EXTERNAL_WAGETYPE	externalWagetype	MOLGA	Employee expenditures (external wage types, cafeteria data, fuel data)
FROM_DATE	fromDate		Start of validity
TO_DATE	toDate		End of validity
WAGETYPE_UNIT	wagetypeUnit	ZEINH	Employee expenditures unit
WAGETYPE_UNIT_ISO	wagetypeUnitISO		Employee expenditures unit ISO code
LANGU	langu		Language key
LANGU_ISO	languISO		ISO code language key
WAGELTEXT	wageltext		Text for employee expenditures
UNIT_TEXT	unitText	ETEXT	Text for unit

Objects (hrcc1dnobjid01)

The objects are adopted in MATRIX in the table TIM_SAP_OBJECT. They are not transferred to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Description
SOURCE_SYS	sourceSys	Unique identification of the SAP system. Always adopted internally.
OBJECT_TYPE	objectType	Object type
OBJ_ID	objectID	Object
OBJ_ID_GRP	objectIDGroup	Object grouping
FROM_DATE	fromDate	Start of validity
TO_DATE	toDate	End of validity
LANGU	langu	Language key
LANGU_ISO	languISO	ISO code language key
OBJ_ID_TXT	objectIDText	Text for object

Cost centres (hrcc1dncostc01)

The cost centres are adopted in MATRIX in the table TIM_SAP_COST_CENTER. They are not transferred to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Description
SOURCE_SYS	sourceSys	Unique identification of the SAP system. Always adopted internally.

SAP	MATRIX	Description
COMP_CODE	compCode	Booking group
COSTCENTER	costCenter	Cost centre
COSTCENTER_GRP	costCenterGroup	Cost centre grouping
FROM_DATE	fromDate	Start of validity
TO_DATE	toDate	End of validity
COCNTR_TXT		Text for cost centre

Internal orders (hrcc1dninord01)

The internal orders are adopted in MATRIX in the table TIM_SAP_INTERNAL_ORDER. They are not transferred to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Description
SOURCE_SYS	sourceSys	Unique identification of the SAP system. Always adopted internally.
COMP_CODE	compCode	Booking group
ORDER	internalOrder	Internal order
ORDER_GRP	orderGroup	Internal order grouping
ORDER_NAME	orderName	Text for the internal order

Projects (hrcc1dnwbsel01)

The projects are adopted in MATRIX in the table TIM_SAP_PROJECT. They are not transferred to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Description
SOURCE_SYS	sourceSys	Unique identification of the SAP system. Always adopted internally.
COMP_CODE	compCode	Booking group
WBS_ELEMENT	wbsElement	Project
WBS_ELEMENT_GRP	wbsElementGroup	Project grouping
WBS_SHORTTEXT	wbsShorttext	Text for the project

4.1.15.12 Interface to SAP KK1

This interface in dormakaba MATRIX is a certified interface for SAP KK1.

Note: Please note that this interface is only available with an active SAP KK1 licence.

The scope of the interface includes:

- Configuration dialogs
- Download of employee, control and master data
- Upload of booking data
- Monitoring functions

Overview

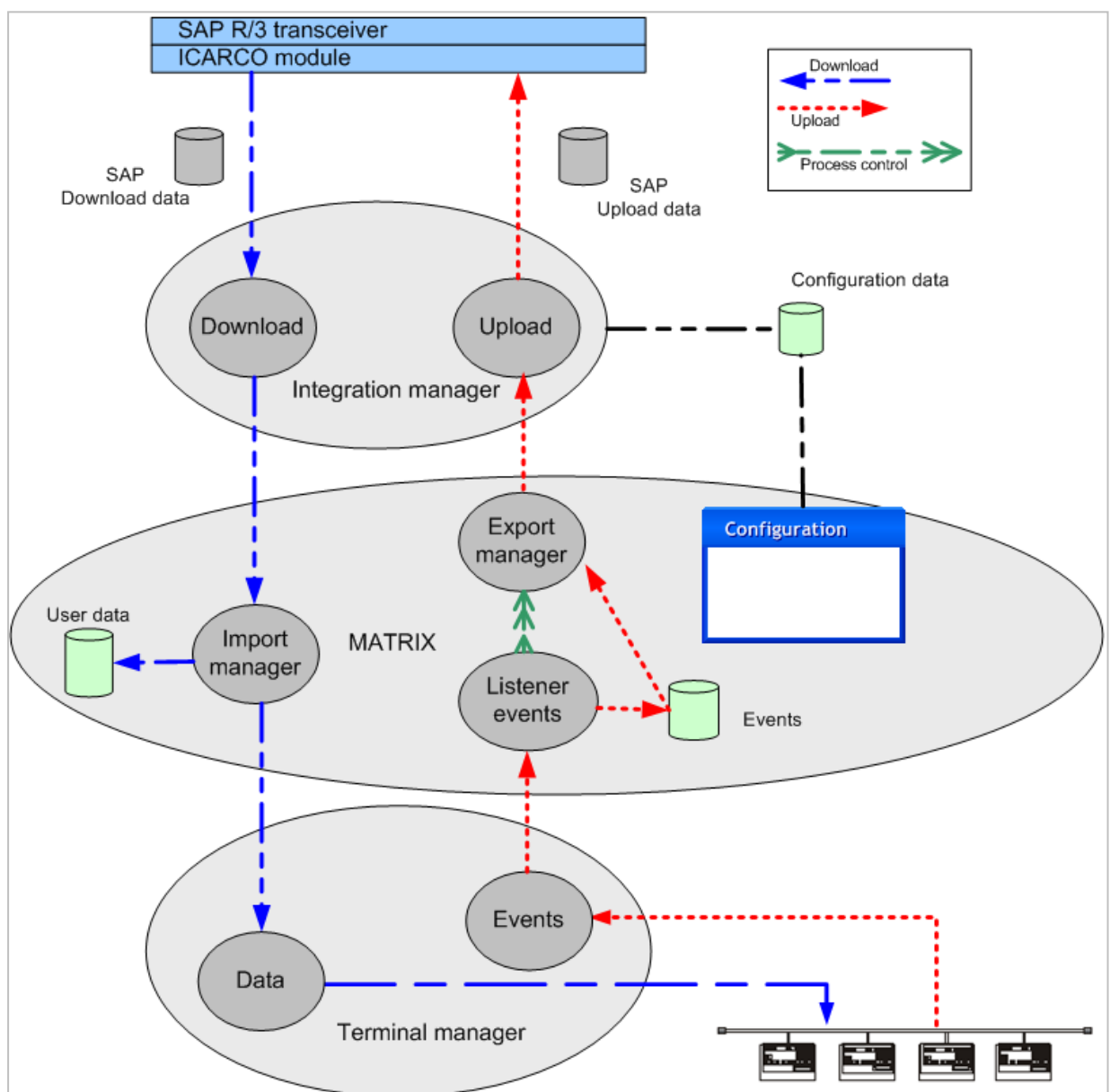
From the SAP point of view, dormakaba MATRIX is treated as a subsystem when it is coupled with SAP. The job of the interface is to provide data transport between the SAP transceiver and the booking terminal of the subsystem. SAP transfers employee master records, absences and external wage types to the subsystem in separate download files. The data is stored in the subsystem, converted and transferred to the booking terminal.

Conversely, the terminals send bookings to the subsystem, which are accepted by the subsystem, converted into the SAP format and forwarded to SAP in an upload.

The data exchange takes place in a configurable interface directory of the SAP transceiver.

The subsystem can be used for time recording and/or access control. As basic employee data, the SAP employee master records or the content of the time/access-relevant employee master record fields are transferred from SAP. The time recording and access permissions are then derived from the system application data defined in the subsystem, via these field contents, and are monitored directly in the booking terminals of the subsystem.

The following graphic shows the simplified data flow between SAP and the subsystem dormakaba MATRIX.



"SAP KK1" dialog

The **SAP KK1** dialog is used to edit the interface settings.

Each interface requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records and to save or discard changes to the record. Use the **Back to selection** button to return to the selection dialog.

Transceiver

The basic settings for the transceiver are specified on this tab.

Logical SAP system input field:

Name of the logical SAP system, the download files of which are processed and to which the booking data in the upload files is transferred.

Transceiver directory input field:

Interface directory of the SAP transceiver, in which the data exchange takes place for the upload and download between SAP and the subsystem.

Default value: transdir

Employee record

On this tab, the fields from the SAP employee record are mapped onto the employee record of dormakaba MATRIX. If no allocation should take place, the selection field remains empty. Multiple allocations from SAP fields can be performed in the Additional fields table.

Transceiver	Employee record	Upload	Download	Record type allocation
ZAUSW - time recording ID card	ID card number	▼	Default value	
BEGDA - validity period start	Valid from	▼	Default value	
ENDDA - validity period end	Valid until	▼	Default value	
ZAUVE - ID card version		▼	Default value	
PERNR - employee number		▼	Default value	
ENAME - name (editable)	Last name	▼	Default value	
SNAME - name (sortable)		▼	Default value	
INFO1 - variable info field	Info record 1	▼	Default value	
INFO2 - variable info field	Info record 2	▼	Default value	
INFO3 - variable info field	Info record 3	▼	Default value	
INFO4 - variable info field	Info record 4	▼	Default value	
INFO5 - variable info field	Info record 5	▼	Default value	
INFO6 - variable info field	Info record 6	▼	Default value	
INFO7 - variable info field	Info record 7	▼	Default value	
INFO8 - variable info field	Info record 8	▼	Default value	
INFO9 - variable info field	Info record 9	▼	Default value	
INFOA - variable info field	Info record 10	▼	Default value	
IMAIL - E-mail code for time processing error	E-mail text	▼	Default value	
MOABW - attendance/absence times grouping	Attendance/Absence reasons ma	▼	Default value	
MOLGA - country grouping	Country group	▼	Default value	
BDEGR - subsystem connection grouping	Time booking profile	▼	Default value	
ZEITY - work schedule grouping	Employee groups/work schedules	▼	Default value	
ZDGBE - business authorisation permission	Business authorisation permissio	▼	Default value	false
ZANBE - access control group	Access profile	▼	Default value	
ZPINC - personal code	PIN code	▼	Default value	
ZMAIL - E-mail code for time recording info	E-mail text	▼	Default value	
Additional fields				
SAP field name MATRIX field name Default value New entry				

Note: A default value can be specified for all field allocations. This value is used when no value is transferred from SAP. If no default value should be used, the entry is left empty.

ZAUSW selection field:

Contains the allocation of the ID card number. Depending on the ID card administration and laser technology used, the ID card number can be transferred either directly or indirectly. For direct transfers, the following applies:

- The transferred ID card number agrees with the ID card number.
- ID card administration level 1 is set.
- Each person can be allocated only one ID card.

Default: ID card.

If the ID card number cannot be transferred directly, the selection remains empty. The ID card number must then be allocated manually.

Note: If there are persons without an ID card allocation in the system, they are displayed in the info centre.

BEGDA selection field:

Contains the allocation for the start of validity date for the person. Persons can only participate in time recording within their validity range.

Default: Time recording from.

ENDDA selection field: Contains the allocation for the person's end of validity date.

Default: Time recording to.

ZAUSVE selection field:

Contains the allocation for the ID card version. Transfer of the ID card version is tied to the direct transfer of the ID card number.

Default: ID card version

PERNR selection field:

Contains the allocation of the employee number. If additional employees who are not featured in SAP or external company employees are also managed in the application, the employee ID numbers should not be transferred, because there is no guarantee against identical employee ID numbers.

Default: Employee number

ENAME selection field:

Contains the allocation of the name in editable form.

Default: No selection

SNAME selection field:

Contains the allocation of the name in sortable form.

Default: Name

Info1 - InfoA selection field:

Balance values from SAP are transferred to the info fields to enable the information display for the bookings. Generally the first info value contains the balance.

Default: Info fields of the application

IMAIL selection field:

Contains the allocation for the e-mail identifier.

Default: E-mail text

MOABW selection field:

Contains the allocation for the absence/attendance grouping.

Default: Main absence/attendance grouping

MOLGA selection field:

Contains the allocation for the country grouping.

Default: Country grouping

BDEGR selection field:

Contains the allocation for the subsystem connection grouping.

Default: Time booking profile

ZEITY selection field:

Contains the allocation for the work schedule grouping.

Default: Employee groups/work schedules grouping

ZDGBE selection field:

Contains the business authorisation permission.

Default: Permission check for terminal bookings

ZANBE selection field:

Contains the allocation for the access control group.

Default: Access profile

ZPIN selection field:

Contains the allocation for the PIN code.

Default: PIN code

ZMAIL_INDICATOR selection field:

Contains the allocation for the e-mail identifier from the time allocation.

Default: E-mail text

Additional fields table:

Further allocations can be made in the **Additional fields** table. It is thus possible to allocate one SAP field to several fields of the application.

Matrix field name input field:

Employee record field from the application.

Options:

All employee record fields created in the system.

SAP field name:

Contains the SAP employee record field.

Options:

All SAP employee record fields

Default value input field:

Contains the default value used when no value is transferred from SAP.

Upload

Various settings for feedback are specified on this tab.

Transceiver	Employee record	Upload	Download	Record type allocation
Upload active ☒ Round bookings to minutes ☐ Upload frequency 60 Number of check cycles until timeout Time events conf11.upl				

Upload active checkbox:

Indicates whether the upload and thereby the data transfer of the bookings and events to SAP is activated.

Options:

- Activated: Booking data is transferred to SAP.
- Not activated: Booking data is not transferred to SAP.

Default: Not activated

Upload cycle time input field:

It is possible to switch on interface directory monitoring for the upload. When the interface directory monitoring is switched on, the system checks whether the SAP transceiver is processing the upload data within the specified time, so that the directory is free for a new upload of bookings. If this not the case, a message appears.

Value range: 0-99

- 0 = No check
- 1-99 = Number of check cycles until message

Default: 0 = No check

Time events input field:

Specifies the file for booking data transfer to SAP.

Default value: conf11.upl

Round bookings to minutes checkbox:

Indicates whether the booking time for the transfer to SAP should be rounded to the nearest minute.

Options:

- Activated: The booking times are rounded to the nearest minute.
- Not activated: The booking times are not rounded.

Default value: Not activated.

Number of check cycles until timeout input field:

Specifies the number of check cycles through which the upload file is run by the SAP transceiver if uploads are activated, until the interface directory must be free for a new upload of bookings and events.

Value range: 0-99

- 0 = No check
- 1-99 = Number of check cycles

Default: 0

Download

Various settings for the data transfer from SAP are specified on this tab.

Transceiver	Employee record	Upload	Download	Record type allocation
Download active ☒ Ignore empty files ☒ Download frequency 60 Person data perso1 Attendance/Absence reasons absen1 External wage types extwa1 ☐ Include bookings not related to persons of the last days				

Download active checkbox:

Indicates whether the download and thus the data transfer from SAP is activated.

Options:

- Activated: data is being transferred from SAP.
- Not activated: data is not being transferred from SAP.

Default: Activated

Ignore empty files check box:

Indicates whether the download should ignore empty files. During basic supply, processing SAP files without content causes all data of the corresponding data type to be deleted.

Options:

- Activated: empty files are ignored.
- Not activated: empty files are not ignored.

Default: Activated

Download cycle time input field:

It is possible to switch on interface directory monitoring for the download. When the interface directory monitoring is switched on, the system checks whether the application is processing the download data within the specified time, so that the directory is free for a new download. If this not the case, a message appears.

Value range: 0-99

- 0 = No check
- 1-99 = Number of check cycles until message

Default: 0 = No check

Person data input field:

Contains the name of the SAP transceiver transfer file for employee records in the interface directory.

Default value: perso01

Attendances/absences input field:

Contains the name of the SAP transceiver transfer file for absences in the interface directory.

Default value: absen1

External wage types input field:

Contains the name of the SAP transceiver transfer file for external wage types or employee expenditures in the interface directory.

Default value: extwa1

"System monitor SAP KK1" dialog

The **System monitor SAP KK1** dialog displays information about the most recent transfers of the SAP KK1 interface.

Status

This tab displays the most important information on the most recent downloads and uploads.

Server data transfer status:

The number of positive and non-imported data records is shown for the various import files.

Number OK display fields:

Show the number of positive imported data records.

Number of errors display fields:

Displays the number of non-imported data records.

Time display fields:

Contains the date and time of the import.

Status of server data transfer:

Contains information on the last export.

Number display fields:

Contains the number of exported data records.

Time display fields:

Contains the date and time of the import.

Details

As well as information on the times, the detail view also contains additional information on the actions.

Time	Action	Value
06/19/2017 07:27:11	Creation in MATRIX	Job has been created in system monitor.

Time column:

Contains the date and time of the action.

Action column:

Contains the action performed.

Description column:

Contains a description of the action performed with additional parameters and values, if these are available.

Actions with comments or actions which could not be carried out are marked with a symbol, which is shown in the column before the description.

SAP KK1 data transfer

The mapping of the SAP data to the MATRIX and terminal data is described in the tables below.

Employee master data (perso1)

When it is imported, the employee master data is distributed to the employee data, the ID cards and, if necessary, to the booking and access permissions. After the import, the terminal-relevant data are sent to the terminal peripherals.

SAP	MATRIX	Terminal	Description
ZAUSW	BAS_BADGE:badgeNo	Ident number	When ID card is transferred directly. If the field is filled, the ID card is allocated or created. The ID card allocation cannot be deleted.
BEGDA	TIM_PERSREC:timeRecordingFrom	Valid from	Valid from (person)
ENDDA	TIM_PERSREC:timeRecordingUntil	Valid until	Valid to (person)
ZAUVE	BAS_BADGE:badgeVersion	ID card version	External system ID card version. Only transferred in case of direct transfer of the ID card.
PERNR	BAS_PERSREC:ExternalPersNr		Fixed transfer of the external system employee number.
	BAS_PERSREC:PersNr		Only transferred if the AutoID option is not set. In this case, no other employees may be created in MATRIX.
ENAME	BAS_PERSREC:surname		Last name, first name; transfer of last name and first name to a field.
SNAME			
INFO1	TIM_PERSREC:info1	Info record 1	Usually holds the person's balance
	TIM_PERSREC:balance		
INFO2	TIM_PERSREC:info2	Info record 2	Usually holds the last allocation date
INFO3	TIM_PERSREC:info3	Info record 3	
INFO4	TIM_PERSREC:info4	Info record 4	
INFO5	TIM_PERSREC:info5	Info record 5	
INFO6	TIM_PERSREC:info6	Info record 6	

SAP	MATRIX	Terminal	Description
INFO7	TIM_PERSREC:info7	Info record 7	
INFO8	TIM_PERSREC:info8	Info record 8	
INFO9	TIM_PERSREC:info9	Info record 9	
INFO10	TIM_PERSREC:info10	Info record 10	
IMAIL	TIM_PERSREC:mailText	E-mail text number	E-mail text identifier from time evaluation
MOABW	TIM_PERSREC:PsGrpgAttAbsType	MOABW	Comparison value for an SAP absence booking with SAP absence reason evaluation
MOLGA	BAS_PERSREC:CountryGroup	MOLGA	Country identifier
BDEGRP	TIM_PERSREC:ExternaltimeBookingProfile	BDEGR	Time booking profile: With the field content, a time booking profile entry with the external system identifier is created in the person-related TIM authorisation set, which cannot be deleted or changed.
ZEITY	TIM_PERSREC: attAbsReasonGroup	ZEITY	Main group for reasons for absence/attendance
ZDGBE	TIM_PERSREC:baAuthorised		Business authorisation permission
ZANBE	TIM_PERSREC:ExternalAccProfile	ZANBE	Access profiles: With the field content, an access profile entry with the external system identifier is created in the person-related authorisation set, which cannot be deleted or changed.
ZPINC	BAS_PERSREC:pinCode	PIN code	PIN code
ZMAIL			E-mail identifier

Absence times (absen1)

The absence times are transferred to MATRIX in the table TIM_SAP_ABSENCE_REASON and to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Terminal	Description
BDEGR	attAbsReasonGrpg		Attendance/absence reasons grouping

SAP	MATRIX	Terminal	Description
MOABW	psGrpgAttAbsType		Attendance/absence times grouping
ZEITY	esGrpgWorkSched		Work schedule grouping
ABWGRP	attAbsReason		Attendance/absence reasons
BEGDA	fromDate		Start of validity
ENDDA	toDate		End of validity
ATEXT	attAbsReasonText		Text for attendance/absence reason

External wage types (extwa1)

The external wage types are adopted in MATRIX in the table TIM_SAP_EMPLOYEE_EXPENDITURE and transferred to the terminals. This transfer is fixed and cannot be parametrised.

SAP	MATRIX	Terminal	Description
BDEGR	extWagetypeGrpg		Employee expenditures connection grouping
MOLGA	countryGrouping	MOLGA	Country grouping
EXLGA	externalWagetype	EXLGA	Employee expenditures (external wage types, cafeteria data, fuel data)
BEGDA	fromDate		Start of validity
ENDDA	toDate		End of validity
ZEINH	wagetypeUnit	ZEINH	Employee expenditures unit
LGTXT	wageltext		Text for employee expenditures
WAGELTEXT			
ETEXT	unitText	ETEXT	Text for unit

4.1.15.13 Site server

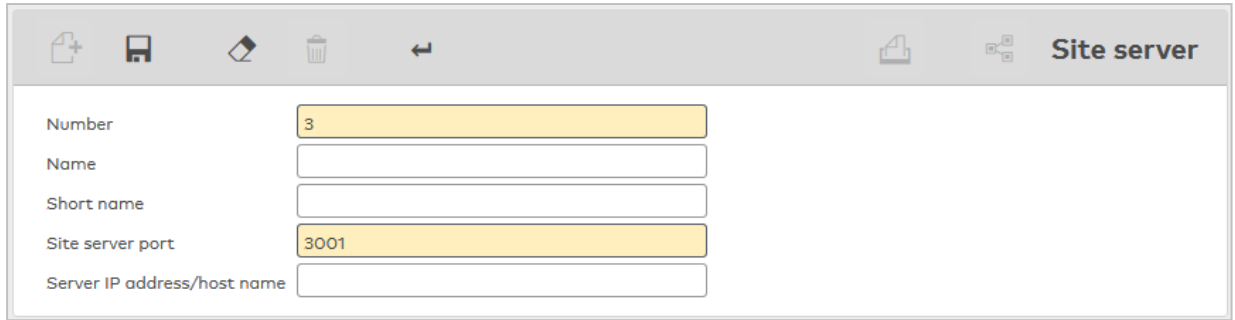
Note: Please note that the site server can only be used with the attendance recording and access functions. Time management is not supported.

If you run dormakaba MATRIX as a client for a site server, you must set up a corresponding interface for communication with the site server master. The interface is used to exchange all data and commands between the two site server instances.

Note: This interface is only available for site server clients. Ensure that the system parameter "Device 10" is set to the value 2.

"Site server" dialog

Use the **Site server** dialog to enter the necessary settings for communication with the site server master.



Number	3
Name	
Short name	
Site server port	3001
Server IP address/host name	

Site server port input field:

Contains the port on which the site server client waits for a connection to be established with the site server master.

Default value: 3001

Server IP address/host name input field:

Contains the IP address and host name of the site server master. The site server client only accepts settings for this IP address and this host name.

4.1.15.14 TMS Mobile interface

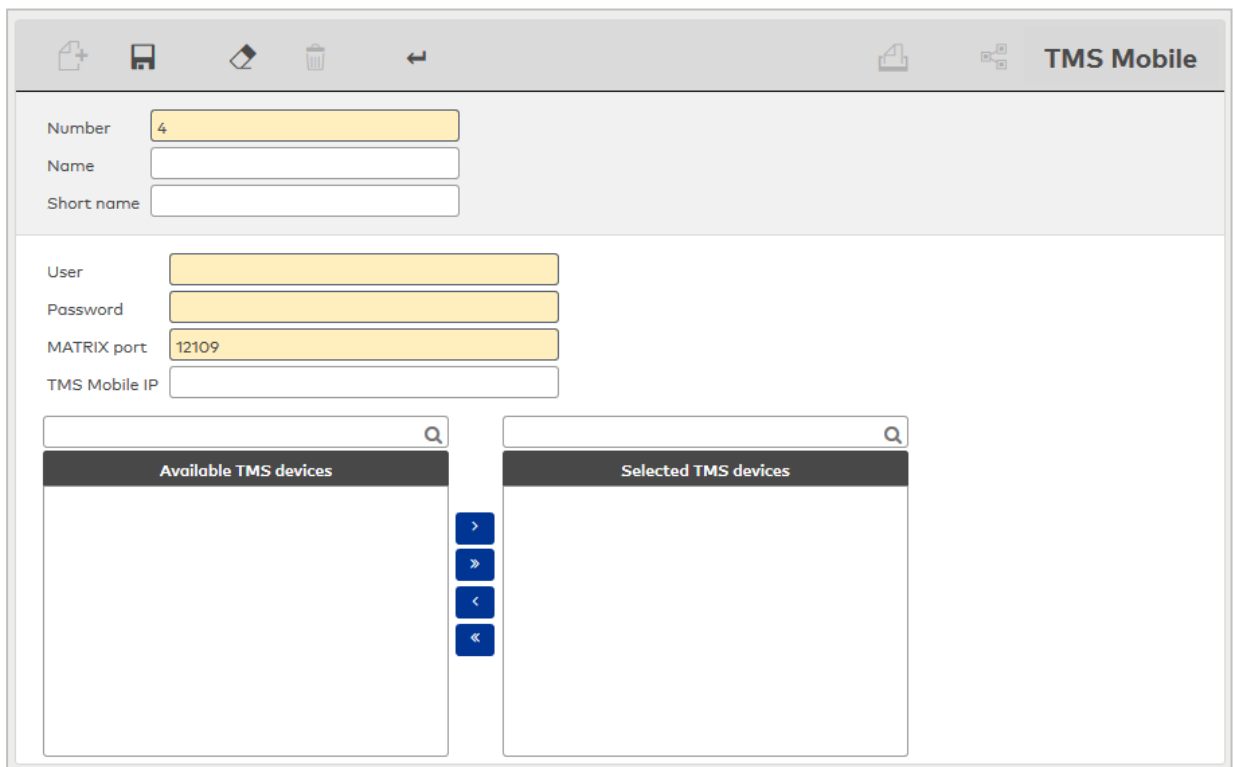
This interface allows the status of devices and doors to be displayed on a mobile device.

"TMS Mobile" dialog

The **TMS Mobile** dialog is used to maintain the connection information required for the communication interface between dormakaba MATRIX and the door status visualisation application.

The interface requires a unique number. It is recommended that you specify a name and short name.

You can use the buttons in the toolbar to save or reject the changes or to print details. Use the **Back to selection** button to return to the selection dialog.



Number	4
Name	
Short name	
User	
Password	
MATRIX port	12109
TMS Mobile IP	

Available TMS devices

Selected TMS devices

>
>>
<
<<

User input field:

Contains the user name which the TMS Mobile uses to log in to dormakaba MATRIX.

Password input field:

Contains the password for the user name.

MATRIX port input field:

Contains the port via which the TMS Mobile is to log into dormakaba MATRIX.

TMS Mobile IP input field:

The IP address tablets can optionally be entered here. Provided that valid information has been entered here, the system will only allow connections which come from this IP address.

TMS devices selection reports:

Assign TMS devices for communication using the selection reports.

4.1.16 System parameters

System parameters comprise all internal parameters for configuring your system. They depend in part on the licensed version.

Note: Changes to specific system parameters may cause serious failures in the application. These parameters feature a notification.

Some of the system parameters can only be changed if certain conditions are met. If they can no longer be changed, they contain a relevant notification.

"System parameters" dialog

The **System parameters** dialog displays the parameters of your installed system in a tree structure, summarised according to installed modules and functional areas.

To expand the tree, click the plus sign in front of each node.

To edit a system parameter, click the element in the tree structure. The dialog is opened in the right-hand section of the window, where the properties of the system parameters are then displayed and can be edited.

Note: Some system parameters may cause serious malfunctions if set incorrectly. These system parameters are indicated by an additional safety instruction  .

You can use the buttons in the toolbar to save or reject changes. You can use the search function to search for individual system parameters using their number or name, or text elements contained within the description or to filter the displayed report by modules. You can print out opened system parameters.

Value input field:

Contains the current value that is configured. Enter a value here. You can find the possible values in the **Description** field.

Default value input field:

Displays the default value specified by the system.

Description column:

Displays the description of the system parameter. The possible values and their meaning are explained.

Note: You must log off from the system and log in again for the changes to become effective.

Description of the system parameters

The system parameters are allocated to the respective modules according to their functions.

Access

Update times

1 Status display refresh:

Time interval for updating the door status, security area monitoring and attendance display, in seconds.

Value range: 0 or 3 to 9999; default value: 30

0 = No update

PIN codes

20 PIN Code digits:

Specifies the required number of the digits for a PIN code

Value range: 0 to 6; default value: 0

21 Individual PIN codes:

If the system parameter is activated, separate PIN codes can be entered for the duress PIN code, IDS arming PIN code and the IDS disarming PIN code for the relevant persons. If the system parameter is deactivated, these fields are hidden.

Value range: 0 or 1; default value: 0

0 = no

1 = yes

22 PIN code displayed in plain text:

Indicates whether the PIN codes are displayed in plain text on the GUI or if the display is hidden.

Value range: 0 or 1; default value: 0

0 = no

1 = yes

AoC (Access on Card)**30 AoC functionality:**

Specifies if the AoC functionality is activated in the system.

Value range: 0 or 1; default value: 0

0 = no

1 = yes

31 Maximum validity period of AoC cards:

Specifies the maximum number of days which an AoC ID card may be valid. Used AoC IDs can be used again after this time.

Value range: 1 to 3287; default value: 7

32 Default validity duration for AoC cards:

Specifies the pre-set period in days which an AoC ID card may be valid.

Value range: 1 to 3287; default value: 1

33 Automatic permission at AoC writers:

Indicates whether all persons should be automatically permitted at AoC writers. This permission does not apply to AoC writers that open a door at the same time.

Value range: 0 or 1; default value: 0

0 = no

1 = yes

Note: The affected terminals must be manually reloaded after changing this parameter.

34 Weekly profile, autom. permission at AoC writers:

States the number of the weekly profile to be used for automatic permission at AoC writers.

DoC (Data on Card)**40 DoC functionality:**

Specifies if the DoC functionality is activated in the system. If this function is activated, the battery state is written to suitably prepared ID cards during bookings and thus transmitted to the system.

Value range: 0 or 1; default value: 0

0 = no

1 = yes

Locking plan**61 Door output type in locking plan matrix:**

Specifies which notation is used for the door output in the locking plan matrix.

Value range: 1 or 2; default value: 1

1 = Name

2 = Abbreviation

62 Door output length in locking plan matrix:

Specifies the maximum length of the door notation in the locking plan matrix.

Value range: 0 to 255; default value: 15

0 = unlimited

63 Number of persons on one side of the locking plan matrix:

Contains the number of persons displayed on one side of the locking plan without paging.

Value range: 0 to 100; default value: 40

0 = unlimited

Note: Higher values from older MATRIX systems are retained during updates.

64 Number of doors on one side of the locking plan matrix:

Contains the number of doors displayed on one side of the locking plan without paging.

Value range: 1 to 50; default value: 30

Note: Higher values from older MATRIX systems are retained during updates.

Visitor administration**70 Visitor administration:**

Determines if the "Visitor administration" option is activated.

Value range: 0 or 1; default value: 0

0 = no: visitor administration is not activated.

1 = yes: visitor administration is activated.

71 With ID card assignment:

Defines if visitors receive an ID card for the access bookings when activated. The visit cannot be activated until a visitor ID card has been assigned.

Value range: 0 or 1; default value: 0

0 = no, an ID card is not necessary for a visitor; the visit can be activated without an ID card.

1 = yes, a visit can only be activated if the visitor is assigned an ID card, usually a visitor ID card.

Note: Using special visitor ID cards requires ID card administration step 3. The access permissions are subject to the visitor ID card in this case and do not have to be assigned when issuing the ID card.

72 With visitor terminal:

Indicates whether visitor administration is to work with one terminal for self registration.

Value range: 0 or 1; default value: 0

0 = no, visitor terminals are not supported.

1 = yes, visitor terminals are supported.

73 with QR code:

Indicates whether visitor administration will work with QR codes for self-registration.

Value range: 0, 1 or 2; default value: 0

0 = no, registration using QR code is not supported.

1 = visitors receive a QR code via e-mail, which they used to register at reception.

2 = visitors receive a QR code via e-mail, which they can use to book in on a QR code reader.

74 Access validity period before visit:

Specifies the period in minutes before the beginning of an actual visit appointment during which QR code access (system parameter Access 73) or LPN recognition access (system parameter Access 76) is valid.

Value range: 1-10000, default value: 120

75 QR code range for virtual ID card numbers:

ID card number range for access using QR codes, delimiter: hyphen (e.g. 10000 - 19999). The first free number in this range is used when creating a new QR code.

Value range: numeric, maximum length: 7 digits, default value: none

76 With number plate recognition:

Specifies whether LPN recognition is activated for visitors.

Value range: 0 or 1; default value: 0

0 = no, LPN recognition is not supported.

1 = yes, LPN recognition is supported.

Note: The following system parameter settings must be configured in order to be able to use LPN recognition in visitor administration:

- Devices 72 "Use Nedap ANPR camera" must be set to 1.
 - Access 70 "Visitor administration" must be set to 1.
 - Access 71 "With ID card assignment" must be set to 1.
-

Room administration**80 Room administration:**

Specifies if the "Room administration" option is activated.

Value range: 0 or 1; default value: 0

0 = no: room administration is not activated.

1 = yes: room administration is activated.

Security areas / room zones**90 Security areas:**

Specifies if the "Security areas" option is activated.

Value range: 0 or 1; default value: 0

0 = no: security areas are not activated.

1 = yes: security areas are activated.

91 Room zones:

Specifies if the "Room zones" option is activated.

Value range: 0 or 1; default value: 0

0 = no, room zones are not activated.

1 = yes, room zones are activated.

92 Counting information:

Specifies if counting information for security areas is activated in the system.

Value range: 0 or 1; default value: 0

0 = no, counting information is not provided for security areas.

1 = yes, counting information is provided for security areas.

93 Further related room zones:

Specifies if further related room zones are activated in the system.

Value range: 0 or 1; default value: 0

0 = no, further related room zones are not active

1 = yes, further related room zones are active

94 Booking realm with counting information:

Specifies the booking realm in hours in which bookings are to be taken into account when recalculating the security area. Older bookings are not taken into account

Value range 0, 1–9999, default value: 48

0 = unlimited; all bookings are taken into account

Patrol**100 Patrol:**

Determines if the "Patrol" option is activated.

Value range: 0 or 1; default value: 0

0 = no: patrols are not activated.

1 = yes: patrols are activated.

101 Patrol status display update:

Time interval for updating the patrol status display, in seconds.

Value range: 10 to 9999; default value: 30

0 = No update

Video comparison**120 Manual image comparison:**

Indicates whether manual image comparison is activated in the system.

Value range: 0 or 1; default value: 0

0 = no.

1 = yes.

Intruder detection systems**130 Intruder detection systems:**

Defines how intruder detection systems are connected.

Value range: 0–2

0 = intruder detection systems inactivated.

1 = simplest form of connection of an intruder detection system.

2 = convenient connection of an intruder detection system (incl. VdS-compliant IDS).

Permissions**140 Permission prioritisation:**

Specifies the prioritisation for different access permissions.

Value range: 0–1

0 = special permissions with higher priority.

1 = all permissions with the same priority.

This system parameter determines whether special permissions have the same priority as or higher priority than access profile permissions.

If priority is the same, all permissions are linked in a disjunction, i.e. access is granted if one or more access daily times match the time requirement.

Special permissions with higher priority override access daily times of allocated access profile permissions. For example, an access profile with an access daily time which grants access between 8:00 and 18:00 h will be overridden by a special permission for one of the readers with an access daily time granting access between 7:00 and 8:00 h.

141 Individual office release permission for online doors:

Specifies whether an individual office release is also possible for individual online doors.

Value range: 0–1; default value: 0

0 = individual office release can be set for all doors but not for individual online doors.

1 = individual office release for individual online doors is possible.

Note 1: The **Individual office release permission for online doors** checkbox for the terminal class found in **File administration parameters** under **Employee record element configuration** must be activated to be able to use individual office release for individual online doors.

Note 2: If the system parameter is deactivated at a later time, previously set up individual office release permissions for online doors remain in place once they have been configured. However, you will not be able to grant any new individual permissions.

Note 3: AoC does not support individual office release permissions.

Mobile Access (access via smartphone)

150 Mobile Access (access via smartphone):

Indicates whether Mobile Access mode is activated.

Value range: 0–2

0 = smart phones cannot be used.

1 = access using smart phones is possible.

2 = Access via Digital Key (voucher) is possible.

Note: System parameter 150 can only be activated in ID card administration level 2 or 3 (system parameter System 120) or if the value of system parameter System 74 "ID card type master ID card" is not set to 3.

151 Infinilink validity period:

Indicates the number of days for which an Infinilink is valid on a smart phone.

Value range: 1-999; default value: 200

152 Infinilink refresh interval:

Indicates the Infinilink refresh interval as a percentage of the Infinilink validity period. Example: If the validity (parameter 151) is set to 7 days and the interval is set to 50%, the Infinilink data will be refreshed after 3.5 days.

Value range: 20-80; default value: 80

153 Virtual ID card number range:

Specifies a number range for creating Mobile Access ID card numbers. If a range is defined, the first free number from this range will be suggested when creating a new virtual ID card of the type Mobile Access.

Value range: numeric; default value: none

154 Infinilink update time:

Defines the time of day at which the expired Infinilink data is automatically updated.

Value range: 00:00–23:59, time in format hh:mm; default value: 01:30

155 Histories via smartphone:

Specifies whether the individual postings and the component statuses are read via smartphone. History logging must additionally be activated in the evol class.

Value range: 0–1

0 = History data cannot be read via smartphone.

1 = History data can be read via smartphone.

156 Automatic permission for Mobile Access Connector:

Indicates whether all persons should be automatically permitted by the Mobile Access Connector.

Value range: 0–1

0 = Persons are not automatically permitted by the Mobile Access Connector.

1 = Persons are automatically permitted by the Mobile Access Connector.

Note: Reload LEGIC Mobile Access Connector manually after changing this parameter!

157 Weekly profile autom. permission for Mobile Access Connector:

Number of the weekly profile to be used for automatic permissions by the Mobile Access Connector.

OSS - Standard Offline

160 OSS functionality:

Specifies if the OSS functionality is activated in the system.

Value range: 0 or 1

0 = OSS functionality is not activated.

1 = OSS functionality is activated. A suitable licence is required for this option.

161 Validity period of permissions on OSS ID cards:

Indicates the validity period of the OSS ID card in days.

162 OSS and AoC IDs from external system:

Specifies whether the OSS and AoC IDs are defined by an external system via the MATRIX REST web service.

Value range: 0 or 1

0 = Functionality is not activated.

1 = The OSS and AoC IDs are defined by an external system via the REST web service.

Caution: If this function is used, the system parameter must be activated before commissioning and must not be deactivated again at a later time.

Time

Additional functions

1 Real-time calculation in terminals:

Determines if a real-time calculation is performed in the terminals.

Value range: 0 or 1; default value: 0

0 = no: no real-time calculation.

1 = yes: the terminals perform real-time calculation.

Note: Daily programs and shifts continuing past the midnight date limit cannot be allocated correctly at the terminal.

2 Door opening in the Time component:

Determines if the door opening functionality can be used in the Time component.

Value range: 0 or 1; default value: 0

0 = no: door opening cannot be used.

1 = yes: door opening can be used.

10 E-Mail texts in person administration:

Determines if e-mail texts can be used for display on terminals.

Value range: 0 or 1; default value: 0

0 = no, e-mail texts cannot be used.

1 = yes, e-mail texts can be used.

Master data

40 Variable work schedules:

Indicates whether variable work schedules with more or fewer than 7 days are supported in the system.

Value range: 0 or 1; default value: 0

0 = no, variable work schedules cannot be created.

1 = yes, variable work schedules can be created.

41 Maximum number of time accounts:

Indicates the number of time accounts that can be created and managed in the system.

Value range: 0 to 999; default value: 100

Note: If time accounts have already been created, the value may only be reduced to the number of existing time accounts only.

42 Rounding plans:

Indicates whether rounding plans can be used.

Value range: 0 or 1; default value: 0

0 = no, rounding plans cannot be created.

1 = yes, rounding plans can be created.

43 Personal specifications mode:

Indicates the mode used to enter personal specifications.

Value range: 0 to 2

0 = not active

1 = One-week cycle

2 = Two-week cycle

44 Automatic holiday entitlement calculation:

Indicates whether holiday entitlement is calculated automatically.

Value range: 0 or 1

0 = Automatic calculation of holiday entitlement is not activated.

1 = Automatic calculation of holiday entitlement is activated. Activation means that the dialogs relevant to holiday rules are also available and a selection field for holiday rules is added to the holiday accounts tab.

Data transfer to payroll program**60 Data transfer:**

Indicates if the functions for data transfer are activated and data transfer to payroll programs can be provided.

Value range: 0 or 1; default value: 0

0 = no, data transfer is not activated.

1 = yes: data transfer is activated.

Yearly overview

Determines the colours and characters for displaying different days in year overviews.

70 Colour for attendance:

Specifies the colour for days on which a person was present.

Value range: Colour selection.

71 Colour for absence without excuse:

Specifies the colour for days on which a person was absent without excuse. Absence without excuse applies to days on which target hours are specified, but the person has no absence and no presence.

Value range: Colour selection.

72 Colour for invalid range:

Specifies the colour for days which are not calculated. These are days before the person joined the company and days in the future.

Value range: Colour selection.

73 Colour for absence without excuse:

Specifies the colour for days which are not calculated. These are days before the person joined the company and days in the future.

Value range: Colour selection.

75 Indicator for presence:

Specifies the character for days on which a person was present.

Value range: one character.

76 Indicator for absence without excuse:

Specifies the indicator for days on which a person was absent without excuse. Absence without excuse applies to days on which target hours are specified, but the person has no absence and no presence.

Value range: one character.

77 Indicator for invalid range:

Specifies the character for days which are not calculated. These are days before the person joined the company and days in the future.

Value range: one character.

78 Indicator for presence:

Indicator for days in the yearly overview that are not yet calculated. Days in the future are not taken into account by the allocation, with the exception of future absence times.

Value range: one character.

79 "Without target time" colour:

Specifies the colour for days without target times. Days without target time are present when a daily program without target time is used. Does not apply to bank holidays.

Value range: Colour selection.

80 "Without target time" character:

Character for days without target time. Days without target time are present when a daily program without target time is used. Does not apply to bank holidays.

81 Indicator for absence:

Indicator for days in the yearly overview on which the employee was absent. The indicator is displayed for all absence times if the user does not have a detail permission for displaying the absence reasons.

82 Colour for absence:

Indicator for days in the yearly overview on which the employee was absent.

Value range: Colour selection.

83 Year overview starting month:

The month to start the yearly overview.

Value range: 1-12, default value: 1

Shift administration

Settings for shift administration.

90 Shift administration:

Determines if shift administration is activated.

Value range: 0 or 1; default value: 0

0 = no, shift administration is not activated.

1= yes: shift administration is activated.

91 "Without shift allocation" colour:

Colour for days without shift allocation in the report of shift allocations.

92 Character for days without shift allocation:

Character for days without shift allocation in the report of shift allocations.

Value range: one character.

Attendance display**100 State refresh:**

Time interval for updating the attendance display, in seconds.

Value range: 1–9999 minutes; default value: 30 minutes

101 Attendance display:

Determines if attendance display is activated.

Value range: 0 or 1; default value: 0

0 = no, attendance display is not activated.

1= yes, attendance display is activated.

Mobile geolocation

110 Mobile geolocation:

For the geolocation of the user to be successful, the following criteria have to be met: geolocation is activated (GPS or fallback network access point); the device and browser support and allow the functionality (secure connection might be required); the user has approved the transmission of location data.

Value range: 0 or 1; default value: 0

0 = no, no geolocation is attempted when a booking is performed.

1 = yes, when a booking is performed via the mobile site, the system attempts to locate the user.

CAUTION: If this system parameter is activated, the system operator must comply with the legal requirements of his or her country with regard to the capture of geolocation data. By activating the parameter, the operator assumes responsibility for legal use.

111 Google API key:

The Google API key is required to enable and use the "Google Maps JavaScript API". Leaving this value empty will deactivate the representation in Google Maps, i.e. the coordinates will show as plain text instead of being shown in Google Maps.

Cost centre registration

120 Cost centre registration:

Specifies whether cost centre registration is activated in the system and in which procedure it is activated.

Value range: 0–2; default value: 0

0 = No cost centre registration

1 = Cost centre registration via bookings

2 = Cost centre registration via time allocation in Self Service

Paid breaks

130 Paid breaks:

Specifies whether paid breaks are activated in the system. If paid breaks are activated, a selection of break types is available when creating breaks. The selection for paid breaks is shown in the time daily programs.

Value range: 0 or 1; default value: 0

0 = no, paid breaks are not supported.

1 = yes, paid breaks are activated.

Devices

Device types

Note: Device types marked with a red stop symbol  are outdated and have been discontinued. Existing devices can be loaded, but no new devices can be created. It will not be possible to load data to these devices from the next version.



1 Use TP3 devices:

Determines whether TP3 devices are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, TP3 devices are not available.

1 = yes, the system supports TP3 devices.

2 Use TP4 devices:

Determines whether TP4 devices are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, TP4 devices are not available.

1 = yes, the system supports TP4 devices.

3 Use XS offline components:

Determines if XS/evolo offline components are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, XS/evolo offline components are not available.

1 = yes, XS/evolo offline components are supported by the system.

**4 Use DCW components:**

Determines if DCW components are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, DCW components are not available.

1 = yes, DCW components are supported by the system.

5 Use DP1 components:

Determines if DP1 components are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, DP1 components are not available.

1 = yes, DP1 components are supported by the system.

**6 Use TP1 readers:**

Determines if TP1 readers are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, TP1 readers are not available.

1 = yes, TP1 readers are supported by the system.

7 Use PHG components:

Determines if PHG components are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, PHG components are not available.

1 = yes, PHG components are supported by the system.

8 Use TMS devices:

Determines if TMS devices are used by the system and how they are supported.

Value range: 0 - 2; default value: 0

0 = deactivated, no TMS devices are supported.

1 = yes, TMS devices connected via TMS-Soft are supported by the system.

2 = yes, TMS devices are supported and managed by the system. The devices are connected via the terminal manager.

9 Use LED attendance displays:

Determines if LED attendance displays are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, LED attendance displays are not supported.

1 = yes, LED attendance displays are supported by the system.

10 Use site server:

Determines if and how site servers are supported by the system.

Value range: 0 or 1; default value: 0

0 = no, site servers are not supported.

1 = functions as a site server master (main instance)

2 = functions as a site server client.

11 Use TP4 web reader:

Determines if TP4 web readers are supported by the system.

Value range: 0 or 1; default value: 0

0 = no, TP4 web readers are not supported.

1 = yes, TP4 web readers are supported.

12 Use XS online components:

Determines if XS online components are supported by the system.

Value range: 0 or 1; default value: 0

0 = no, XS online components are not supported.

1 = yes, XS online components are supported.

15 Use XML terminals:

Indicates whether the system supports XML terminals.

Value range: 0 or 1; default value: 0

0 = No, XML terminals are not supported.

1 = Yes, XML terminals are supported.

16 Use dormakaba terminals:

Indicates whether the system supports dormakaba terminals.

Value range: 0 or 1; default value: 0

0 = No, dormakaba terminals are not supported.

1 = Yes, dormakaba terminals are supported.

17 Use evolo standalone components:

Specifies whether evolo standalone components are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, evolo standalone components are not supported.

1 = yes, evolo standalone components are supported.

18 Use evolo wireless components:

Determines if evolo wireless components are supported by the system.

Value range: 0 or 1; default value: 0

0 = no, evolo wireless components are not supported.

1 = yes, evolo wireless components are supported.

19 Use B-COMM-configured terminals:

Indicates whether components that are integrated via B-COMM are supported by the system.

Value range: 0 or 1; default value: 0

0 = no, B-COMM components are not supported.

1 = yes, B-COMM components are supported.

70 Use KCP compact/remote reader:

Indicates whether components that are integrated via the KCP protocol are supported by the system.

Value range: 0 or 1; default value: 1

0 = no, KCP components are not supported.

1 = yes, KCP components are supported.

71 Use OSS SO third-party component:

Determines if OSS SO third-party components are supported by the system.

Value range: 0 or 1; default value: 0

0 = No, third-party components are not supported.

1 = Yes, third-party components are supported. A suitable licence is required for this option and the OSS functionality must be enabled using the system parameter "Access 160".

72 Use Nedap ANPR camera:

Indicates whether the system supports Nedap ANPR cameras for automatic number plate recognition.

Value range: 0 or 1; default value: 1

0 = no, Nedap ANPR cameras are not supported.

1 = yes, Nedap ANPR cameras are supported.

Note: Additionally, system parameter System 120 "ID card administration level" must be set to 3 and System 72 "ID card number places" must be set to 20 in order to be able to use Nedap ANPR cameras in the system.

Device configuration**30 Default value for "Load IdentAssembler" for DP1 readers:**

Defines the value of the option "Load IdentAssembler" when creating new DP1 readers.

Value range: 0–2

0 = no

1 = yes

2 = yes and option is not visible. If this setting is used, the option is not displayed in the dialog but the IdentAssembler is always loaded in the reader.

User interface**50 Additional info fields:**

Determines whether the four additional fields such as Building, Level, Room and Service information are activated for each device.

Value range: 0 or 1; default value: 0

0 = no, the additional fields are not activated.

1 = yes, the additional fields are activated.

System**Basic settings****1 Multilingual functions:**

With this option the text management dialogs are enabled for multilingual use. The list of the languages must be set in the 'System languages' parameter.

Value range: 0 or 1; default value: 1

0 = No multilingual functions

1 = Multilingual functions are supported.

2 System languages:

List of the language identifiers and localisations separated by '|' for example 'de|en|fr|nl'. All language identifiers specified must be valid. No duplicate entries are permitted. The language identifier for the default language cannot be removed.

Options:

de = German

da = Danish

en = English

es = Spanish

fr = French

it = Italian

nl = Dutch

no = Norwegian

pl = Polish

pt = Portuguese

ru = Russian

sv = Swedish

zh_CN = simplified Chinese

zh_TW = traditional Chinese

3 Default language:

Language identifier or localisation of the default language, for example 'de' or 'en'. This must be one of the languages available in the 'System languages' parameter.

10 Client management:

Specifies the type of client management.

Value range: 1 or 2; default value: 2

1 = Clients with shared hardware

2 = Clients with non-shared hardware

Revision**20 Revision:**

Logging of master data editing in the system. The changes on the master data are logged if revision is active. The revision menu item is also enabled for viewing the revision entries.

Value range: 0 or 1; default value: 1

0 = no revision

1 = revision

21 Revision default period:

Specifies the number of previous days which are to be preselected in the search dialog as period for the revision.

Value range: 1 to 999; default value: 3

Background processes**33 XS radio component with emergency program:**

Determines if the radio components use the emergency program if the radio component has no radio connection. The emergency program replaces the actual configured weekly profile. The emergency weekly profile has 24 hour access.

Value range: 0 or 1; default value: 0

0 = default program is used

1 = emergency program is used

Messages

41 Messages default period:

Specifies the number of previous days which are to be preselected in the search dialog as period for messages.

Value range: 1 to 999; default value: 3

42 "Unknown ID card" analysis:

Specifies whether analysis is conducted if event "1000 – Unknown ID card" is reported by the terminal.

Analysis determines whether a preceding cause of the event is present or whether the ID card is unknown for dormakaba MATRIX. Preceding causes could be, for example: blocking reasons, deletion of a person or an expired validity period.

Value range: 0 or 1; default value: 1

0 = no analysis is performed.

1 = analysis is performed.

Number ranges

71 Employee number type

Defines if the employee number is saved using alphanumeric characters. The leading zeros are always removed if the ID card number is not saved with alphanumeric but numeric characters.

Value range: 0 to 1; default value: 1

0 = only numeric characters can be used.

1 = all alphanumeric characters can be used.

72 ID card number digits

The maximum number of digits an ID card number may have. In addition to the ID card ID string, the ID card version, the country code and the company code must also be taken into account.

Value range: 1 to 25; default value: 17

Note: If this value is subsequently changed, the ID card types used must be adapted. There is the risk that booking is no longer possible with ID cards which have already been created and they need to be created and allocated again while taking the changed length specification into account.

73 ID card type

Defines if the ID card number is saved in numeric, alphanumeric or hexadecimal format. The leading zeros are always removed if the ID card number is saved with numeric characters ones only.

Value range: 0–2; default value: 0

0 = numeric

1 = alphanumeric

2 = hexadecimal

Note: If this value is subsequently changed, created ID cards must be adapted. There is the risk that booking is no longer possible with ID cards which were already created and must be created and allocated again while taking the leading zeros into account.

74 ID card type for master ID card

Defines the ID card type for the master ID cards.

Value range: 0 to 2; default value: 0

0 = ID card

1 = ID card key

2 = Keypad input

3 = Mobile Access

Note: If this value is subsequently changed, the respective master ID cards must be assigned to the persons.

**75 ID card ID string **:

Defines if the ID card ID string is identical with the ID card number.

Value range: 0 or 1; default value: 0

0 = The ID string is equivalent to the ID card number, except in the case of combi ID cards.

1 = One ID string can be defined for each ID card, which is independent from the ID card number.

Note: If this value is subsequently changed from 1 to 0, you must create new ID cards and allocate them to the persons if the ID card number does not correspond to the ID card ID string.

76 Automatic generation of employee numbers:

Determines if the employee numbers should be generated automatically.

Value range: 0 or 1; default value: 0

0 = Off: the employee number must be entered manually.

1 = On: the employee number is generated automatically.

77 XS/evolo number range:

Defines the number range for XS/evolo offline components, AoC stations, PC readers and the associated doors. The digit indicates the number of possible characters.

Value range: 4 to 6; default value: 4

78 TP4/dormakaba number range:

Specifies the number range for TP4/dormakaba components and the associated doors, room zones and security areas.

Value range: 4 to 6; default value: 4

General options**101 Elapsed decimal minutes:**

Defines the display format for the elapsed time.

Value range: 0 or 1; default value: 0

0 = no, display elapsed times as normal minutes. Example: 123.30

1 = yes, display elapsed times as decimal minutes. Example: 123.50:

102 Session timeout:

The maximum period a user session is valid in minutes when there is no activity.

Value range: 1 to 1440; default value: 10

User interface**110 Number of search records:**

The maximum number of the search results displayed in a results block. The search dialogs only display a certain number of search results (result block) at one time, but with the option of scrolling through all search results.

Value range: 1 to 1000; default value: 100

111 Sorting of permission selection reports:

Specifies the sorting of the values for the permission selection reports.

Value range: 1 or 2; default value: 0

1 = Sorting according to number

2 = Sorting according to name

112 Large system selection fields:

Defines if selection fields and selection reports or selection dialogs are used in different dialogs.

Value range: 0 or 1; default value: Default value: 0

0=Use of selection fields or selection reports for smaller volumes of data.

1=Use of input fields and selection dialogs for larger volumes of data.

113 System monitor update:

Time interval for updating the system monitor, in seconds.

Value range: 10 to 9999; default value: 30 seconds

114 Number of system monitor entries

Number of records in the detail views of the system monitor (1-1000).

Value range: 1 to 1000; default value: 100

ID card administration:**120 ID card administration level** .

The type of the ID card administration. ID card administration levels 2 and 3 depend on the licence and can only be activated if system parameter 73 for the ID card type is set to a value other than 2.

Value range: 1 to 3; default value: 1

1 = one ID card per person

2 = several ID cards per person

3 = complex ID card administration

Note: The ID card administration level should be defined directly after the installation. Changes to this value at a later time have the following consequences:

Change from 1 to 2: Multiple ID cards can be allocated to one person.

Change from 1 to 3: The access permissions must be maintained in the ID card administration.

Change from 2 to 3: The access permissions must be maintained in the ID card administration.

Change from 3 to 2: The access permissions must be maintained in person administration.

Change from 3 to 1: This change is only possible if only one ID card is allocated to all persons.

Change from 2 to 1: This change is only possible if only one ID card is allocated to all persons.

Please note that changing to another ID card administration level, especially changing to ID Card Administration Level 3, takes time and the computer may not be switched off during this time.

121 Use ID card creation

Indicates whether the interface to the ID card creation system is used. The ID card creation system runs in the background. ID cards are created directly in dormakaba MATRIX ID card administration.

Value range: 0, 1, 2 or 3

0 = no

1 = ID card creation using Nexus/IDCARD (only existing systems)

Note: In order for the setting "1" to take effect, the system parameter 120 "ID card administration type" must be set to 3 (= complex ID card administration).

2 = ID card creation using MAGiCARD

3 = ID card creation using desktop reader

Note: For ID card creation using a database interface (e.g. using evolutionID), this system parameter is left set to 0 and the MS SQL server is obligatory. A combination of multiple ID card creation systems is not supported.

122 ID card creation timeout:

Time until automatic termination of ID card creation in seconds.

Value range: 0 - 600; default value: 180

0 = no timeout

122 Picture creation timeout:

Time until automatic termination of picture creation in seconds.

Value range: 0 - 600; default value: 180

0 = no timeout

PC reader

130 PC reader:

This option enables the use of a PC reader on the local PC for the automatic transfer of ID card numbers.

Value range: 0 or 1; default value: 1

0 = No, PC reader is not used

1 = Yes, PC reader is used

131 Port for PC reader:

The internal program address (Port) in the local PC for the transfer of PC reader ID card numbers.

Value range: 0 to 65535; default value: 18080

132 PC reader Address via HTTPS (SSL):

The internal program address (Port) in the local PC for the transfer of PC reader ID card numbers.

Value range: 0 to 65535; default value: 18080

External companies

140 External company administration:

Determines if the "External company administration" option, with external companies and external company employees, is activated.

Value range: 0 or 1; default value: 0

0 = no: external company administration is not activated.

1 = yes: external company administration is activated.

Daily automatic booking out

150 System booking type :

Defines what system bookings are performed.

Value range: 0, 1 or 2; default value: 0

0 = no automatic booking out,

1 = time recording system: Leave booking for all persons with arrive as last booking,

2 = access system: automatic booking out into the predefined room zone for all persons with the status 'present'. Multiple selection by ascending and comma-separated listing of the two system booking types (1, 2).

Note: Only use with systems with time recording, not for time management, since there is an automatic booking-out for time management for the daily reconciliation if required.

151 System booking start time:

Defines the time when the system bookings are carried out.

Value: [hh:mm]=time at which daily automatic booking out starts.

Value range: 00:00-24:00, default value: 23:00

152 System booking parameter:

Comma-separated report of parameter values for the selected system booking types.

Type 1: Booking type, terminal number, time offset (in seconds) for the last arrive booking.

Type 2: Number of the exit room zone; this has a door and reader with booking type 'Set access absent'.

In the case of multiple selection of system booking types, the parameters must be listed in the appropriate order.

Data rights

170 Number of data groups:

Option for managing and checking the data groups used.

Value range: 0 to 3; default value: 0

0 = Data groups are disabled.

1-3 = one, two or three data groups are used.

171 Data groups display options:

This option is used to control how objects (persons, ID cards, etc.) are handled for which the user has no access permissions.

Value range: 0, 1; default value: 0

0 = Objects are disabled/greyed out.

1 = Objects are hidden.

Basic search profiles:

This option allows you to activate/deactivate basic search profiles. Once basic search profiles are activated, they can be allocated to users in user administration to limit the access for such users. When basic search profiles are activated, the data group allocation for all persons are permanently deleted and the input fields for data groups in the employee record is hidden. Either data groups or basic search profiles can be used, but not both options at the same time.

Value range: 0 or 1; default value: 0

0 = basic search profiles are inactivated.

1 = basic search profiles are used.

Workflow administration**180 Time system workflow management:**

This option is used to enable the workflow functions for the time system.

Value range: 0, 1; default value: 0

0 = No, the workflow functions are disabled.

1 = Yes, the workflow functions are released.

181 Automatic approval period:

Specifies the period for the automatic approval in days.

Value range: 0–999; default value: 0

0 = inactive, automatic approval is disabled.

1 - 999 = number of calendar days before the next step is automatically approved.

182 Manual approval:

If the automatic approval is active, the last step is only automatically approved if there is at least one manual approval.

Value range: 0, 1; default value: 0

0 = inactive: manual approval is disabled.

1 = active: manual approval is activated.

183 Access system workflow management:

This option is used to enable the workflow functions for the access system.

Value range: 0, 1; default value: 0

0 = No, the workflow functions are disabled.

1 = Yes, the workflow functions are released.

Web options**190 Authentication method:**

This option is used to specify the login authentication method.

Value range: 0 - 2; default value: 0

0 = Form

1 = Kerberos

2 = request header Single Sign On

3 = Windows

Note: This parameter affects all clients.

191 Login form as fallback:

Specifies whether the login form should be used as a fallback if other authentication methods fail.

Value range: 0, 1; default value: 0

0 = No, the login form is not used; login is not possible if an error occurs.

1 = Yes, the login form is used if an error occurs.

Caution! This parameter affects all system clients.

192 Allow "Stay signed in":

Specifies whether the user can use automatic login when starting dormakaba MATRIX. User login information is saved in cookies in encrypted form. Cookies remain valid for 30 days. If a user logs in to dormakaba MATRIX from a different computer, the cookies become invalid and require the user to log in again.

Value range: 0, 1; default value: 0

0 = no, no login information is saved; users must log in every time.

1 = yes, login information can be saved. The **Stay signed in** checkbox is displayed in the dormakaba MATRIX login screen. Any user can activate the checkbox to allow their login information to be saved in the browser. They will then be automatically logged in when dormakaba MATRIX is started.

193 Active Directory authentication:

Specifies whether Windows Active Directory password checks are used for logins via the login form.

Value range: 0, 1 or 2; default value: 0

0 = No, Windows Active Directory password checks are not possible.

1 = Yes, Windows Active Directory password checks are used for logins via the login form. The user can login using their Windows login data.

2 = As for 1, if logging in fails, an additional MATRIX password check is performed.

Note: If system parameter 190 does not have the value 0, but system parameter 191 has the value 0 at the same time, this parameter is deactivated.

Bans from premises**200 Use bans from premises:**

Specifies if bans from premises can be created in the system.

Value range: 0 or 1; default value: 0

0 = no, bans from premises cannot be created.

1 = yes, bans from premises can be created.

202 Search accuracy:

Degree of fuzziness for searching for entries in the list of blocked candidates.

Value range: 0–2

Value 0 = exact search. The spelling of the name must match exactly.

Value 1 = partial fuzzy search. Variants in spelling are allowed, e.g. accents over letters.

Value 2 = fuzzy search. Even transposed letters are allowed.

Reports**210 Use time-controlled reports:**

Specifies if time-controlled reports can be used in the system.

Value range: 0 or 1; default value: 0

0 = no; time-controlled reports are not used.

1 = yes; time-controlled reports are used.

211 Target directory for time-controlled reports:

Defines the user-specific sub-directory in which the time-controlled reports are stored.

Default value: ..\report\scheduledreports\

212 Use SQL-based reports:

The system parameter determines whether the SQL-based report selection is shown in the **New report definition** dialog.

Value range: 0 or 1; default value: 0

0 = no; SQL-based reports are not used.

1 = yes; SQL-based reports are used.

213 Target directory for personal data:

Specifies the directory in which the export file for person-related data is stored.

Default value: ..\report\personalreports\

214 CSV export delimiter:

Default CSV export delimiter for fixed reports.

Permitted values: ;,,:- _ !\$%&/=?

Default value: ;

User administration**220 Restricted permission transfer:**

Defines how a user can transfer permissions for user roles.

Value range: 0 or 1; default value: 0

0 = inactive

1 = users can only transfer permissions they own to roles and can only transfer roles to users if they have all permissions for this role.

221 Dual control login:

Specifies whether dual control login can be configured for individual users.

Value range: 0 or 1; default value: 0

0 = inactive

1 = Users can be configured in such a way that they can only log in to MATRIX using the login details of a second selected user.

Alarm management**230 Alarm management:**

Determines if alarm management is activated. Alarm management is used to configure events which trigger an alarm.

Value range: 0 or 1; default value: 0

0 = inactive

1 = activated.

Help**240 Additional information:**

Adds an additional entry to the **Help** menu that allows to open additional information.

Value range: 0 or 1; default value: 0

0 = inactivated; default menu.

1 = activated. The entry **Additional information** is displayed in the **Help** menu. Parameter 241 is used to set the parameter.

241 Link to additional information:

Specifies the target for the **Additional information** menu item. You can specify an absolute URL (such as <http://www.dormakaba.com>) or a relative URL (as a sub-directory at <C:/dormakaba/MATRIX/main/webapps/matrix/additionalinfo>).

4.1.17 Data housekeeping limits

Use the data housekeeping limits to specify for how long mass data, such as messages, bookings and revision entries, are stored until they are automatically deleted from the system.

"Edit data housekeeping limit" dialog

The **Edit data housekeeping limit** dialog is used to specify the period specific data is stored in the system.

Note: Only the data types that are used in the system are displayed.

You can use the buttons in the toolbar to save or reject changes to the data housekeeping settings.

Settings and displays for the data types:

Days, months, reconciliations input fields:

Contain the period the data is stored for the various data types. Specify for how long the data should be stored in the system. If "Days" are specified, the data will be stored for the number of days entered. If "Months" are specified, the data will be stored for the number of months. If "Reconciliations" are specified, the data will be stored for the number of reconciliations entered.

Time of last cleanup display field:

Contains the time (date, time) when the last scheduled or unscheduled data cleanup was carried out.

Number of records deleted display field:

Contains the number of records that were deleted from the system during the last cleanup.

Note on reconciliations:

If the number of reconciliations is lower than the specified data housekeeping limit, the system will return the date of the oldest reconciliation as a cut-off date.

Run unscheduled cleanup now button:

Click the button to manually carry out an unscheduled cleanup. Regular cleanup is performed once a day.

Note: Deleted records cannot be restored.

Data housekeeping limits for system

Use this area to specify the system-wide and cross-module data housekeeping limits.

Edit Data housekeeping limit

Data housekeeping limits for system

Alarms	60 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0
Approvals/approval steps	60 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0
Blocked persons	60 Days	Time of last cleanup	07/03/2020 15:19:13	Number of records deleted	0
Documents	30 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0
Expired visitor reservations	60 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0
External employee bookings	60 Days	Time of last cleanup	07/03/2020 15:19:13	Number of records deleted	0
ID cards/History records	60 Days	Time of last cleanup	07/03/2020 15:19:13	Number of records deleted	0
Messages and events	60 Days	Time of last cleanup	07/03/2020 15:19:13	Number of records deleted	101
Persons who have left the company	60 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0
Revision entries	60 Days	Time of last cleanup	07/03/2020 15:19:13	Number of records deleted	21
System monitor details	60 Days	Time of last cleanup	07/03/2020 15:19:13	Number of records deleted	14
Terminal-based info centre messages	60 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0
Visitor	60 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0
Visitors/visits bookings	60 Days	Time of last cleanup	07/03/2020 15:19:14	Number of records deleted	0

You can specify the data housekeeping limit for the data types listed below.

The default data housekeeping limit setting is 60 days. Exception: The default value for data transfer to payroll programs is 180 days.

Expired visitor reservations:

Applies to reservations that have not been used since the specified number of days.

Alarms:

Applies to all alarms and events.

Persons who have left the company:

Applies to all persons marked as former employees.

ID cards/history records:

Applies to the allocation of ID cards to persons. An ID card history record is generated when the allocation of an ID card to a person is deleted.

Note: If ID card administration level 1 or 2 is set, ID cards that are no longer needed are also deleted with the ID card history records. At ID card level 3, visitor ID cards are not automatically deleted even if unallocated.

Visitor:

Applies to all visitors created in visitor administration.

Note: Visitors are not deleted after the data housekeeping limit has expired if they are still connected to a visit. An expired visitor is only deleted once the visit is deleted (at the latest after the data housekeeping limit has expired).

Visitors/visits bookings:

Applies to all bookings made by visitors and their visits.

External employee bookings:

Applies to all bookings made by external company employees.

Booking media (videos/images):

Applies to all images and videos from the video verification system.

System monitor details:

Applies to all messages and details of the system monitor, such as database backup and CSV import and export.

Approvals/approval steps:

Applies to the approvals and the approval steps from the workflow area.

Blocked persons:

Applies to blocked persons. This applies to both manually blocked persons with corresponding deletion identifier and persons who were not re-imported during a regular person import and were therefore automatically blocked.

Note: When the person master data is deleted, all existing bookings are deleted too.

Terminal-based info centre messages:

Applies to messages that are displayed in the info centre.

Messages and events:

Applies to all entries that can be displayed in the **Messages** dialog.

Revision entries:

Applies to all revision entries. These log any changes made to the system's data set.

Data housekeeping limits for access

Use this area to specify the data housekeeping limits for the Access module.

Data housekeeping limits for access				
Access reports access log	60 Days	Time of last cleanup	16/1/2020 14:37:46	Number of records deleted 0
Bookings persons access	60 Days	Time of last cleanup	16/1/2020 14:37:43	Number of records deleted 0
Expired special permissions	60 Days	Time of last cleanup	16/1/2020 14:37:48	Number of records deleted 0
Patrol logs	60 Days	Time of last cleanup		Number of records deleted

You can specify the data housekeeping limit for the data types listed below.

The default data housekeeping limit setting is 60 days.

Expired special permissions:

Applies to all assigned special permissions that have expired.

Bookings persons access:

Applies to all bookings made by persons in Access. These also include bookings not allocated to any person, e.g. in cases where **Booking without employee record** is set in the terminals.

Patrol logs:

Applies to the completed and implemented patrols.

Access reports access log:

Applies to log data recording incidents of access to certain access reports.

Data housekeeping limit – time

Use this area to specify the data housekeeping limits for the Time module.

Data housekeeping limit - time			
Data transfer to payroll programs	180 Days	Time of last cleanup	Number of records deleted
Time bookings	Months	Time of last cleanup	Number of records deleted
Absence times	Months	Time of last cleanup	Number of records deleted
Time daily data	Months	Time of last cleanup	Number of records deleted
Time weekly data	Reconciliations	Time of last cleanup	Number of records deleted
Time period data	Reconciliations	Time of last cleanup	Number of records deleted
Time monthly data	Reconciliations	Time of last cleanup	Number of records deleted
Time yearly data	Reconciliations	Time of last cleanup	Number of records deleted

You can specify the data housekeeping limit for the data types listed below.

No data housekeeping limits are set as default. Exception: The default value for data transfer to payroll programs is 180 days.

Data transfer to payroll programs:

Applies to data transferred to the payroll program.

Note: when specifying months:

If months are specified, the data will be stored for the number of months entered

Time bookings:

Applies to all bookings performed for time management/attendance recording. This also includes bookings made using corrections. The data storage period is entered as a number of months.

Absences:

Applies to all booked and manually entered absences. The data storage period is entered as a number of months.

Time daily data:

Applies to daily reconciliation data that is generated during daily reconciliations. The data storage period is entered as a number of months.

Note: when specifying reconciliations:

If reconciliations are specified, the data will be stored for the number of reconciliations entered.

Time weekly data:

Applies to daily reconciliation data generated during daily reconciliations.

Time period data:

Applies to period reconciliation data generated during period reconciliations.

Time monthly data:

Applies to monthly reconciliation data generated during monthly reconciliations.

Time yearly data:

Applies to yearly reconciliation data generated during yearly reconciliations.

Data housekeeping limit for devices

Use this area to specify the data housekeeping limits for the Devices module.

Data housekeeping limit for devices		
TMS history records	60 Days	Time of last cleanup Number of records deleted

You can specify the data housekeeping limit for the data types listed below.

The default data housekeeping limit setting is 60 days.

TMS history records:

Applies to the TMS history records.

4.1.18 System key

A system key with which other specific keys are encrypted can be used to improve security. This provides significantly better protection for the media-specific system keys in particular.

Note: If a system key is used, it must be manually adapted to existing site servers.

Note: If a separate system key is used, it must be stored securely. For instance, if dormakaba MATRIX must be reinstalled due to transferring to a new server, the system key from the old installation is required to put the system back into operation.

"Edit system key" dialog

Use the **Edit system key** dialog to create or change the system key.

The system key encrypts the device management keys used in the following dialogs:

- Devices:
 - evolo Programmer 1460: Password
 - Mobile Access Connector: API password
 - evolo wireless gateway 90 40: Password
 - TMS device configuration: Database password
- ID card types: All keys (e.g. read and write keys)
- Radio keys

Note: If a separate system key is used, this must be downloaded before being saved. Keys can only be re-encrypted and saved once this has been downloaded.

Once all checks have been passed, the new value will be set in the file repository of the system key when saved. All keys in the devices will be encrypted using the new system key.

You can use the buttons in the toolbar to save or reject the changes.

Use own system key checkbox:

Identifier indicating whether a separate system key is used.

- Activated: A separate system key is used. Activation cannot be revoked after the setting is saved.
- Not activated: No system key is used.

Default value: Not activated.

Reset system key area

Old system key input field:

Contains the old system key that is already saved.

The field is activated if a new system key has been created by being entered or generated and has not yet been saved. In this case the previously existing system key will no longer correspond to the default key.

The field remains inactive if this is the first time a new system key is being generated.

New system key input field:

Contains the new system key. The key can either be directly entered or generated.

Minimum key length: 32 hexadecimal characters.

Generate system key button:

Generates a new system key and enters the value legibly in the associated **New system key** input field.

Save system key button:

Downloads a text file containing the new system key. Keys can only be newly encrypted and saved once this has been downloaded.

Restore system key area

System key to restore input field:

Contains the old system key after restoration. When a key is entered in order to be restored and is then saved, it is only saved in the new repository in the file system. The device keys are not re-encrypted.

Note: After restoring the system keys, the MATRIX service must be restarted for the configured key to take effect.

4.1.19 Texts

The texts section is used to save names and short names for data types which can be referenced issued by the user, where they can be translated into the required language in multi-lingual systems.

Example: If a department is defined as "Einkauf" (system language: de), the name is entered as text in the "de" field in the respective table. If there are also English and Spanish users, you can enter the translated names in the "en" field (e.g. "purchasing department") and the "es" field (e.g. "compra").

The displayed language version depends on the browser language setting.

Further information can be found in the section "Working with Matrix" under the heading ► [Maintain multilingual systems](#).

"Selection texts" dialog

The **Selection Texts** dialog displays the texts created in the individual modules and dialogs. Each text record is represented for each module by a unique number and a name.

You can use the checkboxes to select one or more modules whose texts you want to display or edit.

When you create a new record within a dialog, such as a new bank holiday template in the **Bank holiday templates** dialog, the entries in the number, name and short name fields are added to the relevant table in the respective language.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Texts			
☐	Module ▲	Number	Name
☐	Access	1	Door daily times
☐	Access	2	Door weekly profiles
☐	Access	4	Access daily times
☐	Access	5	Access weekly profiles
☐	Access	6	Access profiles
☐	Access	7	Room zones
☐	Access	8	Door selection
☐	Access	9	Intruder detection system
☐	Access	10	Person groups locking plan
☐	Access	11	Locking plans

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Module column:

Contains the module to which the text table belongs.

Number column:

Contains the number for the text table. Each module manages its texts in its own number range.

Name column:

Contains the name for the text table.

"Edit texts" dialog

Use the **Edit Texts** dialog to edit the texts for names and short names.

You can change or enhance the texts for all language versions created in the system.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, or to print a record. Use the **Back to selection** button to return to the selection.

Edit Texts			
Number	1	Access	
Name	Door daily times		
Number	Language	Name	Short name
1	da	Alltid	Alltid
1	de	Immer	Immer
1	en	Always	Always
1	es	Siempre	Siempre
1	fr	Toujours	Tirs
1	it	Sempre	Sempre
1	nl	Altijd	Altijd
1	no	Alltid	Alltid
1	pl	Zawsze	Zawsze
1	pt	Sempre	Sempre
1	ru	Всегда	Всегда
1	sv	Alltid	Alltid

Number column:

Contains the unique number for the text.

Language column:

Contains the international abbreviation for the language.

Name column:

Contains the text for the name. Click in a field to enter a new text or to edit the existing text. After saving, the new text is displayed as the name in the relevant dialogs.

Short name column:

Contains the text of the short name. Click in a field to enter a new text or to edit the existing text. After saving, the new text is displayed as the short name in the relevant dialogs.

4.1.20 Organisation groups

The organisation groups include elements that generally describe a person's organisational allocations, such as nationality, or additional properties, such as the title of a person.

In most cases, the properties are not relevant for the access or time systems. They are rather for simplifying the grouping of employees. Organisation groups facilitate the formation of employee groups for evaluations or for the allocation of users. Various employee record field definitions form the link to the organisation groups.

"Selection organisation groups" dialog

The **Selection Organisation groups** dialog displays all organisation groups created with their number, name and short name.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Organisation groups				
☐	Number	Name	Short name	Delete
☐	3	Form of address	Form of address	
☐	4	Sex	Sex	
☐	5	Language	Language	
☐	6	Marital status	Marstat	
☐	7	Nationality	Nation	
☐	8	Religion	Religion	
☐	9	Title	Title	
Number of records: 7				

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit organisation group" dialog

Use the **Edit Organisation group** dialog to create new organisation groups and edit existing organisation groups. Each organisation group requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Number	Name	Short name	Inactive		
1	German	de	☐		
2	English	en	☐		
3	French	fr	☐		

Number of records: 3

Table:

The records of the organisation group are displayed in the table. Use the buttons in the table to create or delete data. Click a record to edit it.

Number input field:

Contains the unique number for the record. When you create a new record, the number is automatically proposed. If required, you can overwrite it with a number of your own choice. Value range: 1-999999

Default value: Next free number

Name input field:

Contains the name for the record. When you enter a new name, you can enter any combination of figures and letters.

Value range: 250 character, alphanumeric.

Short name input field:

Contains the short name for the record. When you enter a new short name, you can enter any combination of figures and letters.

Value range: 250 character, alphanumeric.

Inactive checkboxes:

Indicate if an entry is active or inactive. An inactive entry remains as information in the employee record, but is no longer available for selection. It can no longer be used, but existing allocations are retained.

4.1.21 Access reports access log

All activations of the access reports are recorded in the access reports access log.

The log displays who has accessed each report, and when. In addition, the filter criteria used when activating the report are displayed.

Access to the following reports is logged:

- Person access report
- Reader events report

"Access reports access log" dialog

Use the **Access reports access log** dialog to view the access to the access reports with the respective filter criteria.

Use the search fields to enter the output period.

Access reports access log

from

12/04/2017

until

12/04/2017

Start search

Users	Date	Time	Query type	Filter criteria											
				from	until	ID card number	ID card label	Employee number	Last name	First name	Reader number	Reader name	Bookings	Messages	Bookings/messages filter
admin	12/4/17	2:50 PM	Person access report	12/4/17	12/4/17										
admin	12/4/17	2:50 PM	Person access report	11/1/17	11/30/17										
admin	12/4/17	2:50 PM	Person access report	10/1/17	10/31/17										
admin	12/4/17	2:51 PM	Person access report	12/4/17	12/4/17										
admin	12/4/17	2:52 PM	Person access report	11/1/17	11/30/17				Germans						
admin	12/4/17	2:52 PM	Person access report	11/1/17	11/30/17										Exit access,

Number of records: 6

Table:

The accesses during the specified period are displayed in the table with the filter criteria applied. The first columns contain information about who has accessed which report.

User column:

Contains the user who has accessed the report.

Date column:

Contains the date of access.

Time column:

Contains the time of access.

Query type column:

Contains the report that was accessed.

The other columns contain the filter criteria used to access the report. Non-specified filter criteria have not restricted the search.

Note: The possible filter criteria are based on the report accessed.

From column:

Contains the date from which the data has been searched for the report.

Until column:

Contains the date until which the data has been searched for the report.

ID card number column:

Contains the filter criterion for the ID cards.

ID card label column:

Contains the filter criterion for the ID card label.

Employee number column:

Contains the filter criterion for the employee number.

Last name column:

Contains the filter criterion for the last name.

First name column:

Contains the filter criterion for the first name.

Reader number column:

Contains the filter criterion for the reader number.

Reader name column:

Contains the filter criterion for the reader name.

Bookings column:

Specifies if the results were filtered by bookings.

Messages column:

Specifies if the results were filtered by messages.

Bookings/messages filter column:

Contains the filter for specific bookings or messages.

4.1.22 Fixed reports defaults

The Fixed reports defaults define the configuration for different fixed reports for the users.

The reports with fixed defaults include:

- Daily data, Group and Individual
- Monthly data, Group and Individual
- Monthly overview, Group and Individual

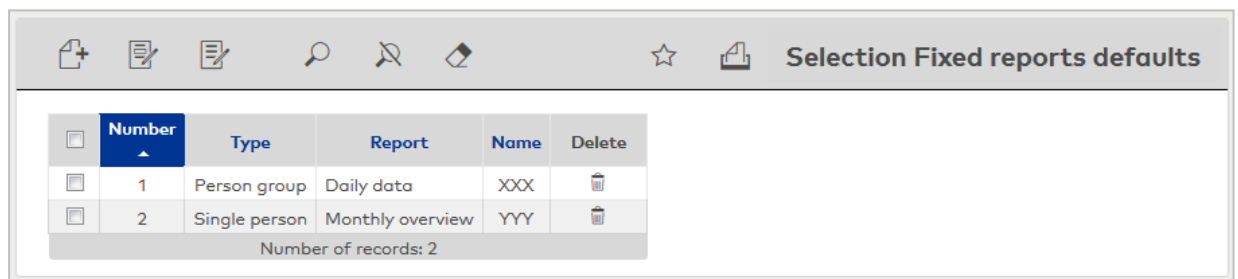
The defaults are allocated to the users. Users cannot change them.

If a user is only authorised to make changes, the allocation of a default for a report only allows the user to change configurations for the fixed report that he created himself, and which he had already created before the default was allocated. New configurations cannot be created for the report in question after allocation of the default if there is no authorisation to create new configurations.

"Selection Fixed reports defaults" dialog

The **Selection Fixed reports default** dialog displays all time system defaults created for the fixed reports.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Number	Type	Report	Name	Delete
1	Person group	Daily data	XXX	
2	Single person	Monthly overview	YYY	

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New fixed reports default" dialog

The **New fixed reports default** dialog displays the templates available for fixed reports. The edit dialog depends on the type selected.

Use the **Back to selection** button in the toolbar to go to the selection dialog.

New fixed lists default	
Type	Report
Single person	Daily data
Single person	Monthly data
Single person	Monthly overview
Person group	Daily data
Person group	Monthly data
Person group	Monthly overview
Person group	Yearly overview
Person group	Absence statistics
Person group	Period overview
Person group	Daily overview
Person group	Holiday data
Person group	Absence
Number of records: 12	

Type column:

Contains the type of templates available for the fixed reports.

Report column:

Contains the name for the report.

"Edit Fixed reports defaults" dialog

Use the **Edit Fixed reports defaults** dialog to create new defaults for fixed reports and edit existing defaults.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, or to create, copy or delete new records. Use the **Back to selection** button to return to the selection dialog.

Edit Fixed reports default			
Number	3	Type	Single person
Name		Report	Daily data

Type display/selection field:

Contains the report type.

Note: The type can be changed when copying a report.

Report display:

Contains the report type that determines the layout and possible columns.

The layout of the dialog depends on the report properties dictated by the report type.

Absence times

Configuration for individual and group reports:

- Absence times

The screenshot displays a configuration window for a report. It features two main panels: 'Available columns' on the left and 'Allocated columns' on the right. The 'Available columns' panel lists: 'Absence time number', 'Cost centre', 'Number of days for previous absence times', and 'Work schedule'. The 'Allocated columns' panel lists: 'Name', 'First name', 'Department', 'Employee number', 'ID card number', 'From', 'To', 'Absence', 'Number of days', and 'Time credit'. Between the panels are four selection buttons: '>', '>>', '<', and '<<'. To the right of the 'Allocated columns' panel are four arrow buttons: '^', '^', 'v', and 'v'. Below the panels are three checkboxes: 'Total line' (checked), 'Landscape' (checked), and 'CSV export delimiter' (unchecked).

Selection report **columns**:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use in the absences report can be selected.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

Yearly overview

Configuration for the Groups yearly overview.

The configuration consists of the tabs:

- General: Contains the columns for the monthly overview.
- Groupings: Contains groups for the totals.
- Absence type allocation: Contains the allocation of the absence types to the groupings.

"General" tab

This tab is used to define the accounts and therefore the columns for display in the yearly overview.

The screenshot shows a user interface for selecting report columns. It consists of two main panels: 'Available columns' on the left and 'Allocated columns' on the right. Between them are navigation buttons: a single arrow, a double right arrow, a single left arrow, and a double left arrow. The 'Available columns' panel has a search bar and a list of columns including various 'Additional holiday' types and 'Balance'. Below this list are four checkboxes: 'Use short name', 'Total line', 'Landscape', and 'CSV export delimiter'. The 'Allocated columns' panel also has a search bar and currently contains 'Last name', 'First name', and 'Employee number'. To the right of this panel are five vertical navigation buttons: up, double up, down, double down, and a bottom-most button.

Selection report **columns**:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use in the yearly overview report can be selected.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

"Groupings" tab:

The groups of absence types for generating totals are defined on this tab. The individual absences are selected on the **Absence type allocation** tab.

The screenshot shows a table interface for defining groups. The table has four columns: 'Number', 'Name', 'Short name', and an empty column. The first row contains the value '1' in the 'Number' column and 'Holiday' in the 'Name' column. To the right of the 'Short name' column are two icons: a pencil (edit) and a trash can (delete). To the right of the table is a blue button labeled 'New entry'.

Groups table:

The groups are created in the table.

"Absence type allocation" tab:

On this tab, the absence types are allocated to the groupings.

Holiday		
Name ▲		
2001 - Holiday		

New entry

Groupings table:

Each grouping is assigned a table for allocating the absences. All absence types created in the system are available for selection.

Monthly overview

Configuration for the individual and group reports with the monthly overview.

The configuration consists of the tabs:

- **General:** contains the columns for the monthly overview.
- **Monthly data:** contains the columns for the monthly data.
- **Time accounts:** contains the time accounts that are displayed.
- **Reconciliation presentation:** contains the allocations of the time accounts from the reconciliations to the columns for the display.

"General" tab

This tab is used to define the accounts and therefore the columns for display in the monthly overview.

Available columns

- 1 - WT 25%
- 2 - WT 50%
- 3 - WT 100%
- Absence times
- Account calculation profile
- Account comparison profile
- Additional holiday
- Additional holiday - previous year
- Additional holiday 2
- Additional holiday 2 - next year

Allocated columns

- Date
- Weekday
- From
- To
- Absence
- Target time
- Actual time
- Daily balance
- Balance

☐ Use short name
 ☐ Landscape
 ☐ Show absence times with data range
 ☐ CSV export delimiter

Selection report columns:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use can be activated.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

"Monthly data" tab

This tab is used to define the employee record accounts and time accounts and therefore the columns for display of the line with the monthly data in the monthly overview.

The screenshot shows the 'Monthly data' tab interface. It consists of two main panels: 'Available columns' on the left and 'Allocated columns' on the right. The 'Available columns' panel has a search bar and a list of items including 'Additional holiday - previous year', 'Additional holiday 2', 'Additional holiday 2 - next year', 'Additional holiday 2 - previous year', 'Additional holiday 3', 'Additional holiday 3 - next year', 'Additional holiday 3 - previous year', 'Additional holiday next year', 'Attendance' (which is highlighted in blue), and 'Bank holiday hours'. The 'Allocated columns' panel also has a search bar and a list of items: 'Month', 'Target time', 'Actual time', 'Absence times', and 'Balance previous day'. Between the two panels are four blue buttons with white arrows: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. To the right of the 'Allocated columns' panel are four blue buttons with white arrows: a single up arrow, a double up arrow, a single down arrow, and a double down arrow.

Selection report columns:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use can be activated.

"Time accounts" tab

This tab is used to select the accounts which are displayed together in the time accounts column.

Note: Each account is displayed in a separate line, provided the account contains a value that does not equal 0.

The screenshot shows the 'Time accounts' tab interface. It consists of two main panels: 'Available columns' on the left and 'Allocated columns' on the right. The 'Available columns' panel has a search bar and a list of items: '1 - WT 25%' and '2 - WT 50%'. The 'Allocated columns' panel also has a search bar and a list of items: '3 - WT 100%'. Between the two panels are four blue buttons with white arrows: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. To the right of the 'Allocated columns' panel are four blue buttons with white arrows: a single up arrow, a double up arrow, a single down arrow, and a double down arrow. At the bottom left of the 'Available columns' panel, there is a label 'Total line - monthly' followed by a small square icon.

Selection report columns:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use can be activated.

"Reconciliation presentation" tab

This tab is used to allocate the time accounts from the reconciliations to the columns in the monthly overview.

This allows, for example, the weekly actual time to be displayed in the "Actual time" column.

Note: The table lists all columns that are enabled for display in the monthly overview.

Column	Monthly reconciliation	Weekly reconciliation	Yearly reconciliation	Periodic reconciliation	
Date					
Weekday					
From					
To					
Absence					
Target time	Total target time				
Actual time	Total actual time				
Daily balance					
Balance					
Colour-coded account balance					

View ☐ Monthly reconciliation ☐ Weekly reconciliation ☐ Yearly reconciliation ☐ Periodic reconciliation

Column column:

Contains the column from the monthly overview.

Weekly reconciliation selection fields:

Contains the accounts from the weekly reconciliation.

Yearly reconciliation selection fields:

Contains the accounts from the yearly reconciliation.

Periodic reconciliation selection fields:

Contains the accounts from the periodic reconciliation.

Display:

These checkboxes are used to define which reconciliations are displayed in the monthly overview.

Note: Display is on the day on which the reconciliation was generated. The table shows a provisional monthly reconciliation for the monthly reconciliation, which contains the totals up to the previous day.

Monthly reconciliation checkbox:

Defines whether monthly reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Weekly reconciliation checkbox:

Defines whether weekly reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Yearly reconciliation checkbox:

Defines whether yearly reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Periodic reconciliation checkbox:

Defines whether periodic reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Period overview

Configuration for the Period overview report. The configuration consists of the tabs:

- General
- Grouping
- Absence type allocation
- Calculation

"General" tab

The accounts to be displayed are selected in this tab.

Selection report columns:

The columns to be output are assigned using the selection reports. All accounts with the types Elapsed time and Daily counter are available for selection.

Use short name checkbox:

Indicates if names or short names should be used for accounts.

Options:

- Not activated: Names are used.
- Activated: Short names are used.

Default value: Not activated

Total line - absent checkbox:

Indicates whether the total line for absent persons is displayed for the shift groups. For the past, the absence times are displayed according to the allocation; for the future, the planned absence times are displayed.

Options:

- Not activated: The total line is not displayed.
- Activated: The total line is displayed.

Default value: Activated.

"Groupings" tab:

The groupings for generating absence times totals are defined under this tab. Groupings are created in a table. Each grouping is assigned a unique number that is only unique for the respective configuration and a name in the respective language. The groupings form the basis for the selection reports on the Absence

times allocation tab.

Number ▲	Name	Short name			New entry
1	Holiday				

Number column:

Contains the unique number of the grouping for this configuration.

Name column:

Contains the name of the grouping.

Short name column:

Contains the short name of the grouping.

"Absence times allocation" tab:

On this tab, the absence types are allocated to the groupings. An absence type may be allocated to multiple groupings. There is a separate selection report for each grouping.

Holiday					
Name ▲					New entry
2001 - Holiday					

Name column:

Contains the allocated absence type.

"Calculation" tab:

The calculation rules for the totals are assigned to the selected accounts on this tab.

Selected columns	Calculation
Name	
First name	
Balance	Last value ▼
Actual time	Total of all days ▼
Target time	Total of all days ▼
Daily balance	Total of all days ▼

Selected columns column:

Contains the column for the report with the name.

Calculation column:

Contains the calculation rule for generating the total.

Options:

- Last value: Value from the last daily reconciliation of the time range.
- Total of all days: All days are added.
- Total from last reconciliation: All days are added from the last reconciliation.

Daily and monthly data

Configuration for individual and group reports:

- Daily data
- Monthly data

Selection report **columns**:

Various columns can be allocated to the report using the selection report. All employee records and time accounts available for the respective report can be selected.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

4.1.23 E-mail configuration

E-mail configuration contains the e-mail server that sends the e-mails to the addressees as well as the corresponding e-mail templates.

Specifying the SMTP server usually suffices if this is used as the default port and does not request authentication.

Some e-mail servers require further parameters, which you can set as additional parameters.

If necessary, you can store a sender for the e-mails sent.

Use the **E-mail server** menu item to define the e-mail server.

Use the **E-mail templates** menu item to manage your templates for the e-mails.

The **E-mail recipient group** menu item is used to manage recipient groups to whom e-mails are sent when events occur in time management.

4.1.23.1 E-mail server

E-mails are sent to their recipients via the e-mail server. E-mails are generated from e-mail templates.

Note: You need to enter an e-mail address for the users concerned to send an e-mail.

"Edit e-mail server" dialog

Use the **Edit E-mail server** dialog to configure access to your e-mail server and the conditions for sending e-mails.

You can use the buttons in the toolbar to save or reject the changes.

Edit E-mail server

Server settings

active ☐

SMTP server

Port

User name

Password

Security Unencrypted ▼

Sender

Misconduct

Number of repetitions

Interval Minutes

Base URL for e-mail links

Base URL

E-mail to text message gateway

active ☐

E-mail to text message gateway

Test

E-mail address Send test e-mail

Server settings

Specifying the SMTP server usually suffices if this is used as the default port and does not request authentication.

Some e-mail servers also require further parameters.

active checkbox:

Indicates if sending of e-mails is authorised.

SMTP server input field:

Contains the address of the SMTP server.

Input format: A-Z, a-z and dots. Maximum 255 characters.

Port input field:

Contains the port of the SMTP server.

Value range: 1–65535

User name input field:

Contains the user name for authentication if this is requested by the e-mail server. Maximum 255 characters.

Password input field:

Contains the password for the user name. Maximum 255 characters.

SSL checkbox:

Indicates if SSL encryption is used.

Sender input field:

Contains the e-mail address of the sender.

Misconduct

Allows configuration of the number and interval of repetitions, if an error occurred during sending.

Number of repetitions input field:

Specifies the number of repeated attempts by the server to send the e-mail.

Interval input field:

Specifies the time in minutes after which a new attempt is to be made to send the e-mail.

Base URL for e-mail links

Enables a login link to be configured that is inserted into all e-mails. If a URL is entered, a **Login** button will be shown in the e-mails. The base URL is also used for "Forgotten password" functions in the MATRIX login dialog.

Base URL input field:

Specifies the URL for automatically generated links in e-mails.

E-mail to text message gateway

This section contains the activation for sending e-mails to a text message gateway.

Note: An active SMTP server must be present to allow e-mails to be sent to a text message gateway. The fields in this section are therefore only activated if the SMTP server is activated.

active checkbox:

Indicates if sending of e-mails is activated.

Default value: Not activated.

E-mail to text message gateway input field:

Contains the details of the text message gateway.

Test

After saving the configuration, you can send a test e-mail.

E-mail address input field:

Contains the e-mail address of the recipient.

Send test e-mail button:

Click this button to send a test e-mail.

4.1.23.2 E-mail templates

E-mail templates are used if information from the MATRIX system is to be sent by e-mail.

Note: You must enter an e-mail address for the users concerned to send an e-mail successfully.

The e-mail templates are pre-installed and permanently allocated to the different actions and therefore the intended purpose. You can change their content, but you cannot delete them or create new e-mail templates.

The text is converted into HTML format using the MATRIX standard template. The HTML code can be individually adapted.

Standard format of e-mails generated by MATRIX:



Note: The **To MATRIX login** button is only shown if a base URL is given for MATRIX in the e-mail server settings.

"Selection e-mail templates" dialog

The **Selection E-mail templates** dialog displays all e-mail templates created for the system.

Note: As the e-mail templates are permanently allocated to the workflow actions, no e-mail templates can be created or deleted.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection E-mail templates				
☐	Number ▲	Name	Short name	Affiliation
☐	1	Approval requested	Request	Time workflow
☐	2	Workflow information	Information	Time workflow
☐	3	Request approved	Approval	Time workflow
☐	4	Request denied	Denial	Time workflow
☐	5	Approval requested	Request	Access workflow
☐	6	Workflow information	Information	Access workflow
☐	7	Request/partial request approved	Approval	Access workflow
☐	8	Request/partial request denied	Denial	Access workflow
☐	9	Information on cancelling a workflow	Cancellation information	Time workflow
☐	10	Information on cancelling a workflow	Cancellation information	Access workflow
☐	11	Substitute requested	Request	Time workflow
☐	12	Substitute information	Information	Time workflow
☐	100	Information on alarm/error	Alarm information	Terminal event alarm
☐	101	Short information on alarm/error	Alarm information (short)	Terminal event alarm
☐	102	Information on alarm/error	Alarm information	Alarm for ban from premises
☐	103	Short information on alarm/error	Alarm information (short)	Alarm for ban from premises
☐	104	Information on alarm/error	Alarm information	Person event alarm
☐	105	Short information on alarm/error	Alarm information (short)	Person event alarm
☐	200	Time-controlled list	List	Time-controlled report
Number of records: 19				

Affiliation column:

Contains the module in which the e-mail template is used.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit e-mail template" dialog

The **Edit e-mail template** dialog can be used to edit existing e-mail templates. Users can specify their own formats in HTML mode.

Note: As the e-mail templates are permanently allocated to the workflow actions, e-mail templates cannot be created or deleted.

Dialog header:

Affiliation display field:

Contains the module in which the e-mail template is used.

Simplified mode radio button:

In this mode, users can read and edit the text of an e-mail template as plain text.

HTML mode radio button:

In this mode, users can read and edit the text of an e-mail template in HTML code. Users can specify their own formats or save individual footers, for example, by editing the HTML code.

Note: No warning or query is issued when code is replaced.

Show preview button (only in HTML mode):

Shows a preview of the e-mail text in HTML mode.

Replace with HTML example button (only in HTML mode):

Resets the content of the text field to the MATRIX standard setting.

Dialog content:

Subject input field:

Contains the text for the subject.

Text input field:

Contains the text for the e-mail. The view depends on the selected format.

Send ICS calendar file in case of absence entries checkbox:

This option is only available for the "Request approved" e-mail template. It enables the applicant to transfer an absence (e.g. holiday) into their personal calendar (e.g. Outlook).

Options:

- Activated: When a workflow is completed, a calendar file named Matrix.ics containing the absence data is generated and sent to the application along with the workflow confirmation e-mail.
- Not activated: Data exchange is not possible.

Default value: Not activated.

4.1.23.3 E-mail recipient groups

E-mail recipient groups can be used to collect members of organisational units or users into groups that receive an e-mail when certain events occur in time management.

Additionally, individual persons and persons who initiated an event can be specified as e-mail recipients.

Note: You need to enter an e-mail address for the users concerned to send an e-mail.

"Selection E-mail recipient group" dialog

The **Selection E-mail recipient group** dialog displays all e-mail recipient groups created for the system.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Number	Name	Short name	Delete record
1	Administration	A	

Number of records: 1

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit E-mail recipient group" dialog

The **Edit E-mail recipient group** dialog is used to create and edit e-mail recipient groups. Each e-mail recipient group requires a unique number. It is recommended that you specify a name and a short name.

Use the buttons in the toolbar to navigate between records, print a record and save or discard changes to the record. Use the **Back to selection** button to return to the selection dialog.

Number: 1

Name: Administration

Short name: A

Initiator: ☒

From organisational unit: Direct superior

E-mail address:

User:

Initiator checkbox:

Identifier indicating whether the person who initiated the e-mail dispatch also receives an e-mail (if their e-mail address is known). This is the case, for instance, if a leave booking has been forgotten or if the status of a colour-coded account changes.

Options:

- Activated: The initiator receives an e-mail.
- Not activated: The initiator does not receive e-mail.

Default value: Activated.

From organisational unit multiple selection:

Select persons from the organisational unit who will receive an e-mail.

Options:

- Blank
- Direct superior

- Substitute for superior
- Superior of the created level
- Substitute for superior of the created level

Default value: Blank

E-mail address multiple entry field:

Enter further e-mail addresses.

User multiple selection:

Select users who receive an e-mail.

Options:

- All users that are created in the system and have an e-mail address.

Send ICS calendar file in case of absence entries checkbox:

This option is only available for the "Request approved" e-mail template. It enables the applicant to transfer an absence (e.g. holiday) into their personal calendar (e.g. Outlook).

Options:

- Activated: When a workflow is completed, a calendar file named Matrix.ics containing the absence data is generated and sent to the application along with the workflow confirmation e-mail.
- Not activated: Data exchange is not possible.

Default value: Not activated.

4.1.24 Alarm administration

When alarm administration is activated, events can be defined which trigger an alarm when they occur. For each alarm event, necessary actions can be defined which can be output to users by means of action texts.

Note: This function is only available if the system parameter "Alarm management" is enabled.

Use the **Configurations** menu item to define the events which trigger an alarm.

Use the **Action texts** menu item to manage action texts.

Use the **Alarm weekly programs** menu item to manage the alarm weekly programs for alarm processing.

Use the **Alarm daily programs** menu item to manage the alarm daily programs for alarm processing.

The **Permanent relay actuations** menu item can be used to access the alarm management relays.

Use the **Floor plans** menu item to manage the floor plans for alarm processing.

4.1.24.1 Configurations

Select **Configurations** to define events that lead to an alarm. Necessary measures, such as sending an e-mail, can be specified for each event, and you can define how the alarm is to be acknowledged.

"Selection configurations" dialog

The **Selection Configurations** dialog displays all configurations for alarm administration created in the system.

The **Search function** can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Configurations					
☐	Number	Name	Short name	Active	Delete
☐	1	ID card not authorised		☒	
☐	2	Repeated incorrect PIN entry		☒	
☐	3	Roomzone change violation		☒	
Number of records: 3					

Active checkbox:

Indicates whether the configuration, and therefore the alarm, is active.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Configuration" dialog

Use the **Edit Configuration** dialog to create new configurations for the alarm administration and edit existing configurations. Each configuration requires a unique number. It is recommended that you specify a name and a short name.

Use the buttons in the toolbar to create a new configuration, delete or print a configuration and save or discard changes to records. Use the **Back to selection** button to return to the selection dialog.

Edit Configuration

Number
 Name
 Short name

Active ☒
 Type

▼

 Priority

▼

Trigger
 ▼

Filter
 ▼

☐ Trigger only if the event occurs ? times within ? minutes
 Number Minutes

Alarm weekly program
 Calendar ▼
 Alarm weekly program ▼ »

Alarm settings
☐ Alarm monitor displays
 ☐ Acknowledgement by user
 ☐ Acknowledgement text required
 Action text ▼

Actions for alarm start and end
 E-mail to address +
 E-mail to user ▼ +
 Text message to telephone number +
 Text message to user ▼ +
 Transfer to external system
 External system URL
 Authorisation

Relay circuits

Relay	allowed delay (min.)	Actuation period	New entry

Active checkbox:

Indicates if configuration is active.

Options:

- Activated: Configuration is active. The alarm is displayed in the alarm monitor if an alarm state occurs.
- Not active: This configuration is not active and no alarms are generated.

Default: Active.

Type selection field:

Contains the alarm type. The type is also used for grouping in the alarm monitor.

Options:

- 1 Alarm
- 2 Error

Priority selection field:

Contains the priority for the alarm. The priority controls the sorting in the alarm monitor.

Options:

- 1 very high
- 2 high
- 3 medium
- 4 low
- 5 very low

Initiator area

The triggering event is defined in this area.

Multiple events can be selected for each terminal event.

Filter area

In this area, the alarms can be limited to different filter criteria using the corresponding sub-filters.

Filter selection field:

Allows results to be limited to infrastructure elements.

Options:

- Terminals: The relevant terminals can be specified using multiple selection.
- Infrastructure nodes: The relevant infrastructure nodes can be selected using multiple selection.
- Room zones: The relevant room zones can be selected using multiple selection.
- Doors: The relevant doors can be selected using multiple selection.
- Readers: The relevant readers can be selected using multiple selection.
- Input contacts: All inputs which are configured in the device tree, and for which the message trigger type is not set to "never", can be selected using multiple selection.

Trigger only if the event occurs x times within x minutes checkbox:

Indicates that an alarm will only be triggered if the event occurs multiple times within the specified time.

Number input field:

Contains the number of times an event must occur before an alarm is generated.

Value range: 1–999

Minutes input field:

Contains the time range during which the defined number of events must occur before an alarm is generated.

Value range: 1–9999

Alarm weekly program

A temporal filter can be defined using the alarm weekly program. Only those events whose times of creation match the alarm weekly program cause alarms to be generated. In this way, an alarm weekly program determines when a corresponding alarm is generated for each individual day of a week. Calendar dependency can be controlled using substitute programs.

Calendar selection field:

Contains the calendar for the calendar dependencies.

Options:

- All calendars created in the system.

Alarm weekly program selection field:

Contains the alarm weekly program with the corresponding alarm daily programs.

Options:

- All alarm weekly programs created in the system.

Alarm settings

The alarm settings define how the alarm is to be acknowledged and whether special actions are required.

Alarm monitor displays checkbox:

Indicates whether the alarm is displayed in the alarm monitor.

Note: If the alarm is not displayed, the other settings in this area are inactive.

Options:

- Activated: The alarm is displayed in the alarm monitor.
- Not activated: The alarm is not displayed in the alarm monitor.

Default value: Activated.

Acknowledgement by counter event checkbox:

Indicates whether the alarm is automatically ended by counter events and then no longer displayed in the alarm monitor.

Note: The selection is only significant if there is a counter event for the event that triggers the alarm. A counter event cancels the original event.

Example: Event = door opened, counter event = door closed.

Options:

- Activated: Alarm is ended by the counter event.
- Not activated: Alarm is not ended by the counter event and has to be manually ended.

Default value: Activated.

Acknowledgement by user checkbox:

Indicates whether a user can acknowledge the alarm in the alarm monitor.

Options:

- Active: Users can acknowledge the alarm.
- Not activated: Users cannot reset the alarm in the alarm monitor. Alarms can only be reset by counter events.

Default value: Activated.

Acknowledgement permitted only if counter event occurs checkbox:

Indicates whether an alarm reset depends on the occurrence of a counter event.

Options:

- Activated: Reset permitted only if a counter event has already occurred.
- Not activated: You can reset the alarm regardless of whether a counter event has occurred or not.

Default value: Not activated.

Acknowledgement text required checkbox:

Indicates whether an acknowledgement text needs to be entered.

Note: If this option is selected, multiple acknowledgement is not possible.

Options:

- Activated: An acknowledgement text must be entered.
- Not activated: An acknowledgement text is not required.

Default value: Not activated.

Action text selection field:

Selection of an action text that is displayed in the alarm monitor when there is an alarm.

Options:

- All action texts created in the system.

Actions for alarm start and end

In addition to acknowledgement, other actions can be specified at the start and end of an alarm.

E-mail to address multiple input:

Enter an e-mail address. Multiple e-mail addresses can be entered if required.

E-mail to user multiple selection:

Selection of users to whom an e-mail is sent.

Options:

- All users created in the system.

Text message to telephone number multiple selection:

Specification of a telephone number for sending a text message.

Text message to user multiple selection:

Selection of users to whom a text message is sent.

Options:

- All users created in the system.

External system URL input field:

Contains the URL of the external system web service to which an alarm will be transmitted.

Authorisation input field:

Contains the token for authorisation in the external system web service. The token must be indefinitely valid or manually updated.

Relay circuits table

In addition to the defined actions, multiple relay actuations can be defined per alarm for the defined actions.

Note: Active permanent relay circuits can be viewed in the **Permanent relay actuations** dialog.

Relay column:

Contains the relay to be actuated.

Options:

- All relays for which the user has the corresponding data group rights.

allowed delay (min.) column:

Maximum time in minutes that may elapse after the triggering event is generated on the server before the relay actuation is executed.

Example: Due to an offline terminal state, terminal events are only received by the server when the terminal is online again. In this example, specifying an allowed delay prevents the risk of delayed terminal events executing undesirable relay connections (e.g. at night) although the actual event took place many hours beforehand.

If a relay actuations is rejected due to an event being too old, this will be recorded as a message in the system.

Value range:

- 0: Any delay, relay actuation is always triggered.
- 1–4320: Relay actuation is only triggered if the event occurs within the specified time.

Default value: 0.

Actuation period column:

Specified how long the relay is to be actuated for. This can either be entered as a fixed value in seconds or until it is deactivated by a counter event or reset.

Options:

- Specification of a fixed activation duration in seconds: The relay is activated for the specified time. A counter event or alarm acknowledgement does not lead to the relay being inactivated earlier. In this case, MATRIX will not send any relay off commands.

Note: If actuated by multiple alarms, the time-limited relay-on command will be issued once per alarm. The system does not check whether or not an actuation has already been executed.

- Deactivation by counter event or acknowledgement of alarm: The relay is switched on for a Start event and switched off for an End event.
If the alarm is acknowledged before the end event, this switches off the relay.
If there is no counter event to the start event, the relay is also activated.

Note: If actuated by multiple alarms, Relay-permanent-on and Relay-off commands are sent. If multiple alarms affect the same relay, the system counts how many permanent actuations are present for one relay due to the alarms. When the first actuation occurs, a relay permanent on command is sent. Further actuations do not lead to further actuation commands to the periphery.

In the case of a corresponding counter event or when the alarm is acknowledged, the internal counter is reduced accordingly. The Relay-off command will only be sent and the counter set back to 0 when the counter is at 1. In this case, the relay is therefore controlled as a "common relay".

Handling of error situations: Relay actuations are sent synchronously to the terminals. If a terminal is offline, the relay cannot be actuated. Failed relay actuations are output as system notifications with the identifier "Alarm management". Failed attempts are not repeated.

4.1.24.2 Action texts

Action texts can be combined with instructions and notes for alarm events in alarm management. The action texts can be stored as freely formatted texts.

"Selection action texts" dialog

The **Selection Action texts** dialog displays all action texts for alarm administration created in the system.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit action text" dialog

Use the **Edit Action text** dialog to create new action texts and edit existing action texts. Each action text requires a unique number; it is recommended that you specify a name and a short name.

Use the buttons in the toolbar to create a new action text, delete or print an action text and save or discard changes to records. Use the **Back to selection** button to return to the selection dialog.

Number: 1

Name: Doorbreak

Short name:

Data group 1:

Action text:

Action text text field:

Free text field for entering the text. The embedded toolbar allows custom formatting of the text.

4.1.25 Alarm weekly programs

Alarm weekly programs are based on the alarm daily programs and are allocated to the alarm definitions. A 7-day cycle applies to the alarm weekly program, corresponding to a calendar week.

"Selection alarm weekly programs" dialog

The **Selection Alarm weekly programs** dialog displays all alarm weekly programs created in the system.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Alarm weekly program "3 (Night)" has been deleted.

Number	Name	Short name	Delete
1	Day		
2	Night		

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit alarm weekly program" dialog

Use the **Edit Alarm weekly program** dialog to create new alarm weekly programs and edit existing alarm weekly programs. Each alarm weekly program requires a unique number; it is recommended that you specify a name and a short name.

An alarm weekly program is allocated to each calendar day in a week.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Day	Selection
Monday	1 - Day
Tuesday	1 - Day
Wednesday	1 - Day
Thursday	1 - Day
Friday	1 - Day
Saturday	3 - Weekend
Sunday	3 - Weekend

Number input field:

Contains the unique number of the alarm weekly program. When you create a new record, the number increases automatically by an increment of one. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Name input field:

Contains the name of the alarm weekly program. When you enter a new name, you can enter any combination of figures and letters. This field is language-dependent.

Short name input field:

Contains the short name of the alarm weekly program. When you enter a new short name, you can enter any combination of figures and letters. This field is language-dependent.

Selection fields **Alarm daily program for: Monday** to **Sunday** selection fields:

Contains the alarm daily program to be used for each day of the week. You must select an entry for each day.

Options:

- All alarm daily programs created in the system.

4.1.26 Alarm daily programs

Alarm daily programs are a fundamental component of alarm administration and are required for defining the alarm weekly programs.

Time intervals are used to control to the minute whether an alarm is displayed and processed.

"Selection alarm daily programs" dialog

The **Selection Alarm daily programs** dialog displays all alarm daily programs created for the system.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

4.1.26.1 Permanent relay actuations

In MATRIX, this dialog enables you to display and end all active permanent relay connections defined in alarm configuration.

Permanent relay actuations dialog

The **Permanent relay actuations** dialog shows all permanent relay connections from alarm management. If a single relay has multiple connections (common relay), they are displayed in a group.

Furthermore, this dialog can be used to end relay connections manually. However, it is only possible to end relay connections manually if the underlying alarm is acknowledged or if the alarm is not displayed in the alarm monitor.

Note: In this dialog, users are only shown relay connections for which they have suitable data group rights to the underlying alarms.

You can use the buttons in the toolbar to update the display or to delete the contents of the list.

Dauerhafte Relaisschaltungen			
Relais	Schaltzeitpunkt	Alarmkonfiguration	Aktionen
1 Terminal 1 - Ausgang 1	28.05.2018 14:58:27	Sabotage	 
▼1 Terminal 1 - Ausgang 2			 
1 Terminal 1 - Ausgang 2	28.05.2018 14:58:27	Sabotage	 
1 Terminal 1 - Ausgang 2	28.05.2018 14:58:59	Ausweis unbekannt	 

Stop (left) button:

Ends the relay connection and deletes the entry if the deactivation was successful. If deactivation was unsuccessful, a corresponding notification is output and the entry is retained.

Delete (right) button:

Ends the relay connection and deletes the entry even if the deactivation was unsuccessful. This can be useful if the device is no longer present.

4.1.26.2 Floor plans

Floor plans are used to visualise the location of an alarm or event in Alarm management. If an alarm occurs and the affected device or door is linked to a floor plan, the alarm source will be shown in the floor plan of the alarm monitor.

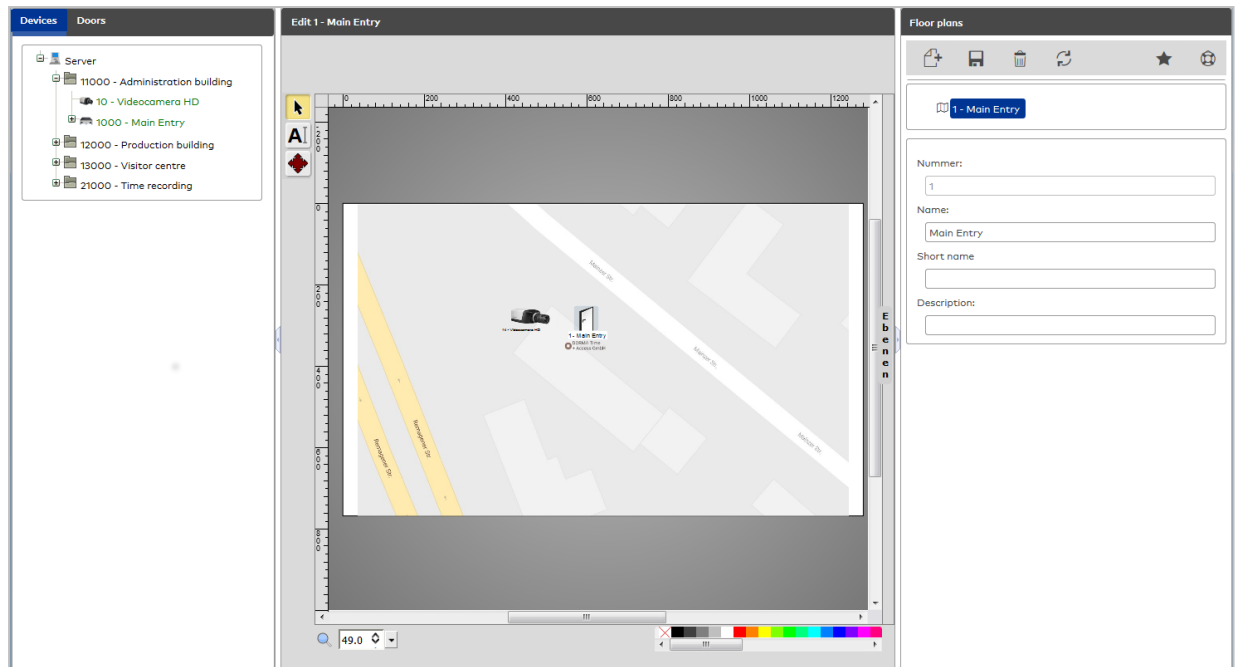
Video cameras can also be integrated into floor plans. Click the camera icon in the floor plan to display the live stream in the alarm monitor.

"Floor plans" dialog

Floor plans are created in the **Floor plans** dialog. Devices and doors can be positioned on maps stored in the system. Created floor plans are displayed in the alarm monitor.

The dialog is divided into three sections:

- Left: **Devices** window containing the available devices and doors in a tree structure.
- Centre: Plan editor window with the visual display of the selected floor plan.
- Right: **Floor plans** window with the created floor plans in a tree structure.



Devices window:

In this section, the available elements (devices and doors) that can be linked to the floor plan are displayed in a tree structure.

Drag the icons of the elements from the tree structure and drop them in the corresponding place in the plan editor.

Plan editor window

The selected floor plan is always displayed in the plan editor.

You can save a plan view in the system as an image or graphic (background graphic) to be used in floor plans. To do so, drag the appropriate graphic from Windows Explorer into the floor plan using drag & drop.

Possible file types:

- .JPEG
- .GIF
- .PNG
- .SVG

The maximum possible file size for a background image is 1.2 MB.

Tip on AutoCAD graphics: If the background graphic is provided in the AutoCAD format .DWG, convert this format into an SVG graphic (Scalable Vector Graphics) using a suitable tool or a Cloud converter.

You can also add labels to floor plans. The context menu offers further functions.

Floor plans window

The floor plans are managed in a tree structure in this section.

Use drag & drop to drag lower nodes directly to the displayed floor plan. This generates a dotted rectangle in the floor plan, the size and position of which can be modified and which has the same name as the dragged floor plan. This rectangle later serves as a navigation link to the corresponding child plan in the event of an alarm in the alarm monitor.

4.1.27 Report configurator

Use the **Report configurator** menu to define and manage the various reports that are available in the individual program groups. The reports are based on basic reports or search profile reports combined with search profiles and report layouts.

Report configurations based on basic reports define both the appearance of the report and the content of the report. The appearance is defined by the selected columns in the report and the content by the filter criteria. The basic report defines the data objects which can be used in the report as columns or filters. Multiple report configurations with different columns and filter criteria can be created on the basis of a basic report.

You can create report layouts and link them with search profiles to make reports. For this, you can combine a report layout with different search profiles for different reports. The report layout determines the appearance of a report. The search profile defines the content of the report. You can determine the search criteria available in the search fields using the search profile fields.

Report layouts, report definitions, search profiles and search profile fields need to belong to the same types to ensure that they are coordinated with one other and are based on the same data set. The type is defined in a selection dialog at the creation stage.

Use the **Report configurations** menu item to define the different reports.

Use the **Basic reports** menu item to access the installed basic reports and import new basic reports.

Use the **Search profile report layout** menu item to manage the report layouts for reports in combination with search profiles.

Use the **Print layouts** menu item to specify the report layout for printed output or output as a PDF file.

4.1.27.1 Report configurations

In the report configurations, you can manage the report configurations which are created on the basis of basic reports or from search profiles and report layouts.

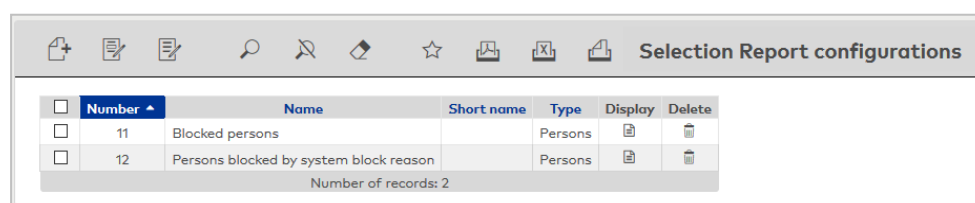
New reports are created using a selection dialog in which the type for the report is selected. Report definitions can only be created from search profiles and report layouts that belong to the same type.

The underlying properties of report configurations based on basic reports are specified by the predefined SQL/HQL statement.

"Selection Report configurations" dialog

The **Selection Report configurations** dialog displays all report configurations.

The **Search function** can be used to limit the selection using a single filter criterion or a group of filter criteria.



Number	Name	Short name	Type	Display	Delete
11	Blocked persons		Persons		
12	Persons blocked by system block reason		Persons		

Number of records: 2

Type column:

Contains the type to which the report configuration belongs.

Display column:

Click the column symbol to open the report in the **Display Report** dialog.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New report configuration" dialog

This dialog displays the available types for new report configurations. The type defines which basic reports or which report layouts and search profiles you can use for the report configurations.

Click an entry to create a new report configuration based on this type.

Use the **Back to selection** button in the toolbar to go to the selection dialog.

New report configuration				
Type	Name	Description	Memory type	System parameters
Search profile	Persons	To create reports in person administration.		
Search profile	External company employee	To create lists in external company administration.		
Search profile	Visitor	To create reports in visitor administration.		
Search profile	Movements	To create reports of movements.		
Basic report	101 - Access daily times		System	
Basic report	102 - Access weekly profiles		System	

Type column:

Contains the type for the report configuration.

Name column:

Contains the name for the available types.

Description column:

Contains a short description of the types.

Memory type column:

Indicates who created the report configuration.

Possible memory types:

- System: classes created during installation which cannot be changed or deleted. Changes to these classes are saved with the type "Overwritten".
- Overwritten: classes derived from changed classes with the type "System".
- User: new classes created by the user.

System parameters column:

Contains the system parameter, if the report configuration depends on a system parameter.

"Edit Report configuration" dialog

Use the **Edit Report configuration** dialog to create new report configurations and edit existing report configurations. Each report configuration requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, or to print the record. Use the **Back** button to return to the selection.

Type display field:

Contains the type on which the report configuration is based.

Possible types:

- Search profile: The report is based on a search profile and a report layout.
- Basic report: The report is based on a basic report.

Basic report display field (only for basic reports):

Contains the underlying basic report template.

Print layout selection field:

Contains the underlying print layout. If no print layout is selected, the system falls back on default layout values (A4, portrait/landscape format depending on total column width, filters, headers, footers). The headers and footers are assigned a fixed area. The area provided for the table does not change.

Created by display field (only for basic reports):

Contains the user who created the report.

Access right selection field:

Indicates which persons can access the report.

Options:

- Public: The report is global and can also be used by other users.
- Individually editable: The report can be executed by all users but can only be altered by its originator.
- Individually readable and editable: The report can only be viewed and altered by its originator.

Default value: Public

Program group:

The checkbox defines in which main menu the report will appear. Multiple selection is possible. The availability of program groups depends on the underlying basic report.

Access checkbox:

The report will appear in the "Access" main menu.

Time checkbox:

The report will appear in the "Time" main menu.

Devices checkbox:

The report will appear in the "Devices" main menu.

System checkbox:

The report will appear in the "System" main menu.

Self Service checkbox:

The report will appear in the "Self Service" main menu.

Reports main menu checkbox:

Indicates on which menu level the report appears.

Options:

- Active: The report is displayed in the "Reports" main menu.
- Not active: The report is displayed in the "Special reports" submenu.

Default value: Not active.

Note: The layout of the dialog depends on the report configuration type.

Report configuration for search profile reports

Report configurations of the type "Search profile" require a search profile and report layout.

Search profile report layout: 11 - Blocked persons

Search profile: 11 - Blocked persons

Print output sorting

Print output sort column	Print output sorting		
01-Last name	Ascending		
02-Department	Ascending		

Number of records: 2

Search profile report layout selection field:

Contains the search profile report layout to be used. The fields to be displayed in the report are defined in this layout.

Search profile selection field:

Contains the search profile of the report. This profile determines the search criteria for the selection of data to be displayed.

Print output sorting table:

All fields defined in the report layout can be used for sorting the records in the report.

Note: If lead objects are defined in the search profile report layout, these determine the sorting. The table for sorting the print output is not available.

Print output sort column column:

Contains the sorting sequence which specifies the sorting sequence and the field name.

Print output sorting column:

Specifies how the data is sorted.

Options:

- Ascending: The records are sorted in ascending order, starting with the smallest value.
- Descending: The records are sorted in descending order, starting with the greatest value.

Report configuration – basic reports

Report configurations with the type "basic report" are based on a basic report with the columns and filter criteria that are predefined here.

Columns and filters

Anzeige							Filter					
Position	Column name	Column header	visible	sortable	Total	Width (px)	visible	Filter value (default)	Mandatory field	adjustable		
1	Valid from	Valid from	☒	☒	☐	250	☒		☐	☒		
2	Valid until	Valid until	☒	☒	☐	250	☒		☐	☒		
3	Visited person (last name)	Visited person (last name)	☒	☒	☐	250	☒		☐	☒		
4	Visitor (last name)	Visitor (last name)	☒	☒	☐	250	☐		☐	☐		
5	Purpose	Purpose	☒	☒	☐	250	☐		☐	☐		

Number of records: 5

Lead objects

Position	Sorting	Subtotal	Page break (PDF)
No entries available.			

Number of records: 0

Show report

Columns and filters table:

This table defines the elements which are displayed in the report and which are used as filters. The possible elements are predefined by the underlying basic report.

Display:

These columns are displayed in the report.

Position:

Contains the position of the allocated field. The position corresponds to the column in the table.

Column name:

Contains the basic report data object. If the column is predefined by the basic report, the settings and editing rules from the basic report are used and can only be partially changed. If the column from the employee record configuration is used, all settings can be changed for the column.

Column header:

Contains the name to be displayed as a column title in the generated report. The name (column name) specified by the system is displayed as default. You can overwrite this name.

visible:

Defines whether the column is displayed in the report.

Options:

- Activated: The column is displayed in the report.
- Not activated: The column is not displayed in the report.

sortable:

Defines whether sorting is possible based on the column.

Options:

- Activated: The report can be sorted based on the column.
- Not activated: The column is not a sorting criterion.

Total:

Specifies whether a total should be output for the column.

Options:

- Activated: The total is output in an additional row at the end of the report.
- Not activated: No total line is output.

Width:

Specifies the width of the column in pixels; the column will be shown at least as wide as the heading.

Value range: 1–9999

Filter:

These columns determine how the search filter is displayed.

visible:

Defines whether the column is displayed as a search filter.

Options:

- Activated: The column is displayed as a search filter.
- Not activated: The column is not displayed as a search filter.

Filter value:

The possible filter values are predefined by the basic report. A default value can be entered automatically in this field. However, users from the list can change the value if the filter is visible and editable.

Mandatory field:

Indicates whether the filter value is a mandatory field and must be set for displaying the report.

Mandatory fields must also always be editable.

Options:

- Activated: The filter value is a mandatory field.
- Not activated: The filter value does not need to be specified.

adjustable:

Indicates whether the filter value can be changed.

Options:

- Activated: The filter value can be changed.
- Not activated: The filter value cannot be changed.

Lead objects table:

Columns can be defined as lead objects in the table. These are used to give the report extra structure using

sorting and totals. Lead objects are only shown in the first row of the report. The following rows remain empty until the lead object changes. The total lines are labelled with a Σ character.

Position:

Contains the column position from the **Columns and filters** table.

Sorting:

Contains the sorting criteria for the lead object.

Options:

- Ascending: The records are sorted in ascending order, starting with the smallest value.
- Descending: The records are sorted in descending order, starting with the greatest value.

Subtotal:

Indicates whether an additional total line should be output for the lead object.

Options:

- Activated: An additional total line is inserted into the report for the lead object.
- Not activated:

Page break (PDF):

Indicates whether a page break should be inserted for the lead object in a PDF printout.

Options:

- Activated: A page break will be inserted before the lead object in the PDF printout.
- Not activated: The report will be created consecutively without page breaks.

Show report button:

Shows a preview of the configured report.

4.1.27.2 Basic reports

In addition to the search profile report layouts, basic reports form the basis for the report configurator.

A basic report relates to a specific data object and provides the possible columns and filter criteria for the report definition. The basis for the basic report is the defined SQL statement for the database query. The columns for possible report definitions are determined by database query.

"Selection Basic reports" dialog

The **Selection Basic reports** dialog displays all basic reports created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Basic reports					
☐	Number ▲	Name	Short name	Memory type	Delete
☐	101	Access daily times	ADP	System	
☐	102	Access weekly profiles	AWP	System	
☐	103	Priority settings	PS	System	
☐	104	Access profiles	AP	System	
☐	105	Door daily times	DDP	System	
☐	106	Door weekly profiles	DWP	System	
☐	107	Security area daily programs	SADP	System	
☐	108	Security area weekly programs	SAWP	System	
☐	109	Counting groups	CGs	System	
☐	110	Rooms	R	System	

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Memory type column:

Indicates who created the basic report.

Possible memory types:

- System: basic reports created during installation which cannot be changed or deleted. Changes to these basic reports are saved under the type "Overwritten".
- Overwritten: basic reports derived from changed basic reports with the type "System".
- User: new basic reports created by the user.

"Edit Basic report" dialog

Use the **Edit Basic report** dialog to create new basic reports and edit existing basic reports. Each basic report requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, or to print the record. Use the **Back** button to return to the selection.

Test report button:

The basic report can be tested after import.

Import file input field:

Contains the name and path for the import file. Enter the complete path in the format C:\xy\name or click on the **Select** button to select a file.

Import button:

Starts the import of the file.

4.1.27.3 Search profile report layout

Search profile reports consist of a report layout and a search profile.

The report layout is used to specify how the data is displayed. The allocated search profile allows you to specify the report's data.

Unlike fixed reports, which are part of the system, search profile reports are included in the **Reports** or **Special reports** menu.

"Selection Search profile report layouts"

The **Selection Search profile report layouts** dialog displays all layouts for reports based on search profiles.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



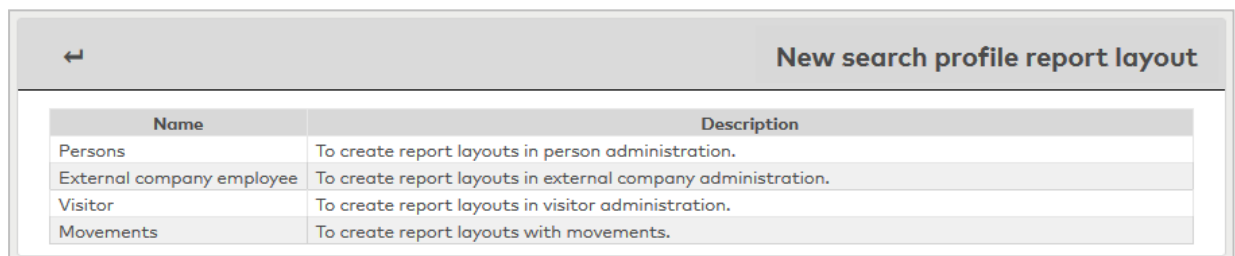
Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New search profile report layout" dialog

The **New search profile report layout** dialog displays the available types for new report layouts. The type defines which report layouts and which search profiles you can use for the report definition.

Click an entry to edit a new report layout on the basis of the type.

Use the **Back to selection** button in the toolbar to go to the selection dialog.



Name column:

Contains the name of the type of the report layout.

Description column:

Contains a short description of the type.

"Edit Search profile report layout" dialog

Use the **Edit Search profile report layout** dialog to create new report layouts based on search profile reports and edit existing report layouts. Each report layout requires a unique number. It is recommended that you specify a name and a short name.

Note: The report layout shown is an example of the basic structure of the dialog.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, or to print the record. Use the **Search** button to return to the selection.

Edit Search profile report layout

Number: Data group 1:

Type:

Name:

Short name:

Fields in the report

Position	Name	Lead object	Print width	Print column header		
1	Absence times	☐	100	Absence times		
2	Last name	☐	100	Last name		
3	First name	☐	100	First name		
4	Department	☐	100	Department		
5	ID card number	☐	100	ID card number		
6	ID card label	☐	100	ID card label		

[New entry](#)

Fields in the report table:

The table contains the fields that compose the layout for the reports.

Position column:

Contains the position of the allocated field. The position corresponds to the column in the table.

Last name column:

Contains the name of the allocated field in the table.

Lead object column:

Indicates if the allocated field is a lead object.

Lead objects are used for grouping and allow clear representation. They are located at the start of a row as their value is only output when they first appear. They are not shown in the subsequent rows of the group. This makes the output clearer and the transition from one lead object to another is easier to recognise.

Note: Once lead objects are defined, they determine the sorting. No other sorting is possible in the output.

Options:

- Activated: The column in the print output contains a lead object.
- Not activated: The column does not contain a lead object.

Default value: Not activated.

Print width column:

Contains the print width for the column in the report.

Print column header column:

Contains the header for the print column.

4.1.27.4 Print layouts

You can define print layouts for basic reports and search profile reports that control how reports are output as PDFs or printouts.

Assign a print layout to a report in report configuration.

"Selection Print layouts" dialog

Use the **Selection Print layouts** dialog to display all print layouts created for basic reports and search profile reports.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Print layout" dialog

Use the **Edit Print layout** dialog to create new print layouts for reports and edit existing print layouts. Each print layout requires a unique number; it is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, or to print the record. Use the **Back** button to return to the selection.

Number:

Name:

Short name:

Orientation: ☐ Portrait ☒ Landscape

Paper size:

Print filter: ☒

Print header: ☒

Print footer: ☒

Orientation radio buttons:

Select whether the report will be aligned in portrait or landscape format.

Paper size:

Contains the size of paper to be used.

Options:

- DIN A4
- DIN A3
- Letter

Print filter checkbox:

Indicates whether the filter values underlying a report should also be printed.

Default value: Not activated

Print header checkbox:

Indicates whether a header should also be printed. As default, the header contains the report names and cannot be altered.

Default value: Not activated

Print footer checkbox:

Indicates whether a footer should also be printed. As default, the footer contains the page number and cannot be altered.

Default value: Not activated

4.1.28 Search profile management

Search profiles are managed and configured in the **Search profile management** menu.

Search profiles allow advanced searches for persons to be performed using user-defined criteria and so extend the standard search functions of the selection dialogs.

Further information can be found in the section "Working with Matrix" under the heading ► [Work with search profiles and search profile reports](#).

Use the **Search profiles** menu item to manage the search profiles.

Use the **Search profile fields** menu item to manage the search criteria that can be used in the search profiles.

4.1.28.1 Search profiles

Search profiles always apply to the respective person group and are accordingly available in either person administration, external company employee administration or visitor administration. They can be used by opening the advanced search function (double magnifying glass) provided in the selection dialogs.

Search profiles enable users to display or edit persons, visitors or external company employees with corresponding characteristics. All elements with direct relationships to a person group can be included in the selection process. The selected set can be specified precisely using linkable search criteria and used in all person-related dialogs.

Search profiles also play an important role in the output of person-related reports. The group of persons for the report is determined by a search profile. Likewise, the period for the search for data with time reference and the output period are defined by the search profile.

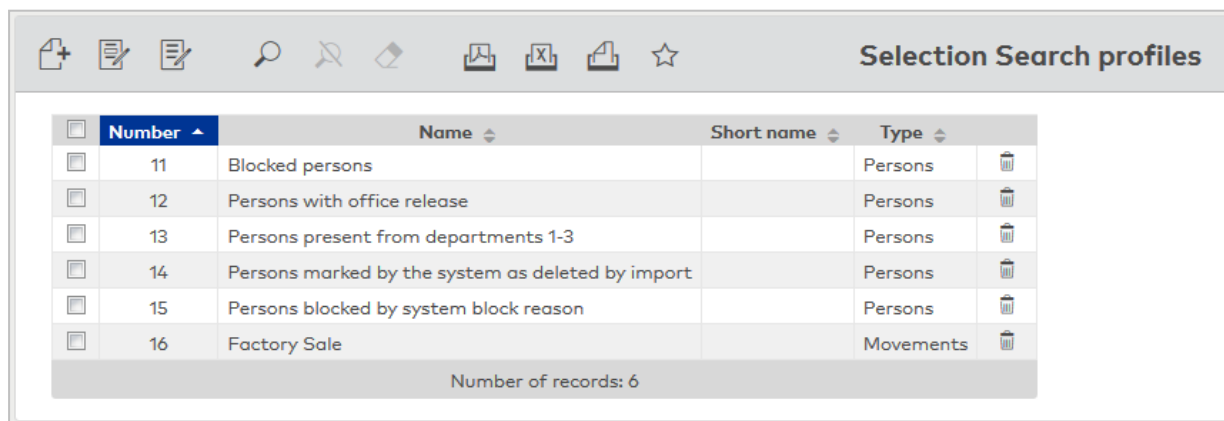
If the search profile requires parameters to be entered, parameter input is automatically activated when opening the report.

"Selection search profiles" dialog

All search profiles created in the system are displayed in the **Selection Search profiles** dialog.

The search profiles are available from the person administration, external company administration and visitor administration dialogs for advanced search functions.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Number	Name	Short name	Type
11	Blocked persons		Persons
12	Persons with office release		Persons
13	Persons present from departments 1-3		Persons
14	Persons marked by the system as deleted by import		Persons
15	Persons blocked by system block reason		Persons
16	Factory Sale		Movements

Number of records: 6

Type display field:

Contains the data type on which the search profile is based and for which it is used.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New search profile" dialog

This dialog displays the available data types for search profiles. Click on an entry to create a new search profile based on the data type.

Use the **Back to selection** button in the toolbar to go to the selection dialog.

"Edit search profiles" dialog

Use the **Edit Search profile** dialog to create new search profiles and edit existing search profiles. Each search profile requires a unique number; it is recommended that you specify a name and a short name.

The search profile fields present in the **Edit Search profile** dialog depend on the data type.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Data types: persons, external company employees, visitors

Criterion	Value range		
Department	1;2;3		
Attendance	1		

Table:

The table contains the conditions of the search profile.

Criterion selection field:

Contains the search element for the search condition.

Value range input field:

Contains the value or value range describing your search quantity.

Possible parameters:

- The parameters depend on the selected criterion. A tooltip in the opened input line shows all possible values and operators for the criterion.
- Use the wildcard @EMPTY if you wish to search for missing or empty fields.
- Use the wildcard @NOTEMPTY if you wish to search for arbitrary values.
- To keep the value range flexible, use wildcards of the type @1, @2, @3 etc., where 1 stands for the first parameter, 2 stands for the second parameter etc. Specific values will be queried if a search profile is used.
- An OR operator can be created within a row using a semicolon ;.

Data type: Movements

Search profiles for movements are based on details of persons and their movements and always refer to a specified period.

Movement-type search profiles form the basis of configured reports.

The screenshot shows a configuration window for a search profile. At the top, there are two radio buttons: "Use wildcards" and "Fixed period". The "Fixed period" option is selected. Below this, there is a "Date from" field with a calendar icon, followed by a dropdown menu showing "@YESTERDAY" and a numeric field with the value "1". Below these fields is a table with two columns: "Criterion" and "Value range". The table contains two rows: "Reader name" with the value "Factory Sale" and "Booking type number" with the value "1". Each row has edit and delete icons. To the right of the table is a "New entry" button.

Criterion	Value range
Reader name	Factory Sale
Booking type number	1

Use wildcards option:

When using the search profile, the **Apply filter** dialog field will be shown. Enter the period for the search in this field.

Fixed period option:

Enter a fixed period using the date fields, or enter a relative time specification by selecting a specified wildcard such as @TODAY. The capabilities of the wildcard can be expanded by entering an offset value. E.g.: @TODAY and 7 returns result for 7 days from now.

"Apply filter" dialog

If a search profile containing wildcards is used, specific values will be queried in the **Apply filter** dialog.

The screenshot shows the "Apply filter" dialog box. It has a title bar with a document icon and the text "Apply filter". Inside the dialog, there are three labels: "Number" with the value "13", "Name" with the value "Persons present from departments 1-3", and "Short name" which is empty. Below these labels is a "Department" field with a text input box. At the bottom of the dialog are two buttons: "Cancel" and "Next".

Input fields:

The input fields are determined by the search profile. All fields from the search profile that contain a wildcard will be displayed.

Cancel button:

Cancels the input and returns to the invoking dialog without evaluating the search profile.

Next button:

The search is carried out using the specified search criteria. The following selection dialog contains all persons (or visitors, external company employees) that match the search criteria.

4.1.28.2 Search profile fields

Search profile fields contain search criteria for search profiles and dynamic reports. The selection of such criteria can be restricted or extended as required.

The search criteria always apply with reference to the respective person group.

"Selection search profile fields" dialog

The **Select search profile fields** dialog displays all data types that can be created for search profiles.

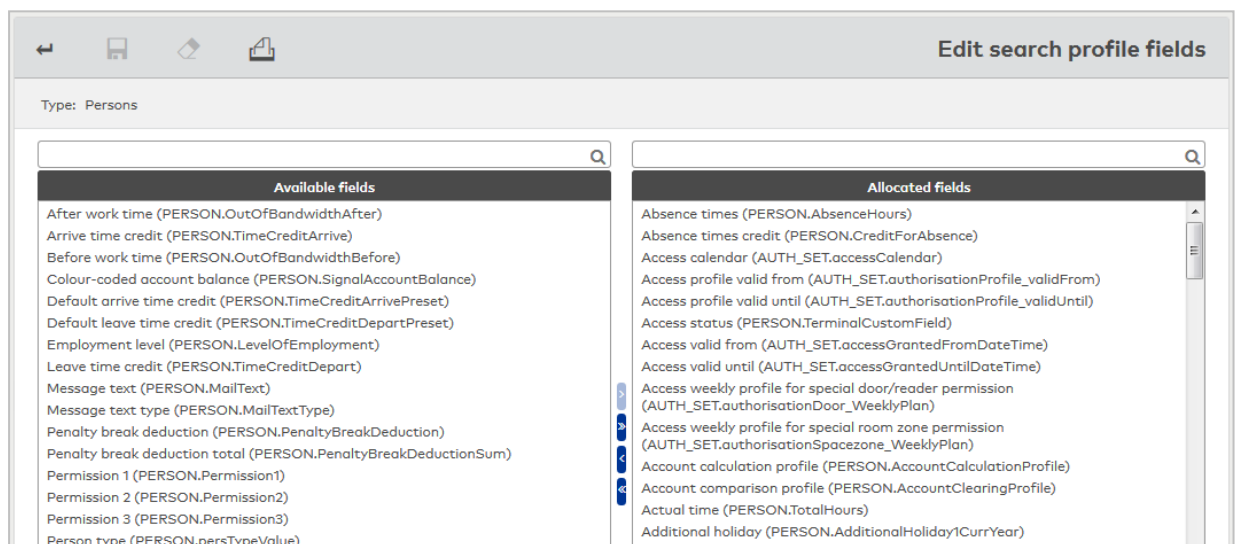


Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit search profile fields" dialog

Use the **Edit search profile fields** dialog to select criteria for each data type. These criteria will then be available for the search profiles.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, and to print the record. Use the **Back to selection** button to return to the selection dialog.



Type display:

Contains the selected data type.

Available fields report:

Contains all available criteria that are not allocated to the type. Click a criterion to select it, and click the right arrow to add the criterion.

Allocated fields report:

Contains all criteria allocated to the type. Click a criterion to select it, and click the left arrow to remove the allocation of this criterion.

Note: To select several entries simultaneously press the Ctrl key while clicking.

4.1.29 Workflow administration

Use the **Workflow administration** menu to manage all the settings and configurations for the application and approval process for workflows.

The basic requirement for working with workflows is that an organisational structure must be created in the system that reflects the relations between managers and employees.

The approval groups contain the users for the approval process. The corrections that underlie the workflow are stored in the correction groups.

Further information can be found in the section "Working with Matrix" under the heading ► [Work with workflows](#).

Use the [Workflows](#) menu item to manage the workflows in the system.

Use the [Workflow definitions](#) menu item to manage the settings and approval steps for the workflows.

Use the [Approval groups](#) menu item to manage the users for the approval process.

Use the [Correction groups](#) menu item to manage the corrections that are subject to a workflow.

Use the [Room zone groups](#) menu item to define the room zone groups and assign to them room zones which can be used in the workflow definitions.

Use the [Organisational structure](#) menu item to manage the responsibilities and organisational relationships within your company.

Use the [Weekly profile allocation](#) menu item to define the weekly profiles that can be used in the requests for access permissions.

Use the [Check functions](#) menu item to define the check functions that can be used in requests for time management.

4.1.29.1 Workflows

Once a workflow has been triggered by a requester, it is managed in the system as an active workflow until all approval steps are completed or the workflow is rejected.

The current status of the workflows is displayed in the workflows.

"Selection Workflows" dialog

The **Selection Workflows** dialog displays all active workflows in the system.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Requester	Creation date	Correction type	Date 1	Date 2	Parameter	Comment	State	Step
Gertrud Hochmeyer	7/4/2018 12:52	Holiday	12/17/2018	12/21/2018			In progress	1 / 3
Gertrud Hochmeyer	7/4/2018 12:51	Holiday	09/03/2018	09/07/2018			In progress	1 / 3

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Requester column:

Contains the name and first name of the person who made the request.

Creation date column:

Contains the date on which the workflow was created.

Correction column:

Contains the correction type of the workflow.

Date 1 column:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 column:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Comment column:

Contains a comment on the workflow, if defined.

State column:

Contains the current state of the workflow.

Options:

	Approved
	In progress
	Pending
	Denied

Step column:

Contains the number of the current approval step that is pending execution.

"Edit Workflow" dialog

The **Edit Workflow** dialog provides detailed information about the work flow.

Use the buttons in the toolbar to print the record or refresh the view. Use the **Back to selection** button to return to the selection dialog.






Edit Workflow

Requester
Hochmeyer, Gertrud
Date 1
12/17/2018

Creation date
7/4/2018 12:52
Date 2
12/21/2018

Correction type
Holiday
Person

State
In progress
Parameter

Comment

Cancel
Restart

Workflow steps

Time	Step	Action	Approving person	Comment (for approval)	State
	1	Approval	Direct superior : Ackreiter, Thorsten		 In progress
	3	Approval	Human resources (approval group) : Martin, Eric		 Pending

Requester display field:

Contains the workflow requester's last name and first name.

Creation date display field:

Contains the date and time when the workflow was created.

Correction type display field:

Contains the correction type for the workflow.

State display field:

Contains the current state of the workflow.

Comment display field:

Contains a comment on the workflow, if defined.

Date 1 display field:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 display field:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Parameters display field::

Contains additional parameters for the correction type if these are required. In the case of a business authorisation permission, the parameter indicates whether the permission is set or reset, for example.

Person display field:

Contains the person for whom a request for access permission has been made.

Room zone display field:

Contains the room zone, if a request for access permission for a room zone has been made.

Weekly profile display field:

Contains the weekly profile in conjunction with a request for access permission.

Workflow steps table:

The table contains the steps of the work flow that are completed or still pending.

Time column:

Contains the date and time when the applicable step was processed. The column is blank if the applicable step has not yet been processed.

Step column:

Contains the sequence in which the workflow steps are processed.

Action column:

Contains the action for the specified workflow step.

Approving person column:

Contains the approver who has processed this step or still has to do so.

Comment (for approval) column:

Contains a comment by the approving person, if defined.

State column:

Contains the current state of the workflow.

Options:

	Approved
	In progress
	Pending
	Denied

4.1.29.2 Workflow definitions

Use the workflow definitions to specify the approval steps for the individual workflows.

Also allocate a correction group and the organisational unit to the workflow.

The correction groups determine which corrections trigger a workflow.

The organisational unit defines the person group.

"Selection Workflow definitions" dialog

The **Selection Workflow definitions** dialog displays all workflow definitions created in the system.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Number	Name	Short name	Delete
1	Production holiday		
2	Room zone access - boss		

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Workflow definition" dialog

Use the **Edit Workflow definition** dialog to create new workflow definitions and edit existing workflow definitions. Each workflow definition requires a unique number. It is recommended that you specify a name and short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Number: 1
Name: Production holiday
Short name:

Correction group: 1 - Holiday
Room zone group:
From requester's organisational unit: 2 - Production
Requester additional attribute:

Workflow steps

Step No.	Action	Approving person/check function	Info email on cancellation		
1	Approve	Direct superior	☒		
2	Information	Substitute for direct superior	☒		
3	Approve	1 - Human resources (approval group)	☒		

Number of records: 3

New entry

Correction group selection field:

Contains the correction group for the workflow definitions.

Options:

- All correction groups created in the system.

Room zone group selection field:

Contains the room zone group for a request for access permission for a room zone.

Options:

- All room zone groups created in the system.

From requester's organisational unit selection field:

Contains the organisational unit to which the requester must belong for the workflow to be triggered.

Note: The highest organisational unit is specified for the workflow definition. All child organisational units are automatically included with this unit, unless the child organisational unit is specified in a workflow definition of its own.

As a rule, therefore, you only need a few workflow definitions at the top nodes of the organisational units and can define the exceptions to the units in question separately.

Options:

- All organisational units created in the system.

Requester additional attributes selection field:

Contains additional criteria for the requester.

Options:

- Department
- Cost centres

Default: No selection

Workflow steps table:

The workflow steps table contains the steps that a workflow has to run through.

Step column:

Contains the sequence in which the workflow steps are processed.

Action column:

Indicates which action is executed in this step.

Options:

- Approve: This step requires an approval. The next approval step can only be processed once the approval has been issued. Workflow steps with information are executed with the approval.
- Information: The information is sent with an approval.

Approver/check function column:

Select the person who must issue the approval or who receives information.

Options:

- All approval groups created in the system: All members of the selected approval group must approve the request or receive information.
- Direct superior: The direct superior must approve the request or receive information.
- Substitutes: A substitute must approve the request or receive information. The additional **Substitute** selection field is displayed in the request. The applicant must select a substitute.
- Substitute (optional): A substitute must approve the request or receive information. The additional **Substitute** selection field is displayed in the request. The applicant can select a substitute or the option "No substitute" in the request.
- Substitute for direct superior: The substitute of the direct superior must approve the request or receive information. If multiple substitutes are present, each of them can approve the step. If the step is approved, it is transformed into an information step for all other substitutes.
- Superior for level x: The superior of level x of the organisational structure must approve the request or receive information.
- All check functions created in the system.

Info e-mail on cancellation column:

Indicates whether an info e-mail must be sent to the workflow step participants in the event that the workflow is cancelled.

Options:

- Active: An info mail is sent.
 - Not activated: No info mail is sent.
- Default value: Active.

4.1.29.3 Approval groups

Approvers can be heads of organisational units and their substitutes as well as freely configurable groups of people who are not depicted in the organisational structure.

A typical example of an approval group would be the works council.

As for the approvers of the organisational units, a main responsible person must be appointed for an approval group.

"Selection Approval groups" dialog

The **Selection Approval groups** dialog displays all approval groups created in the system.

☐	Number	Name	Short name	Delete
☐	1	Human resources (approval group)		

Number of records: 1

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Approval group" dialog

Use the **Edit Approval group** dialog to create new approval groups and edit existing approval groups. Each approval group requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Number: 1
Name: Human resources (approval group)
Short name:

User	Main approving person		
Leroy, Fabienne (leroy)	☐		
Martin, Eric (martin)	☒		
Matrino, Johanna (matrino)	☐		

[New entry](#)

Table of allocated users:

User column:

Contains the first name and last name of the user.

Main approving person column:

Contains the identifier for the main approving person. There can only be one main approving person within an approval group. If the identifier is set for another user and saved, the previous user is automatically deleted.

4.1.29.4 Correction groups

The correction groups are used to combine corrections into groups, which are then allocated to the workflow definitions. All corrections that form part of the correction group automatically trigger the related workflow when used.

"Selection Correction groups" dialog

The **Selection Correction groups** dialog displays all correction groups created for the system with their number, name and short name.

You can use the buttons in the toolbar to create new correction groups, modify selected correction groups or print a report containing the records that are displayed. You can use the search function to search for individual correction groups using their number, name or short name.

The table displays the corresponding search results. Click a column header to sort the report by a characteristic in ascending or descending order. Click an entry to open the relevant record.

Selection Correction groups				
☐	Number	Name	Short name	Delete
☐	1	Holiday		
☐	2	Access permission		
Number of records: 2				

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Number column:

Contains the unique number for the correction group.

Name column:

Contains the name for the correction group in the respective language.

Short name column:

Contains the short name for the correction group in the respective language.

Delete column:

Deletes the record. Before the record is finally deleted, the system displays a confirmation request. If you click **OK**, the record is irrevocably deleted and cannot be recovered.

"Edit Correction group" dialog

Use the **Edit Correction group** dialog to create new correction groups and edit existing correction groups. Each correction group requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Edit Correction group

Number: 1
 Name: Holiday
 Short name:

Available correction types

- 1000 - Arrive
- 1001 - Leave
- 1002 - Arrive/Leave
- 1003 - Leave/Arrive
- 1004 - Business authorisation - leave
- 1005 - Business authorisation - arrive
- 1006 - Business authorisation
- 1007 - Break
- 1008 - Break start
- 1009 - Break end

Allocated correction types

- 2001 - Holiday
- 2002 - Half-day holiday
- 2005 - Special holiday

Correction types selection report:

Assign the correction groups of correction types for the workflow using the selection reports. All correction types created in the system that can be used in the workflow are available for selection.

4.1.29.5 Room zone groups

Room zone groups are used in workflows for assigning access permissions.

Room zone groups are allocated to room zones on the one hand and to the workflow definitions on the other. The room zones are therefore linked to the responsible approving persons via the workflow definitions.

"Selection Room zone groups" dialog

The **Selection Room zone groups** dialog displays all room zone groups created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Room zone group

☐	Number	Name	Short name	Delete
☐	1	Superior		

Number of records: 1

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Room zone group" dialog

Use the **Edit Room zone group** dialog to create new room zone groups and edit existing room zone groups. Each room zone group requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Room zones selection report:

Allocate the room zones to room zone groups using the selection reports. All room zones created in the system are available.

4.1.29.6 Organisational structure

The basic requirement for working with workflows is an organisational structure that forms the basis for reflecting the relations between superiors and employees.

To make an application, a person must be allocated to an organisational unit. The existing attributes "Department" and "Cost centre" can also be considered.

"Organisational structure" dialog

Use the **Organisational structure** dialog to visualise the organisational structure of your company for use in workflows.

The organisational structure is depicted in a tree structure, which maps the hierarchical dependencies. To expand the organisational tree, click the plus sign in front of the respective node.

Click the desired element in the tree to open the dialog for an organisational unit. The dialog opens in the right-hand section of the window and can be used to specify the unit leader and the substitutes.

Use the buttons in the toolbar to create or delete organisational units and to save or discard changes made to the records. Use the search function to search for individual organisational units or a group of units using their number and name.

The screenshot shows the 'Organisational structure' interface. On the left, a tree view displays the hierarchy: 'Organisational structure' (1 Management) -> '2 Production' -> '4 Manufacturing' (highlighted). Other nodes include '6 Warehouse', '3 Administration', and '5 Human resources'. On the right, a form is visible with the following fields:

- Number:** 4
- Name:** Manufacturing
- Short name:** (empty)
- Unit leader:** Cermans, Paul (cermans) (selected from a dropdown)
- Substitutes:** A table with columns: Last name, First name, User ID, and action icons (edit and delete).

Last name	First name	User ID		
Ackreiter	Thorsten	ackreiter		
Meunier	Catherine	meunier		

A 'New entry' button is located to the right of the substitutes table.

Unit leader selection field:

Contains the manager of the organisational unit.

Options:

- All system users.

Substitutes table:

This table contains the allocated substitutes of superiors. These substitutes are automatically notified in the event of a workflow request, or can be entered with the correction if a substitute is required.

Move organisational element

To move an organisational element, select the desired element and click **Move organisational element** in the toolbar.

The screenshot shows the 'Organisational structure' interface with a move dialog box open. The tree view on the left shows the hierarchy: 'Organisational structure' (1 Management) -> '2 Production' -> '4 Manufacturing' -> '6 Warehouse'. The dialog box has a yellow header with the text: 'Move organisational unit/node "5 (Human resources)"! Please select a target node from the tree!'. The dialog box is currently empty, waiting for a selection.

Next, click the element or the node in the tree into which you want to move the element.

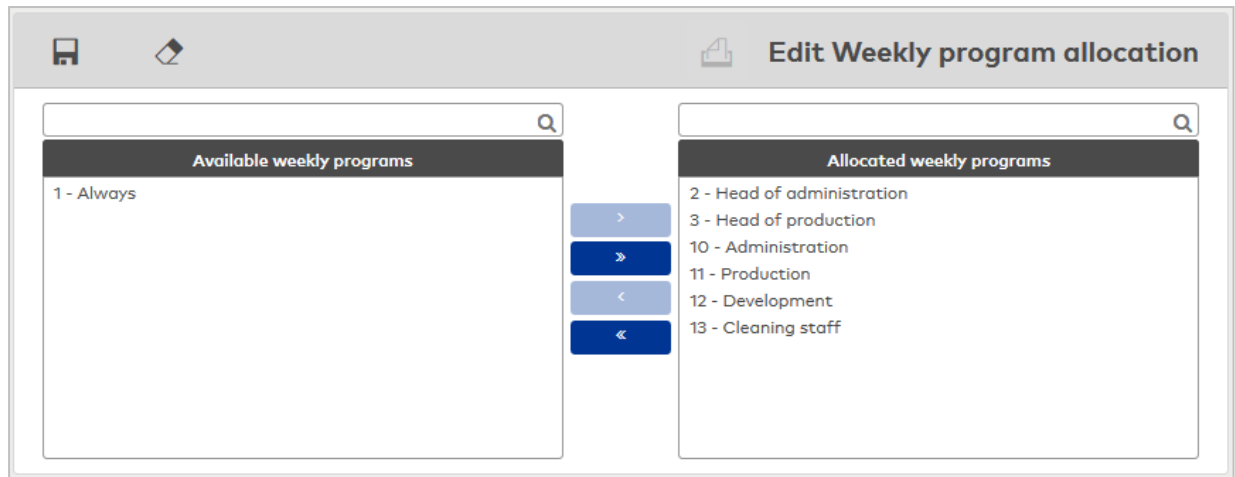
4.1.29.7 Weekly program allocation

The weekly program allocation is used to select the access weekly profiles which will be available in the forms for requesting access permissions for persons and external company employees.

"Edit Weekly profile allocation" dialog

The **Edit Weekly program allocation** is used to select the access weekly profiles which can be used in the requests for access permissions for persons and external company employees.

You can use the buttons in the toolbar to save, discard or print changes.



Weekly profiles selection reports:

Allocate the access weekly profiles that will be available in access permissions using the selection report. All access weekly profiles are available for selection.

4.1.29.8 Check functions

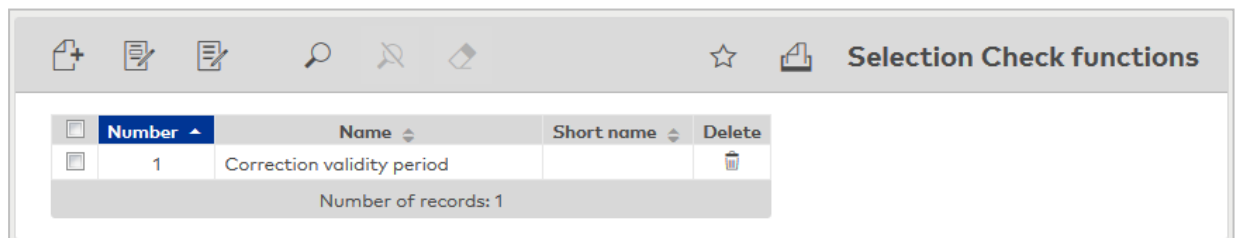
Check functions are used as approval steps in the workflow definitions. If a check is passed, the next step is started; if a check is failed, the workflow is rejected as Not approved.

The check functions are based on calculation modules of the type "Workflow check". These are configured for special checks by specifying specific values and accounts.

"Selection Check functions" dialog

The **Selection Check functions** dialog shows all created check functions.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Check functions" dialog

The **Edit Check functions** dialog is used to create new check functions and edit existing check functions. Each check function requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

The screenshot shows a software window titled "Edit Check function". Inside, there are several input fields arranged in two sections. The top section has "Number" (containing "2"), "Name" (empty), and "Short name" (empty). The bottom section has "Description" (empty), "Check rule" (empty dropdown), and "Day of the check" (dropdown menu showing "Correction validity period - start").

Description text field:

Free text field for describing the check function.

Check rule selection field:

Contains the generally applicable check rule with the checking logic for the check function. After selecting the check rule, the required parameter fields are displayed as input or selection fields for configuration. You must complete the fields for the specific use.

Options:

- All calculation modules of the workflow check type created in the system.

Day of the check selection field:

Contains the time of the check.

Options:

- Correction validity period – start
- Correction validity period – end
- Day of request
- After reconciliation of the correction month
- After reconciliation of the correction year
- After reconciliation of the holiday year

4.1.30 Attendance display

Global configurations for the attendance display are created in the **Attendance display** menu. Every user can be allocated a configuration as a standard view.

Use the [Configurations](#) menu item to define the group of persons for the attendance display and what information is shown.

4.1.30.1 Configurations

The configuration of the attendance display is used to define the how the persons, absence types and additional information are displayed.

"Selection configurations" dialog

The **Selection Configurations** dialog displays all global configurations created in the system for the attendance display.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Configurations				
Number	Name	Short name	Module	Delete
1	Default	D	Time	
2	Attendance First Aid		Access	
3	Attendance All		Access	
Number of records: 3				

Open a record by clicking it.

"Edit Configuration" dialog

The **Edit Configuration** dialog is used to create new global configurations for the attendance display and to edit existing records. Each configuration requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Edit Configuration	
Number	1
Name	Attendance Production
Short name	
Module:	

The layout of the dialog depends on the selected module.

Attendance display (access) configuration

"Persons" tab

The persons to be displayed are defined on this tab.

Persons	Area	Display	Additional info
☒ Persons ☒ Visitor ☒ External company employee			
All persons			

Persons checkbox:

Display all entries from the "Persons" person group. If the checkbox is activated, a selection field is shown that can be used to define further criteria.

Visitors checkbox:

Display all entries from the "Visitors" person group. Only present if visitor administration is activated.

External company employee checkbox:

Display all entries from the "External company employee" person group. Only present if external company administration is activated.

Disable limitation by data groups checkbox:

As default, user authorisations for data groups are taken into account in the attendance display (inactivated). If the checkbox is activated, the existing user authorisations are not taken into account. The user is shown all records.

Person selection

All persons selection:

All persons present in the system are shown in the attendance display.

Search profile selection:

For configuring a selection of persons using defined criteria.

Criterion	Value range
Department	Production

New entry

Person selection table:

The Person selection table contains the criteria for the search. Within a row, an OR link can be created with a semicolon (;).

Criterion selection field:

Contains the search element for the search condition.

Value range input field:

Contains the value or value range describing your search quantity.

If you want to search for missing or empty fields, use the wildcards @EMPTY or @NOTEMPTY for fields which contain any value.

Note: Other wildcards are not allowed in this search.

The employee record fields, which are enabled for use in the search profiles, are available for selection.

If no person search is specified for the configuration, users can determine the persons directly using the

Attendance display dialog.

Multiple selection of persons selection:

For configuring a selection of persons using a list.

Multiple selection of persons

Available persons

Martin, Eric
Matrino, Johanna
Leroy, Fabienne
Legrand, Marc
Kamp, Karsten
Leconte, Sandra

Allocated persons

Ackreiter, Thorsten
Hochmeyer, Gertrud
Cermans, Paul
Meunier, Catherine

"Area" tab

This tab allows users to select a folder. The tab is only available if folders are defined in the system. If a setting is made here, persons who are not present in the folder are no longer displayed.

The screenshot shows the 'Area' tab selected in a navigation bar with 'Persons', 'Area', 'Display', and 'Additional info'. Below the navigation bar, a note states: 'Note: If you select an area, the following limitations apply:'. A bulleted list follows: '• Present persons only are displayed.', '• You cannot select a search profile.', and '• Display, Sorting and Additional information will support the Last name, First name, Employee number, ID card number and ID card label fields only.' At the bottom, there are two input fields: 'Folder' and 'Security area', each with a dropdown arrow.

Folder selection field:

This limits the attendance report to persons who are present in the selected folder. Options: All folders created in the system.

"Display" tab

This tab is used to define the details of the display, such as fields to be displayed and sorting.

The screenshot shows the 'Display' tab selected in the navigation bar. It features a checkbox for 'Animated status change' which is checked. Below this, there are two sections: 'Display' and 'Sorting'. The 'Display' section has a table with columns 'Position', 'Employee record field', and 'New entry'. It contains two rows: '1' with 'Last name' and '2' with 'First name'. The 'Sorting' section has a table with columns 'Position', 'Sorting criterion', 'Sorting', and 'New entry'.

Animated status change checkbox:

Indicates whether a status change is animated in a pop-up dialog.

Options:

- Activated: Every status change is animated using a fading effect.
- Not activated: The display is switched over without any additional affects when the status changes.

Default: Activated.

Display table:

The details of the person are defined in this table.

Position column:

Contains the position specification for the table:

Value range: 1–9999

Employee record field column:

Contains the employee record field to be displayed.

Sorting table:

All fields used in the search can be used for sorting of persons in the display.

Position column:

Contains the position specification for the table:

Value range: 1–9999

Sorting criterion column:

Contains the sorting criterion and specifies the sorting sequence and the field name. If multiple fields are specified, the first sorting uses the first field.

Sorting column:

Specifies how the data is sorted.

Options:

- Ascending – The records are sorted in ascending order, starting with the smallest value.
- Descending – The records are sorted in descending order, starting with the greatest value.

"Additional info" tab

This tab is used to configure data that is displayed as additional information when the mouse cursor is hovered over a person in the display (tooltip).

Position	Employee record field		
2	Business telephone number		
1	Department		

New entry

Display table:

The details of the person are defined in this table.

Position column:

Contains the position specification for the table:

Value range: 1–9999

Employee record field column:

Contains the employee record field to be displayed.

Note: If a folder is indicated on the **Area** tab, the only attributes that can be chosen are name, first name, ID card number and ID card name.

Attendance display (time) configuration**"Persons" tab**

The persons to be displayed are defined on this tab.

Search profile

Person selection

Criterion	Value range		
Last name	@NOTEMPTY		

☐ Disable limitation by data groups

New entry

Person selection table:

The Person selection table contains the criteria for the search. Within a row, an OR link can be created with a semicolon (;).

Criterion selection field:

Contains the search element for the search condition.

Value range input field:

Contains the value or value range describing your search quantity.

If you want to search for missing or empty fields, use the wildcards @EMPTY or @NOTEMPTY for fields which contain any value.

Note: Other wildcards are not allowed in this search.

Disable limitation by data groups checkbox:

User authorisations for data groups are taken into account in the attendance display. If the checkbox is activated, the existing user authorisations are not taken into account. The user is shown all records.

"Display" tab

This tab is used to define the details of the display, such as additional data, sorting and colours.

The screenshot shows the 'Display' tab configuration interface. It includes the following sections:

- Bookings display:** A dropdown menu currently set to 'First and last booking'.
- From/until date for absence times:** A checkbox that is checked.
- Absence times comment:** An unchecked checkbox.
- Show name:** A checked checkbox.
- Show short name:** An unchecked checkbox.
- Animated status change:** An unchecked checkbox.
- Groupings:** A table with 6 rows representing evaluation sequences. Each row has a 'Position' (1-6), a 'Colour' (grey, green, yellow, blue, red, yellow), and a 'Group' name. To the right of the table is a 'New entry' button.

Evaluation sequence	Colour	Group
1	Grey	1 - Not allocated
2	Green	2 - Present
3	Yellow	3 - Absent
4	Blue	4 - Time off
5	Red	5 - Without excuse
6	Yellow	6 - Break
- Display:** A table with 2 rows representing employee record fields. To the right is a 'New entry' button.

Position	Employee record field
1	Last name
2	First name
- Sorting:** A table with 1 row representing sorting criteria. To the right is a 'New entry' button.

Position	Sorting criterion	Sorting
1	Last name	Ascending

Bookings display selection field:

Defines whether booking times are shown in the attendance display.

Options:

- No bookings: No bookings are displayed.
- First and last booking: The first and last bookings of the day are displayed.
- All bookings of one day: All bookings of one day are displayed.

Default: No bookings.

From/until date for absence times checkbox:

Indicates whether absence times are displayed with from and until date.

Options:

- Activated: Absence times are displayed with from and until dates.
- Not activated: Absence times are displayed without date information.

Default: Not activated.

Absence times comment checkbox:

Indicates whether comments are displayed for absence times.

Options:

- Activated: Any comments present are displayed.
- Not activated: No comments are displayed.

Default: Not activated.

Show name checkbox:

Indicates whether absence times are displayed with their name.

Options:

- Activated: Absence times are displayed with their name.
- Not activated: The name of the absence times is not shown.

Default: Not activated.

Show short name checkbox:

Indicates whether absence times are displayed with their short name.

Options:

- Activated: Absence times are displayed with their short name.
- Not activated: The short name of the absence times is not shown.

Default: Not activated.

Groupings table:

The table contains the groupings that are displayed in the attendance display. The colour in which the grouping is displayed can be changed.

Colour column:

Contains the colour for the display.

Group column:

Contains the grouping.

Display table:

The details of the person are defined in this table.

Position column:

Contains the position specification for the table:

Value range: 1-9999

Employee record field column:

Contains the employee record field to be displayed.

Sorting table:

All fields used in the search can be used for sorting of persons in the display.

Position column:

Contains the position specification for the table:

Value range: 1-9999

Sorting criterion column:

Contains the sorting criterion and specifies the sorting sequence and the field name. If multiple fields are specified, the first sorting uses the first field.

Sorting column:

Specifies how the data is sorted.

Options:

- Ascending – The records are sorted in ascending order, starting with the smallest value.
- Descending – The records are sorted in descending order, starting with the greatest value.

"Additional info" tab

This tab is used to configure data that is displayed as additional information when the mouse cursor is hovered over a person in the display (tooltip).

Persons Display **Additional info**

Bookings display All bookings of one day

From/until date for absence times ☒

Absence times comment ☐

Show name ☒

Show short name ☐

Display

Position	Employee record field		
3	Department		
1	Last name		
2	First name		

[New entry](#)

Bookings display selection field:

Defines whether booking times are shown in the attendance display.

Options:

- No bookings: No bookings are displayed.
- First and last booking: The first and last bookings of the day are displayed.
- All bookings of one day: All bookings of one day are displayed.

Default: No bookings.

From/until date for absence times checkbox:

Indicates whether absence times are displayed with from and until date.

Options:

- Activated: Absence times are displayed with from and until dates.
- Not activated: Absence times are displayed without date information.

Default: Not activated.

Show name checkbox:

Indicates whether absence times are displayed with their name.

Options:

- Activated: Absence times are displayed with their name.
- Not activated: The name of the absence times is not shown.

Default: Not activated.

Show short name checkbox:

Indicates whether absence times are displayed with their short name.

Options:

- Activated: Absence times are displayed with their short name.
- Not activated: The short name of the absence times is not shown.

Default: Not activated.

Display table:

The details of the person are defined in this table.

Position column:

Contains the position specification for the table:

Value range: 1-9999

Employee record field column:

Contains the employee record field to be displayed.

4.1.31 Application

The **Application** menu contains various dialogs for configuring the system.

Use the **Correction types** menu item to adjust corrective actions for correction processing.

Use the **Correction filter** menu item to define extended search options for selecting employee records.

Use the **Booking types** menu item to manage the booking types.

Use the **Booking type allocation** menu item to allocate the terminal booking types to the terminal bookings and terminal events.

Use the **Info record allocations** menu item to manage the info records which can be displayed on the terminal when a booking is made.

Use the **Booking dialog** menu item to configure the dialog for alternative recording of bookings via the web.

Use the **Forms** menu item to manage the forms for form printing in person administration, external company employee administration and visitor administration.

Use the **Function assignments** menu item to manage the special properties of functions, such as the display of special features.

Use the **ID card layouts** in the menu to manage the ID card layouts for your ID cards.

Use the **Daily corrections** menu to manage the configuration for the daily corrections dialog.

Use the **Time zones** menu item to specify the time zones that can be used in the system.

4.1.31.1 Correction types

A correction type is an identifier in a correction record which determines the correction processing behaviour and specifies the input entries required for correction processes.

Note: Time system correction types are set up and managed by the administrator. They are responsible for allocating numbers and names to correction types. The default examples of correction types during installation can therefore be deleted or changed.

The most important parameter of a correction type is the correction action. It contains the actual processing logic. The correction actions can be divided into two groups in terms of type:

The first group contains correction actions which execute a specific change to an employee record or other data. Typical actions are changing device properties or person access permissions, or allocating an ID card. Only one value is generally required as a parameter since the attribute is pre-set by the action. Corrections have no time reference and have an immediate effect on objects.

The second group contains actions which do have a time reference and therefore are relevant to allocation. Corrections affect an employee record and always result in a subsequent allocation for the relevant accounts.

Correction actions are a fixed part of the system and are provided by the different modules during installation or updates.

"Selection correction types" dialog

The **Selection Correction types** dialog displays all correction types created in MATRIX for the individual modules. The system only displays the correction types of modules for which a licence is present.

Internal corrections defined by the system cannot be deleted.

The **Search function** can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Correction types						
+ ⌂ ⌂ 🔍 🔍 ✎ ☆ 📄						
◀ 1 ▶						
☐	Number	Name	Short name	active	Module	Delete
☐	2	Person - change office release		☒	Access	
☐	3	Person - change offline employee record		☒	Access	
☐	4	Person - change AoC validity period		☒	Access	
☐	5	Person - change AoC tracking		☒	Access	
☐	6	Person - add door special permission		☒	Access	
☐	7	Person - add room zone special permission		☒	Access	

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Active column:

Indicates if the correction type can be used in the correction dialogs.

Module column:

Contains the module in which the correction type is applied.

"Edit correction type" dialog

Use the **Edit Correction type** dialog to create and edit parameters for correction types. Each correction type requires a unique number. It is recommended that you specify a name and a short name.

The selectable correction actions are a fixed part of the system and are provided by the different modules during installation or updates.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

+ ⌂ ⌂ 🔍 🔍 ✎ ☆ 📄				Edit Correction type			
Number	2	Data group 1		▼			
Name	Person - change office release	Data group 2		▼			
Short name							
active	☒						
Module	Access	▼					
Correction action	Person - change office release	▼					
Correction filter		▼					

active checkbox:

Indicates whether the correction type can be used and is available for selection in the correction dialogs.

Options:

- Activated: The correction type can be used.
- Not activated: The correction type is not available in the correction dialogs.

Default value: Activated.

Module field:

Contains the module in which the correction type is applied.

Options:

- Device administration
- System
- Time
- Access

Correction action selection field:

Contains the correction action which determines the input fields and processing of the correction.
The options depend on the selected module.

Devices module

Module	Devices	▼
Correction action	Devices - Reader - Change parameters	▼

Correction action selection field:

Contains the correction actions for the Device management module. No further parameters are required.

System module

Module	System	▼
Correction action	Correction type - set data group(s)	▼

Correction action selection field:

Contains the correction actions for the system module. No further parameters are required.

Time module

Module	Time	▼
Correction action	Absence	▼
Check for dependencies		▼
Check for duplicate corrections	☒	
Run immediately with Workflow	☒	
Absence type	2001 - Holiday	▼ ▶

Correction action selection field:

Contains the correction actions for the Time module. Further parameters may be required. The respective fields required for the correction action are displayed.

Time identifier selection field:

Specifies the time when the booking is inserted. If no time identifier is required, selection is not available.

Options:

- Absolute: The booking record is inserted with the specified time; specification of the time is required.
- Start of the daily program: The booking record is inserted at the start of the daily program.
- Middle of the daily program: The booking record is inserted at the half-day point.
- End of the daily program: The booking record is inserted at the end of the daily program.
- Current date: The booking record is inserted on the current date.
- Current year: The booking record is inserted at the start of the current year or at the earliest point in the current year.

Check for duplicate corrections checkbox:

Determines whether a check for duplicate corrections is performed. The correction is not executed if an identical correction exists.

Options:

- Activated: A check is performed.
- Not activated: A check is not performed.

Default: Not activated.

Selection field: Check for dependencies:

Specifies the checks that are conducted when corrections are made that are related to absence types.

Options:

- No selection: No check is performed.
- Check remaining holiday: The system checks whether the remaining holiday is sufficient to cover the requested holiday. The system checks on the last day of the holiday year. The holiday year is determined by the system parameter 30. The checks are conducted for every year in which the holiday has been entered. Checks are conducted in both years if a holiday application crosses the holiday year limit. If the remaining holiday for one year is insufficient, the overall check result is negative. If the holiday is requested in the Self Service system, insufficient remaining holiday automatically results in the request being rejected. The number of missing days is displayed in the corresponding notification. If the holiday is entered in the annual overview or monthly overview by an operator via person administration or by using corrections, the system will display a query if the remaining holiday is insufficient. The correction can then be cancelled or confirmed. If confirmed, the holiday will be calculated without further checks being run. Checks are always run if mass corrections are made (e.g. holiday entry for multiple persons). If there is insufficient remaining holiday, the correction is flagged as faulty and displayed as such in the correction table. The holiday is not allocated. If necessary, the holiday must be entered via Person administration.

Default: No selection

Run immediately with Workflow checkbox:

Determines whether corrections are made and allocated immediately with this booking type without waiting for workflow approval.

Options:

- Activated: The workflow is executed and allocated immediately. If the workflow is denied at a later stage, the allocation-relevant changes are deleted again.
- Not activated: The workflow is first executed and allocated with the approval.

Default value: Not activated.

Booking type 1 selection field:

Contains the booking type for the first booking record. If no booking type is required, selection is not available.

Options:

- All booking types created and activated in the system.

Booking type 2 selection field:

Contains the booking type for the second booking record. If no booking type is required, selection is not available.

Options:

- All booking types created and activated in the system.

Absence type selection field:

Contains the absence type for correction. The selection is only available if "Absence" is selected as an action.

Options:

- All absence types created in the system.

Access module

Module	Access	▼
Correction action	Person - change office release	▼
Correction filter		▼

Correction action selection field:

Contains the correction actions for the Access module. Further parameters may be required. The respective fields required for the correction action are displayed.

Correction filter selection field:

A correction filter must be selected for the correction types "Person – change master data" or "ID card – change reason for blocking".

4.1.31.2 Correction filter

You can use correction filters to search flexibly and simplify mass corrections in the Access area. Further search options can be defined for selecting employee record data by creating correction filters.

The created correction filters are available from the **Correction** dialog when selecting employees.

Note: New correction filters can only be created if ID card administration level 3 is set in the system.

"Selection Correction filter" dialog

The **Selection Correction filter** dialog displays all correction filters created in the system.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

☆ Selection Correction filter			
Number	Name	Short name	Delete
1	Persons with access		
Number of records: 1			

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New correction filter" dialog

The **New correction filter** dialog displays the correction filter types available in the system. Click an entry to create a new correction filter based on the types.

Note: New correction filters can only be created if ID card administration level 3 is set in the system.

Use the **Back to selection** button in the toolbar to go to the selection dialog.

 New correction filter				
Type	Name	Description	Memory type	System parameters
Basic report	126 - Personen, Fremdfirmenmitarbeiter, Besucher (mit Ausweis) Zutritt		User	

Type column:

Contains the underlying report type.

Name column:

Contains the name for the type.

Description column:

Contains a short description for the type.

Memory type column:

Indicates who created the correction filter.

Possible memory types:

- System: classes created during installation which cannot be changed or deleted. Changes to these classes are saved with the type "Overwritten".
- Overwritten: classes derived from changed classes with the type "System".
- User: new classes created by the user.

System parameters column:

Contains the system parameter, if the correction filter depends on a system parameter.

"Edit Correction filter" dialog

Use the **Edit Correction filter** dialog to create new correction filters and edit existing correction filters. Each correction filter requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Correction filter has been saved.

Number: 1

Name: Persons with access

Short name:

Basic report: 126 - Personen, Fremdfirmenmitarbeit

Filter position	Filter name	Filter description
1	Personentyp	Personentyp
2	(Person) Last name	(Person) Last name (Last name)
3	(Person) ID card number	(Person) ID card number (ID card number)

New entry

Number of records: 3

Basic report display field:

Contains the basic underlying report.

Table:

The table contains the filter criteria

Filter position display field:

Contains the order of filters in the dialog. The position of a row can be altered in the table using drag & drop.

Filter name selection field:

Contains the name of the filter criterion.

Filter name input field:

Contains the name of the filter in the dialog. This can be freely assigned.

4.1.31.3 Booking types and allocations

Every type of device reports booking events with different booking codes. The booking code for the device type is transformed into a standardised booking type, so that similar bookings, such as those for access, can be shown in the overview and report formats with the same text.

Device-specific booking codes are assigned to the booking types in an allocation table.

More information on booking types can be found in the topic [User programs for booking types](#)

"Selection booking types" dialog

The **Selection Booking types** dialog displays all booking types created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Booking types						
◀ 1 2 ▶						
☐	Number ▲	Name	Short name	Module	active	Delete
☐	1	Successful access		Access	☒	
☐	2	Office release initiated		Access	☒	
☐	3	Office release terminated with ID card		Access	☒	
☐	4	Successful access with PIN code		Access	☒	
☐	5	Successful access with office release option		Access	☒	
☐	6	ID card updated		Access	☒	
☐	7	Entrance access		Access	☒	
☐	8	Exit access		Access	☒	
☐	9	Video access		Access	☒	
☐	10	Video access denied		Access	☒	

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Module column:

Contains the module in which the booking type is used.

Active column:

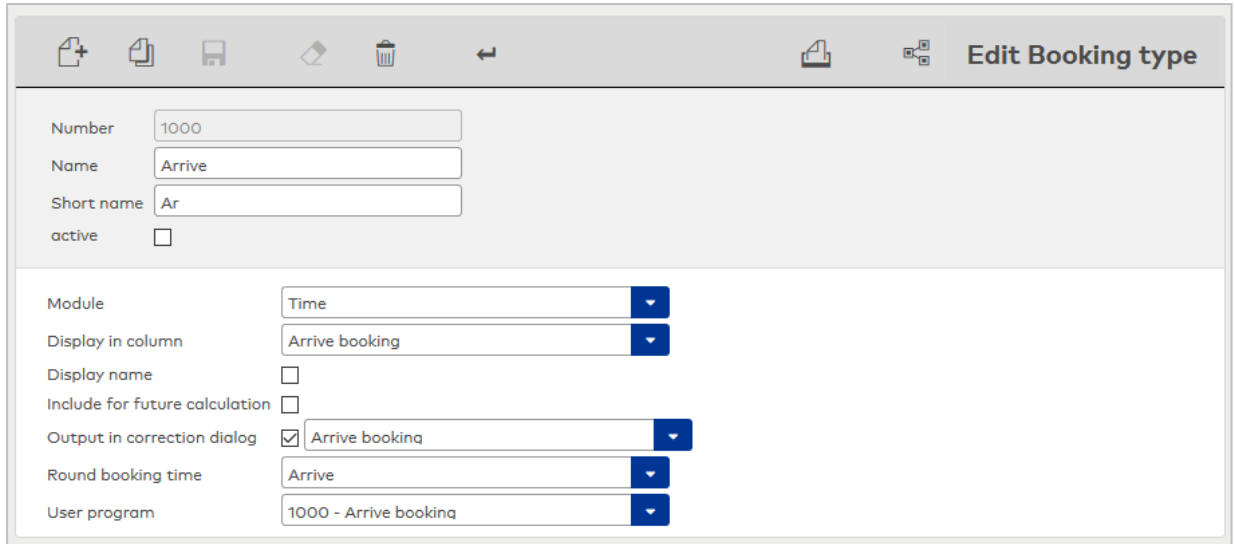
Indicates whether the booking type can be used.

"Edit booking type" dialog

Use the **Edit Booking type** dialog to create new booking types and edit existing booking type records. Each booking type requires a unique number; it is recommended that you specify a name and a short name.

The display text, which shows overviews and reports of the booking events at various devices, is hidden behind the booking type.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.



Edit Booking type

Number: 1000

Name: Arrive

Short name: Ar

active: ☐

Module: Time

Display in column: Arrive booking

Display name: ☐

Include for future calculation: ☐

Output in correction dialog: ☒ Arrive booking

Round booking time: Arrive

User program: 1000 - Arrive booking

active checkbox:

Defines whether the booking type can be used and is available for selection in the selection fields for the booking type.

Options:

- Activated: The booking type can be used and is available in corresponding selection fields.
- Not activated: The booking type cannot be used.

Default value: Activated.

Module selection field:

Contains the module to which the booking type belongs.

Options:

- Time
- Access

Display in column selection field:

Determines the column in the booking overview in which bookings of this type are displayed.

Options:

- Arrive booking
- Leave booking

Display name checkbox:

Indicates whether the booking type is displayed with short name and the time.

Activated: The booking types are displayed with their short name and the time in the selected column.

Not activated: Bookings using this booking type are displayed with the time only and without the short name.

Include for future calculation checkbox:

Specifies whether corrections are calculated only up to the current date or for the future as well.

Allocations for the future may affect the calculation of holiday records.

Activated: Allocations are also conducted for the future.

Not activated: Allocations end on the current date.

Output in correction dialog:

A booking type can indicate whether bookings are displayed with their corresponding booking type in the dialog for the corrections per day and which table or column they are in.

Note: This selection is only available if the Time module is selected.

-

Checkbox:

Indicates whether bookings are displayed with their booking in the corrections per day dialog.

Options:

- Activated: Bookings are displayed.
- Not activated: Bookings are not displayed.

Default value: Not activated.

Selection field:

Indicates which table and column the bookings are displayed.

Options:

- Blank field
- Arrive booking: Arrive bookings are shown with the time of the booking in the **From** column in the bookings table. The booking type is shown using its short name in the associated **Type** column.
- Leave booking: Leave bookings are displayed in the **Until** column in the bookings table with the time of the booking. The booking type is shown using its short name in the associated **Type** column.
- Other booking: These bookings are displayed in the **Other bookings** column with the time, booking type and parameters. As a general, these bookings are changes to permissions or modified master data allocations.

Default value: Blank

Round booking time selection field:

Specifies how bookings with this booking type are to be rounded, if rounding is activated.

Options:

- No rounding: Bookings are not rounded.
- Arrive: Bookings are rounded like arrive bookings.
- Leave: Bookings are rounded like leave bookings.

Default value: No rounding.

User program:

Contains the user program which is used for booking processing.

Other parameters:

Depending on the **User program** selected, other parameters may be required for the booking type.

Parameter name	Type	Value
Absence type	Absence type	
Value	Time sum	

Parameter name display field:

Contains the name of the parameter.

Type display field:

Contains the type of parameter.

Value input field:

Contains a specific value. If no value is entered, this can be defined with the correction type or needs to be set during the correction input.

"Edit booking type allocations" dialog

Use the **Edit Booking type allocations** dialog to allocate the device-specific booking codes and edit booking types. A distinction is made between booking types for the time and access systems.

You can use the buttons in the toolbar to save or discard the changes to the record.

Edit booking type allocations				
Device type	Booking code	Name	Booking type(time)	Booking type(access)
AoC	1	Badge loaded		6 - ID card updated
evolo	1	Successful access		22 - Successful access offline
evolo	9	Office release activated		2 - Office release initiated
evolo	10	Office release deactivated		3 - Office release terminated with ID card
evoloWless	1	Successful access		1 - Successful access
evoloWless	9	Office release activated		2 - Office release initiated
evoloWless	10	Office release deactivated		3 - Office release terminated with ID card
KABA	B0	Info	203 - Info	

Device type display field:

Contains the device type for assigning the booking type.

Booking code display field:

Contains the device-specific booking code for the device type displayed.

Name display field:

Contains the name of the device-specific booking code.

Booking type (time) selection field:

Contains the booking types for the device-specific booking code in the time system.

Options:

- All booking types created in the system which are allocated to the time system.

Booking type (access) selection field:

Contains the booking types for the device-specific booking code in the access system.

Options:

- All booking types created in the system which are allocated to the access system.

User programs for booking types

User programs for booking types are small program units which contain the allocation logic for bookings.

The user programs are directly linked with the booking types and, consequently, the booking records.

Note: User programs are allocated to the modules depending on your task.

4.1.31.4 Info record allocation

Depending on the terminals used, up to 10 info records can be displayed for a booking. All time accounts which contain an elapsed time or a day counter, such as the number of vacation days, are suitable for display as an info record. The info record allocation specifies which time accounts are displayed in the info records.

Note: The assignment of info records applies to all terminals which support this function across the system.

"Edit info record allocation" dialog

Use the **Edit Info record allocation** dialog to allocate time accounts to info records. Only one time account can be allocated to each info record.

You can use the buttons in the toolbar to save or reject the changes to the record or print the allocation.

Terminal info field	Account
Time record	Balance previous day
Info record 1	
Info record 2	
Info record 3	
Info record 4	
Info record 5	
Info record 6	
Info record 7	
Info record 8	
Info record 9	
Info record 10	

Terminal info field column:

Contains the info record for the display on the terminal. The output depends on the booking configuration.

Selection fields in the **Account** column:

Select the time account to be displayed in each info field.

Options:

- All time accounts and internal system accounts that are released to be displayed as info records.

4.1.31.5 Booking dialog

The booking dialog is used for time recordings and recording of bookings. In addition to Arrive and Leave bookings, various info bookings such as business authorisations or breaks are also supported.

A person is granted permission to participate through personal access to the system and the corresponding user role with access to the booking dialog.

The range of functions and the booking options are defined in a configuration dialog.

"Edit booking dialog" dialog

Use the **Edit booking dialog** dialog to define the booking types and the buttons for the booking dialog.

Booking types without parameters are displayed as buttons in the first lines of the dialog.

Booking types with parameter input are arranged under the buttons.

You can use the buttons in the toolbar to save or reject the changes.

available booking types report:

Contains all booking types created in the system that can still be allocated to the booking dialog. Click a booking type to select it and then click the right arrow. The selected booking type is added to the dialog.

selected booking types report:

Contains all booking types that are assigned to the booking dialog. Click a booking type to select it, then click the left arrow to remove this booking type from the dialog.

Note: To select several booking types simultaneously press the Ctrl key while clicking.

Show info record in bookings dialog checkbox:

Indicates whether the entered info records are shown in their own tab in the booking dialog.

The pre-set info record allocation determines which memories are displayed.

Options:

- Activated: The info records are displayed.
- Not activated: The info records are not displayed.

Default value: Not activated.

4.1.31.6 Forms

Forms always apply to the respective person group and are accordingly available in either person administration, external company employee administration or visitor administration.

The form type determines its use and possible field content. The type is defined when creating a new form and cannot be changed.

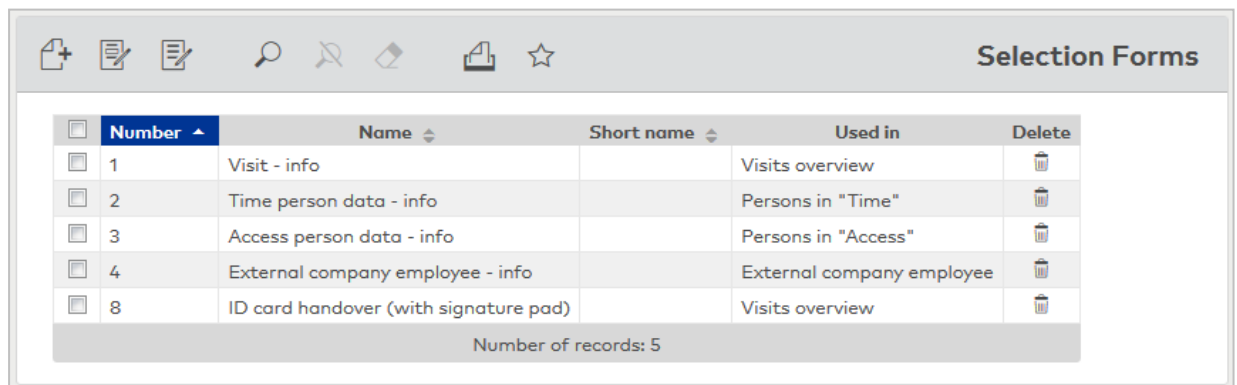
The forms are saved in the database in HTML format and can be called up using the toolbar buttons in the respective person administration, external company employee administration or visitor administration dialogs. They can be printed out or saved in the MATRIX system with digital signatures.

Further information can be found in the section "Working with Matrix" under the heading ► [Set up and print forms](#).

"Selection forms" dialog

The **Selection Forms** dialog displays all created forms.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Number	Name	Short name	Used in	Delete
1	Visit - info		Visits overview	
2	Time person data - info		Persons in "Time"	
3	Access person data - info		Persons in "Access"	
4	External company employee - info		External company employee	
8	ID card handover (with signature pad)		Visits overview	

Number of records: 5

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Used in column:

Contains the form types that determine the module in which the form is made available. The form type is selected during creation of the form and cannot be changed.

Types:

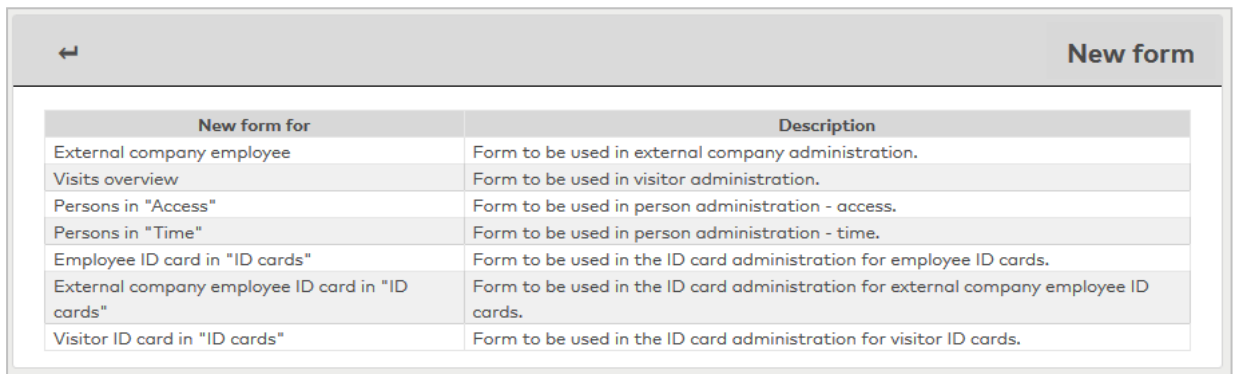
- External company employees: Forms for external company administration
- Overview of visits: Forms for visitor administration

"New form" dialog

Use the **New form** dialog to select the form type. Each form is linked to a form type that defines its usage and the available field content for the actual values in the printout.

All available form types are displayed. Click an entry to create a new form.

Use the **Back to selection** button in the toolbar to go to the selection dialog.



New form for	Description
External company employee	Form to be used in external company administration.
Visits overview	Form to be used in visitor administration.
Persons in "Access"	Form to be used in person administration - access.
Persons in "Time"	Form to be used in person administration - time.
Employee ID card in "ID cards"	Form to be used in the ID card administration for employee ID cards.
External company employee ID card in "ID cards"	Form to be used in the ID card administration for external company employee ID cards.
Visitor ID card in "ID cards"	Form to be used in the ID card administration for visitor ID cards.

New form for column:

Contains the form types that determine the module in which the form is made available. The possible form types depend on the configuration of the MATRIX system.

Description column:

Contains a short description of the form type.

"Edit form" dialog

Use the **Edit Form** dialog to create new forms and edit existing forms. Each form requires a unique number; it is recommended that you specify a name and short name.

Use the buttons in the toolbar to create new records, delete or print records and save or discard changes to records. Use the **Back to selection** button to return to the selection dialog.

Text tag	Dialog
Vorname	First name
Name	Last name
Personalnummer	Employee number
aktDatum	Current date
Personenbild	Employee image
Geburtsdatum	Date of birth

Number of records: 6

Used in display field:

Contains the form types that determine the module in which the form is made available. The form type is selected during creation of the form and cannot be changed.

Select template file button:

Select an HTML file to use as a template for the form.

TemplateName.html button:

The button is labelled with the file name of the saved file and allows the template to be downloaded, for editing, for example.

Note: If the file is uploaded again after being changed, allocated wildcards for ID card/employee record fields will be retained if they are still present.

Table:

Text tags are allocated to the fields in the dialog interface using this table.

Text tag display field:

Contains the unique text tag from the form template as plain text.

Dialog field selection field:

Contains the allocated field from the dialog interface. The content of this field is applied when printing the form and used in place of the text tag in the form.

The selection depends on the form type.

Options:

- All fields corresponding to the form type.

Radio buttons:

Allow forms with digital signatures to be saved. The signed forms are saved as documents in MATRIX. They can be called up again for the person, the external company employee or the visit at any time.

- **Without signature:** For printing forms without signatures.
- **Sign with touchscreen:** For forms that can be signed using a device with a touchscreen.
- **Sign with signature pad:** For forms that can be signed using a signature pad made by Signotec (Signotec Sigma or Signotec Sigma Lite). You can also enter a sentence that will be displayed in the header of the signature pad. This is usually the sentence that is located before the signature line on the form.

Note: Websocket Pad Server by Signotec must be installed on the operating station to allow MATRIX to communicate with the Signotec signature pad. Please follow the manufacturer's installation instructions to set up the signature pad.

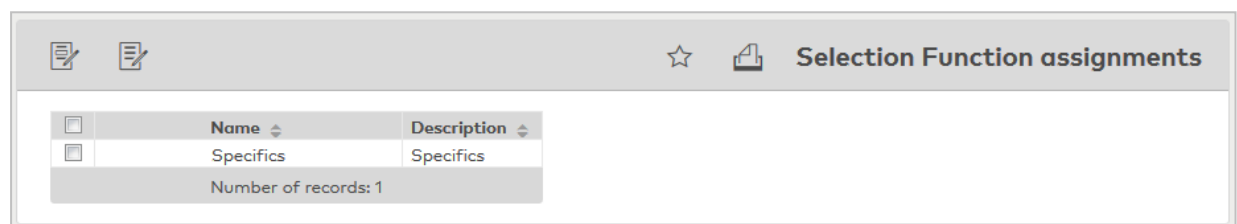
4.1.31.7 Function assignments

Function assignments determine the characteristics of special functions. These are characteristics of specifics for the time system.

"Selection Function assignments" dialog

The **Selection Function assignments** dialog displays all function assignments created in the system.

You can use the button in the toolbar to edit the function assignments.



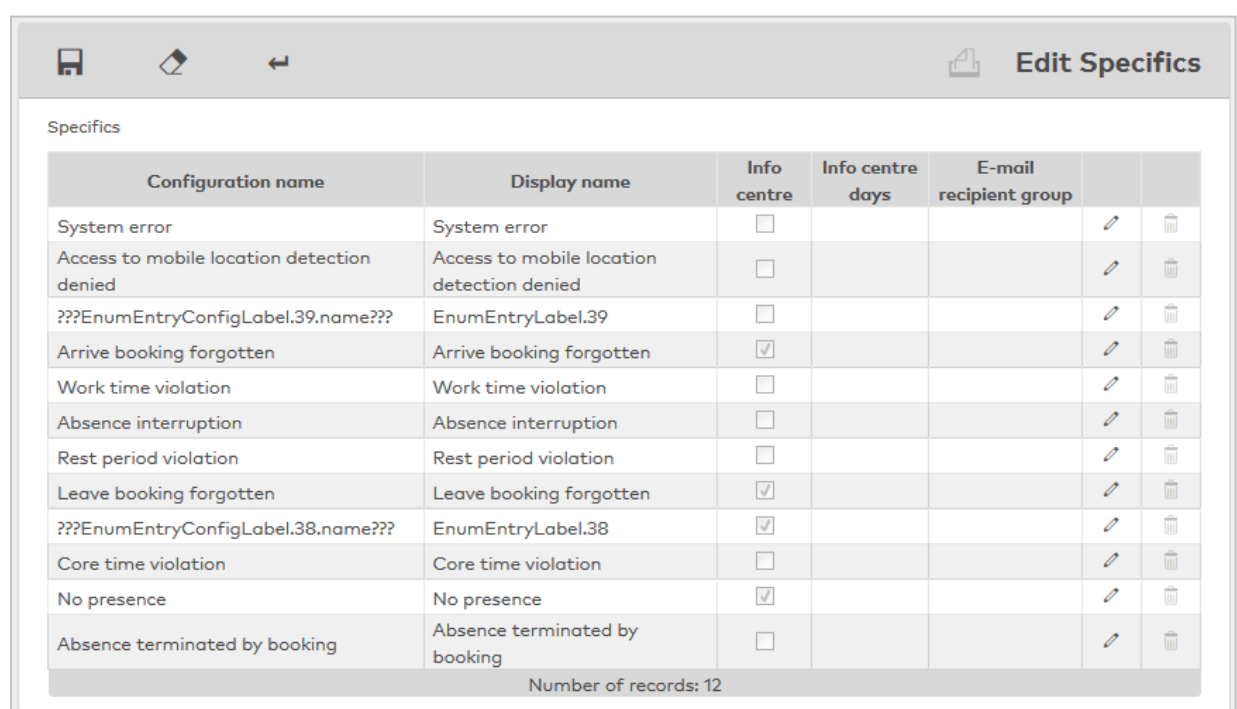
Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Specifics" dialog

You can use the **Edit Specifics** dialog to change the display names of selected specifics and to specify whether and for how long the specifics are displayed in the info centre. If necessary, an e-mail recipient group can be entered and will then receive an e-mail if the event occurs.

Specifics are generated during calculation of time data and so indicate inconsistencies to the user. Typical examples are forgotten bookings, violations of core time or when a person is missing for unknown reasons.

Use the buttons in the toolbar to print records and save or discard changes made to the records. Use the **Back to selection** button to return to the selection dialog.



Specifics table:

The table displays all specifics. For editing, click the button in the **Edit** column.

Configuration name column:

Displays the configuration name for the specifics entry. The configuration name cannot be changed.

Display name column:

Contains the display text for displaying the specifics item in the specifics report.

Info centre column:

Indicates if the specifics item is displayed in the info centre.

Note: The info centre should advise you of specifics which you may rectify. Specifics which cannot be corrected, such as core time violations, should not be displayed in the info centre, or only for a specified number of days.

Info centre days column:

Indicates the number of days for which a specifics item is displayed in the info centre.

Value range: Empty, no limit or 1-9999 days.

E-mail recipient group column:

Contains the e-mail recipient group to which an e-mail is sent if the event occurs.

Options:

- Blank
- All e-mail recipient groups created in the system.

Default: Blank

4.1.31.8 ID card layouts (IDCard)

ID cards can be printed from MATRIX if an ID card creation system is connected. The ID card layout must have been created in advance in the system.

Note: This function is only available if the system parameter "System 121" is set to the value "1".

"Selection ID card layouts" dialog

The **Selection ID card layouts** dialog displays all ID card layouts created in the system with their number, name and short name.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection ID card layouts					
☐	Number	Name	Short name	Layout name	Delete
☐	1	Employee ID card	EmpID	Mitarbeiter	
☐	2	Replacement employee ID card	RepEID	MitarbeiterErsatz	
☐	3	Service provider ID card	SPID	Dienstleister	
☐	4	Replacement service provider ID card	RepSPID	DienstleisterErsatz	
☐	5	Visitor ID card	V	Besucher	
Number of records: 5					

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit ID card layout" dialog

Use the **Edit ID card layout** dialog to create new ID card layouts and edit existing ID card layouts. Each ID card layout requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

"ID card layout" tab

Specify the visible ID card data using this tab.

Layout name input field:

Free text for the name of the layout. The ID card creation system requires this name to identify the required layout. The name is not language-dependent.

User selection field:

Determines the user for the ID card.

Options:

- Employee
- Visitors
- External company employees
- LPN

Photo required checkbox:

Indicates whether a photo is required for the ID card.

Options:

- Activated: a photo is required.
- Not activated: a photo is not required.

Default: Not activated.

Print layout :

Opens a pop-up dialog which allows you to add or delete a photo of the person for the ID card. Click in the frame.

"Employee record fields" tab

This tab allows you to define the freely configurable employee record fields for the data exchange between the two systems. You can find the meaning of these fields in the ID card creation system.

The standard configuration is shown as an example.

Field 1	Town/ Postcode	Field 16	
Field 2	Business telephone number	Field 17	
Field 3	Business mobile number	Field 18	
Field 4	Number or Name/Street	Field 19	
Field 5	Day of joining	Field 20	
Field 6	Date of leaving the company	Field 21	
Field 7	Date of birth	Field 22	
Field 8	Sex	Field 23	
Field 9	Business e-mail	Field 24	
Field 10	Function	Field 25	
Field 11	Nationality	Field 26	
Field 12	SAP cost centre	Field 27	
Field 13		Field 28	
Field 14		Field 29	
Field 15		Field 30	

Field 1–30 selection fields:

The ID card creation system provides 30 freely-configurable fields for the application. These can be filled with field content from the application as needed.

Options:

- All employee record fields created in the system.

Default value: No specification.

"Company fields" tab

On this tab, you can define the freely configurable company fields for the data exchange between the two systems. You can find the meaning of these fields in the ID card creation system.

The standard configuration is shown as an example.

Field 1	Town/ Postcode
Field 2	Street/Number
Field 3	Telephone number
Field 4	Fax
Field 5	E-mail
Field 6	Name
Field 7	First name
Field 8	
Field 9	
Field 10	

Field 1-10 selection fields:

The ID card creation system provides 10 freely-configurable fields for the application. These can be filled with field content from the application as needed.

Options:

- All employee record fields created in the system.

Default value: No specification.

4.1.31.9 ID card layouts (MAGiCARD)

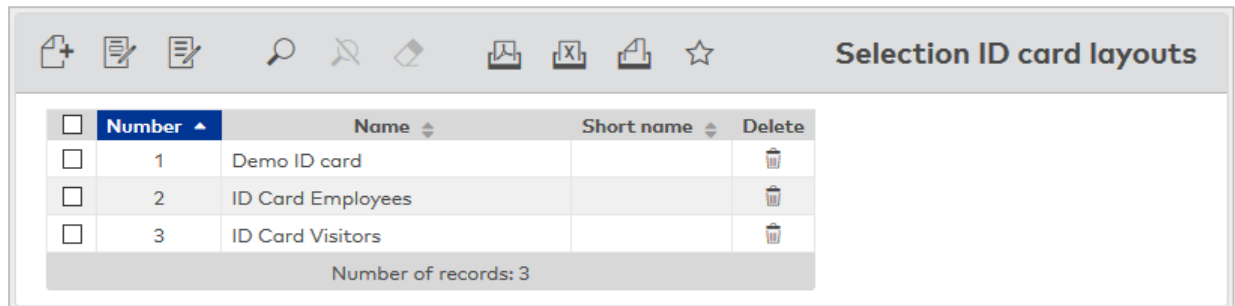
ID cards can be printed from MATRIX if a MAGiCARD ID card printer is connected. The ID card layout must have been created in advance in the system.

Note: This function is only available if the system parameter "System 121" is set to the value "2".

"Selection ID card layouts" dialog

The **Selection ID card layouts** dialog displays all ID card layouts created in the system with their number, name and short name.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit ID card layout" dialog

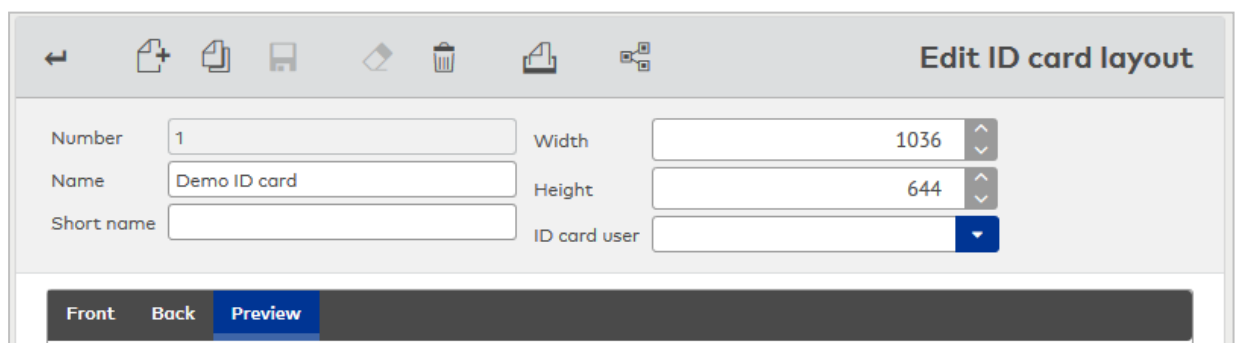
Use the **Edit ID card layout** dialog to create new ID card layouts and edit existing ID card layouts. Each ID card layout requires a unique number. It is recommended that you specify a name and a short name.

The dialog header contains information that determines the size of the ID card.

The tabs can be used to create separate layouts for the front and back of the ID card.

Note: Editing ID card layouts is not supported by Internet Explorer.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.



Dialog header

Height and **Width** selection fields:

Enter the height and width of the ID card in pixels.

Note: Details of printing height and width can be found in the printer documentation.

ID card user selection field:

Contains the organisational ID card user types.

Options: Employee, visitor, external company employee, LPN

"Front" and "Back" tabs

Use these tabs to define the visible identification data printed on the front and back of the card.

The editing options are identical for both sides.

Note: If you wish to print the back of the ID card in colour, check the printer settings beforehand. The printer may be set to monochrome printing by default.

Editing area:

Database fields and free text can be freely positioned in the editing area.

Search button:

Opens a pop-up dialog in which you can select a background image. The background images for the front and back must not be larger than 15 MB.

Add free text button:

Adds a free text element. The free text element can then be edited (see below).

Add field button:

Adds a database field containing a reference to the employee record or a function (e.g. current date).

Add person image button:

Adds a database field containing a reference to the employee record field.

Remove button:

Deletes the selected element from the editing area. The element will be removed without a confirmation prompt and cannot be restored.

The coordinates and further editing options are displayed for every selected element.

The screenshot displays a configuration panel for an ID card element. It includes the following fields and controls:

- Field:** A dropdown menu currently showing "First and last name".
- Preview text:** A text input field containing "John Doe".
- X:** A numeric input field with the value "440" and up/down arrow controls.
- Y:** A numeric input field with the value "185" and up/down arrow controls.
- Width:** A numeric input field with the value "455" and up/down arrow controls.
- Height:** A numeric input field with the value "50" and up/down arrow controls.
- Orientation:** Three radio button options: "Left" (selected), "Centre", and "Right".
- Font size:** A numeric input field with the value "39" and up/down arrow controls.
- Font:** A text input field containing "arial".
- Text style:** A dropdown menu currently showing "Bold".
- Font colour:** A color selection bar showing a black color.

Field selection field:

Contains the referenced database field (only of the type "Field").

Preview text input field:

Contains placeholder text for a database field (only of the type "Field").

Text input field:

Contains the text that will be visible on the ID card (only of the type "Free text").

Input field **X**:

Contains the value of the X coordinate on the ID card in pixels. This indicates the distance of the element from the left edge of the card.

Input field **Y**:

Contains the value of the Y coordinate on the ID card in pixels. This indicates the distance of the element from the top edge of the card.

Width input field:

Contains the width of the element in pixels.

Height input field:

Contains the height of the element in pixels.

Note: The images are adjusted to fit the width when called up from the database.

Orientation radio buttons:

Specifies the orientation of the visible text within an element.

Font size input field:

Contains the font size of the visible text within an element in pixels.

Font input field:

Contains the font of the visible text within an element.

Note: Only fonts that are installed in the browser can be used. As standard these are Arial, Monospace and Sans-Serif.

Text style selection field:

Contains the style of the visible text within an element. Possible values are normal, bold and italic.

Font colour selection:

Contains the font colour of the visible text within an element.

"Preview" tab

Shows a preview of the configured front and back of the ID card.

Configured printers selection field:

Contains the printers used to print the ID cards.

Print test ID card button:

Allows a test printout to be printed.

4.1.31.10 Daily correction

Day-related corrections are, for example, manual bookings and corrections made to employee records.

In the configuration settings for this dialog, you can combine the corrections for several operators.

"Selection configurations" dialog

The **Selection Configurations** dialog displays all configurations for the daily corrections dialog.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Configurations					
	Number	Name	Short name	Default	Delete
	1	Default	Def	☒	
Number of records: 1					

Default column:

Indicates the configuration that is used as the default configuration.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Configuration" dialog

Use the **Edit Configuration** dialog to create new configurations for the daily correction dialog and edit existing configurations. Each configuration requires a unique number. It is recommended that you specify a name and a short name.

Note: This dialog is designed for the administrator. It should be used when selecting different correction types. Incorrect configurations can lead to undesirable results.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Edit Configuration					
Number	1	Name	Default	Short name	Def
Default	☒				

Default checkbox:

Indicates the configuration that is used as the default configuration.

Corrections area:

Corrections	
1615 - Work schedule - day	1613 - Maximum working hours - day
1617 - Daily program - day	1614 - Maximum business authorisation per
	1616 - Maximum break time - day
Without calculated breaks	Break 1 1511 - Do not calculate break 1
	Break 2 1512 - Do not calculate break 2
	Break 3 1513 - Do not calculate break 3
Extended work time	1507 - Before/after work time - day
Shift profile change	
Workflow approval	☒

Corrections selection fields:

The selection fields for the correction types contain the day-related correction types that only take effect on one day or are only valid from the specified date.

Options:

- Work schedule – day
- Maximum working hours – day
- Maximum business authorisation period – day
- Maximum break time – day

Without calculated breaks 1–3 selection fields:

Selection of the correction types for identifiers for which breaks should not be calculated.

Options:

- Do not calculate break 1
- Do not calculate break 2
- Do not calculate break 3

Extended work time selection field:

Selection of the correction type for extending the work time.

Shift profile change selection field:

Select the correction type for shift profile change.

Workflow approval checkbox:

Indicates whether open workflows can be displayed and approved.

Options

- Activated: Workflows are displayed and can be approved.
- Not activated: Workflows are not displayed.

Default value: Not activated.

Absence times area:

The absence times are defined in this area.

The screenshot displays the 'Abwesenheiten' (Absences) configuration area. It consists of two main panels with search bars at the top. The left panel, titled 'Verfügbare Korrekturarten' (Available correction types), contains a list of correction types with their IDs and names: 2040 - Berufsschule, 2041 - Fortbildung, 2017 - Gleitzeit, 2013 - Krank, 2012 - Krank ohne Lohnfortzahlung, 2014 - Krank untätig, 2021 - Mutterschutz, 2022 - Ohne Lohnfortzahlung, 2005 - Sonderurlaub, and 2001 - Urlaub. The right panel, titled 'Zugeordnete Korrekturarten' (Assigned correction types), shows a list of assigned types: 2015 - Arbeitsunfall, 2030 - Dienstreise, and 2020 - Erziehungsurlaub. Between the two panels are four blue buttons with white arrows: a right arrow, a double right arrow, a left arrow, and a double left arrow. On the right side of the right panel, there are four blue buttons with white arrows: an up arrow, a double up arrow, a down arrow, and a double down arrow.

Correction types selection report:

Assign the correction types for absences in configuration using the selection reports.

Other correction types area:

Additional correction types for use can be defined in this area.

Sonstige Korrekturarten - Anzeige ☐

Sonstige Korrekturarten - Eingabe

Verfügbare Korrekturarten

1619 - Kostenstellenwechsel
1604 - Max Arbeitszeit setzen
1613 - Max Arbeitszeit Tag
1603 - Max Dienstgangzeit setzen
1614 - Max Dienstgangzeit Tag
1616 - Max Pausenzeit Tag
1506 - Rhythmusprüfung
1723 - Ruhezeit
1636 - Rundungsplan setzen
1605 - Saldo setzen
1722 - Schicht Rückgraben

>
>
<
<

Zugeordnete Korrekturarten

1629 - Mehrarbeitsberechtigung Tag
1501 - Mehrarbeitsberechtigung ändern
1719 - Resturlaub aus Vorjahr

^
^
v
v

Other correction types - Display checkbox:

Indicates whether the "Other corrections" block is displayed and can be used.

Options:

- Activated: The "Other corrections" block is displayed.
- Not activated: The "Other corrections" block is not displayed.

Default value: Activated.

Other correction types – Input selection reports:

Assign the further correction types in configuration using the selection reports.

Display accounts area:

This area is used to specify the display accounts.

Anzeigekonten

Verfügbare Anzeigekonten

Anwesenheit Summe
Arbeitszeit
Arbeitszeit gesamt
Arbeitszeit gesamt Summe
Arbeitszeit Summe
Dienstgangzeit
Dienstgangzeit Summe
Feiertag Stunden
Feiertag Stunden Summe
Feiertag Tage

>
>
<
<

Zugeordnete Anzeigekonten

Abwesenheiten
Abwesenheit Summe
Anwesenheitszeit

^
^
v
v

Display accounts selection reports:

Assign the applicable display accounts in configuration using the selection reports.

Time accounts area:

The time accounts that can be displayed and changed in the dialog are defined in this area.

Time accounts selection reports:

Assign the applicable time accounts in the configuration using the selection reports.

Arrive/leave booking area:

Arrive and leave bookings are determined in this area.

Correction types selection report:

Assign the applicable correction types for arrive and leave bookings in the configuration using the selection reports.

Default for arrive selection field:

Contains the correction type that is stated as the default in the table for bookings in the left-hand block of bookings, if no correction type is specified.

Options:

- All correction types created in the system.

Default value: Arrive

Default for leave selection field:

Contains the correction type that is stated as the default in the table for bookings in the right-hand block of bookings, if no correction type is specified.

Options:

- All correction types created in the system.

Default value: Leave

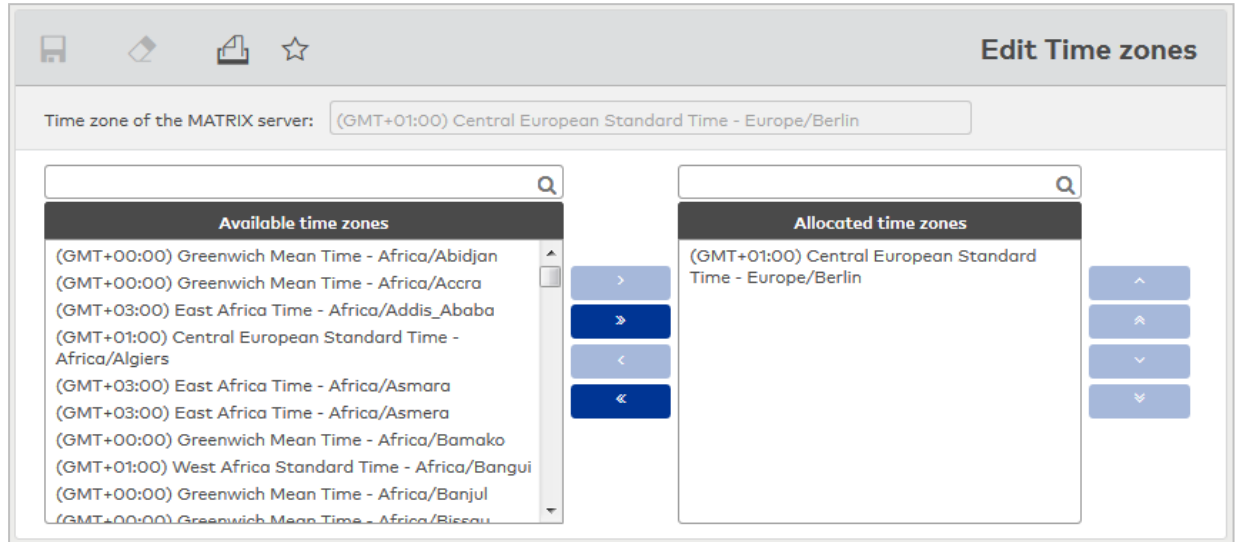
4.1.31.11 Time zones

The time zones available in person administration and device management can be limited by preselection. This simplifies selection and reduces possible operator errors.

"Edit Time zones" dialog

The **Edit Time zones** dialog is used to specify the time zones that can be used when making selections in person administration and device management.

You can use the buttons in the toolbar to save or reject the changes or to print the record.



MATRIX server time zone display field:

Contains the MATRIX server time zone.

Note: The MATRIX server time zone is allocated automatically and cannot be removed from the list of allocated time zones.

Time zones selection reports:

Use the selection report to allocate the time zones that can be used in the MATRIX system.

Note: No further time zones should be allocated if no person is managed in a different time zone and no devices are used in a different time zone.

4.2 Service

The **Service** menu offers direct access to system information and log files.. You can display the data directly and generate an output as text files in zipped format.

Use the **Service information** menu item to query the system information for the current dormakaba MATRIX installation and the underlying system.

Use the **Service report** menu item to output all service information and log files in a ZIP archive.

Use the **User programming** menu item to open the dialog for importing and exporting the user programming. The functions are required for the service team, in the context of customer adjustments.

Use the **Activation** menu item to open the dialog for activating your licence.

Use the **AoC addresses** menu item for an overview of the current AoC addresses with the assigned doors.

Use the **Log files** sub-menu to open the application, server, terminal and integration log files and to define the log level.

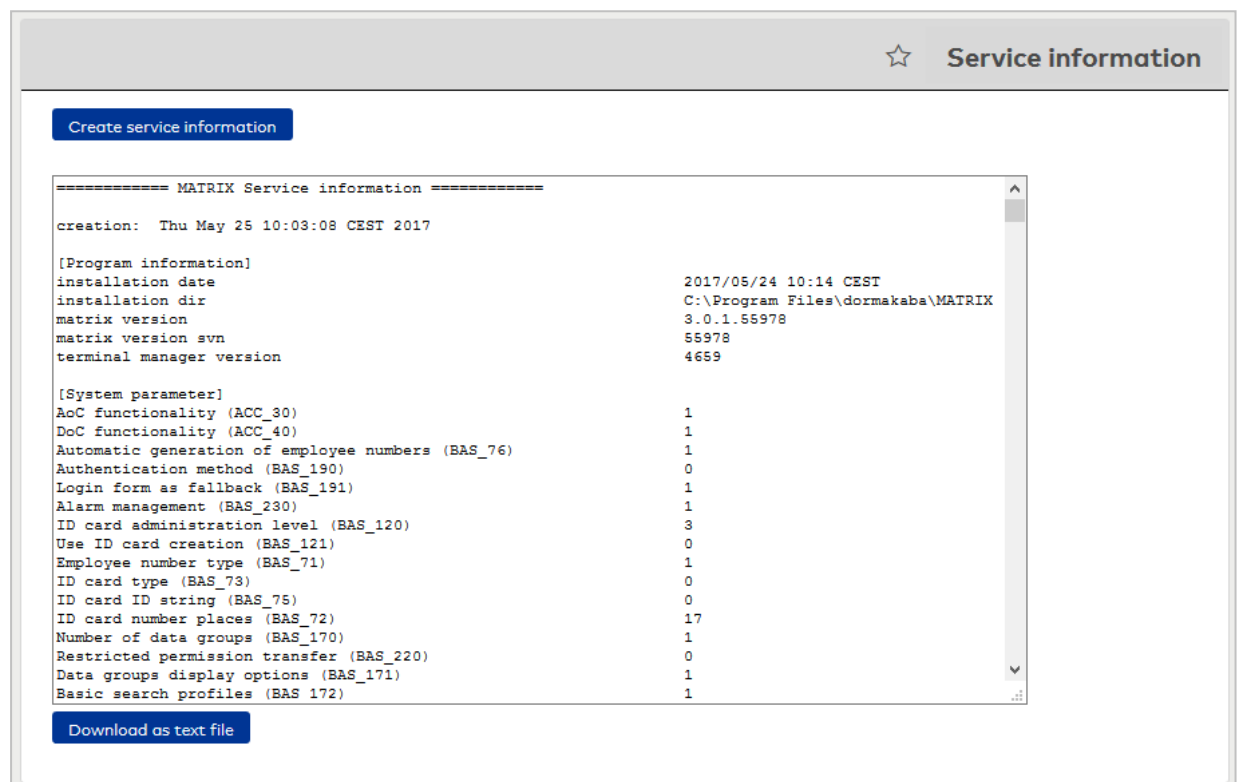
4.2.1 Service information

The service information provides all operation-relevant information on the system and the version of dormakaba MATRIX that is installed. This information can be saved as a text file for successful troubleshooting and forwarded to the dormakaba EAD GmbH support.

"Service information" dialog

Use the **Service information** dialog to create a file containing all relevant information on your system and the installation.

The existing text file is overwritten the next time the service information is created.



Create service information button:

Queries the relevant system information from your installation and displays it in the text field.

Note: The text field is empty if no service has been generated yet.

Download as text file button:

Opens a save dialog that you can use to save the service information as a text file in any directory.

4.2.2 Service report

In the service report all log files are combined in a ZIP file. This can be saved and forwarded to the dormakaba EAD GmbH support for successful troubleshooting.

"Service report" dialog

Use the **Service report** dialog to export all service and log files to a shared ZIP archive.


Create service report button:

Generates a ZIP archive with all service and log files and opens a save dialog that you can use to save the service report in any directory.

4.2.3 User programming

For service callouts and configuration purposes, the service team can be given access to the system at the customer's request.

To this end, the service team requires a password that can be generated by the administrator. This password is only temporarily valid and must be re-generated once it has expired.

One of the principal objectives of dormakaba MATRIX is the fast and effective implementation of customer requirements. The necessary customer adjustments should be integrated, if possible, independently of the version.

If the customer requirements can be realised in the framework of user programming, there is often no need for the deployment of the service team on location, as the administrator can provide the service team with the necessary user programming.

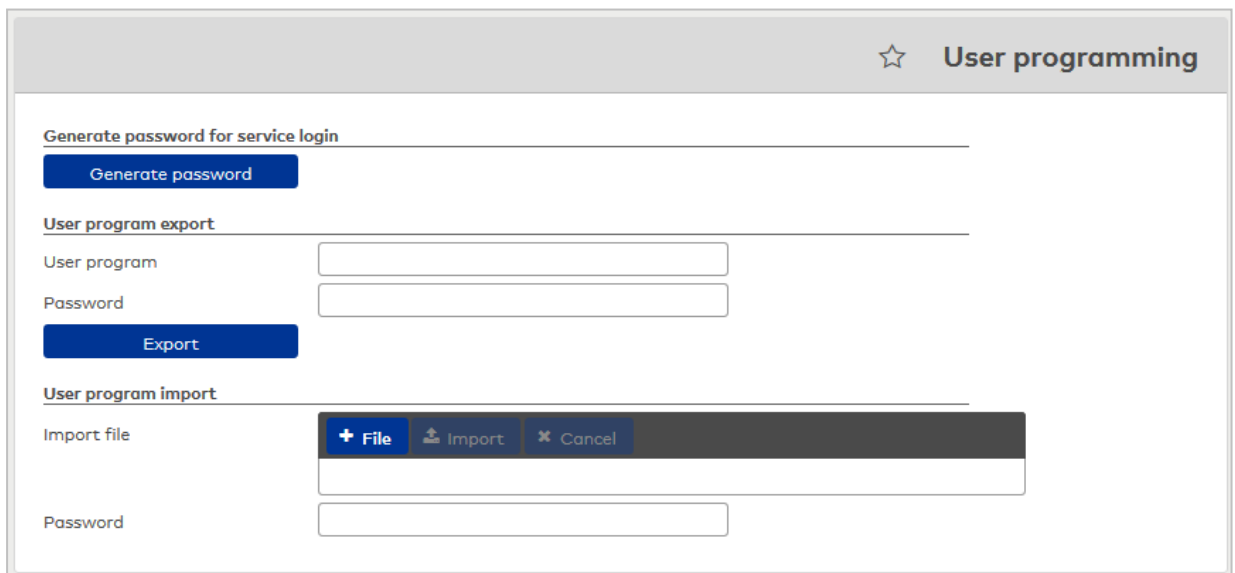
Using the export function, the administrator creates a user programming export file which is supplied to the service team via e-mail or remote maintenance access.

After completing the adjustments, the file returned by the service team is then imported by the administrator.

"User programming" dialog

Use the **User programming** dialog to generate the password for the service login.

You can also create the export file for the user programming for the service and re-import this once the changes have been made.


Generate password for service login:**Generate password** button:

Click this button to generate the temporary password for the service login. The password is displayed in the output field.

User program export:**User program** input field:

Enter the user program to be exported.

Password input field:

Entering a password protects the export file against unauthorised access.

Run export button:

Generates the export file matrix.mcf. You specify the storage location of the export file while exporting in a browser-dependent dialog.

User program import**Import file** field:

Contains the directory and the file name for the loaded import file.

Password input field:

If the import file is password-protected, the password must be entered before the file can be imported.

File button:

Opens the search dialog for files. Click the button to load the import file.

Import button:

Executes the import of the specified file. The entire user configuration is adopted with the import.

Note: You must log in again after the import for the changes to become effective.

4.2.4 Activation

If no licence has yet been installed, dormakaba MATRIX operates using a demo licence. In demo mode, the notification "Demo licence" appears every time the user logs in to a new dialog without a menu. The functionality of the demo version is limited.

If you wish to activate dormakaba MATRIX, you need the product key that you received with the installation CD.

Further information on activating dormakaba MATRIX can be found under the heading [MATRIX activation](#).

Note: No activation is required for dongle-based versions.

"MATRIX activation" dialog

You can register your licence online in the **MATRIX activation** dialog.

You require the MATRIX product key for registration.

**Product key** input fields:

Enter the 16-digit product key.

Start activation button:

Starts software activation using the MATRIX activation server. Successful activation is reported by a notification text. Then, restart the MATRIX service.

Note: Alternatively, you can also execute activation using the MATRIX web interface. Instructions can be found in the section [How to: Activation](#).

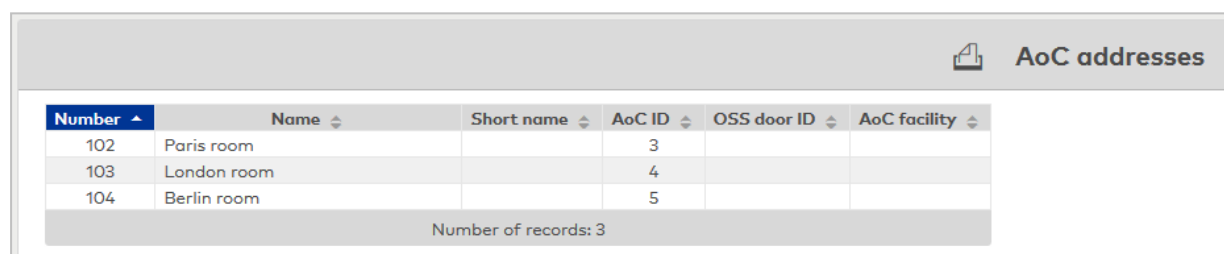
4.2.5 AoC addresses

AoC Addresses are allocated automatically by the system when a reader with AoC identifier is allocated to a door.

Note: The AoC addresses are not necessarily consecutive; there may be gaps. The gaps originate in deleted doors or room zones with AoC validity not expired. Due to existing AoC validity, ID cards can still have permissions for the deleted AoC addresses. To prevent validity for new doors of these permissions without control, deleted AoC addresses remain blocked until the AoC validity expires.

"AoC addresses" dialog

The **AoC addresses** dialog displays all currently allocated AoC addresses and OSS addresses that are required for communication with the terminals.



Number	Name	Short name	AoC ID	OSS door ID	AoC facility
102	Paris room		3		
103	London room		4		
104	Berlin room		5		

Number of records: 3

AoC ID column:

Displays the AoC address.

OSS Door ID column:

Displays the OSS door address.

AoC facility column:

Displays the AoC site which serves as unique identification together with the AoC ID.

Note: Duplicate AoC addresses for doors occur when allocating the door to a room zone because all doors with AoC readers receive the AoC address of the room zone. Allocating the AoC address via room zones limits the number range of the AoC addresses to a minimum.

4.2.6 Log files

The **Log files** sub-menu provides access to all logs created in the various components.

The log files are rolling, that is, the last entry is at the top. The dialog displays a maximum of the last 2,000 lines. When you save the log files, you can optionally call up older entries as a history.

Use the log level to define the level of detail in the logs. The memory requirement increases with the level of detail that you select. The file size of the rolling log files can be between 1-999 MB. The standard setting is 1 MB for terminal logs and 5 MB for the application log.

The following log levels are possible as the detail and priority increase:

1. DEBUG
2. INFO (default setting)
3. WARN

4. ERROR
5. FATAL
6. TRACE (only processing of time bookings)

According to the log level that is selected, only the messages at this level and those with higher priority are logged. If the WARN log level is set, all messages in the WARN, ERROR and FATAL categories are logged; messages with a lower priority (in this case INFO and DEBUG) are not logged.

FATAL refers to serious errors that affect the system and can result in loss of data. The Matrix service should be closed. Save the log files using the program directory in the \Log folder and send it to the responsible system administrator or service.

ERROR refers to serious errors that affect a sub-area or a component (such as room zone administration). They can result in data loss or inconsistencies in this sub-area. Go to the Service menu, save the log files and forward them to the responsible system administrator or service.

WARN refers to warnings that are output about events that were corrected independently by the system. These can be expired user sessions that were deleted automatically, for example, or missing user permissions. With this type of message, special measures do not usually have to be taken.

INFO identifies messages, for example if a certain step was started or successfully ended.

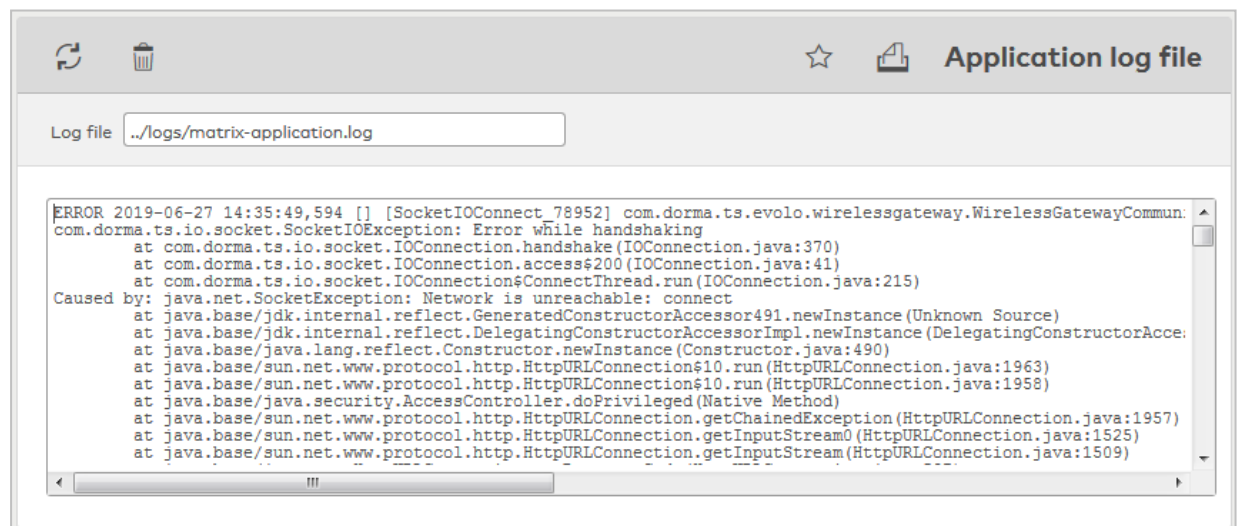
DEBUG identifies internal notification messages that are only intended for the development department. This log level should only be switched on if requested by the service in order to obtain additional information during fault analysis. In normal operation, this log level must not be switched on as it can impair the system's performance.

With TRACE, all processing steps for processing of time bookings are recorded. This log level should only be activated in response to a special prompt by the service.

"Application log file" dialog

You can view the contents of the log file generated by the application in the **Application log file** dialog.

You can use the buttons in the toolbar to update the display or to delete the content of the log file.



Log file field:

Displays the name of the log file.

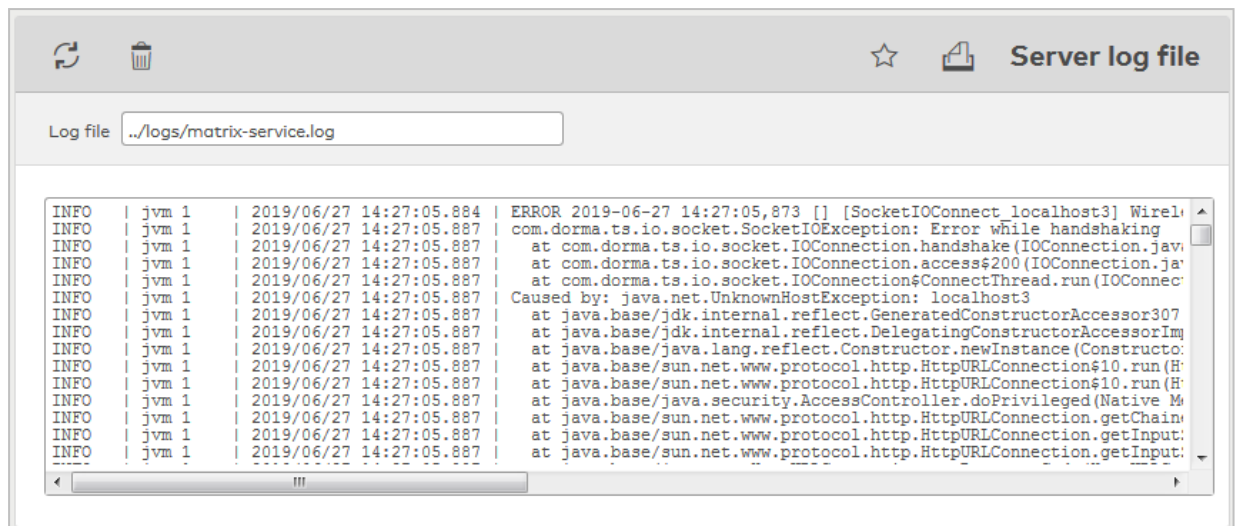
Text field:

Zeigt den Inhalt der Logdatei an. Es werden maximal 2000 Zeilen angezeigt.

"Server log file" dialog

In the **Server log file** dialog, you can view the content of the log files generated by the server.

You can use the buttons in the toolbar to update the display or to delete the content of the log file.



Log file field:

Displays the name of the log file.

Text field:

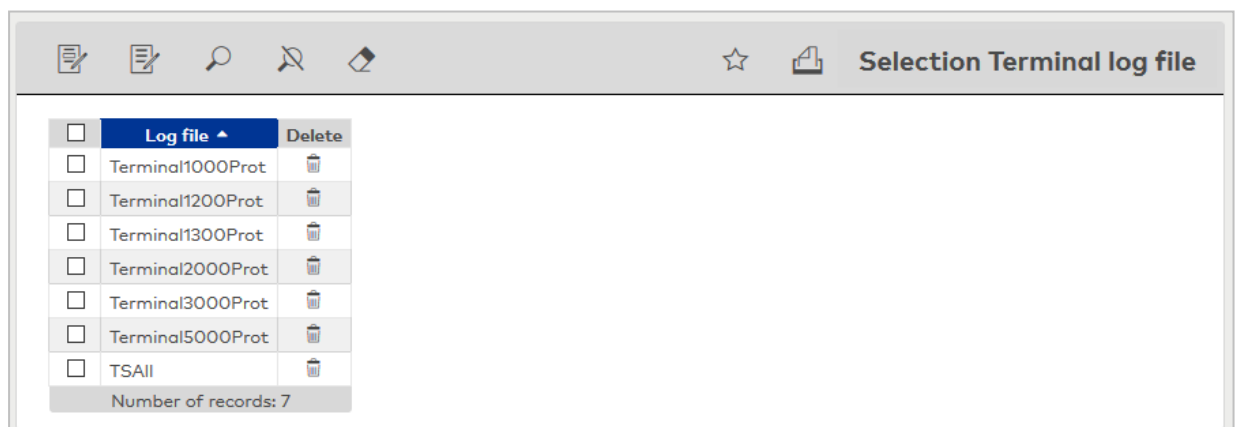
Zeigt den Inhalt der Logdatei an. Es werden maximal 2000 Zeilen angezeigt.

"Selection terminal log file" dialog

The **Selection Terminal log file** dialog displays all available log files for all available terminals.

You can use the buttons in the toolbar to open selected log files and to print a report containing the records that are displayed. You can use the search function to search for individual log files using their name.

The table displays the corresponding search results. Click a column header to sort the report by a characteristic in ascending or descending order. Click an entry to open the relevant record.



Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Log file column:

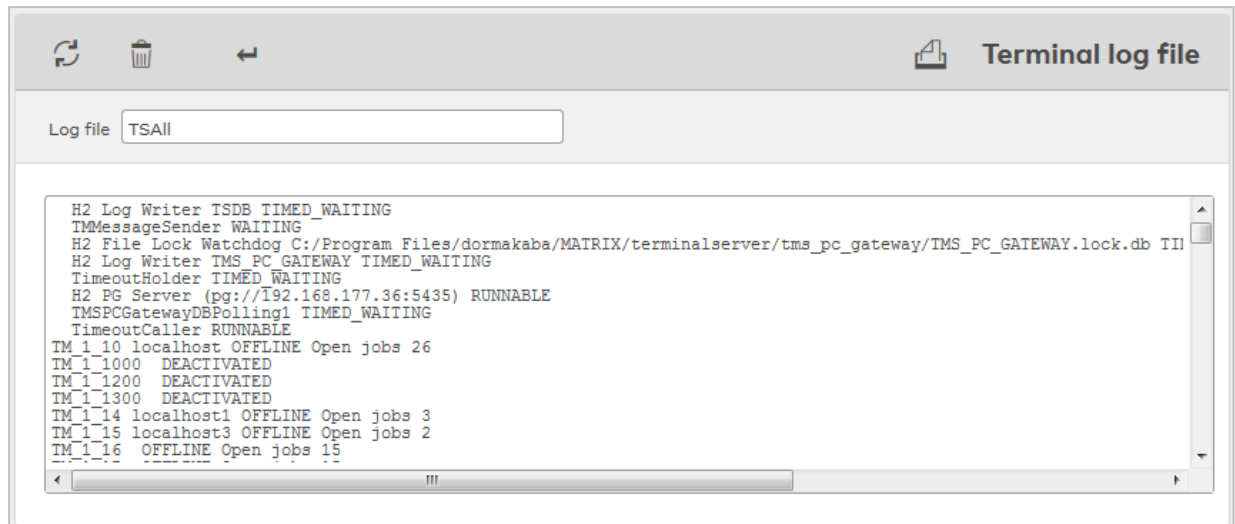
Contains the name of the log file.

Note: The TSAll log file is a special file which contains the most important information on the TS module and the terminals.

"Terminal log file" dialog

In the **Terminal log file** dialog, you can view the content of the log files generated by the terminal.

You can use the buttons in the toolbar to navigate between records, refresh the display or to delete or print out the log file contents. Use the **Back to selection** button to return to the selection.



Log file field:

Displays the name of the log file.

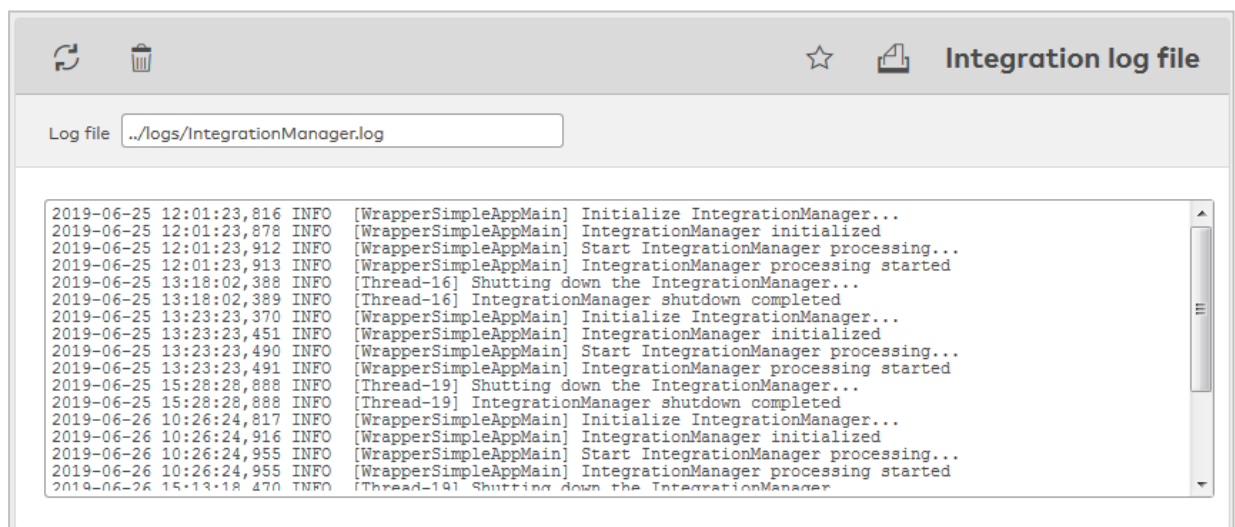
Text field:

Zeigt den Inhalt der Logdatei an. Es werden maximal 2000 Zeilen angezeigt.

"Integration log file" dialog

Use the **Integration log file** dialog to view the contents of the generated integration log files.

You can use the buttons in the toolbar to update the display or to delete the content of the log file.



Log file field:

Displays the name of the log file.

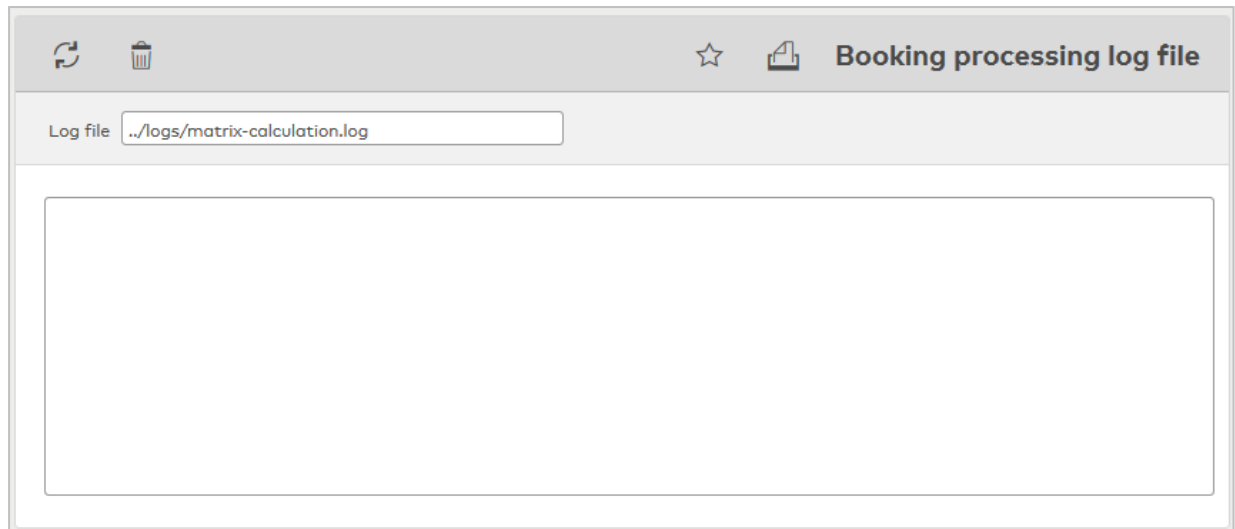
Text field:

Zeigt den Inhalt der Logdatei an. Es werden maximal 2000 Zeilen angezeigt.

"Booking processing log file" dialog

Use the **Booking processing log file** dialog to view the content of the log files generated for processing bookings.

You can use the buttons in the toolbar to update the display or to delete the content of the log file.

**Log file** field:

Displays the name of the log file.

Text field:

Zeigt den Inhalt der Logdatei an. Es werden maximal 2000 Zeilen angezeigt.

"Edit Log level" dialog

Use the **Edit Log level** dialog to edit the settings of the terminal log files. You can assign the same settings to all log files, or define different log levels and memory sizes.

You can use the buttons in the toolbar to save, reject or print out the changes to the log level settings.

The table displays the individual settings for all log files.

Edit Log level

General setting

Log level

File size
 KB

Apply to all log files

Record database queries

Save terminal commands to XML files ☐

Save page load time in CSV file ☐

Individual setting

Log file ▼	Log level	File size (KB)
TSAll	INFO	2048
Terminal6000Prot	INFO	1024
Terminal5000Prot	INFO	1024
Terminal3000Prot	INFO	1024
Terminal25Prot	INFO	1024
Terminal23Prot	INFO	1024
Terminal2000Prot	INFO	1024
Terminal15Prot	INFO	1024
Terminal14Prot	INFO	1024
Terminal1300Prot	INFO	1024
Terminal1200Prot	INFO	1024
Terminal10Prot	INFO	1024
Terminal1000Prot	INFO	1024
../logs/matrix-calculation.log	FATAL	5120
../logs/matrix-application.log	INFO	15360
../logs/IntegrationManager.log	INFO	2048

Number of records: 16

Reload from log4j.properties

Log level general setting selection field:

Contains the log level that should be applied to all log files. Select a log level from the list.

File size general setting input field:

Contains the file size that should be applied to all log files. Enter the file size you require in KB.

Apply to all log files button:

Applies the general setting to the individual setting for all log files.

Record database queries checkbox:

Causes all database queries that are executed on the database to be logged. Deselect this checkbox if you do not want to log the database queries.

Save terminal commands to XML file checkbox:

Ensures that all terminal commands are logged in the terminal log file and are created as XML files. Deactivate the checkbox if the terminal commands are not to be logged or created as XML files.

Note: Very many XML files can be created during normal operation above a certain number of terminals. That is why this option should only be activated if analysis of terminal commands is required.

Save page load time in CSV file checkbox:

Causes the load times for the HTML pages to also be logged.

Individual setting table:

The settings of the individual log files can be modified in this table.

Log file column:

Contains the name of the log file.

Log level column:

Contains the currently selected log level. To enter a different individual setting, select the log level entry you require from the list. Refer to the topic [Log files](#) for a detailed description of each log level.

File size column:

Contains the maximum file size of the log file. To make an individual setting, enter the file size you require.

Reload from log4j.properties button:

Loads changes made to the log file into the system.

Caution: Only trained, specialist personnel are permitted to edit and import log files.

4.3 Corrections

Changes can be made to the master data records using corrections. The dialog is designed to make many different types of corrections and also allows you to enter many corrections at the same time. The dialog provides a generating function and a related searching procedure for applying the same corrections to different master data.

Input entries in the dialog interface are saved as correction records in the database and processed in a correction process. Corrections are applied directly to the master data and are valid immediately.

Note: The corrections are only available when the data groups option is enabled.

"Edit corrections" dialog

Use the **Edit Corrections** dialog to record the various corrections and display incorrectly processed correction records for revision. The input fields are located in the upper section of the dialog and the corrections already recorded or incorrectly processed are displayed in the lower section.

Use the buttons on the toolbar to save and discard the correction inputs and start processing corrections or print or delete the displayed records. You can display the progress of correction processing by clicking the **Refresh** button.



**Edit Corrections**

Correction type

97 - Alarm management action text - set data group(s)

Action texts

1

Data group 1

1 - Administration

Apply

Corrections (open = 0, Failed = 0, New = 2)

Correction type	Number/name	Valid from	Valid until	Parameter	Error message		
Alarm management action text - set data group(s)	1 - Doorbreak			Data group 1 =			
Alarm management action text - set data group(s)	1 - Doorbreak			Data group 1 = 1			

Corrections are recorded or edited in the input line. The composition of the line matches the correction type selected.

Correction type selection field:

Selecting the correction type determines the master data reference and the parameter fields in the input line.

Search button (magnifier):

Opens a selection dialog that is based on the correction types. One or more records can be chosen from this dialog. If you select multiple records, an * is displayed in the input field.

Other **selection and input fields**:

The other selection and input fields relate to the correction type selected.

Apply button:

Use this button to create the correction records and transfer them into the table. One correction record is generated for each master data record.

Corrections () progress display

After startup, the number of corrections is displayed with the current status. These are updated at time intervals of 2 seconds in order to show the progress.

Total	Number of corrections in the table
Open	Corrections that must still be processed
Failed	Corrections that could not be completed; the entries remain in the table where they can be corrected or deleted.
New	Newly entered corrections for which correction processing has not yet been triggered

Table:

The table displays all correction records that have been newly created but not yet processed. The correction records can be deleted or modified. Click the **Change line** button of a correction record. The entry will then be loaded into the input line and can be directly altered.

Correction type column:

Displays the type of correction for the correction record.

Number/name column:

Displays the number and name of the master data records to which the correction is applied.

Valid from/valid until column:

Enter a start and end date for validity.

Parameter column:

Displays the parameters required for correction. The master data reference and the new value are displayed, respectively.

Error message column:

Displays a message if a correction record could not be processed.

4.4 Reports (system)

The **Reports** menu provides you with the fixed reports in the basic system.

You can print out all reports or save them as a PDF file.

The **Users in organisational unit** report gives you an overview of user allocation to the organisational units.

The **User rights** report gives you an overview of the allocation of user roles and data group rights for the users.

The **Evaluation of personal data** report contains a compilation of all person-related data for a person in line with the EU data protection regulation.

The **Alarms** report provides an overview of the alarms.

The **Encoded ID cards** report provides an overview of all ID cards encoded using MATRIX.

4.4.1 Users in organisational unit

The **Users in organisational unit** report allows a clear evaluation of all organisational units and their allocated users.

You can select the data for individual organisational units, several organisational units or all organisational units for display. If required, the child organisational units can also be displayed at the same time.

"Selection Users in organisational unit" dialog

The **Selection Users in organisational unit** dialog lists all existing organisational units. Select individual or multiple organisational units to obtain an overview of the allocated users for the selected units.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Number	Name	Short name
☐ 1	Management	
☐ 2	Production	
☐ 3	Administration	
☐ 4	Manufacturing	
☐ 5	Human resources	
☐ 6	Warehouse	

Number of records: 6

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Display Users in organisational unit" dialog

The **Display Users in organisational unit** dialog shows the previously selected organisational units with their allocated users.

You can use the buttons in the toolbar to print the report or to save it as a PDF. Use the **Back to selection** button to return to the selection dialog.

← **Display Users in organisational unit**

☐ Show users in child organisational units as well

Administration

Superior Matrino, Johanna (matrino)

User ID	Last name	First name
matrino	Matrino	Johanna

Manufacturing

Superior Cermans, Paul (cermans)
Substitutes Ackreiter, Thorsten (ackreiter), Meunier, Catherine (meunier)

User ID	Last name	First name
cermans	Cermans	Paul
kamp	Kamp	Karsten
leconte	Leconte	Sandra
meunier	Meunier	Catherine

Show users in child organisational units as well checkbox:

Indicates whether only the users in the organisational unit are displayed or also the users in the child organisational units.

Options:

- Activated: Users in the child organisational units are also displayed.
- Not activated: Only users which are directly allocated to the organisational unit are displayed.

Default: Activated.

Display of the organisational units:

The display shows the organisational units plus the child organisational units if they are activated.

Allocated users table:

Contains the users for the organisational unit.

User ID column:

Contains the ID of the user.

Last name column:

Contains the last name of the user.

First name column:

Contains the first name of the user.

4.4.2 User rights

The **User rights** report allows clear evaluation of all users with the allocated user roles and the allocated data groups to which access rights exist.

"User rights" dialog

In the **User rights** dialog, the users are displayed with the allocated user roles and data group rights. Select individual or multiple options to obtain an overview of the allocated users for these.

You can use the toolbar to print a report containing the displayed records.

The screenshot shows the 'User rights' interface. At the top, there are search filters: 'User ID', 'Last name', 'User role(s)', and 'Data group rights'. Below these are radio buttons for 'Active users', 'Blocked users', and 'All users' (selected). A 'Start search' button is on the right. The main part of the interface is a table with columns: 'User ID', 'Last name', 'First name', 'User role(s)', 'Data group rights', and 'Blocked'. The table lists 12 users. At the bottom, it says 'Number of records: 12'.

User ID	Last name	First name	User role(s)	Data group rights	Blocked
ackreiter	Ackreiter	Thorsten	Superior		☐
admin	Administrator		admin	Administration, Purchase, Production, Development	☐
cermans	Cermans	Paul	Superior		☐
hochmeyer	Hochmeyer	Gertrud	Superior		☐
kamp	Kamp	Karsten	Employee		☐
leconte	Leconte	Sandra	Superior		☐
legrand	Legrand	Marc	Superior		☐
leroy	Leroy	Fabienne	Superior		☐
martin	Martin	Eric	Superior		☐
matrino	Matrino	Johanna	Superior		☐
matrix	MATRIX	DORMA	System configuration		☐
meunier	Meunier	Catherine	Superior		☐

Number of records: 12

Filter criteria:

Enter the filter criteria for the search in the search fields. Value ranges for the users and multiple selections for the user roles and data group rights are possible.

Use the radio buttons to select whether all users or only active users/blocked users are to be displayed.

Table:

The table displays the users found in the search.

4.4.3 Evaluate person-related data

Persons can query which data concerning them is stored in the MATRIX system in line with the EU data protection regulation.

The **Evaluate person-related data** report contains all data concerning a person saved in the MATRIX system provided for export in the form of a zip file.

The stored data depends on the person group (persons, visitors, external company employees).

A PDF file containing data from the Base, Access and Time sections and a PDF file for the assigned users are generated for each person. Further data is provided in the form of CSV files if data is present in the corresponding areas. No empty files are written.

Note: Data on room reservations and patrols do not form constituent parts of the export data and must be called up using the **Reservations** or **Patrol log** dialogs. If one or both of these functions are used, a readme file containing a corresponding note is added to the export.

"Selection Person types" dialog

All existing person types that are active in the system are listed in the **Selection Person types** dialog. The possible person types are:

- Persons
- External company employees
- Visitors

Selection Person types	
Name	Description
Person	Persons from person administration
External company employee	External company employee form external company administration
Visitor	Visitors from visitor administration
Number of records: 3	

Click an entry to apply a person type.

"Selection persons" dialog

Use the **Selection Persons** dialog to search for persons and directly apply them to the invoking dialog.

Note: When the **Several ID cards per person** option is active, an individual record for the person is displayed in the table for every ID card.

Selection Persons						
Last name	First name	Department	Employee number	ID card number	ID card label	Blocked
Ackreiter	Thorsten		1	9001	001	☐
Cermans	Paul	2 - Production	7	8203	203	☐
Hochmeyer	Gertrud	2 - Production	5	8201	201	☐
Kamp	Karsten	2 - Production	9	8205	205	☐
Leconte	Sandra	2 - Production	10	8206	206	☐
Legrand	Marc	2 - Production	6	8202	202	☒

Click an entry to directly apply the corresponding record.

"Selection External company employees" dialog

Use the **Selection External company employees** dialog to search for external company employees and directly apply them to the invoking dialog.

Note: If the **Several ID cards per person** option is active, an individual record of the external company employee is displayed in the table for every ID card.

Selection External company employee							
Last name		ID card number					
First name		ID card label					
External company							
			Apply ID card number				
Start search							
Last name	First name	External company	ID card number	ID card label	Blocked		
Schilling	Wolfgang	ACME	19001	ACME 19001	☐		
Schmitz	Peter	ACME	19002	ACME 19002	☐		
Number of records: 2							

Click an entry to directly apply the corresponding record.

"Selection Visitor" dialog

Use the **Selection Visitor** dialog to search for visitors and directly apply them to the invoking dialog.

Title	Last name	First name	Company
	Berg	Eva	
	Miller	Mike	ABC Media

Number of records: 2

Click an entry to directly apply the corresponding record.

"Export personal data" dialog

The **Export personal data** dialog is used to create an export file containing the data concerning the selected person saved in the system.

Note: The file is available for download for 24 hours. Subsequently, it is automatically deleted by the data cleanup process:

Export personal data

Export file generation has started.

Legrand, Marc (Employee number: 6)

Start export Cancel export Download file

Start export button:

Starts the export of all person-related data present in the system concerning the specified person. Depending on the amount of data, this process may take some time (up to several minutes). Progress is not displayed. Refresh the dialog. Once generation of the zip file has been successfully concluded, the **Download file** button is activated.

Cancel export button:

Cancels the export process.

Download file button:

Opens a Save dialog that you can use to save the export file in a local directory. The button is activated once the generation of the zip file has been successfully concluded.

Note: The server directory from which the person-related data is provided for download is specified using the system parameter "System 213". The standard directory is "..\report\personalreports\".

4.4.4 Alarms

All alarms that have occurred, together with their different status information for acknowledgement, are shown in the **Alarms** report.

"Selection alarms" dialog

The **Selection Alarms** dialog lists all existing alarms.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Start	End	Type	Trigger	Configuration	Priority	Device number	Name	Type	Door number	Door name	Alarm status	Acknowledgement	Accepted by	Acknowledged by
06/07/2017 12:41:20	06/07/2017 12:41:20	Alarm	Arrive		3	0					completed	pending		
06/07/2017 16:19:57	06/07/2017 16:19:57	Alarm	Arrive		3	0					completed	pending		
06/07/2017 16:20:17	06/07/2017 16:20:17	Alarm	Business authorisation - leave		3	0					completed	pending		
06/09/2017 10:25:44	06/09/2017 10:25:44	Alarm	Arrive		3	0					completed	pending		
06/09/2017 10:26:50	06/09/2017 10:26:50	Alarm	Arrive		3	0					completed	pending		

Number of records: 5

Search fields:

From date/time field:

Specifies the date and time of the start of the period for the search. If this is not specified, there is no limit for the search in the past.

Until date/time field:

Specifies the date and time of the end of the period for the search. If this is not specified, there is no limit for the end of the search.

Device number input field:

Specification of a number or value range for the search for the device number.

Door number input field:

Specification of a number or value range for the search for the device number.

Device type selection field:

Specification of the device types.

Options:

- Empty, no selection
- Reader
- Input/output module
- Trafficpoint
- MUX
- Keyboard
- Terminal

Type selection field:

Specification of the type of the alarm.

Options:

- Empty, no selection
- Alarm
- Error

Priority selection field:

Specification of the priority of the alarm.

Options:

- Empty, no selection
- very high
- high
- medium
- low
- very low

Alarm status selection field:

Specification of the alarm status.

Options:

- Empty, no selection
- Active
- completed

Acknowledgement selection field:

Specification of the status of the acknowledgement.

Options:

- Empty, no selection
- not required
- pending
- accepted
- acknowledged

Trigger selection field:

Specification of a trigger for the alarm.

Options:

- Empty, no selection
- All triggers available in the system.

Accepted by selection field:

Specification of an operator who accepted the alarm.

Options:

- Empty, no selection
- All operators created in the system.

Acknowledged by selection field:

Specification of an operator who accepted the alarm.

Options:

- Empty, no selection
- All operators created in the system.

Table:

The table displays the results of the search. Click an entry to display further details of the alarm.

"Display alarm" dialog

The **Display Alarm** dialog displays the details of the selected alarms.

Use the toolbar to navigate between the alarms, print the records displayed or return to the selection dialog.

		Display Alarm	
Start	06/07/2017 16:20:17	End	06/07/2017 16:20:17
Start signalled	06/07/2017 16:20:17	Stop signalled	06/07/2017 16:20:17
Type	Alarm	Reporting terminal	0
Trigger	Business authorisation - leave	Configuration	
Priority	3	Alarm status	completed
Device number	0	Device name	
ID card	8203		
Person	Cermans, Paul	Employee number	7
Accepted by		Accepted on	
Acknowledged by		Acknowledged at	
Acknowledgement status	pending	Acknowledgement text	

Start display field:

Contains the date and time when the alarm started.

End display field:

Contains the date and the time when the alarm was ended.

Start signalled display field:

Contains the date and time when the start of the alarm was signalled.

Stop signalled display field:

Contains the date and time when the end of the alarm was signalled.

Type display field:

Contains the type of the alarm.

Reporting terminal display field:

Contains the number and name of the terminal, provided the alarm was reported by a terminal.

Trigger display field:

Specifies the event which triggered the alarm.

Configuration name display field:

Contains the name of the alarm configuration.

Device number display field:

Contains the number of the device on which the alarm occurred.

Device name display field:

Contains the name of the device on which the alarm occurred.

Device type display field:

Specifies the type of the device.

Door number display field:

Contains the door number, if the alarm was triggered at a door.

Door name display field:

Contains the door name, if the alarm was triggered at a door.

ID card display field:

Contains the ID card, if the alarm was triggered by an ID card.

Accepted by display field:

Contains the user who accepted the alarm.

Accepted on display field:

Contains the date and time when the alarm was accepted.

Acknowledged by display field:

Contains the user who acknowledged the alarm.

Acknowledged at display field:

Contains the date and time when the alarm was acknowledged.

Acknowledgement status display field:

Contains the current status of the acknowledgement.

Acknowledgement text display field:

Contains the acknowledgement text, if there is one.

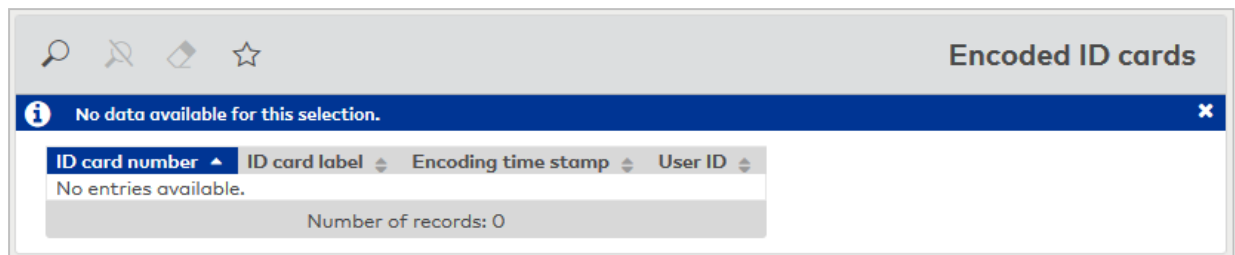
4.4.5 Encoded ID cards

The **Encoded ID cards** report provides a clear overview of ID cards encoded using MATRIX, along with their time stamp and user ID, for the purpose of evaluation.

Encoding requires a configured ID card creation system (PC reader).

"Encoded ID cards" dialog

The **Encoded ID cards** dialog contains a list of all ID cards encoded using MATRIX.



ID card number column:

Contains the ID card number of the encoded ID card.

ID card label column:

Contains the label visible on the assigned ID card, if available.

Encoding time stamp column:

Contains details of the date and time at which the ID card was encoded.

User ID column:

Contains the user ID of the MATRIX user who encoded the ID card.

4.5 Alarm monitor

The alarm monitor shows the status of various alarms and events.

You can also use the alarm monitor to display floor plans regardless of whether an alarm or error has occurred. You can call up and monitor video cameras contained in the floor plans from the alarm monitor.

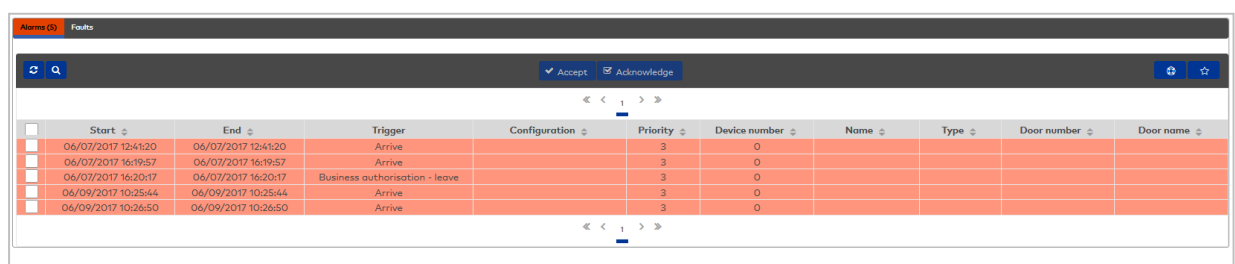
Note: The alarm monitor is only available if the corresponding system parameter "System 230 Alarm Management" is activated.

"Alarm monitor" dialog

The **Alarm monitor** dialog is a popup dialog in which all the existing alarms and events are displayed chronologically.

Note: When it is necessary to use proxy servers or load balancers, these must be WebSocket capable to ensure that the dialog is displayed correctly.

Use the toolbar to switch on the filter function, manually update the display and accept and acknowledge alarms or errors. Activate the **Keep details open** checkbox to display the dialog's details screen described below.



Alarms and errors are grouped on tabs of the same names. The following description applies to both tabs.

Table:

In the table, 10 alarms per page are always displayed, which have not yet been acknowledged or accepted. Alarms which do not need to be acknowledged are not displayed. If no column is selected as sorting, the start time is used as the default. New alarms therefore always appear at the top.

Colour coding:

New alarms are highlighted in red, new errors in yellow and accepted alarms or errors are highlighted in white.

Start column:

Contains the date and the time when the alarm started.

End column:

Contains the date and time when the corresponding counter event was triggered. This column is empty as long as there is no counter event.

Trigger column:

Contains the event that triggered the alarm.

Configuration column:

Contains the name of the alarm configuration.

Priority column:

Contains the priority of the alarm.

Note: The following columns are only filled if the information on the device or the door is present.

Device number column:

Contains the number of the device from which the alarm was reported.

Device name column:

Contains the name of the device.

Device type column:

Contains the type of device.

Door number column:

Contains the number of the door where the alarm occurred.

Door name column:

Contains the name of the door.

"Details" window

This window displays additional information on alarms and errors. The information can be printed as a PDF file using the button in the title bar.

If the alarm has not yet been accepted, this area contains an **Accept** button. If the alarm was accepted, the display shows who accepted the alarm and when.

If an alarm or error that relates to a door with an attached camera is selected in the alarm monitor, a miniature live image from the camera is automatically displayed in the Details window. If multiple video cameras are connected, the live images are shown one above the other. Click a live image to open it in a camera popup. The live image is not printed out when the details are printed.

Details

Type:

Alarm

Priority:

3

Trigger:

Arrive

Configuration:

Start:

06/09/2017 10:25:44

End:

06/09/2017 10:25:44

Start signalled:

06/09/2017 10:25:45

Stop signalled:

06/09/2017 10:25:45

State:

completed

Person:

Cermans, Paul

Employee number:

7

ID card:

8203

✓ Accept

"Measures" window

This window displays the measure text created in alarm configuration.

Actions

You have already booked with arrival at this door.

Please check out first.

"Acknowledgement" window

The button is used to acknowledge alarms. Comment input can be set as a mandatory field in alarm configuration.

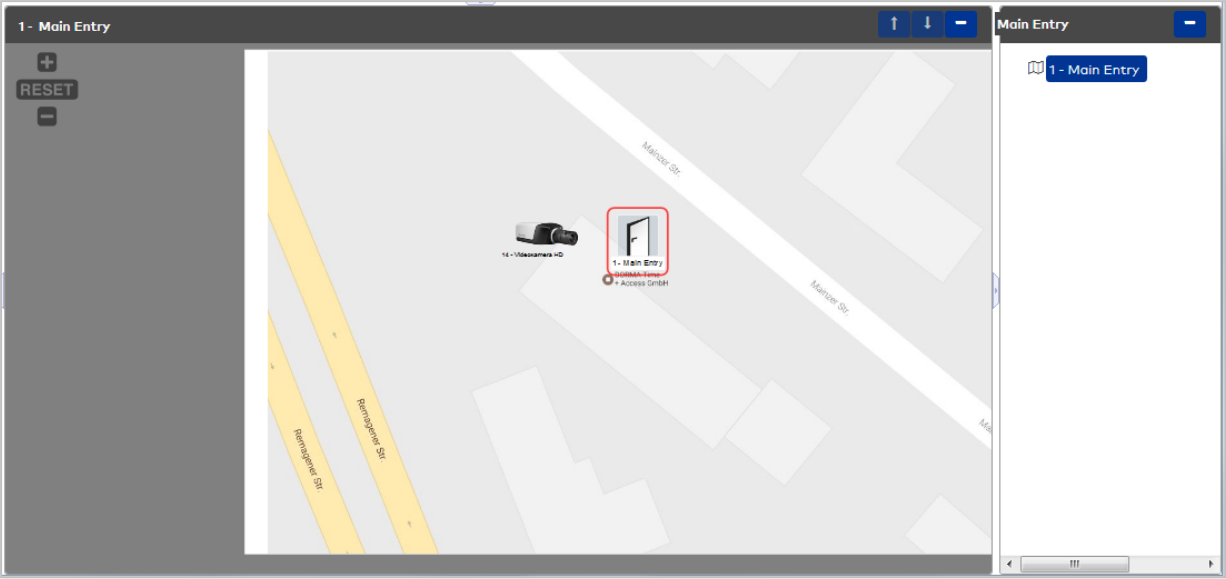
Note: The **Acknowledgement** window is also displayed if multiple alarms have been selected in the table and all need to be acknowledged at once. If a comment is specified as mandatory for at least one alarm, a comment must be entered before all the selected alarms can be acknowledged. In this case, all alarms are acknowledged with this text.

Acknowledgement

✓ Acknowledge

"Floor plans" window

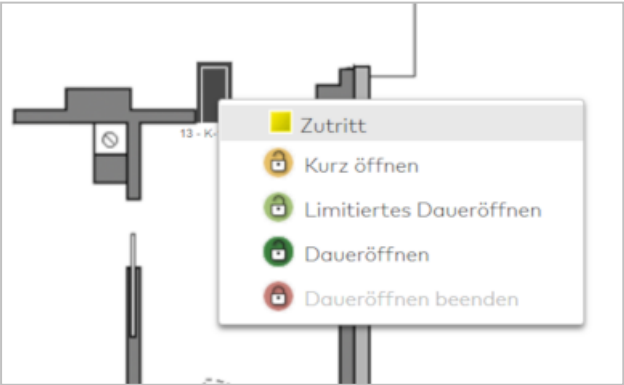
If the **Keep details open** checkbox is activated, the floor plans that have been created are displayed. If the floor plans contain video cameras, you can call up the live images by clicking the camera symbol. As the live images are opened in a [camera popup](#), you can monitor multiple cameras simultaneously by arranging them side by side. The camera popups remain open even if the alarm monitor is closed.



The door icons in the floor plan indicate the door status:

	Door closed, accessible with access permission (target status: access, office release possible)
	door open (target status permanent opening, target status office release activated, manual permanent opening)
	door blocked (target status no access, reader block in place)
	Door status unknown

Door can be accessed directly via the door icons. Click a door icon to open a context menu containing the current door status and direct access buttons.



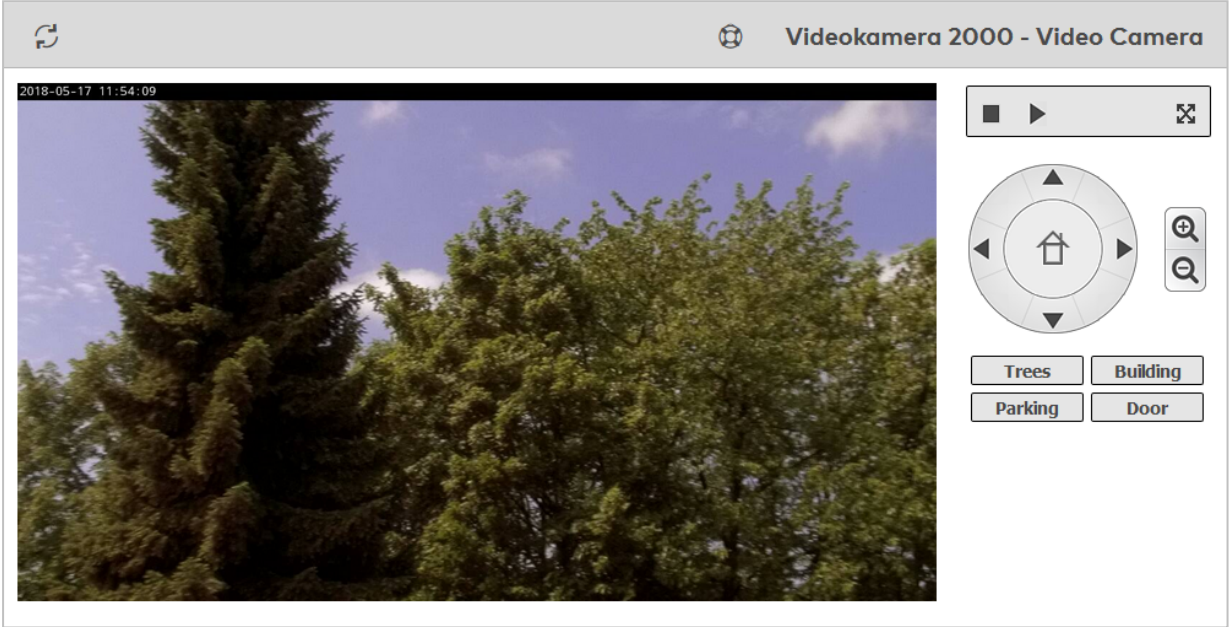
Camera popup

The camera popup is a video surveillance component and can be called up in MATRIX using the following methods:

- From device management using the **Devices – Video camera** dialog. This option is primarily used for test purposes when setting up a camera.
- From the floor plans in alarm management by clicking a camera icon.
- From the alarm monitor by clicking an alarm or camera icon in the floor plan window.
- From the door monitor status display by clicking a camera icon.

Note: A camera popup keeps the browser session open. If you have opened a camera popup, the MATRIX will remain open even if no other user activities are taking place.

Use the button in the toolbar to update the status display.



The camera popup displays the live image on the left. The control fields are shown on the right.

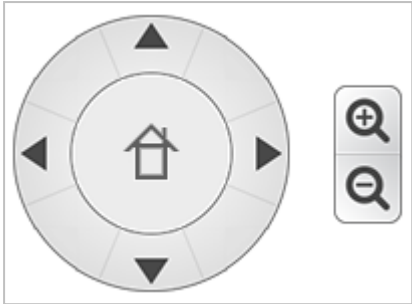


	Stop	Stops the image
	Start	Restarts the image
	Full screen	Switches the image to full screen mode

Cameras with PTZ control

If PTZ control has been activated for the camera via device management, a PTZ control field is shown and can be used to control the camera.

Note: Please read the camera documentation for information on whether the camera supports PTZ functions and, if so, which functions.



	Up	Swivels the camera upwards
	Right	Swivels the camera clockwise
	Down	Swivels the camera downwards
	Left	Swivels the camera anticlockwise
	Home	Press briefly to move the camera to the default position. Press and hold to set the current camera position as the new default position. A small note will appear in the camera popup when a new default position is set.
	Zoom in	Zooms in to the image
	Zoom out	Zooms out from the image

Cameras with PTZ control and preset positions function

You can use the preset positions function to save various camera positions, such as a parking space, a door or a window. Once saved, you can move the camera to these specific positions.

The configured preset positions buttons are displayed below PTZ control in the camera popup. You can save up to 10 positions. Each position is represented by a separate button. The preset positions buttons must be created in the camera's device management beforehand.

Examples:



Setting a camera position:

To save the current camera position, press the appropriate preset positions button until a confirmation note is displayed in the camera popup.

Moving to a camera position:

To move the camera to a previously saved camera position, briefly press the preset positions button.

4.6 System monitor

The system monitor displays the status of various background processes and time-controlled jobs. The detailed information on the various processes provides detailed information on the jobs being performed. If required, and possible, the process can be stopped or executed manually.

In addition to the permanently installed processes, other processes are also registered to be displayed in the system monitor. These processes primarily include interfaces, which can be set up in the system. Detailed information can be found in the interface descriptions.

"System monitor" dialog

The **System monitor** dialog displays all registered background processes and time-controlled jobs. Every process is displayed with its status and name.

System monitor		
State	Process	Action
	Blocked Persons	 
	CSV export of employee record	 
	CSV import of employee record	 
	Daily data	 
	Database backup	 
	Datev Time	 
	asd	 
Number of records: 7		
Last update: 05/25/2017 10:18:16		

State column:
Contains the current status of the process.
Possible display:

	The process is active.
	The process is stopped.
	The status is unknown.

Process column:
Contains the name of the process. Click the name to open the dialog with the detailed information.

Action column:
If the process permits, commands can be sent to the process from this column.
Actions include:

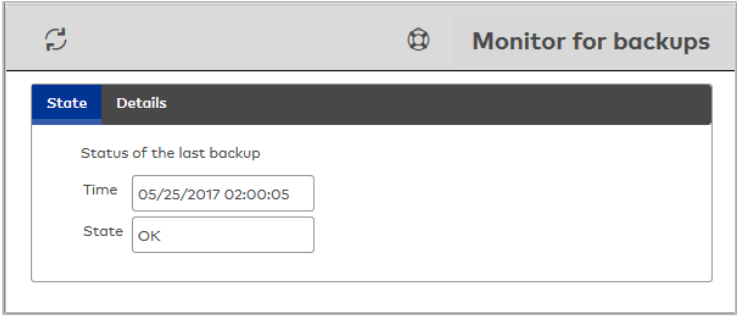
	Start process.
	Stop process.
	Action not possible.

"Monitor backup" dialog

The **Monitor for backups** dialog displays information on the most recently performed backup.

Status tab

The most important information on the backup is displayed on this tab.



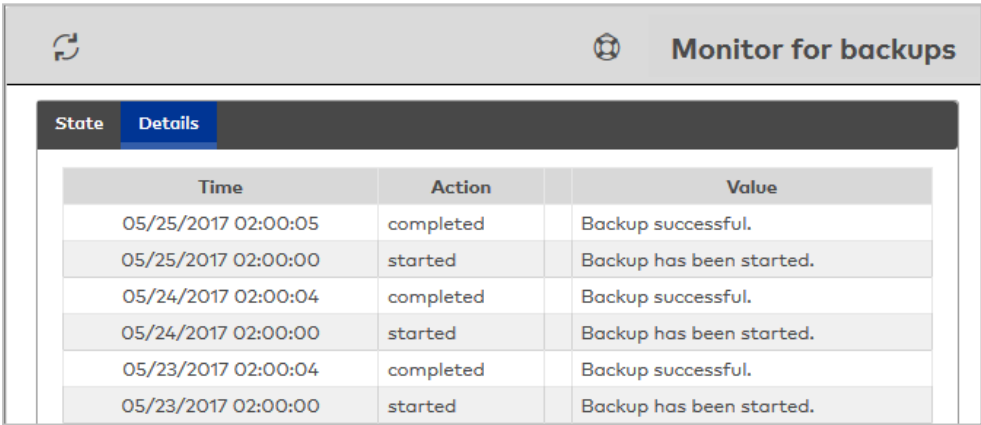
Status of the last backup:

Time display field:
Contains the date and time of the last backup.

State display field:
Contains the status of the last backup.

Details tab

The detail view contains information on the starting time and the current status of every backup process.



Time column:
Contains the date and time at which the last status change (start, end) took place.

Action column:
Contains the current action status.

Description column:
Contains a description of the action performed with additional parameters and values, if these are available.
Actions with comments or actions which could not be carried out are marked with a symbol, which is shown in the column before the description.

"Monitor time-controlled reports" dialog

The **Time-controlled reports monitor** dialog displays information on the time-controlled reports.

  Time-controlled reports monitor	
Time-controlled report	4 - Daily data
Last run	05/25/2017 01:00:12
State	OK

Time-controlled report display field:

Contains the number and name of the time-controlled report.

Last run display field:

Contains the date and time when the last export of the time-controlled report was executed.

State display field:

Contains the current state for the time-controlled report.

"Monitor employee record CSV import" dialog

The **Monitor for employee data import in CSV format** dialog displays information on the most recent employee record import.

  Monitor for employee data import in CSV format			
Time	Action		Value
06/12/2017 21:13:57	completed		Failed to import 10 records.
06/12/2017 21:13:56	started		CSV import started.
Last update: 06/12/2017 21:15:49			

Time column:

Contains the date and time on which the import was performed.

Action column:

Contains the current action status.

Description column:

Contains a description of the action performed with additional parameters and values, if these are available.

Actions with comments or actions which could not be carried out are marked with a symbol, which is shown in the column before the description.

"Monitor employee record CSV export" dialog

The **Monitor for employee data export in CSV format** dialog displays information on the most recent employee record export.

  Monitor for employee data export in CSV format		
Time	Action	Value
06/12/2017 21:11:44	completed	CSV export successful.
06/12/2017 21:11:37	started	CSV export started.
06/12/2017 21:10:25	completed	CSV export successful.
06/12/2017 21:10:15	started	CSV export started.
Last update: 06/12/2017 21:16:34		

Time display field:

Contains the date and time when the last export of employee record data was executed.

Action column:

Contains the current action status.

Description column:

Contains a description of the action performed with additional parameters and values, if these are available.

Actions with comments or actions which could not be carried out are marked with a symbol, which is shown in the column before the description.

"Monitor time bookings CSV export" dialog

The **Monitor for bookings export in CSV format** dialog displays information on the most recently performed export of time bookings.

  Monitor for bookings export in CSV format		
Time	Action	Value
06/05/2017 18:26:59	Creation in MATRIX	Job has been created in system monitor.
Last update: 06/12/2017 21:17:06		

Time display field:

Contains the date and time when the CSV export was executed.

Action column:

Contains the current action status.

Description column:

Contains a description of the action performed with additional parameters and values, if these are available.

Actions with comments or actions which could not be carried out are marked with a symbol, which is shown in the column before the description.

"System monitor - general interface" dialog

The **System monitor - general interface** dialog displays information on the most recent transfers of the interface.

Status

This tab displays the most important information on the most recent imports and exports.

The import or export can be performed manually if necessary or for test purposes.

Note: The setup of the dialog depends on the basic configuration of the interface and may vary from the description.

The screenshot shows a web interface titled "Monitor for general interface". It has two tabs: "State" (selected) and "Details". The "Import status" section includes a "Time of last import" field showing "06/12/2017 21:19:05", two "OK" and "ERROR" display fields, and two input fields for "Employee records" and "Permissions". Below these is a "File name" field with a "Durchsuchen..." button, the text "Keine Datei ausgewählt.", and a blue "Data import" button. The "Export status" section includes a "Time of last export" field showing "06/12/2017 21:19:05", a "Number" label, and input fields for "Employee records" and "Bookings". At the bottom, there is a "File name" field, "From date" and "Until date" fields with calendar icons, and a blue "Data export" button.

Import status:

The number of positive and non-imported data records is shown for the various import files.

Time of last import display field:

Contains the date and time of the last import.

OK display fields:

Show the number of positive imported data records.

Number of errors display fields:

Displays the number of non-imported data records.

Manual import:

Following selection of the file, a manual import can be performed.

Note: The display of the field for the import file and the selection are browser-dependent.

File name selection field:

Contains the file name for the import.

Data import button:

Performs the manual data import.

Export status:

Contains the information for the most recently executed export functions.

Time of last export display field:

Contains the date and time of the export.

Number display fields:

Contain the number of exported data records for each data type.

Manual Export:

A manual export can be performed for all configured data types if necessary or for test purposes.

An export file must be specified for each data type. For bookings, you must specify the period for which the bookings are to be exported.

Note: The storage location and file name of the export file may be requested again during the export in a browser-dependent dialog.

File name selection field:

Contains the file name for the export file.

From date and **Until date** data fields for bookings:

These two fields contain the period for which the bookings are to be exported.

Details

As well as information on the time, the detail view also contains additional information on the actions.

Monitor for general interface		
State Details		
Time	Action	Value
06/12/2017 21:19:05	Creation in MATRIX	Job has been created in system monitor.

Time column:

Contains the date and time of the action.

Action column:

Contains the action performed.

Value column:

Contains a description of the action performed with additional parameters and values, if these are available.

Actions with comments or actions which could not be carried out are marked with a symbol, which is shown in the column before the description.

5 Dialogs in the Devices module

The **Devices** module allows you to manage all devices, such as terminals, readers and wireless and offline components, and define their associated configuration data, such as classes or ID card types.

Whenever a new device is installed and created in the system, it also need to be configured. To do this, the device is configured with the hardware-dependent properties that are managed by the terminal manager. It then has to be provided with user data, which is provided by the application.

Use the **Load/display terminal** menu item to access the terminal overview and load the terminals with data.

Use the **Devices** menu item to manage all devices such as terminals, readers and input and output modules.

Use the **Device state** menu item to obtain important information about the general status of devices and inputs and outputs.

Use the **Class administration** menu to manage the terminal classes and other master data for the device administration.

Use the **Reports** menu to access different reports for device administration area.

Use the **Diagnosis** menu to access dialogs for diagnostics in the device administration area.

Use the **Corrections** menu item to quickly and effectively edit several properties for devices.

5.1 Load/display terminal

After creating new devices, you have to supply them with the configuration data for the initial start-up, such as hardware parameters, offline parameters and the application data.

Note: You only need to load data if the device configuration has changed. Changes to the application data are transferred automatically.

The transfer is processed in the background. This means that you can continue to work with the user interface. To check the transfer of the jobs you can use the **Job details** button to switch directly from the terminal selection to the dialog with the jobs for the terminals.

"Select terminals" dialog

The **Select terminals** dialog displays all installed terminals and components. Additional status information and information regarding pending tasks for terminals are also displayed.

Transfer the selected devices or all devices for data transfer to the **Load data** dialog by clicking an entry in the table or by using the buttons in the toolbar.

The **Search function** can be used to limit the selection using a single filter criterion or a group of filter criteria.

Number Device group

Name State

Short name Infrastructure nodes

[Start search](#)

Load/display terminal (Automatic status update)

	Number	Name	Short name	State	Data status	Open jobs			
	1	Cylinder 1		Not up-to-date	Configuration data changed	0	Transfer data	Job details	
	2	Cylinder 2		Not up-to-date	Configuration data changed	0	Transfer data	Job details	
	3	Door 3		Not up-to-date	OK	0	Transfer data	Job details	
	4	Door 4		Not up-to-date	OK	0	Transfer data	Job details	

Device group selection field:

Contains the selection for the search for a specific device group.

Options:

- Terminals
- XS/evolo components
- XS Manager/evolo Programmer
- AccessOnCard station
- PC reader
- TMS components

State selection field:

Contains the selection used for the search for devices with a specific state.

Infrastructure node selection field:

Contains the selection for an infrastructure node if the search is to be restricted to devices within the node.

Table:

Displays all devices in the selection along with their status. Click an entry to open it in the **Load data** dialog.

State column:

Contains the current online state of online components.

	Online	The device is listed as "Online" in the terminal manager. It sends the monitoring message at regular intervals.	
	Offline	The device is listed as "Offline" in the terminal manager. No monitoring messages are received from the device.	Possible causes: • Device not connected • Connection data such as IP address or port incorrect • Firewall preventing connection • Other network components defective or incorrectly configured • Physical defects of devices or cables • Temporary maintenance work
	Inactive	The device is marked as inactive. There is no communication with the device. The terminal manager is not accepting jobs for the device.	Possible cause: • The device is not activated

Data state column:

Contains the current configuration state of standalone components.

 Up to date	The device has the current configuration data.	
 Not up to date	More recent configuration data is present that has not yet been transferred to the device.	The device must be synchronised. evolo whitelist components require • Either a subsequent "Load terminal" action for the evolo Programmer 1460 • Or an additional "Load traceback" event using the evolo Programmer 1460 beforehand XS offline components require • A "Load terminal" event using XS Manager
 Inactive	The device is marked as inactive.	The device must be set to "Active".

Open jobs column:

Displays the number of jobs which have not yet been processed for the device.

Transfer data button:

Transfers the configuration data to the device. To start data transfer to multiple devices simultaneously, highlight the entries and click **Edit selected search results**.

Job details button:

Opens the **Terminal jobs** dialog that displays all outstanding jobs of the respective device.



Button :

Updates the status information display and the number of open jobs.

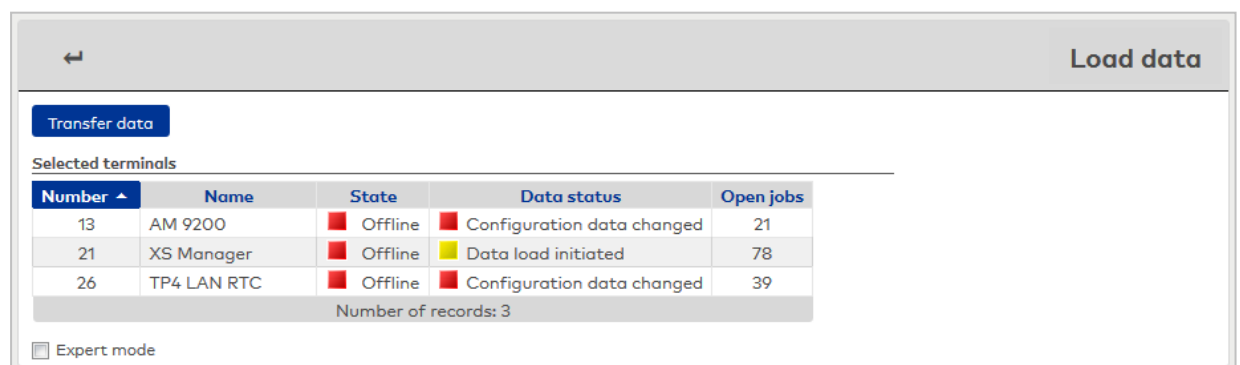
"Load data" dialog

Use the **Load data** dialog to select the data to be loaded and use the **Transfer data** button for transfer to the selected devices.

Note: If the data cannot be loaded to the device without errors, you will receive important device-dependent information in the [Data analysis overview](#).

The data analysis is particularly helpful if more data is to be loaded to a device than was designated in the configuration.

You can use the buttons in the toolbar to return to the **Select terminals** dialog.



Note: Click a line in the table to display the details on the jobs.

Transfer data button:

Transfers the selected data to the selected devices. Click the button to start the data transfer. You will

receive the respective information when the job was created. The actual transfer takes place in the background.

Selected terminals table:

Contains all terminals to which data is transferred with their unique number and name.

State column:

Contains the current online state of online components.

 Online	The device is listed as "Online" in the terminal manager. It sends the monitoring message at regular intervals.	
 Offline	The device is listed as "Offline" in the terminal manager. No monitoring messages are received from the device.	Possible causes: • Device not connected • Connection data such as IP address or port incorrect • Firewall preventing connection • Other network components defective or incorrectly configured • Physical defects of devices or cables • Temporary maintenance work
 Inactive	The device is marked as inactive. There is no communication with the device. The terminal manager is not accepting jobs for the device.	Possible cause: • The device is not activated

Data state column:

Contains the current configuration state of standalone components.

 Up to date	The device has the current configuration data.	
 Not up to date	More recent configuration data is present that has not yet been transferred to the device.	The device must be synchronised. evolvo whitelist components require • Either a subsequent "Load terminal" action for the evolvo Programmer 1460 • Or an additional "Load traceback" event using the evolvo Programmer 1460 beforehand XS offline components require • A "Load terminal" event using XS Manager
 Inactive	The device is marked as inactive.	The device must be set to "Active".

Open jobs column:

Displays the number of jobs which have not yet been processed for the device.

Expert mode checkbox:

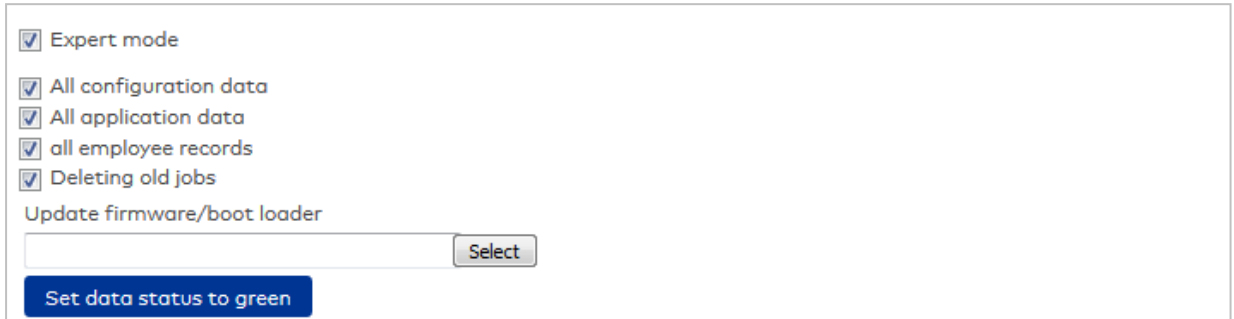
Since the devices are usually supplied with all data, the expert mode is deactivated by default. Activate the checkbox if you want to switch to the expert mode.

Expert mode

The expert mode allows you to select the data to be transferred individually. This may be useful for test purposes or if you want to transfer only a few data to many devices.

Note: The booking operation may only work with limitations or not at all if not all data was loaded in a device.

The transfer of files which will lead to a complete data loss in a device is marked with a safety symbol . You should not transfer these files except for test purposes. The device must be supplied with all data again to ensure that it functions properly after the test.



☒ Expert mode

☒ All configuration data

☒ All application data

☒ all employee records

☒ Deleting old jobs

Update firmware/boot loader

Additional options in expert mode:

All configuration data checkbox:

Selects all configuration data. Select this checkbox if you want to transfer all displayed configuration data to the selected devices. All checkboxes in the **Device configuration** column are selected.

All application data checkbox:

Selects all application data. Select this checkbox if you want to transfer all displayed application data to the selected devices. All checkboxes in the **Application data** column are selected.

All employee records checkbox:

Select this checkbox if you want to transfer employee master data to the selected devices.

Deleting old jobs checkbox:

Select the checkbox if older jobs that are still to be transmitted should be deleted. Old jobs are usually only processed for XS/evolo offline components.

Update firmware/boot loader input field:

Contains the file with the firmware/boot loader.

Contains the name and the path of the file with the firmware/boot loader. Enter the complete path or click the **Select** button to select a file.

Set data status to green button:

Changes the data status to green without transferring data to the device.

Selection table for the individual files.

Selection	Device configuration	Selection	Application data
☒	Device groups	☒	Access daily times
☒	Display parameters	☒	Access profiles
☒	File administration 	☒	Access weekly profiles
☒	Hardware parameters	☒	Break plans
☒	ID card reader parameters	☒	Calendar
☒	InputPortDefinitionen	☒	Day types
☒	Keyboard conversion table	☒	Door daily times
☒	Key preselections	☒	Door definitions
☒	LAN parameters	☒	Door weekly profiles
☒	MUX definitions	☒	Door weekly profiles (time)
☒	Offline parameters	☒	E-mail texts
☒	Reader	☒	Holidays
☒	Real-time clock	☒	IDS areas
☒	SIO parameters	☒	IDS profiles
☒	Terminal list	☒	Interlock control
☒	Terminal texts	☒	Lift control
☒	TMBasic programs	☒	Manual special days/bank holidays
☒	Traffic points	☒	Priority settings
☒	Variable booking instructions	☒	Real time daily programs
☒	VBI key allocations	☒	Room zone control records
☒	VBI selections	☒	SAP absence reasons
☒	Web parameters	☒	SAP wage types
		☒	Security area daily programs
		☒	Security areas
		☒	Security area weekly programs
		☒	System parameters
		☒	VBI permission

Selection checkbox:

Checkbox for selecting the data for transfer. Select the checkboxes for the data that you want to transfer.

Device configuration column:

Contains the physical parameters of the device configuration

Application data column:

Contains the application data from the application's installed modules.

Note: Loading application data is only required for a replaced terminal or the first start-up.

"Terminal jobs" dialog

The dialog displays the jobs in the selected terminal and their status. The last 30 jobs are displayed per status

You can use the buttons in the toolbar to update the display or to return to the terminal selection.

State display field:

Displays the terminal's current status.

Open jobs display field:

Contains the number of still-open jobs which have to be transferred to the terminal manager.

Note: The number of still-open jobs being transferred to the terminal manager, may differ from the number of still-open jobs in the tab name. The reason for the difference is the asynchronous processing of the jobs in the terminal manager and the number of job details being limited to 30.

In the tabs the jobs are displayed according to their status. The number in brackets indicates the respective number of jobs contained.

The tabs all have the same layout. The jobs are displayed as a table. Click a entry to display the job details.

Clear job details button:

Only clears the job details from the display, but does not delete the pending jobs for the terminal in the terminal manager.

Job details column:

Shows the job with file number and file name or the relevant instruction.

Time stamp column:

Contains the date and the time when the job was created.

Job details display:

Shows the details of the job in the appropriate XML structure.

Response details display:

Contains the response to the job from the terminal in the appropriate XML structure, if an answer is available.

Incorrect jobs tab:

Displays a log of all jobs where the data transfer was not successful. Check the detail information in this case. In many cases the cause is the incorrect configuration of the device. Faulty jobs are not repeated and must be restarted after the cause has been removed.

Open jobs tab:

Displays all jobs not yet processed with the timestamp for the creation time.

Note: Jobs that are still open could not yet be processed because other jobs may still be in progress. The jobs are listed as still open if a terminal cannot be reached. The terminal manager repeats the processing of the jobs at regular intervals.

Jobs status warning tab:

Displays a log of all jobs where a warning was given during the data transfer. The detailed information contains more hints.

Successful jobs tab:

Displays a log of all jobs where the data transfer was successfully completed.

Received events tab:

Displays a log of all records that were sent from the selected terminal to the server. The events received constitute bookings or messages from the terminal periphery.

5.2 Devices

Use the **Devices** menu item to set up and maintain all devices managed in the system.

The specific properties of every device are defined in the device definition. Generally valid properties for the respective device types are defined using the assigned device classes.

From an application point of view, all devices, including the infrastructure nodes, are managed through logical numbers. The logical device number is a number unique in the system with which each element in the device tree can be identified without taking the type of the element into account. This means that all elements in the tree share the same number range, regardless of whether they are readers, terminals, connected components or infrastructure nodes.

You can create and edit all devices and elements in the tree using the **Devices dialog**.

A distinction is made between the following device categories, depending on the type of data transfer:

Online components

Standalone components

Wireless components

A separate category is provided for

TMS components

"Devices" dialog

The **Devices** dialog is used to manage all devices (components) present in the system. On the left of the dialog, the devices are displayed in a tree structure (device tree) that is essentially identical to the hierarchical structure of the terminal periphery, thereby mapping the interdependencies of the connected components. The tree structure can be adapted to local and organisational situations with the help of infrastructure nodes.

Click the required element in the device tree to open a device-specific dialog. The dialog opens in the right-hand section of the window, and the properties of the selected device are displayed and can be edited here.

You can use the buttons in the toolbar to create or delete devices and to save or reject changes made to the records. The copy function can copy entire sections of the device tree. Using the 'move' function, devices with all connected components or entire folders can be moved.

Use the search function to search for individual devices or a group of devices by number and name.

Device tree

To expand the tree, click the plus sign in front of each node.

Warning symbols indicate device status deviations.

	The device is not activated.	Activate the device: Click Devices in the menu tree followed by the device and select the Active checkbox.
	The device is not properly loaded with data.	Load the data: Click Devices in the menu tree followed by the device and

		then the Load/display terminal button.
	The device is not operational.	Check the details: Click Devices in the menu tree followed by the device and then the Load/display terminal button to obtain additional information.

Dialog header

The header data for all devices has the same format and is only described here once. A description of the bottom section of the dialog containing device-specific properties can be found in the individual device descriptions.

Devices

Server 10 - AM9230 11000 - Administration building 12000 - Production building 13000 - Visitor centre 21000 - Time recording	<table style="width: 100%;"> <tr> <td style="width: 35%;">Number</td> <td> 10 </td> <td rowspan="2" style="width: 30%; text-align: center;"> Transfer data Load/display terminal </td> <td rowspan="2" style="width: 35%; text-align: center; vertical-align: middle;"> AM 92 30 TP4 - terminal </td> </tr> <tr> <td>Name</td> <td> AM9230 </td> </tr> <tr> <td>Short name</td> <td> </td> <td colspan="2" style="vertical-align: top;"> State ■ Offline Data status ■ No configuration data </td> </tr> <tr> <td>Building</td> <td> </td> <td colspan="2"></td> </tr> <tr> <td>Level</td> <td> </td> <td colspan="2"></td> </tr> <tr> <td>Room</td> <td> </td> <td colspan="2"></td> </tr> <tr> <td>Service information</td> <td> </td> <td colspan="2"></td> </tr> <tr> <td>active</td> <td>☒</td> <td colspan="2"></td> </tr> <tr> <td>Firmware version</td> <td> </td> <td colspan="2"></td> </tr> </table>	Number	10	Transfer data Load/display terminal	 AM 92 30 TP4 - terminal	Name	AM9230	Short name		State ■ Offline Data status ■ No configuration data		Building				Level				Room				Service information				active	☒			Firmware version			
Number	10	Transfer data Load/display terminal	 AM 92 30 TP4 - terminal																																
Name	AM9230																																		
Short name		State ■ Offline Data status ■ No configuration data																																	
Building																																			
Level																																			
Room																																			
Service information																																			
active	☒																																		
Firmware version																																			

General
Inputs/outputs

Number input field:

Contains the device's unique number. When you create a new record, the number is automatically proposed. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Note: An extended number range using between 1 and 6 digits (1-999999, device-dependent only up to 65000) can be set with system parameters 70 and 71. In this case, the employee record configuration must be set to the option **Extended: 6 digits**. Please take account of the increased memory requirement in the devices.

Name input field:

Contains the device's name. When you enter a new name, you can enter any combination of figures and letters. This information is displayed in the left part of the window next to the number in the tree structure.

Short name input field:

Contains the short name of the device. When you enter a new short name, you can enter any combination of figures and letters.

Note: The next four fields are only present if system parameter Devices 50 is activated.

Building input field:

Contains the name of the building in which the device is installed.

Level input field:

Contains the level or floor on which the device is installed.

Room input field:

Contains the room in which the device is installed.

Service information input field:

For entering further information for the service personnel.

active checkbox:

Activates the device in the terminal manager.

Firmware version display field:

Displays the firmware version. This is requested by the device and can therefore only be displayed if communication with the device has already taken place.

Transfer data button:

Transfers alterations made to the configuration data directly to the device. You will receive the respective information when the job was created. The actual transfer takes place in the background.

Load/display terminal button:

Opens the device in the **Select terminals** dialog.

Note: The button is available for all devices that need to be supplied with data and the infrastructure nodes. The selection contains all devices that are subordinate to the node.

Status displays

Status display:

Show the current online status of online components.

 Online	The device is listed as "Online" in the terminal manager. It sends the monitoring message at regular intervals.	
 Offline	The device is listed as "Offline" in the terminal manager. No monitoring messages are received from the device.	Possible causes: • Device not connected • Connection data such as IP address or port incorrect • Firewall preventing connection • Other network components defective or incorrectly configured • Physical defects of devices or cables • Temporary maintenance work
 Inactive	The device is marked as inactive. There is no communication with the device. The terminal manager is not accepting jobs for the device.	Possible cause: • The device is not activated

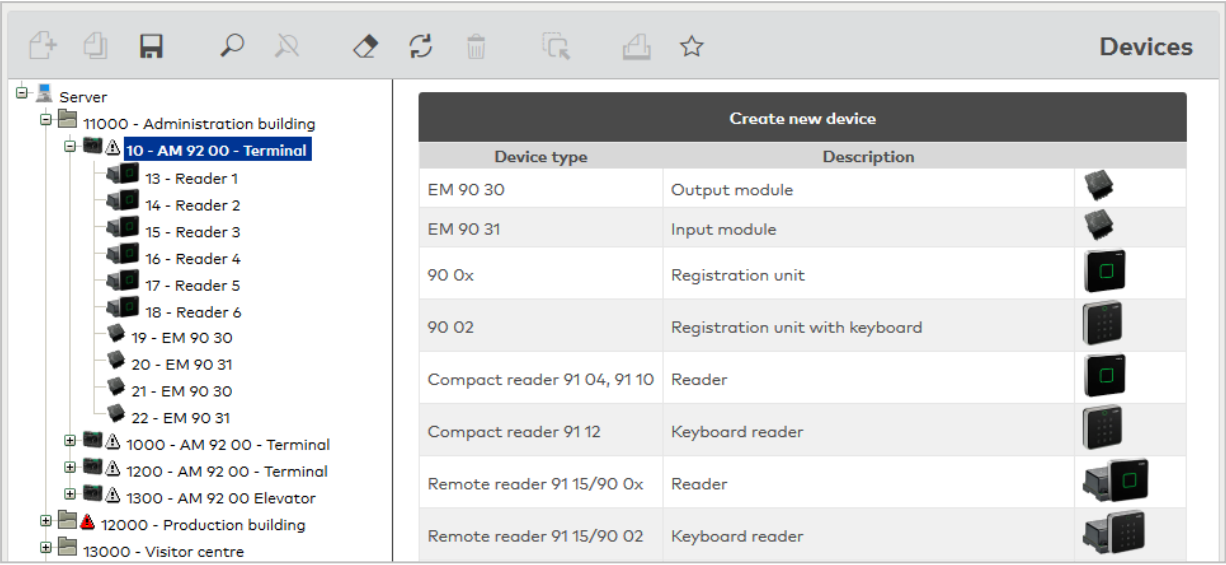
Data status display:

Shows the current configuration status of standalone components.

 Up to date	The device has the current configuration data.	
 Not up to date	More recent configuration data is present that has not yet been transferred to the device.	The device must be synchronised. evolo whitelist components require • Either a subsequent "Load terminal" action for the evolo Programmer 1460 • Or an additional "Load traceback" event using the evolo Programmer 1460 beforehand XS offline components require • A "Load terminal" event using XS Manager
 Inactive	The device is marked as inactive.	The device must be set to "Active".

Create new devices

To create a new device, click **Create new record** in the toolbar.
Click the desired device in the selection.



Device type column:

Displays the device type.

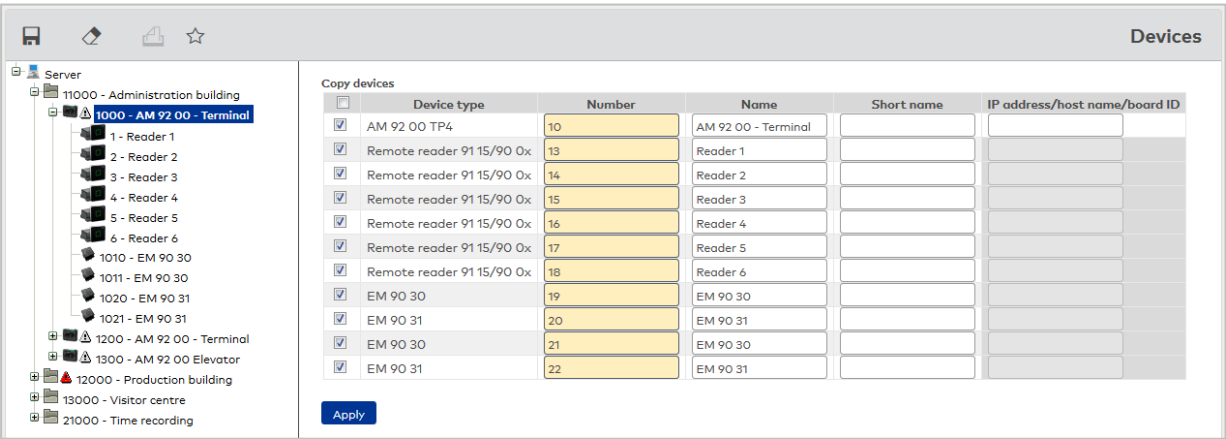
Name column:

Contains the descriptions of the devices.

Illustration column:

Contains an illustration of the device.

Copy devices



Selection checkbox:

The selected components are transferred during the copy procedure.

Device type display field:

Displays the device type.

Number display field:

the numbers are automatically specified for copying the data packets. However, you can also enter your own number using up to 4 digits.

Name display field:

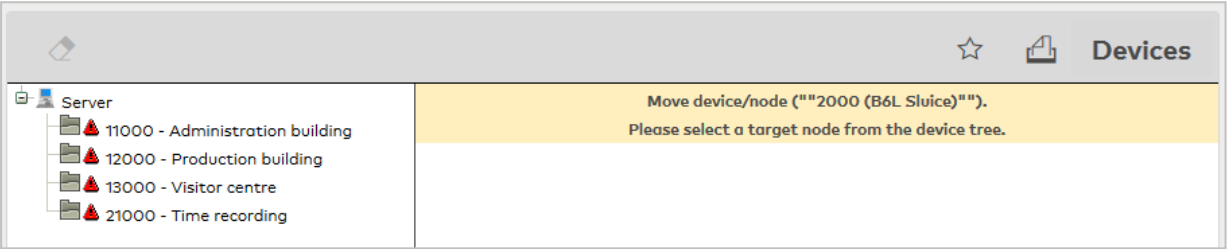
Contains the device's name. You can overwrite the specified name with your own name. Any combination of

numbers and letters is allowed. This information is displayed in the left part of the window next to the number in the tree structure.

Short name display field:
Contains the short name of the device. You can overwrite the specified short name with your own short name. When you enter a new short name, you can enter any combination of figures and letters.

IP address/host name/board ID display field:
Contains the network IP or the DNS name of the terminal. The address transferred must be overwritten with the address of the device.

Move devices



Now click the device or the node in the device tree where you want to move the device. Only the possible destinations for moving the device to are displayed in the device tree at this time.

Note: If it is not possible to move the device because, for example, the required address range is already occupied for the bus addresses, a message to this effect will be displayed.

The dialog description for the components provides additional information on the device-dependent parameters.

5.2.1 Server

The server is the original node in the device tree and is connected to all devices either directly or indirectly.

Device type	Description
Server	Server, original node of the device tree

The server administrates all devices and provides them with data.

Devices connected to the server using the LAN are required to know the server's IP address or the host name and the port in order to transmit their messages and events to the server.

"Devices" dialog – Server

The server is the device tree's original node.

Note: When starting the terminal manager the IP address and the port are automatically determined, thus making it superfluous to enter them manually.

IP address/host name	192.168.4.12
Port	3000

IP address/host name input field:

Input field for the IP address or host name. When creating the LAN components, the IP address or the host name for communicating with the server are entered automatically.

Port input field:

Contains the network port which is used by the server to receive messages and bookings from the terminal. When creating the LAN components, the port for communicating with the server is entered automatically.

TMS configuration

Note: This part of the dialog is only available if the system parameter "Use TMS devices" is set to 1.

The TMS configuration maps the basis for TMS components connected via TMS-Soft. This is where the parameters for accessing the TMS-Soft database are created.

TMS configuration	
Driver class	com.mysql.jdbc.Driver
DBUrl	jdbc:mysql://localhost/TMS DB 4 3
DBUser	Administrator
DBPasswd	
Port for messages from TMS system	12334
Synchronisation interval in sec.	30
History update interval in seconds	30
Daily data transfer (time of day)	01:00
active	☐

Driver class input field:

Contains the database driver for accessing the database.
Default value: com.mysql.jdbc.Driver

DBUrl input field:

Contains the path for the database.

DBUser input field:

Contains the user name for the superadmin of the database.

DBPasswd input field:

Contains the password for the superadmin of the database.

Port for messages from TMS system input field:

Contains the port on which the TMS system sends messages.
Default value: 12334

Synchronisation interval in sec. input field:

Contains the time interval for the synchronisation in seconds.
Default value: 1 seconds

History update interval in seconds input field:

Contains the time interval for updating the history data in seconds.
Default value: 30 seconds

Daily data transfer (time of day) input field:

Contains the time of the daily data transfer.
Input format: hh:mm

active checkbox:

Indicates whether the connection to TMS-Soft is activated.

Options:

- Not activated: The connection to TMS-Soft is not activated.
- Activated: The connection is active.

Default value: Activated

5.2.2 "Devices" dialog – Infrastructure nodes

Infrastructure nodes are part of the organisational elements of the device tree.

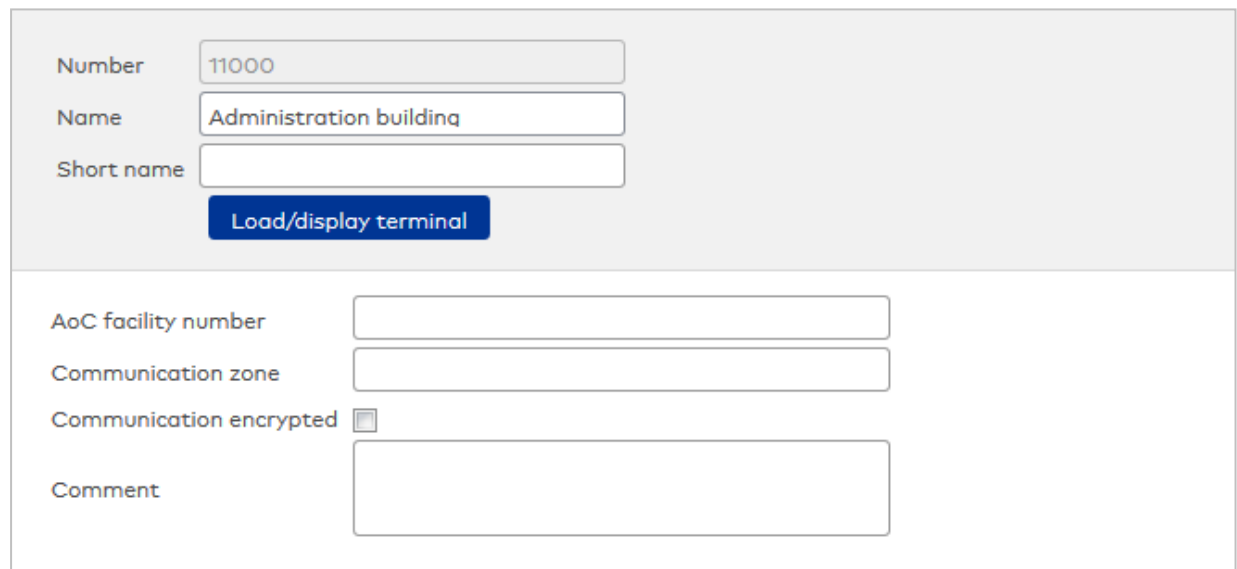
Device type	Description
Infrastructure nodes	Organisational element

You can use the infrastructure nodes to combine the devices according to the local or organisational situations under a node, thereby making the device tree more transparent.

Using the infrastructure node, you can also specify device-wide properties such as the AoC address, the communication zones and the communication encryption for the devices which are allocated to this node.

"Devices" dialog – Infrastructure nodes

You specify the infrastructure node's properties in this dialog.


AoC system number input field:

Input field for the number of the AoC system to which the infrastructure node belongs. The number for the AoC system is another criterion for grouping doors. If a number is used for the AoC facility, the door is uniquely identified using the combination between the AoC facility and the door number.

Value range: 1–9999

Default: Not specified

Note: This checkbox is only available if the AoC function is activated.

Communication zone input field:

All terminals belonging to the same communication zone exchange booking data. The communication zone is inherited from the parent infrastructure node and can be overwritten if necessary.

Communication encrypted checkbox:

Identifier indicating whether communication between the application and the devices is SSL encrypted. The

devices include not only the terminals and controllers but also XS Manager and the AoC Manager. The setting is automatically applied to all devices which are allocated to this infrastructure node and have an encrypted communication function.

The command channel to the devices and the event channel to the server are both encrypted.

Note: As the Telnet port to the devices is also incorporated in encryption, it can only be reached subsequently via the TM analyser.

Options:

- Activated: The communication is encrypted.
- Not activated: Communication is not encrypted.

Default: Not activated.

Comment input field:

Text field for entering an additional comment.

5.2.3 Online components

Online components are directly connected to the server or the higher-level device. They are supplied with data directly from the server. Typical online components include all LAN terminals, readers and input/output modules.

In terms of technology, a distinction can be made between the following online component device types (in alphabetical order):

[Access manager terminals](#)

[DCW devices](#)

[DP1 devices](#)

[dormakaba terminals](#)

[KCP devices \(compact/remote readers\)](#)

[PHG devices](#)

[TP1 devices](#)

[TP3 terminals](#)

[TP4 terminals](#)

[Wiegand devices](#)

[Further online components](#), such as AoC stations PC reader or video cameras

5.2.3.1 Access manager terminals

The access manager terminals belong to the online components and are therefore directly connected to the host system.

Note: The Device Scanner allows you to search for and configure TP4 AM controllers in a LAN network with or without DHCP. All found devices are displayed along with their MAC address and their IP address. Further information can be found in the section "Working with Matrix" under the heading [► Change the network parameters using the Device Scanner](#).

Device type	Description	Image
AM 92 00 T	Terminal	
AM 92 30 T	Terminal	
AM 92 90 T rack	Terminal	
AM 92 90 T wall	Terminal	

"Devices" dialog – AM 92 00 TP4 terminal

These terminals belong to the online components and are therefore directly connected to the host system.

Crypt components can be connected to the RS 485 bus of these devices for either DP1 or PHG; a combination is not possible. DCW and TP1 components are not supported and neither are serial sub-terminals.

Number

10

Name

Short name

active

☒

Firmware version

Load/display terminal



AM 92 00 T - terminal

General

Inputs/outputs

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1 2 3 4

☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

New entry

Number of relays for elevator

Lift output devices

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Checkboxes **1** to **8**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program

invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

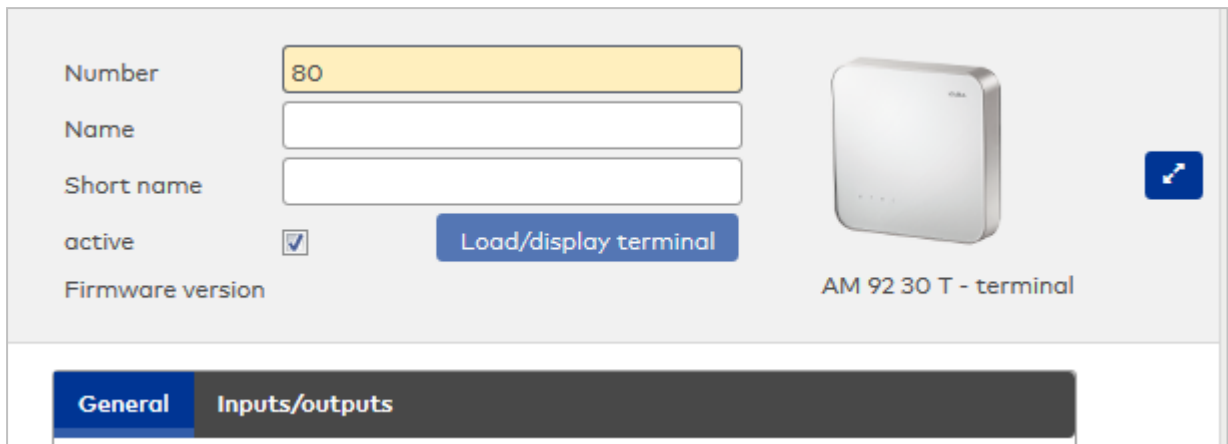
Possible values (depending on the firmware in use if applicable):

- **Internal:** Local relays
- **DCW4:** 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4:** Local relays + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15:** 15-way O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15:** Local relays + 15-way O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule:** Door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule:** Local relays + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17:** 4-way I/O modules from DP1 address 17
- **Internal_DP1_4_Adresse17:** Local relays + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17:** 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17:** Local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17:** Door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17:** Local relays + door modules from DP1 address 17
- **DP1_4_Adresse25:** 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25:** Local relays + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25:** 15-way O modules from DP1 address 25
- **Internal_DP1_15_Adresse25:** Local relays + 15-way O modules from DP1 address 25
- **DP1DoorModule_Adresse25:** Door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25:** Local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17:** I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17:** Local relays + I/O 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25:** I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25:** Local relays + I/O 9/8 modules from DP1 address 25
- **KCP_9030_ReaderAddress1:** Uses the 9115/9125 + 9030 relays on 9115/9125 for Comfort IDS with the physical address 1 on the KCP bus
- **KCP_9030_ReaderAddress2:** Uses the 9115/9125 + 9030 relays on 9115/9125 for Comfort IDS with the physical address 2 on the KCP bus

"Devices" dialog – AM 92 30 TP4 terminal

These terminals belong to the online components and are therefore directly connected to the host system.

Crypt components can be connected to the RS 485 bus of these devices for either DP1 or PHG; a combination is not possible. DCW and TP1 components are not supported and neither are serial sub-terminals.



Number: 80

Name:

Short name:

active: ☒

Firmware version:

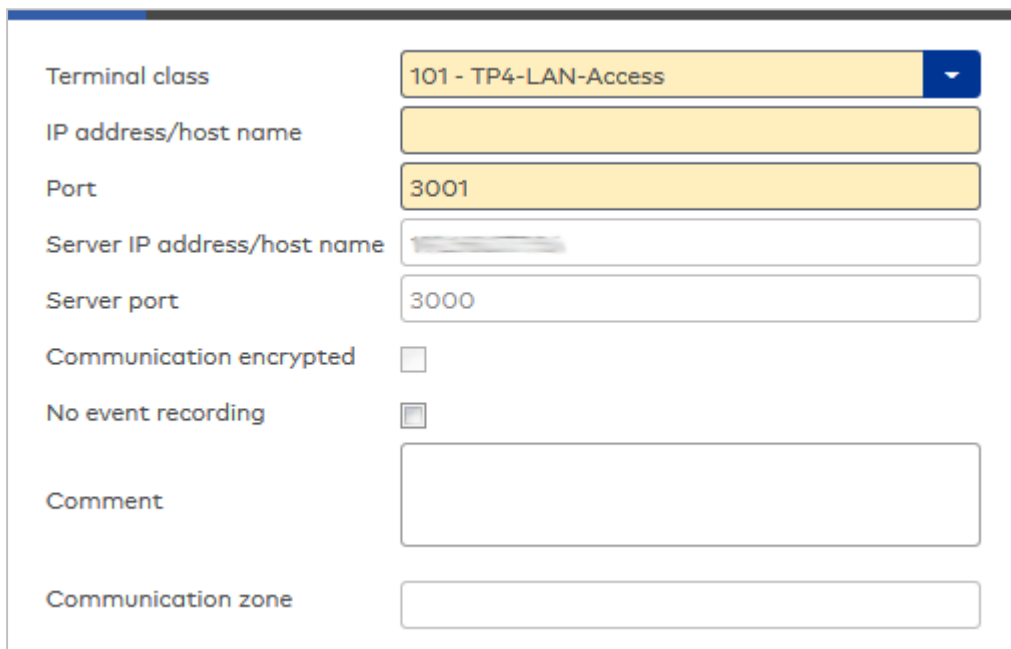
Load/display terminal

AM 92 30 T - terminal

General Inputs/outputs

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



Terminal class: 101 - TP4-LAN-Access

IP address/host name:

Port: 3001

Server IP address/host name:

Server port: 3000

Communication encrypted: ☐

No event recording: ☒

Comment:

Communication zone:

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

If the input level does not match the required level, the inputs can be inverted on this tab. Here you specify the relays and the lift output devices for lift control.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1

2

3

4

☐
☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

Number of relays for elevator

Lift output devices

Internal

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

Checkboxes **1** to **4**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

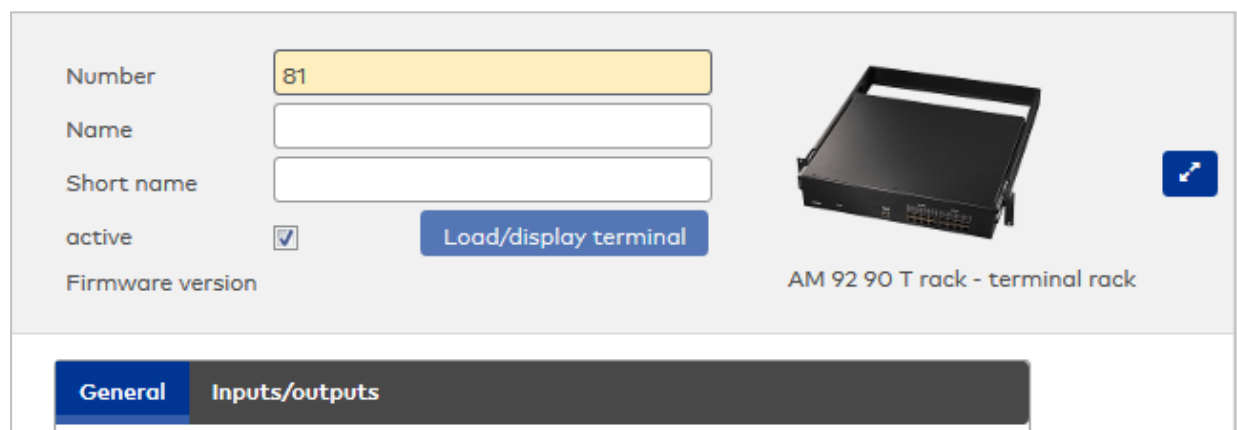
- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17

- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – AM 92 90 TP4 rack terminal

These terminals belong to the online components and are therefore directly connected to the host system.

Crypt components can be connected to the RS 485 bus of these devices for either DP1 or PHG; a combination is not possible. DCW and TP1 components are not supported and neither are serial sub-terminals.



Number: 81

Name:

Short name:

active: ☒

Firmware version:

Load/display terminal

AM 92 90 T rack - terminal rack

General Inputs/outputs

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

The screenshot shows a configuration form with the following fields and values:

Field	Value
Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	

Number of relays for elevator

Lift output devices

New entry

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Checkboxes **1** to **18**:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program

invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – AM 92 90 TP4 wall terminal

These terminals belong to the online components and are therefore directly connected to the host system.

Crypt components can be connected to the RS 485 bus of these devices for either DP1 or PHG; a combination is not possible. DCW and TP1 components are not supported and neither are serial sub-terminals.

Number	82	 AM 92 90 T wall - wall-mounted terminal	
Name			
Short name			
active	☒		
Firmware version			
Load/display terminal			
General Inputs/outputs			

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

New entry

Number of relays for elevator

Lift output devices

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Checkboxes **1** to **18**:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25

- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

5.2.3.2 DCW devices

DCW devices belong to the online components and are therefore directly connected to the host system.

The connection is made via the DCW bus.

CAUTION!: These device types are outdated and have been discontinued. Existing devices can be loaded, but no new devices can be created. It will not be possible to load data to these devices from the next version.

Device type	Description	Image
DCW In 15MD	15x input module	
DCW IO 4/4MD	4x input/4x output module	
DCW Out 15MD	15x output module	
DCW S6 readers	Reader	
DCW-S6D-KP keypad	Keyboard	
DCW S6D-KP/reader	Keypad reader	

"Devices" dialog – DCW input/output modules

The DCW Input/Output modules include

- DCW In 15MD - 15x Input module
- DCW Out 15MD - 15x Output module
- DCW I/O 4/4MD - 4-way input/output modules
- DCW S6D-DM input/output modules

No other components can be connected to an input/output module.

The functions which are connected to the input/output module are determined by the terminal to which the module is connected.

Input/output modules on TP4

DCW In 15MD

Number

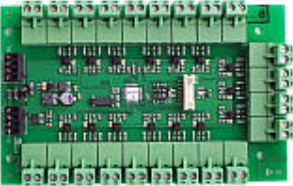
89

Name

Short name

active

☒



In 15 MD - 15-input module

Bus type

DCW

Physical address

1

Comment

Input inversion

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

New entry

Bus type display field:
Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:
Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.
Options:
• All addresses in the bus which are still free.
Default value: Lowest free address.

Comment input field:
Text field for entering an additional comment.

Input inversion (1-15) checkbox:
If the input level does not match the required level, the inputs can be inverted.
Options:
• Activated: The input level is inverted.
• Not activated: The input level is not inverted.
Default value: Not activated

TMBasic program table:
The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:
Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:
Contains the number of the input connected to the TMBasic program.
Options:
• All device inputs that are not allocated.
Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

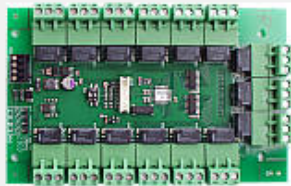
- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

DCW Out 15MD

Number 89 Name Short name active ☒	 Out 15 MD - 15-output module
Bus type DCW	
Physical address 1	
Comment	

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

DCW I/O 4/4MD

Number 10 Name Short name active ☒	 IO 4/4 MD - module with 4 inputs/4 outputs										
Bus type DCW Physical address 1 Comment 1 2 3 4 ☐ ☐ ☐ ☐											
Input inversion	<table border="1"> <thead> <tr> <th>Input number</th> <th>Message trigger type</th> <th>TMBasic program</th> <th>Program invocation type</th> <th>TMBasic parameter</th> </tr> </thead> <tbody> <tr> <td colspan="5"> 1 2 3 4 </td> </tr> </tbody> </table>	Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	1 2 3 4				
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter							
1 2 3 4											
New entry											

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-4) checkbox:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

DCW S6D-DM

Number	89	 S6-DM - door module			
Name					
Short name					
active	☒				
Bus type	DCW				
Physical address	1				
Comment					
Input inversion	1 ☐ 2 ☐ 3 ☐				
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	New entry

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-3) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

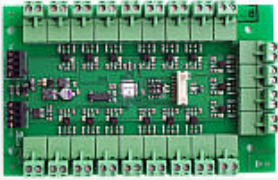
- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Input/output modules on TP3**DCW In 15MD**

Number 10 Name Short name active ☒	 In 15 MD - 15-input module																														
Bus type DCW Physical address 1 Comment Input inversion <table border="0"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td> </tr> <tr> <td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td> </tr> </table>		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15																	
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐																	

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-15) checkbox:

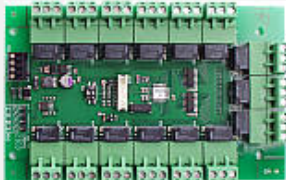
If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

DCW Out 15MD

Number 89 Name Short name active ☒	 Out 15 MD - 15-output module
Bus type DCW Physical address 1 Comment	

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

DCW I/O 4/4MD

Number 10 Name Short name active ☒	 IO 4/4 MD - module with 4 inputs/4 outputs
Bus type DCW Physical address 1 Comment 1 2 3 4 ☐ ☐ ☐ ☐	

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-4) checkbox:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

DCW S6D-DM

Number	89	 S6-DM - door module
Name		
Short name		
active	☒	
Bus type	DCW	
Physical address	1	
Comment		
Input inversion	1 ☐ 2 ☐ 3 ☐	

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW modules can receive the physical addresses 1-4.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-3) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

"Devices" dialog – DCW S6 reader keypad reader

DCW S6 readers can be created as subcomponents under the online devices.

No further components can be connected to a DCW S6 reader.

Number	10	 S6 - reader
Name		
Short name		
active	☒	
General reader info Reader function Device group		

The functions which are connected to the reader are determined by the terminal to which the reader is connected.

Reader at TP4

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Auswahlfeld **Physical address**:

Enthält die eindeutige Adresse im DCW-Bus für das Gerät. DCW-Leser können innerhalb des DCW-Busses die physikalischen Adressen 1-4 erhalten. Dabei werden andere DCW-Gerätetypen wie I/O-Module nicht betrachtet, da diese einen eigenen Adressraum bilden.

Auswahl: Alle noch freien Adressen

Standard: Nächste freie Adresse

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0–999

Default value: 3 seconds

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0–999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0–999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0–999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)

- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period		Seconds
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
TP4 VBI selection definition		▼
VBI time preselections		▼
Terminal function unit1		
Reader 1		▼
Display 1		▼
Keyboard 1		▼
Key code conversion table 1		▼
Terminal function unit2		
Reader 2		▼
Display 2		▼
Keyboard 2		▼
Key code conversion table 2		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Reader at TP3

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DCW	▼
Physical address	1	▼
Affiliation	Access	▼
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW online components can contain the physical addresses 1-4 in the DCW bus. All addresses still available are displayed. It does not take other DCW device types such as I/O modules into account, as these form a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to

open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
Key time preselections		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

"Devices" dialog – DCW S6-KP keyboard

DCW keypads can be created as subcomponents under the online devices.

No other components can be connected to a DCW keypad.

Number	10	 S6D-KP - keyboard
Name		
Short name		
active	☒	
Physical address	3 	
Comment		

Physical address input field:

Contains the unique address in the DCW bus for the device. DCW keypads can have physical addresses 1-4. All addresses still available are displayed. It does not take other DCW device types such as I/O modules into account, as these form a separate address space.

Options:

- All addresses in the bus which are still free.

Default value: Smallest free address.

Comment input field:

Text field for entering an additional comment.

Keypad device numbers

Keypads are allocated to the terminal units using device groups. The keypad device number is usually required for the allocation.

Note: For DCW components, address 1 starts with DIP switch setting 0.

The following specifications apply:

Keypad 1: Physical address 1, DIP switch 0: Device number 60

Keypad 2: Physical address 2, DIP switch 1: Device number 61

Keypad 3: Physical address 3, DIP switch 2: Device number 62

Keypad 4: Physical address 4, DIP switch 3: Device number 63

The device number must be entered in the reader tab in the **Keypad device number 1** field.

"Devices" dialog – DCW S6-KP/reader keypad reader

DCW S6-KP/readers are combined devices that consist of a keyboard and an integrated reader. They belong to the readers and can be created as subcomponents under terminals.

No further components can be connected to a DCW S6-KP/reader.

Number	10	
Name		
Short name		
active	☒	
S6-KP/reader - keyboard reader		
General reader info Reader function Device group		

The functions which are connected to the reader are determined by the terminal to which the reader is connected.

Reader on the TP4 terminal

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type		▼
Bus type		▼
Physical address	0	▼
Affiliation	Access	▼
No event recording	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Auswahlfeld **Physical address**:

Enthält die eindeutige Adresse im DCW-Bus für das Gerät. DCW-Leser können innerhalb des DCW-Busses

die physikalischen Adressen 1-4 erhalten. Dabei werden andere DCW-Gerätetypen wie I/O-Module nicht betrachtet, da diese einen eigenen Adressraum bilden.

Auswahl: Alle noch freien Adressen

Standard: Nächste freie Adresse

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
Terminal function unit1		Terminal function unit2	
Reader 1	48 - PHG reader	Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Reader on the TP3 terminal**General**

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DCW	▼
Physical address	1	▼
Affiliation	Access	▼
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW online components can contain the physical addresses 1-4 in the DCW bus. All addresses still available are displayed. It does not take other DCW device types such as I/O modules into account, as these form a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
Key time preselections		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

5.2.3.3 DP1 devices

DP1 devices belong to the online components and are therefore directly connected to the host system.

The connection is made via the DP1 bus.

Device type	Description	Image
DP1 IO 8/9 MD	9x input/8x output module	
DP1 M6D reader	Reader	
DP1 S6-DM	3x input/2x output module	
DP1 S6 reader	Reader	
DP1 S6-KP	Keyboard	
DP1 S6-KP/reader	Keypad reader	

"Devices" dialog – DP1 input/output modules

The DP1 I/O modules include:

- DP1 S6-DM
- DP1 IO 8/9 MD

You cannot connect any additional components to an I/O module.

The functions which are connected to the input/output module are determined by the terminal to which the module is connected.

Input/output modules on TP4

DP1 S6-DM

Number	89													
Name														
Short name														
active	☒													
S6-DM - door module														
Bus type	DCW													
Physical address	1													
Comment														
Input inversion	1 2 3 ☐ ☐ ☐													
<table border="1"> <thead> <tr> <th>Input number</th> <th>Message trigger type</th> <th>TMBasic program</th> <th>Program invocation type</th> <th>TMBasic parameter</th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="5"></td> <td>New entry</td> </tr> </tbody> </table>			Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter							New entry
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter										
					New entry									

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address input field:

Contains the unique address in the DP1 bus for the device. These modules can receive physical addresses 1-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-3) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

DP1 IO 8/9 MD

Number	10	 9-way input/8-way output module			
Name					
Short name					
active	☒				
Bus type	DP_1				
Physical address	17				
Comment					
Input inversion	1 2 3 4 5 6 7 8 9 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	New entry

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address input field:

Contains the unique address in the DP1 bus for the device. These modules can receive physical addresses 17-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-9) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Input/output modules on TP3**DP1 S6-DM**

Number	89	 S6-DM - door module
Name		
Short name		
active	☒	
Bus type	DP 1	
Physical address	9	
Comment		
Input inversion	1 ☐ 2 ☐ 3 ☐	

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address input field:

Contains the unique address in the DP1 bus for the device. These I/O modules may have physical addresses 1-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-3) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

Note: The following table is only available, if the module is connected to a TP4 terminal.

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

DP1 IO 8/9 MD

Number	89	 9-way input/8-way output module												
Name														
Short name														
active	☒													
Bus type	DP_1													
Physical address	17													
Comment														
Input inversion	1 2 3 4 5 6 7 8 9 ☐☐☐☐☐☐☐☐☐													
<table border="1"> <thead> <tr> <th>Input number</th> <th>Message trigger type</th> <th>TMBasic program</th> <th>Program invocation type</th> <th>TMBasic parameter</th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="5"></td> <td>New entry</td> </tr> </tbody> </table>			Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter							New entry
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter										
					New entry									

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address input field:

Contains the unique address in the DP1 bus for the device. The modules can receive physical addresses 17-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-9) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

"Devices" dialog – DP1 M6D reader

DP1 M6D readers can be created as subcomponents under the online devices.

You cannot connect any additional components to a DP1 M6D reader.

Number	89	 M6D - reader
Name		
Short name		
active	☒	

General reader info	Reader function	Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DP_1	▼
Physical address	1	▼
Affiliation	Access	▼
AoC writer	☐	
Load IdentAssembler	☒	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Indicates whether the reader is used to write AoC data.

Value range:

- Activated: The reader is used as an AoC writer.
- Not activated: The reader is not used as an AoC writer.

Default value: Not activated.

Load Identassembler checkbox:

Indicates whether the IdentAssembler is loaded. This setting can only be disabled if the reader is not used as an AoC writer.

- Activated: The IdentAssembler is loaded.
- Not activated: The IdentAssembler is not loaded.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the

wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening

from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

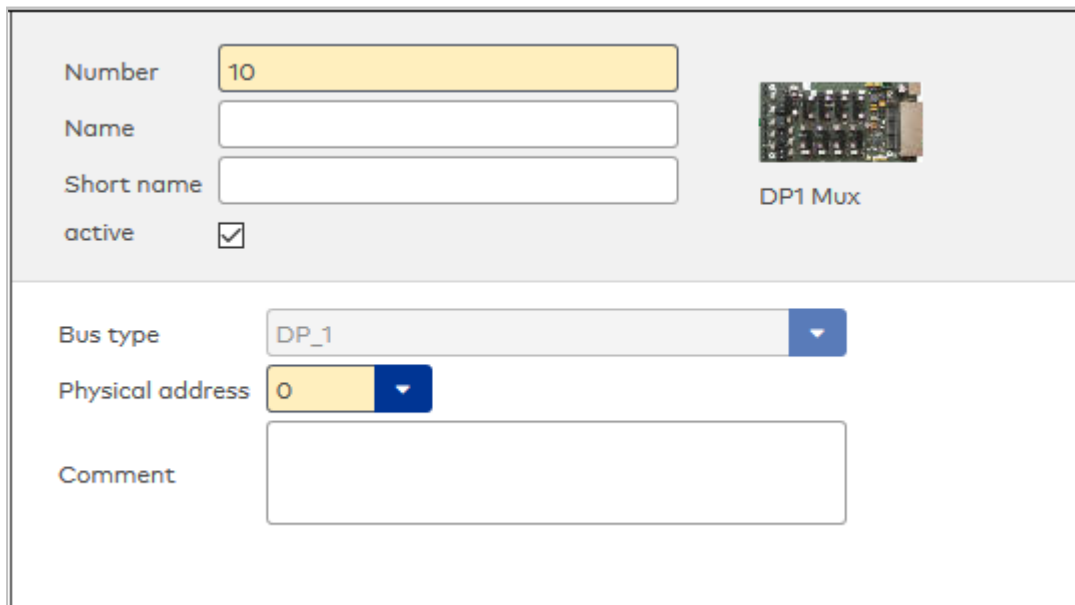
Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – DP1 MuxD multiplexer

These devices are generally used to allow star-shaped wiring of the 2-wire terminals.

All 2-wire terminals can be connected to them.



The screenshot shows a configuration window for a DP1 Mux device. It contains the following fields and controls:

- Number:** A text input field containing the value '10'.
- Name:** An empty text input field.
- Short name:** An empty text input field.
- active:** A checkbox that is currently checked.
- Bus type:** A dropdown menu showing 'DP_1'.
- Physical address:** A dropdown menu showing '0'.
- Comment:** A large empty text area.
- DP1 Mux:** A label with a small image of the device next to it.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. The devices can receive physical addresses 1-31.

All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment text field:

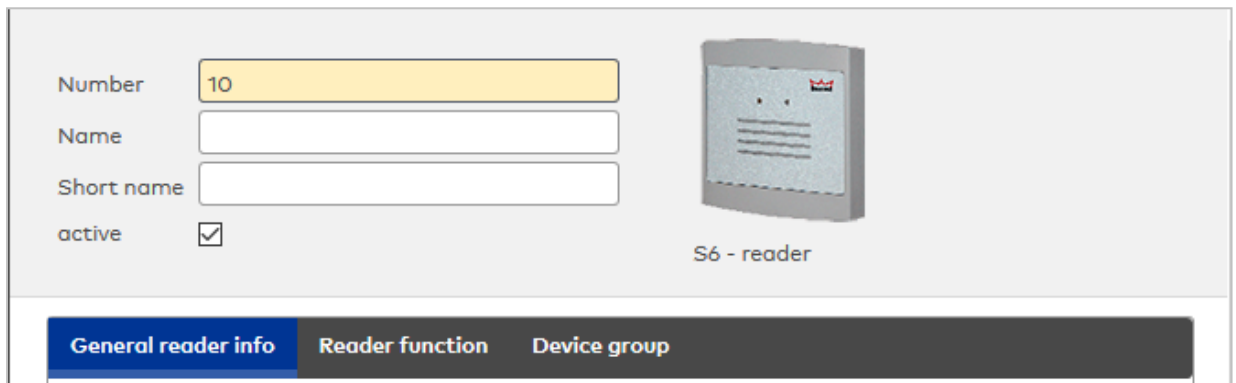
For specifying an additional comment.

"Devices" dialog – DP1 S6 reader

DP1 readers can be created as subcomponents under the online devices.

Note: You should connect all input/output modules prior to setting up the reader. This is important for assigning the inputs and outputs for the various reader functions. In the selection fields of the reader functions, you can only select those inputs/outputs known to the terminal.

No other components can be connected to this reader.



Number: 10

Name:

Short name:

active: ☒

S6 - reader

General reader info | Reader function | Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DP_1	▼
Physical address	1	▼
Affiliation	Access	▼
AoC writer	☐	
Load IdentAssembler	☒	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Indicates whether the reader is used to write AoC data.

Value range:

- Activated: The reader is used as an AoC writer.
- Not activated: The reader is not used as an AoC writer.

Default value: Not activated.

Load Identassembler checkbox:

Indicates whether the IdentAssembler is loaded. This setting can only be disabled if the reader is not used as an AoC writer.

- Activated: The IdentAssembler is loaded.
- Not activated: The IdentAssembler is not loaded.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		▼
VBI key allocation			▼
TP4 VBI selection definition			▼
VBI time preselections			▼
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		▼	Reader 2
Display 1		▼	Display 2
Keyboard 1		▼	Keyboard 2
Key code conversion table 1		▼	Key code conversion table 2

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

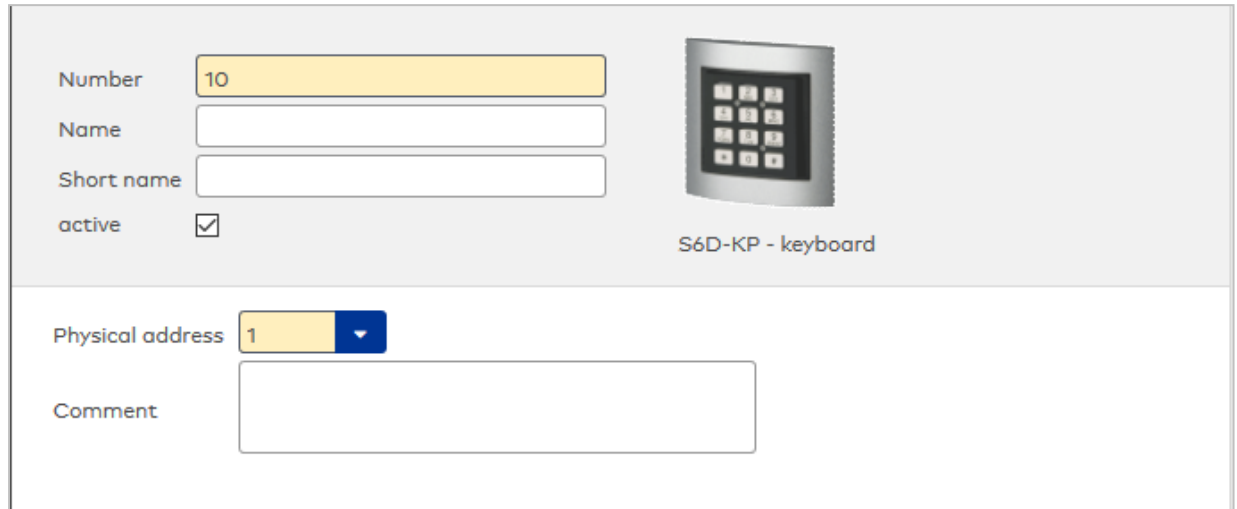
Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – DP1 S6-KP

DP1 keypads can be created as subcomponents under the online devices.

No other components can be connected to a DP1 keypad.



The screenshot shows a configuration window for a DP1 S6-KP keypad. It contains the following fields and controls:

- Number:** A text input field containing the value '10'.
- Name:** An empty text input field.
- Short name:** An empty text input field.
- active:** A checkbox that is currently checked.
- Physical address:** A dropdown menu showing the value '1'.
- Comment:** A large empty text area.

To the right of the form is a small icon of a keypad and the label 'S6D-KP - keyboard'.

Physical address input field:

Contains the unique address in the DP1 bus for the device. DP1 keypads can have physical addresses 1-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment input field:

Text field for entering an additional comment.

Keypad device numbers

Keypads are allocated to the terminal units using device groups. The keypad device number is usually required for the allocation.

Note: For DP1 components, address 1 starts with DIP switch setting 1.

The following specifications apply:

Keypad 1: Physical address 1, DIP switch 1: Device number 64
 Keypad 2: Physical address 2, DIP switch 2: Device number 65
 Keypad 3: Physical address 3, DIP switch 3: Device number 66
 Keypad 4: Physical address 4, DIP switch 4: Device number 67
 Keypad 5: Physical address 5, DIP switch 5: Device number 68
 Keypad 6: Physical address 6, DIP switch 6: Device number 69
 Keypad 7: Physical address 7, DIP switch 7: Device number 70
 Keypad 8: Physical address 8, DIP switch 8: Device number 71
 Keypad 9: Physical address 9, DIP switch 9: Device number 72
 Keypad 10: Physical address 10, DIP switch 10: Device number 73
 Keypad 11: Physical address 11, DIP switch 11: Device number 74
 Keypad 12: Physical address 12, DIP switch 12: Device number 75
 Keypad 13: Physical address 13, DIP switch 13: Device number 76
 Keypad 14: Physical address 14, DIP switch 14: Device number 77
 Keypad 15: Physical address 15, DIP switch 15: Device number 78
 Keypad 16: Physical address 16, DIP switch 16: Device number 79
 Keypad 17: Physical address 17, DIP switch 17: Device number 80
 Keypad 18: Physical address 18, DIP switch 18: Device number 81

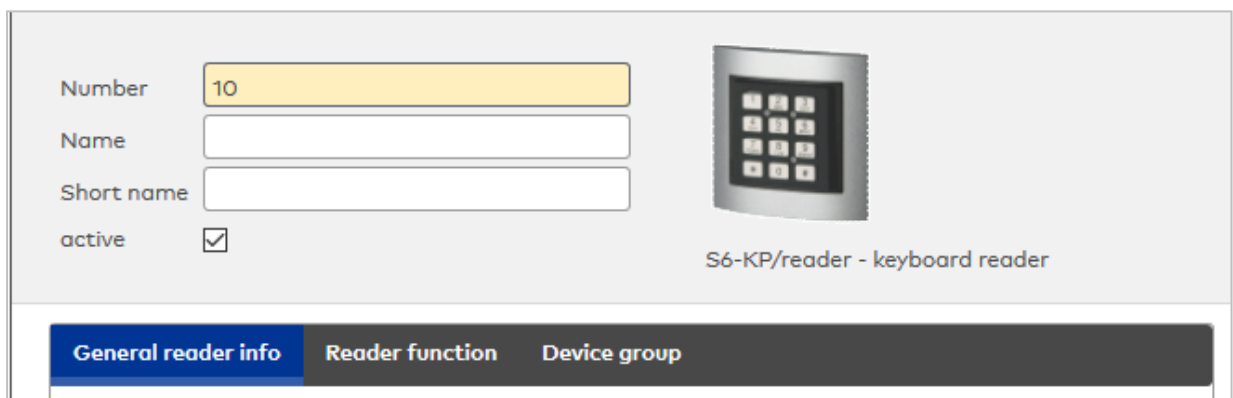
Keypad 19: Physical address 19, DIP switch 19: Device number 82
 Keypad 20: Physical address 20, DIP switch 20: Device number 83
 Keypad 21: Physical address 21, DIP switch 21: Device number 84
 Keypad 22: Physical address 22, DIP switch 22: Device number 85
 Keypad 23: Physical address 23, DIP switch 23: Device number 86
 Keypad 24: Physical address 24, DIP switch 24: Device number 87
 Keypad 25: Physical address 25, DIP switch 25: Device number 88
 Keypad 26: Physical address 26, DIP switch 26: Device number 89
 Keypad 27: Physical address 27, DIP switch 27: Device number 90
 Keypad 28: Physical address 28, DIP switch 28: Device number 91
 Keypad 29: Physical address 29, DIP switch 29: Device number 92
 Keypad 30: Physical address 30, DIP switch 30: Device number 93
 Keypad 31: Physical address 31, DIP switch 31: Device number 94

The device number must be entered in the reader tab in the **Keypad device number 1** field.

"Devices" dialog – DP1 S6-KP/reader

These units are combination devices that consist of a keypad and an integrated reader. They belong to the readers and can be created as subcomponents under terminals.

No other components can be connected to a DP1 S6-KP/reader.



Number

Name

Short name

active ☒



S6-KP/reader - keyboard reader

General reader info Reader function Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DP_1	▼
Physical address	1	▼
Affiliation	Access	▼
AoC writer	☐	
Load IdentAssembler	☒	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Indicates whether the reader is used to write AoC data.

Value range:

- Activated: The reader is used as an AoC writer.
- Not activated: The reader is not used as an AoC writer.

Default value: Not activated.

Load Identassembler checkbox:

Indicates whether the IdentAssembler is loaded. This setting can only be disabled if the reader is not used as an AoC writer.

- Activated: The IdentAssembler is loaded.
- Not activated: The IdentAssembler is not loaded.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		▼
VBI key allocation			▼
TP4 VBI selection definition			▼
VBI time preselections			▼
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	▼
Display 1	▼	Display 2	▼
Keyboard 1	▼	Keyboard 2	▼
Key code conversion table 1	▼	Key code conversion table 2	▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

5.2.3.4 dormakaba terminals

dormakaba terminals are online components and are therefore directly connected to the host system.

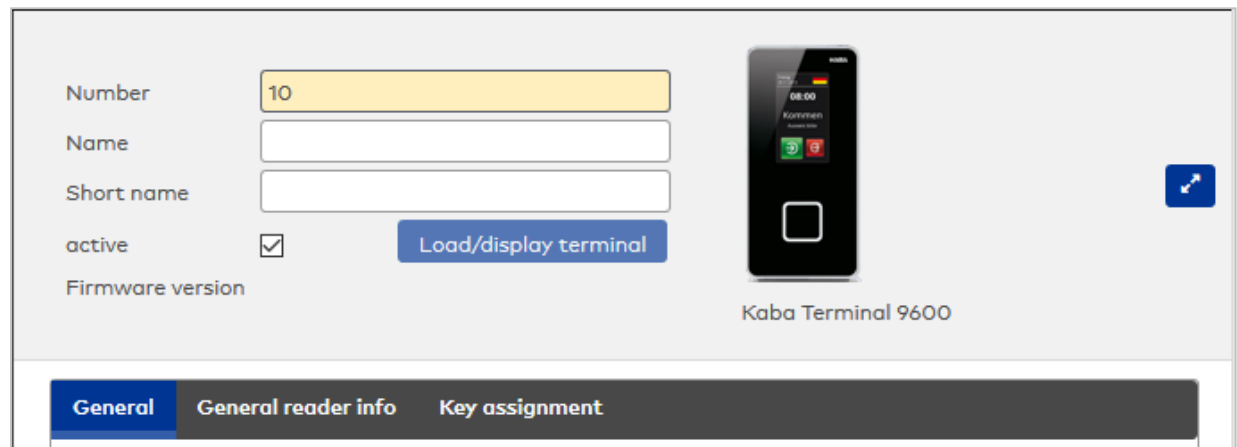
Further information can be found in the section "Working with Matrix" under the heading ► [Set up a dormakaba 96 00/97 00 terminal](#).

Device type	Description	Image
dormakaba 96 00	dormakaba 96 00 terminal	
dormakaba 97 00	dormakaba 97 00 terminal	

"Devices" dialog – dormakaba 96 00 terminal

These terminals belong to the online components and are therefore directly connected to the host system.

No additional components can be connected to dormakaba 96 00 terminals.



Number

Name

Short name

active ☒

Firmware version

[Load/display terminal](#)



Kaba Terminal 9600

[General](#) [General reader info](#) [Key assignment](#)

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	400 - Kaba Terminal
IP address/host name	
Port	30464
Server IP address/host name	192.168.4.59
Server port	30464
Group address GID	0
Device address DID	0
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 30464 to 30703

Default value: 30464

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The server port is automatically applied to the Port field and cannot be changed.

Group address GID display field:

Contains the group address for the terminal.

Device address DID display field:

Contains the device address for the terminal.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Reader general

Use this tab to define settings for the reader.

ID card type	1 - HITAG ID	▼
Affiliation	Time	▼
Door release pulse length (DRP)		Seconds
Door open time (DOT)		Seconds

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Affiliation selection field:

Defines the affiliation and function.

Options:

- AoC
- Time
- Time and AoC

Default value: Time.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Key assignment

Use this tab to define the key allocation and key time preselections.

VBI key allocation	2 - Kaba 9600 Arrive/Depart	▼
Kaba key time preselections		▼

VBI key allocation selection field:

Contains the VBI key allocation for the terminal.

Options:

- All VBI key allocations available in the system for this terminal type.

Default value: No selection.

dormakaba key time preselections selection field:

Contains the time preselections for the time-controlled switchover of booking key preselection on dormakaba terminals.

Options:

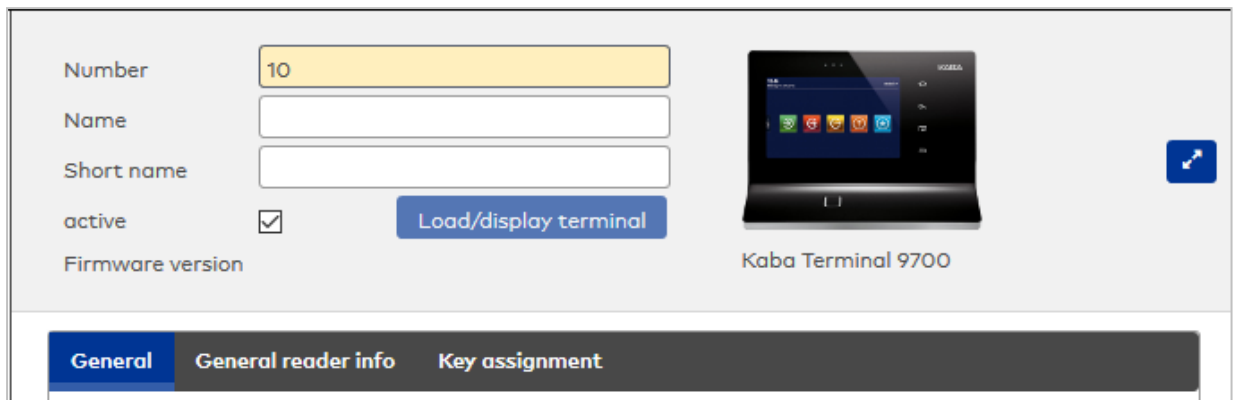
- All VBI time preselections available in the system for this terminal type.

Default value: No selection

"Devices" dialog – dormakaba 97 00 terminal

These terminals belong to the online components and are therefore directly connected to the host system.

No additional components can be connected to dormakaba 97 00 terminals.



Number: 10

Name:

Short name:

active: ☒

Firmware version:

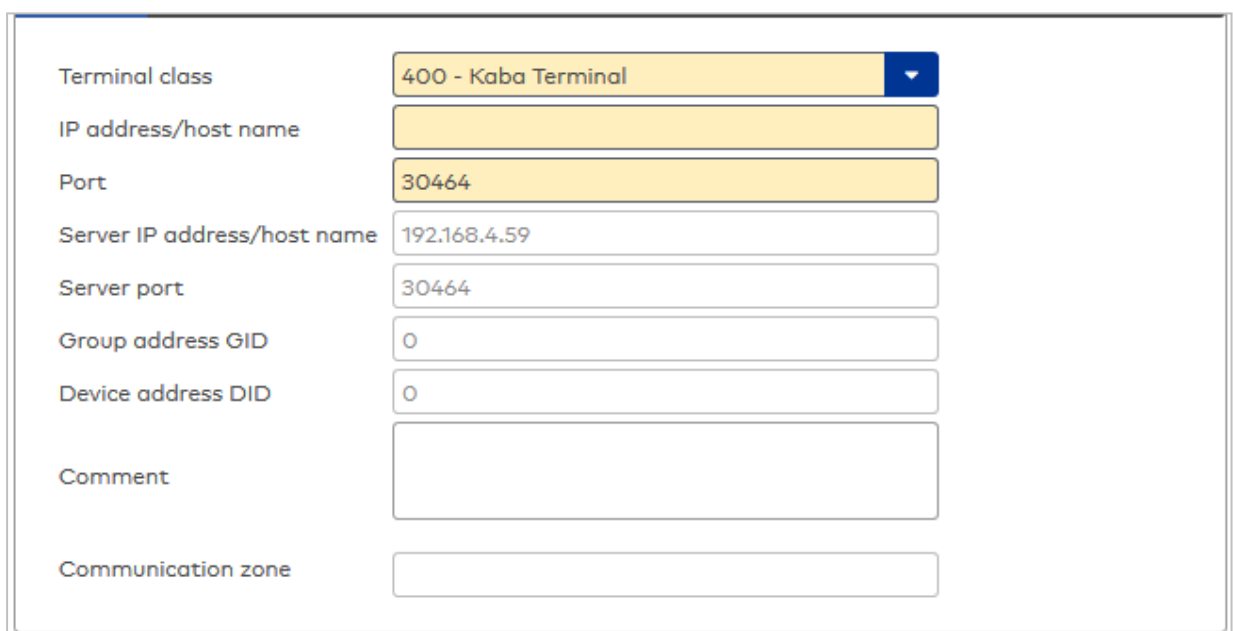
Load/display terminal

Kaba Terminal 9700

General | General reader info | Key assignment

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



Terminal class: 400 - Kaba Terminal

IP address/host name:

Port: 30464

Server IP address/host name: 192.168.4.59

Server port: 30464

Group address GID: 0

Device address DID: 0

Comment:

Communication zone:

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 30464 to 30703

Default value: 30464

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The server port is automatically applied to the Port field and cannot be changed.

Group address GID display field:

Contains the group address for the terminal.

Device address DID display field:

Contains the device address for the terminal.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Reader general

Use this tab to define settings for the reader.

ID card type	1 - HITAG ID
Affiliation	Time
Door release pulse length (DRP)	Seconds
Door open time (DOT)	Seconds

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Affiliation selection field:

Defines the affiliation and function.

Options:

- AoC
- Time
- Time and AoC

Default value: Time.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Key assignment

Use this tab to define the key allocation and key time preselections.

VBI key allocation	2 - Kaba 9600 Arrive/Depart	▼
Kaba key time preselections		▼

VBI key allocation selection field:

Contains the VBI key allocation for the terminal.

Options:

- All VBI key allocations available in the system for this terminal type.

Default value: No selection.

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system for this terminal type.

Default value: No selection

5.2.3.5 KCP devices (compact/remote readers)

KCP devices belong to the online components and are therefore directly connected to the host system.

Compact readers, remote readers, registration units and EM modules are connected via the KCP bus.

Note: Firmware updates of KCP devices can take a long time as two components must be transferred. This is logged by two identical entries in the job log.

Device type	Description	Image
EM 90 30	8-way output module	
EM 90 31	8-way input module	
Registration unit 90 0x	Registration unit	
Registration unit 90 02	Registration unit with keyboard	
Interface 9010	KCP reader adapter	

Device type	Description	Image
Compact reader 9104, 9110	KCP reader	
Compact reader 9112	KCP keypad reader	
Remote reader 9115 / 900x	KCP reader	
Remote reader 9115 / 9002	KCP keypad reader	
Remote reader 9125	KCP reader	
RS232	KCP RS232 reader	

"Devices" dialog – EM input/output modules

The EM input/output modules include

- EM 9030 8-way output module
- EM 9031 8-way input module

No other components can be connected to an input/output module.

The functions which are connected to the input/output module are determined by the terminal to which the module is connected.

EM 9030 8-way output module

Number 28 Name Short name active ☒	 EM 90 30 - 8-way output module	
Bus type OC 8		
Physical address 1		
Comment		

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the IC bus for the device. Modules can be assigned the physical addresses 1-5.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:
Text field for entering an additional comment.

EM 9031 8-way input module

Number29

Name

Short name

active☒



EM 90 31 - 8-way input module

Bus typeIC 8

Physical address1

Comment

Input inversion

1☐

2☐

3☐

4☐

5☐

6☐

7☐

8☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	New entry

Bus type display field:
Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Comment input field:
Text field for entering an additional comment.

Input inversion (1-3) checkbox:
If the input level does not match the required level, the inputs can be inverted.
Options:
• Activated: The input level is inverted.
• Not activated: The input level is not inverted.
Default value: Not activated

TMBasic program table:
The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:
Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:
Contains the number of the input connected to the TMBasic program.
Options:
• All device inputs that are not allocated.
Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

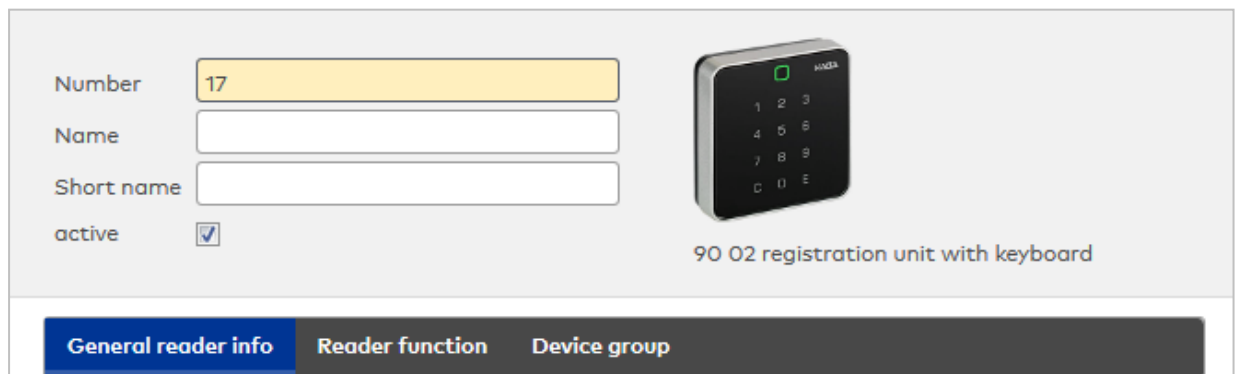
"Devices" dialog – Registration unit 90 02

Registration units of type 9002 can be created as subcomponents under AM or KCP devices.

When connected to AM 92 00 T: The registration units support Mifare Classic, Mifare DESFire, Legic prime, Legic advant in line with IdentAssembler and reader parameters from the MATRIX ID card type. If two registration units are connected to one controller, they must both have the same ID card type. Firmware cannot be downloaded.

When connected to a 9125 remote reader: The registration units only support Mifare and Legic ID card types.

No further components can be connected to registration units.



Number

Name

Short name

active ☒

90 02 registration unit with keyboard

General reader info | Reader function | Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for

operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DP_1	▼
Physical address	1	▼
Affiliation	Access	▼
AoC writer	☐	
Load IdentAssembler	☒	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Indicates whether the reader is used to write AoC data.

Value range:

- Activated: The reader is used as an AoC writer.
- Not activated: The reader is not used as an AoC writer.

Default value: Not activated.

Load Identassembler checkbox:

Indicates whether the IdentAssembler is loaded. This setting can only be disabled if the reader is not used as an AoC writer.

- Activated: The IdentAssembler is loaded.
- Not activated: The IdentAssembler is not loaded.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

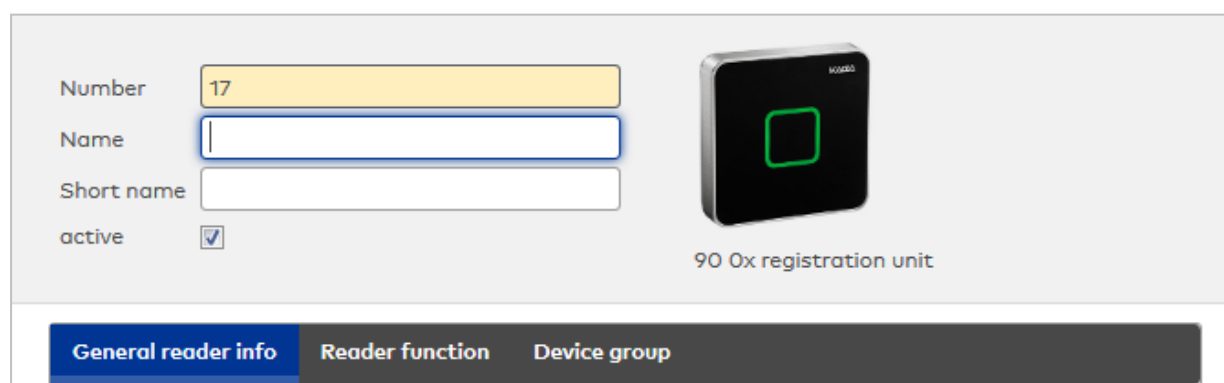
Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – Registration unit 90 0x

Registration units of the type 900x can be created as subcomponents under AM devices.

No further components can be connected to registration units.

Note: The registration units support Mifare Classic, Mifare DESFire, Legic prime, Legic advant in line with IdentAssembler and reader parameters from the MATRIX ID card type. If two registration units are connected to one controller, they must both have the same ID card type. Firmware cannot be downloaded.



Number: 17

Name:

Short name:

active: ☒

90 0x registration unit

General reader info | Reader function | Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DP_1	▼
Physical address	1	▼
Affiliation	Access	▼
AoC writer	☐	
Load IdentAssembler	☒	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Indicates whether the reader is used to write AoC data.

Value range:

- Activated: The reader is used as an AoC writer.
- Not activated: The reader is not used as an AoC writer.

Default value: Not activated.

Load Identassembler checkbox:

Indicates whether the IdentAssembler is loaded. This setting can only be disabled if the reader is not used as an AoC writer.

- Activated: The IdentAssembler is loaded.
- Not activated: The IdentAssembler is not loaded.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		▼
VBI key allocation			▼
TP4 VBI selection definition			▼
VBI time preselections			▼
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	▼
Display 1	▼	Display 2	▼
Keyboard 1	▼	Keyboard 2	▼
Key code conversion table 1	▼	Key code conversion table 2	▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – interface 90 10

The 90 10 interface is used to connect Wiegand readers. A 90 10 interface has six inputs and two outputs. It can be connected to AM controllers and TP4 terminals.

A maximum of two Wiegand readers can be created under a 90 10 interface.



Number

Name

Short name

active ☒

Interface 90 10

General Inputs/outputs

General



Bus type

Physical address

Comment

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address for the device in the KCP bus. Remote readers of the type 9125 can receive physical addresses 1–15.

Options:

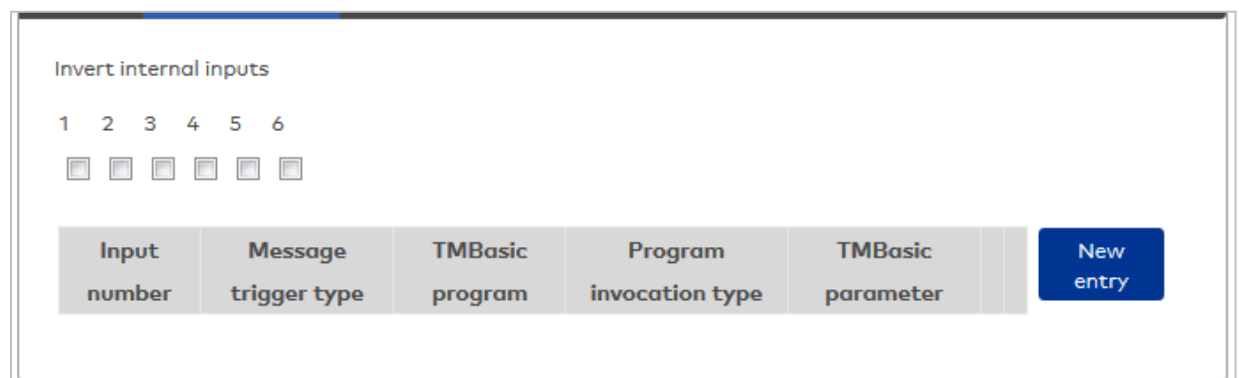
- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Inputs/outputs



Invert internal inputs

1 2 3 4 5 6

☐ ☐ ☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

New entry

Invert internal inputs (1–6) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

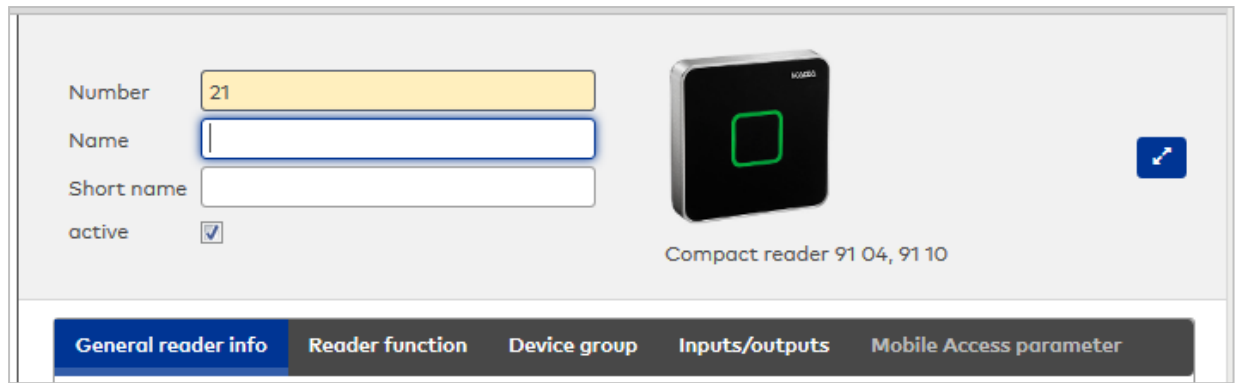
TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – 91 04, 91 10 compact readers

Compact readers of the types 91 04 and 91 10 are readers without keyboards that have two inputs and one output. They can be connected to AM controllers and TP4 terminals and are configured in the same way as registration units under an AM controller. Only Mifare and Legic ID card types can be used.

No further components can be connected to compact readers.



Number

Name

Short name

active ☒

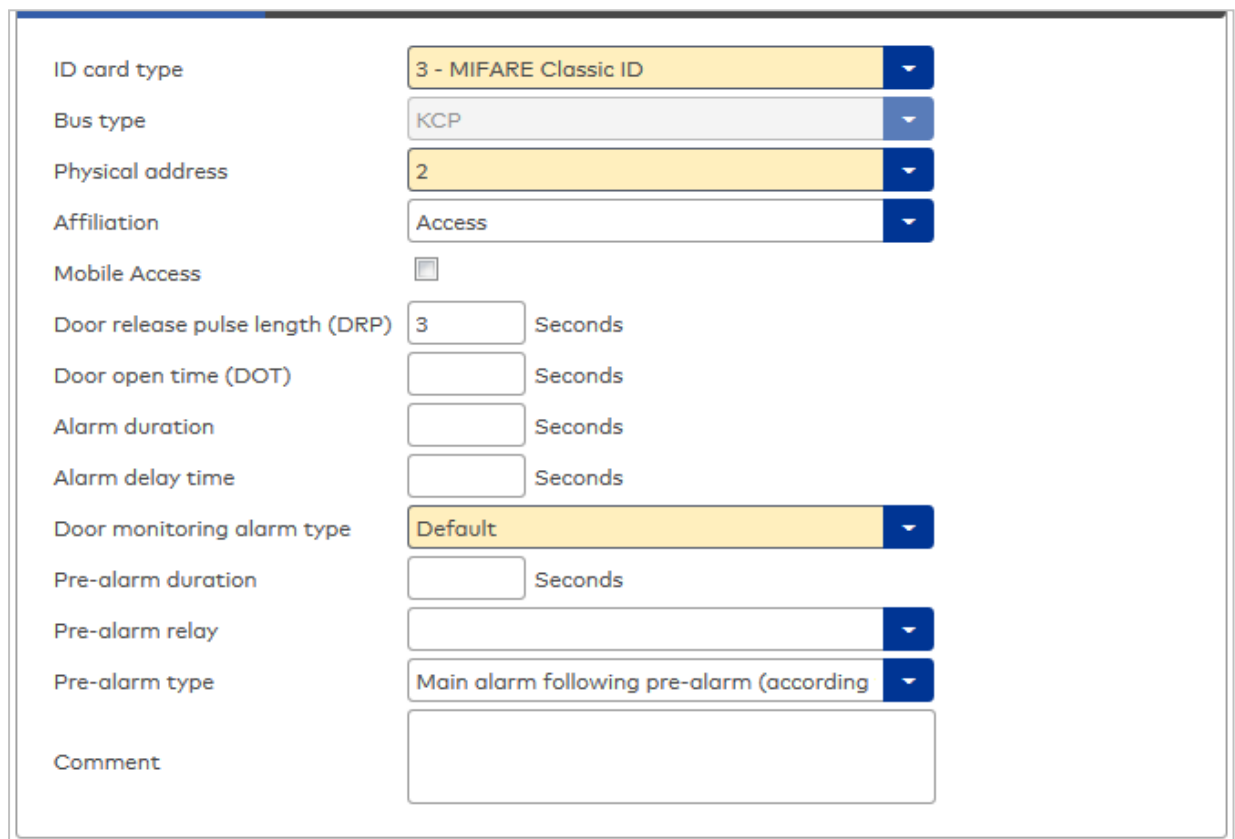
Compact reader 91 04, 91 10

General reader info | Reader function | Device group | Inputs/outputs | Mobile Access parameter

Click the name of a tab to obtain information on the tab fields.

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



ID card type

Bus type

Physical address

Affiliation

Mobile Access ☐

Door release pulse length (DRP) Seconds

Door open time (DOT) Seconds

Alarm duration Seconds

Alarm delay time Seconds

Door monitoring alarm type

Pre-alarm duration Seconds

Pre-alarm relay

Pre-alarm type

Comment

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address for the device in the KPC bus. KPC online components can contain the physical addresses 1–15 in the KPC bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Mobile Access checkbox:

Activates the Mobile Access connection.

Activated: The device is enabled for Mobile Access bookings and is configured for Mobile Access when loading data.

Not activated: The device is not enabled for Mobile Access.

Note: This option is only available if the Mobile Access function is enabled (system parameter 150).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
Terminal function unit1		Terminal function unit2	
Reader 1	48 - PHG reader	Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

If an I/O module is connected to the reader, this connection is configured in the tab.

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

With I/O module (2/2) checkbox:

Indicates whether the device uses an I/O module.

When this box is checked, the internal input inversion section is displayed as well. This is where inputs can be inverted if the input level does not match the required level.

Invert internal inputs:

Checkboxes **1** to **2**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Mobile Access parameter

This tab is only available if the option **Mobile Access** is activated for the device.

This tab can be used to configure the Mobile Access parameters individually. Changes made to the configuration are transferred when loading data.

Note: Please see the device documentation to check whether your device is suitable for mobile access.

Mobile Access: activate NFC	☒
Mobile Access: activate Bluetooth	☒
Bluetooth scan duration (ms)	200
RSSI filter (dBm)	-70
Access with smartphone without user interaction	☐

Mobile Access: Activate NFC checkbox:

Identifier indicating whether mobile access is established via NFC (near field communication).

Options:

- Activated: NFC is switched on; booking can be performed via NFC using a smart phone.
- Not activated: NFC function is switched off.

Default: Activated.

Mobile Access: Activate BLE checkbox:

Identifier indicating whether mobile access is established using BLE (Bluetooth).

Options:

- Activated: BLE is switched on; booking can be performed via BLE using a smart phone.
- Not activated: BLE function is switched off.

Default: Activated.

BLE scan duration (ms) input field:

Specifies the scan duration of BLE smart phones in milliseconds.

Value range: 50 to 2000 ms, default: 200 ms

RSSI filter (dBm) input field:

Specifies the minimum RSSI filter for the BLE connection. The spatial search range of the BLE smart phone can be limited using the power level.

Value range: -128 to 127 dBm, empty; default:

Note: If the value remains empty, the default value of the respective components is applied.

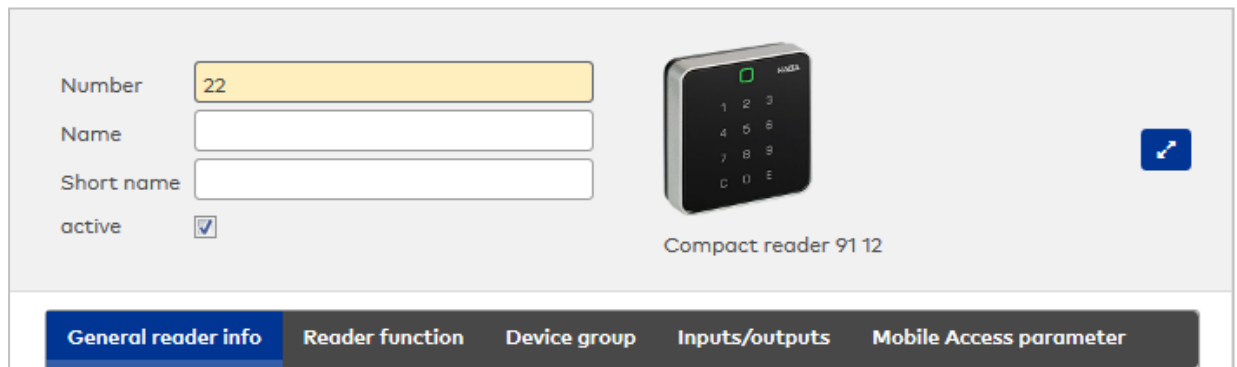
Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access. Options: Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user. Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Devices" dialog – 91 12 compact readers

Compact readers of the type 91 12 are keypad readers with two inputs and one output. They can be connected to AM controllers and TP4 terminals and are configured in the same way as registration units under an AM controller. Only Mifare and Legic ID card types can be used.

No further components can be connected to compact readers.



Number

Name

Short name

active ☒

Compact reader 91 12

General reader info | Reader function | Device group | Inputs/outputs | Mobile Access parameter

Click the name of a tab to obtain information on the tab fields.

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	3 - MIFARE Classic ID	▼
Bus type	KCP	▼
Physical address	2	▼
Affiliation	Access	▼
Mobile Access	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address for the device in the KPC bus. KPC online components can contain the physical addresses 1–15 in the KPC bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Mobile Access checkbox:

Activates the Mobile Access connection.

Activated: The device is enabled for Mobile Access bookings and is configured for Mobile Access when loading data.

Not activated: The device is not enabled for Mobile Access.

Note: This option is only available if the Mobile Access function is enabled (system parameter 150).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door

relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)

- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	
VBI key allocation		
TP4 VBI selection definition		
VBI time preselections		
Terminal function unit1		Terminal function unit2
Reader 1	48 - PHG reader	Reader 2
Display 1		Display 2
Keyboard 1		Keyboard 2
Key code conversion table 1		Key code conversion table 2

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

Invert internal inputs

1
2

☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	New entry

Invert internal inputs:

Checkboxes 1 to 2

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Mobile Access parameter

Mobile Access: activate NFC	☒
Mobile Access: activate Bluetooth	☒
Bluetooth scan duration (ms)	200
RSSI filter (dBm)	-70
Access with smartphone without user interaction	☐

Mobile Access: Activate NFC checkbox:

Identifier indicating whether mobile access is established via NFC (near field communication).

Options:

- Activated: NFC is switched on; booking can be performed via NFC using a smart phone.
- Not activated: NFC function is switched off.

Default: Activated.

Mobile Access: Activate BLE checkbox:

Identifier indicating whether mobile access is established using BLE (Bluetooth).

Options:

- Activated: BLE is switched on; booking can be performed via BLE using a smart phone.
- Not activated: BLE function is switched off.

Default: Activated.

BLE scan duration (ms) input field:

Specifies the scan duration of BLE smart phones in milliseconds.

Value range: 50 to 2000 ms, default: 200 ms

RSSI filter (dBm) input field:

Specifies the minimum RSSI filter for the BLE connection. The spatial search range of the BLE smart phone can be limited using the power level.

Value range: -128 to 127 dBm, empty; default:

Note: If the value remains empty, the default value of the respective components is applied.

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access. Options: Activated: The

dormakaba mobile access app must be started. No further actions are required of the

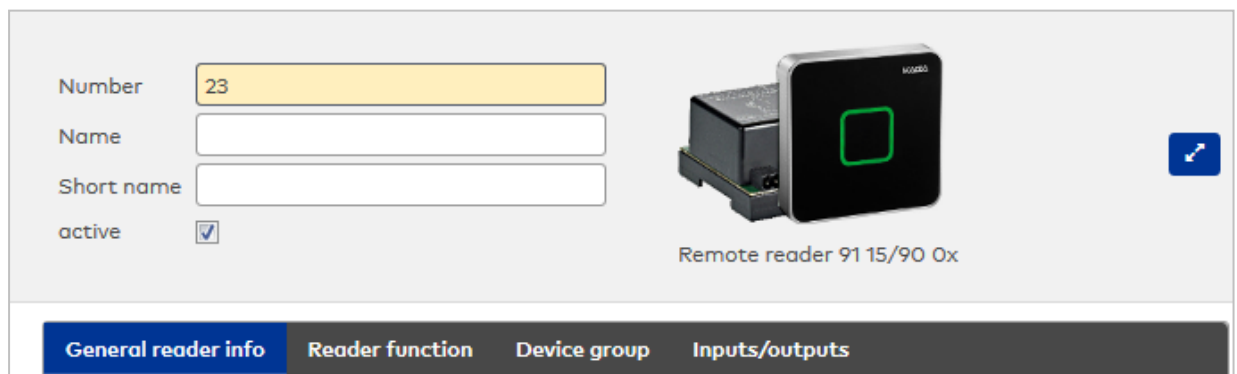
user. Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Devices" dialog – 91 15 / 90 0x remote readers

Remote readers of the type 91 15 / 90 0x are readers without keyboards with two inputs and one output. They can be connected to AM controllers and TP4 terminals. Only Mifare and Legic ID card types can be used.

A maximum of nine EM 90 30 output modules and a maximum of five EM 90 31 input modules can be connected to 91 15 / 90 0x remote readers with physical addresses 1 and 2.

A maximum of one EM 90 30 output module and a maximum of one EM 90 31 input module can be connected to 91 15 / 90 0x remote readers with physical addresses 3–15.



Number

Name

Short name

active ☒

Remote reader 91 15/90 0x

General reader info | Reader function | Device group | Inputs/outputs

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	3 - MIFARE Classic ID	▼
Bus type	KCP	▼
Physical address	2	▼
Affiliation	Access	▼
Mobile Access	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address for the device in the KPC bus. KPC online components can contain the physical addresses 1–15 in the KPC bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Mobile Access checkbox:

Activates the Mobile Access connection.

Activated: The device is enabled for Mobile Access bookings and is configured for Mobile Access when loading data.

Not activated: The device is not enabled for Mobile Access.

Note: This option is only available if the Mobile Access function is enabled (system parameter 150).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door

relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)

- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the

door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 1. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1	48 - PHG reader	Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

Invert internal inputs

1

2

☐

☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

Invert internal inputs:

Checkboxes 1 to 2

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – 91 15 / 90 02 remote readers

Remote readers of the types 91 15 / 90 02 are keypad readers with two inputs and one output. They can be connected to AM controllers and TP4 terminals. Only Mifare and Legic ID card types can be used.

A maximum of nine EM 90 30 output modules and a maximum of five EM 90 31 input modules can be connected to 91 15 / 90 02 remote readers with physical addresses 1 and 2.

A maximum of one EM 90 30 output module and a maximum of one EM 90 31 input module can be connected to 91 15 / 90 02 remote readers with physical addresses 3–15.

Number	24		
Name			
Short name			
active	☒		
Remote reader 91 15/90 02			
General reader info Reader function Device group Inputs/outputs			

Click the name of a tab to obtain information on the tab fields.

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	3 - MIFARE Classic ID	
Bus type	KCP	
Physical address	2	
Affiliation	Access	
Mobile Access	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	
Pre-alarm duration		Seconds
Pre-alarm relay		
Pre-alarm type	Main alarm following pre-alarm (according	
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address for the device in the KPC bus. KPC online components can contain the physical addresses 1–15 in the KPC bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Mobile Access checkbox:

Activates the Mobile Access connection.

Activated: The device is enabled for Mobile Access bookings and is configured for Mobile Access when loading data.

Not activated: The device is not enabled for Mobile Access.

Note: This option is only available if the Mobile Access function is enabled (system parameter 150).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
Terminal function unit1		Terminal function unit2	
Reader 1	48 - PHG reader	Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

New entry

Invert internal inputs:

Checkboxes **1** to **2**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – 91 25 remote readers

Remote readers of the type 91 25 are used to connect registration units, RS 232 readers and IO modules. They have four inputs and three outputs. They can be connected to AM controllers and TP4 terminals.

A maximum of two registration units, two RS 232 readers, nine EM 90 30 output modules and five EM 90 31 input modules can be connected to 91 25 remote readers with physical addresses 1 and 2.

A maximum of two registration units, one EM 90 30 output module and a maximum of one EM 90 31 input module can be connected to 91 25 remote readers with physical addresses 3–15.

Number

25

Name

Short name

active

☒



Remote reader 91 25

General

Inputs/outputs

General

The form contains three fields:

- Bus type:** A dropdown menu with 'KCP' selected.
- Physical address:** A dropdown menu with '1' selected.
- Comment:** A text input field.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address for the device in the KCP bus. Remote readers of the type 9125 can receive physical addresses 1–15.

Options:

- All addresses in the bus which are still free.

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Inputs/outputs

The form includes the following elements:

- Invert internal inputs:** A section with four checkboxes labeled 1, 2, 3, and 4.
- TMBasic program table:** A table with columns for Input number, Message trigger type, TMBasic program, Program invocation type, and TMBasic parameter. A 'New entry' button is located to the right of the table.

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

Invert internal inputs (1–4) checkbox:

If the input level does not match the required level, the inputs can be inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – RS232 readers

RS232 reader can be created as subcomponents under 91 25 remote readers.

You cannot connect any additional components to a RS232 reader.



Number: 26

Name:

Short name:

active: ☒

RS232 reader

General reader info | Reader function | Device group

The functions which are connected to the reader are determined by the terminal to which the reader is connected.

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

The screenshot displays a configuration window with the following fields and values:

- ID card type:** 3 - MIFARE Classic ID
- Bus type:** KCP
- Physical address:** 2
- Affiliation:** Access
- Mobile Access:** ☐
- Door release pulse length (DRP):** 3 Seconds
- Door open time (DOT):** [empty] Seconds
- Alarm duration:** [empty] Seconds
- Alarm delay time:** [empty] Seconds
- Door monitoring alarm type:** Default
- Pre-alarm duration:** [empty] Seconds
- Pre-alarm relay:** [empty]
- Pre-alarm type:** Main alarm following pre-alarm (according
- Comment:** [empty text area]

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address for the device in the KPC bus. KPC online components can contain the physical addresses 1–15 in the KPC bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Mobile Access checkbox:

Activates the Mobile Access connection.

Activated: The device is enabled for Mobile Access bookings and is configured for Mobile Access when loading data.

Not activated: The device is not enabled for Mobile Access.

Note: This option is only available if the Mobile Access function is enabled (system parameter 150).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door

relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)

- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
TP4 VBI selection definition		▼
VBI time preselections		▼
Terminal function unit1		
Reader 1		▼
Display 1		▼
Keyboard 1		▼
Key code conversion table 1		▼
Terminal function unit2		
Reader 2		▼
Display 2		▼
Keyboard 2		▼
Key code conversion table 2		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

5.2.3.6 PHG devices

PHG devices are online components. They can be created as subcomponents under the online devices.

IO modules and various readers are connected using the PHG bus.

Device type	Description	Image
PHG IO 4/2	4-way input/2-way output module	

Device type	Description	Image
PHG IO 4/4	4-way input/4-way output module	
PHG reader	Reader	
PHG-KP	Keyboard	
PHG-KP/reader	Keypad reader	
PHG-KP/reader with display	Keyboard reader with display	
PHG motor card reader	Motorised card reader with card retention function	
PHG motor card reader with display	Motorised card reader with card retention function and display	
PHG Mux	PHG Mux	

"Devices" dialog – PHG input/output modules

The PHG input/output modules include

- PHG IO 4/2 modules with 4 inputs/2 outputs
- PHG IO 4/4 modules with 4 inputs/4 outputs

No other components can be connected to an input/output module.

The functions which are connected to the input/output module are determined by the terminal to which the module is connected.

PHG IO 4/2 module with 4 inputs/2 outputs

Number

64

Name

PHG IO 4/2

Short name

active

☒



PHG IO 4/2 - module with 4 inputs/2 outputs

Bus type

PHG

Physical address

5

Comment

Input inversion

1

2

3

4

☐

☐

☐

☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the PHG bus for the device. PHG online components can contain the physical addresses 1-16 in the PHG bus.

Options: All addresses that are still free, default setting: next free address.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-4) checkbox:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

PHG IO 4/4 modules with 4 inputs/4 outputs

Number	65	 PHG IO 4/4 - module with 4 inputs/4 outputs												
Name	PHG IO 4/4													
Short name														
active	☒													
Bus type	PHG													
Physical address	6													
Comment														
Input inversion	1 2 3 4 ☐ ☐ ☐ ☐													
<table border="1"> <thead> <tr> <th>Input number</th> <th>Message trigger type</th> <th>TMBasic program</th> <th>Program invocation type</th> <th>TMBasic parameter</th> <th></th> </tr> </thead> <tbody> <tr> <td colspan="6"> New entry </td> </tr> </tbody> </table>			Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry					
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter										
New entry														

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the PHG bus for the device. PHG online components can contain the physical addresses 1-16 in the PHG bus.

Options: All addresses that are still free, default setting: next free address.

Comment input field:

Text field for entering an additional comment.

Input inversion (1-4) checkbox:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

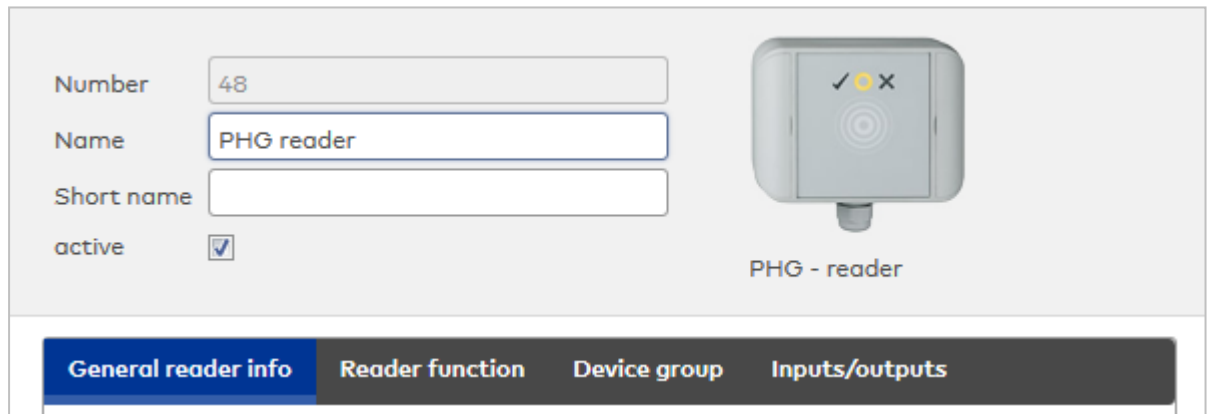
TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – PHG reader

PHG reader-Components can be created as subcomponents under the online devices.

No other components can be connected to this reader.



Number: 48

Name: PHG reader

Short name:

active: ☒

PHG - reader

General reader info | Reader function | Device group | Inputs/outputs

Click the name of a tab to obtain information on the tab fields.

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type		▼
Bus type		▼
Physical address	0	▼
Affiliation	Access	▼
No event recording	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the PHG bus for the device. PHG online components can contain the physical addresses 1-16 in the PHG bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered

when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	
VBI key allocation		
TP4 VBI selection definition		
VBI time preselections		
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>
Reader 1	48 - PHG reader	Reader 2
Display 1		Display 2
Keyboard 1		Keyboard 2
Key code conversion table 1		Key code conversion table 2

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

If the device uses an I/O module, the module is configured in the tab.

With I/O module (2/2) ☒

Invert internal inputs

1 2

☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	

New entry

With I/O module (2/2) checkbox:

Indicates whether the device uses an I/O module.

When this box is checked, the internal input inversion section is displayed as well. This is where inputs can be inverted if the input level does not match the required level.

Invert internal inputs:

Checkboxes 1 to 2

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – PHG-KP

PHG-KP-Components can be created as subcomponents under the online devices.

No other components can be connected to this keyboard.

Number	89	
Name		
Short name		PHG-KP - keyboard
active	☒	
Physical address	7 v	
Comment		

Physical address input field:

Contains the unique address in the PHG bus for the device. PHG keypads may have physical addresses 1-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment input field:

Text field for entering an additional comment.

Keypad device numbers

Keypads are allocated to the terminal units using device groups. The keypad device number is usually required for the allocation.

Note: The address for components starts with 0.

The following specifications apply:

Keypad 0: Physical address 0: Device number B0
 Keypad 1: Physical address 1: Device number B1
 Keypad 2: Physical address 2: Device number B2
 Keypad 3: Physical address 3: Device number B3
 Keypad 4: Physical address 4: Device number B4
 Keypad 5: Physical address 5: Device number B5
 Keypad 6: Physical address 6: Device number B6
 Keypad 7: Physical address 7: Device number B7
 Keypad 8: Physical address 8: Device number B8
 Keypad 9: Physical address 9: Device number B9
 Keypad 10: Physical address 10: Device number BA
 Keypad 11: Physical address 11: Device number BB
 Keypad 12: Physical address 12: Device number BC
 Keypad 13: Physical address 13: Device number BD
 Keypad 14: Physical address 14: Device number BE
 Keypad 15: Physical address 15: Device number BF

The device number must be entered in the reader tab in the **Keypad device number 1** field.

"Devices" dialog – PHG-KP/reader

PHG-KP/reader-Components are combination devices that consist of a keyboard and an integrated reader. They can be created as subcomponents under the online devices. No other components can be connected to this keyboard reader.

Number	49	 PHG-KP/reader - keyboard reader
Name	PHG keypad reader	
Short name		
active	☒	

General reader info	Reader function	Device group	Inputs/outputs

Click the name of a tab to obtain information on the tab fields.

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type		▼
Bus type		▼
Physical address	0	▼
Affiliation	Access	▼
No event recording	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the PHG bus for the device. PHG online components can contain the

physical addresses 1-16 in the PHG bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
TP4 VBI selection definition		▼
VBI time preselections		▼
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>
Reader 1	48 - PHG reader	▼
Display 1		▼
Keyboard 1		▼
Key code conversion table 1		▼
Reader 2		▼
Display 2		▼
Keyboard 2		▼
Key code conversion table 2		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

If an I/O module is connected to the reader, this connection is configured in the tab.

With I/O module (2/2) ☒

Invert internal inputs

1 2

☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

With I/O module (2/2) checkbox:

Indicates whether the device uses an I/O module.

When this box is checked, the internal input inversion section is displayed as well. This is where inputs can be inverted if the input level does not match the required level.

Invert internal inputs:

Checkboxes **1** to **2**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

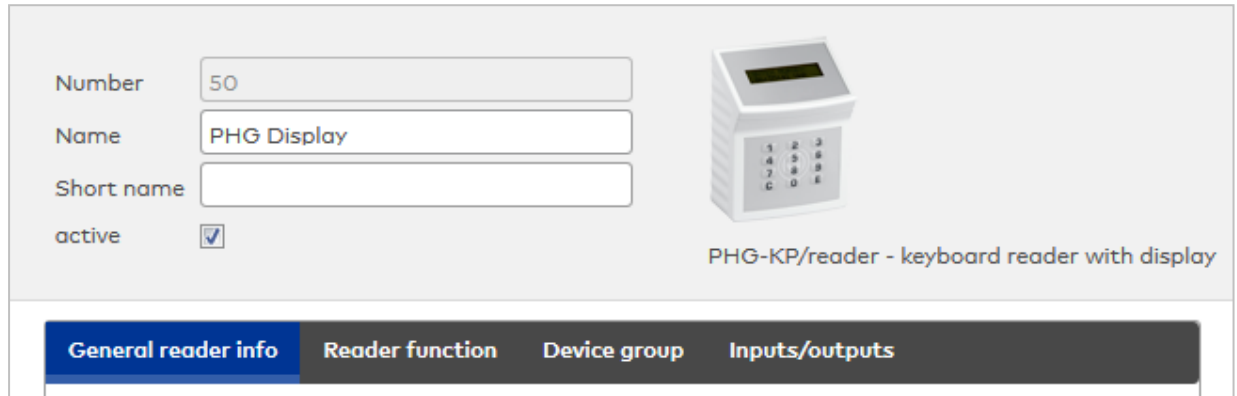
TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – PHG-KP/reader with display

PHG-KP/reader with display-Components can be created as subcomponents under the online devices.

No other components can be connected to this reader.



Number: 50

Name: PHG Display

Short name:

active: ☒

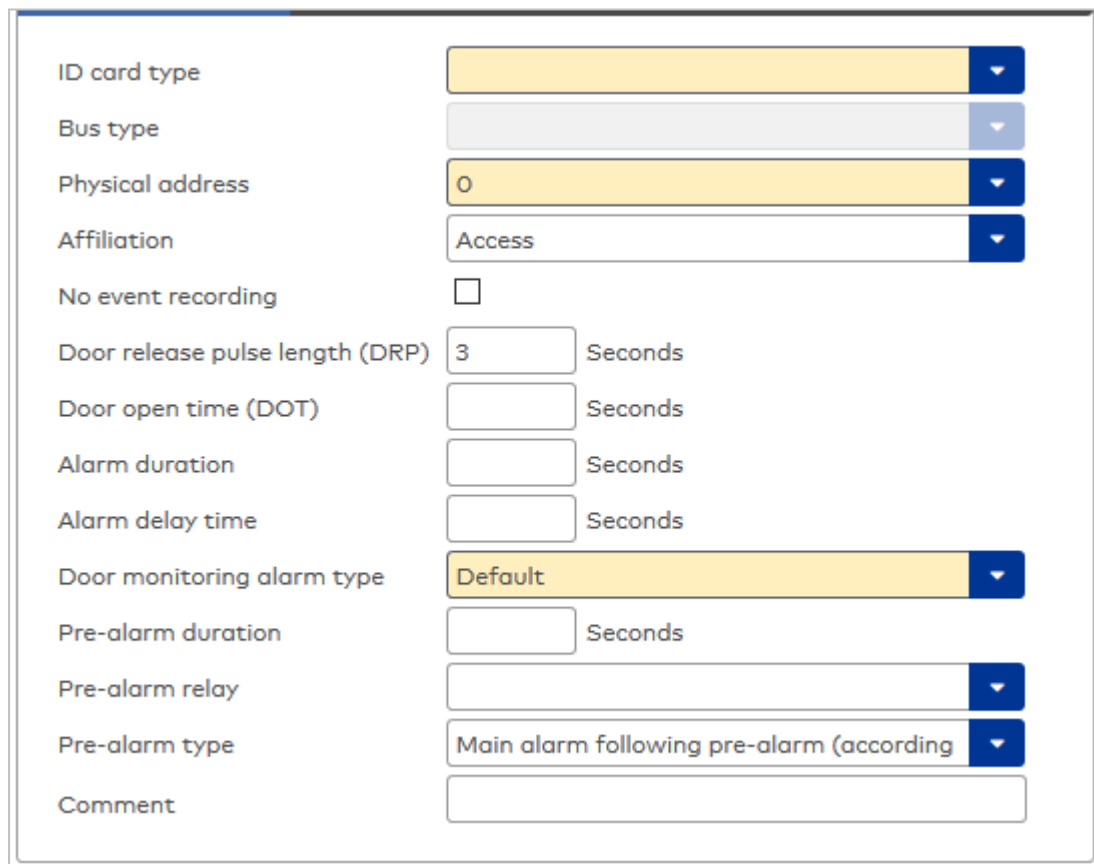
PHG-KP/reader - keyboard reader with display

General reader info | Reader function | Device group | Inputs/outputs

Click the name of a tab to obtain information on the tab fields.

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



ID card type: [Dropdown]

Bus type: [Dropdown]

Physical address: 0 [Dropdown]

Affiliation: Access [Dropdown]

No event recording: ☐

Door release pulse length (DRP): 3 [Input] Seconds

Door open time (DOT): [Input] Seconds

Alarm duration: [Input] Seconds

Alarm delay time: [Input] Seconds

Door monitoring alarm type: Default [Dropdown]

Pre-alarm duration: [Input] Seconds

Pre-alarm relay: [Dropdown]

Pre-alarm type: Main alarm following pre-alarm (according [Dropdown]

Comment: [Input]

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains

information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Auswahlfeld **Physical address**:

Enthält die eindeutige Adresse im DCW-Bus für das Gerät. DCW-Leser können innerhalb des DCW-Busses die physikalischen Adressen 1-4 erhalten. Dabei werden andere DCW-Gerätetypen wie I/O-Module nicht betrachtet, da diese einen eigenen Adressraum bilden.

Auswahl: Alle noch freien Adressen

Standard: Nächste freie Adresse

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing

- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period		Seconds
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
Terminal function unit1		Terminal function unit2	
Reader 1	48 - PHG reader	Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

If the device uses an I/O module, the module is configured in the tab.

With I/O module (2/2) ☒

Invert internal inputs

1 2

☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter			New entry

With I/O module (2/2) checkbox:

Indicates whether the device uses an I/O module.

When this box is checked, the internal input inversion section is displayed as well. This is where inputs can be inverted if the input level does not match the required level.

Invert internal inputs:

Checkboxes **1** to **2**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – PHG motor card reader

PHG motor card reader can be created as subcomponents under the online devices.

No other components can be connected to this reader.

Number

62

Name

PHG Motor reader

Short name

active

☒



PHG motor card reader

General reader info

Reader function

Device group

Inputs/outputs

Motor card reader options

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DP_1	▼
Physical address	1	▼
Affiliation	Access	▼
AoC writer	☐	
Load IdentAssembler	☒	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Indicates whether the reader is used to write AoC data.

Value range:

- Activated: The reader is used as an AoC writer.
- Not activated: The reader is not used as an AoC writer.

Default value: Not activated.

Load Identassembler checkbox:

Indicates whether the IdentAssembler is loaded. This setting can only be disabled if the reader is not used as an AoC writer.

- Activated: The IdentAssembler is loaded.
- Not activated: The IdentAssembler is not loaded.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period		Seconds
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		▼
VBI key allocation			▼
TP4 VBI selection definition			▼
VBI time preselections			▼
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	▼
Display 1	▼	Display 2	▼
Keyboard 1	▼	Keyboard 2	▼
Key code conversion table 1	▼	Key code conversion table 2	▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

If the device uses an I/O module, the module is configured in the tab.

With I/O module (2/2) ☒

Invert internal inputs

1 2

☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	

New entry

With I/O module (2/2) checkbox:

Indicates whether the device uses an I/O module.

When this box is checked, the internal input inversion section is displayed as well. This is where inputs can be inverted if the input level does not match the required level.

Invert internal inputs:

Checkboxes **1** to **2**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Motor card reader options

This tab contains the options for retaining an ID card after a booking.

Always retain ID card	☐
Retain when booking has been successful	☐
Retain when the door is unlocked	☐
Retain when the door is not unlocked after an access booking	☐
Retain if ID card is unknown, access period has expired or employee record has been blocked	☐
Retain when the encoded ID card validity has expired	☐
Retain when the access profile-based access permission is missing	☐
Retain when access is blocked by the door program	☐
Retain when an incorrect PIN has been entered or PIN entry is permanently blocked	☐
Retain when the sequence checking status for the employee record is "Absent"	☐
Retain when the access status of the employee record is not unknown	☐
Retain when the access status of the employee record is unknown	☐
Retain if employee record type = employee	☐
Retain if employee record type = visitor	☐
Retain if employee record type = external employee	☐
Retain when the last day of the employee record validity period has been reached	☐
Retain when the last day of the ID card validity period has been reached	☐

Always retain ID card checkbox:

Indicates whether ID cards are always retained after a booking.

Options:

- Activated: ID cards are always retained after a booking.
- Not activated: ID cards are not always retained; other conditions are checked.

Default value: Not activated.

Retain when booking has been successful checkbox:

Indicates whether ID cards are always retained after a successful booking.

Options:

- Activated: ID cards are always retained after a successful booking.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the door is unlocked checkbox:

Indicates if ID cards are retained when the door is released.

Options:

- Activated: ID cards are retained when the door is released
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the door is not unlocked after an access booking checkbox:

Indicates if ID cards are retained when the door is not released after an access booking.

Options:

- Activated: ID cards are retained when the door is not released after an access booking
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain if ID card is unknown, access period has expired or employee record has been blocked checkbox:

Indicates whether ID cards are retained when they are unknown, their access validity has expired or the employee record is blocked.

Options:

- Activated: ID cards are retained when they are unknown
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the encoded ID card validity period has expired checkbox:

Indicates if ID cards are retained when the encoded ID card validity period has expired.

Options:

- Activated: ID cards are retained when the ID card has expired.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the access profile-based access permission is missing checkbox:

Indicates whether ID cards are retained when there is no access-profile-specific access permission.

Options:

- Activated: ID cards are retained when there is no access-profile-specific access permission.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when access is blocked by the door program checkbox:

Indicates whether ID cards are retained when access is blocked by the door program.

Options:

- Activated: ID cards are retained when access is blocked by the door program
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when an incorrect PIN has been entered or PIN entry is permanently blocked checkbox:

Indicates whether ID cards are retained when an incorrect PIN has been entered or PIN entry is permanently blocked.

Options:

- Activated: ID cards are retained when an incorrect PIN has been entered or PIN entry is permanently blocked
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the sequence checking status for the employee record is absent checkbox:

Indicates whether ID cards are retained when the sequence checking status for the employee record is absent.

Options:

- Activated: ID cards are retained when the sequence checking status for the employee record is absent.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the access status of the employee record is not unknown checkbox:

Indicates whether ID cards are retained when the access status of the employee record is not unknown.

Options:

- Activated: ID cards are retained when the access status of the employee record is not unknown.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the access status of the employee record is unknown checkbox:

Indicates whether ID cards are retained when the access status of the employee record is unknown.

Options:

- Activated: ID cards are retained when the access status of the employee record is unknown.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when employee record type = employee checkbox:

Indicates whether ID cards are retained when the employee record type is an employee type.

Options:

- Activated: ID cards are retained when the employee record type is an employee type.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when employee record type = visitor checkbox:

Indicates whether ID cards are retained when the employee record is a visitor type.

Options:

- Activated: ID cards are retained when the employee record type is a visitor type.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when employee record type = external employee checkbox:

Indicates whether ID cards are retained when the employee record is an external employee type.

Options:

- Activated: ID cards are retained when the employee record type is an external employee type.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the last day of the employee record validity period has been reached or exceeded checkbox:

Identifier indicating whether ID cards are retained when the last valid day of the employee record has been reached or been exceeded.

Options:

- Activated: ID cards are retained when the last valid day of the employee record has been reached or been exceeded.
- Not activated: ID cards are not retained; other conditions are checked.

Retain when the last day of the ID card validity period has been reached or exceeded checkbox:

Identifier indicating whether ID cards are retained when the last valid day of the ID card has been reached or been exceeded.

Options:

- Activated: ID cards are retained when the last valid day of the ID card has been reached or been exceeded.
- Not activated: ID cards are not retained; other conditions are checked.

"Devices" dialog – PHG motor card reader with display

PHG motor card reader with display can be created as subcomponents under the online devices.

No other components can be connected to this reader.

Number 63 Name PHG Motor Display Short name active ☒	 PHG - motor card reader with display
General reader info Reader function Device group Inputs/outputs Motor card reader options	

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DP_1	▼
Physical address	1	▼
Affiliation	Access	▼
AoC writer	☐	
Load IdentAssembler	☒	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Indicates whether the reader is used to write AoC data.

Value range:

- Activated: The reader is used as an AoC writer.
- Not activated: The reader is not used as an AoC writer.

Default value: Not activated.

Load Identassembler checkbox:

Indicates whether the IdentAssembler is loaded. This setting can only be disabled if the reader is not used as an AoC writer.

- Activated: The IdentAssembler is loaded.
- Not activated: The IdentAssembler is not loaded.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Inputs/outputs

If the device uses an I/O module, the module is configured in the tab.

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					<button>New entry</button>

With I/O module (2/2) checkbox:

Indicates whether the device uses an I/O module.

When this box is checked, the internal input inversion section is displayed as well. This is where inputs can be inverted if the input level does not match the required level.

Invert internal inputs:Checkboxes **1** to **2**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Motor card reader options

This tab contains the options for retaining an ID card after a booking.

Always retain ID card	☐
Retain when booking has been successful	☐
Retain when the door is unlocked	☐
Retain when the door is not unlocked after an access booking	☐
Retain if ID card is unknown, access period has expired or employee record has been blocked	☐
Retain when the encoded ID card validity has expired	☐
Retain when the access profile-based access permission is missing	☐
Retain when access is blocked by the door program	☐
Retain when an incorrect PIN has been entered or PIN entry is permanently blocked	☐
Retain when the sequence checking status for the employee record is "Absent"	☐
Retain when the access status of the employee record is not unknown	☐
Retain when the access status of the employee record is unknown	☐
Retain if employee record type = employee	☐
Retain if employee record type = visitor	☐
Retain if employee record type = external employee	☐
Retain when the last day of the employee record validity period has been reached	☐
Retain when the last day of the ID card validity period has been reached	☐

Always retain ID card checkbox:

Indicates whether ID cards are always retained after a booking.

Options:

- Activated: ID cards are always retained after a booking.
- Not activated: ID cards are not always retained; other conditions are checked.

Default value: Not activated.

Retain when booking has been successful checkbox:

Indicates whether ID cards are always retained after a successful booking.

Options:

- Activated: ID cards are always retained after a successful booking.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the door is unlocked checkbox:

Indicates if ID cards are retained when the door is released.

Options:

- Activated: ID cards are retained when the door is released
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the door is not unlocked after an access booking checkbox:

Indicates if ID cards are retained when the door is not released after an access booking.

Options:

- Activated: ID cards are retained when the door is not released after an access booking
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the ID card is unknown checkbox:

Indicates whether ID cards are retained when they are unknown.

Options:

- Activated: ID cards are retained when they are unknown
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the employee record has expired checkbox:

Indicates if ID cards are retained when the employee record has expired.

Options:

- Activated: ID cards are retained when the employee record has expired.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the ID card has expired checkbox:

Indicates whether ID cards are retained when the ID card has expired.

Options:

- Activated: ID cards are retained when the ID card has expired.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the employee record is blocked checkbox:

Indicates whether ID cards are retained when the employee record is blocked.

Options:

- Activated: ID cards are retained when the employee record is blocked.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the access profile-based access permission is missing checkbox:

Indicates whether ID cards are retained when there is no access-profile-specific access permission.

Options:

- Activated: ID cards are retained when there is no access-profile-specific access permission.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when access is blocked by the door program checkbox:

Indicates whether ID cards are retained when access is blocked by the door program.

Options:

- Activated: ID cards are retained when access is blocked by the door program
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when an incorrect PIN has been entered or PIN entry is permanently blocked checkbox:

Indicates whether ID cards are retained when an incorrect PIN has been entered or PIN entry is permanently blocked.

Options:

- Activated: ID cards are retained when an incorrect PIN has been entered or PIN entry is permanently blocked
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the sequence checking status for the employee record is absent checkbox:

Indicates whether ID cards are retained when the sequence checking status for the employee record is absent.

Options:

- Activated: ID cards are retained when the sequence checking status for the employee record is absent.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the access status of the employee record is not unknown checkbox:

Indicates whether ID cards are retained when the access status of the employee record is not unknown.

Options:

- Activated: ID cards are retained when the access status of the employee record is not unknown.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when the access status of the employee record is unknown checkbox:

Indicates whether ID cards are retained when the access status of the employee record is unknown.

Options:

- Activated: ID cards are retained when the access status of the employee record is unknown.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when employee record type = employee checkbox:

Indicates whether ID cards are retained when the employee record type = employee.

Options:

- Activated: ID cards are retained when the employee record type = employee.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when employee record type = visitor checkbox:

Indicates whether ID cards are retained when the employee record type = visitor.

Options:

- Activated: ID cards are retained when the employee record type = visitor.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

Retain when employee record type = external employee checkbox:

Indicates whether ID cards are retained when the employee record type = external employee .

Options:

- Activated: ID cards are retained when the employee record type = external employee.
- Not activated: ID cards are not retained; other conditions are checked.

Default value: Not activated.

"Devices" dialog – PHG Mux

PHG Mux-Components can be created as subcomponents under the online devices.

No other components can be connected to this keyboard.

Number	32	 PHG Mux	
Name			
Short name			
active	☒		
Bus type	PHG		
Physical address	1		
Comment			

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address input field:

Contains the unique address in the PHG bus for the device. PHG keypads may have physical addresses 1-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Comment input field:

Text field for entering an additional comment.

Keypad device numbers

Keypads are allocated to the terminal units using device groups. The keypad device number is usually required for the allocation.

Note: The address for components starts with 0.

The following specifications apply:

Keypad 0: Physical address 0: Device number B0
 Keypad 1: Physical address 1: Device number B1
 Keypad 2: Physical address 2: Device number B2
 Keypad 3: Physical address 3: Device number B3
 Keypad 4: Physical address 4: Device number B4
 Keypad 5: Physical address 5: Device number B5
 Keypad 6: Physical address 6: Device number B6
 Keypad 7: Physical address 7: Device number B7
 Keypad 8: Physical address 8: Device number B8
 Keypad 9: Physical address 9: Device number B9
 Keypad 10: Physical address 10: Device number BA
 Keypad 11: Physical address 11: Device number BB
 Keypad 12: Physical address 12: Device number BC
 Keypad 13: Physical address 13: Device number BD
 Keypad 14: Physical address 14: Device number BE
 Keypad 15: Physical address 15: Device number BF

The device number must be entered in the reader tab in the **Keypad device number 1** field.

5.2.3.7 TP1 devices

TP1 devices can be created as subcomponents under online components.

The connection is made via the TP1 bus.

CAUTION! These device types are outdated and have been discontinued. Existing devices can be loaded, but no new devices can be created. It will not be possible to load data to these devices from the next version.

Device type	Description	Image
TP1 M6I	Reader	
TP1 S6I	Reader	
TP1 VT terminal	Reader	

"Devices" dialog – TP1 M6I reader

TP1 readers can be created as subcomponents under the online devices.

Note: Prior to setting up a TP1 S6I reader, it is recommended that you have created all input/output modules. This is important for assigning the inputs and outputs for the various reader functions. In the selection fields of the reader functions, you can only select those inputs/outputs known to the terminal.

You cannot connect any additional components to a TP1 reader.

Number	26	
Name		
Short name		
active	☐	
Internal reader		

Reader at TP4

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID
Bus type	INTERN
Physical address	2
Affiliation	Access
Door release pulse length (DRP)	3 Seconds
Door open time (DOT)	Seconds
Alarm duration	Seconds
Alarm delay time	Seconds
Comment	

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the TP1 bus for the device. TP1 online components can contain the physical addresses 1-16 in the TP1 bus. All addresses still available are displayed.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Create ID card reader parameters for legacy TP1 checkbox:

Indicates whether special ID card reader parameters need to be generated for the terminal in accordance with the reader's setting.

Options:

- Not activated: No additional ID card reader parameters are required.
- Activated: Special ID card reader parameters need to be generated.

Default value: Not activated

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period		Seconds
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
TP4 VBI selection definition		▼
VBI time preselections		▼
Terminal function unit1		
Reader 1		▼
Display 1		▼
Keyboard 1		▼
Key code conversion table 1		▼
Terminal function unit2		
Reader 2		▼
Display 2		▼
Keyboard 2		▼
Key code conversion table 2		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Reader at TP3

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	INTERN	▼
Physical address	2	▼
Affiliation	Access	▼
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the TP1 bus for the device. TP1 online components can contain the physical addresses 1-16 in the TP1 bus. All addresses still available are displayed.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Create ID card reader parameters for legacy TP1 checkbox:

Indicates whether special ID card reader parameters need to be generated for the terminal in accordance with the reader's setting.

Options:

- Not activated: No additional ID card reader parameters are required.
- Activated: Special ID card reader parameters need to be generated.

Default value: Not activated

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
Key time preselections		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

"Devices" dialog – TP1 M6I reader

TP1 M6I readers can be created as subcomponents under the online devices.

You cannot connect any additional components to a TP1 M6I reader.

Number	90	 M6I - reader
Name		
Short name		
active	☒	
General reader info Reader function Device group		

Reader at TP4

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for

operating the device.

ID card type	1 - HITAG ID	▼
Bus type	INTERN	▼
Physical address	2	▼
Affiliation	Access	▼
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the TP1 bus for the device. TP1 online components can contain the physical addresses 1-16 in the TP1 bus. All addresses still available are displayed.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type

determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Create ID card reader parameters for legacy TP1 checkbox:

Indicates whether special ID card reader parameters need to be generated for the terminal in accordance with the reader's setting.

Options:

- Not activated: No additional ID card reader parameters are required.
- Activated: Special ID card reader parameters need to be generated.

Default value: Not activated

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Reader at TP3**General**

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	INTERN	▼
Physical address	2	▼
Affiliation	Access	▼
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the TP1 bus for the device. TP1 online components can contain the physical addresses 1-16 in the TP1 bus. All addresses still available are displayed.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-

alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Create ID card reader parameters for legacy TP1 checkbox:

Indicates whether special ID card reader parameters need to be generated for the terminal in accordance with the reader's setting.

Options:

- Not activated: No additional ID card reader parameters are required.
- Activated: Special ID card reader parameters need to be generated.

Default value: Not activated

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units. Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
Key time preselections		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

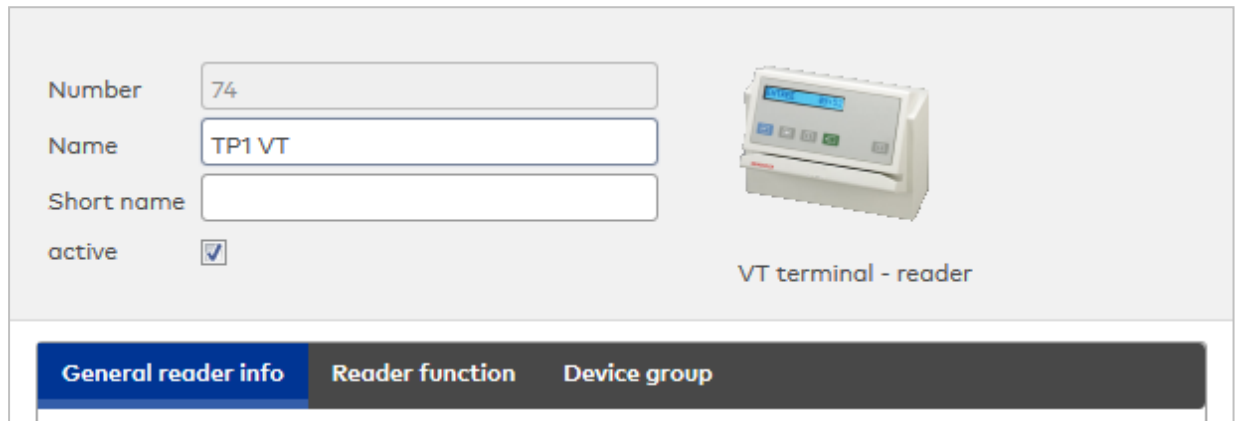
- All VBI time preselections available in the system.

Default value: No selection

"Devices" dialog – TP1 VT terminal

TP1 VT terminals can be created as readers under the online devices.

You cannot connect any additional components to a TP1 VT terminal.



Number: 74

Name: TP1 VT

Short name:

active: ☒

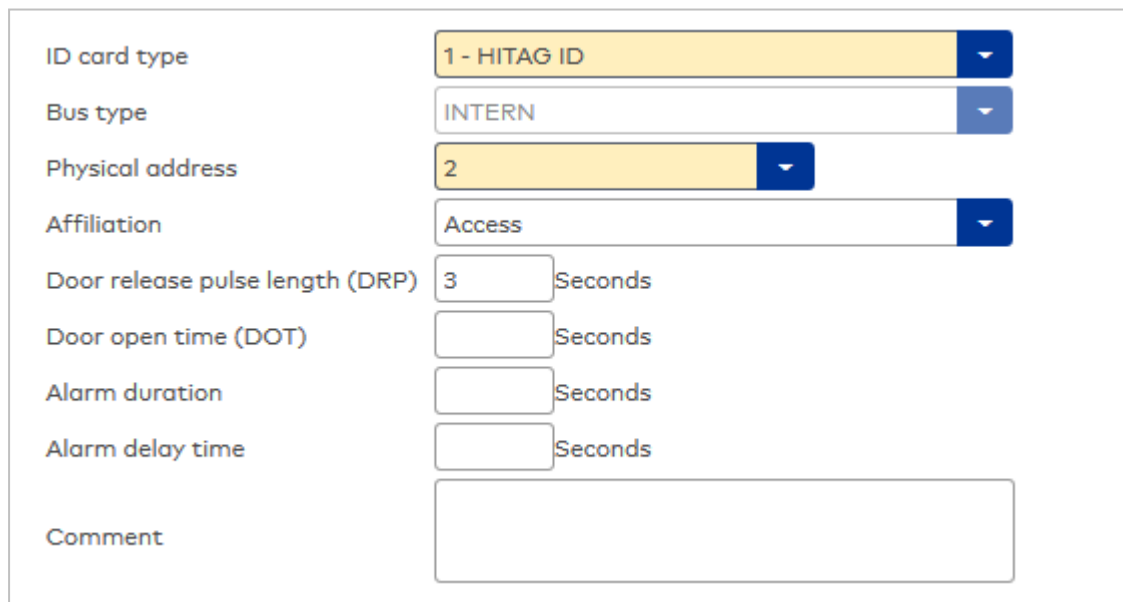
VT terminal - reader

General reader info | Reader function | Device group

Reader at TP4

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



ID card type: 1 - HITAG ID

Bus type: INTERN

Physical address: 2

Affiliation: Access

Door release pulse length (DRP): 3 Seconds

Door open time (DOT): Seconds

Alarm duration: Seconds

Alarm delay time: Seconds

Comment:

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the TP1 bus for the device. TP1 online components can contain the physical addresses 1-16 in the TP1 bus. All addresses still available are displayed.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Create ID card reader parameters for legacy TP1 checkbox:

Indicates whether special ID card reader parameters need to be generated for the terminal in accordance with the reader's setting.

Options:

- Not activated: No additional ID card reader parameters are required.
- Activated: Special ID card reader parameters need to be generated.

Default value: Not activated

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

Reader at TP3**General**

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	
Bus type	INTERN	
Physical address	2	
Affiliation	Access	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the TP1 bus for the device. TP1 online components can contain the physical addresses 1-16 in the TP1 bus. All addresses still available are displayed.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Create ID card reader parameters for legacy TP1 checkbox:

Indicates whether special ID card reader parameters need to be generated for the terminal in accordance with the reader's setting.

Options:

- Not activated: No additional ID card reader parameters are required.
- Activated: Special ID card reader parameters need to be generated.

Default value: Not activated

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units. Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
Key time preselections		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

5.2.3.8 TP3 terminals

TP3 terminals are online components. They are directly connected to the host system or are used as subcomponents.

CAUTION!: These device types are outdated and have been discontinued. Existing devices can be loaded, but no new devices can be created. It will not be possible to load data to these devices from the next version.

Device type	Description	Image
LANRTC (TP3)	Terminal	
M6Box	2-wire terminal TP3	
M6I/L6I/VT*	2-wire terminal TP3	
VT10	2-wire terminal TP3	

"Devices" dialog – TP3 LANRTC terminal

LANRTC terminals are used to connect the LAN and 2-wire sectors in the terminal area.

2-wire terminals can be connected to a LANRTC terminal.

Number	88	 TP3 LANRTC - terminal
Name		
Short name		
active	☒	
Firmware version		
Load/display terminal		
Terminal class	300 - TP3-LANRTC	
IP address/host name		
Port	3001	
Server IP address/host name	192.168.4.12	
Server port	3000	
Comment		
Communication zone		

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Comment input field:

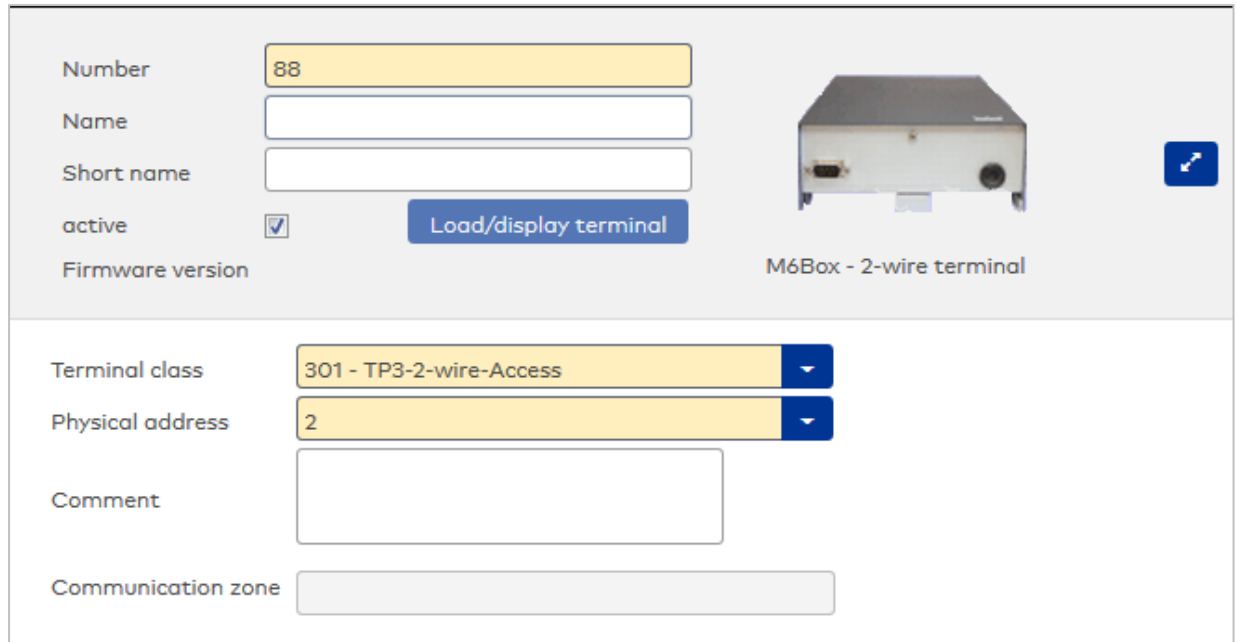
Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

"Devices" dialog – M6Box 2-wire terminal

M6Box terminals are used as 2-wire terminals under LAN or LANRTC terminals.



Number: 88

Name:

Short name:

active: ☒

Firmware version:

Load/display terminal

M6Box - 2-wire terminal

Terminal class: 301 - TP3-2-wire-Access

Physical address: 2

Comment:

Communication zone:

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

"Devices" dialog – M6l/L6l/VT* terminal

M6l/L6l/VT3 terminals belong to the online components and are therefore directly connected to the host system.

M6l/L6l/VT3 terminals are primarily used for attendance recording. Further readers can be connected as internal readers or TP1 readers under the M6l/L6l/VT3 terminals.

Number	88	 VT3xx - 2-wire terminal		
Name				
Short name				
active	☒			Load/display terminal
Firmware version				

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	301 - TP3-2-wire-Access	v
Physical address	2	v
Comment		
Communication zone		

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID
Bus type	INTERN
Physical address	2
Affiliation	Access
Door release pulse length (DRP)	3 Seconds
Door open time (DOT)	Seconds
Alarm duration	Seconds
Alarm delay time	Seconds
Comment	

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the internal bus for the device. Physical Addresses 1-3 can be assigned to the internal readers, with Address 1 being allocated to the terminal's fixed reader and Addresses 2 and 3 to the executed readers. All addresses still available are displayed.

Options:

- All addresses which are still free

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Device group

This tab contains the device group for readers on a TP3 terminal as well as details on the keyboard and the booking instructions.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction		
VBI key allocation		
Key time preselections		

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: 1 arrive/leave

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

"Devices" dialog – VT10 terminal

VT10 terminals belong to the online components and are therefore directly connected to the host system.

The terminals are primarily used for attendance recording. You cannot connect any additional components under the VT10 terminals.

Number

88

Name

Short name

active

☒

Firmware version

Load/display terminal



VT10 - 2-wire terminal



Terminal class

301 - TP3-2-wire-Access

Physical address

2

Comment

Communication zone

Terminal class selection field:
Contains the terminal class with the basic settings for the device.
Options: All terminal classes which have been defined for the device.

Physical address selection field:
Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.
Options:
• All addresses in the bus which are still free
Default value: Lowest free address.

Comment input field:
Text field for entering an additional comment.

Communication zone display field:
Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

5.2.3.9 TP4 terminals

TP4 terminals are online components. They are directly connected to the host system or are used as subcomponents.

Device type	Description	Image
B6L-4P	Terminal	
B6L 19"	Terminal 19" rack mount	
B6L 19" 1 Mux	Terminal 19" rack mount with one multiplexer	 
B6L 19" 2 Mux	Terminal 19" rack mount with two multiplexers	

Device type	Description	Image
		
B6L-RR 10	Terminal	
B6I-RR-15	Terminal	
B6L-WM	Terminal wall mount	
B6R-(19")	2-wire terminal 19" insertion housing	
B6R-HS	2-wire terminal top-hat rail	
B6R WALL-MOUNTED	2-wire wall-mounted terminal	
L6L	Terminal	
LANRTC	Terminal	
M6L	Terminal	

"Devices" dialog – B6L-4P

These terminals belong to the online components and are therefore directly connected to the host system.

The B6L-4P terminal is formed through the merger of a B6L terminal and a 9-way input/8-way output module.

Note: As a result, both devices are created in the device tree at the same time and the key data is queried during the creation process.

Create new devices

Number
87
Name
Short name
active
☒
Terminal class
101 - TP4-LAN-Access
IP address/host name
Port
3001



B6L-4P - terminal

Number
88
Name
Short name
Physical address
17



9-way input/8-way output module

After saving, the properties of both devices are shown on different tabs.

Number
87
Name
Short name
active
☒
Firmware version

Load/display terminal



B6L-4P - terminal

General

Inputs/outputs

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

The screenshot shows a configuration form with the following fields and values:

Field	Value
Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1
2
3

☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

Number of relays for elevator

Lift output devices

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

The inputs can be inverted in this field if the input level does not correspond with the required level.

Checkboxes **1** to **3**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – B6L 19" terminal

These terminals belong to the online components and are therefore directly connected to the host system.

Other 2-wire terminals, DCW components and DP1 components may be connected.

Number	87	 B6L-*(19") - 19" rack mount for terminal	
Name			
Short name			
active	☒		
Firmware version			
Load/display terminal			
<input checked="" type="button" value="General"/> Inputs/outputs			

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1 2 3 4

☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

[New entry](#)

Number of relays for elevator

Lift output devices

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Checkboxes **1 to 8**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Possible values (depending on the firmware in use if applicable):

- **Internal:** Local relays
- **DCW4:** 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4:** Local relays + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15:** 15-way O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15:** Local relays + 15-way O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule:** Door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule:** Local relays + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17:** 4-way I/O modules from DP1 address 17
- **Internal_DP1_4_Adresse17:** Local relays + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17:** 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17:** Local relays + 15-way O modules from DP1 address 17

- **DP1DoorModule_Adresse17:** Door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17:** Local relays + door modules from DP1 address 17
- **DP1_4_Adresse25:** 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25:** Local relays + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25:** 15-way O modules from DP1 address 25
- **Internal_DP1_15_Adresse25:** Local relays + 15-way O modules from DP1 address 25
- **DP1DoorModule_Adresse25:** Door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25:** Local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17:** I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17:** Local relays + I/O 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25:** I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25:** Local relays + I/O 9/8 modules from DP1 address 25
- **KCP_9030_ReaderAddress1:** Uses the 9115/9125 + 9030 relays on 9115/9125 for Comfort IDS with the physical address 1 on the KCP bus
- **KCP_9030_ReaderAddress2:** Uses the 9115/9125 + 9030 relays on 9115/9125 for Comfort IDS with the physical address 2 on the KCP bus

"Devices" dialog – B6L 19" terminal 1x 8-channel multiplexer

These terminals belong to the online components and are therefore directly connected to the host system.

The B6L-(19") terminal with a multiplexer is formed through the merger of a B6L-(19") terminal and a DP1 8-channel multiplexer.

Note: As a result, both devices are created in the device tree at the same time and the key data is queried during the creation process.

Create new devices

Number

Name

Short name

active ☒

Terminal class

IP address/host name

Port



B6L (19'') - terminal 1x multiplexer (8 inputs)

Number

Name

Short name

Physical address



DP1 Mux

B6L-(19'') terminal

The first part of the dialog contains the general information about the B6L-1(192) terminal.

Number input field:

Contains the device's unique number. When you create a new record, the number is automatically proposed. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Name input field:

Contains the device's name. When you enter a new name, you can enter any combination of figures and letters. This information is displayed in the left part of the window next to the number in the tree structure.

Short name input field:

Contains the short name of the device. When you enter a new short name, you can enter any combination of figures and letters.

active checkbox:

Activates the device in the terminal manager.

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device types.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

DP1 multiplexer:

The second part of the dialog contains the general information about the multiplexer.

Number input field:

Contains the device's unique number. When you create a new record, the number is automatically proposed. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Name input field:

Contains the device's name. When you enter a new name, you can enter any combination of figures and letters. This information is displayed in the left part of the window next to the number in the tree structure.

Short name input field:

Contains the short name of the device. When you enter a new short name, you can enter any combination of figures and letters.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. The devices can receive physical addresses 1-31.

Default value: 31.

The remaining parameters are set after the details have been saved in the device-specific dialogs. More information can be found in the respective device descriptions:

"Devices" dialog – B6L 19" terminal 2x 8-channel multiplexer

These terminals belong to the online components and are therefore directly connected to the host system.

The B6L-(19") terminal with two multiplexers is formed through the merger of a B6L-(19") terminal and two DP1 8-channel multiplexers.

Note: As a result, both devices are created in the device tree at the same time and the key data is queried during the creation process.

Create new devices

Number

87

Name

Short name

active

☒

Terminal class

101 - TP4-LAN-Access

IP address/host name

Port

3001



B6L (19") - terminal 2x multiplexor

Number

88

Name

Short name

Physical address

31



DP1 Mux

Number

89

Name

Short name

Physical address

0



DP1 Mux

B6L-(19") terminal

The first part of the dialog contains the general information about the B6L-1(192) terminal.

Number input field:

Contains the device's unique number. When you create a new record, the number is automatically proposed. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Name input field:

Contains the device's name. When you enter a new name, you can enter any combination of figures and letters. This information is displayed in the left part of the window next to the number in the tree structure.

Short name input field:

Contains the short name of the device. When you enter a new short name, you can enter any combination of figures and letters.

active checkbox:

Activates the device in the terminal manager.

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device types.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

DP1 multiplexer 1 and 2:

The second part of the dialog contains the general information about the multiplexer.

Number input field:

Contains the device's unique number. When you create a new record, the number is automatically proposed. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Name input field:

Contains the device's name. When you enter a new name, you can enter any combination of figures and letters. This information is displayed in the left part of the window next to the number in the tree structure.

Short name input field:

Contains the short name of the device. When you enter a new short name, you can enter any combination of figures and letters.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. The devices can receive physical addresses 1-31.

Default value: 31.

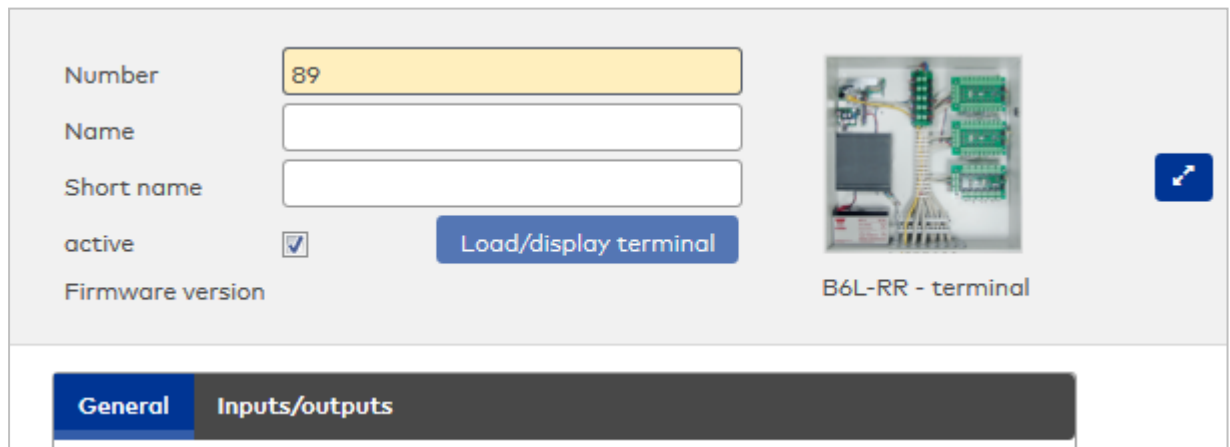
The remaining parameters are set after the details have been saved in the device-specific dialogs. More information can be found in the respective device descriptions:

"Devices" dialog – B6L-RR-10 terminal

The B6L-RR terminal (Ready-to-Run-Box) is a combination of various hardware components that form a terminal unit with more inputs/outputs and a specific wiring instruction for controlling doors in a basic access area.

Inside the casing, the B6L-RR terminal is equipped with two input modules (DCW) and one output module (DCW) for controlling up to ten doors. The external terminals are configured for the connection of ten doors. For each door, there are three inputs for door status contact, door handle contact and door button, and one output for the door opener relay.

Only DP1 S6D components can be connected to a B6L-RR.



General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

The screenshot shows a configuration form with the following fields and values:

Field	Value
Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs and the TMBasic program.

Output port of the alarm output for tamper alarm

89 Internal - Output 1

External tamper contact input

89 Internal - Input 1

Invert internal inputs

1 2 3

☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry

1. Module

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry

2. Module

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry

Output port of the alarm output for tamper alarm selection field:
Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:
Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Internal inputs:

Checkboxes **1 to 3**:
Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:
The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:
Contains a freely definable name for the input. This name is used in the alarm monitor.

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Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Checkboxes 1 to 15

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Checkboxes 1 to 15

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

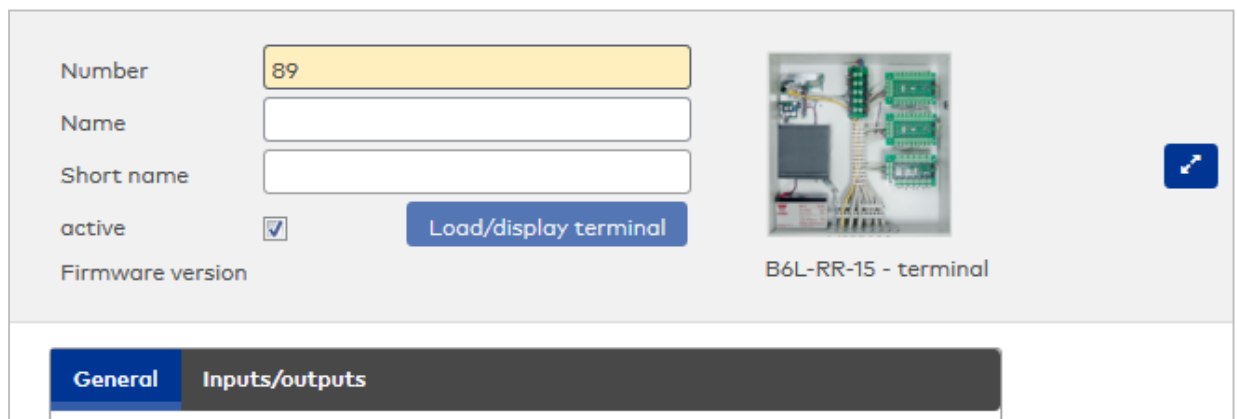
The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – B6L-RR-15 terminal

The B6L-RR-15 terminal (Ready-to-Run-Box) is a combination of various hardware components that form a terminal unit with more inputs/outputs and a specific wiring instruction for controlling doors in a basic access area.

Inside the casing, the B6L-RR-15 terminal is equipped with two input modules (DCW) and one output module (DCW) for controlling up to 15 doors. The external terminals are configured for the connection of the doors. For each door, there are two inputs for door status contact, door handle contact and door button, and one output for the door opener relay.

Only DP1 S6D components can be connected to a B6L-RR-15.



The screenshot shows a configuration window for the B6L-RR-15 terminal. It includes input fields for 'Number' (containing 89), 'Name', and 'Short name'. There is a checkbox for 'active' which is checked, and a 'Firmware version' field. A blue button labeled 'Load/display terminal' is located below the 'active' checkbox. To the right of the form is a photograph of the physical terminal unit. Below the main configuration area, there is a tabbed interface with two tabs: 'General' (which is selected and highlighted in blue) and 'Inputs/outputs'.

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs and the TMBasic program.

Output port of the alarm output for tamper alarm
89 Internal - Output 1

External tamper contact input
89 Internal - Input 1

Invert internal inputs

1 2 3

☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry								
1. Module														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry								
2. Module														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter		New entry								

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Internal inputs:

Checkboxes **1** to **3**:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Checkboxes 1 to 15

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Checkboxes 1 to 15

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

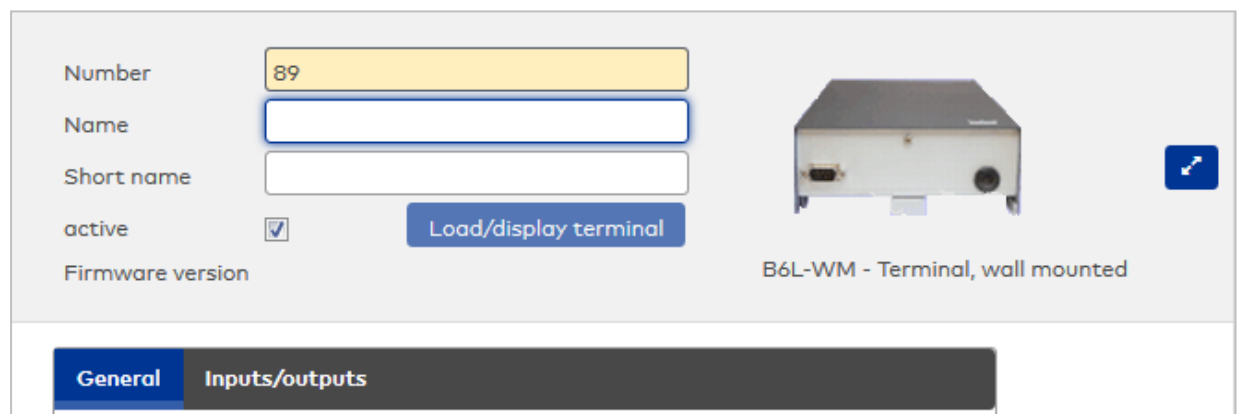
TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

"Devices" dialog – B6L WM terminal

The B6L-WM terminal is one of the online components and is directly connected with the host system.

Further 2-wire terminals, DCW components and DP1 components can be connected to a B6L-WM terminal.



Number: 89

Name:

Short name:

active: ☒

Firmware version:

Load/display terminal

B6L-WM - Terminal, wall mounted

General Inputs/outputs

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

The screenshot shows a configuration form with the following fields and values:

Field	Value
Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1
2
3

☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

Number of relays for elevator

Lift output devices

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

The inputs can be inverted in this field if the input level does not correspond with the required level.

Checkboxes **1** to **3**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – B6R-(19") 2-wire terminal

B6R-(19") terminals are used as 2-wire terminals under B6L or LANRTC terminals.

Number	88	 B6R-(19") - 2-wire, 19" rack mount terminal
Name		
Short name		
active	☒	
Firmware version		
Load/display terminal		
General Inputs/outputs		

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	201 - TP4-2-wire-Access
Board ID	
Physical address	1
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Board ID input field:

With the aid of the Board ID, the higher level terminal can transfer the physical address for the 2-wire terminal to the 2-wire terminal itself. To do this, the Board ID is sent by itself or as part of a broadcast with the physical address into the 2-wire terminal network. The 2-wire terminal with the same Board ID then accepts the physical address.

Format: 12345-123

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for internal inputs, the TMBasic program

and lift controls.

Invert internal inputs

1 2 3 4 5 6 7 8

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter

New entry

Number of relays for elevator

Lift output devices

Checkboxes 1 to 8

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – B6R-HS 2-wire terminal

B6R-HS terminals are used as 2-wire terminals under B6L or LANRTC terminals.

Number	88	 B6R-HS - 2-wire, top-hat rail terminal
Name		
Short name		
active	☒	
Firmware version		

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	201 - TP4-2-wire-Access
Board ID	
Physical address	1
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Board ID input field:

With the aid of the Board ID, the higher level terminal can transfer the physical address for the 2-wire terminal to the 2-wire terminal itself. To do this, the Board ID is sent by itself or as part of a broadcast with the physical address into the 2-wire terminal network. The 2-wire terminal with the same Board ID then accepts the physical address.

Format: 12345-123

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

If the input level does not match the required level, the inputs can be inverted on this tab. Here you specify the relays and the lift output devices for lift control.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1

2

3

4

☐
☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	

Number of relays for elevator

Lift output devices

Internal

New entry

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

Checkboxes **1** to **4**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – B6R-WM 2-wire terminal

B6R-WM terminals are used as 2-wire terminals under B6L or LANRTC terminals.

Number	88	 ↗
Name		
Short name		
active	☒	
Firmware version		
Load/display terminal		
B6R-WM - 2-wire, wall-mounted terminal		

General	Inputs/outputs

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	201 - TP4-2-wire-Access ▼
Board ID	
Physical address	1 ▼
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Board ID input field:

With the aid of the Board ID, the higher level terminal can transfer the physical address for the 2-wire terminal to the 2-wire terminal itself. To do this, the Board ID is sent by itself or as part of a broadcast with the physical address into the 2-wire terminal network. The 2-wire terminal with the same Board ID then accepts the physical address.

Format: 12345-123

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

If the input level does not match the required level, the inputs can be inverted on this tab. Here you specify the relays and the lift output devices for lift control.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1

2

3

4

☐
☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

Number of relays for elevator

Lift output devices

Internal

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

Checkboxes **1** to **4**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – L6L terminal

The L6L terminal belongs to the online components and is therefore directly connected to the host system.

L6L terminals are primarily used for attendance recording.

Number	89	 L6L - terminal	
Name			
Short name			
active	☒		
Firmware version			
Load/display terminal			

General	Inputs/outputs	General reader info	Reader function	Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs and the TMBasic program.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1 2 3

☐ ☐ ☐

Name	Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	New entry

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

Checkboxes **1** to **3**:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Reader general

The tab contains the general information on the TP4 reader. This information is essential for operating the reader.

Ausweistyp	1 - HITAG ID	▼
Bustyp	INTERN	▼
Physikalische Adresse	1	▼
Zugehörigkeit	Zeit	▼
AoC-Schreiber	☐	
IdentAssembler laden	☐	
Entriegelungsimpulsdauer (EID)		Sekunden
Türoffenzeit (TOZ)		Sekunden
Alarmdauer		Sekunden
Alarmverzögerungszeit		Sekunden
Türüberwachungsalarmtyp	Standard	▼
Voralarmdauer		Sekunden
Voralarmrelais		▼
Voralarmtyp	Hauptalarm nach Voralarm(gemäß Alarmdi	▼
Bemerkung		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address display field:

Contains the unique address in the internal bus for the device. Physical Addresses 1-3 can be assigned to the internal readers, with Address 1 being allocated to the terminal's fixed reader and Addresses 2 and 3 to the executed readers.

The fixed reader's address cannot be changed.

All addresses still available are displayed.

Options:

- All addresses which are still free

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Identifier indicating whether the reader can write AoC data, too.

Options:

- Not activated: The reader does not write AoC data.
- Activated: AoC data can be written with this reader.

Default value: Not activated

Load Identassembler checkbox:

Indicates whether the ID card definition's IdentAssembler should be loaded into the device.

Options:

- Not activated: The IdentAssembler is not loaded.
- Activated: the IdentAssembler is loaded.

Default value: Not activated.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-

alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal function units are groupings of readers, displays and keyboards into logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction		v		
VBI key allocation	1 - TP4 Arrive/Depart	v		
TP4 VBI selection definition		v		
VBI time preselections		v		
<u>Terminal function unit1</u>			<u>Terminal function unit2</u>	
Reader 1		v	Reader 2	
Display 1	Device: 1	v	Display 2	
Keyboard 1	Device: 1	v	Keyboard 2	
Key code conversion table 1		v	Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: 1 arrive/leave

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – L6R terminal

L6R terminals are used as 2-wire terminals under B6L or LANRTC terminals primarily for attendance recording.

The screenshot shows a web-based configuration interface for an L6R terminal. On the left, there are input fields for 'Number' (containing '88'), 'Name', and 'Short name'. Below these is a checkbox for 'active' which is checked, and a 'Firmware version' label. A blue button labeled 'Load/display terminal' is positioned to the right of the 'active' checkbox. To the right of the form is a small image of the L6R terminal device, with the text 'L6R - 2-wire terminal' underneath it. A blue share icon is located to the right of the terminal image. At the bottom of the dialog is a horizontal tab bar with five tabs: 'General' (highlighted in blue), 'Inputs/outputs', 'General reader info', 'Reader function', and 'Device group'.

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	201 - TP4-2-wire-Access
Board ID	
Physical address	1
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Board ID input field:

With the aid of the Board ID, the higher level terminal can transfer the physical address for the 2-wire terminal to the 2-wire terminal itself. To do this, the Board ID is sent by itself or as part of a broadcast with the physical address into the 2-wire terminal network. The 2-wire terminal with the same Board ID then accepts the physical address.

Format: 12345-123

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1

2

3

☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

Number of relays for elevator

Lift output devices

Internal

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

The inputs can be inverted in this field if the input level does not correspond with the required level.

Checkboxes **1** to **3**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

General readers

The tab contains the general information on the TP4 reader. This information is essential for operating the reader.

Ausweistyp	1 - HITAG ID	▼
Bustyp	INTERN	▼
Physikalische Adresse	1	▼
Zugehörigkeit	Zeit	▼
AoC-Schreiber	☐	
IdentAssembler laden	☐	
Entriegelungsimpulsdauer (EID)		Sekunden
Türoffenzeit (TOZ)		Sekunden
Alarmdauer		Sekunden
Alarmverzögerungszeit		Sekunden
Türüberwachungsalarmtyp	Standard	▼
Voralarmdauer		Sekunden
Voralarmrelais		▼
Voralarmtyp	Hauptalarm nach Voralarm(gemäß Alarmdi	▼
Bemerkung		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address display field:

Contains the unique address in the internal bus for the device. Physical Addresses 1-3 can be assigned to the internal readers, with Address 1 being allocated to the terminal's fixed reader and Addresses 2 and 3 to the executed readers.

The fixed reader's address cannot be changed.

All addresses still available are displayed.

Options:

- All addresses which are still free

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Identifier indicating whether the reader can write AoC data, too.

Options:

- Not activated: The reader does not write AoC data.
- Activated: AoC data can be written with this reader.

Default value: Not activated

Load Identassembler checkbox:

Indicates whether the ID card definition's IdentAssembler should be loaded into the device.

Options:

- Not activated: The IdentAssembler is not loaded.
- Activated: the IdentAssembler is loaded.

Default value: Not activated.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-

alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal function units are groupings of readers, displays and keyboards into logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction		v		
VBI key allocation	1 - TP4 Arrive/Depart	v		
TP4 VBI selection definition		v		
VBI time preselections		v		
<u>Terminal function unit1</u>			<u>Terminal function unit2</u>	
Reader 1		v	Reader 2	
Display 1	Device: 1	v	Display 2	
Keyboard 1	Device: 1	v	Keyboard 2	
Key code conversion table 1		v	Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: 1 arrive/leave

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

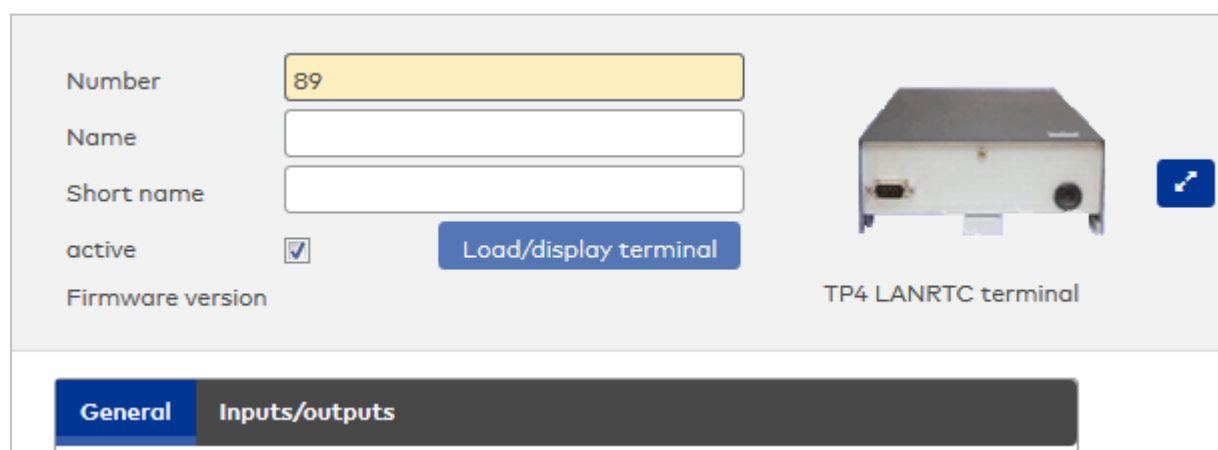
Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – LANRTC terminal

LANRTC terminals are used to connect the LAN and 2-wire sectors in the terminal area.

Further 2-wire terminals, DCW components and DP1 components can be connected to a LANRTC terminal.



The screenshot displays a configuration window for a TP4 LANRTC terminal. On the left, there are input fields for 'Number' (containing '89'), 'Name', and 'Short name'. Below these is a checkbox for 'active' which is checked, and a label for 'Firmware version'. A blue button labeled 'Load/display terminal' is positioned to the right of the 'active' checkbox. To the right of the form is a photograph of the physical terminal unit. Below the main configuration area, there is a horizontal bar with two tabs: 'General' (which is selected) and 'Inputs/outputs'.

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

The screenshot shows a configuration form with the following fields and values:

Field	Value
Terminal class	101 - TP4-LAN-Access
IP address/host name	
Port	3001
Server IP address/host name	
Server port	3000
Communication encrypted	☐
No event recording	☐
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1

2

3

☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	

Number of relays for elevator

Lift output devices

Internal

New entry

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

The inputs can be inverted in this field if the input level does not correspond with the required level.

Checkboxes **1** to **3**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

"Devices" dialog – M6Lterminal

These terminals belong to the online components and are therefore directly connected to the host system.

The terminals are primarily used for attendance recording.

Number

Name

Short name

active ☒

Firmware version

Load/display terminal

M6L - terminal

General Inputs/outputs General reader info Reader function Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class

IP address/host name

Port

Server IP address/host name

Server port

Communication encrypted ☐

Comment

Communication zone

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs and the TMBasic program.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1

2

3

Name	Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter
New entry					

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

Checkboxes **1** to **3**:

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

General readers

The tab contains the general information on the TP4 reader. This information is essential for operating the reader.

Ausweistyp	1 - HITAG ID	▼
Bustyp	INTERN	▼
Physikalische Adresse	1	▼
Zugehörigkeit	Zeit	▼
AoC-Schreiber	☐	
IdentAssembler laden	☐	
Entriegelungsimpulsdauer (EID)		Sekunden
Türoffenzeit (TOZ)		Sekunden
Alarmdauer		Sekunden
Alarmverzögerungszeit		Sekunden
Türüberwachungsalarmtyp	Standard	▼
Voralarmdauer		Sekunden
Voralarmrelais		▼
Voralarmtyp	Hauptalarm nach Voralarm(gemäß Alarmdi	▼
Bemerkung		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address display field:

Contains the unique address in the internal bus for the device. Physical Addresses 1-3 can be assigned to the internal readers, with Address 1 being allocated to the terminal's fixed reader and Addresses 2 and 3 to the executed readers.

The fixed reader's address cannot be changed.

All addresses still available are displayed.

Options:

- All addresses which are still free

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Identifier indicating whether the reader can write AoC data, too.

Options:

- Not activated: The reader does not write AoC data.
- Activated: AoC data can be written with this reader.

Default value: Not activated

Load Identassembler checkbox:

Indicates whether the ID card definition's IdentAssembler should be loaded into the device.

Options:

- Not activated: The IdentAssembler is not loaded.
- Activated: the IdentAssembler is loaded.

Default value: Not activated.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-

alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal function units are groupings of readers, displays and keyboards into logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction		v		
VBI key allocation	1 - TP4 Arrive/Depart	v		
TP4 VBI selection definition		v		
VBI time preselections		v		
<u>Terminal function unit1</u>			<u>Terminal function unit2</u>	
Reader 1		v	Reader 2	
Display 1	Device: 1	v	Display 2	
Keyboard 1	Device: 1	v	Keyboard 2	
Key code conversion table 1		v	Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: 1 arrive/leave

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

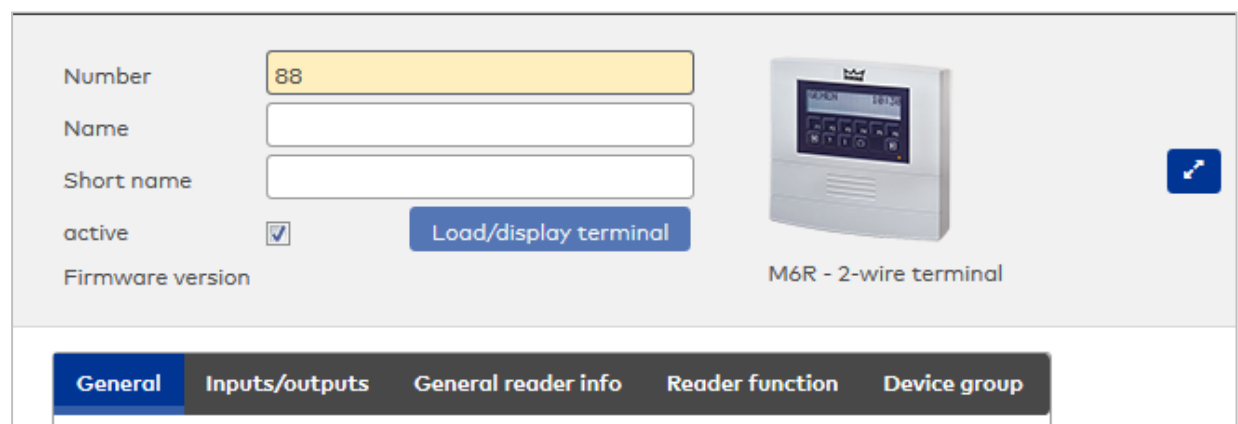
Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – M6R terminal

M6R terminals are used as 2-wire terminals under B6L or LANRTC terminals primarily for attendance recording.



Number: 88

Name:

Short name:

active: ☒

Firmware version:

Load/display terminal

M6R - 2-wire terminal

General | Inputs/outputs | General reader info | Reader function | Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	201 - TP4-2-wire-Access
Board ID	
Physical address	1
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Board ID input field:

With the aid of the Board ID, the higher level terminal can transfer the physical address for the 2-wire terminal to the 2-wire terminal itself. To do this, the Board ID is sent by itself or as part of a broadcast with the physical address into the 2-wire terminal network. The 2-wire terminal with the same Board ID then accepts the physical address.

Format: 12345-123

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. 2-wire terminals can have the physical addresses 1-31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

Inputs/outputs

You can use this tab to adjust the input and output parameters for the tamper contact which adjust internal inputs, the TMBasic program and lift controls.

Output port of the alarm output for tamper alarm

External tamper contact input

Invert internal inputs

1
2
3

☐
☐
☐

Input number	Message trigger type	TMBasic program	Program invocation type	TMBasic parameter	
					New entry

Number of relays for elevator

Lift output devices

Output port of the alarm output for tamper alarm selection field:

Specifies the alarm relay for the anti-tamper alarm. You only need to set a value in this field if one output is to be used which differs from the class setting.

External tamper contact input selection field:

Specifies the external input to which the anti-tamper switch is connected. You only need to set a value in this field if one input is to be used which differs from the class setting.

Invert internal inputs:

The inputs can be inverted in this field if the input level does not correspond with the required level.

Checkboxes **1** to **3**

Indicate whether the input level is inverted.

Options:

- Activated: The input level is inverted.
- Not activated: The input level is not inverted.

Default value: Not activated

TMBasic program table:

The table contains the allocation of the inputs to the TMBasic programs and specifies other details.

Name column:

Contains a freely definable name for the input. This name is used in the alarm monitor.

Input number column:

Contains the number of the input connected to the TMBasic program.

Options:

- All device inputs that are not allocated.

Default value: The first free input.

Message trigger type column:

Determines which input change is reported.

Options:

- Never: No notifications are generated
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic program column:

Number of the TM-Basic program that should be opened according to the TMBasic program invocation type.

Options:

- All TMBasic programs created in the system

Program invocation type column:

Determines on which input change a TMBasic program opens, if a TMBasic program is defined.

Options:

- Never: Do not invoke a TMBasic program
- On activation: Notification if the input was activated
- On deactivation: Notification if the input was deactivated
- On status change: Notification every time the status of the input changes

Default value: Never

TMBasic parameter column:

The parameter that is passed when the TMBasic program is called. The value range depends on the parameter definition of the TMBasic program.

Number of relays for lift input field:

Number of relays used to control a lift. The number of relays corresponds with the number of floor levels that can be released from the terminal. Input is only required if the terminal is used for lift control.

Value range: 0–64

Default value: 0

Lift output devices selection field:

Determines how the outputs are used for lift control. A selection is only required if the terminal is used for lift control.

Options:

- **Internal**, local relay
- **DCW4**, 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **Internal_DCW4**, local relay + 4-way I/O modules from DCW module address 68 (DIP switch 0)
- **DCW15**, 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **Internal_DCW15**, local relay + 15-way I/O modules from DCW module address 84 (DIP switch 0)
- **DCWDoorModule**, door modules from DCW module address 76 (DIP switch 0)
- **Internal_DCWDoorModule**, local relay + door modules from DCW module address 76 (DIP switch 0)
- **DP1_4_Adresse17**, 4-way O modules from DP1 address 17
- **Internal_DP1_4_Adresse17**, local relay + 4-way I/O modules from DP1 address 17
- **DP1_15_Adresse17**, 15-way O modules from DP1 address 17
- **Internal_DP1_15_Adresse17**, local relays + 15-way O modules from DP1 address 17
- **DP1DoorModule_Adresse17**, door modules from DP1 address 17
- **Internal_DP1DoorModule_Adresse17**, local relays + door modules from DP1 address 17
- **DP1_4_Adresse25**, 4-way I/O modules from DP1 address 25
- **Internal_DP1_4_Adresse25**, local relay + 4-way I/O modules from DP1 address 25
- **DP1_15_Adresse25**, 15-way I/O modules from DP1 address 25
- **Internal_DP1_15_Adresse25**, local relay + 15-way I/O modules from DP1 address 25
- **DP1DoorModule_Adresse25**, door modules from DP1 address 25
- **Internal_DP1DoorModule_Adresse25**, local relays + door modules from DP1 address 25
- **DP1_9I_8O_Adresse17**, I/O 9/8 modules from DP1 address 17
- **Internal_DP1_9I_8O_Adresse17**, local relay + IO 9/8 modules from DP1 address 17
- **DP1_9I_8O_Adresse25**, I/O 9/8 modules from DP1 address 25
- **Internal_DP1_9I_8O_Adresse25**, local relay + IO 9/8 modules from DP1 address 25

General readers

The tab contains the general information on the TP4 reader. This information is essential for operating the reader.

Ausweistyp	1 - HITAG ID	▼
Bustyp	INTERN	▼
Physikalische Adresse	1	▼
Zugehörigkeit	Zeit	▼
AoC-Schreiber	☐	
IdentAssembler laden	☐	
Entriegelungsimpulsdauer (EID)		Sekunden
Türoffenzeit (TOZ)		Sekunden
Alarmdauer		Sekunden
Alarmverzögerungszeit		Sekunden
Türüberwachungsalarmtyp	Standard	▼
Voralarmdauer		Sekunden
Voralarmrelais		▼
Voralarmtyp	Hauptalarm nach Voralarm(gemäß Alarmdi	▼
Bemerkung		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address display field:

Contains the unique address in the internal bus for the device. Physical Addresses 1-3 can be assigned to the internal readers, with Address 1 being allocated to the terminal's fixed reader and Addresses 2 and 3 to the executed readers.

The fixed reader's address cannot be changed.

All addresses still available are displayed.

Options:

- All addresses which are still free

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

AoC writer checkbox:

Identifier indicating whether the reader can write AoC data, too.

Options:

- Not activated: The reader does not write AoC data.
- Activated: AoC data can be written with this reader.

Default value: Not activated

Load Identassembler checkbox:

Indicates whether the ID card definition's IdentAssembler should be loaded into the device.

Options:

- Not activated: The IdentAssembler is not loaded.
- Activated: the IdentAssembler is loaded.

Default value: Not activated.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-

alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal function units are groupings of readers, displays and keyboards into logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction		v		
VBI key allocation	1 - TP4 Arrive/Depart	v		
TP4 VBI selection definition		v		
VBI time preselections		v		
<u>Terminal function unit1</u>			<u>Terminal function unit2</u>	
Reader 1		v	Reader 2	
Display 1	Device: 1	v	Display 2	
Keyboard 1	Device: 1	v	Keyboard 2	
Key code conversion table 1		v	Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: 1 arrive/leave

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

5.2.3.10 Wiegand devices

Wiegand devices are online components. They can be created as subcomponents under 92 30 AM controllers (with TP4 firmware).

Device type	Description	Image
Wiegand reader	Reader	
Wiegand keyboard reader	Keypad reader	

"Devices" dialog – Wiegand reader

Wiegand readers can be created as subcomponents under 92 30 AM controllers (with TP4 firmware). Two Wiegand readers can be connected to each 92 30 AM controller. Registration units of the type 90 0x and Wiegand readers cannot be operated simultaneously under one 92 30 AM controller.

Wiegand readers can also be created in the KCP bus system under a 9010 interface.

Wiegand readers can be configured with (existing) MATRIX Wiegand ID card types.

No other components can be connected to this reader.

Number	28	 Wiegand reader	
Name			
Short name			
active	☒		

General reader info | Reader function | Device group

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type		▼
Bus type		▼
Physical address	0	▼
Affiliation	Access	▼
No event recording	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the PHG bus for the device. PHG online components can contain the physical addresses 1-16 in the PHG bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period		Seconds
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
TP4 VBI selection definition		▼
VBI time preselections		▼
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>
Reader 1	48 - PHG reader	▼
Display 1		▼
Keyboard 1		▼
Key code conversion table 1		▼
Reader 2		▼
Display 2		▼
Keyboard 2		▼
Key code conversion table 2		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

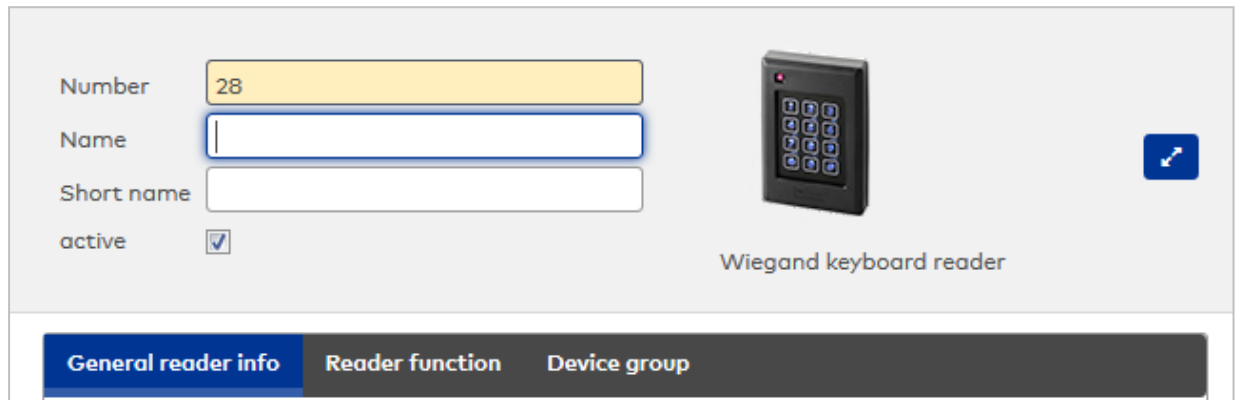
"Devices" dialog – Wiegand keyboard reader

Wiegand keypad readers can be created as subcomponents under 92 30 AM controllers (with TP4 firmware). Two Wiegand readers can be connected to each 9230 AM controller. Registration units of the type 90 0x and Wiegand readers cannot be operated simultaneously under one 92 30 AM controller.

Wiegand keypad readers can also be created in the KCP bus system under a 9010 interface.

Wiegand keypad readers can be configured with (existing) MATRIX Wiegand ID card types.

No other components can be connected to this reader.



Number

Name

Short name

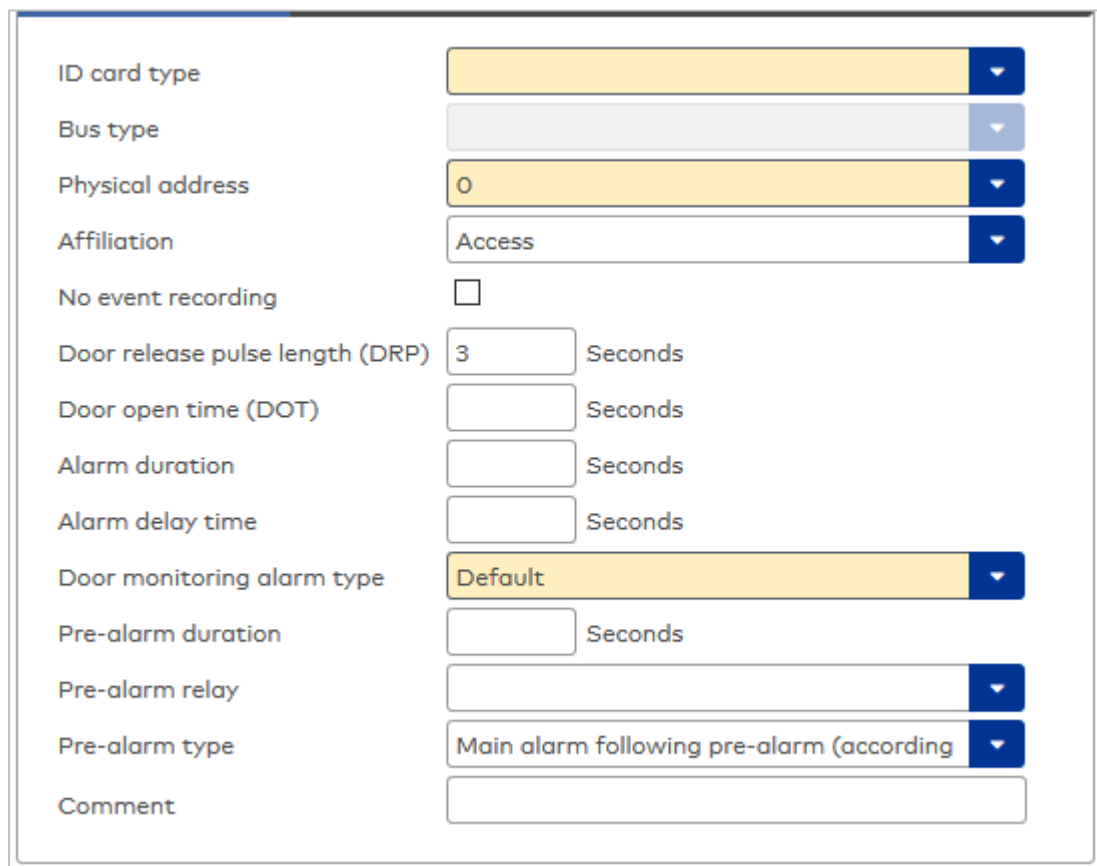
active ☒

Wiegand keyboard reader

General reader info | Reader function | Device group

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



ID card type

Bus type

Physical address

Affiliation

No event recording ☐

Door release pulse length (DRP) Seconds

Door open time (DOT) Seconds

Alarm duration Seconds

Alarm delay time Seconds

Door monitoring alarm type

Pre-alarm duration Seconds

Pre-alarm relay

Pre-alarm type

Comment

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains

information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the PHG bus for the device. PHG online components can contain the physical addresses 1-16 in the PHG bus.

Options: All addresses that are still free, default setting: next free address

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing

- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
Terminal function unit1		Terminal function unit2	
Reader 1	48 - PHG reader	Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

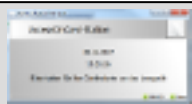
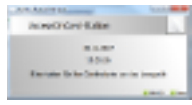
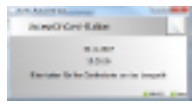
Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

5.2.3.11 Further online devices

Further online components are available for special applications.

Device type	Description	Image
AoC station	Desktop Reader Manager with PC reader, AccessOnCard and master media management functions	
Encoding station	Desktop Reader Manager for communicating with third-party products	
Deister long range reader	Reader	
Internal reader	Reader	
LED attendance display	LED attendance display	
LEGIC Mobile Access Connector	Mobile Access Connector	
Nedap ANPR camera	Camera for automatic number plate recognition	
PC reader	Desktop Reader Manager with PC reader and master media management functions	

Device type	Description	Image
Site server	Site server	
TP4 web reader	Reader for web bookings	
Video camera	Video camera	
XML terminal	Terminal with XML interface protocol	

"Devices" dialog – AccessOnCard station

The AccessOnCard Station is one of the online components and is thus directly connected to the host system.

No other components can be connected to an AccessOnCard station.

The dialog header shows the AccessOnCard station and status of the connected reader in addition to the status and data status.

Number

25

Name

Short name

active

☒

Firmware version

Transfer data

Load/display terminal



AccessOnCard station

ID card type

1 - HITAG ID

IP address/host name

Port

3501

Server IP address/host name

10.155.16.243

Server port

3010

Communication encrypted

☐

Request AoC data from host system

☒

DoC active

☒

Replace fabrication key

☒

Free Selection active

☒

Write number of cabinets to assign

☐

Comment

with IP reader

☐

IP reader address

Search for IP Enrolment reader

Search in subnet

☒

Search in the IP range

☐

From IP address

To IP address

Start search

MAC address

IP address

ID card type selection field:

Contains the ID card type. The ID card type determines the reader technology for the writing/reading device and contains information about how the ID card data should be interpreted.

IP address/host name input field:

Contains the network IP or the DNS name of the AoC Station.

Input options:

- IP address
- Host name

Port input field:

Contains the network port for the AoC Station.

Default port: 3501.

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port input field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically filled with a default value and can be changed as required.

Default port: 3010.

Communication encrypted checkbox:

Identifier indicating whether communication between MATRIX and the AoC station is encrypted.

- Activated: Communication is via SSL.
- Not activated: Communication is via a plain socket connection.

Default value: Not activated.

Request AoC data from host system checkbox:

Identifier indicating whether the AoC data is currently requested by the server before writing.

DoC active checkbox:

Identifier indicating whether the DoC function is activated.

Replace fabrication key checkbox:

Indicates whether the fabrication key of Mifare user media can be replaced by the application key.

Default value: Not activated.

Free Selection active checkbox:

Identifier indicating whether the AoC station can be used to call up which cabinets are occupied by the respective ID card for cabinet locks with Free Selection Mode.

Write number of cabinets to assign checkbox:

Identifier indicating whether the maximum number of assignable cabinets will be written to the ID card if the **Free Selection active** checkbox is activated.

Comment input field:

Text field for entering an additional comment.

with IP reader checkbox:

Identifier indicating whether an AccessOnCard station with Admitto IP is in use.

IP reader address input field:

Input field for the IP address of the reader.

Search for IP Enrolment reader area:

This area contains the setting for searching the Admitto C devices.

Search in subnet checkbox:

This indicates whether the search is also to be performed in the subnet.

When subnet search is activated, it is not possible to search in the IP range.

Search in the IP range checkbox:

This indicates whether the search is also to be performed in an IP range.

When IP search is activated, it is not possible to search in the subnet.

From IP address input field:

When the search in the IP range is activated, the IP address for the start of the search can be specified here.

To IP address input field:

When the search in the IP range is activated, the IP address for the end of the search can be specified here.

Start search button:

Starts the search of the Admitto C devices.

Found devices table:

The table displays the found devices.

The required Admitto C device is identified from the MAC address. Apply the IP by clicking "Apply".

One Admitto C device can be defined per AccessOnCard station.

The IP entered for the Admitto C device can be changed later if necessary.

"Devices" dialog – B-COMM terminal

These terminals are online components and are connected directly to the host system. The device-specific settings are configured exclusively via B-COMM. The user data is then exchanged directly between the MATRIX server and the terminal.

No further devices can be connected to a B-COMM terminal.

Notes:

MATRIX only transmits the following to the B-COMM terminal:

- Personnel records (for all persons permitted to book at the B-COMM terminal by booking profiles)
- The time once per night
- The next summertime/wintertime changeover time (if a summertime/wintertime changeover rule has been saved for the B-COMM terminal) once per night
- Firmware version query
- Booking logfile size query (to determine whether any bookings are present in the terminal that have not yet been transferred to MATRIX)

MATRIX receives events and bookings from the B-COMM terminal.

Number	16	 B-COMM terminal		
Name				
Short name				
active	☒			Load/display terminal
Firmware version				

Terminal class	2 - B-Comm 1
IP address/host name	
Port	30464
Server IP address/host name	192.168.177.36
Server port	30464
Group address GID	0
Device address DID	0
Comment	
Communication zone	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1000–32765

Default value: 3001

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Group address GID input field:

Contains the Group ID for the terminal.

Value range: 0–29

Default value: 0

Device address DID input field:

Contains the DID (device ID) for the terminal.

Value range: 0–59

Default value: 0

Note: Every GID/DID value pair may only occur once in the system.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

"Devices" dialog – Encoding station

Encoding stations are used to establish communication between dormakaba MATRIX and third-party products for encoding ID cards.

The encoding station is an online component and so is connected directly to the host system.

No further components can be connected to an encoding station.

Use the parameters to determine the features for the device. This information is absolutely necessary for operating the device.

The screenshot shows the 'Encoding station' configuration window. It has a light gray background. On the left, there are several input fields: 'Number' with the value '15', 'Name', 'Short name', 'active' with a checked checkbox, and 'Firmware version' with a blue refresh icon. To the right of these fields are two buttons: 'Transfer data' and 'Load/display terminal'. Further right is a small window titled 'PC-Leser' showing a date '14.09.2017' and time '09:32:11'. Below the top section, there is a larger section with more fields: 'ID card type' with a dropdown menu showing '1 - HITAG ID', 'IP address/host name', 'Port' with the value '3501', 'Server IP address/host name' with the value '10.155.17.83', 'Server port' with the value '3010', 'Communication encrypted' with an unchecked checkbox, and 'Comment'.

ID card type selection field:

Contains the ID card type. The ID card type determines the reader technology for the writing/reading device and contains information about how the ID card data should be interpreted.

IP address/host name input field:

Contains the network IP or the DNS name of the encoding station.

Input options:

- IP address
- Host name

Port input field:

Contains the network port for the encoding station. The default port is 3501.

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted checkbox:

Identifier indicating whether communication between MATRIX and the encoding station is encrypted.

- Activated: Communication is via SSL.
- Not activated: Communication is via a plain socket connection.

Default value: Not activated.

Comment input field:

Text field for entering an additional comment.

"Devices" dialog – Deister long range reader

These readers can be created as subcomponents under the online devices.

Note: You should connect all input/output modules prior to setting up the reader. This is important for assigning the inputs and outputs for the various reader functions. In the selection fields of the reader functions, you can only select those inputs/outputs known to the terminal.

No other components can be connected to this reader.

Number 66 Name Deister Short name active ☒	 Deister long range reader						
<table border="1"> <thead> <tr> <th>General reader info</th> <th>Reader function</th> <th>Device group</th> </tr> </thead> <tbody> <tr> <td colspan="3"> </td> </tr> </tbody> </table>		General reader info	Reader function	Device group			
General reader info	Reader function	Device group					

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type		▼
Bus type		▼
Physical address	0	▼
Affiliation	Access	▼
No event recording	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Auswahlfeld **Physical address**:

Enthält die eindeutige Adresse im DCW-Bus für das Gerät. DCW-Leser können innerhalb des DCW-Busses die physikalischen Adressen 1-4 erhalten. Dabei werden andere DCW-Gerätetypen wie I/O-Module nicht betrachtet, da diese einen eigenen Adressraum bilden.

Auswahl: Alle noch freien Adressen

Standard: Nächste freie Adresse

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0–999

Default value: 3 seconds

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered

when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
TP4 VBI selection definition		▼
VBI time preselections		▼
Terminal function unit1		
Reader 1		▼
Display 1		▼
Keyboard 1		▼
Key code conversion table 1		▼
Terminal function unit2		
Reader 2		▼
Display 2		▼
Keyboard 2		▼
Key code conversion table 2		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader. This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – Internal reader

Internal readers can be created as subcomponents under various TP3 devices. The readers are designated as internal readers because they are connected to the same interface as the internal reader, with the interface leading to the exterior.

You cannot connect any additional components to an internal reader.

Number	26	
Name		
Short name		
active	☐	

Internal reader

Reader general

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	INTERN	▼
Physical address	2	▼
Affiliation	Access	▼
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the internal bus for the device. Physical Addresses 1-3 can be assigned to the internal readers, with Address 1 being allocated to the terminal's fixed reader and Addresses 2 and 3 to the executed readers. All addresses still available are displayed.

Options:

- All addresses which are still free

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay		▼
Alarm relay number		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to

open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
Key time preselections		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

"Devices" dialog – LED attendance display

An LED attendance display belongs to the online components and is therefore directly connected to the host system.

No other components can be connected to an LED attendance display.

Use the parameters to determine the features for the device. This information is absolutely necessary for operating the device.

Number: 29

Name: LED Administration

Short name: Adm

active: ☒

Firmware version:

Load/display terminal

LED attendance display

Terminal class: 21 - Lampentableau

Physical address: 1

ID card type: 1 - HITAG ID

Comment:

Communication zone:

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

Physical address selection field:

Contains the unique address in the 2-wire bus for the device. LED attendance displays can have the physical addresses 1–31 within a bus.

Options:

- All addresses in the bus which are still free

Default value: Lowest free address.

ID card type selection field:

Contains the ID card type. The ID card type determines the reader technology for the writing/reading device and contains information about how the ID card data should be interpreted.

Comment input field:

Text field for entering an additional comment.

Communication zone display field:

Indicates the communication zone to which the terminal belongs. The communication zone is assigned by a higher level infrastructure node. Only terminals belonging to the same communication zone exchange booking data via inter-terminal communication (ITC).

"Devices" dialog – LEGIC Mobile Access Connector

These devices are online components and are connected directly to the host system.

The end-to-end management service LEGIC Connect is used to connect to smart phones. The connection is configured using LEGIC Mobile Access Connector.

Number

Name

Short name

active ☒





LEGIC Mobile Access Connector

LEGIC Connect URL

LEGIC Connect MobileApp ID

LEGIC Connect Project ID

LEGIC Connect API Key

LEGIC Connect MobileApp ID for configuration

LEGIC Connect key set name Infinilink

LEGIC Connect key set name Infini ID

LEGIC Connect key set name history

Legic Connect URL input field:

Contains the URL for the Legic Connect service.

Legic MobileAPP ID input field:

Enter the identifier of the Mobile App being used.

Legic Connect project ID input field:

Enter the identifier of the customer-specific project in LEGIC Connect.

Legic Connect API key input field:

Enter the authentication key used by MATRIX to log in to the Legic Connect Service.

LEGIC Connect MobileApp ID for configuration input field:

Enter the ID of the mobile app used to transfer configuration packages (VCP installer app).

Legic Connect key set name – Infinilink input field:

Contains the names of the key set in LEGIC Connect (Infinilink).

Legic Connect key set name – Infini-ID input field:

Contains the Identifier of the key set in LEGIC Connect (Infini-ID).

Legic Connect key set name history input field:

Specifies the API key of the VCP default project for deployment of the VCP marker files. A standard key is set as default for production plants.

The LEGIC Connect key sets are read-only fields and are used to display the automatically generated values. These are automatically generated during the (first) data transfer (system-specific). If it is not possible to generate them in LEGIC Connect, a corresponding error message will be displayed.

"Devices" dialog – Nedap ANPR camera

Nedap ANPR cameras can be connected to an AM 92 30 terminal or 90 10 interface via the Wiegand bus.

They are used for automatic number plate recognition.

Number	16	 Nedap ANPR camera	
Name			
Short name			
active	☒		
General reader info Reader function Device group			

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type		▼
Bus type		▼
Physical address	0	▼
Affiliation	Access	▼
No event recording	☐	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	▼
Pre-alarm duration		Seconds
Pre-alarm relay		▼
Pre-alarm type	Main alarm following pre-alarm (according	▼
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Auswahlfeld **Physical address**:

Enthält die eindeutige Adresse im DCW-Bus für das Gerät. DCW-Leser können innerhalb des DCW-Busses die physikalischen Adressen 1-4 erhalten. Dabei werden andere DCW-Gerätetypen wie I/O-Module nicht betrachtet, da diese einen eigenen Adressraum bilden.

Auswahl: Alle noch freien Adressen

Standard: Nächste freie Adresse

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0–999

Default value: 3 seconds

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0–999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0–999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0–999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

B6L-RR range terminals (B6L-RR-10, B6L-RR-15) are an exception from this regulation. In such cases, the wiring and thus the assignment of the inputs and outputs are predefined. When initially saved, the fields are filled automatically with the standard configuration that corresponds with the physical address in the DP1 bus.

Door relay		▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Turnstile lock input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Display text if entry denied	☐	
Display text on permanent door opening	☐	
Display text output on office release	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay selection field:

Contains the output for the door opening. The door opener is connected to this output.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Alarm relay number selection field:

Selection of the output number for the alarm.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door status contact input selection field:

Contains the input number for the door status contact. The door status contact determines whether the door is open or closed.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Door opening key switch selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. A door opening key switch needs to be specified to prevent the door opening from triggering a forced entry alarm.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example.

Options:

- All the inputs administrated by the terminal are offered for selection.

Default value: No selection

Turnstile lock - port device number selection field:

Selects the input number for the lock signal of a turnstile control.

Options:

- All outputs managed by the terminal are available for selection.

Default value: No selection

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Display text if entry denied checkbox:

Defines the display text output when according to the door program no access is possible.

Options:

- Activated: The terminal text 188 is output on the display instead of the pre-set text and the LED is shown in red.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text on permanent door opening checkbox:

Defines the text displayed when the door is permanently open according to the door program.

Options:

- Activated: Terminal text 189 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Display text output on office release checkbox:

Defines the display text output when an office release is triggered.

Options:

- Activated: Terminal text 197 is displayed instead of the pre-set text.
- Not activated: The pre-set text is shown on the display.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

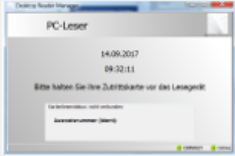
Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – PC reader

PC reader are used in conjunction with the Desktop Reader Manager. They are online components and are therefore connected directly to the host system.

No other components can be connected to a PC reader.

Use the parameters to determine the features for the device. This information is absolutely necessary for operating the device.

Number	10	Transfer data	 PC reader
Name		Load/display terminal	
Short name		State ☐ Inactive	
active	☒	Data status	
Firmware version			

ID card type	1 - HITAG ID
IP address/host name	
Port	3501
Server IP address/host name	10.155.17.83
Server port	3010
Communication encrypted	☐
Replace fabrication key	☐
Free Selection active	☐
Write number of cabinets to assign	☐
ID card encoding	☐
Comment	
with IP reader	☐
IP reader address	
Search for IP Enrolment reader	
Search in subnet	☒
Search in the IP range	☐
From IP address	
To IP address	
Start search	
MAC address IP address	

ID card type selection field:

Contains the ID card type. The ID card type determines the reader technology for the writing/reading device and contains information about how the ID card data should be interpreted.

IP address/host name input field:

Contains the network IP or the DNS name of the PC reader.

Input options:

- IP address
- Host name

Port input field:

Contains the network port of the PC reader. The default port is 3500.

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted checkbox:

Identifier indicating whether communication between MATRIX and the PC reader is encrypted.

- Activated: Communication is via SSL.
- Not activated: Communication is via a plain socket connection.

Default value: Not activated.

Replace fabrication key checkbox:

Indicates whether the fabrication key of Mifare user media can be replaced by the application key.

Default value: Not activated.

Note: This option is only available with the 9108 desktop reader and KABA CID ID cards.

Free Selection active checkbox:

Identifier indicating whether the PC reader can be used to call up which cabinets are occupied by the respective ID card for cabinet locks with Free Selection Mode.

Write number of cabinets to assign checkbox:

Identifier indicating whether the maximum number of assignable cabinets will be written to the ID card if the **Free Selection active** checkbox is activated.

ID card encoding checkbox:

Identifier indicating whether the PC reader can be used to encode ID cards.

Note: Only available if ID card encoding is configured in the system. Please note that ID card encoding cannot be used with all ID card types.

Comment input field:

Text field for entering an additional comment.

with IP reader area:

This area is required to define a PC reader with an Admitto IP.

with IP reader checkbox:

When this option is activated, the "with IP reader" area is enabled.

IP reader address input field:

Input field for the IP address of the reader.

Search in subnet checkbox:

This indicates whether the search is also to be performed in the subnet.

When subnet search is activated, it is not possible to search in the IP range.

Search in the IP range checkbox:

This indicates whether the search is also to be performed in an IP range.

When IP search is activated, it is not possible to search in the subnet.

From IP address input field:

When the search in the IP range is activated, the IP address for the start of the search can be specified here.

To IP address input field:

When the search in the IP range is activated, the IP address for the end of the search can be specified here.

Start search button:

Starts the search of the Admitto C devices.

Found devices table:

The table displays the found devices.

The required Admitto C device is identified from the MAC address. Apply the IP by clicking "Apply".

A maximum of one Admitto C device can be defined for each PC reader.

The IP entered for the Admitto C device can be changed later if necessary.

"Devices" dialog – Site server

The site server is one of the online components and is thus directly connected to the host system. A site server master can supply multiple site server clients as a main instance.

Number	23	Transfer data Load/display terminal	 Site server
Name			
Short name			
active	☒		
Firmware version			

IP address/host name	
Port	3001
Terminal listener port	3000
Server IP address/host name	10.155.16.243
Server port	3000
Comment	

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the site server client's network port.

Value range: 1-9999 The default port is 3001.

Terminal listener port input field:

Contains the port via which the devices send bookings and events.

Value range: 1-9999 The default port is 3000.

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Comment input field:

Text field for entering an additional comment.

"Devices" dialog – TP4 web reader

TP4 web readers are online components that can be created below a terminal.

They allow web bookings via the built-in web server of the selected terminal.

Number	75	 TP4 web reader
Name	Webleser	
Short name		
active	☒	

General reader info	Reader function	Device group	LAN/web parameters

General readers

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

ID card type	1 - HITAG ID	▼
Bus type	DCW	▼
Physical address	1	▼
Affiliation	Access	▼
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Comment		

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Bus type display field:

Displays the bus type to which the device is connected. The field is determined by the device type and cannot be altered.

Physical address selection field:

Contains the unique address in the DCW bus for the device. DCW online components can contain the physical addresses 1-4 in the DCW bus. All addresses still available are displayed. It does not take other DCW device types such as I/O modules into account, as these form a separate address space.

Affiliation selection field:

Determines whether the reader is assigned to the time or access system, or to both.

Options:

- Time
- Time and door opening
- Time and access
- Access

Default value: Time for internal readers, access for external readers.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-99

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Comment input field:

Text field for entering an additional comment.

Device group

This tab contains the general information on the keypad and the variable booking instructions.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction		▼
VBI key allocation	1 - TP4 Arrive/Depart	▼
VBI time preselections		▼
Key code conversion table 1		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: No selection

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: 1 arrive/leave

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Key code conversion table 1 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

LAN/web parameters

Use this tab to define settings for the web server in the terminal.

HTTP port	80
Use cookies	☐
Query PIN code	☐
Display name field	☐
ID card input covered	☐
Local booking	☐

HTTP port input field:

Contains the number of the HTTP port, with which the terminal is activated. 0 = the web server is not activated.

Value range: 0–32767

Default value = 80

Use cookies checkbox:

Allows the use of cookies.

Options:

- Not activated: Cookies may not be used.
- Activated: Cookies are used. The name/ID card that was last used for a booking is saved in a cookie and entered as a predefined value in the name or ID card field when the booking page is re-opened.

Default value: Not activated

Query PIN code checkbox:

Defines whether the PIN code field is included in the booking form.

Options:

- Not activated: The PIN code field is not available.
- Activated: The PIN code field is available.

Default value: Not activated

Display name field checkbox:

Defines whether the name field is included in the booking form.

Options:

- Not activated: The name field is not displayed.
- Activated: The name field is displayed.

Default value: Not activated

ID card input covered checkbox:

Defines whether the ID card input is hidden in a password field.

Options:

- Not activated: The ID card is not entered in a hidden password field.
- Activated: The ID card is entered in a hidden password field.

Default value: Not activated

Local booking checkbox:

Defines the booking behaviour for the internal web server in the terminal for a web/WAP booking.

Options:

- Not activated: This booking is treated as an external booking.
- Activated: The booking is treated as a local booking (no difference to booking at a terminal).

Default value: Not activated

"Devices" dialog – Video camera

Video cameras belong to online components and can be added under the server or under a folder.

No other components can be connected to a video camera.

Use the parameters to determine the features for the device. This information is absolutely necessary for operating the device.

Number

20

Name

Front

Short name



Video camera

IP address/host name

16.166.66.166

Port

Communication encrypted

☐

User name

admin

Password

●●●●●●

Query ONVIF camera

Query result

Streaming technology

JPEG snapshots

Streaming URL or path

/axis-cgi/jpg/image.cgi

Refresh rate per minute

60

User name for stream

Password for stream

PTZ active

☒

PTZ URL or path

/onvif/services

PTZ token

profile_1_h264

PTZ positions

Generate PTZ position token in camera

Position	Name	Short name	PTZ position token
Number of records: 0			

New entry

Show camera

IP address/host name input field:

Contains the IP address of the video camera.

Port input field:

A port can be stated in addition to the IP address. If no port is entered, the corresponding standard port is used automatically. Port 80 is used for unencrypted connections and port 443 is used for encrypted connections.

Communication encrypted checkbox:

Indicates whether communication between the terminal and camera is encrypted via HTTPS.

Note: Please see the documentation of the appropriate camera for information on whether the camera supports HTTPS and for instructions for setting up the camera.

User name input field:

Contains the user names used by MATRIX to authenticate itself to the camera.

Password input field:

Contains the password for user names.

Query ONVIF camera button:

Queries camera data in line with the ONVIF standard. The results are issued in the **Query result** field.

Query result field:

Displays camera data, such as manufacturer, model, firmware version, serial number, hardware ID, snapshot URLs and information concerning whether the camera can be PTZ controlled.

Streaming technology selection field:

Select the technology to be used to stream the video image. Further parameters may have to be configured depending on the streaming technology selected.

Options:

- JPEG snapshots
- Motion JPEG (MJPEG)
- MPEG-Dash

Streaming URL or path input field:

URL or path to the camera or streaming software. The path entered must begin with a forward slash (example: /snap.jpg). In a case such as this, the IP address or the host name of the camera is selected as the basic address.

Please note that when using streaming software, the streaming URL is always different to that of the camera.

Note: additionally, when using a MATRIX IP camera connector, the snapshot URL must be prefixed to the address of the IP camera connector.

Example: `http://myconnector.example.com:9000/snapshot/http://mycamera.example.com/snapshot.jpg`

In this example, "`http://mycamera.example.com/snapshot.jpg`" is the snapshot URL and

"`http://myconnector.example.com:9000/snapshot`" is the URL of the MATRIX IP camera connectors.

Refresh rate per minute input field (only for JPEG snapshots):

Specifies how often a snapshot is requested from the camera per minute. Snapshots can be assembled into films if short query intervals are specified.

Value: empty or 0 to 1500. Here, empty or 0 means no repeat requests and 1500 means a maximum of 25 repeat requests per minute.

User name for stream input field (only for JPEG snapshot streaming technology):

Enter the user name used to access the snapshots. This input is transferred to the user's browser by MATRIX to allow the camera or streaming software to be accessed from the browser.

Password for stream input field (only for JPEG snapshot streaming technology):

Enter the user password used to access the snapshots. This input is transferred to the user's browser by MATRIX to allow the camera or streaming software to be accessed from the browser.

PTZ active checkbox:

Indicates whether the camera can be remotely controlled (PTZ – pan, tilt, zoom) in line with ONVIF profile S. Please read the camera's documentation to find out whether the camera supports this function.

Options:

- Active: Remote control is active. The [camera popup](#) displays the live stream and also contains a control field for PTZ control of the camera that users can employ to control the camera orientation.
- Not active: Remote control is not possible.

PTZ URL or path input field:

Enter the URL or the path for PTZ control of the camera.

PTZ token input field:

Enter the token (identifier) for PTZ control.

Note: If the PTZ data is not entered automatically, click the **Query ONVIF camera** button to call up the PTZ data.

Generate PTZ position token in camera button :

Requests a further PTZ preset position token from the camera. The generated token is displayed in the **Query result** field and can then be entered and used in the table.

PTZ positions table:

This table is used to define PTZ preset positions buttons for storing camera positions in the camera popup. A separate entry is required for every PTZ preset position button. An ONVIF query must be started before creating the buttons. This requests the available PTZ positions token from the camera. If the camera delivers no PTZ preset position tokens or too few, additional tokens can be generated using the **Generate PTZ positions token in camera** button.

Note: A maximum of 10 preset positions buttons can be defined.

Position: Determines the order of PTZ preset position buttons in the camera popup. Each position can only be assigned once.

Name: Displayed in the camera popup as a button tooltip.

Short name: Displayed in the camera popup as a button label. Only the first eight characters are used.

PTZ position token: Required internally to control the camera. Possible tokens are provided by the camera and displayed in the ONVIF query field. Each token can only be assigned once.

Show camera button:

Shows a popup dialog containing the live camera image. This can be used to test the configuration.

"Devices" dialog – XML terminal

XML terminals are online components and are connected directly to the host system.

They are used to connect third-party terminals/controllers that use the XML interface protocol.

Note: The number of XML terminals that can be created depends on your licence.

The devices are only available if the system parameter Devices 15 "Use XML terminal" is active.

The screenshot shows a configuration window for XML terminals. On the left, there are input fields for 'Number' (set to 10), 'Name', 'Short name', 'active' (checked), and 'Firmware version'. To the right of these fields are two buttons: 'Transfer data' and 'Load/display terminal'. Further right is a diagram of an XML terminal with the label 'XML terminal' below it. At the bottom of the window, there is a tabbed interface with 'General' selected and 'Time zone and clock change' as the next tab.

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

IP address/host name	
Port	3001
Server IP address/host name	147.147.147.47
Server port	3000
Comment	

IP address/host name input field:

Contains the network IP or the DNS name of the XML terminal.

Input options:

- IP address
- Host name

Port input field:

Contains the XML terminal's network port.

Default port: 3001.

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port input field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically filled with a default value and can be changed as required.

Default port: 3000.

Comment input field:

Text field for entering an additional comment.

Time zone and clock change

This tab contains the general information on the keypad and the variable booking instructions.

Time zone	(GMT+00:00) Greenwich Mean Time - Afrik
Clock change	1 - GMT +1:00 Central Europe

Time zone selection field:

Contains the time zone in which the terminal is located. The time zone must be specified when the clock time is transferred from the server to the terminal to take the time difference into account.

Options:

- All available time zones.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

5.2.4 Standalone components

Standalone components include all components that are directly connected to the server. They are manually supplied with application data either using evolo Programmer or XS Manager.

They include the following types:

[evolo whitelist components](#)

[XS offline components](#)

[Further offline components](#) such as OSS SO third-party components

5.2.4.1 evolo whitelist components

evolo whitelist components are standalone components that are manually supplied with application data via the evolo Programmer 1460 programmer.

Device type	Description	Image
evolo c-lever air	evolo fitting	
evolo c-lever compact	evolo fitting	
evolo c-lever pro	evolo fitting	
evolo c-lever pro TouchGo	evolo fitting	
evolo digital cylinder	evolo cylinder	
evolo compact reader	evolo reader	
evolo mechatronic cylinder	evolo cylinder	
evolo programmer 1460	evolo component	
evolo remote reader	evolo reader	
Cabinet lock 21 10	evolo cabinet lock	

"Devices" dialog – evolo c-lever air

This fitting is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number: 15

Name:

Short name:

active: ☒

Firmware version:

Transfer data

Load/display terminal

evolo c-lever air

Terminal class: 5 - evolo

ID card type: 3 - MIFARE Classic ID

Master medium:

Comment:

Door release pulse length (DRP): 5 Seconds

Extended release pulse length for OSS: 5 Seconds

AoC (Access on card): ☐

DoC (Data on Card): ☐

Mobile Access (Infinilink): ☐

Access with smartphone without user interaction: ☐

OSS: ☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – evolo c-lever pro

This fitting is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number	16	Transfer data	 evolo c-lever pro
Name		Load/display terminal	
Short name			
active	☒		
Firmware version			

Terminal class	5 - evolo
ID card type	3 - MIFARE Classic ID
Master medium	1 - evolo master
Comment	
Door release pulse length (DRP)	5 Seconds
Extended release pulse length for OSS	5 Seconds
AoC (Access on card)	☐
DoC (Data on Card)	☐
Mobile Access (Infinilink)	☐
Access with smartphone without user interaction	☐
OSS	☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – evolo c-lever pro TouchGo

This fitting is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number: 24

Name:

Short name:

active: ☒

Firmware version:

Transfer data

Load/display terminal

evolo c-lever pro TouchGo

Terminal class: 5 - evolo

ID card type: 3 - MIFARE Classic ID

Master medium: 1 - evolo Master 1

Comment:

Door release pulse length (DRP): 5 Seconds

Extended release pulse length for OSS: 5 Seconds

AoC (Access on card): ☐

DoC (Data on Card): ☐

Mobile Access (Infinilink): ☐

Access with smartphone without user interaction: ☐

OSS: ☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – evolo c-lever compact

This fitting is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number: 17

Name:

Short name:

active: ☒

Firmware version:

Transfer data

Load/display terminal

evolo c-lever compact

Terminal class: 5 - evolo

ID card type: 3 - MIFARE Classic ID

Master medium: 1 - evolo master

Comment:

Door release pulse length (DRP): 5 Seconds

Extended release pulse length for OSS: 5 Seconds

AoC (Access on card): ☐

DoC (Data on Card): ☐

Mobile Access (Infinilink): ☐

Access with smartphone without user interaction: ☐

OSS: ☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium for commissioning of the component.

Options:

- All master media created in the system for the component.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – evolo digital cylinder

This cylinder is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number	18	Transfer data	 evolo digital cylinder
Name		Load/display terminal	
Short name			
active	☒		
Firmware version			

Terminal class	5 - evolo
ID card type	3 - MIFARE Classic ID
Master medium	1 - evolo master
Comment	
Door release pulse length (DRP)	5 Seconds
Extended release pulse length for OSS	5 Seconds
AoC (Access on card)	☐
DoC (Data on Card)	☐
Mobile Access (Infinilink)	☐
Access with smartphone without user interaction	☐
OSS	☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – evolo compact reader

This reader is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number	19	Transfer data	 evolo compact reader
Name		Load/display terminal	
Short name			
active	☒		
Firmware version			

Terminal class	5 - evolo
ID card type	3 - MIFARE Classic ID
Master medium	1 - evolo master
Comment	
Door release pulse length (DRP)	5 Seconds
Extended release pulse length for OSS	5 Seconds
AoC (Access on card)	☐
DoC (Data on Card)	☐
Mobile Access (Infinilink)	☐
Access with smartphone without user interaction	☐
OSS	☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – evolo mechatronic cylinder

This cylinder is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number	22	Transfer data	 evolo mechatronic cylinder
Name		Load/display terminal	
Short name			
active	☒		
Firmware version			

Terminal class	5 - evolo
ID card type	3 - MIFARE Classic ID
Master medium	1 - evolo Master 1
Comment	
Door release pulse length (DRP)	5 Seconds
Extended release pulse length for OSS	5 Seconds
AoC (Access on card)	☐
DoC (Data on Card)	☐
Mobile Access (Infinilink)	☐
Access with smartphone without user interaction	☐
OSS	☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

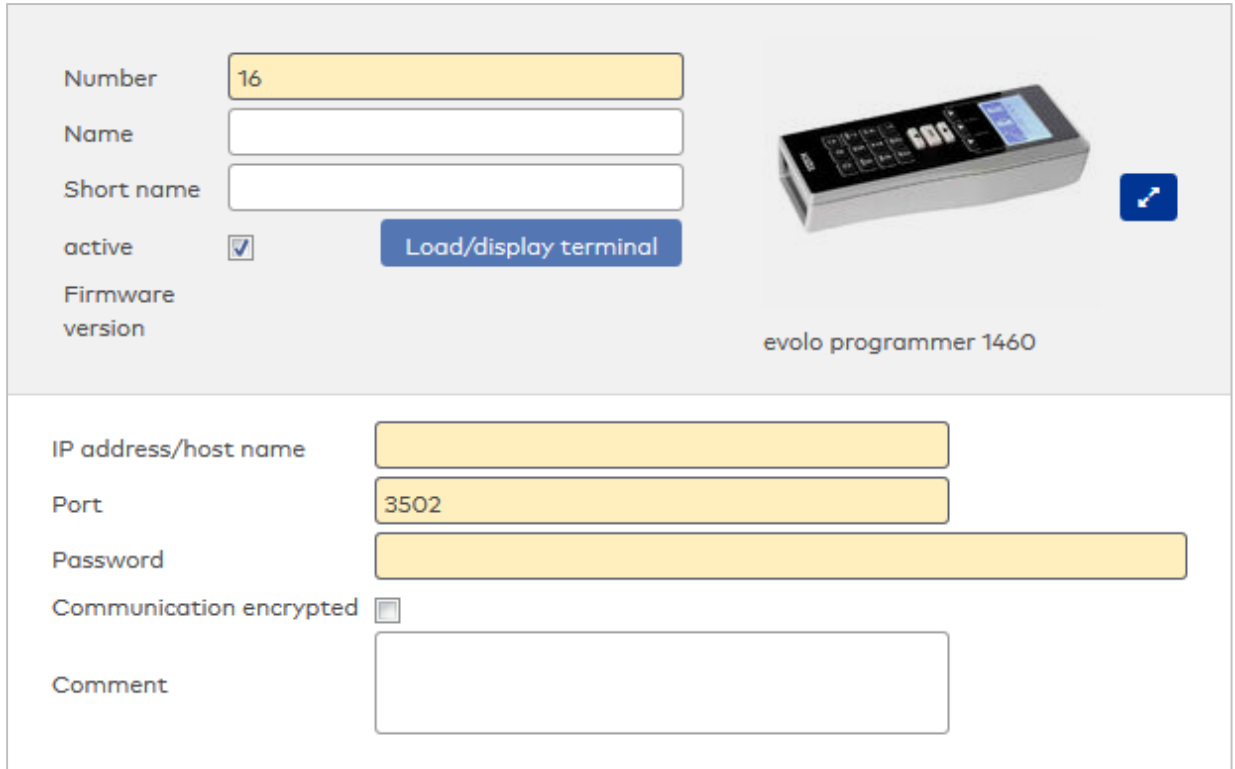
OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – evolo programmer 1460

The evolo Programmer 1460 is used to connect evolo whitelist components.



Number

Name

Short name

active ☒

Firmware version

[Load/display terminal](#)

evolo programmer 1460

IP address/host name

Port

Password

Communication encrypted ☐

Comment

IP address/host name input field:

Contains the network IP or the DNS name of the device.

Input options:

- IP address
- Host name

Programmer name input field:

Contains the name of the programmer.

Port input field:

Contains the programmer's network port.

Default port: 3502.

Password input field:

Contains the programmer's password.

Communication encrypted checkbox:

Identifier indicating whether communication between MATRIX and the programmer service is encrypted.

See also: [► Set up an HTTPS connection to the evolo Programmer service](#)

- Activated: Communication is via HTTPS. A trusted certificate is required for this.
- Not activated: Communication is via an HTTP connection.

Default value: Not activated.

Comment input field.

Free text field for comments.

"Devices" dialog – evolo remote reader

This reader is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

Number	20	Transfer data	
Name			
Short name		Load/display terminal	
active	☒		
Firmware version			

Terminal class	5 - evolo
ID card type	3 - MIFARE Classic ID
Master medium	1 - evolo master
Comment	
Door release pulse length (DRP)	5 Seconds
Extended release pulse length for OSS	5 Seconds
AoC (Access on card)	☐
DoC (Data on Card)	☐
Mobile Access (Infinilink)	☐
Access with smartphone without user interaction	☐
OSS	☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Extended release pulse length for OSS input field:

Contains the extended duration of the door release pulse for door opening in seconds. This duration is used if the **Extended door opening time (OSS)** checkbox is activated in the employee record or ID card record on the **Permissions** tab.

Value range: 0-99

Default value: 5 seconds

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

OSS checkbox:

Identifies the component as an OSS reader. This identification is required if the reader can also read OSS ID cards.

Note: You require a corresponding licence to use OSS.

"Devices" dialog – 21 10 cabinet lock

This lock is an evolo whitelist component. These components are not supplied with data directly from the server. Data is exchanged via the evolo programmer.

No other components can be connected to these components.

This device type is used in connection with the "Cabinet door" door type.

Number	21	Transfer data	
Name			
Short name		Load/display terminal	
active	☒		
Firmware version			

Terminal class	5 - evolo
ID card type	3 - MIFARE Classic ID
Master medium	1 - evolo master
Comment	
AoC (Access on card)	☐
DoC (Data on Card)	☐
Mobile Access (Infinilink)	☐
Access with smartphone without user interaction	☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

Mobile Access (Infinilink) checkbox:

Indicates the type of Mobile Access connection.

Activated: Access permissions for these components can be granted directly on a smartphone without having to update the components using the programmer (in the same way as AoC functions).

Not activated: If a smartphone is permitted for the components, it can be used as a substitute ID card medium in evolo offline/whitelist mode (using Infini-D).

Note: This option is only available if the Mobile Access function is enabled (system parameter Access 150).

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

5.2.4.2 XS offline components

XS offline components are standalone components that are manually supplied with data via XS Manager.

Device type	Description	Image
XS fitting offline	Offline fitting	
XS reader offline	Offline reader	
XS Manager	XS Manager	
XS cylinder offline	Offline cylinder	

"Devices" dialog – XS fitting offline

This fitting belongs to the XS/evolo offline components. They are not supplied with data directly from the server. Data is exchanged via the XS Manager.

No other components can be connected to XS/evolo offline components.

Number	90	 XS fitting offline - XS component
Name		
Short name		
active	☒	
Load/display terminal		
Terminal class	1 - XS	
ID card type	1 - HITAG ID	
Comment		
Door release pulse length (DRP)	5 Seconds	
AoC (Access on card)	☐	
DoC (Data on Card)	☐	

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

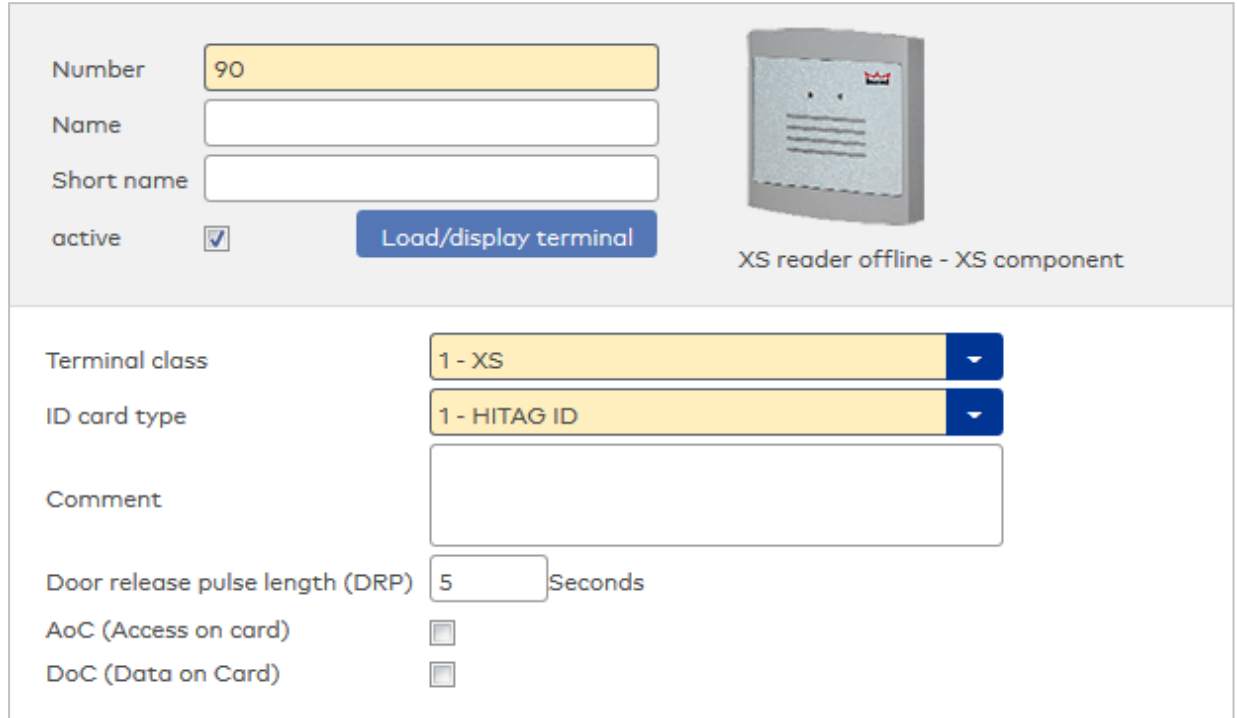
Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

"Devices" dialog – XS reader offline

This reader belongs to the XS/evolo offline components. These components are not supplied with data directly from the server. Data is exchanged via the XS Manager.

No other components can be connected to XS/evolo offline components.



Number

Name

Short name

active ☒

[Load/display terminal](#)



XS reader offline - XS component

Terminal class

ID card type

Comment

Door release pulse length (DRP) Seconds

AoC (Access on card) ☐

DoC (Data on Card) ☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-99

Default value: 0 seconds (no door open time monitoring)

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

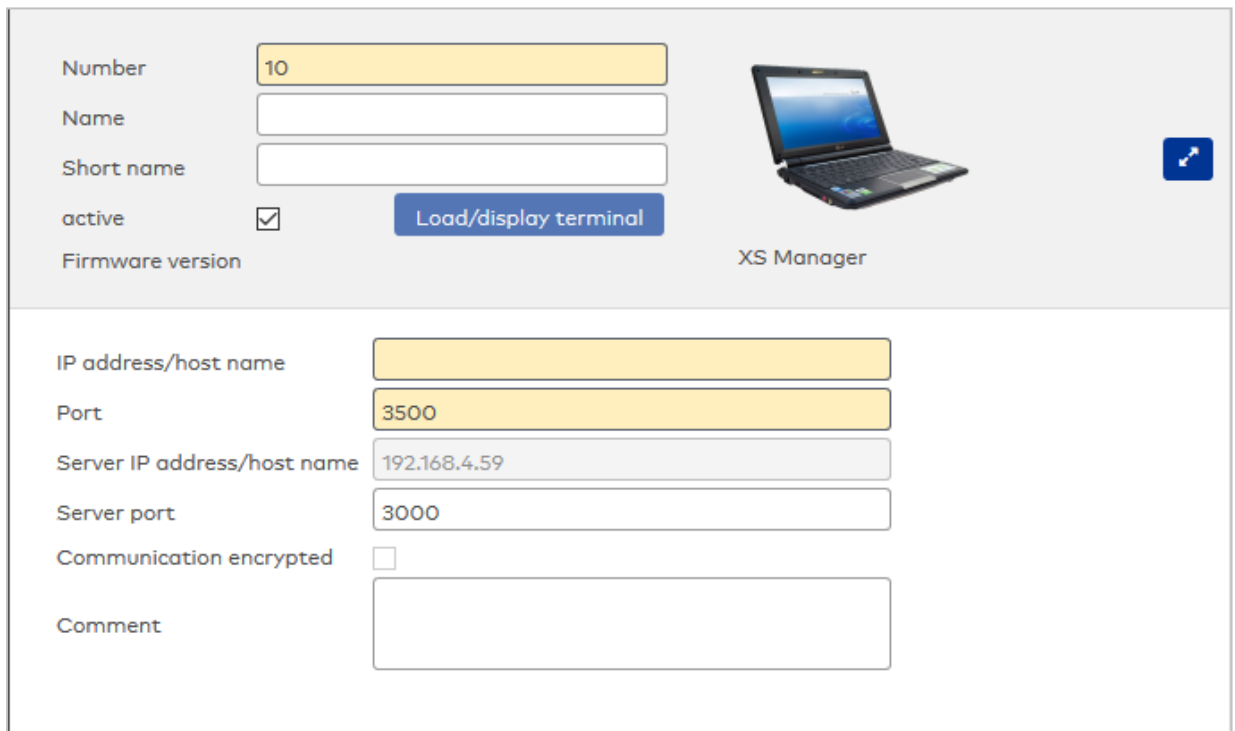
Note: This option is only available if the DOC function is enabled (system parameter Access 40).

"Devices" dialog – XS Manager

The XS Manager is one of the online components and is thus directly connected to the host system.

No other components can be connected to a XS Manager.

Use the parameters to determine the features for the device. This information is absolutely necessary for operating the device.



Number	10
Name	
Short name	
active	☒
Firmware version	
Load/display terminal	
XS Manager	
IP address/host name	
Port	3500
Server IP address/host name	192.168.4.59
Server port	3000
Communication encrypted	☐
Comment	

IP address/host name input field:

Contains the network IP or the host name for the device.

Input options:

- IP address
- Host name

Port input field:

Contains the terminal's network port.

Value range: 1–9999

The default port is 3500.

Server IP address/host name display field:

Contains the network IP address or host name of the server to which the terminal sends bookings and events. The parameter is automatically taken from the higher-level node and cannot be changed.

Server port display field:

Displays the network port to which the dormakaba MATRIX server is connected. The port is automatically taken from the higher-level node and cannot be changed.

Communication encrypted display checkbox:

Identifier indicating whether communication with the terminal is encrypted. This setting is pre-set by the higher-level infrastructure nodes and cannot be changed here.

Options:

- Activated: Communication with the devices is encrypted.
- Not activated: Communication is not encrypted.

Default value: Not activated

Comment input field:

Text field for entering an additional comment.

"Devices" dialog – XS cylinder offline

This cylinder belongs to the XS/evolo offline components. They are not supplied with data directly from the server. Data is exchanged via the XS Manager.

No other components can be connected to XS/evolo offline components.



XS cylinder offline - XS component

Number	90
Name	
Short name	
active	☒
Load/display terminal	
Terminal class	1 - XS
ID card type	1 - HITAG ID
Comment	
Door release pulse length (DRP)	8 Seconds
AoC (Access on card)	☐
DoC (Data on Card)	☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

AoC (access on card) checkbox:

identifies the component as an AoC reader. This identification is required if the reader can also read AoC ID cards.

Note 1: This option is only available if the AOC function is enabled (system parameter Access 30). The range of AOC functions may depend on the firmware.

Note 2: The AOC system number from the higher-level infrastructure node applies to components that participate in AoC operation and are integrated under an infrastructure node.

DoC (data on card) checkbox:

Identifies the component as a DoC reader. This identification is required if the reader can also read DoC ID cards.

Note: This option is only available if the DOC function is enabled (system parameter Access 40).

5.2.4.3 Further standalone components

Components made by other companies can be integrated into MATRIX via OSS using third-party components.

Device type	Description	Image
Third-party component	OSS SO third-party component	

"Devices" dialog - OSS SO third-party components

This device type is required to integrate third-party components in MATRIX via OSS.

Note: The number of components that can be created depends on your licence.

No other components can be connected to an OSS SO third-party component.

Configuration is conducted using the third-party system, meaning that no further input is required.

Further information can be found in the section "Working with Matrix" under the heading [▶ Work with OSS components](#).

Number

14

Name

Short name

active

☒





OSS SO third-party component

5.2.5 Wireless components

Wireless components include all components that are connected to the server via radio nodes.

They include the following types:

[evolo wireless components](#)

[XS online components](#)

5.2.5.1 evolo wireless components

evolo wireless components are connected to the server via the evolo wireless gateway.

Device type	Description	Image
evolo c-lever air wireless	evolo component	
evolo c-lever compact wireless	evolo component	
evolo c-lever pro wireless	evolo component	
evolo digital cylinder wireless	evolo component	
evolo wireless mechatronic cylinder	evolo component	
evolo wireless remote reader	evolo component	
evolo wireless gateway 9040	Radio nodes	

"Devices" dialog – evolo c-lever air wireless

This fitting is an evolo wireless component and is connected to the server via the evolo wireless gateway.

Further devices cannot be connected to these devices.

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

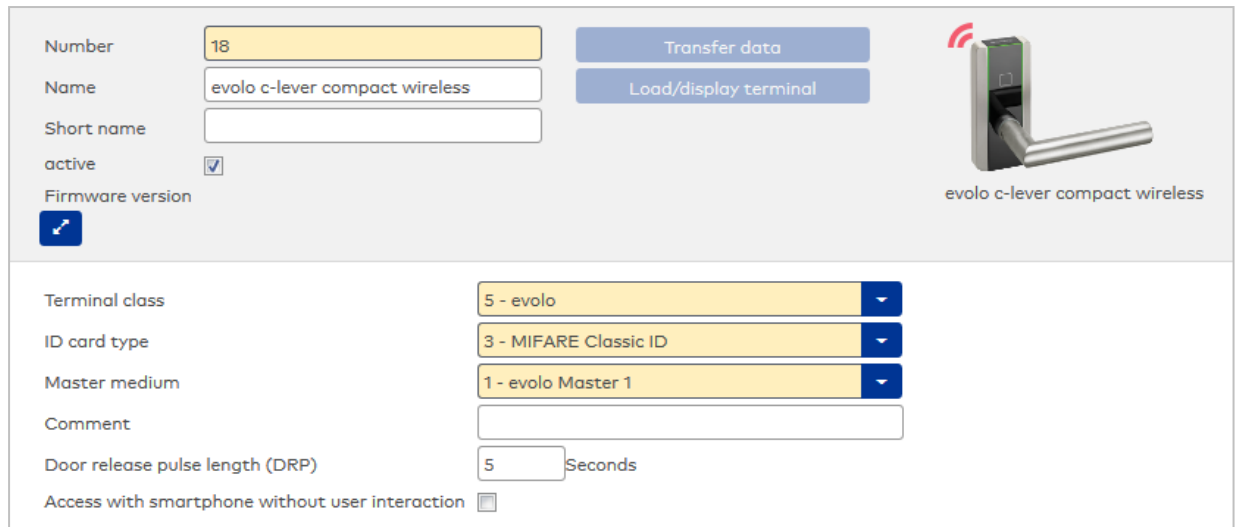
Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Devices" dialog – evolo c-lever compact wireless

This fitting is an evolo wireless component and is connected to the server via the evolo wireless gateway.

No other components can be connected to these components.


Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

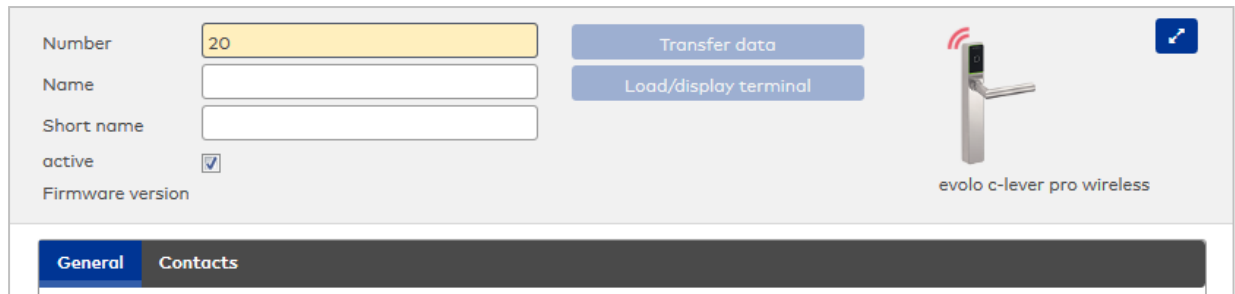
Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Devices" dialog – evolo c-lever pro wireless

This fitting is an evolo wireless component and is connected to the server via the evolo wireless gateway.

Further devices cannot be connected to these devices.



Number: 20

Name:

Short name:

active: ☒

Firmware version:

Transfer data

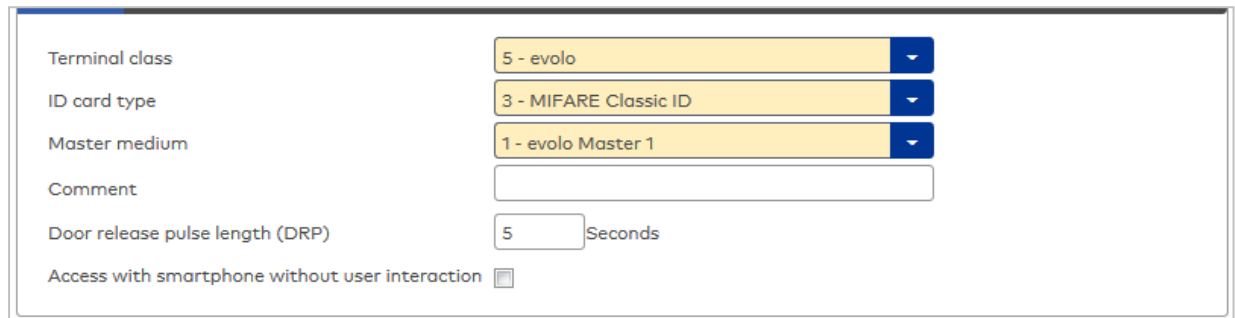
Load/display terminal

evolo c-lever pro wireless

General Contacts

"General" tab

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



Terminal class: 5 - evolo

ID card type: 3 - MIFARE Classic ID

Master medium: 1 - evolo Master 1

Comment:

Door release pulse length (DRP): 5 Seconds

Access with smartphone without user interaction: ☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Contacts" tab

This tab is used to configure whether a message should be generated upon forced entry and which of the four possible contacts must be evaluated to monitor the door.

Alarms can be defined for all messages.

Note: Door monitoring generates additional network traffic at the cost of battery life. Therefore, it must only be activated when it is actually needed.

Message triggered on	
Forced entry	☐
Frame contact status change (input 1)	☐
Door handle contact status change (input 2)	☐
Bolt contact status change (input 3)	☐
Cylinder contact status change (input 4)	☐
Inversion	
Invert frame contact	☐
Invert door handle contact	☐
Invert bolt contact	☐
Invert cylinder contact	☐

Message triggered on area:

Forced entry checkbox:

Identifier indicating whether a message is generated on forced entry.

Frame contact (input 1) status change:

Identifier indicating whether a message is generated when the status on input contact 1 changes.

Door handle contact (input 2) status change:

Identifier indicating whether a message is generated when the status on input contact 2 changes.

Bolt contact (input 3) status change:

Identifier indicating whether a message is generated when the status on input contact 3 changes.

Cylinder contact (input 4) status change:

Identifier indicating whether a message is generated when the status on input contact 4 changes.

Inversion area:

All input contacts can be inverted in this area.

Invert frame/handle/bolt/cylinder contact checkbox:

The respective input contact is inverted.

Not activated: The open state is the idle state.

Activated: The closed state is the idle state.

"Devices" dialog – evolvo digital cylinder wireless

This cylinder is an evolvo wireless component and is connected to the server via the evolvo wireless gateway.

Further devices cannot be connected to these devices.

Number	16	Transfer data	
Name			
Short name		Load/display terminal	
active	☒		
Firmware version			
Terminal class	5 - evolo		
ID card type	3 - MIFARE Classic ID		
Master medium	1 - evolo Master 1		
Comment			
Door release pulse length (DRP)	5	Seconds	
Access with smartphone without user interaction	☐		

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

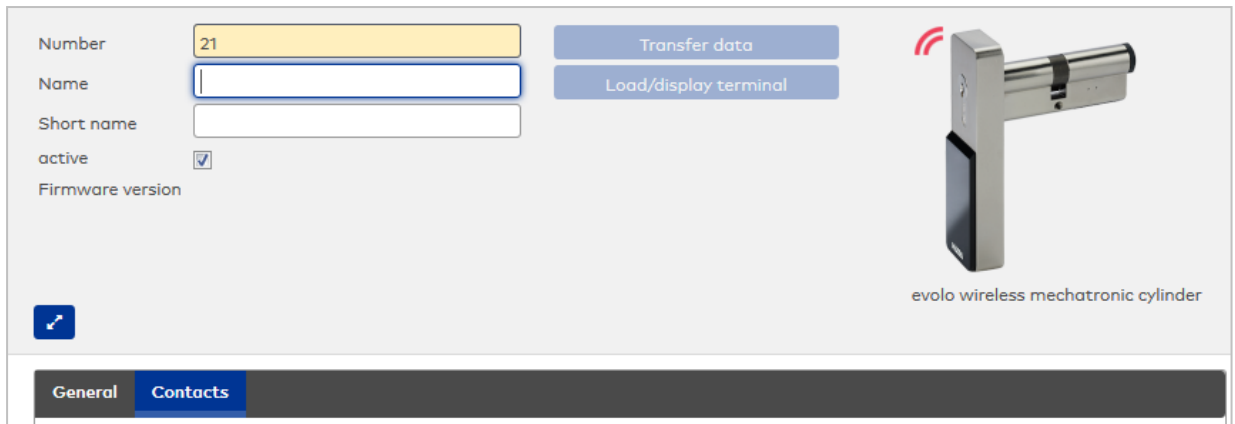
Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Devices" dialog – evolo wireless mechatronic cylinder

This fitting is an evolo wireless component and is connected to the server via the evolo wireless gateway.

Further devices cannot be connected to these devices.



Number: 21

Name:

Short name:

active: ☒

Firmware version:

Transfer data

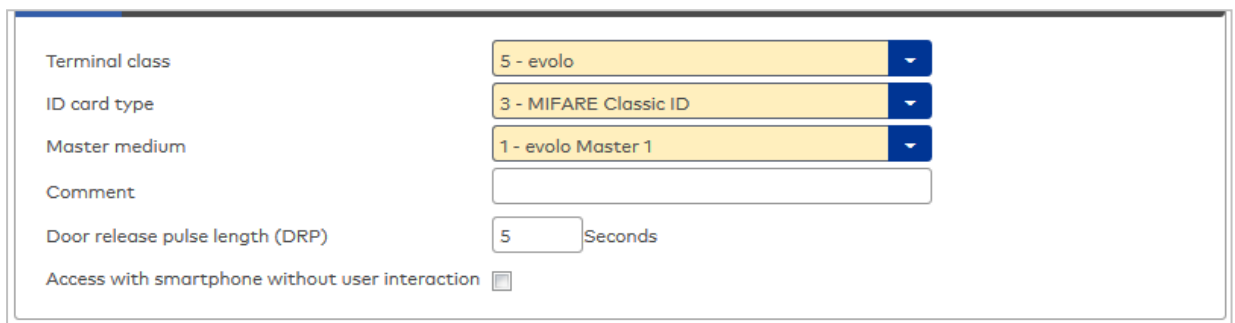
Load/display terminal

evolo wireless mechatronic cylinder

General Contacts

"General" tab

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



Terminal class: 5 - evolo

ID card type: 3 - MIFARE Classic ID

Master medium: 1 - evolo Master 1

Comment:

Door release pulse length (DRP): 5 Seconds

Access with smartphone without user interaction: ☐

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Contacts" tab

This tab is used to configure whether a message should be generated upon forced entry and which of the four possible contacts must be evaluated to monitor the door.

Alarms can be defined for all messages.

Note: Door monitoring generates additional network traffic at the cost of battery life. Therefore, it must only be activated when it is actually needed.

The screenshot shows a configuration window for the 'Contacts' tab. It is divided into two main sections. The first section, titled 'Message triggered on', contains four rows, each with a text label and a checkbox: 'Forced entry', 'Frame contact status change (input 1)', 'Door handle contact status change (input 2)', and 'Bolt contact status change (input 3)'. The second section, titled 'Inversion', also contains four rows with text labels and checkboxes: 'Invert frame contact', 'Invert door handle contact', 'Invert bolt contact', and 'Invert cylinder contact'. The checkboxes are currently unchecked.

Message triggered on area:

Forced entry checkbox:

Identifier indicating whether a message is generated on forced entry.

Frame contact (input 1) status change:

Identifier indicating whether a message is generated when the status on input contact 1 changes.

Door handle contact (input 2) status change:

Identifier indicating whether a message is generated when the status on input contact 2 changes.

Bolt contact (input 3) status change:

Identifier indicating whether a message is generated when the status on input contact 3 changes.

Cylinder contact (input 4) status change:

Identifier indicating whether a message is generated when the status on input contact 4 changes.

Inversion area:

All input contacts can be inverted in this area.

Invert frame/handle/bolt/cylinder contact checkbox:

The respective input contact is inverted.

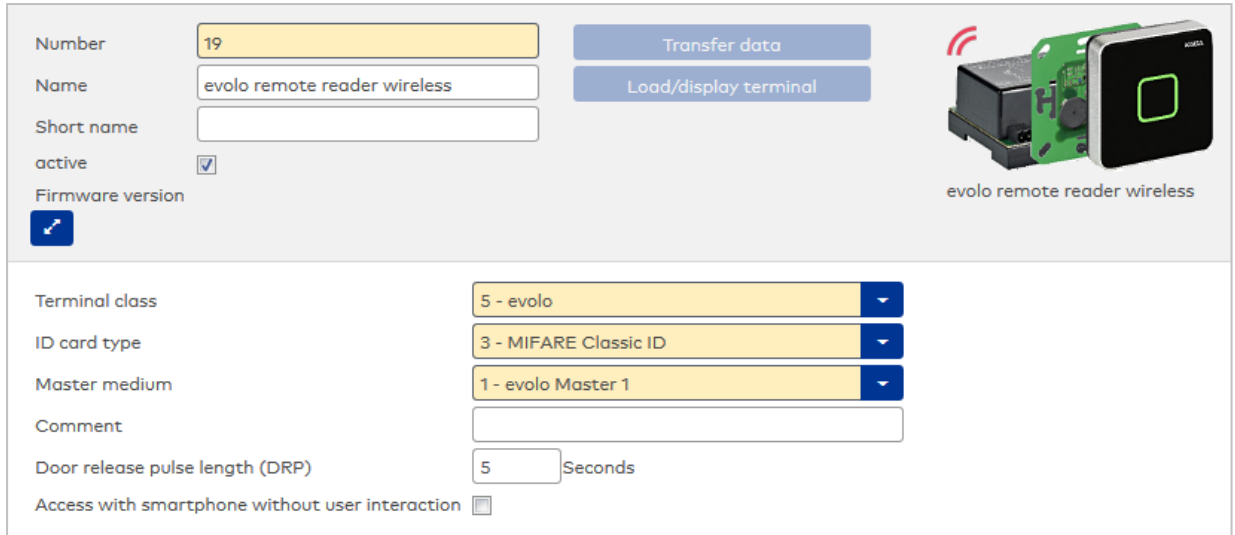
Not activated: The open state is the idle state.

Activated: The closed state is the idle state.

"Devices" dialog – evolvo wireless remote reader

This reader is an evolvo wireless component and is connected to the server via the evolvo wireless gateway.

No other components can be connected to these components.


Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Comment input field:

Text field for entering an additional comment.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-99

Default value: 5 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Access with smartphone without user interaction checkbox:

Indicates whether input is required on a smartphone for Mobile Access.

Options:

- Activated: The **dormakaba mobile access** app must be started. No further actions are required of the user.
- Inactivated: The user must activate access using the **dormakaba mobile access** app.

"Devices" dialog – evolo wireless gateway 9040

The evolo wireless gateway 9040 is directly connected to the host system and serves as a radio node for connecting evolo wireless components.

Number

Name

Short name

active

☒

Firmware version

Load/display terminal



evolo wireless gateway

9040



IP address/host name

Installation code

Device password

Comment

IP address/host name input field:
Contains the network IP or the DNS name of the gateway.
Input options:

- IP address
- Host name

Installation code input field:
The installation code is an 18-byte hexadecimal radio key which is required for communication between the gateway and the evolo wireless components. If the Latin letters "a" to "f" are specified as lower case letters in the hexadecimal system, these are converted to and saved as upper case letters. Consequently, when the page is refreshed, the installation code is shown with uppercase letters.

Device password input field:
The password protects the gateway from unauthorised access. The password must be made up of at least 5 characters; the maximum number of characters is 40. It consists of alphanumeric characters (no mutated vowels) and the special characters !"#\$%&'()*+,-./:;<=>?@[\\]^_`{|}~.

5.2.5.2 XS online components

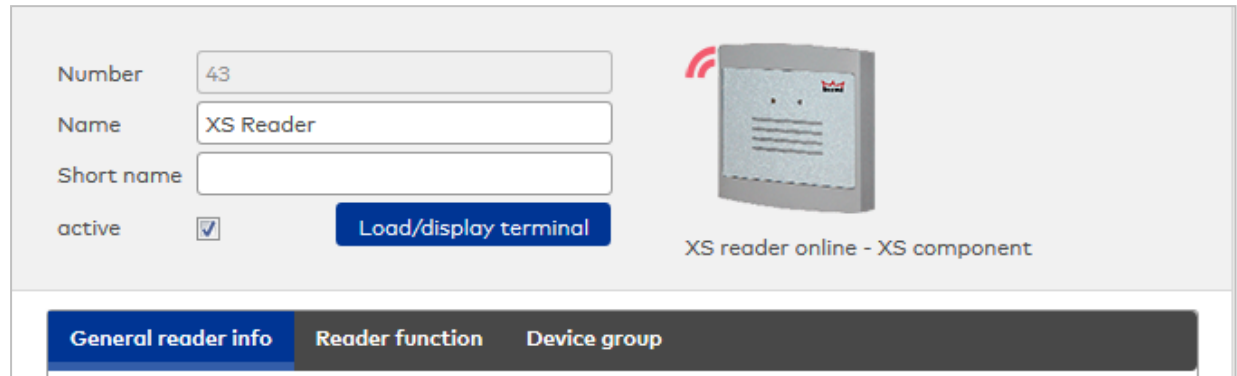
XS online components are wireless components that are connected to the server via DP1 XS traffic point.

Device type	Description	Image
DP1 XS Fitting	Online fitting	
DP1 XS reader	Online reader	
DP1 XS traffic point	Radio nodes	
DP1 XS cylinder	Online cylinder	

"Devices" dialog – DP1 XS reader

The XS reader belongs to the XS/evolo online components. These components are connected to a terminal via a radio node.

No other components can be connected to the XS/evolo online components.



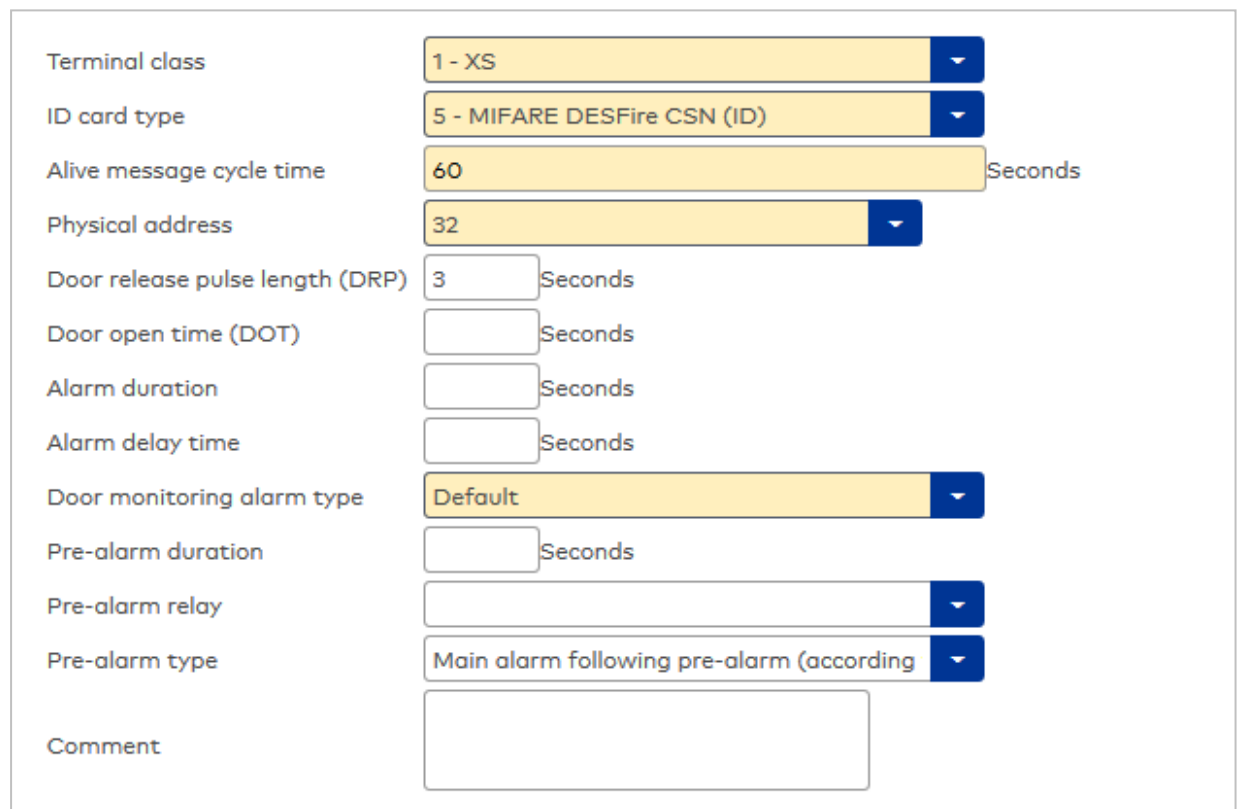
Number: 43
 Name: XS Reader
 Short name:
 active: ☒ Load/display terminal

XS reader online - XS component

General reader info | Reader function | Device group

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.



Terminal class: 1 - XS
 ID card type: 5 - MIFARE DESFire CSN (ID)
 Alive message cycle time: 60 Seconds
 Physical address: 32
 Door release pulse length (DRP): 3 Seconds
 Door open time (DOT): Seconds
 Alarm duration: Seconds
 Alarm delay time: Seconds
 Door monitoring alarm type: Default
 Pre-alarm duration: Seconds
 Pre-alarm relay: Seconds
 Pre-alarm type: Main alarm following pre-alarm (according)
 Comment:

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Alive message cycle time input field:

Contains the time in seconds within which the components send a signal to indicate they are still online.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 32-62 in the DP1 bus. All addresses still available are displayed. It does not take other DP1 device types into account, as these make up a separate address space (1 to 31).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default except for the door relay.

The door relay is predefined and, depending on the physical address of the reader in the DP1 bus, is automatically filled when initially saved.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay	43 XS Reader - Output 1	▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay display field:

Contains the relay number for the door opening. The output is predefined by the DP1 bus assignment and cannot be modified.

Alarm relay number selection field:

Selection of the output number for the alarm. Select the output which is to be activated in case of an alarm.

Door status contact input selection field:

Selection of the input number for the door status contact. The door status contact determines whether the door is open or closed. Select the input the door status contact is connected to.

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed. Select the input the door handle contact is connected to.

Door opening key switch input selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. It is necessary to specify the door opening key switch to prevent the door opening from initiating a forced entry. Select the input the door opening key switch is connected to.

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example. Select the input which can be used to operate the reader.

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the

keyboard and the booking instructions, also contains two definitions for the terminal function units. Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

The screenshot shows a configuration interface with the following fields:

- Variable booking instruction:** A dropdown menu currently showing "1 - Access".
- VBI key allocation:** An empty dropdown menu.
- TP4 VBI selection definition:** An empty dropdown menu.
- VBI time preselections:** An empty dropdown menu.
- Terminal function unit1:** A section header for the first unit configuration.
- Terminal function unit2:** A section header for the second unit configuration.
- Reader 1:** An empty dropdown menu.
- Reader 2:** An empty dropdown menu.
- Display 1:** An empty dropdown menu.
- Display 2:** An empty dropdown menu.
- Keyboard 1:** An empty dropdown menu.
- Keyboard 2:** An empty dropdown menu.
- Key code conversion table 1:** An empty dropdown menu.
- Key code conversion table 2:** An empty dropdown menu.

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – DP1 XS Fitting

This fitting is an evolo wireless component and is connected to the server via the evolo wireless gateway.

This fitting belongs to the XS/evolo online components. These are connected to a terminal via a radio node.

No other components can be connected to XS/evolo online components.

Number 44 Name XS Beschlag Short name active ☒	 XS fitting online - XS component						
Load/display terminal							
<table border="1"> <thead> <tr> <th>General reader info</th> <th>Reader function</th> <th>Device group</th> </tr> </thead> <tbody> <tr> <td colspan="3"> </td> </tr> </tbody> </table>		General reader info	Reader function	Device group			
General reader info	Reader function	Device group					

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	1 - XS	
ID card type	5 - MIFARE DESFire CSN (ID)	
Alive message cycle time	60	Seconds
Physical address	32	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	
Pre-alarm duration		Seconds
Pre-alarm relay		
Pre-alarm type	Main alarm following pre-alarm (according	
Comment		

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Alive message cycle time input field:

Contains the time in seconds within which the components send a signal to indicate they are still online.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 32-62 in the DP1 bus. All addresses still available are displayed. It does not take other DP1 device types into account, as these make up a separate address space (1 to 31).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0–99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default except for the door relay.

The door relay is predefined and, depending on the physical address of the reader in the DP1 bus, is automatically filled when initially saved.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay	43 XS Reader - Output 1	▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay display field:

Contains the relay number for the door opening. The output is predefined by the DP1 bus assignment and cannot be modified.

Alarm relay number selection field:

Selection of the output number for the alarm. Select the output which is to be activated in case of an alarm.

Door status contact input selection field:

Selection of the input number for the door status contact. The door status contact determines whether the door is open or closed. Select the input the door status contact is connected to.

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed. Select the input the door handle contact is connected to.

Door opening key switch input selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. It is necessary to specify the door opening key switch to prevent the door opening from initiating a forced entry. Select the input the door opening key switch is connected to.

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example. Select the input which can be used to operate the reader.

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access		
VBI key allocation			
TP4 VBI selection definition			
VBI time preselections			
<u>Terminal function unit1</u>		<u>Terminal function unit2</u>	
Reader 1		Reader 2	
Display 1		Display 2	
Keyboard 1		Keyboard 2	
Key code conversion table 1		Key code conversion table 2	

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – DP1 XS cylinder

These cylinders belong to the XS/evolo online components. They are connected to a terminal via a radio node.

No other components can be connected to XS/evolo online components.

Number 45 Name XS Zylinder Short name active ☒	Load/display terminal	 XS cylinder online - XS component
General reader info Reader function Device group		

General

Use this tab to create the general parameters for the device. This information is absolutely necessary for operating the device.

Terminal class	1 - XS	
ID card type	5 - MIFARE DESFire CSN (ID)	
Alive message cycle time	60	Seconds
Physical address	32	
Door release pulse length (DRP)	3	Seconds
Door open time (DOT)		Seconds
Alarm duration		Seconds
Alarm delay time		Seconds
Door monitoring alarm type	Default	
Pre-alarm duration		Seconds
Pre-alarm relay		
Pre-alarm type	Main alarm following pre-alarm (according	
Comment		

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Alive message cycle time input field:

Contains the time in seconds within which the components send a signal to indicate they are still online.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. DP1 online components can contain the physical addresses 32-62 in the DP1 bus. All addresses still available are displayed. It does not take other DP1 device types into account, as these make up a separate address space (1 to 31).

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds. If the value = 0, the door relay is not activated even if the access check is positive.

Value range: 0-999

Default value: 3 seconds

Note: The door release pulse length must be at least 3 seconds for XS components.

Door open time (DOT) input field:

Contains the time that the door can be open in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded. When door open time = 0, the door status contact is not monitored.

Value range: 0-999

Default value: 0 seconds (no door open time monitoring)

Alarm duration input field:

Contains the alarm duration in seconds.

Value range: 0-999

Default value: 0 seconds, no alarm duration.

Alarm delay time input field:

Contains the alarm delay in seconds. The alarm is triggered when this time is exceeded.

Value range: 0-999

Default value: 0 seconds, no alarm delay.

Door monitoring alarm type selection field:

Selection of the alarm at the door if the door open time is exceeded. The door monitoring alarm type determines whether a pre-alarm is triggered when the door open time (DOT) is exceeded and how long the alarm output is activated in case of forced entry or the DOT being exceeded.

Options:

- Standard. Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered
- Main alarm depending on alarm duration
- Main alarm until door closed
- No alarm activation
- Pre-alarm until DOT The pre-alarm is ended by closing the door. Booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running does not reset DOT monitoring or the pre-alarm.
- Main alarm according to alarm duration or until door closing
- Pre-alarm for DOT with resetting the DOT in case of door action The pre-alarm is ended by closing the door. Re-releasing the door by booking, pressing the door key switch, entering the door opener code or permanent door opening when door open time monitoring or the pre-alarm is running resets DOT monitoring or the pre-alarm and restarts DOT monitoring. No further door opening, opening time or pre-alarm activation messages are subsequently generated.

Default value: Default

Pre-alarm duration input field:

Contains the pre-alarm duration in seconds. If the reason the alarm removed during the pre-alarm, the pre-alarm is ended and the alarm is not triggered.

Value range: 0-99

Default value: 0 seconds (no pre-alarm)

Pre-alarm relay selection field:

Selects the output number for the pre-alarm.

Options:

- All the outputs administrated by the terminal.

Default value: No selection

Pre-alarm type display field:

Selection of the pre-alarm type for pre-alarm behaviour in relation to the main alarm.

Options:

- Main alarm following pre-alarm (according to alarm duration)
- Main alarm after pre-alarm (until door closed)
- Main alarm after pre-alarm (according to alarm duration/door closing)
- Main alarm after forced entry (according to alarm duration)
- Main alarm after forced entry (until door closed)
- Main alarm after forced entry (according to alarm duration/door closed)

Default value: Main alarm following pre-alarm (according to alarm duration)

Comment input field:

Text field for entering an additional comment.

Reader function

Use this tab to specify the hardware-dependent settings for the reader.

The assignment of the inputs and outputs for the door control and door monitoring depends on the building conditions and the wiring and thus cannot be set by default except for the door relay.

The door relay is predefined and, depending on the physical address of the reader in the DP1 bus, is automatically filled when initially saved.

Note: All inputs and outputs of the terminal and the allocated components are available in the selection fields. It is therefore recommended that you create the input and output modules for the door control and monitoring prior to the readers.

Door relay	43 XS Reader - Output 1	▼
Alarm relay number		▼
Duress alarm relay		▼
Door status contact input		▼
Door handle contact input		▼
Door opening key switch input		▼
Reader actuation input		▼
Reader actuation input function	Inactivate reader	▼
No unlocking stop	☐	
Access control for two persons - booking period	Seconds	
Access control for two persons - confirmation permission		▼
Access control for two persons - movement		▼

Door relay display field:

Contains the relay number for the door opening. The output is predefined by the DP1 bus assignment and cannot be modified.

Alarm relay number selection field:

Selection of the output number for the alarm. Select the output which is to be activated in case of an alarm.

Door status contact input selection field:

Selection of the input number for the door status contact. The door status contact determines whether the door is open or closed. Select the input the door status contact is connected to.

Door handle contact input selection field:

Selection of the input number for the door handle contact. The door handle contact establishes whether the door handle is pressed. Select the input the door handle contact is connected to.

Door opening key switch input selection field:

Selection of the input number for the door opening key switch. The door opening key switch can be used to open a door without booking. It is necessary to specify the door opening key switch to prevent the door opening from initiating a forced entry. Select the input the door opening key switch is connected to.

Reader control input selection field:

Selection of the input number for the reader control. This input can be used to deactivate the reader when arming an intruder detection system, for example. Select the input which can be used to operate the reader.

Reader control input function selection field:

Specifies the reader's function if an input for deactivating the reader is stated.

Options:

- Inactivate reader: Reader is taken out of operation. When the input is active, the reader is taken out of operation. Terminal text 198 is shown on the display and the operation LED lights up red. Booking is not possible.
- Reader control input active signal: When the input is active, terminal text 210 is shown on the display when the terminal is in standby mode and the operation LED lights up red. Booking can continue.

Default value: Inactivate reader.

No unlocking stop checkbox:

Specifies the setting for the door release.

Options:

- Not activated: The door release is ended when the door is opened.
- Activated: The door release is not ended when the door is opened.

Default value: Not activated

Access control for two persons - booking period input field:

Contains the period in seconds in which the second booking of an access booking for two persons must take place.

Value range: 0–99 seconds

Default value: Not specified

Access control for two persons - confirmation permission selection field:

Defines whether specific confirmation permission is required for access control for two persons.

Options:

- 2. booking with second ID card. No confirmation permission is required for access control for two persons.
- 2. booking with an ID card authorised for access control for two persons. Confirmation permission is required for access control for two persons.

Default value: No selection

Access control for two persons - movement selection field:

Selection of persons who move to the entrance room zone.

Options:

- 1. person booking moves to the entrance room zone. A movement is only recorded for the first person.
- First and second persons booking move to the entrance room zone. A movement is recorded for both persons.

Default value: No selection

Device group

This tab contains the device group for readers on a TP4 terminal and, together with general details on the keyboard and the booking instructions, also contains two definitions for the terminal function units.

Terminal functions units are assemblies of readers, displays and keyboards in logical units. You only need to make changes in special exceptional cases.

Caution: Device groups should only be parameterised by persons with expert knowledge. Please contact your service partner.

Variable booking instruction	1 - Access	▼
VBI key allocation		▼
TP4 VBI selection definition		▼
VBI time preselections		▼
Terminal function unit1		
Reader 1		▼
Display 1		▼
Keyboard 1		▼
Key code conversion table 1		▼
Terminal function unit2		
Reader 2		▼
Display 2		▼
Keyboard 2		▼
Key code conversion table 2		▼

Variable booking instruction selection field:

Contains the variable booking instruction that is carried out when there is a booking on this reader.

Options:

- All TP4 variable booking instructions available in the system.

Default value: 1 Access

VBI key allocation selection field:

Contains the VBI key allocation if a non-standard assignment of the keys is necessary.

Options:

- All VBI key allocations available in the system.

Default value: No selection

VBI selection definition selection field:

Contains the VBI selection definition if there is a limited selection of variable booking instructions.

Options:

- All VBI selection definitions available in the system.

Default value: No selection

VBI time preselections selection field:

Contains the VBI time preselections for the time-controlled change of the booking key preselection.

Options:

- All VBI time preselections available in the system.

Default value: No selection

Terminal function unit 1 and **Terminal function unit 2** sections:

Terminal function unit 1 usually comprises a reader and the components that are allocated to this reader.

This is why this reader itself is entered as reader 1 and cannot be changed.

Terminal function unit 2 is used in special cases only, for example with a booking where a second booking is connected to a different reader.

Reader 1 display field:

Contains the reader itself.

Reader 2 input field:

Selects a second reader which forms a device unit in conjunction with the Reader 1. The reader has to be connected to the same terminal as Reader 1.

Display device number 1/2 selection field:

Selects the display device number used to allocate a display to the terminal unit on which info texts are displayed during the booking.

Keypad device number 1/2 selection field:

Selects the keypad device number used to allocate a keypad to the terminal unit for entering values during booking.

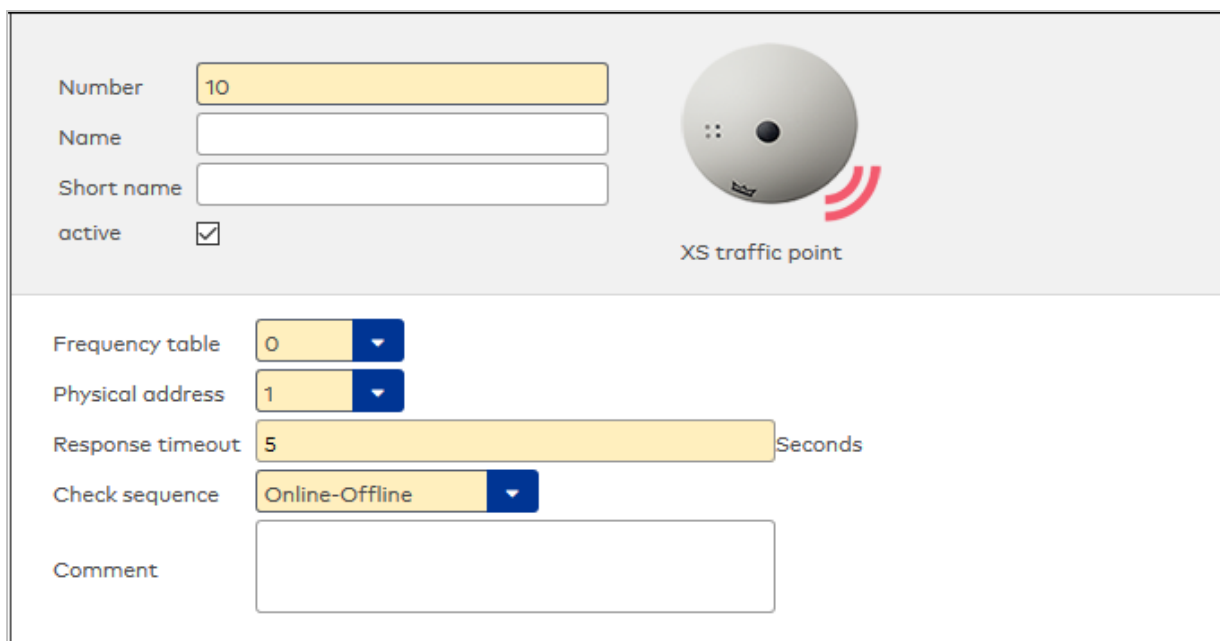
Key code conversion table 1/2 selection field:

Selects a key code conversion table if a different key coding is required for the keypad device that is allocated.

"Devices" dialog – DP1 XS traffic point

DP1 traffic points form the connection between a terminal and XS/evolo online components. While the XS/evolo online components is first put into operation using the XS Manager, bookings on the XS/evolo online components are transmitted to the terminal via the radio node, where they are processed. The response to the booking is sent back to the components after processing. The XS/evolo online components thus behave like readers that are directly connected to a terminal.

Only XS/evolo online components can be connected to a traffic point.


Frequency table selection field:

Contains the frequency table for the radio communication.

Physical address selection field:

Contains the unique address in the DP1 bus for the device. XS traffic points may have physical addresses 1-31. All addresses still available are displayed. The XS/evolo online components are not taken into account as these occupy the address range from 32, thus forming a separate address space.

Response timeout input field:

Displays the time in seconds that the XS/evolo online components waits for a response from the XS traffic point to a booking request. Value range: 0 to 15 seconds.

Check sequence selection field:

Contains the check sequence for the connected XS/evolo online components. The check sequence determines whether the XS/evolo online components test the access permissions online or offline first. The check sequence is transmitted to the XS/evolo online components from the radio nodes.

Options:

- **Online before offline operating mode:**

The XS end device establishes a radio connection to its XS traffic point when a booking is made. This connection is used to send the ID card data to the XS traffic point, which then passes it on to the master terminal via DP1. The master terminal processes the booking and sends the response via DP1 to the XS traffic point, which then passes it back to the XS end device via the radio connection which is still active.

If no wireless connection can be established, it is possible to fall back on an emergency database present in the XS end device that can be transferred exclusively using the XS manager. In this case, the XS end device generates log records that can also only be read using the XS manager. This corresponds to the offline function of the XS end devices.

- **Offline before online operating mode:**

The XS end device first checks whether the ID card for a booking is authorised in the internal database. If it is authorised, the booking is executed and the XS end device switches off again without online connection.

If the ID card is not authorised internally, the XS end device establishes a radio connection with its XS traffic point. This connection is used to send the ID card data to the XS traffic point, which then passes it on to the master terminal via DP1. The master terminal processes the booking and sends the response via DP1 to the XS traffic point, which then passes it back to the XS end device via the radio connection which is still active.

Comment input field:

Text field for entering an additional comment.

5.2.6 TMS devices

TMS devices are mainly used to manage escape routes.

Device type	Description	Image
TMS PC gateway	Gateway for the connection via the terminal manager	
TMS configuration	Nodes for TMS devices with a connection via TMS-Soft	
TMS terminal	TMS device with a connection via TMS-Soft	
ER MSVP LAN/LON	TMS devices with a connection via the terminal manager	
ER SVP S4X LAN/LON		
ER SVP LAN/LON		
TMS terminal LAN/LON		
TMS Comfort LAN/LON		
TMS Basic LAN/LON		

The door control settings are managed in a special database. A TMS PC gateway transmits the changes to the individual door controls.

To use TMS devices, the applicable system parameter must be released. There are two ways for the connection:

Connection via TMS-Soft

Requirements:

- System parameters value 1
- TMS-Soft installation

The device parameters are set via TMS-Soft.

Further information can be found in the section "Working with Matrix" under the heading [► Work with the door management system \(TMS\) via TMS-Soft](#).

Connection via the terminal manager

- System parameters value 2
- MATRIX-TMS-PC-GATEWAY installation

The device parameters are set via dormakaba MATRIX.

Further information can be found in the section "Working with Matrix" under the heading [► Work with the door management system \(TMS\) via terminal manager](#).

Devices dialog – TMS PC gateway

This dialog is only available if the system parameter "Use TMS devices" is set to 2.

The TMS PC gateway is used for communication between the TMS devices and MATRIX.

Both LAN and LON devices are connected via the gateway.

General

This tab is used to specify the general settings for communication with the TMS devices.

Host name input field:

Contains the server names in the network

LAN interface active checkbox:

Specifies whether the LAN interface is used. This checkbox must be activated if TMS devices are connected via LAN.

LON interface active checkbox:

Specifies whether the LON interface is used. This checkbox must be activated if TMS devices are connected via LON.

LON type selection field:

Used to select the communication type via LON.

Possible types: LON, ILS, OpenDLV.

Comment input field:

Text field for entering an additional comment.

LAN devices

This tab can be used to display the LAN devices and configure the addresses.

Search for LAN modules button:

Opens a list of the search options for finding TMS devices in the LAN.

Search for LAN modules

Search in subnet ☒

Search in the IP range ☐

From IP address

To IP address

Start search
Stop search

Select **Search in subnet** or **Search in the IP range** and enter the IP addresses. Next, click **Start search**. All the TMS devices found in the selected LAN area are displayed in the table. Click **Stop search** to close the search options.

Assign IP button:

Opens the IP configuration parameters for a TMS device. Select a device in the table then click this button to configure a TMS device with new network data.

Select "Automatically get IP address (DHCP)" or enter the addresses in the fields and click **Assign IP**. The device will then be displayed in the table with the address details. Click **Cancel IP assignment** to close the IP configuration parameters.

Assign device button:

Select one or more devices in the table then click this button to assign the device(s) to a TMS PC gateway.

Select the device to be assigned in the LAN device selection field then click **Assign device**. The device is then displayed in the table. Click **Do not assign device** to close the device assignment.

Remove device assignment button:

Select one or more devices in the table then click this button to remove the assignment of the TMS PC gateway to this/these device(s).

Table

The table displays all the TMS devices found in the LAN.

Selection: Checkbox for selecting individual devices. Select a device then click a button to configure it.

MAC address: Contains the device's MAC address.

IP address: Contains the device's IP address.

DHCP: Contains the address of the DHCP server that provides the device with the IP address.

Subnet mask: Contains the interface's network mask.

Gateway IP: Contains the IP address of the network gateway that the TMS device uses for communication.

Host IP: Contains the IP address of the computer on which the TMS PC gateway is located.

UDP port: Contains the TMS gateway's port.

TMS XPort: Indicates whether the network adapter is TMS specific.

LAN device: Name of the applicable LAN device.

LON devices

This tab can be used to display the LON devices and configure the addresses.

Search for LON ID
Assign device
Remove device assignment

Selection	LON address	LON device
Number of records: 0		

Search for LON ID button:
Starts the search for TMS devices in the LON. All the devices found are displayed in the table.

Assign device button:
Select one or more devices in the table then click this button to assign the device(s) to a TMS PC gateway.

Remove device assignment button:
Select one or more devices in the table then click this button to remove the assignment of the TMS PC gateway to this/these device(s).

Table
The table displays all the TMS devices found in the LON.

- Selection:** Checkbox for selecting individual devices. Select a device then click a button to configure it.
- LON address:** Contains the device's LON address.
- LON device:** Contains the LON device's name.

LAN/LON gateway/LON-ILS/LON-Open-DLV

Depending on the interface used, the parameters of the interface for communication and signal processing are specified on these tabs.

Port

IP address/host name

LAN port

10001

Groups/blocks

Number of doors in a group N1

20

Query next group after T2 [milliseconds]

1000

Number of doors in a block N2

10

Query next block after T3 [milliseconds]

50

Status telegram

Next state query after T1 [seconds]

10

Max. time to state feedback [seconds]

5

Number of attempts when no response

2

Next I/O DCW state query after T1 [seconds]

0

Next TE60 state refresh [seconds]

0

Telegram

Number of attempts when no response

2

Max. time to feedback [seconds]

3

Port
These details are automatically populated when the devices are assigned but can also be separately configured for each device.

Groups/blocks
Number of doors in a group N1 input field:
Contains the number of telegrams before a group break is made.
Query next group after T2 [milliseconds]:
Contains the time after which a query is to be sent, including the break after the query is sent.
Number of doors in a block N2 input field:
Contains the number of telegrams before a block break is made.

Query next block after T3 [milliseconds] input field:

Contains the length of a pause after a block is sent.

State telegram

Next state query after T1 [seconds] input field:

Contains the time after which a device is queried if it has not changed state and therefore not sent any telegrams to the central terminal (state query).

Max. time to state feedback [seconds] input field:

Contains the time that a central terminal waits before sending a time overrun message after a state query telegram has been sent without a response.

Number of attempts when no response input field:

Contains the number of times that a state query telegram is resent if no response is received.

Next I/O DCW state query after T1 [seconds] input field:

An I/O-DCW module does not send a state telegram if the state of an input has been changed, i.e. the device must be queried after the time T1 (state query). 0 = No query.

Next TE60 state refresh [seconds] input field:

Contains the time after which a TE60 state panel module is refreshed.

Telegram

Number of attempts when no response input field:

Contains the number of times that a status query telegram is resent if no response is received.

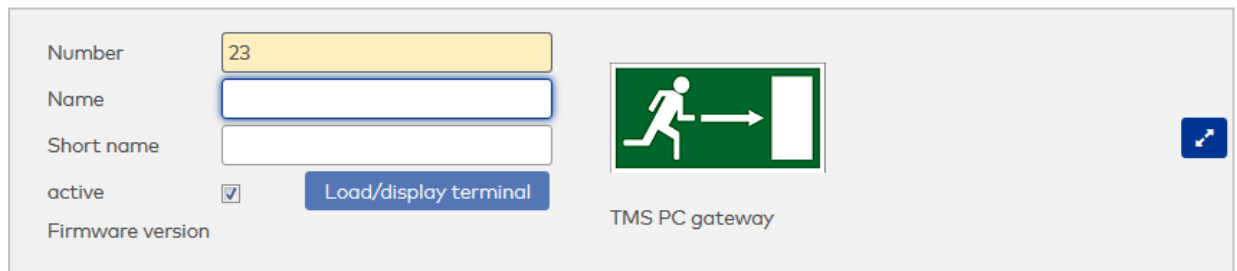
Max. time to feedback [seconds] input field:

Contains the time that a central terminal waits before sending a time overrun message after a telegram has been sent without a response.

Devices dialog – TMS terminal via TMS-Soft

This device is only available if the system parameter "Use TMS devices" is set to 1.

All available TMS devices are created in the device tree under the node **TMS configuration**. As they are managed via TMS-Soft, however, no further information is required here.



Number: 23

Name:

Short name:

active: ☒

Firmware version:

Load/display terminal

TMS PC gateway

TMS terminal address display field:

Contains the unique address of the terminal. This is the address used to manage the terminal in TMS. The address cannot be changed as it is adopted by TMS.

"Devices" dialog – TMS terminals via terminal manager

These devices are only available if the system parameter "Use TMS devices" is set to 2.

TMS devices are created in the device tree directly below the "Server" root node. They also require a TMS-PC gateway.

MATRIX supports devices with the following device types:

- TMS terminal LAN
- TMS Comfort LAN
- TMS Basic LAN
- ER MSVP LAN

- ER SVP S4X LAN
- ER SVP LAN
- TMS Terminal LON
- TMS Comfort LON
- TMS Basic LON
- ER MSVP LON
- ER SVP S4X LON
- ER SVP LON

As the device types have very similar configurations, the description of the dialogs in the section below has been summarised.

Note: The parameters and therefore the dialogs can deviate from the description depending on the specific device and software version. Any such deviations are highlighted.

Number	25	 TMS terminal LAN	
Name			
Short name			
active	☐		
Firmware version			
Load/display terminal			

LAN (LAN terminals only)

This tab is only available for LAN devices.

The parameters for device communication via a LAN connection are created on this tab.

As the parameters are generally configured via a TMS-PC gateway, the addresses only need to be modified on exceptions.

TMS PC Gateway	2
TMS address	2
MAC address	
IP address	
Comment	

TMS PC gateway selection field:

Selection of the TMS gateway to be used for the connection.

TMS address input field:

Contains the device's TMS address.

MAC address input field:

Contains the device's MAC address.

IP address input field:

Contains the device's IP address.

Comment input field:

Text field for entering an additional comment.

LON (LON terminals only)

This tab is only available for LON devices.

The parameters for device communication via a LON connection are created on this tab.

As the parameters are generally configured via a TMS-PC gateway, the addresses only need to be modified on exceptions.

TMS PC Gateway	
TMS address	4
LON address	
Comment	

TMS PC gateway selection field:

Selection of the TMS gateway to be used for the connection.

TMS address input field:

Contains the device's TMS address.

LON address input field:

Contains the device's LON address.

Comment input field:

Text field for entering an additional comment.

Unlocking

This tab is used to specify relock times, key switch activation times for long-term and permanent door release and the door-open monitoring parameters.

<u>Relock times</u>	
Short-term door release (3-180 sec)	5
Long-term door release (5-120 min)	5
<u>Short-term, long-term, permanent door release</u>	
Combined functions	All combinations
Activate long-term door release (3-20 sec)	8
Activate permanent door release (5-30 sec)	15
<u>Door-open monitoring</u>	
Main alarm duration (5-180 sec)	90
<u>Door-open monitoring 1</u>	
Time until pre alarm (5-180 sec)	30
Pre-alarm duration (4-475 sec)	60
<u>Door-open monitoring 2</u>	
Time until pre alarm (5-180 sec)	30
Pre-alarm duration (4-475 sec)	60

Relock times

Short-term door release (3–180 sec) input field:

Specifies the period for which a door remains released after a short-term door release. Once this period has passed, the door locks automatically.

Values: 3–180 seconds; default value: 5 seconds.

Long-term door release (5–120 min) input field:

Specifies the period for which a door remains released after a long-term door release. Once this period has passed, the door locks automatically.

Values: 5–120 minutes; default value: 5 minutes.

Short-term, long-term and permanent door release

Combined functions selection field:

Used to deactivate certain release types. The applicable input field is hidden. If all release types should be supported, select "All combinations".

Activate long-term door release (3–20 sec) input field:

Specifies the period for which the key switch must be pressed (to the right) to trigger a function in the case of long-term door release.

Values: 3–20 seconds; default value: 8 seconds.

Activate permanent door release (5–30 sec) input field:

Specifies the period for which the key switch must be pressed (to the right) to trigger a function in the case of permanent door release.

Values: 5–30 seconds; default value: 15 seconds.

Note: The value set for long-term door release must always be lower than that set for permanent door release.

Door-open monitoring

Main alarm duration (5–180 sec) input field:

Specifies the duration of the main alarm.

Values: 5–180 seconds; default value: 90 seconds.

Door-open monitoring 1/2

Time until pre alarm (5–180 sec) input field:

Specifies the length of time the door can remain open before the pre-alarm is triggered.

Values: 5–180 seconds; default value: 30 seconds.

Pre-alarm duration (4–475 sec) input field:

Specifies the length of time after which the pre-alarm switches to a main alarm.

Values: 4–475 seconds; default value: 60 seconds.

ER SVP LAN/LON only

<u>Functions</u>	<u>Release/Lock</u>
Relock via door contact ☐	Release duration 5
<u>Duration limit function</u>	<u>Door-open monitoring</u>
Duration limit for main alarm active ☒	Time until pre-alarm 30
	Pre-alarm duration 60
	Main alarm duration 90
<u>Smoke detector function</u>	
Smoke detector function SVP locks on smoke detector alarm	v

Functions

Relock via door contact checkbox:

Specifies whether it should be possible for the door to relock by means of door contact before the end of the release period. Default value: Not activated

Duration limit function

Duration limit for main alarm active checkbox:

Specifies whether there is a limit on the duration of the main alarm. Default value: Activated.

Release/Lock

Release duration input field:

Specifies the length of time a door remains released. Once this period has passed, the door locks

automatically.

Values: 2-255 seconds; default value: 5 seconds

Door-open monitoring

Time until pre-alarm input field:

Specifies the length of time the door can remain open before the pre-alarm is triggered.

Values: 5-255 seconds; default value: 30 seconds.

Pre-alarm duration input field:

Specifies the length of time after which the pre-alarm switches to a main alarm.

Values: 10-255 seconds; default value: 60 seconds.

Main alarm duration input field:

Specifies the duration of the main alarm.

Values: 5-255 seconds; default value: 90 seconds.

Smoke detector function

Smoke detector function selection field:

Selection of the function that should be triggered in the event of a smoke detector alarm.

Key switch

This tab can be used to assign functions to the key switches that are triggered when they are pressed. Up to four additional key switches can be installed in addition to the internal key switch.

Note in relation to ER MSVP LAN/LON devices: These devices do not have an internal key switch.

Note in relation to ER SVP LAN/LON devices: These devices do not support key switches.

Internal key switch	
Clockwise turn - function 1	Korte/lange/continue ontgrendeling B' ▼
Clockwise turn - function 2	Alarmbevestiging (S) ▼
Clockwise turn - function 3	Geen functie ▼
Anti-clockwise turn	Vergrendelen (S) ▼
KS1	
Clockwise turn - function 1	Korte/lange/continue ontgrendeling B' ▼
Clockwise turn - function 2	Geen functie ▼
Clockwise turn - function 3	Geen functie ▼
Anti-clockwise turn	Vergrendelen (S) ▼
KS2	
Clockwise turn	Korte/lange/continue ontgrendeling B' ▼
Anti-clockwise turn	Vergrendelen (S) ▼
KS3	
Clockwise turn	Korte/lange/continue ontgrendeling B' ▼
Anti-clockwise turn	Vergrendelen (S) ▼
KS4	
Clockwise turn	Korte/lange/continue ontgrendeling B' ▼
Anti-clockwise turn	Vergrendelen (S) ▼

Clockwise turn selection fields:

Selection of the function. Three functions can be assigned to a clockwise turn of both the internal key

switch and ST1. Only one function can be assigned to a clockwise turn of each of the key switches ST2-4.
Default value: Short-term/long-term/permanent door release CS1 (I)

Anti-clockwise turn selection field:

Selection of the function. Only one function can ever be assigned to an anticlockwise turn of any of the key switches.

Default value: Lock (S).

SVP functions

This tab is used to assign functions to the anti-panic locks.

Note: An SVP can be connected as independent device or up to two SVP devices can be connected to a TMS device.

Basic functions

Release/Lock - via profile cylinder

Korte ontgrendeling B1 (I)

Release/Lock - via SVP lock

Geen functie

Automatic SVP release

☒

Local alarm when handle is operated

☒

Activate/deactivate SVP/ED or SVP/ED unlocked

Disable automatic SVP/ED release on smoke alarm

SVP release on emergency stop switch activation

☒

SVP type

SVP type SVP6xx operating current

In-/Output SVP1

Input 1

Radarmelder (I)

Input 2

Geen functie

Output 1

Aansturing ED250-impuls (O)

Mode

Monoflopfunctie

Time (1-255 sec)

1

Output 2

Aansturing ED250-radar (O)

Mode

Normale werking aan/uit

Time (1-255 sec)

1

In-/Output SVP2

Input 1

Geen functie

Input 2

Geen functie

Output 1

Geen functie

Mode

Normale werking aan/uit

Time (1-255 sec)

1

Output 2

Geen functie

Mode

Normale werking aan/uit

Time (1-255 sec)

1

Basic functions

Release/Lock - via profile cylinder selection field:

Selection of the function for releasing and locking via the profile cylinder.

Default value: Short-term door release CS1 (I).

Release/Lock - via SVP lock selection field:

Selection of the function for releasing and locking via the SVP lock.

Default value: no function.

Automatic SVP release checkbox:

Specifies whether automatic SVP release is used.

Default value: Activated.

Caution: This function must always be activated for fire doors.

Local alarm when handle is operated checkbox:

Specifies whether a local alarm is triggered if the handle is used.

Default value: Activated.

Activate/deactivate SVP/ED or SVP/ED released selection field:

Select which SVP/ED function should be triggered in the event of a smoke detector alarm. If fresh air

supply opening is used, the door is automatically released and opened in the event of a smoke detector alarm to allow smoke to escape from the building.

Caution: The function "SVP/ED releases as long as the smoke detector alarm is active. (fresh air supply opening)" must NOT be selected for fire doors.

SVP release on emergency stop switch activation checkbox:

Specifies whether it should be possible to trigger an SVP release via an emergency stop switch.

Default value: Activated.

SVP type selection field:

Selection of the SVP type for doors with an SVP 6xx. Select the working principle for the connectable external lever handle.

In-/Output SVP1/SVP2:

If two SVP devices are connected to one TMS device, these areas are used to specify the assignment of the inputs and outputs for SVP1 and SVP2.

Input 1/2 selection fields:

Selection of the external devices connected to input 1 or 2 of the SVP device.

Output 1/2 selection fields:

Selection of the external devices connected to output 1 or 2 of the SVP device.

Mode 1/2 selection fields:

Selection of the function mode of the components triggered via output 1 or 2 (see also the figure in the description of the "Input/Output Module" tab).

Time selection field:

Enter a time in seconds for the function of the components triggered via output 1 or 2. A time can only be specified for the modes monostable function, turn-on delay or flashing mode (monostable).

Values: 1-255 seconds. Default value: 1 second.

Special functions

The tab is used to specify the assignments of the inputs and the connected external devices as well as to edit the alarm volume and the inputs and outputs for the network variables.

Other

Note: The functions can differ depending on the specific device and software version.

The screenshot shows the 'Other' configuration tab with the following settings:

- Emergency stop switch is connected (at terminal X7) ☐
- Smoke detector is connected (at terminal X7) ☒
- Smoke detector is connected via DCW/LON/LAN ☐
- External tamper contact ☐
- External door contact ☐
- Interlock/Own function: Short-term door release CS1 (I) (dropdown menu)
- Other - relock via door contact ☐

Emergency stop switch is connected (at terminal X7) checkbox:

Specifies whether an emergency stop switch is connected to terminal X7.

Smoke detector is connected (at terminal X7) checkbox:

Specifies whether a smoke detector is connected to terminal X7.

Smoke detector is connected via DCW/LON/LAN checkbox:

Specifies whether there is a DCW, LON or LAN connection to a smoke detector.

External tamper contact checkbox:

Specifies whether an external tamper contact is connected to the TMS device.

External door contact checkbox:

Specifies whether an external door contact is connected to the TMS device.

Interlock/Own function selection field:

Selection of the release type for the interlock function.

Other - relock via door contact checkbox:

Specifies whether the door prematurely relocks in the event of door contact.

Default value: Not activated

Special mode 1 selection field:

Select the functions stored for special permissions.

TV operating mode selection field:

Select in the event of a different operating mode.

TMS switching commands from PC

TMS switching commands from PC

Command 1 - short-term door release ☒

Command 2 - long-term door release ☒

Command 3 - permanent door release ☒

Command 4 - lock ☒

Command 5 - function No function ▼

Command 5 - name Command 5

Command 5 button Switch ▼

This area can be used to activate or deactivate the switching commands for the remote operation of the door controls from the **Device status** dialog in MATRIX.

Command 1 - short-term door release checkbox:

Specifies whether the switching command for the remote operation of the short-term door release is activated.

Default value: Activated.

Command 2 - long-term door release checkbox:

Specifies whether the switching command for the remote operation of the long-term door release is activated.

Default value: Activated.

Command 3 - permanent door release checkbox:

Specifies whether the switching command for the remote operation of the permanent door release is activated.

Default value: Activated.

Command 4 - lock checkbox:

Specifies whether the switching command for the remote operation of the lock function is activated.

Default value: Activated.

Command 5 - function selection field:

Select an additional function for remote operation.

Command 5 - name input field:

Free entry of a name for the additional function for remote operation. This name is displayed on the button.

"Command 5" button selection field:

Select the execution mode for the additional function. The button can be configured as a switch or a push button.

Alarm volume

This area is used to specify the duration and volume of all signal tones.

Note in relation to ER SVP S4X LAN/LON devices: The alarm volume cannot be set for these device types.

Alarm volume			
Alarm name	Alarm duration	Automatic acknowledgement	Volume
Pre-alarm			Loud
Main alarm	☒	☒	Loud
Emergency stop switch activated	☒	☐	Loud
Casing tamper alarm	☒	☐	Loud
Tamper alarm - forced entry	☒	☐	Off
Smoke detector alarm	☒	☐	Loud
Hardware error in emergency stop circuit	☒		Loud
Handle operated	☒		Loud
Acknowledge sound for long-term door release			Loud
Acknowledge sound for permanent door release			Loud

Table

Alarm name: Name of the alarm type.

Alarm duration: Specifies whether the acoustic alarm should be automatically switched off after 90 seconds.

Default values: Activated.

Automatic acknowledgement: Specifies whether the alarm should be automatically acknowledged. This function can only be used for main alarm types.

Default values: Only activated for main alarm.

Volume: Select the alarm volume: Low, Medium, Loud or Off.

Default value: Loud.

Access Control

Access control	
Special function 1	No function
Special function 2	No function
Special function 3	Card without interlock function (!)
Door locking - simulate DL ☐	

Special function 1 to 3 selection fields:

Select the functions stored for special permissions.

Door locking - simulate TV checkbox:

This checkbox must be activated if the TMS control room is only operated as an access control.

Note: The simulation only works if no TVs are connected via the DCW bus (TVs must be disconnected).

Operation is possible with or without an external door contact. If no door contact is used, the TV (simulated) switches in line with the Release/Lock commands. If an external door contact is activated as a special function, in the event of a release the TV (simulated) switches independently of the door contact. When the "Lock" command is issued, the TV (simulated) is only activated if the door contact reports "DOOR CLOSED". Door-open monitoring is activated. If the door is opened without a release command, a tamper alarm is generated.

Input network variables

Input network variables	
nviTMSFunction 1	No function ▼
nviTMSFunction 2	No function ▼
nviTMSFunction 3	No function ▼
nviTMSFunction 4	No function ▼

Function 1 to 4 selection fields:

Select additional functions for the inputs.

Note: The network variables can only be used in connection with the LON module and a LON commissioning tool (e.g. Pathfinder).

Output network variables

Output network variables	
nvoTMSFb1	No function ▼
nvoTMSFb2	No function ▼
nvoTMSFb3	No function ▼
nvoTMSFb4	No function ▼

Function 1 to 4 selection fields:

Select additional functions for the outputs.

Note: The network variables can only be used in connection with the LON module and a LON commissioning tool (e.g. Pathfinder).

Input/output module

This tab can be used to adapt the parameters for the I/O modules.

Note: The number of modules and the use of an internal module depend on the specific device types.

The preliminary parameters can be modified in line with individual requirements.

Internal module				
Input 1	Short-term/long-term/permanent doc	Mode	Normal function on/off	Time (1-255 sec) 1
Input 2	Lock (S)	Mode	Normal function on/off	Time (1-255 sec) 1
Output 1	DL locked (O)	Mode	Normal function on/off	Time (1-255 sec) 1
Output 2	Group alarm without DCW error (O)	Mode	Normal function on/off	Time (1-255 sec) 1
Module 1				
Input 1	Short-term door release CS1 (I)			
Input 2	Long-term door release CS1 (I)			
Input 3	Permanent door release (I)			
Input 4	Lock (S)			
Output 1	Pre-alarm ("door open" alarm) (O)	Mode	Normal function on/off	Time (1-255 sec) 1
Output 2	Main alarm ("door open" alarm) (O)	Mode	Normal function on/off	Time (1-255 sec) 1
Output 3	Emergency stop switch activated (O)	Mode	Normal function on/off	Time (1-255 sec) 1
Output 4	DL locked (O)	Mode	Normal function on/off	Time (1-255 sec) 1

module:

The parameters are separately managed for each available module.

Input selection fields:

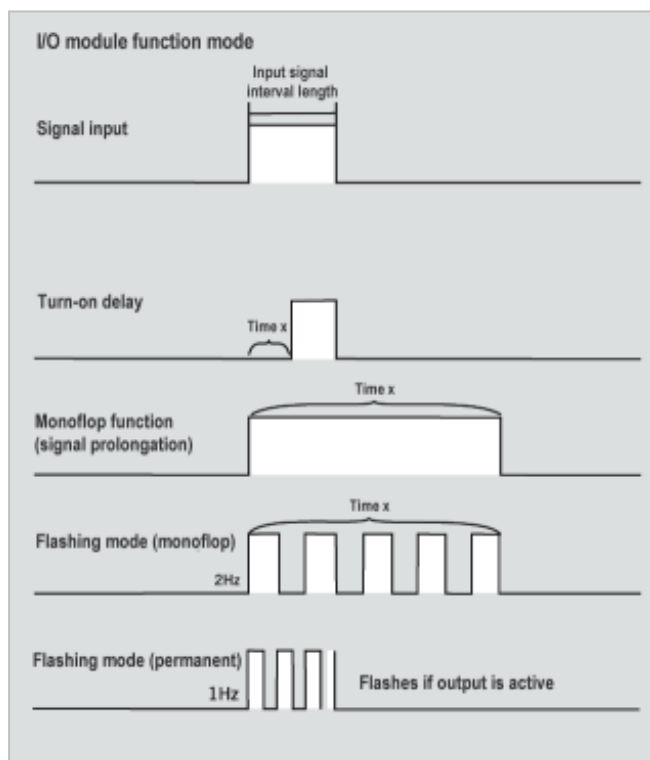
Select the external components connected to the input.

Output selection fields:

Select the external components connected to the output.

Mode selection fields:

Select the function mode of the components triggered via the adjacent output.

**Time** input fields:

Enter a time in seconds for the function of the components triggered via the adjacent inputs and outputs. A time can only be specified for the modes monostable function, turn-on delay or flashing mode (monostable).

Values: 1-255 seconds. Default value: 1 second.

Timer

This tab is used to configure the time and time zone settings for each device.

Note for TMS Basic LAN/LON devices: This tab is not available for these device types.

The screenshot shows the 'Timer' configuration interface. It is divided into two main sections. The first section, titled 'Time zone and clock change', contains two dropdown menus: 'Time zone' and 'Clock change'. The second section, titled 'Timer output functions', contains four dropdown menus: 'Timer output 1st function', 'Timer output 2nd function', 'Inverted timer output 1st function', and 'Inverted timer output 2nd function'. All dropdown menus currently display 'No function'.

Time zone and clock change

Time zone selection field:

Select the time zone.

Clock change selection field:

Select summer time. If summer time is not selected, the time is not adjusted in the device.

Timer output functions

Timer output 1st/2nd function input field:

Select the type of release at the start of a time-based switching process.

Inverted timer output 1st/2nd function input field:

Select the type of lock at the end of a time-based switching process.

Service

This tab can be used to activate a maintenance display. When triggered, the yellow LEDs on the door controls flash to indicate the upcoming maintenance by a service engineer.

Note for TMS Basic LAN/LON devices: This tab is not available for these device types.

The screenshot shows the 'Service' configuration interface. It has a title 'Maintenance'. Below the title, there is a checkbox labeled 'Activate maintenance display' which is checked. Below this, there is a date field labeled 'Maintenance alarm on' with the value '06/15/2018'. At the bottom, there is a blue button labeled 'Recalculate'.

Maintenance

Activate maintenance display checkbox:

Specifies whether a signal should be emitted on the specified date.

Maintenance alarm on date field:

Enter a date for the next maintenance alarm.

Recalculate button:

Transmits changes made to the maintenance alarm to the TMS.

5.2.7 Internal device numbers TP4

In a TP4 terminal, all internal and external components which can be administrated by the terminal are managed using internal device numbers. This also applies to the internal inputs and outputs and the inputs/outputs of the input/output modules.

The internal device numbers are used if the hardware is to be associated with a function.

For example, you need to specify in the reader function definition the input to which the door status contact is connected or the output to which the door opener contact is connected, so that the terminal can control and monitor the relevant door functions.

Allocation of inputs/outputs is subject to the structural conditions and preallocation is only possible in a few cases such as for the B6L-RR.

In almost all dialogs where you require the internal device number, you are assisted by selection fields; the selection is determined by the components set up.

Note: Prior to setting up the readers of a terminal, it is recommended that you create all input/output modules you have intended for the terminal. This enables you to instantly find the correct inputs/outputs for the reader functions when setting up the reader.

Output numbers

The table below contains the internal device numbers for the outputs.

Device	Output	Internal device number	Default function	Description
M6L/L6L/B6L/LanRTC/M6R/L6R/B6R	REL_1	1	Door relay for local web, WAP or device command booking	
	REL_2	2	Alarm relay for local web, WAP or device command booking	
B6L/B6R	REL_3	3		
	REL_4	4		
	REL_5	5		
B6L	REL_6	6		
	REL_7	7		
	REL_8	8		
M6L/L6L/B6L/LanRTC/M6R/L6R	Buzzer	9		As of TP4 FW 1.15
		11-17, 21-24, 31-34, 41-44, 51-54, 61-62, 71-72	Reserved (TP3 M6 box TP1 reader or DCW outputs)	
TP1 reader address 1	REL_1	111	Door relay for booking at TP1 reader address 1	
	REL_2	112	Alarm relay for booking at TP1 TM reader address 1	
TP1 reader address 2	REL_1	121	Door relay for booking at TP1 reader address 2	

Device	Output	Internal device number	Default function	Description
	REL_2	122	Alarm relay for booking at TP1 TM reader address 2	
TP1 reader address 3	REL_1	131	Door relay for booking at TP1 reader address 3	
	REL_2	132	Alarm relay for booking at TP1 TM reader address 3	
TP1 reader address 4	REL_1	141	Door relay for booking at TP1 reader address 4	
	REL_2	142	Alarm relay for booking at TP1 TM reader address 4	
TP1 reader address 5	REL_1	151	Door relay for booking at TP1 reader address 5	
	REL_2	152	Alarm relay for booking at TP1 TM reader address 5	
TP1 reader address 6	REL_1	161	Door relay for booking at TP1 reader address 6	
	REL_2	162	Alarm relay for booking at TP1 TM reader address 6	
TP1 reader address 7	REL_1	171	Door relay for booking at TP1 reader address 7	
	REL_2	172	Alarm relay for booking at TP1 TM reader address 7	
TP1 reader address 8	REL_1	181	Door relay for booking at TP1 reader address 8	
	REL_2	182	Alarm relay for booking at TP1 TM reader address 8	
TP1 reader address 9	REL_1	191	Door relay for booking at TP1 reader address 9	
	REL_2	192	Alarm relay for booking at TP1 TM reader address 9	
TP1 reader address 10	REL_1	201	Door relay for booking at TP1 reader address 10	
	REL_2	202	Alarm relay for booking at TP1 TM reader address 10	
TP1 reader address 11	REL_1	211	Door relay for booking at TP1 reader address 11	
	REL_2	212	Alarm relay for booking at TP1 TM reader address 11	
TP1 reader address 12	REL_1	221	Door relay for booking at TP1 reader address 12	
	REL_2	222	Alarm relay for booking at TP1 TM reader address 12	
TP1 reader address 13	REL_1	231	Door relay for booking at TP1 reader address 13	

Device	Output	Internal device number	Default function	Description
	REL_2	232	Alarm relay for booking at TP1 TM reader address 13	
TP1 reader address 14	REL_1	241	Door relay for booking at TP1 reader address 14	
	REL_2	242	Alarm relay for booking at TP1 TM reader address 14	
TP1 reader address 15	REL_1	251	Door relay for booking at TP1 reader address 15	
	REL_2	252	Alarm relay for booking at TP1 TM reader address 15	
TP1 reader address 16	REL_1	261	Door relay for booking at TP1 reader address 16	
	REL_2	262	Alarm relay for booking at TP1 TM reader address 16	
TP1 reader addresses 17-31		271-499	reserved	
DCW 2-channel I/O module 0 or DCW 4-channel I/O module 0 or DCW 3-channel input/2-channel output module (door module) in compatibility mode Address 68 (0x44) REL_3 and REL_4, only in 4-channel I/O module	REL_1	501	Door relay in conjunction with DCW reader address 160 (0xa0)	
	REL_2	502	Alarm relay in conjunction with DCW reader address 160 (0xa0)	
	REL_3	503		
	REL_4	504		
DCW 2-channel I/O module 1 or DCW 4-channel I/O module 1 or DCW 3-channel input/2-channel output module (door module) in compatibility mode Address 69 (0x45) REL_3 and REL_4, only in 4-channel I/O module	REL_1	511	Door relay in conjunction with DCW reader address 161 (0xa1)	
	REL_2	512	Alarm relay in conjunction with DCW reader address 161 (0xa1)	
	REL_3	513		
	REL_4	514		
DCW 2-channel I/O module 2 or DCW 4-channel I/O module 2 or DCW 3-channel input/2-channel output module (door module) in compatibility mode address 70 (0x46) REL_3 and REL_4, only in 4-channel I/O module	REL_1	521	Door relay in conjunction with DCW reader address 162 (0xa2)	
	REL_2	522	Alarm relay in conjunction with DCW reader address 162 (0xa2)	
	REL_3	523		
	REL_4	524		
DCW 2-channel I/O module 3 or DCW 4-channel I/O module 3 or DCW 3-channel input/2-channel output module (door module) in compatibility mode address 71 (0x47)	REL_1	531	Door relay in conjunction with DCW reader address 163 (0xa3)	

Device	Output	Internal device number	Default function	Description
REL_3 and REL_4, only in 4-channel I/O module	REL_2	532	Alarm relay in conjunction with DCW reader address 163 (0xa3)	
	REL_3	533		
	REL_4	534		
DCW 3-channel input/2-channel output module (door module) 0, address 76 (0x4C)	REL_1	506		
	REL_2	507		
DCW 3-channel input/2-channel output module (door module) 1, address 77 (0x4D)	REL_1	516		
	REL_2	517		
DCW 3-channel input/2-channel output module (door module) 2, address 78 (0x4E)	REL_1	526		
	REL_2	527		
DCW 3-channel input/2-channel output module (door module) 3, address 79 (0x4F)	REL_1	536		
	REL_2	537		
DCW 15-channel output module 0 Address 84 (0x54)	REL_1	541		
	REL_2	542		
	REL_3	543		
	REL_4	544		
	REL_5	545		
	REL_6	546		
	REL_7	547		
	REL_8	548		
	REL_9	549		
	REL_10	550		
	REL_11	551		
	REL_12	552		
	REL_13	553		
	REL_14	554		
	REL_15	555		

Device	Output	Internal device number	Default function	Description
DCW 15-channel output module 1 Adresse 85 (0x55)	REL_1	561		
	REL_2	562		
	REL_3	563		
	REL_4	564		
	REL_5	565		
	REL_6	566		
	REL_7	567		
	REL_8	568		
	REL_9	569		
	REL_10	570		
	REL_11	571		
	REL_12	572		
	REL_13	573		
	REL_14	574		
	REL_15	575		
DCW 15-channel output module 2 Address 86 (0x56)	REL_1	581		
	REL_2	582		
	REL_3	583		
	REL_4	584		
	REL_5	585		
	REL_6	586		
	REL_7	587		
	REL_8	588		
	REL_9	589		
	REL_10	590		
	REL_11	591		
	REL_12	592		
	REL_13	593		
	REL_14	594		
	REL_15	595		

Device	Output	Internal device number	Default function	Description
DCW 15-channel output module 3 Address 87 (0x57)	REL_1	601		
	REL_2	602		
	REL_3	603		
	REL_4	604		
	REL_5	605		
	REL_6	606		
	REL_7	607		
	REL_8	608		
	REL_9	609		
	REL_10	610		
	REL_11	611		
	REL_12	612		
	REL_13	613		
	REL_14	614		
	REL_15	615		
DCW ID card reader 0 address 160 (0xa0)	Buzzer	616		As of TP4 FW 1.15
DCW ID card reader 1 address 161 (0xa1)	Buzzer	617		As of TP4 FW 1.15
DCW ID card reader 2 address 162 (0xa2)	Buzzer	618		As of TP4 FW 1.15
DCW ID card reader 3 address 163 (0xa3)	Buzzer	619		As of TP4 FW 1.15
DP1 module address 1	REL_1	620		
	REL_2	621		
	REL_3	622		
	REL_4	623		
	Buzzer	624		As of TP4 FW 1.15
DP1 module address 2	REL_1	625		
	REL_2	626		
	REL_3	627		
	REL_4	628		
	Buzzer	629		As of TP4 FW 1.15

Device	Output	Internal device number	Default function	Description
DP1 module address 3	REL_1	630		
	REL_2	631		
	REL_3	632		
	REL_4	633		
	Buzzer	634		As of TP4 FW 1.15
DP1 module address 4	REL_1	635		
	REL_2	636		
	REL_3	637		
	REL_4	638		
	Buzzer	639		As of TP4 FW 1.15
DP1 module address 5	REL_1	640		
	REL_2	641		
	REL_3	642		
	REL_4	643		
	Buzzer	644		As of TP4 FW 1.15
DP1 module address 6	REL_1	645		
	REL_2	646		
	REL_3	647		
	REL_4	648		
	Buzzer	649		As of TP4 FW 1.15
DP1 module address 7	REL_1	650		
	REL_2	651		
	REL_3	652		
	REL_4	653		
	Buzzer	654		As of TP4 FW 1.15
DP1 module address 8	REL_1	655		
	REL_2	656		
	REL_3	657		
	REL_4	658		
	Buzzer	659		As of TP4 FW 1.15

Device	Output	Internal device number	Default function	Description
DP1 module address 9	REL_1	660		
	REL_2	661		
	REL_3	662		
	REL_4	663		
	Buzzer	664		As of TP4 FW 1.15
DP1 module address 10	REL_1	665		
	REL_2	666		
	REL_3	667		
	REL_4	668		
	Buzzer	669		As of TP4 FW 1.15
DP1 module address 11	REL_1	670		
	REL_2	671		
	REL_3	672		
	REL_4	673		
	Buzzer	674		As of TP4 FW 1.15
DP1 module address 12	REL_1	675		
	REL_2	676		
	REL_3	677		
	REL_4	678		
	Buzzer	679		As of TP4 FW 1.15
DP1 module address 13	REL_1	680		
	REL_2	681		
	REL_3	682		
	REL_4	683		
	Buzzer	684		As of TP4 FW 1.15
DP1 module address 14	REL_1	685		
	REL_2	686		
	REL_3	687		
	REL_4	688		
	Buzzer	689		As of TP4 FW 1.15

Device	Output	Internal device number	Default function	Description
DP1 module address 15	REL_1	690		
	REL_2	691		
	REL_3	692		
	REL_4	693		
	Buzzer	694		As of TP4 FW 1.15
DP1 module address 16	REL_1	695		
	REL_2	696		
	REL_3	697		
	REL_4	698		
	Buzzer	699		
DP1 module address 17	REL_1	700	Door relay in conjunction with a DP1 ID card reader address 1	
	REL_2	701	Alarm relay in conjunction with a DP1 ID card reader address 1	
	REL_3	702		
	REL_4	703		
	REL_5	704		
	REL_6	705		
	REL_7	706		
	REL_8	707		
	REL_9	708		
	REL_10	709		
	REL_11	710		
	REL_12	711		
	REL_13	712		
	REL_14	713		
	REL_15	714		
DP1 module address 18	REL_1	715	Door relay in conjunction with a DP1 ID card reader address 2	
	REL_2	716	Alarm relay in conjunction with a DP1 ID card reader address 2	
	REL_3	717		
	REL_4	718		
	REL_5	719		
	REL_6	720		

Device	Output	Internal device number	Default function	Description
	REL_7	721		
	REL_8	722		
	REL_9	723		
	REL_10	724		
	REL_11	725		
	REL_12	726		
	REL_13	727		
	REL_14	728		
	REL_15	729		
DP1 module address 19	REL_1	730	Door relay in conjunction with a DP1 ID card reader address 3	
	REL_2	731	Alarm relay in conjunction with a DP1 ID card reader address 3	
	REL_3	732		
	REL_4	733		
	REL_5	734		
	REL_6	735		
	REL_7	736		
	REL_8	737		
	REL_9	738		
	REL_10	739		
	REL_11	740		
	REL_12	741		
	REL_13	742		
	REL_14	743		
	REL_15	744		
DP1 module address 20	REL_1	745	Door relay in conjunction with a DP1 ID card reader address 4	
	REL_2	746	Alarm relay in conjunction with a DP1 ID card reader address 4	
	REL_3	747		
	REL_4	748		
	REL_5	749		
	REL_6	750		
	REL_7	751		

Device	Output	Internal device number	Default function	Description
	REL_8	752		
	REL_9	753		
	REL_10	754		
	REL_11	755		
	REL_12	756		
	REL_13	757		
	REL_14	758		
	REL_15	759		
DP1 module address 21	REL_1	760	Door relay in conjunction with a DP1 ID card reader address 5	
	REL_2	761	Alarm relay in conjunction with a DP1 ID card reader address 5	
	REL_3	762		
	REL_4	763		
	REL_5	764		
	REL_6	765		
	REL_7	766		
	REL_8	767		
	REL_9	768		
	REL_10	769		
	REL_11	770		
	REL_12	771		
	REL_13	772		
	REL_14	773		
	REL_15	774		
DP1 module address 22	REL_1	775	Door relay in conjunction with a DP1 ID card reader address 6	
	REL_2	776	Alarm relay in conjunction with a DP1 ID card reader address 6	
	REL_3	777		
	REL_4	778		
	REL_5	779		
	REL_6	780		
	REL_7	781		
	REL_8	782		

Device	Output	Internal device number	Default function	Description
	REL_9	783		
	REL_10	784		
	REL_11	785		
	REL_12	786		
	REL_13	787		
	REL_14	788		
	REL_15	789		
DP1 module address 23	REL_1	790	Door relay in conjunction with a DP1 ID card reader address 7	
	REL_2	791	Alarm relay in conjunction with a DP1 ID card reader address 7	
	REL_3	792		
	REL_4	793		
	REL_5	794		
	REL_6	795		
	REL_7	796		
	REL_8	797		
	REL_9	798		
	REL_10	799		
	REL_11	800		
	REL_12	801		
	REL_13	802		
	REL_14	803		
	REL_15	8804		
DP1 module address 24	REL_1	805	Door relay in conjunction with a DP1 ID card reader address 8	
	REL_2	806	Alarm relay in conjunction with a DP1 ID card reader address 8	
	REL_3	807		
	REL_4	808		
	REL_5	809		
	REL_6	810		
	REL_7	811		
	REL_8	812		
	REL_9	813		

Device	Output	Internal device number	Default function	Description
	REL_10	814		
	REL_11	815		
	REL_12	816		
	REL_13	817		
	REL_14	818		
	REL_15	819		
DP1 module address 25	REL_1	820	Door relay in conjunction with a DP1 ID card reader address 9	
	REL_2	821	Alarm relay in conjunction with a DP1 ID card reader address 9	
	REL_3	822		
	REL_4	823		
	REL_5	824		
	REL_6	825		
	REL_7	826		
	REL_8	827		
	REL_9	828		
	REL_10	829		
	REL_11	830		
	REL_12	831		
	REL_13	832		
	REL_14	833		
	REL_15	834		
DP1 module address 26	REL_1	835	Door relay in conjunction with a DP1 ID card reader address 10	
	REL_2	836	Alarm relay in conjunction with a DP1 ID card reader address 10	
	REL_3	837		
	REL_4	838		
	REL_5	839		
	REL_6	840		
	REL_7	841		
	REL_8	842		
	REL_9	843		
	REL_10	844		

Device	Output	Internal device number	Default function	Description
	REL_11	845		
	REL_12	846		
	REL_13	847		
	REL_14	848		
	REL_15	849		
DP1 module address 27	REL_1	850	Door relay in conjunction with a DP1 ID card reader address 11	
	REL_2	851	Alarm relay in conjunction with a DP1 ID card reader address 11	
	REL_3	852		
	REL_4	853		
	REL_5	854		
	REL_6	855		
	REL_7	856		
	REL_8	857		
	REL_9	858		
	REL_10	859		
	REL_11	860		
	REL_12	861		
	REL_13	862		
	REL_14	863		
	REL_15	864		
DP1 module address 28	REL_1	865	Door relay in conjunction with a DP1 ID card reader address 12	
	REL_2	866	Alarm relay in conjunction with a DP1 ID card reader address 12	
	REL_3	867		
	REL_4	868		
	REL_5	869		
	REL_6	870		
	REL_7	871		
	REL_8	872		
	REL_9	873		
	REL_10	874		
	REL_11	875		

Device	Output	Internal device number	Default function	Description
	REL_12	876		
	REL_13	877		
	REL_14	878		
	REL_15	879		
DP1 module address 29	REL_1	880	Door relay in conjunction with a DP1 ID card reader address 13	
	REL_2	881	Alarm relay in conjunction with a DP1 ID card reader address 13	
	REL_3	882		
	REL_4	883		
	REL_5	884		
	REL_6	885		
	REL_7	886		
	REL_8	887		
	REL_9	888		
	REL_10	889		
	REL_11	890		
	REL_12	891		
	REL_13	892		
	REL_14	893		
	REL_15	894		
DP1 module address 30	REL_1	895	Door relay in conjunction with a DP1 ID card reader address 14	
	REL_2	896	Alarm relay in conjunction with a DP1 ID card reader address 14	
	REL_3	897		
	REL_4	898		
	REL_5	899		
	REL_6	900		
	REL_7	901		
	REL_8	902		
	REL_9	903		
	REL_10	904		
	REL_11	905		
	REL_12	906		

Device	Output	Internal device number	Default function	Description
	REL_13	907		
	REL_14	908		
	REL_15	909		
DP1 module address 31	REL_1	910	Door relay in conjunction with a DP1 ID card reader address 15	
	REL_2	911	Alarm relay in conjunction with a DP1 ID card reader address 15	
	REL_3	912		
	REL_4	913		
	REL_5	914		
	REL_6	915		
	REL_7	916		
	REL_8	917		
	REL_9	918		
	REL_10	919		
	REL_11	920		
	REL_12	921		
	REL_13	922		
	REL_14	923		
	REL_15	924		
DP1 module address 32	REL_1	925		Address is not polled
	REL_2	926		
DP1 module address 33	REL_1	927		Address is not polled
	REL_2	928		
DP1 module address 34	REL_1	929		Address is not polled
	REL_2	930		
DP1 module address 35	REL_1	931		Address is not polled
	REL_2	932		
DP1 module address 36	REL_1	933		Address is not polled
	REL_2	934		
DP1 module address 37	REL_1	935		Address is not polled
	REL_2	936		
DP1 module address 38	REL_1	937		Address is not polled
	REL_2	938		
DP1 module address 39	REL_1	939		Address is not polled
	REL_2	940		

Device	Output	Internal device number	Default function	Description
DP1 module address 40	REL_1	941		Address is not polled
	REL_2	942		
DP1 module address 41	REL_1	943		Address is not polled
	REL_2	944		
DP1 module address 42	REL_1	945		Address is not polled
	REL_2	946		
DP1 module address 43	REL_1	947		Address is not polled
	REL_2	948		
DP1 module address 44	REL_1	949		Address is not polled
	REL_2	950		
DP1 module address 45	REL_1	951		Address is not polled
	REL_2	952		
DP1 module address 46	REL_1	953		Address is not polled
	REL_2	954		
DP1 module address 47	REL_1	955		Address is not polled
	REL_2	956		
DP1 module address 48	REL_1	957		Address is not polled
	REL_2	958		
DP1 module address 49	REL_1	959		Address is not polled
	REL_2	960		
DP1 module address 50	REL_1	961		Address is not polled
	REL_2	962		
DP1 module address 51	REL_1	963		Address is not polled
	REL_2	964		
DP1 module address 52	REL_1	965		Address is not polled
	REL_2	966		
DP1 module address 53	REL_1	967		Address is not polled
	REL_2	968		
DP1 module address 54	REL_1	969		Address is not polled
	REL_2	970		
DP1 module address 55	REL_1	971		Address is not polled
	REL_2	972		
DP1 module address 56	REL_1	973		Address is not polled
	REL_2	974		
DP1 module address 57	REL_1	975		Address is not polled
	REL_2	976		

Device	Output	Internal device number	Default function	Description
DP1 module address 58	REL_1	977		Address is not polled
	REL_2	978		
DP1 module address 59	REL_1	979		Address is not polled
	REL_2	980		
DP1 module address 60	REL_1	981		Address is not polled
	REL_2	982		
DP1 module address 61	REL_1	983		Address is not polled
	REL_2	984		
DP1 module address 62	REL_1	985		Address is not polled
	REL_2	986		

Input numbers

The table below contains the internal device numbers for the inputs.

Device	Input	Internal device number	Default function
M6L/L6L/B6L/R6L/M6R/B6R	DIN_1	1	Door contact input
	DIN_2	2	Door handle contact input
	DIN_3	3	Door opening key switch input
B6L/B6R	DIN_4	4	
B6L	DIN_5	5	
	DIN_6	6	
	DIN_7	7	
	DIN_8	8	
		11-13, 21-24, 31-34 , 41-44 , 51-54 , 61-63, 71-73	Reserved (TP3 M6 box TP1 reader or DCW inputs)
M6L/B6L/R6L/M6R/B6R	AMS	99	Anti tamper switch, if no external anti tamper switch input is defined.
TP1 reader address 1	DIN_1	111	Door contact input at TP1 reader address 1
	DIN_2	112	Door handle input at TP1 reader address 1
	DIN_3	113	Door opening key switch input at TP1 reader address 1
	AMS	119	Anti tamper switch at TP1 reader address 1
TP1 reader address 2	DIN_1	121	Door contact input at TP1 reader address 2
	DIN_2	122	Door handle input at TP1 reader address 2
	DIN_3	123	Door opening key switch input at TP1 reader address 2
	AMS	129	Anti tamper switch at TP1 reader address 2
TP1 reader address 3	DIN_1	131	Door contact input at TP1 reader address 3
	DIN_2	132	Door handle input at TP1 reader address 3
	DIN_3	133	Door opening key switch input at TP1 reader address 3
	AMS	139	Anti tamper switch at TP1 reader address 3

Device	Input	Internal device number	Default function
TP1 reader address 4	DIN_1	141	Door contact input at TP1 reader address 4
	DIN_2	142	Door handle input at TP1 reader address 4
	DIN_3	143	Door opening key switch input at TP1 reader address 4
	AMS	149	Anti tamper switch at TP1 reader address 4
TP1 reader address 5	DIN_1	151	Door contact input at TP1 reader address 5
	DIN_2	152	Door handle input at TP1 reader address 5
	DIN_3	153	Door opening key switch input at TP1 reader address 5
	AMS	159	Anti tamper switch at TP1 reader address 5
TP1 reader address 6	DIN_1	161	Door contact input at TP1 reader address 6
	DIN_2	162	Door handle input at TP1 reader address 6
	DIN_3	163	Door opening key switch input at TP1 reader address 6
	AMS	169	Anti tamper switch at TP1 reader address 6
TP1 reader address 7	DIN_1	171	Door contact input at TP1 reader address 7
	DIN_2	172	Door handle input at TP1 reader address 7
	DIN_3	173	Door opening key switch input at TP1 reader address 7
	AMS	179	Anti tamper switch at TP1 reader address 7
TP1 reader address 8	DIN_1	181	Door contact input at TP1 reader address 8
	DIN_2	182	Door handle input at TP1 reader address 8
	DIN_3	183	Door opening key switch input at TP1 reader address 8
	AMS	189	Anti tamper switch at TP1 reader address 8
TP1 reader address 9	DIN_1	191	Door contact input at TP1 reader address 9
	DIN_2	192	Door handle input at TP1 reader address 9
	DIN_3	193	Door opening key switch input at TP1 reader address 9
	AMS	199	Anti tamper switch at TP1 reader address 9
TP1 reader address 10	DIN_1	201	Door contact input at TP1 reader address 10
	DIN_2	202	Door handle input at TP1 reader address 10
	DIN_3	203	Door opening key switch input at TP1

Device	Input	Internal device number	Default function
			reader address 10
	AMS	209	Anti tamper switch at TP1 reader address 10
TP1 reader address 11	DIN_1	211	Door contact input at TP1 reader address 11
	DIN_2	212	Door handle input at TP1 reader address 11
	DIN_3	213	Door opening key switch input at TP1 reader address 11
	AMS	219	Anti-tamper switch at TP1 reader address 11
TP1 reader address 12	DIN_1	221	Door contact input at TP1 reader address 12
	DIN_2	222	Door handle input at TP1 reader address 12
	DIN_3	223	Door opening key switch input at TP1 reader address 12
	AMS	229	Anti-tamper switch at TP1 reader address 12
TP1 reader address 13	DIN_1	231	Door contact input at TP1 reader address 13
	DIN_2	232	Door handle input at TP1 reader address 13
	DIN_3	233	Door opening key switch input at TP1 reader address 13
	AM	239	Anti-tamper switch at TP1 reader address 13
TP1 reader address 14	DIN_1	241	Door contact input at TP1 reader address 14
	DIN_2	242	Door handle input at TP1 reader address 14
	DIN_3	243	Door opening key switch input at TP1 reader address 14
	AMS	249	Anti-tamper switch at TP1 reader address 14
TP1 reader address 15	DIN_1	251	Door contact input at TP1 reader address 15
	DIN_2	252	Door handle input at TP1 reader address 15
	DIN_3	253	Door opening key switch input at TP1 reader address 15
	AMS	259	Anti-tamper switch at TP1 reader address 15
TP1 reader address 16	DIN_1	261	Door contact input at TP1 reader address 16
	DIN_2	262	Door handle input at TP1 reader address 16
	DIN_3	263	Door opening key switch input at TP1 reader address 16
	AMS	269	Anti-tamper switch at TP1 reader address 16
TP1 reader address 17-32		271-499	reserved

Device	Input	Internal device number	Default function
DCW 2-channel I/O module 0 or DCW 4-channel I/O module 0 or DCW door module 0 in compatibility mode address 68 (0x44) DIN_3 only in 4-channel I/O module and in door module DIN_4 only in 4-channel I/O module	DIN_1	501	Door contact input in conjunction with DCW reader address 160 (0xa0)
	DIN_2	502	Door handle contact input in conjunction with DCW reader address 160 (0xa0)
	DIN_3	503	Door opening key switch input in conjunction with DCW reader address 160 (0xa0)
	DIN_4	504	
	AMS	505	Anti-tamper switch
DCW 2-channel I/O module 1 or DCW 4-channel I/O module 1 or DCW door module 1 in compatibility mode address 69 (0x45) DIN_3 only in 4-channel I/O module and in door module DIN_4 only in 4-channel I/O module	DIN_1	511	Door contact input in conjunction with DCW reader address 161 (0xa1)
	DIN_2	512	Door handle contact input in conjunction with DCW reader address 161 (0xa1)
	DIN_3	513	Door opening key switch input in conjunction with DCW reader address 161 (0xa1)
	DIN_4	514	
	AMS	515	Anti-tamper switch
DCW 2-channel I/O module 2 or DCW 4-channel I/O module 2 or DCW door module 2 in compatibility mode address 70 (0x46) DIN_3 only in 4-channel I/O module and in door module DIN_4 only in 4-channel I/O module	DIN_1	521	Door contact input in conjunction with DCW reader address 162 (0xa2)
	DIN_2	522	Door handle contact input in conjunction with DCW reader address 162 (0xa2)
	DIN_3	523	Door opening key switch input in conjunction with DCW reader address 162 (0xa2)
	DIN_4	524	
	AMS	525	
DCW 2-channel I/O module 3 or DCW 4-channel I/O module 3 or DCW door module 3 in compatibility mode address 71 (0x47) DIN_3 only in 4-channel I/O module and in door module DIN_4 only in 4-channel I/O module	DIN_1	531	Door contact input in conjunction with DCW reader address 163 (0xa3)
	DIN_2	532	Door handle contact input in conjunction with DCW reader address 163 (0xa3)
	DIN_3	533	Door opening key switch input in conjunction with DCW reader address 163 (0xa3)
	DIN_4	534	
	AMS	535	Anti-tamper switch
DCW 3-channel input/2-channel output module (door module) 0, address 76 (0x4C)	DIN_1	506	
	DIN_2	507	
	DIN_3	508	
	AMS	509	Anti-tamper switch
DCW 3-channel input/2-channel output module (door module) 0, address 77 (0x4D)	DIN_1	516	
	DIN_2	517	
	DIN_3	518	
	AMS	519	Anti-tamper switch
DCW 3-channel input/2-channel output module (door module) 0, address 78 (0x4E)	DIN_1	526	
	DIN_2	527	
	DIN_3	528	
	AMS	529	Anti-tamper switch

Device	Input	Internal device number	Default function
DCW 3-channel input/2-channel output module (door module) 0, address 79 (0x4F)	DIN_1	536	
	DIN_2	537	
	DIN_3	538	
	AMS	539	Anti-tamper switch
DCW 15-channel input module 0 address 80 (0x50)	DIN_1	541	
	DIN_2	542	
	DIN_3	543	
	DIN_4	544	
	DIN_5	545	
	DIN_6	546	
	DIN_7	547	
	DIN_8	548	
	DIN_9	549	
	DIN_10	550	
	DIN_11	551	
	DIN_12	552	
	DIN_13	553	
	DIN_14	554	
	DIN_15	555	
DCW 15-channel input module 1 address 81 (0x51)	DIN_1	561	
	DIN_2	562	
	DIN_3	563	
	DIN_4	564	
	DIN_5	565	
	DIN_6	566	
	DIN_7	567	
	DIN_8	568	
	DIN_9	569	
	DIN_10	570	
	DIN_11	571	
	DIN_12	572	
	DIN_13	573	
	DIN_14	574	
	DIN_15	575	
DCW 15-channel input module 2 address 82 (0x52)	DIN_1	581	
	DIN_2	582	
	DIN_3	583	
	DIN_4	584	
	DIN_5	585	
	DIN_6	586	
	DIN_7	587	
	DIN_8	588	
	DIN_9	589	
	DIN_10	590	
	DIN_11	591	
	DIN_12	592	
	DIN_13	593	
	DIN_14	594	
	DIN_15	595	

Device	Input	Internal device number	Default function
DCW 15-channel input module 3 address 83 (0x53)	DIN_1	601	
	DIN_2	602	
	DIN_3	603	
	DIN_4	604	
	DIN_5	605	
	DIN_6	606	
	DIN_7	607	
	DIN_8	608	
	DIN_9	609	
	DIN_10	610	
	DIN_11	611	
	DIN_12	612	
	DIN_13	613	
	DIN_14	614	
	DIN_15	615	
DCW ID card reader 0 address 160 (0xa0)	AMS	616	Anti-tamper switch
DCW ID card reader 1 address 161 (0xa1)	AMS	617	Anti-tamper switch
DCW ID card reader 2 address 162 (0xa2)	AMS	618	Anti-tamper switch
DCW ID card reader 3 address 163 (0xa3)	AMS	619	Anti-tamper switch
DP1 module address 1	DIN_1	620	
	DIN_2	621	
	DIN_3	622	
	DIN_4	623	
	AMS	624	Anti-tamper switch
DP1 module address 2	DIN_1	625	
	DIN_2	626	
	DIN_3	627	
	DIN_4	628	
	AMS	629	Anti-tamper switch
DP1 module address 3	DIN_1	630	
	DIN_2	631	
	DIN_3	632	
	DIN_4	633	
	AMS	634	Anti-tamper switch
DP1 module address 4	DIN_1	635	
	DIN_2	636	
	DIN_3	637	
	DIN_4	638	
	AMS	639	Anti-tamper switch
DP1 module address 5	DIN_1	640	
	DIN_2	641	
	DIN_3	642	
	DIN_4	643	
	AMS	644	Anti-tamper switch

Device	Input	Internal device number	Default function
DP1 module address 6	DIN_1	645	
	DIN_2	646	
	DIN_3	647	
	DIN_4	648	
	AMS	649	Anti-tamper switch
DP1 module address 7	DIN_1	650	
	DIN_2	651	
	DIN_3	652	
	DIN_4	653	
	AMS	654	Anti-tamper switch
DP1 module address 8	DIN_1	655	
	DIN_2	656	
	DIN_3	657	
	DIN_4	658	
	AMS	659	Anti-tamper switch
DP1 module address 9	DIN_1	660	
	DIN_2	661	
	DIN_3	662	
	DIN_4	663	
	AMS	664	Anti-tamper switch
DP1 module address 10	DIN_1	665	
	DIN_2	666	
	DIN_3	667	
	DIN_4	668	
	AMS	669	Anti-tamper switch
DP1 module address 11	DIN_1	670	
	DIN_2	671	
	DIN_3	672	
	DIN_4	673	
	AMS	674	Anti-tamper switch
DP1 module address 12	DIN_1	675	
	DIN_2	676	
	DIN_3	677	
	DIN_4	678	
	AMS	679	Anti-tamper switch
DP1 module address 13	DIN_1	680	
	DIN_2	681	
	DIN_3	682	
	DIN_4	683	
	AMS	684	Anti-tamper switch
DP1 module address 14	DIN_1	685	
	DIN_2	686	
	DIN_3	687	
	DIN_4	688	
	AMS	689	Anti-tamper switch

Device	Input	Internal device number	Default function
DP1 module address 15	DIN_1	690	
	DIN_2	691	
	DIN_3	692	
	DIN_4	693	
	AMS	694	Anti-tamper switch
DP1 module address 16	DIN_1	695	
	DIN_2	696	
	DIN_3	697	
	DIN_4	698	
	AMS	699	Anti-tamper switch
DP1 module address 17	DIN_1	700	Door contact input in conjunction with a DP1 ID card reader address 1
	DIN_2	701	Door handle contact input in conjunction with one DP1 ID card reader address 1
	DIN_3	702	Door opening key switch input in conjunction with one DP1 ID card reader address 1
	DIN_4	703	
	DIN_5	704	
	DIN_6	705	
	DIN_7	706	
	DIN_8	707	
	DIN_9	708	
	DIN_10	709	
	DIN_11	710	
	DIN_12	711	
	DIN_13	712	
	DIN_14	713	
	DIN_15	714	
	AMS	925	Anti-tamper switch
DP1 module address 18	DIN_1	715	Door contact input in conjunction with a DP1 ID card reader address 2
	DIN_2	716	Door handle contact input in conjunction with one DP1 ID card reader address 2
	DIN_3	717	Door opening key switch input in conjunction with one DP1 ID card reader address 2
	DIN_4	718	
	DIN_5	719	
	DIN_6	720	
	DIN_7	721	
	DIN_8	722	
	DIN_9	723	
	DIN_10	724	
	DIN_11	725	
	DIN_12	726	
	DIN_13	727	
	DIN_14	728	
	DIN_15	729	
	AMS	926	Anti-tamper switch
DP1 module address 19	DIN_1	730	Door contact input in conjunction with a

Device	Input	Internal device number	Default function
			DP1 ID card reader address 3
	DIN_2	731	Door handle contact input in conjunction with one DP1 ID card reader address 3
	DIN_3	732	Door opening key switch input in conjunction with one DP1 ID card reader address 3
	DIN_4	733	
	DIN_5	734	
	DIN_6	735	
	DIN_7	736	
	DIN_8	737	
	DIN_9	738	
	DIN_10	739	
	DIN_11	740	
	DIN_12	741	
	DIN_13	742	
	DIN_14	743	
	DIN_15	744	
	AMS	927	Anti-tamper switch
DP1 module address 20	DIN_1	745	Door contact input in conjunction with a DP1 ID card reader address 4
	DIN_2	746	Door handle contact input in conjunction with one DP1 ID card reader address 4
	DIN_3	747	Door opening key switch input in conjunction with one DP1 ID card reader address 4
	DIN_4	748	
	DIN_5	749	
	DIN_6	750	
	DIN_7	751	
	DIN_8	752	
	DIN_9	753	
	DIN_10	754	
	DIN_11	755	
	DIN_12	756	
	DIN_13	757	
	DIN_14	758	
	DIN_15	759	
	AMS	928	Anti-tamper switch
DP1 module address 21	DIN_1	760	Door contact input in conjunction with a DP1 ID card reader address 5
	DIN_2	761	Door handle contact input in conjunction with one DP1 ID card reader address 5
	DIN_3	762	Door opening key switch input in conjunction with one DP1 ID card reader address 5
	DIN_4	763	
	DIN_5	764	
	DIN_6	765	
	DIN_7	766	

Device	Input	Internal device number	Default function
	DIN_8	767	
	DIN_9	768	
	DIN_10	769	
	DIN_11	770	
	DIN_12	771	
	DIN_13	772	
	DIN_14	773	
	DIN_15	774	
	AMS	929	Anti-tamper switch
DP1 module address 22	DIN_1	775	Door contact input in conjunction with a DP1 ID card reader address 6
	DIN_2	776	Door handle contact input in conjunction with one DP1 ID card reader address 6
	DIN_3	777	Door opening key switch input in conjunction with one DP1 ID card reader address 6
	DIN_4	778	
	DIN_5	779	
	DIN_6	780	
	DIN_7	781	
	DIN_8	782	
	DIN_9	783	
	DIN_10	784	
	DIN_11	785	
	DIN_12	786	
	DIN_13	787	
	DIN_14	788	
	DIN_15	789	
	AMS	930	Anti-tamper switch
DP1 module address 23	DIN_1	790	Door contact input in conjunction with a DP1 ID card reader address 7
	DIN_2	791	Door handle contact input in conjunction with one DP1 ID card reader address 7
	DIN_3	792	Door opening key switch input in conjunction with one DP1 ID card reader address 7
	DIN_4	793	
	DIN_5	794	
	DIN_6	795	
	DIN_7	796	
	DIN_8	797	
	DIN_9	798	
	DIN_10	799	
	DIN_11	800	
	DIN_12	801	
	DIN_13	802	
	DIN_14	803	
	DIN_15	804	
	AMS	931	Anti-tamper switch
DP1 module address 24	DIN_1	805	Door contact input in conjunction with a DP1 ID card reader address 8

Device	Input	Internal device number	Default function
	DIN_2	806	Door handle contact input in conjunction with one DP1 ID card reader address 8
	DIN_3	807	Door opening key switch input in conjunction with one DP1 ID card reader address 8
	DIN_4	808	
	DIN_5	809	
	DIN_6	810	
	DIN_7	811	
	DIN_8	812	
	DIN_9	813	
	DIN_10	814	
	DIN_11	815	
	DIN_12	816	
	DIN_13	817	
	DIN_14	818	
	DIN_15	819	
	AMS	932	Anti-tamper switch
DP1 module address 25	DIN_1	820	Door contact input in conjunction with a DP1 ID card reader address 9
	DIN_2	821	Door handle contact input in conjunction with one DP1 ID card reader address 9
	DIN_3	822	Door opening key switch input in conjunction with one DP1 ID card reader address 9
	DIN_4	823	
	DIN_5	824	
	DIN_6	825	
	DIN_7	826	
	DIN_8	827	
	DIN_9	828	
	DIN_10	829	
	DIN_11	830	
	DIN_12	831	
	DIN_13	832	
	DIN_14	833	
	DIN_15	834	
	AMS	933	Anti-tamper switch
DP1 module address 26	DIN_1	835	Door contact input in conjunction with a DP1 ID card reader address 10
	DIN_2	836	Door handle contact input in conjunction with one DP1 ID card reader address 10
	DIN_3	837	Door opening key switch input in conjunction with one DP1 ID card reader address 10
	DIN_4	838	
	DIN_5	839	
	DIN_6	840	
	DIN_7	841	
	DIN_8	842	

Device	Input	Internal device number	Default function
	DIN_9	843	
	DIN_10	844	
	DIN_11	845	
	DIN_12	846	
	DIN_13	847	
	DIN_14	848	
	DIN_15	849	
	AMS	934	Anti-tamper switch
DP1 module address 27	DIN_1	850	Door contact input in conjunction with a DP1 ID card reader address 11
	DIN_2	851	Door handle contact input in conjunction with one DP1 ID card reader address 11
	DIN_3	852	Door opening key switch input in conjunction with one DP1 ID card reader address 11
	DIN_4	853	
	DIN_5	854	
	DIN_6	855	
	DIN_7	856	
	DIN_8	857	
	DIN_9	858	
	DIN_10	859	
	DIN_11	860	
	DIN_12	861	
	DIN_13	862	
	DIN_14	863	
	DIN_15	864	
	AMS	935	Anti-tamper switch
DP1 module address 28	DIN_1	865	Door contact input in conjunction with a DP1 ID card reader address 12
	DIN_2	866	Door handle contact input in conjunction with one DP1 ID card reader address 12
	DIN_3	867	Door opening key switch input in conjunction with one DP1 ID card reader address 12
	DIN_4	868	
	DIN_5	869	
	DIN_6	870	
	DIN_7	871	
	DIN_8	872	
	DIN_9	873	
	DIN_10	874	
	DIN_11	875	
	DIN_12	876	
	DIN_13	877	
	DIN_14	878	
	DIN_15	879	
	AMS	936	Anti-tamper switch
DP1 module address 29	DIN_1	880	Door contact input in conjunction with a DP1 ID card reader address 13
	DIN_2	881	Door handle contact input in conjunction

Device	Input	Internal device number	Default function
			with one DP1 ID card reader address 13
	DIN_3	882	Door opening key switch input in conjunction with one DP1 ID card reader address 13
	DIN_4	883	
	DIN_5	884	
	DIN_6	885	
	DIN_7	886	
	DIN_8	887	
	DIN_9	888	
	DIN_10	889	
	DIN_11	890	
	DIN_12	891	
	DIN_13	892	
	DIN_14	893	
	DIN_15	894	
	AMS	937	Anti-tamper switch
DP1 module address 30	DIN_1	895	Door contact input in conjunction with a DP1 ID card reader address 14
	DIN_2	896	Door handle contact input in conjunction with one DP1 ID card reader address 14
	DIN_3	897	Door opening key switch input in conjunction with one DP1 ID card reader address 14
	DIN_4	898	
	DIN_5	899	
	DIN_6	900	
	DIN_7	901	
	DIN_8	902	
	DIN_9	903	
	DIN_10	904	
	DIN_11	905	
	DIN_12	906	
	DIN_13	907	
	DIN_14	908	
	DIN_15	909	
	AMS	938	Anti-tamper switch
DP1 module address 31	DIN_1	910	Door contact input in conjunction with a DP1 ID card reader address 15
	DIN_2	911	Door handle contact input in conjunction with one DP1 ID card reader address 15
	DIN_3	912	Door opening key switch input in conjunction with one DP1 ID card reader address 15
	DIN_4	913	
	DIN_5	914	
	DIN_6	915	
	DIN_7	916	
	DIN_8	917	
	DIN_9	918	

Device	Input	Internal device number	Default function
	DIN_10	919	
	DIN_11	920	
	DIN_12	921	
	DIN_13	922	
	DIN_14	923	
	DIN_15	924	
	AMS	939	Anti-tamper switch
DP1 module address 32	AMS	940	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 33	AMS	941	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 34	AMS	942	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 35	AMS	943	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 36	AMS	944	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 37	AMS	945	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 38	AMS	946	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 39	AMS	947	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 40	AMS	948	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 41	AMS	949	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 42	AMS	950	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 43	AMS	951	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 44	AMS	952	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 45	AMS	953	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 46	AMS	954	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 47	AMS	955	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 48	AMS	956	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 49	AMS	957	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 50	AMS	958	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 51	AMS	959	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 52	AMS	960	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 53	AMS	961	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 54	AMS	962	Anti tamper switch, address is not polled

Device	Input	Internal device number	Default function
			(as of 2.03)
DP1 module address 55	AMS	963	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 56	AMS	964	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 57	AMS	965	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 58	AMS	966	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 59	AMS	967	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 60	AMS	968	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 61	AMS	969	Anti tamper switch, address is not polled (as of 2.03)
DP1 module address 62	AMS	970	Anti tamper switch, address is not polled (as of 2.03)

5.3 Device status

The **Device state** dialog provides information about the connection (online status) and data status of the devices as well as the status of the inputs and outputs of the devices set up and the components connected.

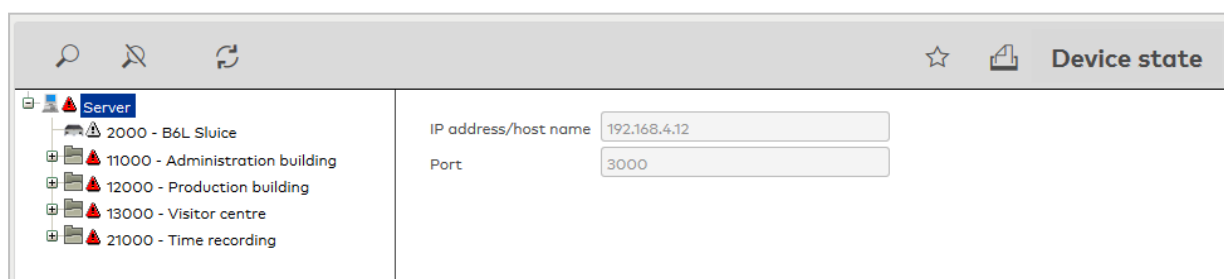
Note: The status of the input/outputs can only be queried if the devices are active and online. Moreover, the data status should be up to date. If this is not the case, first load the device with the current data.

"Device status" dialog

The left-hand area of the **Device state** dialog displays the terminals according to the device administration tree structure. The right-hand area contains the device-specific information.

Click the required element in the device tree. The device-specific dialog opens in the right-hand window section and displays the information for the selected device.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



The dialog layout depends on the device types and may, therefore, deviate from the details given in the description.

Device tree

The device tree on the left of the dialog is structured in the same way as device management.

Warning symbols indicate device status deviations.

	The device is not activated.	Activate the device: Click Devices in the menu tree followed by the device and select the Active checkbox.
	The device is not properly loaded with data.	Load the data: Click Devices in the menu tree followed by the device and then the Load/display terminal button.
	The device is not operational.	Check the details: Click Devices in the menu tree followed by the device and then the Load/display terminal button to obtain additional information.

Dialog header

The header data on the right of the dialog contains the number and names of the device, information about the installed firmware version and various pieces of status information.

Number	7000	 M6L - terminal
Name	M6L	
Short name		
State	■ Online	
Last offline/online switch	27 Jun 2019, 11:08:07	
Start loading	27/6/2019 11:21:06	
Stop loading	27/6/2019 11:21:15	
Battery status	Good	
Firmware version	TP4Firmw 2.16 24.03.2017	Firmware transferred to terminal
Device state I/O state		

State display field:

Indicates the current state of the connection between the device and the terminal manager (online status).

	Online	The device is listed as "Online" in the terminal manager. It sends the monitoring message at regular intervals.	
	Offline	The device is listed as "Offline" in the terminal manager. No monitoring messages are received from the device.	Possible causes: • Device not connected • Connection data such as IP address or port incorrect • Firewall preventing connection • Other network components defective or incorrectly configured • Physical defects of devices or cables • Temporary maintenance work
	Inactive	The device is marked as inactive. There is no communication with the device. The terminal manager is not accepting jobs for the device.	Possible cause: • The device is not activated

Last offline/online switch display:

Displays the last switch between online and offline status.

Start loading display:
Contains the time at which the device's last loading process was manually started in the **Load/display terminal** dialog (data loading).

Stop loading display:
Contains the time at which the device's last loading process was finished.

Battery status display:
Contains the state of the battery if the device has one.
Good = The battery status is good.
Critical = The battery status is critical and it should be replaced.

Firmware version display:
Contains the firmware version for the terminal.

Firmware transferred to terminal button:
Opens a pop-up dialog for selecting and transferring the current firmware version. This function is only available for update-enabled DP1 components.

evolo wireless gateway 9040 commissioning mode

The commissioning mode can be activated via the **Device status** dialog for evolo wireless components.

Wireless commissioning

ActivateDeactivate

Setup duration in minutes90

Wireless commissioning status■ inactive

Wireless commissioning buttons:

- Activate:**
Activates commissioning mode. This mode remains active for the stated setup duration, during which time further components can be connected without switching the mode again.
- Deactivate:**
Ends commissioning mode.

Setup duration in minutes input field:
Enter the period in minutes for which commissioning mode remains active until it is automatically switched off.

Wireless commissioning status display:
Displays the current state of commissioning.

■ Active	Commissioning mode is active.	It is switched off automatically after the stated setup duration has expired. To end commissioning mode immediately, click the Deactivate button.
■ Active – unsupported mode	The gateway commissioning mode is activated in modes that are not supported by Matrix.	To activate commissioning mode, click the Deactivate button and then Activate .
■ Inactive	Commissioning mode is not active.	To activate commissioning mode, click the activate button.

dormakaba terminal configuration data

The **Device state** dialog for dormakaba terminals contains additional buttons for reading and writing device configuration files and system keys.

Configuration file	Load from terminal	Transfer to terminal
Apply system key from master medium	Activate	Deactivate
Fabrication key replacement	Activate	Deactivate

Configuration file:

This functionality allows customised display layouts to be loaded onto the terminals. To do this, the configuration files must first be loaded from the terminal. The resulting zip file is saved on the user's computer. Once they have been customised, the files can be transferred back to the terminal. To do this, the files to be transferred must be provided as a zip file.

Load from terminal button:

Creates a zip file containing the files from the terminal and opens then in a Save-As dialog.

The files are dormakaba-terminal-specific files with the file types INI, PNG and OGG and include the TM licence file sop.ini. They are transferred via FTP.

The names of the files are as follows:

- /data/data/com.kaba.apps.ba/files/audio/*
- /data/data/com.kaba.apps.ba/files/images/*
- /data/data/com.kaba.apps.ba/files/init/*
- /data/data/com.kaba.apps.hr/files/init/*

Transfer to terminal button:

Opens a file selection window for transferring the processed zip file to the terminal.

The following files are transferred to the terminal from the selected zip file:

- /data/data/com.kaba.apps.ba/files/audio/beep-error.ogg // Audio file for error signal,
- /data/data/com.kaba.apps.ba/files/audio/beep-ok-long.ogg // Audio file for OK signal.
- /data/data/com.kaba.apps.ba/files/audio/beep-ok-short.ogg // Audio file for short OK signal.
- /data/data/com.kaba.apps.ba/files/audio/LegicLaunchingDataProcessedSound.ogg // Audio file Legic OK
- /data/data/com.kaba.apps.ba/files/audio/LegicLaunchingErrorSound.ogg // Audio file Legic error
- /data/data/com.kaba.apps.ba/files/audio/LegicLaunchingStartSound.ogg // Audio file Legic start
- /data/data/com.kaba.apps.ba/files/images/*.png // Graphics for display layout
- /data/data/com.kaba.apps.hr/files/init/interface.ini // Display layout
- /data/data/com.kaba.apps.hr/files/init/sop.ini // Terminal licence file

Apply system key from master medium:

see also: Information on transferring ID card keys can be found under [Working with master media and master medium keys](#)

Activate button:

Activates applying the system key from the master medium.

Deactivate button:

Deactivates applying the key from the master medium.

Replace fabrication key:**Activate button:**

Activates fabrication key replacement in Mifare user media.

Deactivate button:

Deactivates fabrication key replacement in Mifare user media.

"Device state" tab

The **Device state** tab contains a table of the most important information concerning the connected components.

Number	Name	Bus	DCW	Address	Type	State	Last offline/online switch	Software version	Update firmware
7000	M6L	Internal		1	Reader	 Online	27 Jun 2019, 11:10:31		
7015	CL 9104	KCP		1	Reader	 Offline			
7017	RLP 9115	KCP		2	Reader	 Offline			

[Transfer firmware to components](#)

Number column:

Contains the component's unique number.

Name column:

Contains the component's name.

Bus column:

Contains the bus type via which the component is connected to the device.

DCW column:

Contains the component name if this is connected to the device via the DCW bus.

Address column:

Contains the address on the bus.

Type column:

Contains the component type.

State column:

Indicates the current state of the connection between the device and the terminal manager (online status).

 Online	The device is listed as "Online" in the terminal manager. It sends the monitoring message at regular intervals.	
 Offline	The device is listed as "Offline" in the terminal manager. No monitoring messages are received from the device.	Possible causes: • Device not connected • Connection data such as IP address or port incorrect • Firewall preventing connection • Other network components defective or incorrectly configured • Physical defects of devices or cables • Temporary maintenance work
 Inactive	The device is marked as inactive. There is no communication with the device. The terminal manager is not accepting jobs for the device.	Possible cause: • The device is not activated

Last offline/online switch column:

Displays the last switch between online and offline status.

Firmware version column:

Contains the component firmware version.

Update firmware column:

Selection for a simultaneous firmware update for multiple devices. Only update-enabled DP1 and KCP components can be updated.

Firmware transferred to components button:

Launches the transfer of firmware to the selected components.

Device status at the evolo wireless gateway

The table also shows the signal strength (RSSI value) of all components connected to an evolo wireless gateway.

	RSSI $\geq$ -85
	RSSI $<$ -85 and $\geq$ -90
	RSSI $<$ -90
	RSSI unknown

Note: The display does not include wireless extenders. If an evolo component is connected to a wireless gateway via an extender, the RSSI value between the evolo component and extender is displayed. If malfunctions occur despite the displayed RSSI being adequate, the signal strength between the extender and the gateway may be too weak.

"I/O status" tab

The **I/O status** tab displays all internal inputs and outputs of the device and all components connected to the inputs and outputs.

Note: The display is always up-to-date when invoking and can be refreshed via the toolbar any time.

 Intern				
	inverted	Contact assigned to	Assignment	State
Input 1	☐			 inactive
Input 2	☐			 inactive
Input 3	☐			 inactive
Output 1				 inactive
Output 2				 inactive

Internal and components display:

Displays the internal inputs and outputs and the connected components along with the identifiers of the input inversion, allocated readers and their assignment.

Devices/components display:

Displays the device with an image and its name. The bus address is additionally displayed for input/output modules.

Tables:

Inputs/outputs display:

All inputs and outputs of the device are displayed.

Inverted display:

Indicate whether the input level is inverted.

Contact assigned to display:

Displays all components such as readers, interlocks or intruder detection systems that use the input or output. If the display is blank, none of the components use the input or output.

Assignment display:

Displays the assigned function of the input or output specified by the allocated component.

Status display:

The status of the input or output is displayed.

 Active	The digital input or relay is activated.	
 Inactive	The digital input or relay is not activated.	
 Unknown	The status cannot be requested by the device.	This is usually the case if the device is not active or is offline. Check the online/offline status of the device.

5.4 Class administration

The various device classes are managed in class administration. The device classes summarise the properties of a group of devices with the same functions and the same hardware properties.

They make creating and defining terminals and offline components easier in the device definition.

Use the **Classes** menu item to manage the device classes.

Use the **Class setting** sub-menu for additional settings that are referred to in the classes or which define additional properties and functions of the devices.

Use the **ID card types** menu item to manage the ID card types that are used in your company.

Use the **Master media** menu item to manage the master media for the evolo components.

Use the **Radio key** menu item to define which radio key is to be used for communication with the radio components.

Use the **LEGIC configuration packages** menu item is used to manage the configuration packages (VCPs) of a LEGIC Mobile Access Connector.

5.4.1 Classes

The device classes summarise the properties of a group of devices with the same functions and the same hardware properties.

Note: The device classes can only be displayed and maintained if the terminal manager has been started as it manages the device classes directly. However, this usually occurs when your system starts.

"Selection classes" dialog

The **Selection Classes** dialog displays all available device classes. These classes are required for the device definition.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

☐	Number	Name	Class type	Memory type	Delete
☐	1	XS	XS terminal class	System	
☐	2	MATRIX AIR	MATRIX AIR terminal class	System	
☐	5	evolo	evolo terminal class	System	
☐	21	Lampentableau	LED attendance display class	System	
☐	100	TP4-LAN-RTC	TP4 LAN class	System	
☐	101	TP4-LAN-Access	TP4 LAN class	System	
☐	102	TP4-LAN-Time	TP4 LAN class	System	
☐	103	TP4-LAN-Access+Time	TP4 LAN class	System	
☐	104	TP4-LAN-AoC	TP4 LAN class	System	
☐	201	TP4-2-wire-Access	TP4 2-wire class	System	
☐	202	TP4-2-wire-Time	TP4 2-wire class	System	
☐	203	TP4-2-wire-Access+Time	TP4 2-wire class	System	
☐	400	Kaba Terminal	Kaba terminal class	System	

Number of records: 13

Class type column:

Contains the class's type.

Memory type column:

Indicates how the class was created.

Possible memory types:

- System: classes created during installation which cannot be changed or deleted. Changes to these classes are saved under the type "Overwritten".
- Overwritten: classes derived from the classes of the system type.
- User: new classes created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New terminal class" dialog

The **New terminal class** dialog displays the available class types. Select a class to transfer the default settings for this class to the **Modify Classes** dialog. Adjustable parameters depend on the class properties.

Use the **Back to selection** button to return to the selection dialog.

New terminal class

Class type
XS terminal class
TP4 LAN class
TP4 2-wire class
TP3 LAN class
TP3 2-wire class
LED attendance display class
Kaba terminal class
evolo terminal class
B-COMM terminal class

Class type column:

Contains the name for the available types. Click the required class types to create a new class.

"Edit class" dialog

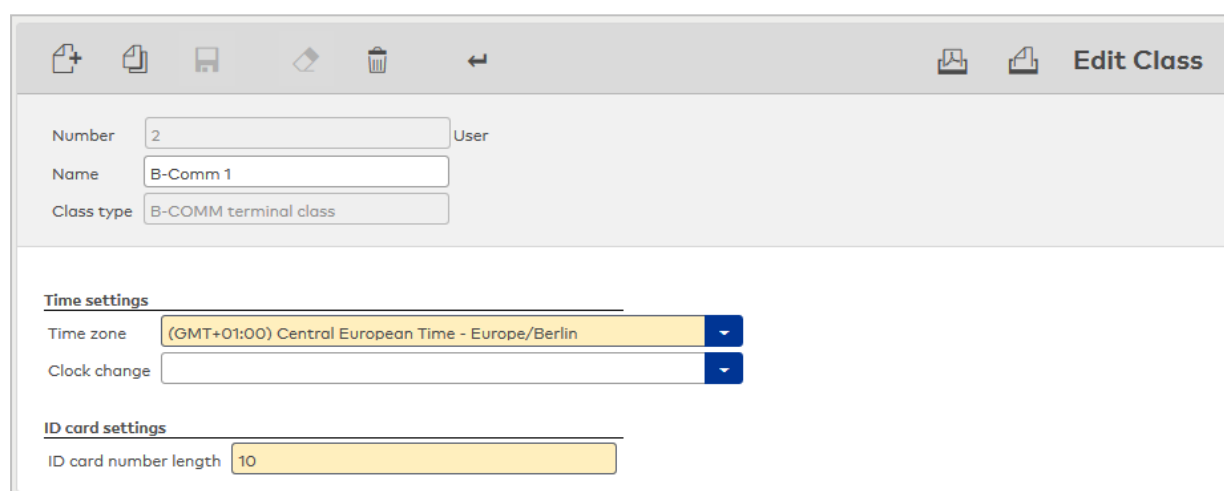
Use the **Edit class** dialogs to create new device classes depending on the class types and edit existing device classes. Each device class requires a unique number; it is recommended that you specify a name.

The configurable parameters depend on the hardware properties and wiring of the device.

"Edit class" dialog - B-COMM terminal

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.



The screenshot shows the 'Edit Class' dialog box. At the top, there is a toolbar with icons for adding, saving, deleting, and undoing. The main area contains the following fields:

- Number:** 2
- Name:** B-Comm 1
- Class type:** B-COMM terminal class
- Time settings:**
 - Time zone:** (GMT+01:00) Central European Time - Europe/Berlin
 - Clock change:** (empty dropdown)
- ID card settings:**
 - ID card number length:** 10

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Time settings:

To transfer the clock time from the server to the terminal it is necessary to specify the time zone of the terminal to take a possible time difference into account. The clock change must be specified for the terminal, if it should perform the changeover itself.

Time zone selection field:

Contains the time zone in which the terminal is located. The time zone must be specified when the clock time is transferred from the server to the terminal to take the time difference into account.

Options:

- All available time zones.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

ID card settings:

Lets you set the booking characteristics.

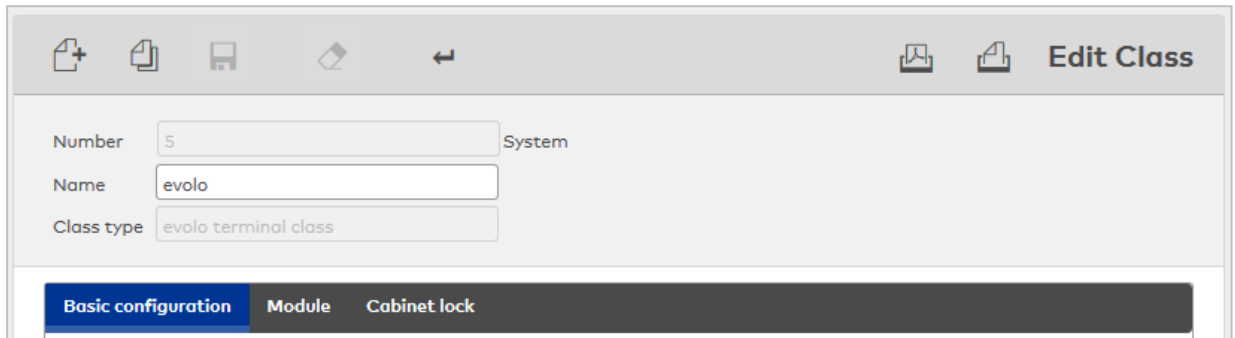
ID card number length input field:

The input must match the ID card length defined for the terminal in B-COMM.

"Edit Class" dialog – evolo

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.



The screenshot shows the 'Edit Class' dialog box. At the top, there is a toolbar with icons for adding, deleting, saving, and undoing, followed by a 'Print' icon and the title 'Edit Class'. Below the toolbar, there are three input fields: 'Number' with the value '5', 'Name' with the value 'evolo', and 'Class type' with the value 'evolo terminal class'. To the right of the 'Number' field is a 'System' label. At the bottom, there is a tabbed interface with three tabs: 'Basic configuration' (which is selected and highlighted in blue), 'Module', and 'Cabinet lock'.

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

"Basic configuration" tab

Use this tab to set the parameters for the basic configuration of the device.

Time zone and clock change

Time zone
(GMT+01:00) Central European Standard Time - Europe/Berlin

Clock change
1 - GMT +1:00 Central Europe

Signalling

Authorised beep

☐

Not authorised beep

☒

Light ring

☒

History log

History log

☒

Bolt recreation time

Bolt recreation time
30
Minutes

OiF interval configuration

☒ Fixed

OiF interval (ms)

☐ Variable

Idle time before adjustment (min.)

Start value for OiF interval (ms)

Bluetooth and Mobile Access parameter

Mobile Access: activate NFC

☐

Mobile Access: activate Bluetooth

☐

Bluetooth scan duration (ms)

RSSI filter (dBm)

DoC parameter

Number of DoC cards on which the same data type will be written in sequence
3

Time zone and clock change

The time zone of the terminal is required for correct communication between the server and the terminal.

Time zone selection field:

Contains the time zone in which the terminal is located. The time zone must be specified when the clock time is transferred from the server to the terminal to take the time difference into account.

Options:

- All available time zones.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

Signalling

The various signals are defined in this block.

Authorised beep checkbox:

Switches the audible signal for authorised access on or off.

Options:

- Activated: The audible signal for authorised access bookings is switched on.
- Not activated: The audible signal is switched off.

Default: Not activated.

Not authorised beep checkbox:

Switches the audible signal for unauthorised access on or off.

Options:

- Activated: The audible signal for unauthorised access bookings is switched on.
- Not activated: The audible signal is switched off.

Default: Activated.

Light ring checkbox:

Switches the visual signal on or off.

Options:

- Activated: The visual signal is switched on.
- Not activated: The visual signal is switched off.

Default: Activated.

History log

This block contains the setting for the history log.

History log checkbox:

Switches the history log in the component on or off.

Options:

- Activated: The history log is switched on.
- Not activated: The history log is switched off.

Default: Activated.

Bolt recreation time

This block contains the specifications for checking the coupling status of the dormakaba c-lever.

Bolt recreation time input field:

Contains the time interval in minutes for the check.

Value range: 0–255

0 = No check

Default value: 30 minutes

OiF interval configuration

This block provides configuration options for the Object in Field Interval (OiF). This specifies the interval in which the components search for an ID card.

Fixed option:

Uses the components' default settings.

OiF interval (ms) input field:

Specifies the interval in which the components search for an ID card in milliseconds.

Value range: 250–1000, blank: The default setting of the respective component is used.

Default value: Blank

Variable option:

Enter a variable interval.

Note: If no access is recorded for a longer period of time, the OiF interval can be extended. The battery consumption of the components can be reduced by setting a longer OiF interval and longer idle time.

Idle time before adjustment (min) input field:

The idle time is the time without bookings after which an OiF interval is gradually increased. The interval is doubled each time it is increased.

Input example – 60 min.: OiF interval directly after booking: 250 ms; after 1 h without a booking, the OiF interval is increased to 500 ms; after 2 h without a booking, the OiF interval is increased to 1000 ms.

Value range: 1–255

Start value for OiF interval (ms) input field:

Specifies the starting value before the value is gradually increased.

Value range: 250–1000

Bluetooth and Mobile Access parameter

Mobile Access: Activate NFC checkbox:

Switches use of NFC (Near Field Communication) on/off.

Options:

- Activated: NFC is switched on; booking can be performed via NFC using a smart phone.
- Not activated: NFC function is switched off.

Default: Activated.

Mobile Access: activate Bluetooth checkbox:

Switches the use of Bluetooth on/off.

Options:

- Activated: Bluetooth is switched on; booking can be performed via Bluetooth using a smartphone.
- Not activated: Bluetooth function is switched off.

Default: Activated.

Bluetooth scan duration (ms) input field:

Specifies the scan duration of Bluetooth smartphones in milliseconds.

RSSI filter (dBm) input field:

Specifies the minimum RSSI filter for the Bluetooth connection. The spatial search range of the Bluetooth smartphone can be limited using the power level.

Note: If the value remains empty, the default value of the respective components is applied.

DoC parameters (optional if the DOC function system parameter is activated)

Number of DoC cards on which the same data type will be written in sequence input field:

Maximum number of RFID ID cards on which a certain DoC event is written. If a corresponding entry is already present on the ID card (DoC number and battery state match), the event is not re-written on the ID card.

Value range: blank, 1-20

"Module" tab

The **Module** tab lets you select one of the additional modules.

The screenshot displays the 'Module' configuration tab. On the left, four radio buttons are visible: 'Off' (selected), 'S module', 'Pass-Lock', and 'Escape-Return'. The 'S module' option is expanded, revealing two main sections: 'Activation' and 'Actuator behaviour'. In the 'Activation' section, 'Active if' is set to 'As long as input is active' and 'Activate for' is set to '1' seconds. In the 'Actuator behaviour' section, 'If active' is set to 'Permanently locked'. The 'Pass-Lock' option is also partially visible, showing 'Release Pass-Lock using' set to 'Authorised master medium'.

Off radio button:

No additional modules are used.

S module radio button:

The S module is used for overriding of permissions by an external floating contact. Activation is via a switch, time switch or building control system such as an alarm system.

Activation area:**Active if** selection field:

Options:

- As long as input is active.
- Time limit.
- Pulsed operating mode

Default value: As long as input is active.

Activate for input field:

Defines the duration of activation if the option "Time limit" is selected.

Value range: 1–9999 seconds.

Actuator behaviour area**If active** selection field:

Options:

- Always open
- Open with any ID card
- Permanently locked
- Deactivate TimePro

Default value: Permanently locked.

Pass-Lock radio button:

The Pass-Lock additional module is used.

Release Pass-Lock using selection field:

Options:

- Authorised master medium
- Authorised ID card

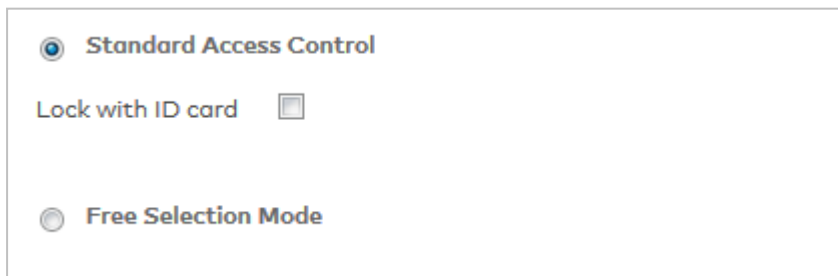
Default value: Authorised master medium.

Escape-Return radio button:

The Escape-Return additional module is used.

"Cabinet lock" tab

This tab is used to configure the locking mechanism of cabinet locks.



☒ **Standard Access Control**

Lock with ID card ☐

☐ **Free Selection Mode**

Standard Access Control option:

Allows individual permissions to be allocated to the cabinet.

Lock with ID card checkbox:

Specifies the type of locking mechanism.

Options:

- Activated: The door can only be closed using an ID card.
- Not activated: The door is closed by manually pushing it closed (without an ID card).

Default value: not activated.

Free Selection Mode option:

Allows free selection of a non-occupied cabinet within a permission group.

Note: This mode is only available in conjunction with ID cards of the LEGIC Advant and MIFARE DESFire types.

"Wireless transmitting power" tab

This tab is used to adjust the transmitting power of components within a wireless gateway.

Note: This function depends on the firmware of the wireless gateway.

☐ Normal transmitting power

☒ Optimise transmitting power for high range

High transmitting power (dBm)

☐ Optimise transmitting power for long battery life

Low transmitting power (dBm)

☐ Adapt transmitting power dynamically

Adaptation interval (min.)

LQI limit for high transmitting power (dB)

High transmitting power (dBm)

LQI limit for low transmitting power (dB)

Low transmitting power (dBm)

Normal transmitting power option:

The transmitting power of the components is a constant 3 dBm.

Optimise transmitting power for high range option:

The transmitting power is increased to achieve an optimum range.

Values: 3 to 8 dBm

Default value: 8 dBm

Optimise transmitting power for long battery life option:

The transmitting power is reduced to achieve optimum battery life.

Values: -10 to 3 dBm

Default value: 0 dBm

Adapt transmitting power dynamically option:

Transmitting power is dynamically adapted by MATRIX.

Adaptation interval (min.):

Values: 0 to 65,534 minutes

Default value: 60 minutes

LQI limit for high transmitting power (dB):

Values: 0 to 135 dB

Default value: 95 dB

High transmitting power (dBm):

Values: 3 to 8 dBm

Default value: 8 dBm

LQI limit for low transmitting power (dB)

Values: 155 to 255 dB

Default value: 155 dB

Low transmitting power (dBm):

Values: -10 to 3 dBm

Default value: 0 dBm

"Edit class" dialog – dormakaba terminal

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.

Edit Class

Number System

Name

Class type

Time zone and clock change

Terminal texts ▼

Time zone ▼

Clock change ▼

Booking setting

Booking sequence checking ▼

Timeout setting

"Permitted" display period	5.0	Seconds
"No permission" display period	5.0	Seconds
"Display info" display period	0.0	Seconds
Operation timeout	12.0	Seconds
Response monitoring	3.0	Seconds
Menu key activation period	10	Seconds

Password

Terminal password

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Language and time setting

To transfer the clock time from the server to the terminal it is necessary to specify the time zone of the terminal to take a possible time difference into account. The clock change must be specified for the terminal, if it should perform the changeover itself.

Terminal texts selection field:

Contains the terminal text file to be used for the display.

Options:

- All terminal texts that have been created for dormakaba terminals.

Time zone selection field:

Contains the time zone in which the terminal is located. The time zone must be specified when the clock time is transferred from the server to the terminal to take the time difference into account.

Options:

- All available time zones.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

Booking setting

Lets you set the booking characteristics.

Booking sequence checking selection field:

Contains the specifications for sequence checking for a booking.

Options:

- Independent of the employee record parameter
- According to employee record parameters

Timeout settings

Specify the time after which there is a switch-off if there is no activity at the terminal.

"Permitted" display period input field:

This parameter determines the display time for messages for a booking with permission.

Value range: 0: 0 to 99.9 seconds.

Default value: 5 seconds.

"No permission" display period input field:

This parameter determines the display time for messages for a booking with no permission.

Value range: 0: 0 to 99.9 seconds.

Default value: 5 seconds.

"Display info" display period input field:

This parameter determines the display info display for bookings with permission.

Value range: 0: 0 to 99.9 seconds.

Default value: 0 seconds.

Operation timeout input field:

This parameter determines the time that the terminal waits for ID card or keyboard entry after actuation. If there is no input during this time, the terminal returns to its basic status.

Value range: 0: 0 to 99.9 seconds.

Default value: 12 seconds.

Response monitoring input field:

This parameter monitors for the occurrence of a logical booking response after the terminal has transferred a booking record to the server. The terminal expects a valid response within the response monitoring period. "Please wait" is displayed during the monitoring period. If there is no response, the terminal changes to Offline operating mode. Response monitoring is four times as

long as the value entered here.
 Value range: 0:0 to 99.9 seconds.
 Default value: 3 seconds

Menu key activation period input field:

This parameter monitors activation of the menu key.
 Value range: 1 to 15 seconds.
 Default value: 10 seconds

Password

This parameter is used to store a password in the terminal which is requested when exiting the application or when calling up the local parameter settings in the menu bar. If the password is entered incorrectly more than three times, functioning of the terminal is blocked. It can only be unblocked by re-loading the terminal's data.

Terminal password input field:

Contains the password for the terminal.

"Edit Class" dialog – LED attendance display

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.

The screenshot shows the 'Edit Class' dialog box. It has a title bar with icons for file operations and a button labeled 'Edit Class'. The main area contains four input fields: 'Number' (21), 'Name' (Lampentableau), 'Class type' (LED attendance display class), and 'Terminal type' (Two-wire terminal). Below these fields are two tabs: 'Display parameters' (selected) and 'SIO host parameters'.

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Terminal type display field:

Displays the selected terminal type. The terminal type identifies the device variants within a class type. It is determined together with the class type when you create it and cannot be changed after it is saved.

Display parameters

Use this tab to define the display parameters for the attendance display.

The screenshot displays a configuration window with the following elements:

- Number of employee records:** A dropdown menu currently set to 40.
- Colour assignment:** A matrix with 8 rows and 8 columns (labeled 0-7). Each cell contains a colored square and a radio button. The selected colors are: Row 0: Grey; Row 1: Green; Row 2: Red; Row 3: Yellow; Row 4: Grey; Row 5: Grey; Row 6: Grey; Row 7: Red. The selected status (radio button) is: Row 0: Col 1; Row 1: Col 2; Row 2: Col 3; Row 3: Col 4; Row 4: Col 5; Row 5: Col 6; Row 6: Col 7; Row 7: Col 7.
- Flashing settings:**
 - Flashing frequency:** A dropdown menu set to 2.5 Hz.
 - Pulse factor:** A dropdown menu set to 1:1.

Number of employee records selection field:

Defines the number of persons who can manage the attendance display or the LED displays taken as a single unit. Up to three LED attendance displays can be physically connected. The system handles the connected units as a single attendance display.

Options:

- 40 persons, corresponding to one LED attendance display
- 80 persons, corresponding to two units
- 120 persons, corresponding to three units

Default value: 40 persons

Colour assignment:

The assignment of colour numbers for colour definition in the terminal's variable booking instruction can be defined in the matrix.

Options: Exactly one colour can be defined for every status.

Flashing settings

Flashing frequency selection field:

You can change flashing frequency of the individual LED in the range 0.5-4.5 Hertz.

Options:

- 0.5-4.5

Default value: 2.5

Pulse factor selection field:

Here you can set the pulse factor between the On-status duration and the Off-status duration.

Options:

- 1:3
- 1:1
- 3:1

Default value: 1:1

SIO host parameters

Use this tab to parametrise the serial interface to the higher-level terminal.

Serial interface settings	
Baud rate	9600
Parity	Even
Number of data bits	7
Number of broadcast repetitions	1
Number of repetitions	3
Response or offline timeout	0 Seconds

Serial interface settings

Baud rate selection field:

Specification of the baud rate for the data transfer.

Options:

- 1200 baud
- 2400 baud
- 4800 baud
- 9600 Baud

Default value: 9600 baud

Parity selection field:

Specification of the parity for the parity check for the data transfer.

Options:

- None
- Even
- Uneven

Default value: Even

Number of data bits selection field:

Specification of the data bits for the data transfer.

Options:

- 7 data bits
- 8 data bits

Default value: 8 data bits

Number of broadcast repetitions input field:

The number of times a broadcast message is repeated.

Value range: 0–5

Default value: 0

Number of repetitions input field:

Number of times a job or a response is retransmitted if the receiver does not respond within the receive timeout time.

Value range: 1–5

Default value: 1

Response or offline timeout input field:

Time in seconds within which a response is expected from a 2-wire terminal.

Value range: 5-45 seconds, 0 = no offline timeout monitoring.

Default value: 0 seconds

"Edit Class" dialog – TP3 2-wire class

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Terminal type display field:

Displays the selected terminal type. The terminal type identifies the device variants within a class type. It is determined together with the class type when you create it and cannot be changed after it is saved.

Operation mode selection field:

Contains the operating mode defining how the device reports messages and events to the server.

Options:

- Buffered online: The terminal independently transmits messages and events to the server. For this, the terminal should always be connected to the server.
- Offline: The terminal is not always connected to the server and only transmits the messages and events when prompted by the server.

Default value: Buffered online

Terminal texts selection field:

Contains the terminal text file to be used for the display.

Options:

- All created terminal texts.

Display parameters

Use this tab to set the parameters for the display for terminals with a display.

Time zone and clock change	
Time zone	(GMT+01:00) Central European Time - Europe/Berlin
Clock change	1 - GMT +1:00 Central Europe

Parameters in the display	Time/date format
Time ☐	Date format ☐ DDMMYY date format
Date ☐	☒ MMDDYY date format
Weekday ☐	Time format ☐ Normal time
	☒ Decimal minutes

Timeout setting	Other
Display 5 Seconds	Backlight type Off
Keyboard 10 Seconds	LCD type 1_16
Backlight 1 Minutes	

Time zone and clock change

The time zone of the terminal is required for correct communication between the server and the terminal.

Time zone selection field:

Contains the time zone in which the terminal is located. The time zone must be specified when the clock time is transferred from the server to the terminal to take the time difference into account.

Options:

- All available time zones.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

Parameters in the display

Select the checkbox of the time parameters to be displayed and select the position of the parameters in the display in the corresponding selection field.

Time checkbox:

Identifier indicating whether the time in the display is shown.

Date checkbox:

Identifier indicating whether the date in the display is shown.

Weekday checkbox:

Identifier indicating whether the weekday in the display is shown.

Time/date format

Specifies how the time and date are output when the terminal is in standby mode. Select the required option for displaying the date and time in the display. These options are only relevant if you have selected the relevant parameters in the display.

Date format selection field:

Defines how the six-figure date format is displayed.

Time format selection field:

Defines how the time format is displayed (in normal time or industry time).

Timeout setting

Specify the time after which there is a switch-off if there is no activity at the terminal.

Display input field:

Specifies how long the info text for a booking is displayed in seconds. After this interval, the terminal switches back to the standard output.

Value range: 1-99 seconds

Default: 5 seconds

Keypad input field:

Displays the duration for the swipe or proxy reader for keypad input in seconds.

Value range: 1-99 seconds

Default: 5 seconds

Backlighting input field:

Specifies the time in minutes for switching off the backlighting if the backlighting type = is configured time-dependent.

Value range: 1-10 minutes

Default: 1 minute

Other

Select the other parameters you require.

Backlighting type:

Selection of backlighting.

Options:

- Off: The backlighting is switched off.
- On: The backlighting is switched on.
- Time-dependent: The backlighting is switched on during a booking or pressing a key for the time specified for the backlighting.

Default value: On

LCD type selection field :

Selection of the physical LCD type installed in the terminal.

Option:

- 1-16: For displays with 16 characters.
- 1-8: For displays with 8 characters.

Default value: 1-16

File administration parameters

Use this tab to set the parameters for the maximum number of records that the terminal can save.

Access settings	
Access calendar number	10
Number of manual special days/bank holidays (access)	50
Number of access daily programs	100
Number of access weekly profile	30
Number of door daily programs	50
Number of door weekly profiles	30
Number of VBI permissions	0
Number of individual permissions	10

Time settings	
Number of variable booking instructions	10
Number of SAP absence reasons	0
Number of SAP wage types	0
Number of time daily programs	0
Number of time calendars	0
Number of manual special days/bank holidays (time)	0

Employee record settings	
Number of employee records	1000
Employee record format	Extended ▼

Terminal settings	
Number of permission levels	0
Number of reader function definitions	70
Number of terminal list entries	100

Access settings

Enter the values for the maximum number of records that can be saved from the access module.

Access calendar number input field:

The maximum number of calendars that can be saved.

Number of manual special days/bank holidays input field:

The maximum number of special days and bank holidays that can be saved.

Number of access daily times input field:

The maximum number of access daily times that can be saved.

Number of access weekly programs input field:

The maximum number of door weekly profiles that can be saved.

Number of door daily times input field:

The maximum number of door daily times that can be saved.

Number of door weekly profiles input field:

The maximum number of door weekly profiles that can be saved.

Number of VBI permissions input field:

The maximum number of VBI permissions that can be saved.

Number of individual permissions input field:

The maximum number of individual permissions that can be saved.

Time settings

Number of variable booking instructions input field:

The maximum number of variable booking instructions that can be saved.

Value range: 0–999

Number of SAP absence reasons input field:

The maximum number of SAP absences that can be saved.

Value range: 0–999

Number of SAP wage types input field:

The maximum number of SAP wage types that can be saved.

Value range: 0–999

Number of time daily programs input field:

The maximum number of time daily programs that can be saved.

Value range: 0–999

Number of time calendars input field:

The maximum number of time calendars that can be saved.

Value range: 0–999

Number of manual special days/bank holidays (time) input field:

The maximum number of special days and bank holidays that can be saved.

Value range: 0–999

Employee record settings

Enter the values for the employee records.

Number of employee records input field:

The maximum number of employee records that can be saved.

Employee record format selection field:

Employee record format.

Options:

- Default: The employee record contains the default elements
- Access: The employee record contains the default elements and access elements
- Enhanced: The employee record contains the default + access + SAP and extended access elements
- Minimum access: The terminal only accepts the access employee record (only allowed in AAC operating mode).

Default value: Standard.

Terminal settings

Enter the values for the terminal definition.

Number of permission levels input field:

The maximum number of permission levels that can be saved.

Number of reader function definitions input field:

The maximum number of reader function records that can be saved.

Number of terminal list entries input field:

The maximum number of terminal list entries that can be saved.

Hardware parameters

Use this tab to set the parameters for the terminal hardware.

The screenshot shows a configuration window with two main sections. The first section, titled 'Sound signal', contains four checkboxes: 'Error tone', 'Info tone', 'Positive tone', and 'Key click', all of which are checked. The second section, titled 'Other hardware parameters', contains three items: 'Permanent door unlocking' (unchecked), 'Switch off operation LED' (unchecked), and 'Relay allocation'. The 'Relay allocation' is a dropdown menu currently showing 'Door->R1, alarm->R2'.

Sound signals

Select the checkboxes for the messages and actions for which a sound signal should be sounded.

Error tone checkbox:

Issues a tone signal in the case of error messages.

Info tone checkbox:

Issues a tone signal in the case of info and status messages.

Positive tone checkbox:

Issues a tone signal in the case of a successful booking.

Key click checkbox:

Issues a tone signal for the key input.

Other hardware parameters

Select the other parameters you require for the terminal hardware.

Permanent door unlocking checkbox:

Indicator of the permanent door release option.

Options:

- Activated: The permanent door release option is switched on.
- Not activated: The permanent door release option is switched off.

Switch off operation LED checkbox:

Indicator for the operation LED.

Options:

- Activated: Operation LED is switched off.
- Not activated: Operation LED is switched on.

Relay allocation selection field:

Defines the specified relay allocation for the door release impulse and alarm output.

Options:

- Door >R1, Alarm >R2: Internal Relay 1 is designed for the door opening and Internal Relay 2 for the alarm.
- Door->R2, alarm->R1: Internal Relay 2 is designed for the door opening and Internal Relay 1 for the alarm.

Default value: Door >R1, Alarm >R2

Offline parameters

Use this tab to set the parameters for the behaviour of the terminal if the connection to the terminal manager is interrupted.

Door settings	
Door open time	60 Seconds
Comparison value for door opener code	
Door release pulse length	3 Seconds
Door opening without employee record	☐
Booking settings	
Automatic booking out at 0:00.	☐
Store messages in booking log	☒
Booking log can be overwritten	☐
Booking permission without employee record	☐
Length of PIN code	0
Booking sequence checking	Independent of the employee record param
Alarm settings	
Anti tamper switch, ATS; monitoring	☒
Alarm duration	1
Alarm delay time	0
Level booking fifo	90 Percent
PIN code entry repeated and alarm output activated with incorrect PIN code	0
Alarm output activated with incorrect country code	☐
Alarm output activated if company code is unknown	☐
Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered	☒
Alarm output activated if ID card is unknown	☐
Alarm output activated if anti tamper switch is activated	☒

Door settings

Create the door parameters for the offline status.

Door open time input field:

Duration of the door opening in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded.

Comparison value for door opener code input field:

The code that is to be entered if the device type 'K' plus device number '001' is defined as the input device to open the door in the variable booking instruction.

Door release pulse length input field:

Duration of the door release pulse for the door opening in seconds.

Door opening without employee record checkbox:

Allows a door opening even if there is no employee record available for an ID card.

Booking settings

Define the booking parameters for the offline status.

Automatic booking out at 0:00 checkbox:

Sets the employee record status to absent for daily closing at 0:00.

Store messages in booking log checkbox:

Stores all messages in the booking log.

Booking log can be overwritten checkbox:

Allows old log records to be overwritten even if they have not yet been read.

Booking permission without employee record checkbox:

Allows a booking even if there is no employee record available for an ID card.

Length of PIN code input field:

Specification of the length for the PIN code.

Booking sequence checking selection field:

Selection of the sequence checking for a booking.

Alarm settings

Define the alarm settings for the offline status.

Anti-tamper switch monitoring checkbox:

Activates the anti tamper switch monitoring.

Alarm duration input field:

Duration of the alarm signal in seconds.

Alarm delay time input field:

Duration of the delay in seconds until the alarm output is activated.

Level booking fifo input field:

Percentage level booking fifo for which a message should be displayed.

PIN code entry repeated and alarm output activated with incorrect PIN code input field:

Specification of repetitions until the incorrect input of the PIN code triggers an alarm.

Alarm output activated with incorrect country code checkbox:

Activates an alarm signal if the country code on the ID card is incorrect.

Alarm output activated if company code is unknown checkbox:

Activates an alarm if the company code on the ID card is incorrect.

Alarm output activated if door opening time is exceeded, door is forced open or an invalid door opening code is entered checkbox:

Activates an alarm when the door open time is exceeded, the door is forced open, or an invalid door opening code is entered.

Alarm output activated if ID card is unknown checkbox:

Activates an alarm if there is a booking with an unknown ID card.

Alarm output activated if anti-tamper switch is activated checkbox:

Activates an alarm signal if the anti-tamper switch is activated.

SIO host parameters

Serial interface settings	
Baud rate	9600
Parity	Even
Number of data bits	7
Number of broadcast repetitions	1
Number of repetitions	3
Response or offline timeout	0 Seconds

Serial interface settings

Baud rate selection field:

Specification of the baud rate for the data transfer.

Options:

- 1200 baud
- 2400 baud
- 4800 baud
- 9600 Baud

Default value: 9600 baud

Parity selection field:

Specification of the parity for the parity check for the data transfer.

Options:

- None
- Even
- Uneven

Default value: Even

Number of data bits selection field:

Specification of the data bits for the data transfer.

Options:

- 7 data bits
- 8 data bits

Default value: 8 data bits

Number of broadcast repetitions input field:

The number of times a broadcast message is repeated.

Value range: 0–5

Default value: 0

Number of repetitions input field:

Number of times a job or a response is retransmitted if the receiver does not respond within the receive timeout time.

Value range: 1–5

Default value: 1

Response or offline timeout input field:

Time in seconds within which a response is expected from a 2-wire terminal.

Value range: 5-45 seconds, 0 = no offline timeout monitoring.

Default value: 0 seconds

"Edit class" dialog – TP3 LAN terminal

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.

The screenshot shows the 'Edit Class' dialog box. At the top, there are icons for adding, deleting, saving, and undoing, along with a title bar 'Edit Class'. The main area contains the following fields:

- Number:** 300
- Name:** TP3-LANRTC
- Class type:** TP3 LAN class
- Terminal type:** LAN terminal
- Operation mode:** Buffered online (dropdown menu)

At the bottom, there are two tabs: 'LAN parameters' (selected) and 'SIO subnet parameter'.

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Terminal type display field:

Displays the selected terminal type. The terminal type identifies the device variants within a class type. It is determined together with the class type when you create it and cannot be changed after it is saved.

Operation mode selection field:

Contains the operating mode defining how the device reports messages and events to the server.

Options:

- **Buffered online:** The terminal independently transmits messages and events to the server. For this, the terminal should always be connected to the server.
- **Offline:** The terminal is not always connected to the server and only transmits the messages and events when prompted by the server.

Default value: Buffered online

LAN parameters

Use this tab to set the parameters for the LAN communication of the terminal.

LAN communication settings		
Alive message cycle time	1	Minutes
Host online check cycle time	1	Minutes

LAN communication settings

Enter the connection settings for the communication in your network.

Alive message cycle time input field:

Interval in minutes between live messages from a LAN terminal for itself and any connected sub-terminals to the terminal manager. The terminal is marked as offline if there are no messages for a terminal.

Value range: 0 - 255 (0 = send no message)

Default value: 0

Host online check cycle time input field:

Interval in minutes between the LAN terminal availability checks. If one LAN terminal cannot establish a connection to another LAN terminal this is marked as offline in the internal terminal list and therefore it is not taken into account during the terminals' data transfer.

Value range: 0 - 127 (0 = perform no check)

Default value: 0

SIO subnet parameters

Use this tab to set the parameters for the serial interface for the 2-wire bus.

Serial interface settings		
Baud rate	9600	▼
Parity	Even	▼
Number of data bits	7	▼
Number of broadcast repetitions	1	
Number of repetitions	3	
Response or offline timeout	0	Seconds

Serial interface settings

Baud rate selection field:

Specification of the baud rate for the data transfer.

Options:

- 1200 baud
- 2400 baud
- 4800 baud
- 9600 Baud

Default value: 9600 baud

Parity selection field:

Specification of the parity for the parity check for the data transfer.

Options:

- None
- Even
- Uneven

Default value: Even

Number of data bits selection field:

Specification of the data bits for the data transfer.

Options:

- 7 data bits
- 8 data bits

Default value: 8 data bits

Number of broadcast repetitions input field:

The number of times a broadcast message is repeated.

Value range: 0–5

Default value: 0

Number of repetitions input field:

Number of times a job or a response is retransmitted if the receiver does not respond within the receive timeout time.

Value range: 1–5

Default value: 1

Response or offline timeout input field:

Time in seconds within which a response is expected from a 2-wire terminal.

Value range: 5-45 seconds, 0 = no offline timeout monitoring.

Default value: 0 seconds

"Edit class" dialog – TP4 2-wire class

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.

The screenshot shows the 'Edit Class' dialog box. The top bar contains icons for file operations and the title 'Edit Class'. The main area is divided into two columns. The left column contains text input fields for 'Number' (203), 'Name' (TP4-2-wire), 'Class type' (TP4 2-wire class), and 'Terminal type' (Two-wire terminal). The right column contains dropdown menus for 'Access mode' (Autonomous access control), 'Operation mode' (Buffered online), and 'Terminal texts' (1 - TP4 Terminaltexte (de)). At the bottom, there is a row of tabs: 'Display parameters', 'File administration parameters' (which is highlighted in blue), 'Hardware parameters', 'Offline parameters', 'SIO host parameters', and 'SIO subnet parameter'.

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Terminal type display field:

Displays the selected terminal type. The terminal type identifies the device variants within a class type. It is determined together with the class type when you create it and cannot be changed after it is saved.

Access mode selection field:

Contains the access operation mode which determines the scope of the access permission checks for a booking in the terminal.

Options:

- Default: with ordinary door opening. Door opening is additionally enabled in case of a successful booking.
- Autonomous Access Control: with evaluation of the access permissions taking the door control into account.

Default value: Autonomous access control.

Operation mode selection field:

Contains the operating mode defining how the device reports messages and events to the server.

Options:

- Buffered online: The terminal independently transmits messages and events to the server. For this, the terminal should always be connected to the server.
- Offline: The terminal is not always connected to the server and only transmits its messages and events when prompted by the server.

Default value: Buffered online.

Terminal texts selection field:

Contains the terminal text file to be used for the display.

Options:

- All created terminal texts.

Display parameters

Use this tab to set the parameters for the terminal display.

Time zone and clock change

Time zone: (GMT+01:00) Central European Time - Europe/Berlin

Clock change:

Parameters in the display

First row on display fixed: ☐

VBI text position: Default

Time: ☐ Default

Date: ☐ Default

Weekday: ☐ Default

Time/date format

Date format: ☐ DDMMYY date format, ☒ MMDDYY date format

Time format: ☐ Normal time, ☒ Decimal minutes

Timeout setting

Display: 5 Seconds

Keyboard: 5 Seconds

Backlight: 1 Minutes

Other

Backlight type: On

Offline signalling: ☐

Display info text:

Time zone and clock change

The time zone of the terminal is required for correct communication between the server and the terminal.

Time zone selection field:

Contains the time zone in which the terminal is located. The time zone must be specified when the clock time is transferred from the server to the terminal to take the time difference into account.

Options:

- All available time zones.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

Parameters in the display:

Select the checkbox of the time parameters to be displayed and select the position of the parameters in the display in the corresponding selection field.

Time check box and selection field:

Displays the current time at the selected position in the display.

Date check box and selection field:

Displays the current date at the selected position in the display.

Weekday check box and selection field:

Displays the current weekday at the selected position in the display.

Positioning options:

- Default: Time at top-right, date without weekday at bottom right, date with weekday at bottom left
- Top-left
- Top-right
- Bottom-left
- Bottom-right

Default value: Default

Time/date format

Specifies how the time and date are output when the terminal is in standby mode. Select the required option for displaying the date and time in the display. These options are only relevant if you have selected the relevant parameters in the display.

Date format selection field:

Defines how the six-figure date format is displayed.

Time format selection field:

Defines how the time format is displayed (in normal time or industry time).

Timeout setting

Specify the time after which there is a switch-off if there is no activity at the terminal.

Display input field:

Specifies how long the info text for a booking is displayed in seconds. After this interval, the terminal switches back to the standard output.

Value range: 1-99 seconds

Default: 5 seconds

Keypad input field:

Displays the duration for the swipe or proxy reader for keypad input in seconds.

Value range: 1-99 seconds

Default: 5 seconds

Backlighting input field:

Specifies the time in minutes for switching off the backlighting if the backlighting type = is configured time-dependent.

Value range: 1–10 minutes

Default: 1 minute

Other:

Select the other parameters you require.

Backlighting type selection field:

Specifies the behaviour of the background lighting.

Options:

- Off: The backlighting is switched off.
- On: The backlighting is switched on.
- Time-dependent: The backlighting is switched on during a booking or pressing a key for the time specified for the backlighting.

Default value: On

Offline signalling selection field:

Activates the display of a signal for the offline status. The offline status is displayed with a flashing character in the time.

Options:

- Activated: A signal is displayed in the offline mode.
- Not activated: No signal is displayed.

Default value: Not activated

Display info text input field:

Enables an additional info text to be displayed. This text is output in the second line in standby mode, provided no date/weekday is displayed.

File administration parameters

Use this tab to set the parameters for the maximum number of records that the terminal can save.

Access settings		Time settings	
Access calendar number	10	Number of variable booking instructions	10
Number of manual special days/bank holidays (access)	50	Number of SAP absence reasons	0
Number of holidays	5	Number of SAP wage types	0
Number of access daily programs	100	Number of time daily programs	0
Number of access weekly profile	30	Number of time calendars	0
Number of access profiles	100	Number of manual special days/bank holidays (time)	0
Number of door daily programs	50	Number of minimum break plans	0
Number of door weekly profiles	30		
Number of VBI permissions	0		
Number of interlock controls	5		
Number of combined permissions	10		
Number of AoC readers	0		
Number of security areas	10		
Number of security area daily programs	0		
Number of IDS profiles	5		
Number of gateways for IDS	0		
Number of wireless readers for IDS	0		
Number of permission levels	5		

Access settings

Enter the values for the maximum number of records that can be saved.

Access calendar number input field:

The maximum number of calendars that can be saved.

Value range: 0-999

Number of manual special days/bank holidays (access) input field:

The maximum number of special days and bank holidays that can be saved.

Value range: 0-999

Number of holidays input field:

The maximum number of holidays that can be saved.

Value range: 0-999

Number of access daily times input field:

The maximum number of access daily times that can be saved.

Value range: 0-999

Number of access weekly programs input field:

The maximum number of door weekly profiles that can be saved.

Value range: 0-999

Number of door daily times input field:

The maximum number of door daily times that can be saved.

Value range: 0-999

Number of door weekly profiles input field:

The maximum number of door weekly profiles that can be saved.

Value range: 0-999

Number of VBI permissions input field:

The maximum number of individual permissions that can be saved.

Value range: 0-999

Number of interlock controls input field:

The maximum number of interlock definitions that can be saved.

Value range: 0-999

Number of combined permissions input field:

Number of combined permissions which can be stored per person.

Value range: 0-4000

Note: Only set this value as high as is actually necessary because the number of combined permissions is multiplied by the number of persons.

Number of AoC readers input field:

The maximum number of AoC readers that can be saved.

Value range: 0-9999

Number of security areas input field:

The maximum number of security areas that can be saved.

Value range: 0-99

Number of security area daily programs input field:

Maximum number of security area daily programs that can be saved.

Value range: 0-99

Number of IDS profiles input field:

Maximum number of IDS profiles that can be saved.

Value range: 0-99

Number of gateways for IDS input field:

Maximum number of IDS profiles that can be saved.

Value range: 0-16

Number of wireless readers for IDS input field:

Maximum number of wireless readers for IDS use that can be saved.

Value range: 0-256

Number of permission levels input field:

The maximum number of priority circuits that can be saved.

Value range: 0-999

Time settings**Number of variable booking instructions** input field:

The maximum number of variable booking instructions that can be saved.

Value range: 0-999

Number of SAP absence reasons input field:

The maximum number of SAP absences that can be saved.

Value range: 0–999

Number of SAP wage types input field:

The maximum number of SAP wage types that can be saved.

Value range: 0–999

Number of time daily programs input field:

The maximum number of time daily programs that can be saved.

Value range: 0–999

Number of time calendars input field:

The maximum number of time calendars that can be saved.

Value range: 0–999

Number of manual special days/bank holidays (time) input field:

The maximum number of special days and bank holidays that can be saved.

Value range: 0–999

Number of minimum break plans input field:

The maximum number of minimum break plans that can be saved.

Value range: 0–999

Employee record settings		Terminal settings	
Number of employee records	1000	Number of reader function definitions	70
Employee record format	Extended	Number of terminal list entries	100
Length of employee record info field	0	Number of terminal device group definitions	34
		Number of traffic point parameters	31
		Number of MUX definitions	0
		Number of TCP readers	0
		Number of ID card reader profiles	0
		Number of InputPortDefinitionen	0
		System log memory size	0
		TMBasic configuration memory size	0
		TMBasic programs memory size	0

Employee record element configuration	
Disable AoC fields	☐
Disable SAP fields	☐
Disable floor release bit pattern	☐
Deactivate personalised duress PIN	☐
Save extended ID card numbers	☐
Activate tables for duration of stay monitoring	☐
Individual office release permission for online doors	☐

Employee record settings

Enter the values for the employee records.

Number of employee records input field:

The maximum number of employee records that can be saved.

Employee record format selection field:

Employee record format.

Options:

- Default: The employee record contains the default elements.
- Access: The employee record contains the default elements and access elements.
- Enhanced: The employee record contains the default + access + SAP and extended access elements.
- Minimum access: The terminal only accepts the access employee record (only allowed in AAC operating mode).
- Extended: 6 digits: In the extended employee record, 6-digit device numbers can be used for readers, for example in the access profiles.

Default value: Default

Length of employee record info field input field:

The number of possible characters in the employee record info field. Info fields are used for info bookings, for example for querying remaining vacation. The employee record info field can contain up to 10 info values, each with 16 characters plus separators.

The value should be set to 0 in the case of a class for access.

Value range: 0-160

Terminal settings

Enter the values for the terminal definition.

Number of permission levels input field:

The maximum number of priority circuits that can be saved.

Value range: 0-999

Number of reader function definitions input field:

The maximum number of reader function records that can be saved.

Value range: 0-999

Number of terminal list entries input field:

The maximum number of terminal list entries that can be saved.

Value range: 0-999

Number of terminal device group definitions input field:

The maximum number of terminal device group definitions that can be saved.

Value range: 0-70

Number of traffic point parameters input field:

The maximum number of traffic point parameters that can be saved.

Value range: 0-31

Number of MUX definitions input field:

The maximum number of multiplexer definitions that can be saved.

Value range: 0-31

Number of TCP readers input field:

The maximum number of TCP readers that can be saved.

Value range: 0-31

Number of ID card reader profiles input field:

The maximum number of ID card reader profiles that can be saved. If only one ID card type is used at a terminal, the number entered can be 0. If several ID card types are used, the number selected should be equal to or greater than the number of connected readers.

Value range: 0-31

System log memory size input field:

System log size specification in bytes.

Value range: 0-9999999

TMBasic configuration memory size input field:

Specifies the size of the TMBasic configuration file in bytes.

Value range: 0-9999999

TMBasic programs memory size input field:

Specifies the size of the TMBasic program in bytes.

Value range: 0-9999999

Employee record element configuration

Rarely used elements in the employee records can be enabled or disabled by the following configuration settings. This can help reduce the terminals' memory requirements.

Disable AoC fields checkbox:

Indicates whether the AoC fields such as AoC motion recording, AoC validity and AoC interval calculation type are saved.

Options:

- Activated: The AoC fields are not saved
- Not activated: The AoC fields are saved

Default: Not activated.

Disable SAP fields checkbox:

Indicates whether the SAP fields such as BDEGR, MOLGA, ZEITY, MOABW and VPLOA are saved.

Options:

- Activated: The SAP fields are not saved.
- Not activated: The SAP fields are saved.

Default: Not activated.

Disable floor release bit pattern checkbox:

Indicates if the floor release bit patterns 1-3 are saved.

Options:

- Activated: The floor release bit patterns are not saved.
- Not activated: The floor release bit patterns are saved.

Default: Not activated.

Save extended ID card numbers checkbox:

Indicates if the extended ID card numbers are saved.

Options:

- Activated: The extended ID card numbers are saved.
- Not activated: The extended ID card numbers are not saved.

Default: Not activated.

Activate tables for duration of stay monitoring checkbox:

Indicates whether the tables for the duration of stay monitoring will be activated.

Options:

- Activated: The tables are activated.
- Not activated: The tables are not activated.

Default: Not activated.

Individual office release permission for online doors checkbox:

Indicates whether an individual office release is also possible for individual online doors in the employee record.

Options:

- Activated: Individual office release for individual online doors is possible.
- Not activated: Individual office release can be set for all doors but not for individual online doors.

Default: Not activated.

Note 1: This option is only effective if system parameter 141 (Access) is activated.

Note 2: TP4 firmware version 3.04 or higher is required.

Note 2: Please note that individual office release permissions use more memory.

Hardware parameters

Use this tab to set the parameters for the terminal hardware.

Sound signal		Emergency power configuration	
Error tone	☒	DCW bus emergency power supply	☐
Info tone	☒	Emergency power switch-off	☐
Positive tone	☒	Emergency power delay time	0 Seconds
Office release sound	☒		
Key click	☒		
AoC waiting sound	Only with readers without display v		
IDS waiting tone	No sound v		
Other hardware parameters			
Permanent door unlocking	☐		
Operation LED colour	Yellow v		
Relay allocation	Door->R1, alarm->R2 v		
Optical keystroke display	☐		
Single LED signalling	☐		

Sound signals

Select the checkboxes for the messages and actions for which a sound signal should be sounded.

Error tone checkbox:

Issues a tone signal in the case of error messages.

Info tone checkbox:

Issues a tone signal in the case of info and status messages.

Positive tone checkbox:

Issues a tone signal in the case of a successful booking.

Key click checkbox:

Issues a tone signal for the key input.

AoC waiting sound selection field:

Defines which reader types issue a waiting sound and show a yellow flashing LED during AoC booking.

Options:

- No sound
- Only with readers with display
- Only with readers without display
- With all readers

IDS waiting tone selection field:

Defines which types of readers issue a waiting tone while the intruder detection system is being actuated.

Options:

- No sound
- Only with readers with display
- Only with readers without display
- With all readers

Emergency power configuration

Select the parameters you require for the emergency power supply.

DCW bus emergency power supply checkbox:

Activates the emergency power supply for the DCW bus.

Emergency power switch-off checkbox:

Activates the emergency power switch-off.

Emergency power delay time input field:

Time in seconds for which the emergency power supply should continue to run.

Other hardware parameters

Select the other parameters you require for the terminal hardware.

Permanent door unlocking checkbox:

Activates the permanent door release option.

Operation LED colour selection field:

Specifies how the operation LED is displayed, if the hardware supports this function.

Options: Off, yellow, green, red

Relay allocation selection field:

Defines the specified relay allocation for the door release impulse and alarm output.

Options:

- Door >R1, Alarm >R2: Internal Relay 1 is designed for the door opening and Internal Relay 2 for the alarm.
- Door->R2, alarm->R1: Internal Relay 2 is designed for the door opening and Internal Relay 1 for the alarm.

Default value: Door >R1, Alarm >R2

Optical keystroke display checkbox:

Activates visual LED signalling when keys are pressed on the PHG-VOXIO-Touch.

Single LED signalling checkbox:

If this checkbox is activated, all three LEDs of the PHG-VOXIO-Touch are actuated at once to signal, for instance, a booking event or the door status.

Offline parameters

Use this tab to set the parameters for the behaviour of the terminal if the connection to the terminal manager is interrupted.

The screenshot shows a configuration window with two tabs: "Door settings" and "Booking settings".

Door settings:

- Door open time: 0 (input field) Seconds
- Comparison value for door opener code: (input field)
- Door release pulse length: 0 (input field) Seconds
- Door opening without employee record: ☐

Booking settings:

- Automatic booking out at 0:00: No change (dropdown menu)
- Store messages in booking log: ☐
- Booking log can be overwritten: ☐
- Booking permission without employee record: ☐
- No special actions for room zone 0: ☒
- Booking sequence checking: According to employee record parameters (dropdown menu)

Door settings: Create the door parameters for the offline status.

Door open time input field:

Duration of the door opening in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded.

Comparison value for door opener code input field:

The code that is to be entered if the device type 'K' plus device number '001' is defined as the input device to open the door in the variable booking instruction.

Door release pulse length input field:

Duration of the door release pulse for the door opening in seconds.

Door opening without employee record checkbox:

Allows a door opening even if there is no employee record available for an ID card.

Booking settings: Define the booking parameters for the offline status.

Automatic booking out at 0:00 selection field:

Sets the employee record status to the selected setting for daily reconciliation at 0:00.

Options:

- No change: The status is not changed.
- Set status to absent: The status is set to 'Absent'. The first booking of the day then has to be an arrive booking.

- No change, non-recurring skip of sequence checking: For the first booking of the day, no sequence checking is carried out and the subsequent status is determined by the booking.

Default value: No change.

Store messages in booking log checkbox:

Stores all messages in the booking log.

Booking log can be overwritten checkbox:

Allows old log records to be overwritten even if they have not yet been read.

Booking permission without employee record checkbox:

Allows a booking even if there is no employee record available for an ID card.

No special actions for room zone 0 checkbox:

Identifier for checking room zone 0.

This identifier should always be activated. If you also include the outside area in the anti-passback room controls, you must also create a room zone for the outside area and allocated access permissions for it.

Booking sequence checking selection field:

Controls the sequence check for a booking.

Alarm settings: Define the alarm settings for the offline status.

Alarm settings	
Anti tamper switch, ATS; monitoring	☒
Output port device number of the alarm output for anti tamper alarm	0
External tamper contact input	0
Alarm duration	1
Alarm delay time	0
Level booking fifo	90 Percent
PIN code entry repeated and alarm output activated with incorrect PIN code	0
Door opener code/PIN entry blocking time	0
No alarm output activation when an incorrect PIN is entered	☐
Alarm output activated with incorrect country code	☐
Alarm output activated if company code is unknown	☐
Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered	☐
Alarm output activated if ID card is unknown	☐
Alarm output activated if anti tamper switch is activated	No alarm activation
Alarm output activated if door is not opened after unlocking	☐
Alarm output activated if ID card version number is incorrect	☐
TMBasic program with notification	
Parameter for TMBasic program with notification	

Anti tamper switch monitoring checkbox:

Activates the anti tamper switch monitoring.

Output port device number of the alarm output for anti tamper alarm input field:

Specification of the alarm relay for the anti-tamper alarm.

External tamper contact input input field:

Specification of the external input to which the anti tamper switch is connected.

Alarm duration input field:

Duration of the alarm signal in seconds.

Alarm delay time input field:

Duration of the delay in seconds until the alarm output is activated.

Level booking fifo input field:

Percentage level booking fifo for which a message should be displayed.

PIN code entry repeated and alarm output activated with incorrect PIN code input field:

Specification of repetitions until the incorrect input of the PIN code triggers an alarm.

Door opener code/PIN entry blocking time input field:

Specifies the blocking time in minutes for the keypad or the person once the number of incorrect entries

specified under **PIN code entry repeated** has been reached.

Value range: 0–99

0 = no blocking time

1-98 = blocking time in minutes

99 = permanent blocking

No alarm output activation when an incorrect PIN is entered checkbox:

Activates an alarm signal if an incorrect PIN code is entered.

Alarm output activated with incorrect country code checkbox:

Activates an alarm signal if the country code on the ID card is incorrect.

Alarm output activated if company code is unknown checkbox:

Activates an alarm if the company code on the ID card is incorrect.

Alarm output activated if door opening time is exceeded, door is forced open or an invalid door opening code is entered checkbox:

Activates an alarm when the door open time is exceeded, the door is forced open, or an invalid door opening code is entered.

Alarm output activated if ID card is unknown checkbox:

Activates an alarm if there is a booking with an unknown ID card.

Alarm output activated if anti tamper switch is activated selection field:

Alarm output activated if anti tamper switch is activated.

Alarm output activated if door is not opened after release checkbox:

Activates an alarm signal if the door is not opened by a booking after it is unlocked.

Alarm output activated if ID card version number is incorrect checkbox:

Activates an alarm if the version number on the ID card is incorrect.

TMBasic program with notification selection field:

Select a TMBasic program that is invoked when a notification is issued. Note: A TMBasic program can be invoked even if the notification log record is not generated due to the setting Alarm duration = 0.

Parameter for TMBasic program with notification input field:

Enter a parameter that is submitted to the TMBasic program and can be queried there using `param = shellGetArgument()`.

Value range: 0-9999

SIO host parameters

Use this tab to parametrise the serial interface to the host system.

Serial interface settings		
Baud rate	9600	
Parity	Even	
Number of data bits	7	
Transmission start delay	0	Milliseconds
Transmission end delay	0	Milliseconds
Number of broadcast repetitions	1	
Number of repetitions	3	
Response or offline timeout	0	Seconds
Receive timeout	0	(Byte times)
Use encryption	☐	

Serial interface settings:

Baud rate selection field:

Specification of the baud rate for the data transfer.

Options:

- 2400 baud
- 4800 baud
- 9600 baud
- 19200 baud
- 38400 baud

Default value: 2400 baud

Parity selection field:

Selection of the parity for the parity check for the data transfer.

Options:

- None
- Even
- Uneven

Default value: Even

Number of data bits selection field:

Select the number of data bits for the data transfer.

Options:

- 7 data bits
- 8 data bits

Default value: 8 data bits

Transmission start delay input field:

The time for the delayed transmission start in milliseconds.

Transmission end delay input field:

The time for the delayed transmission end in milliseconds.

Number of broadcast repetitions input field:

The number of times a broadcast message is repeated.

Number of repetitions input field:

Number of times a job or a response is repeated if the receiver does not respond within the receive timeout.

Response or offline timeout input field:

Time in seconds within which a response is expected from a 2-wire terminal.

Receive timeout input field:

Time in seconds until a message is sent again if there is no communication.

Using XOR encryption checkbox:

Activates XOR encryption for the data transfer.

SIO subnet parameters

Use this tab to parametrise the serial interface to the 2 wire network.

Serial interface settings		
Baud rate	9600	▼
Parity	Even	▼
Number of data bits	8	▼
Transmission start delay	0	Milliseconds
Transmission end delay	0	Milliseconds
Number of broadcast repetitions	1	
Number of repetitions	3	
Response or offline timeout	0	Seconds
Receive timeout	0	(Byte times)
Use encryption	☐	

Serial interface settings:

Enter the values for the communication using a serial interface.

Baud rate selection field:

Specification of the baud rate for the data transfer.

Options:

- 2400 baud
- 4800 baud
- 9600 baud
- 19200 baud
- 38400 baud

Default value: 2400 baud

Parity selection field:

Selection of the parity for the parity check for the data transfer.

Options:

- None
- Even
- Uneven

Default value: Even

Number of data bits selection field:

Select the number of data bits for the data transfer.

Options:

- 7 data bits
- 8 data bits

Default value: 8 data bits

Transmission start delay input field:

The time for the delayed transmission start in milliseconds.

Transmission end delay input field:

The time for the delayed transmission end in milliseconds.

Number of broadcast repetitions input field:

The number of times a broadcast message is repeated.

Number of repetitions input field:

Number of times a job or a response is repeated if the receiver does not respond within the receive timeout.

Response or offline timeout input field:

Time in seconds within which a response is expected from a 2-wire terminal.

Receive timeout input field:

Time in seconds until a message is sent again if there is no communication.

Using XOR encryption checkbox:

Activates XOR encryption for the data transfer.

"Edit Class" dialog – TP4 LAN

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.

The screenshot shows the 'Edit Class' dialog box. It has a title bar with icons for file operations and a button labeled 'Edit Class'. The main area contains several input fields and dropdown menus arranged in two columns. The left column has 'Number' (value 3), 'Name' (empty), 'Class type' (value 'TP4 LAN class'), and 'Terminal type' (value 'LAN terminal'). The right column has 'Access mode' (value 'Autonomous access control'), 'Operation mode' (value 'Buffered online'), 'Employee record read mode' (value 'Default'), and 'Terminal texts' (value '1 - TP4 Terminaltexte (de)'). At the bottom, there is a row of tabs: 'Display parameters' (selected), 'File administration parameters', 'Hardware parameters', 'Offline parameters', 'LAN parameters', 'SIO subnet parameter', and 'SIO subnet parameter 2'.

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Terminal type display field:

Displays the selected terminal type. The terminal type identifies the device variants within a class type. It is determined together with the class type when you create it and cannot be changed after it is saved.

Access mode selection field:

Contains the access operation mode which determines the scope of the access permission checks for a booking in the terminal.

Options:

- Default: with ordinary door opening. Door opening is additionally enabled in case of a successful booking.
- Autonomous Access Control: with evaluation of the access permissions taking the door control into account.

Default value: Autonomous access control.

Operation mode selection field:

Contains the operating mode defining how the device reports messages and events to the server.

Options:

- Buffered online: The terminal independently transmits messages and events to the server. For this, the terminal should always be connected to the server.
- Offline: The terminal is not always connected to the server and only transmits the messages and events when prompted by the server.

Default value: Buffered online

Employee record read mode selection field:

Options:

- Default: Bookings are checked against the ID card database.
- Load unknown employee records: If an ID card number is not found in the database when booking, TP4 requests it from MATRIX and reloads if necessary before declining.

Terminal texts selection field:

Contains the terminal text file to be used for the display.

Options:

- All created terminal texts.

Display parameters

Use this tab to set the parameters for the terminal display.

Time zone and clock change

The time zone of the terminal is required for correct communication between the server and the terminal.

Time zone selection field:

Contains the time zone in which the terminal is located. The time zone must be specified when the clock time is transferred from the server to the terminal to take the time difference into account.

Options:

- All available time zones.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

Parameters in the display:

Select the checkbox of the time parameters to be displayed and select the position of the parameters in the display in the corresponding selection field.

Time check box and selection field:

Displays the current time at the selected position in the display.

Date check box and selection field:

Displays the current date at the selected position in the display.

Weekday check box and selection field:

Displays the current weekday at the selected position in the display.

Positioning options:

- Default: Time at top-right, date without weekday at bottom right, date with weekday at bottom left
- Top-left
- Top-right
- Bottom-left
- Bottom-right

Default value: Default

Time/date format

Specifies how the time and date are output when the terminal is in standby mode. Select the required option for displaying the date and time in the display. These options are only relevant if you have selected the relevant parameters in the display.

Date format selection field:

Defines how the six-figure date format is displayed.

Time format selection field:

Defines how the time format is displayed (in normal time or industry time).

Timeout setting

Specify the time after which there is a switch-off if there is no activity at the terminal.

Display input field:

Specifies how long the info text for a booking is displayed in seconds. After this interval, the terminal switches back to the standard output.

Value range: 1-99 seconds

Default: 5 seconds

Keypad input field:

Displays the duration for the swipe or proxy reader for keypad input in seconds.

Value range: 1-99 seconds

Default: 5 seconds

Backlighting input field:

Specifies the time in minutes for switching off the backlighting if the backlighting type = is configured time-dependent.

Value range: 1–10 minutes

Default: 1 minute

Other:

Select the other parameters you require.

Backlighting type selection field:

Specifies the behaviour of the background lighting.

Options:

- Off: The backlighting is switched off.
- On: The backlighting is switched on.
- Time-dependent: The backlighting is switched on during a booking or pressing a key for the time specified for the backlighting.

Default value: On

Offline signalling selection field:

Activates the display of a signal for the offline status. The offline status is displayed with a flashing

character in the time.

Options:

- Activated: A signal is displayed in the offline mode.
- Not activated: No signal is displayed.

Default value: Not activated

Display info text input field:

Enables an additional info text to be displayed. This text is output in the second line in standby mode, provided no date/weekday is displayed.

File administration parameters

Use this tab to set the parameters for the maximum number of records that the terminal can save.

Access settings		Time settings	
Access calendar number	10	Number of variable booking instructions	10
Number of manual special days/bank holidays (access)	50	Number of SAP absence reasons	0
Number of holidays	5	Number of SAP wage types	0
Number of access daily programs	100	Number of time daily programs	0
Number of access weekly profile	30	Number of time calendars	0
Number of access profiles	100	Number of manual special days/bank holidays (time)	0
Number of door daily programs	50	Number of minimum break plans	0
Number of door weekly profiles	30		
Number of VBI permissions	0		
Number of interlock controls	5		
Number of combined permissions	10		
Number of AoC readers	0		
Number of security areas	10		
Number of security area daily programs	0		
Number of IDS profiles	5		
Number of gateways for IDS	0		
Number of wireless readers for IDS	0		
Number of permission levels	5		

Access settings

Enter the values for the maximum number of records that can be saved.

Access calendar number input field:

The maximum number of calendars that can be saved.

Value range: 0-999

Number of manual special days/bank holidays (access) input field:

The maximum number of special days and bank holidays that can be saved.

Value range: 0-999

Number of holidays input field:

The maximum number of holidays that can be saved.

Value range: 0-999

Number of access daily times input field:

The maximum number of access daily times that can be saved.

Value range: 0-999

Number of access weekly programs input field:

The maximum number of door weekly profiles that can be saved.

Value range: 0-999

Number of door daily times input field:

The maximum number of door daily times that can be saved.

Value range: 0-999

Number of door weekly profiles input field:

The maximum number of door weekly profiles that can be saved.

Value range: 0-999

Number of VBI permissions input field:

The maximum number of individual permissions that can be saved.

Value range: 0-999

Number of interlock controls input field:

The maximum number of interlock definitions that can be saved.

Value range: 0-999

Number of combined permissions input field:

Number of combined permissions which can be stored per person.

Value range: 0-4000

Note: Only set this value as high as is actually necessary because the number of combined permissions is multiplied by the number of persons.

Number of AoC readers input field:

The maximum number of AoC readers that can be saved.

Value range: 0-9999

Number of security areas input field:

The maximum number of security areas that can be saved.

Value range: 0-99

Number of security area daily programs input field:

Maximum number of security area daily programs that can be saved.

Value range: 0-99

Number of IDS profiles input field:

Maximum number of IDS profiles that can be saved.

Value range: 0-99

Number of gateways for IDS input field:

Maximum number of IDS profiles that can be saved.

Value range: 0-16

Number of wireless readers for IDS input field:

Maximum number of wireless readers for IDS use that can be saved.

Value range: 0-256

Number of permission levels input field:

The maximum number of priority circuits that can be saved.

Value range: 0-999

Time settings**Number of variable booking instructions** input field:

The maximum number of variable booking instructions that can be saved.

Value range: 0-999

Number of SAP absence reasons input field:

The maximum number of SAP absences that can be saved.

Value range: 0-999

Number of SAP wage types input field:

The maximum number of SAP wage types that can be saved.

Value range: 0-999

Number of time daily programs input field:

The maximum number of time daily programs that can be saved.

Value range: 0-999

Number of time calendars input field:

The maximum number of time calendars that can be saved.

Value range: 0-999

Number of manual special days/bank holidays (time) input field:

The maximum number of special days and bank holidays that can be saved.

Value range: 0-999

Number of minimum break plans input field:

The maximum number of minimum break plans that can be saved.

Value range: 0-999

Employee record settings		Terminal settings	
Number of employee records	1000	Number of reader function definitions	70
Employee record format	Extended ▼	Number of terminal list entries	100
Length of employee record info field	0	Number of terminal device group definitions	34
		Number of traffic point parameters	31
		Number of MUX definitions	0
		Number of TCP readers	0
		Number of ID card reader profiles	0
		Number of InputPortDefinitionen	0
		System log memory size	0
		TMBasic configuration memory size	0
		TMBasic programs memory size	0

Employee record element configuration	
Disable AoC fields	☐
Disable SAP fields	☐
Disable floor release bit pattern	☐
Deactivate personalised duress PIN	☐
Save extended ID card numbers	☐
Activate tables for duration of stay monitoring	☐
Individual office release permission for online doors	☐

Employee record settings

Enter the values for the employee records.

Number of employee records input field:

The maximum number of employee records that can be saved.

Employee record format selection field:

Employee record format.

Options:

- Default: The employee record contains the default elements.
- Access: The employee record contains the default elements and access elements.
- Enhanced: The employee record contains the default + access + SAP and extended access elements.
- Minimum access: The terminal only accepts the access employee record (only allowed in AAC operating mode).
- Extended: 6 digits: In the extended employee record, 6-digit device numbers can be used for readers, for example in the access profiles.

Default value: Default

Length of employee record info field input field:

The number of possible characters in the employee record info field. Info fields are used for info bookings, for example for querying remaining vacation. The employee record info field can contain up to 10 info values, each with 16 characters plus separators.

The value should be set to 0 in the case of a class for access.

Value range: 0-160

Terminal settings

Enter the values for the terminal definition.

Number of permission levels input field:

The maximum number of priority circuits that can be saved.

Value range: 0-999

Number of reader function definitions input field:

The maximum number of reader function records that can be saved.

Value range: 0-999

Number of terminal list entries input field:

The maximum number of terminal list entries that can be saved.

Value range: 0-999

Number of terminal device group definitions input field:

The maximum number of terminal device group definitions that can be saved.

Value range: 0-70

Number of traffic point parameters input field:

The maximum number of traffic point parameters that can be saved.

Value range: 0-31

Number of MUX definitions input field:

The maximum number of multiplexer definitions that can be saved.

Value range: 0-31

Number of TCP readers input field:

The maximum number of TCP readers that can be saved.

Value range: 0-31

Number of ID card reader profiles input field:

The maximum number of ID card reader profiles that can be saved. If only one ID card type is used at a terminal, the number entered can be 0. If several ID card types are used, the number selected should be equal to or greater than the number of connected readers.

Value range: 0-31

System log memory size input field:

System log size specification in bytes.

Value range: 0-9999999

TMBasic configuration memory size input field:

Specifies the size of the TMBasic configuration file in bytes.

Value range: 0-9999999

TMBasic programs memory size input field:

Specifies the size of the TMBasic program in bytes.

Value range: 0-9999999

Employee record element configuration

Rarely used elements in the employee records can be enabled or disabled by the following configuration settings. This can help reduce the terminals' memory requirements.

Disable AoC fields checkbox:

Indicates whether the AoC fields such as AoC motion recording, AoC validity and AoC interval calculation type are saved.

Options:

- Activated: The AoC fields are not saved
- Not activated: The AoC fields are saved

Default: Not activated.

Disable SAP fields checkbox:

Indicates whether the SAP fields such as BDEGR, MOLGA, ZEITY, MOABW and VPLOA are saved.

Options:

- Activated: The SAP fields are not saved.
- Not activated: The SAP fields are saved.

Default: Not activated.

Disable floor release bit pattern checkbox:

Indicates if the floor release bit patterns 1-3 are saved.

Options:

- Activated: The floor release bit patterns are not saved.
- Not activated: The floor release bit patterns are saved.

Default: Not activated.

Save extended ID card numbers checkbox:

Indicates if the extended ID card numbers are saved.

Options:

- Activated: The extended ID card numbers are saved.
- Not activated: The extended ID card numbers are not saved.

Default: Not activated.

Activate tables for duration of stay monitoring checkbox:

Indicates whether the tables for the duration of stay monitoring will be activated.

Options:

- Activated: The tables are activated.
- Not activated: The tables are not activated.

Default: Not activated.

Individual office release permission for online doors checkbox:

Indicates whether an individual office release is also possible for individual online doors in the employee record.

Options:

- Activated: Individual office release for individual online doors is possible.
- Not activated: Individual office release can be set for all doors but not for individual online doors.

Default: Not activated.

Note 1: This option is only effective if system parameter 141 (Access) is activated.

Note 2: TP4 firmware version 3.04 or higher is required.

Note 2: Please note that individual office release permissions use more memory.

Hardware parameters

Use this tab to set the parameters for the terminal hardware.

Sound signal		Emergency power configuration	
Error tone	☒	DCW bus emergency power supply	☐
Info tone	☒	Emergency power switch-off	☐
Positive tone	☒	Emergency power delay time	0 Seconds
Office release sound	☒		
Key click	☒		
AoC waiting sound	Only with readers without display v		
IDS waiting tone	No sound v		
Other hardware parameters			
Permanent door unlocking	☐		
Operation LED colour	Yellow v		
Relay allocation	Door->R1, alarm->R2 v		
Optical keystroke display	☐		
Single LED signalling	☐		

Sound signals

Select the checkboxes for the messages and actions for which a sound signal should be sounded.

Error tone checkbox:

Issues a tone signal in the case of error messages.

Info tone checkbox:

Issues a tone signal in the case of info and status messages.

Positive tone checkbox:

Issues a tone signal in the case of a successful booking.

Key click checkbox:

Issues a tone signal for the key input.

AoC waiting sound selection field:

Defines which reader types issue a waiting sound and show a yellow flashing LED during AoC booking.

Options:

- No sound
- Only with readers with display
- Only with readers without display
- With all readers

IDS waiting tone selection field:

Defines which types of readers issue a waiting tone while the intruder detection system is being actuated.

Options:

- No sound
- Only with readers with display
- Only with readers without display
- With all readers

Emergency power configuration

Select the parameters you require for the emergency power supply.

DCW bus emergency power supply checkbox:

Activates the emergency power supply for the DCW bus.

Emergency power switch-off checkbox:

Activates the emergency power switch-off.

Emergency power delay time input field:

Time in seconds for which the emergency power supply should continue to run.

Other hardware parameters

Select the other parameters you require for the terminal hardware.

Permanent door unlocking checkbox:

Activates the permanent door release option.

Operation LED colour selection field:

Specifies how the operation LED is displayed, if the hardware supports this function.

Options: Off, yellow, green, red

Relay allocation selection field:

Defines the specified relay allocation for the door release impulse and alarm output.

Options:

- Door >R1, Alarm >R2: Internal Relay 1 is designed for the door opening and Internal Relay 2 for the alarm.
- Door->R2, alarm->R1: Internal Relay 2 is designed for the door opening and Internal Relay 1 for the alarm.

Default value: Door >R1, Alarm >R2

Optical keystroke display checkbox:

Activates visual LED signalling when keys are pressed on the PHG-VOXIO-Touch.

Single LED signalling checkbox:

If this checkbox is activated, all three LEDs of the PHG-VOXIO-Touch are actuated at once to signal, for instance, a booking event or the door status.

Offline parameters

Use this tab to set the parameters for the behaviour of the terminal if the connection to the terminal manager is interrupted.

The screenshot displays a configuration window with two main sections: **Door settings** and **Booking settings**.

Door settings:

- Door open time:** A numeric input field set to '0', followed by the unit 'Seconds'.
- Comparison value for door opener code:** An empty numeric input field.
- Door release pulse length:** A numeric input field set to '0', followed by the unit 'Seconds'.
- Door opening without employee record:** An unchecked checkbox.

Booking settings:

- Automatic booking out at 0:00:** A dropdown menu currently showing 'No change'.
- Store messages in booking log:** An unchecked checkbox.
- Booking log can be overwritten:** An unchecked checkbox.
- Booking permission without employee record:** An unchecked checkbox.
- No special actions for room zone 0:** A checked checkbox.
- Booking sequence checking:** A dropdown menu currently showing 'According to employee record parameters'.

Door settings: Create the door parameters for the offline status.

Door open time input field:

Duration of the door opening in seconds before an alarm is triggered. An alarm is triggered when this time is exceeded.

Comparison value for door opener code input field:

The code that is to be entered if the device type 'K' plus device number '001' is defined as the input device to open the door in the variable booking instruction.

Door release pulse length input field:

Duration of the door release pulse for the door opening in seconds.

Door opening without employee record checkbox:

Allows a door opening even if there is no employee record available for an ID card.

Booking settings: Define the booking parameters for the offline status.

Automatic booking out at 0:00 selection field:

Sets the employee record status to the selected setting for daily reconciliation at 0:00.

Options:

- **No change:** The status is not changed.
- **Set status to absent:** The status is set to 'Absent'. The first booking of the day then has to be an arrive booking.
- **No change, non-recurring skip of sequence checking:** For the first booking of the day, no sequence checking is carried out and the subsequent status is determined by the booking.

Default value: No change.

Store messages in booking log checkbox:

Stores all messages in the booking log.

Booking log can be overwritten checkbox:

Allows old log records to be overwritten even if they have not yet been read.

Booking permission without employee record checkbox:

Allows a booking even if there is no employee record available for an ID card.

No special actions for room zone 0 checkbox:

Identifier for checking room zone 0.

This identifier should always be activated. If you also include the outside area in the anti-passback room controls, you must also create a room zone for the outside area and allocated access permissions for it.

Booking sequence checking selection field:

Controls the sequence check for a booking.

Alarm settings: Define the alarm settings for the offline status.

Alarm settings	
Anti tamper switch, ATS; monitoring	☒
Output port device number of the alarm output for anti tamper alarm	0
External tamper contact input	0
Alarm duration	1
Alarm delay time	0
Level booking fifo	90 Percent
PIN code entry repeated and alarm output activated with incorrect PIN code	0
Door opener code/PIN entry blocking time	0
No alarm output activation when an incorrect PIN is entered	☐
Alarm output activated with incorrect country code	☐
Alarm output activated if company code is unknown	☐
Alarm output activated if door opening time is exceeded, door is forced entry or an invalid door opening code is entered	☐
Alarm output activated if ID card is unknown	☐
Alarm output activated if anti tamper switch is activated	No alarm activation
Alarm output activated if door is not opened after unlocking	☐
Alarm output activated if ID card version number is incorrect	☐
TMBasic program with notification	
Parameter for TMBasic program with notification	

Anti tamper switch monitoring checkbox:

Activates the anti tamper switch monitoring.

Output port device number of the alarm output for anti tamper alarm input field:

Specification of the alarm relay for the anti-tamper alarm.

External tamper contact input input field:

Specification of the external input to which the anti tamper switch is connected.

Alarm duration input field:

Duration of the alarm signal in seconds.

Alarm delay time input field:

Duration of the delay in seconds until the alarm output is activated.

Level booking fifo input field:

Percentage level booking fifo for which a message should be displayed.

PIN code entry repeated and alarm output activated with incorrect PIN code input field:

Specification of repetitions until the incorrect input of the PIN code triggers an alarm.

Door opener code/PIN entry blocking time input field:

Specifies the blocking time in minutes for the keypad or the person once the number of incorrect entries specified under **PIN code entry repeated** has been reached.

Value range: 0–99

0 = no blocking time

1-98 = blocking time in minutes

99 = permanent blocking

No alarm output activation when an incorrect PIN is entered checkbox:

Activates an alarm signal if an incorrect PIN code is entered.

Alarm output activated with incorrect country code checkbox:

Activates an alarm signal if the country code on the ID card is incorrect.

Alarm output activated if company code is unknown checkbox:

Activates an alarm if the company code on the ID card is incorrect.

Alarm output activated if door opening time is exceeded, door is forced open or an invalid door opening code is entered checkbox:

Activates an alarm when the door open time is exceeded, the door is forced open, or an invalid door opening code is entered.

Alarm output activated if ID card is unknown checkbox:

Activates an alarm if there is a booking with an unknown ID card.

Alarm output activated if anti tamper switch is activated selection field:

Alarm output activated if anti tamper switch is activated.

Alarm output activated if door is not opened after release checkbox:

Activates an alarm signal if the door is not opened by a booking after it is unlocked.

Alarm output activated if ID card version number is incorrect checkbox:

Activates an alarm if the version number on the ID card is incorrect.

TMBasic program with notification selection field:

Select a TMBasic program that is invoked when a notification is issued. Note: A TMBasic program can be invoked even if the notification log record is not generated due to the setting Alarm duration = 0.

Parameter for TMBasic program with notification input field:

Enter a parameter that is submitted to the TMBasic program and can be queried there using param = shellGetArgument().

Value range: 0-9999

LAN parameters

Use this tab to set the parameters for the LAN communication of the terminal.

The screenshot shows a configuration window titled "LAN communication settings". It contains the following fields and controls:

- Alive message cycle time**: An input field with a "Minutes" label to its right.
- Host online check cycle time**: An input field with a "Minutes" label to its right.
- 1st DNS IP**: An input field.
- 2nd DNS IP**: An input field.
- Domain name**: An input field.
- Use DHCP**: A dropdown menu currently showing "On".
- Use SNMP**: An unchecked checkbox.
- Telnet port**: An input field containing the value "23".

LAN communication settings: Enter the connection settings for the communication in your network.

Alive message cycle time input field:

Interval in minutes between live messages from a LAN terminal for itself and any connected sub-terminals to the terminal manager. The terminal is marked as offline if there are no messages for a terminal.

Value range: 0 - 255 (0 = send no message)

Default value: 0

Host online check cycle time input field:

Interval in minutes between the LAN terminal availability checks. If one LAN terminal cannot establish a connection to another LAN terminal this is marked as offline in the internal terminal list and therefore it is not taken into account during the terminals' data transfer.

Value range: 0 - 127 (0 = perform no check)

Default value: 0

1st DNS IP input field:

Specifies the DNS' IP address.

2nd DNS IP input field:

Specifies the DNS's second IP address.

Domain name input field:

Specifies the domain name.

Use DHCP checkbox:

Uses DHCP for the network communication.

Use SNMP checkbox:

Indicates whether the SNMP server is activated in the terminal.

Options:

- Not activated: No SNMP server is activated.
- Activated: The SNMP server is set up for port 161.

Default value: Not activated.

Telnet port input field:

Contains the port number for the Telnet link.

Default value: 23

SIO subnet parameters

Use this tab to set the parameters for the serial interface.

Serial interface settings

Baud rate

9600

Parity

Even

Number of data bits

7

Transmission start delay

0

Milliseconds

Transmission end delay

0

Milliseconds

Number of broadcast repetitions

1

Number of repetitions

3

Response or offline timeout

0

Seconds

Receive timeout

0

(Byte times)

Use encryption

☐

Serial interface settings:**Baud rate** selection field:

Specification of the baud rate for the data transfer.

Options:

- 2400 baud
- 4800 baud
- 9600 baud
- 19200 baud
- 38400 baud

Default value: 2400 baud

Parity selection field:

Selection of the parity for the parity check for the data transfer.

Options:

- None
- Even
- Uneven

Default value: Even

Number of data bits selection field:

Select the number of data bits for the data transfer.

Options:

- 7 data bits
- 8 data bits

Default value: 8 data bits

Transmission start delay input field:

The time for the delayed transmission start in milliseconds.

Transmission end delay input field:

The time for the delayed transmission end in milliseconds.

Number of broadcast repetitions input field:

The number of times a broadcast message is repeated.

Number of repetitions input field:

Number of times a job or a response is repeated if the receiver does not respond within the receive timeout.

Response or offline timeout input field:

Time in seconds within which a response is expected from a 2-wire terminal.

Receive timeout input field:

Time in seconds until a message is sent again if there is no communication.

Using XOR encryption checkbox:

Activates XOR encryption for the data transfer.

"Edit Class" dialog – XS terminal class

When you create a new class, standard settings are made depending on the terminal type selected. These can be adapted to your company's special circumstances.

Caution: Terminal classes should only be parametrised by persons with expert knowledge. Please contact your service partner.

The screenshot shows the 'Edit Class' dialog for an XS terminal class. The dialog has a toolbar at the top with icons for file operations and a title bar 'Edit Class'. The main area contains several input fields and checkboxes. The 'Number' field is highlighted in yellow and contains the value '3'. The 'Name' field is empty. The 'Class type' dropdown is set to 'XS terminal class'. Below these are checkboxes for 'Permanent opening without data' and 'Manual termination of office release', both of which are unchecked. The 'Clock change' dropdown is set to '1 - GMT +1:00 Central Europe'. The 'Log memory size (bytes)' and 'Number of DoC cards on which the same data type will be written in sequence' fields are empty.

Class type display field:

Displays the selected class type. The class type identifies devices that are based on the same technology. You make the selection at the same time as you create the terminal type and cannot change it after saving.

Permanent opening without data checkbox:

Determines if the door is open or closed by default after initialisation and before synchronisation. The door will also reset to this status in case of incorrect synchronisation. Select this checkbox if the door is to be open by default.

Default value: Not activated, door is closed.

Manual termination of office release checkbox:

Determines if an office release can be terminated manually, that is, without a valid ID card. Select this checkbox if you want to permit manual office release.

Default value: Not activated, manual termination of office release is not allowed.

Clock change selection field:

Contains the template for the clock change time for switching between summertime and wintertime. The clock change must be specified for the terminal, if it should perform the changeover itself.

Options:

- All created clock changes.

Log memory size (bytes) input field:

The log memory size information does not define the number of possible history entries but rather the reserved memory space for histories in words, i.e. 2 bytes. Any odd numbers entered are therefore rounded up to the next even number.

Value range: blank, 1-131070.

Default value: Blank

Number of DoC cards on which the same data type will be written in sequence input field:

Defines the number of DoC cards on which the same data type will be written in sequence.

Value range: blank, 1-20

5.4.2 Class setting

In this sub-menu you can maintain additional configuration data that is allocated to the devices using the class as well as define properties and functions of the devices.

Use the **TP4 terminal texts** menu item to manage the texts used in the TP4 terminals.

Use the **dormakaba terminal texts** menu item to manage the texts used in the dormakaba terminals.

Use the **TP4 variable booking instructions** menu item to manage the variable booking instructions for TP4 terminals.

Use the **dormakaba variable booking instructions** menu item to manage the variable booking instructions for dormakaba terminals.

Use the **TP3 variable booking instructions** menu item to manage the variable booking instructions for TP3 terminals.

Use the **Function assignments** menu item to assign different functions and properties of the devices to the dialog interface.

Use the **Key code conversion tables** menu item to define the conversion tables for different keypads.

Use the **TP4 VBI key allocations** menu item to define the key assignments for TP4 terminals.

Use the **dormakaba VBI key allocations** menu item to define the key assignments for dormakaba terminals.

Use the **TP4 VBI selection definition** menu item to assign multiple variable booking instructions to one or two keys.

Use the **TP4 VBI time preselections** menu item to manage the VBI time preselections for the time-controlled pre-setting of booking keys on TP4 terminals.

Use the **dormakaba VBI time preselections** menu item to manage the VBI time preselections for the time-controlled pre-setting of booking keys on dormakaba terminals.

Use the **TP3 VBI time preselections** menu item to manage the VBI time preselections for the time-controlled pre-setting of booking keys on TP3 terminals.

Use the **Summer/winter time** menu item to manage the clock change times between daylight savings time and standard time.

Use the **TMBasic programs** menu item to manage the TMBasic programs for the various terminals.

Use the **TMBasic messages** menu item to manage the TMBasic messages.

5.4.2.1 TP4 terminal texts

In order to display texts, booking responses and other information of a booking or notification the terminal requires the relevant texts.

You manage these texts in the terminal texts. When a terminal is initialised, the texts are transferred to the terminal. Only one file with the terminal texts can be transferred to each terminal. As the terminal expects unique numbers in the terminal texts, the terminal texts are not multilingual. If you want to operate the terminals in different languages, a separate file with the terminal texts must be created and maintained for each language.

The terminal texts are allocated to the terminal classes

Note: Terminal texts should only be changed by persons with expert knowledge. Please contact your service partner.

"Selection TP4 terminal texts" dialog

The **Selection TP4 terminal texts** dialog displays all TP4 terminal text files created.

The **Search function** can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection TP4 terminal texts				
☐	Number	Name	Memory type	Delete
☐	1	TP4 Terminaltexte (de)	System	
☐	2	TP4 Terminaltexte (en)	System	
☐	3	TP4 Terminaltexte (fr)	System	
☐	4	TP4 Terminaltexte (nl)	System	
☐	5	TP4 Terminaltexte (it)	System	
☐	6	TP4 Terminaltexte (es)	System	
☐	7	TP4 Terminaltexte (pt)	System	
☐	8	TP4 Terminaltexte (da)	System	
☐	9	TP4 Terminaltexte (no)	System	
☐	10	TP4 Terminaltexte (pl)	System	
☐	11	TP4 Terminaltexte (sv)	System	
☐	12	TP4 Terminaltexte (tr)	System	
Number of records: 12				

Memory type column:

Indicates who created the terminal texts.

Possible memory types:

- System: terminal text files created during installation which cannot be changed or deleted. Changes to these texts are saved under the type "Overwritten".
- Overwritten: these terminal texts are changed texts of the system type.
- User: new terminal texts created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TP4 terminal texts" dialog

Use the **Edit TP4 terminal texts** dialog to create new terminal texts and edit existing records.

You can use the buttons in the toolbar to navigate between terminal texts, to create, copy or delete terminal texts, and to save or discard changes. Use the **Back to selection** button to return to the selection dialog.

Text number	Text content	Description		
1	"#01 NO POLL REC"	Terminal has no poll records		
2	"#02 NO INFO REC"	Info record not received within timeout		
3	"#3 PROC. ERROR"	General processing error (no memory, etc.)		
5	"AoC data error"	AoC data error while calculating		
6	"Approval?"	Confirmation booking prompt with access control for two persons		
7	"No permission"	The access control for two persons is missing the confirmation permission (optional)		
8	"#08 WORD IDENT.?"	Unknown word identifier		
9	"No AoC data"	AoC data could not be determined		
10	"Calculate AoC data"	AoC calculation running		

Table of terminal texts:

The table contains all created terminal texts of the terminal text file.

Text number column:

Contains the unique number of the terminal text.

Text content column:

Contains the text as displayed in the terminal display. The text must be placed in quotation marks.

Description column:

Contains a descriptive text as an internal comment. The specification of a description is optional.

5.4.2.2 dormakaba terminal texts

In order to display texts, booking responses and other information for a booking, as well as messages that a terminal can show on the display, the terminal requires the relevant texts.

You manage these texts in the terminal texts. When a terminal is initialised, the texts are transferred to the terminal. Only one file with the terminal texts can be transferred to each terminal. As the terminal expects unique numbers in the terminal texts, the terminal texts are not multilingual. If you want to operate the terminals in different languages, a separate file with the terminal texts must be created and maintained for each language.

The terminal texts are allocated to the terminal classes

Note: Terminal texts should only be changed by persons with expert knowledge. Please contact your service partner.

"Selection dormakaba terminal texts" dialog

The **Selection dormakaba terminal texts** dialog displays all text files that have been created for dormakaba terminals.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection dormakaba terminal texts				
☐	Number	Name	Memory type	Delete
☐	1	dormakaba Terminaltexte (de)	System	
☐	2	dormakaba Terminaltexte (en)	System	
☐	3	dormakaba Terminaltexte (fr)	System	
☐	4	dormakaba Terminaltexte (nl)	System	
☐	5	dormakaba Terminaltexte (it)	System	
☐	6	dormakaba Terminaltexte (es)	System	
☐	7	dormakaba Terminaltexte (pt)	System	
☐	8	dormakaba Terminaltexte (da)	System	

Memory type column:

Indicates who created the terminal texts.

Possible memory types:

- System: terminal text files created during installation which cannot be changed or deleted. Changes to these texts are saved under the type "Overwritten".
- Overwritten: these terminal texts are changed texts of the "System" type.
- User: new terminal texts created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit dormakaba terminal texts" dialog

Use the **Edit dormakaba terminal texts** dialog to create new texts for dormakaba terminals and edit existing records.

The texts are distributed over three identically structured tabs, according to their usage.

- General texts
- Dialog texts
- Display info texts

You can use the buttons in the toolbar to navigate between terminal texts, to create, copy or delete terminal texts, and to save or discard changes. Use the **Back to selection** button to return to the selection dialog.

Edit dormakaba terminal texts						
Number	2	System				
Name	dormakaba Terminaltexte (en)					
Language	English					
General texts Dialog texts Display info texts						
Number	Text content	Description				
t01	Key not allowed	Key not allowed				
t02	Terminal blocked	Terminal blocked				
t03	Input time has expired	Input time has expired				
t04	Input error	Input error				
t05	Please wait	Please wait				
t06	Parametrisation error	Parametrisation error				

Language selection field:

Contains the language of the character set. The selection offered depends on which language packages have been installed.

Table of terminal texts:

The table contains all created terminal texts of the terminal text file.

Text number column:

Contains the unique number of the terminal text. This is fixed and cannot be changed.

Text content column:

Contains the text as displayed in the terminal display.

Description column:

Contains a descriptive text as an internal comment. This specification is optional.

5.4.2.3 Variable booking instructions

Variable booking instructions define how bookings are processed at the terminals.

All variable booking instructions that are required for your system are set up when the system is installed.

Note: Variable booking instructions should only be edited by persons with expert knowledge. Please contact your service partner.

"Selection TP3 variable booking instructions" dialog

The **Selection TP3 variable booking instructions** dialog displays all TP3 variable booking instructions files created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection TP3 variable booking instructions				
☐	Number ^	Name	Memory type	Delete
☐	1	Access	System	
☐	4	Access with pincode	System	
☐	201	Arrive	System	
☐	202	Depart	System	
☐	203	Info	System	
☐	204	Arrive BA	System	
☐	205	Depart BA	System	
☐	206	Pause begin	System	
☐	207	Pause end	System	
☐	208	Arrive with reason	System	
☐	209	Depart with reason	System	
☐	210	Info1	System	
Number of records: 12				

Memory type column:

Indicates how the variable booking instructions were created.

Possible memory types:

- System: variable booking instructions created during installation which cannot be changed or deleted. Changes to these variable booking instructions are saved under the type "Overwritten".
- Overwritten: variable booking instructions derived from the variable booking instructions of the system type.
- User: new variable booking instructions created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TP3 variable booking instruction" dialog

Use the **Edit TP3 variable booking instruction** dialog to create new variable booking instructions and edit existing records. Each record requires a unique number; it is recommended that you specify a name.

Caution: System files should only be edited by persons with expert knowledge. Please contact your service partner.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy or delete a record and to save or discard changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Number: 1 System

Name: Access

[Import/Export](#)

Variable booking instruction definition

Preselection text: ACCESS

Acknowledgement text: ACCESS OK

PIN code input: 0 No query

VBI type: 0 Create log record

Offline allowance: 3 Door opening

Sequence checking status: 2 None, no status change

Door opening value: 1 Door relay 1

Record number: 0 No record

Calculation rule time value: 0 Time record

LED colour value: 2 Green

Update definitions

Device class	Record number	File number	Time refresh	Employee record fields	Delete	

Parameter definition

Parameter type	Operating instruction text	Device types	Edit types	Delete	

VBI start device definitions

Device type	Device number	Delete	

Preselection text input field:

Contains the text that is displayed when the variable booking instruction is activated.

Acknowledgement text input field:

Contains the text that is printed when a printer is connected.

ERec info record output checkbox:

Displays employee record information using the info button.

PIN code input:

Defines behaviour during PIN code checks.

VBI type selection field:

Controls how the booking log record is created and the confirmation query.

Offline authorisation selection field:

Defines the booking behaviour if the terminal is offline.

Sequence checking status selection field:

Defines the evaluation of the employee record with regard to its change in status.

Door opening value selection field:

Contains type of door opening.

Version 3.83 or later: Additional value 2 defines the alarm relay number as strike 2.

If VT10 is used, 2 doors can be controlled by 2 external readers in this way.

Value range:

- 0 = No door opening
- 1 = Door relay 1
- 2 = Door relay 2 (alarm relay on interface board used as second door relay)

Default value: 1 = Door relay 1

Record number selection field:

Indicates which record from the employee record is displayed during offline processing.

Calculation rule time value selection field:

Defines the calculation of the time to be displayed during the real-time simulation of an offline booking.

LED colour value selection field:

Defines the signal LED status display type following a booking.

Tables:

Additional parameters for the variable booking instruction can be set in the tables below.

Note: It is essential to have profound knowledge in programming variable booking instructions for these parameters. Therefore, they should only be edited by a service partner.

Programming is based on terminal-specific documentation for the variable booking instructions.

<u>Update definitions</u>						
Device class	Record number	File number	Time refresh	Employee record fields	Delete	
<u>Parameter definition</u>						
Parameter type	Operating instruction text	Device types	Edit types	Delete		
<u>VBI start device definitions</u>						
Device type	Device number	Delete				

Update definitions table:

Contains the parameters for exchanging data within the inter-terminal communication.

Parameter definition table:

In this table comprehensive programming can be defined with checks and actions.

VBI start device definitions table:

This table defines the device components required for reading data during the booking.

"Selection TP4 variable booking instructions" dialog

The **Selection TP4 variable booking instructions** dialog displays all TP4 booking instruction files created.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Selection TP4 variable booking instructions				
☐	Number	Name	Memory type	Delete
☐	1	Access	System	
☐	2	Access with ITK	System	
☐	3	Access with ITK SA	System	
☐	4	Access with pincode	System	
☐	5	Access with office release	System	
☐	6	Access with ITK SA OUT	System	
☐	7	Access IN	System	
☐	8	Access OUT	System	

Memory type column:

Indicates how the variable booking instructions were created.

Possible memory types:

- System: variable booking instructions created during installation which cannot be changed or deleted. Changes to these variable booking instructions are saved under the type "Overwritten".
- Overwritten: variable booking instructions derived from the variable booking instructions of the system type.
- User: new variable booking instructions created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TP4 variable booking instruction" dialog

Use the **Edit TP4 variable booking instruction** dialog to create new variable booking instructions and edit existing records.

Caution: System files should only be edited by persons with expert knowledge. Please contact your service partner.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy or delete a record and to save or discard changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Edit TP4 variable booking instruction	
Number	1 System
Name	Access
Import/Export	
Variable booking instruction definition	
Preselection text	ACCESS
Acknowledgement text	ACCESS OK
ERec info record output	☐
PIN code input	0 No query
Duress PIN code	0 No duress PIN code
VBI type	0 Create log record
Offline allowance	3 Door opening
Sequence checking status	2 None, no status change
Door opening value	1 Door opening
IDS actuation value	0 No IDS actuation
Record number	0 No record
Calculation rule time value	0 Time record
LED colour value	2 Green
TMBasic program	
TMBasic start parameter	
AoC data calculation	
Save AoC data	
DoC data generation	

Preselection text input field:

Contains the text that is displayed when the variable booking instruction is activated.

2nd preselection text (access control for two persons only) input field:

Contains the text displayed for the second booking of the access control for two persons function.

Acknowledgement text input field:

Contains the text that is printed when a printer is connected.

ERec info record output checkbox:

Displays the employee record information using the info button. You can scroll through the individual info records using the info button.

PIN code input:

Defines behaviour during PIN code checks.

Duress PIN code selection field:

Indicates whether a duress PIN code is required.

VBI type selection field:

Controls how the booking log record is created and the confirmation query.

Offline authorisation selection field:

Defines the booking behaviour if the terminal is offline.

Sequence checking status selection field:

Defines the evaluation of the employee record with regard to its change in status.

Door opening value selection field:

Contains type of door opening.

IDS actuation value selection field:

Defines the type of IDS actuation.

Record number selection field:

Indicates which record from the employee record is displayed during offline processing.

Calculation rule time value selection field:

Defines the calculation of the time to be displayed during the real-time simulation of an offline booking.

LED colour value selection field:

Defines the signal LED status display type following a booking.

Options:

Value	LED colour
0	Off
1	Yellow
2	Green
3	No change
4	Red
5	Yellow: absent; Green: present
6	Green: absent; Yellow: present
7	Off: absent; Yellow: present
8	Off: absent; Green: present

Note: For bookings with door opening, a green LED shines for the release duration. In case of a booking error, a red LED shines for the duration of booking info output.

Some booking functions, such as office release, AoC bookings or IDS actuation, have fixed, device-specific LED displays.

TMBasic program selection field:

Selection of the TMBasic program, which is executed when the variable booking instruction is processing.

TMBasic start parameter input field:

Specification of the start parameters for the TMBasic program, if necessary.

AoC data calculation selection field:

Specifies how the AoC data is calculated.

Options:

0 = Calculate the AoC data offline

1 = Query AoC data from server

Default value: 0

Save AoC data selection field:

Specifies how the AoC data are written on the cards.

DoC data generation input field:

Indicates whether DoC data is calculated.

Options:

0 = No DoC data

1 = Write/read DoC data

2 = Write/read DoC data, cancel on DoC error

3 = Delete DoC data

4 = Delete DoC data, cancel on DoC error

Default value: 0

Tables:

Additional parameters for the variable booking instruction can be set in the tables below.

Note: It is essential to have profound knowledge in programming variable booking instructions for these parameters. Therefore, they should only be edited by a service partner.

Programming is based on terminal-specific documentation for the variable booking instructions.

<u>Update definitions</u>						
Device class	Record number	File number	Time refresh	Employee record fields	Delete	
<u>Parameter definition</u>						
Parameter type	Operating instruction text	Device types	Edit types	Delete		
<u>VBI start device definitions</u>						
Device type	Device number	Delete				

Update definitions table:

Contains the parameters for exchanging data within the inter-terminal communication.

Parameter definition table:

In this table comprehensive programming can be defined with checks and actions.

VBI start device definitions table:

This table defines the device components required for reading data during the booking.

5.4.2.4 dormakaba variable booking instructions

Variable booking instructions define how bookings are processed at the terminals.

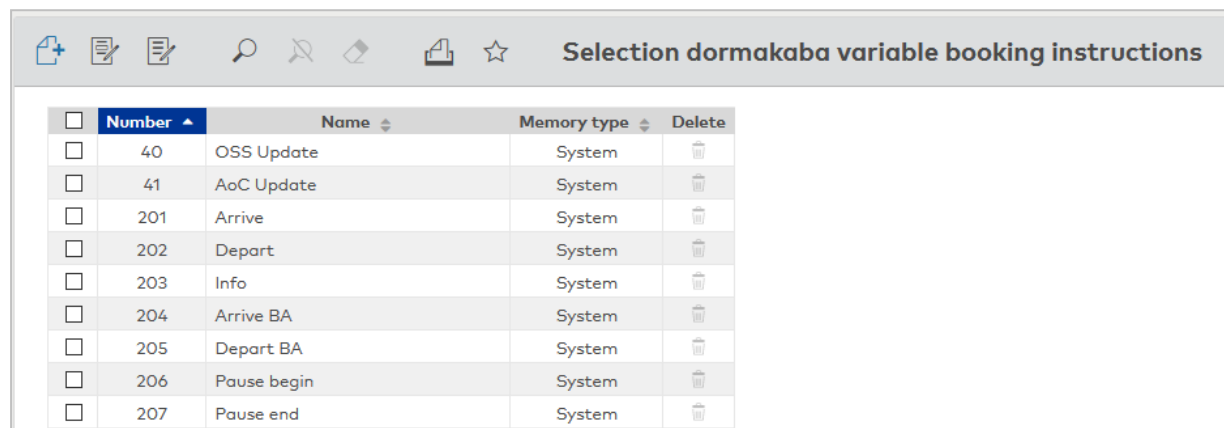
All variable booking instructions that are required for your system are set up when the system is installed.

Note: Variable booking instructions should only be edited by persons with expert knowledge. Please contact your service partner.

"Selection dormakaba variable booking instructions" dialog

The **Selection dormakaba variable booking instructions** dialog displays all dormakaba booking instruction files that have been created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



☐	Number	Name	Memory type	Delete
☐	40	OSS Update	System	
☐	41	AoC Update	System	
☐	201	Arrive	System	
☐	202	Depart	System	
☐	203	Info	System	
☐	204	Arrive BA	System	
☐	205	Depart BA	System	
☐	206	Pause begin	System	
☐	207	Pause end	System	

Memory type column:

Indicates how the variable booking instructions were created.

Possible memory types:

- System: variable booking instructions created during installation which cannot be changed or deleted. Changes to these variable booking instructions are saved under the type "Overwritten".
- Overwritten: variable booking instructions derived from the variable booking instructions of the "System" type.
- User: new variable booking instructions created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit dormakaba variable booking instruction" dialog

Use the **Edit dormakaba variable booking instruction** dialog to create new variable booking instructions and edit existing records.

Caution: System files should only be edited by persons with expert knowledge. Please contact your service partner.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy or delete a record and to save or discard changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Edit dormakaba variable booking instruction

Number System

Name

Variable booking instruction definition

Preselection text

Record type/Record type modification

Acknowledgement text

Number of display infos

Key remains preselected ☒

Employee record required ☒

Create log record ☒

Booking allowed with full buffer ☐

Online booking ☐

AoC update ☐

DoC update ☐

Actuate relay ☐

Keyboard entry 1

Dialog text

Report

Number of places

Input format

Keyboard

Booking instruction definition area:

This area contains the various settings and properties of the variable booking instruction.

Preselection text input field:

Free text field for the preselection text. If the terminal is ready for booking, the preselection text appears in the top line of the booking window and on the icon.

Record type/Record type modification selection field:

These parameters define the record type and record type modification with which a booking record is sent to the server.

Options:

- B0 Info query
- B1 Arrive
- B2 Leave
- B3 Business authorisation
- B4 Business authorisation "Arrive"
- B5 Business authorisation "Leave"
- BS Break start
- BE Break end
- F0 Special function
- FA Special function
- FB Special function
- FC Special function
- FD Special function
- FE Special function

Acknowledgement text selection field:

Select an acknowledgement text for dormakaba terminals.

Options:

- Static terminal text = displays the automatic acknowledgement text "Thank you".
- Time record according to info record allocation = displays any time record. The [Info record allocations dialog](#) is used to define which employee record accounts and time accounts are allocated to the info records.

Number of display infos selection field:

This parameter defines how many display infos are displayed from the master record.

Selection: any value between 0 and 10.

Key remains preselected checkbox:

This parameter specifies that bookings can continue to be made using the last-pressed function key until another function key is pressed. This setting eliminates the need to press the same function key again before every booking.

Note: Keys preselected using the dormakaba key time preselection take priority over this function.

Employee record required checkbox:

This parameter stipulates that for each ID number read from the ID card, an employee record must be stored in the terminal. If there is no employee record for the ID number read from the ID card, although "Employee record required" has been set in the parameters, error code 4 "No master record found" is entered in the booking record. In the Offline/Stand-alone operating states, the booking is denied with the error message "No master record".

Generate log record checkbox:

This parameter defines whether bookings and events are to be buffered. The parameter is primarily relevant when in Offline and Autonomous modes. If buffer backup has been configured, the parameter also applies to the Online mode.

Booking allowed with full buffer checkbox:

This parameter defines whether bookings are also allowed when the buffer memory is full. If the buffer memory is full, booking records are no longer saved in the terminal. This also applies if buffer backup is set in the parameters. The access control functions are available, however.

Online booking checkbox:

This parameter determines whether the terminal also expects a logical booking response from the server in the Offline and Stand-alone operating states. If this does not happen, the internal booking response is displayed after four times the response timeout time (4 x 3 seconds = 12 seconds).

AoC update checkbox:

This parameter specifies whether the booking instruction should cause the AoC data to be written to the ID card.

OSS update checkbox:

This parameter specifies whether the booking instruction should cause the OSS data to be written to the ID card

Actuate relay checkbox:

This parameter determines whether the strike relay R1/A (Arrive) or R2/B (Leave) is to be actuated for permitted bookings. Which relay is actuated depends on the SA/SAM of the function key pressed and must therefore be taken into account when setting the parameters. For SA/SAM A2, B2, B5 and B3 for present employees, strike relay R2 is actuated. For all other SA/SAM for present employees and B3 for absent employees, strike relay R1 is actuated.

Keyboard input 1 area

Parameter for the option of booking via keyboard input.

These options can only be used if system parameter "Time 120 Cost centre" is activated.

Dialog text selection field:

Contains the text output on the terminal.

List selection field

Contains the list of booking options displayed on the terminal.

Options:

Absences: List of absences created in master data management.

Cost centres: List of the cost centres created in person administration.

None: If no list is specified, you can enter data freely using the keyboard. This is configured in detail using the following three selection fields.

Number of characters selection field:

Enter the maximum number of characters for free user input.

Values: 0–24 characters

Input format display:

Select how user input is treated if the maximum possible number of characters is fallen short of.

Options:

Fill up: The missing characters are filled up using spaces (alphanumeric keyboard) or with zeroes (numeric keyboard).

Fixed: No characters are filled up and only the entered text is transferred to dormakaba MATRIX.

Keyboard display:

Type of keyboard for free user input.

Options:

Alphanumeric : An alphanumeric keyboard is displayed.

Numeric : A numeric keyboard is displayed.

5.4.2.5 Function assignments

Function assignments connect different dialogs with properties and functions in the terminal periphery and define the default values which are used when creating new devices.

Variable booking instructions thus essentially determine the terminal's behaviour during a booking. The variable booking instruction saves the information on how an access booking is performed, how a connected intruder detection system is selected or whether the tests for a lift need to be run.

Allocating variable booking instructions to different functions provided in the dialog interface means the user does not need to perform the correct allocation of a variable booking instruction in the device definition.

In addition to allocating variable booking instructions, in some dialogs, booking types are connected with functions and actions which the user can perform in the dialogs. A person can be configured as 'Present' or 'Absent' in the attendance display. The booking types required for this setting are defined in the function assignment.

"Edit function assignments" dialog

Use the **Edit Function assignments** dialog to assign the functions to the dialog interface.

The allocation is made in a simple table with the elements being predefined from the dialog interface. The selection for the function assignment is made by the selection type.

Note: The function cannot be performed if no allocation exists for a dialog element which is connected with an action. If the allocation represents a variable booking instruction, you must enter the respective variable booking instruction manually with the devices. If you make changes to the function assignments, the changes are not applied to devices already created. Subsequent changes must be updated in the respective dialogs for device modification.

Edit Function assignments		
Name	Function assignment	Selection type
Time booking key allocation	1 - TP4 Arrive/Depart	VBI key allocation
Comfort/VdS-compliant IDS: IDS function via key allocation	3 - TP4 IDS	VBI key allocation
Set access present	107 - Set access present	Booking type
Set access absent	108 - Set access absent	Booking type
Set persons	10001 - Set room zone/set	Booking type
Access cancel notification	10002 - - Security area: c	User program
Video booking	9 - Video access	Booking type
Video booking denied	10 - Video access denied	Booking type
Default class for access terminals	101 - TP4-LAN-Access	Class
Default class for time terminals	102 - TP4-LAN-Time	Class

Name display field:

Contains the name from the dialog interface for the allocation.

Function assignment selection field:

Contains the function assignment for the dialog interface.

Options:

- The selection quantity depends on the respective selection type.

Selection type display field:

Displays the type for the selection quantity of the function assignment.

Description of the available function assignments

Access:

This allocation defines the default variable booking instruction for access for the readers which are connected to the TP4 terminal. The variable booking instruction is entered when creating a reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab

Access TP3:

This allocation defines the default variable booking instruction for access for the readers which are connected to the TP3 terminal. The variable booking instruction is entered when creating a reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab

Write AoC data:

This allocation defines the default variable booking instruction for access for readers which can also write AoC data on ID cards.

Time booking key allocation:

This allocation defines the default for the time booking key allocation.

Lift:

This allocation defines for a reader the variable booking instruction which is used to perform bookings for a lift. The variable booking instruction is entered through the dialog for the lift control with the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

IDS connection standard:

This allocation defines a reader's variable booking instruction which is used to perform bookings for arming/disarming intruder detection systems. The variable booking instruction is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

IDS input "ready to be armed" status:

Specification of the wildcard in the variable booking instruction for the standard IDS connection. This

wildcard is set from the edit dialog prior to the transfer of the variable booking instruction to the terminal through the concrete input to signal whether the IDS is ready to be armed.

IDS activation/deactivation input:

Specification of the wildcard in the variable booking instruction for the standard IDS connection. This wildcard is set from the edit dialog prior to the transfer of the variable booking instruction to the terminal through the input for the arming status of the IDS.

IDS activation/deactivation output:

Specification of the wildcard in the variable booking instruction for the standard IDS connection. This wildcard is set from the edit dialog prior to the transfer of the variable booking instruction to the terminal through the output for arming/disarming the IDS.

IDS connection with reader shut down:

This allocation defines a reader's variable booking instruction which is used to perform bookings for arming/disarming intruder detection systems. The variable booking instruction is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

IDS input "ready to be armed" status:

Specifies the wildcard in the variable booking instruction for the IDS connection with reader shut down. This wildcard is set from the edit dialog prior to the transfer of the variable booking instruction to the terminal through the concrete input to signal whether the IDS is ready to be armed.

IDS activation/deactivation input:

Specifies the wildcard in the variable booking instruction for the IDS connection with reader shut down. This wildcard is set from the edit dialog prior to the transfer of the variable booking instruction to the terminal through the input for the arming status of the IDS.

IDS activation/deactivation output:

Specifies the wildcard in the variable booking instruction for the IDS connection with reader shut down. This wildcard is set from the edit dialog prior to the transfer of the variable booking instruction to the terminal through the output for arming/disarming the IDS.

Comfort/ VdS-compliant IDS: IDS arming:

This allocation defines a reader's variable booking instruction which is used to perform bookings for arming intruder detection systems. The variable booking instruction is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

Default value: 12 Activate IDS

Comfort/ VdS-compliant IDS: IDS disarming.

This allocation defines a reader's variable booking instruction which is used to perform bookings for disarming detection systems. The variable booking instruction is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

Default value: 13 deactivate IDS

Comfort/ VdS-compliant IDS: IDS disarming with access.

This allocation defines a reader's variable booking instruction which is used to perform bookings for disarming detection systems. An access booking is made at the same time. The variable booking instruction is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

Default value: 14 IDS deactivation with access

Comfort/ VdS-compliant IDS: IDS reverse.

This allocation defines a reader's variable booking instruction which is used to perform bookings for reversing the status of intruder detection systems. The variable booking instruction is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

Default value: 15 Switch IDS

Comfort/ VdS-compliant IDS: IDS reverse with access.

This allocation defines a reader's variable booking instruction which is used to perform bookings for reversing the status of intruder detection systems. An access booking is made at the same time. The variable booking instruction is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the variable booking instruction manually for the readers in the **Device group** tab.

Default value: 16 Switch IDS with access

Comfort/ VdS-compliant IDS: IDS function key allocation:

This allocation defines for a reader the key assignment which is used to perform bookings for intruder detection system functions. The VBI key allocation is entered using the dialog for intruder detection systems in the selected reader. If no default is given, you must enter the VBI key allocation manually for the readers in the **Device group** tab.

Default value: 3 TP4 Arrive/Depart with IDS

Set access present:

With this allocations the booking type for the manual settings of the attendance status is set to present. If the allocation is not available, the action is not performed and the attendance status cannot be changed.

Set access absent:

With this allocation the booking type for the manual settings of the attendance status is set to absent in the attendance display. If the allocation is not available, the action is not performed and the attendance status cannot be changed.

Set person:

This assignment specifies the booking type for manually setting a person in a room zone/security area. If the allocation is not available, the action is not performed.

Access cancellation notification:

This entry determines which user program is executed when the terminal reports a reverse access booking. A cancellation notification is usually generated by the terminal if access is granted but the door is not opened. The counting value must be corrected again in such a case, particularly with regard to counting information for security areas.

Video booking:

This allocation defines booking type for video bookings. If the allocation does not exist, the action is not performed.

Video booking denied:

This allocation defines booking type for video bookings which have been rejected. If the allocation does not exist, a video booking with rejection is not made.

Access IN:

This allocation sets the booking type that is evaluated during basic time recording to determine the time difference as an Arrive booking. As default, this is set to "7 - Entrance access".

Access OUT:

This allocation sets the booking type that is evaluated when using basic time recording to determine the time difference as a Leave booking. As default, this is set to "8 - Exit access".

5.4.2.6 Key code conversion tables

Key code conversion tables are usually used for special keyboards.

As shown in the example, an M6L can be fitted with a 10-key keyboard for entering PIN codes or door opener codes instead of the standard keyboard (function keys F1–F6 and booking keys).

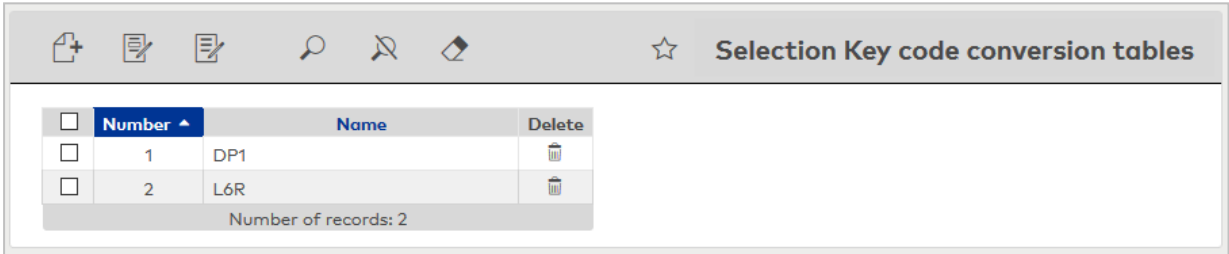


In this case, the key codes must be mapped to the correct keys.

"Selection key code conversion tables" dialog

The **Selection Key code conversion tables** dialog displays all key code conversion tables created.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

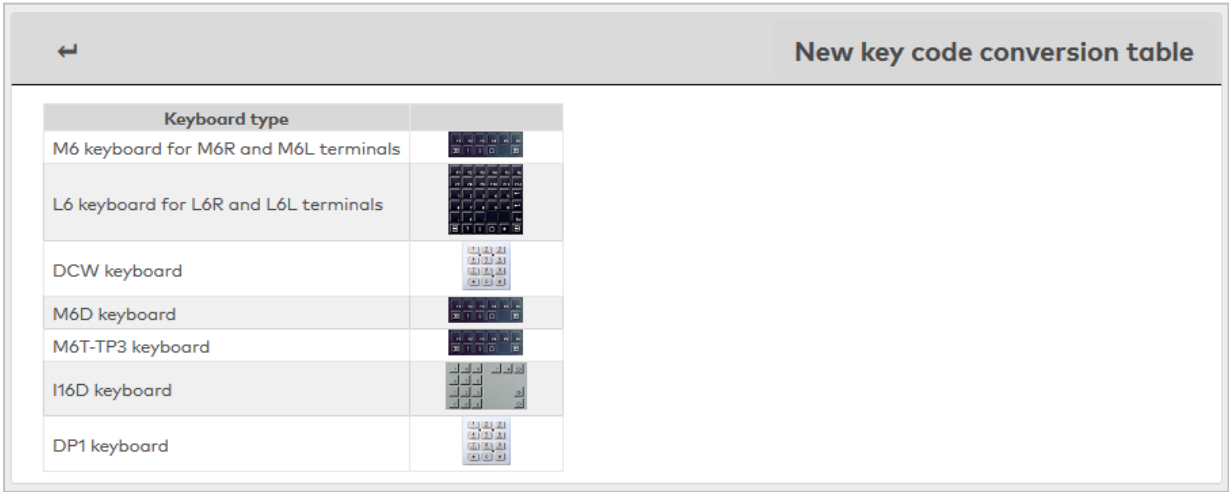


Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New key code conversion table" dialog

The **New key code conversion table** dialog displays the available standard keyboard layouts. Select a keyboard to apply it to the key code conversion table in the **Edit Key code conversion table** dialog.

Use the **Back to selection** button in the toolbar to go to the selection dialog.



Keyboard type column:

Contains the keyboard types. The keyboard layout and the keys that are possible with this are linked to the keyboard types.

Illustration column:
Contains an image of the standard keyboard for the type.

"Edit key code conversion table" dialog

Use the **Edit Key code conversion table** dialog to create new key code conversion tables and edit existing records.

Note: Depending on the keypad selected, the dialog contains a selection field for each key for allocating the key number. The arrangement of the selection fields is based on the arrangement of the keys on the keypad.
The M6D keypad dialog is shown as an example.

Edit Key code conversion table

Number1

NameDP1

1

2

3

4

5

6

7

8

9

*

0

#

DP1 keyboard

1

2

3

4

5

6

7

8

9

ESC

0

Return

Selection fields:
The selection fields contain the allocated keys. The arrangement of the selection fields is based on the arrangement of the keys. If a key is not allocated, it remains unassigned.
Options:

- All available keys.

Default key code conversion table in key numbers

Default assignment of the function keys:

Key code	Key number	Default assignment
0x23	31	F1
0x24	32	F2
0x25	33	F3
0x26	34	F4
0x27	35	F5

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User Documentation dormakaba MATRIX Basic

1073G-00-B3a

0x28	36	
0x22	37	
0x34	38	
0x35	39	
0x36	40	
0x37	41	
0x38	42	

Default assignment of the numerical keys:

Key code	Key number	Default assignment
0x32	1	
0x33	2	
0x45	3	
0x46	4	
0x47	5	
0x48	54	
0x42	6	
0x43	7	
0x44	8	
0x56	9	

0x57	10	
0x58	53	

Default assignment of booking and other keys:

Key code	Key number	Default assignment
0x52	51	
0x53	50	
0x54	52	
0x67	55	ESC
0x62	17	
0x63	30	
0x64	19	
0x65	25	
0x68	20	

5.4.2.7 TP4 VBI key allocations

The VBI key allocations are used to define the key assignments for different TP3 and TP4 devices if they are equipped with a keypad. A variable booking instruction can be allocated to each key which defines the booking characteristics. The booking preselection is only possible for assigned keys.

Note: TP3 and TP4 devices without a keyboard do not need VBI key allocations.

"Selection TP4 VBI key allocations" dialog

The **Selection TP4 VBI key allocations** dialog displays all created VBI key allocations for TP3 and TP4 terminals.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Selection TP4 VBI key allocations				
☐	Number ↑	Name	Memory type	Delete
☐	1	TP4 Arrive/Depart	System	
☐	2	TP3 Arrive/Depart	System	
☐	3	TP4 IDS	System	
Number of records: 3				

Memory type column:

Indicates how the VBI key allocation was created.

Possible memory types:

- System: VBI key allocations created during installation which cannot be changed or deleted. Changes to these VBI key allocations are saved under the type "Overwritten".
- Overwritten: VBI key allocations derived from the VBI key allocations of the "system" type.
- User: new VBI key allocations created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New TP4 VBI key allocation" dialog

The **New TP4 VBI key allocation** dialog displays the available basic VBI key allocations. Select a key allocation to transfer the default settings for this key allocation to the **Edit TP4 VBI key allocation** dialog.

The available keys depend on the basic VBI key allocation. Select the template that corresponds to your terminal.

Use the **Back to selection** button to return to the selection dialog.

New TP4 VBI key allocation	
VBI keys	Description
TP4 devices	For use with all TP4 devices

VBI keys column:

Contains the name of the available basic VBI key allocation.

Description column:

Contains a short description of which devices the VBI key allocation can be used for.

5.4.2.8 dormakaba VBI key allocation

dormakaba VBI key allocation is used to define the key assignments for different dormakaba devices if they are equipped with a keyboard. A variable booking instruction can be allocated to each key which defines the booking characteristics. The booking preselection is only possible for assigned keys.

"Selection dormakaba VBI key allocations" dialog

The **Selection dormakaba VBI key allocations** dialog displays all VBI key allocations created for dormakaba terminals. Each VBI key allocation is represented by a unique number and a name.

Use the buttons in the toolbar to create new VBI key allocations or to edit selected VBI key allocations. You can use the search function to search for individual VBI key allocations using the number or name.

The table displays the corresponding search results. Click a column header to sort the report by a characteristic in ascending or descending order. Click an entry to open the relevant record.

Selection dormakaba VBI key allocations				
☐	Number ▲	Name ↕	Memory type ↕	Delete
☐	1	9700 Arrive/Depart/CostCenter /Absence	Overwritten	
☐	1	9700 Arrive/Depart	System	
☐	2	9600 Arrive/Depart	System	
☐	40	9700 OSS	System	
☐	41	9700 AoC	System	
☐	42	9600 OSS	System	
☐	43	9600 AoC	System	
Number of records: 7				

Memory type column:

Indicates which user created the VBI key allocation.

Possible memory types:

- System: VBI key allocations created during installation which cannot be changed or deleted. Changes to these VBI key allocations are saved under the type "Overwritten".
- Overwritten: VBI key allocations derived from the VBI key allocations of the "System" type.
- User: new VBI key allocations created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New dormakaba VBI key allocation" dialog

The **New dormakaba key allocation** dialog displays the available basic VBI key allocations for dormakaba terminals. Select a key allocation to transfer the default settings for this key allocation to the **Edit dormakaba VBI key allocation** dialog.

The available keys depend on the basic VBI key allocation. Select the template that corresponds to your terminal.

Use the **Back to selection** button to return to the selection dialog.

New dormakaba VBI key allocation	
VBI keys	Description
dormakaba terminal 97 00	For use with all dormakaba 97 00 terminals
dormakaba terminal 96 00	For use with all dormakaba 96 00 terminals

VBI keys column:
Contains the name of the available basic VBI key allocation.

Description column:
Contains a short description of which devices the VBI key allocation can be used for.

Available VBI key allocations:
Since the key allocation differs internally between the different devices, you need to select the basic VBI key allocation which establishes a connection to the device variant.

dormakaba terminal 97 00:
Select this key allocation for type 97 00 dormakaba terminals.

dormakaba terminal 96 00:
Select this key allocation for type 96 00 dormakaba terminals.

"Edit dormakaba VBI key allocation" dialog

Use the **Edit dormakaba VBI key allocation** dialog to create new VBI key allocations and edit existing VBI key allocations for dormakaba terminals.

Note: The number of keys available depends on the template selected when a new key allocation is created.

Use the buttons in the toolbar to navigate between records, create or delete a record and save or discard changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Edit dormakaba VBI key allocation	
Number	1 System
Name	9700 Arrive/Depart
VBI key allocation for	dormakaba terminal 97 00
Allocation between key number and VBI number	
F0	900 - Basic state ▼
F1	201 - Arrive ▼
F2	202 - Depart ▼
F3	205 - Depart BA ▼
F4	203 - Info ▼
F5	204 - Arrive BA ▼

Allocation between key number and VBI number selection fields:
Each key can be allocated to a booking instruction via the selection fields. Keys not allocated a variable booking instruction cannot be selected for a booking.
Options:

- All variable booking instructions for dormakaba terminals that have been created in the system.

Note: The keys available depend on the basic VBI key allocation.

5.4.2.9 TP4 VBI selection definition

The **VBI selection definition** allows you to scroll through several booking commands using one (forwards) or two (forwards and backwards) keys. The selected booking command is then activated according to the booking command definition, e.g. with the ID card.

Note: The maximum number of VBI selection definitions that can be set up for a terminal is defined in the file management parameter "Number of terminal device group definitions".

"Selection TP4 VBI selection definitions" dialog

The **Selection TP4 VBI selection definition** dialog displays all created VBI selection definitions for TP4 terminals.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

☐	Number	Name	Delete
☐	1	B6L	
☐	2	M6L	

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TP4 VBI selection definition" dialog

Use the **Edit TP4 VBI selection definition** dialog to create new TP4 VBI selection definitions and edit existing records. Each record requires a unique number; it is recommended that you specify a name.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Name: 1

Name:

Key for "Scroll backwards":

Key for "Scroll forwards":

Numbers of selectable variable booking instructions

VBI number		
1 - Access		
202 - Depart		

New entry

Key for "Scroll backwards" selection field:
Selection of the key for scrolling backwards.

Key for "Scroll forwards" selection field:
Selection of the key for scrolling forwards.

Numbers of selectable variable booking instructions table:

- VBI number** column:
Selection of the variable booking command that is to be available for selection.
- Options:
All variable booking instructions created in the system.

5.4.2.10 VBI/key time preselections

The terminal peripherals offer device-specific options to preselect the desired booking at specific times. The advantage of this is that the persons booking do not initially have to activate the desired booking by pressing a button.

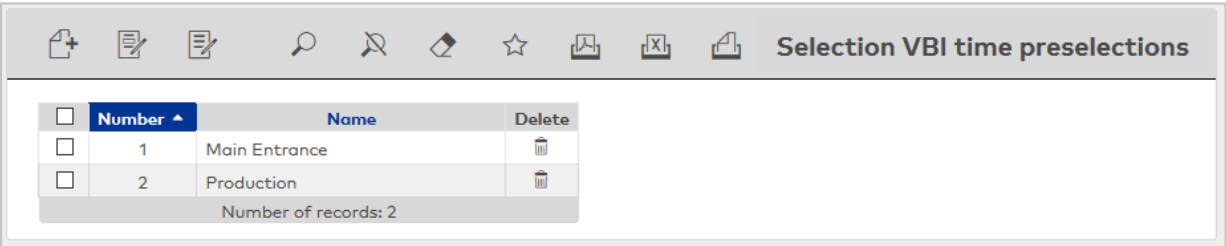
Generally, the arrive function is enabled for the employees' arrival times and the leave function is enabled for the employees' leaving times.

Depending on the device types, the time preselections are controlled via variable booking instructions for TP4 terminals and using the keys for TP3 terminals.

"Selection TP4 VBI time preselections" dialog

The **Selection TP4 VBI time preselections** dialog displays all created VBI time preselections for TP4 terminals.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TP4 VBI time preselection" dialog

In the **Edit TP4 VBI time preselection** dialog, you can create new TP4 VBI time preselections and edit existing records.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

[illegible]

Time preselection table:

You can define a total of 10 time periods for preselections.

Note: You must enter a period (From–Until) to create a time preselection.

From input fields:

Contain the time when time preselection starts. From this time on, the terminal automatically activates the specified variable booking instruction as a preselection.

Value range: 00:00-24:00

Format: hh:mm

Until input field:

The specified variable booking instruction remains activated as a preselection until this point in time. A variable booking instruction selected by the user remains in force after this time.

Value range: 00:00-24:00

Format: hh:mm

VBI number selection field:

Selection of the variable booking instruction which is pre-set for the specified time period.

Options:

- All variable booking instructions created in the system.

"Selection TP3 key time preselections" dialog

The **Select TP3 key time preselections** dialog displays all created key time preselections for TP3 terminals.

The **Search** function can be used to limit the selection using a single filter criterion or a group of filter criteria.












Selection VBI time preselections

☐	Number ^	Name	Delete
☐	1	Main entry	
☐	2	Production	

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TP3 key time preselection" dialog

Use the **Edit Key time preselection** dialog to create new key time preselections for TP3 terminals and edit existing records.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

[illegible]

Time preselection table:

You can define a total of 10 time periods for preselections.

Note: A From time and an Until time are necessary for a time preselection.

From input fields:

Contain the time when time preselection starts. From this time on, the terminal automatically activates the specified booking key as a preselection.

Value range: 00:00-24:00

Format: hh:mm

Until input field:

The specified booking key remains activated as a preselection until this point in time. A booking key selected by the user remains in force after this time.

Value range: 00:00-24:00

Format: hh:mm

Key number selection field:

Selection of the booking key which is pre-set for the specified time period.

Options:

- All booking keys on the TP3 terminal.

5.4.2.11 dormakaba key time preselections

The terminal peripherals offer device-specific options to preselect the desired booking at specific times. The advantage of this is that the persons booking do not have to press a button first when they want to make a booking.

Generally, the arrive function is enabled for the employees' arrival times and the leave function is enabled for the employees' leaving times.

Depending on the device types, the time preselections for dormakaba terminals are controlled using the keys.

"Selection dormakaba key time preselections" dialog

The **Selection dormakaba key time preselections** dialog displays all key time preselections that have been created for dormakaba terminals.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

☐	Number	Name	Delete
☐	1	Production	
☐	2	Main Entry	

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit dormakaba key time preselections" dialog

Use the **Edit dormakaba key time preselections** dialog to create new key time preselections for dormakaba terminals and edit existing records. Each record requires a unique number; it is recommended that you specify a name.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Number: 1
Name: Production

Time preselection

From	Key number
06:00	1 - F1
12:00	2 - F2

Time preselection table:

You can define a total of twelve time ranges for preselections.

From input fields:

Contain the time when time preselection starts. From this time on, the terminal automatically activates the specified booking key as a preselection.

Value range: 00:00-24:00

Format: hh:mm

Key number selection field:

Selection of the booking key which is pre-set for the specified time period.

Options:

- All booking keys of dormakaba terminals.

5.4.2.12 Summertime/wintertime

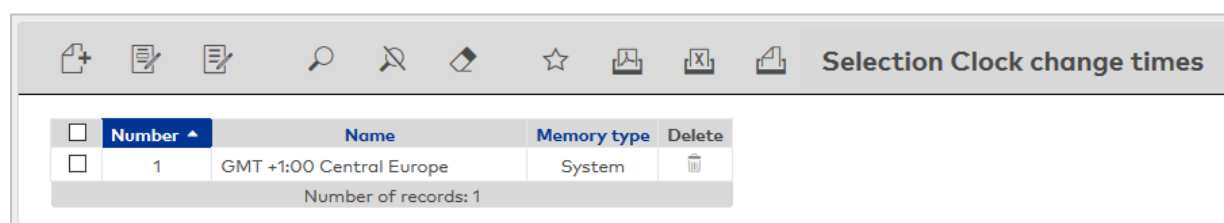
So that your system can automatically change over from summertime to wintertime, you need to specify the clock change time that applies.

You can define several clock change times in order to take into account differences between different times zones for international use.

"Selection clock change times" dialog

The **Selection clock change times** displays all times created for changing between summertime and wintertime. The clock change times are required for the definition of the device class.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Number	Name	Memory type	Delete
1	GMT +1:00 Central Europe	System	

Number of records: 1

Memory type column:

Indicates how the clock change times were created.

Possible memory types:

- System: clock change times created during installation which cannot be changed or deleted. Changes to these clock change times are saved under the type "Overwritten".
- Overwritten: clock change times derived from the clock change times of the system type.
- User: clock change times created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit clock change times" dialog

Use the **Edit Clock change time** dialog to create times for changing between summertime and wintertime and edit existing records. Each record requires a unique number; it is recommended that you specify a name.

The system uses the information to automatically calculate each clock change time for the current year.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Time difference input field:

Contains the time difference of the change in minutes. This difference is added when the time changes to summertime, and is deducted when the time changes to wintertime.

Clock change to summer time area:

Example: In Central Europe this is the last Sunday in the month of March at 02:00 in the morning.

Month selection field:

Contains the month of the clock change to summertime.

Week selection field:

Contains the week of the clock change to summertime.

Weekday selection field:

Contains the weekday of the clock change to summertime.

Time input field:

Contains the time of the clock change to summertime.

Clock change to winter time area:

Example: In Central Europe this is the last Sunday in the month of October at 03:00 in the morning.

Month selection field:

Contains the month of the clock change to wintertime.

Week selection field:

Contains the week of the clock change to wintertime.

Weekday selection field:

Contains the weekday of the clock change to wintertime.

Time input field:

Contains the time of the clock change to wintertime.

5.4.2.13 TMBasic programs

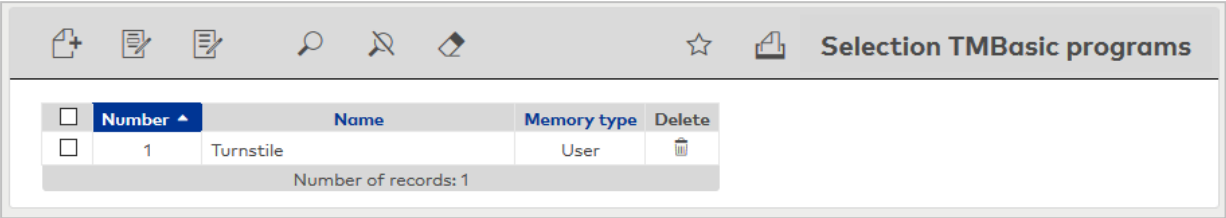
Using the TMBasic programs, TP4 terminals provide a flexible way of resolving special tasks.

Note: Thorough knowledge of the terminal is a prerequisite for programming the TMBasic programs. Therefore, TMBasic programs should only be executed by persons with expert knowledge. Please contact your service partner.

"Selection TMBasic programs" dialog

The **Selection TMBasic programs** dialog displays all TMBasic programs created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Memory type column:

Indicates how the TMBasic programs were created.

The possible store types are as follows:

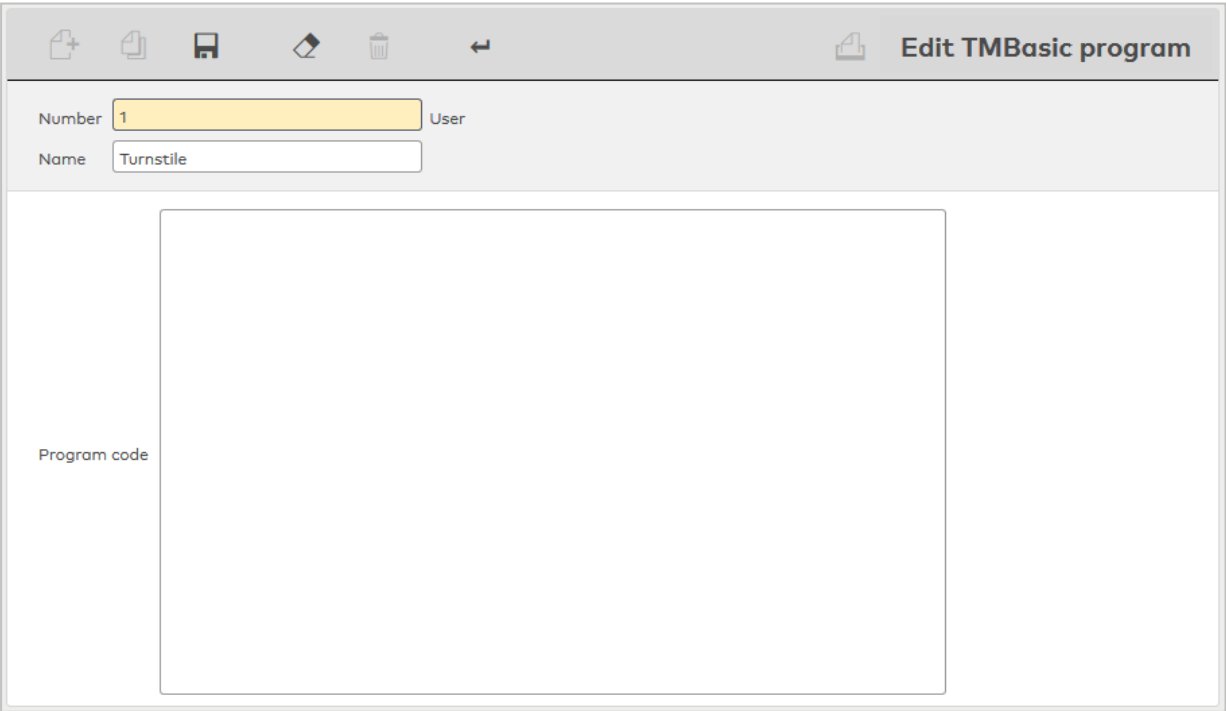
- System - TMBasic programs created during installation which cannot be changed or deleted. Changes to these TMBasic programs are saved under the type "Overwritten".
- Overwritten - TMBasic programs derived from the TMBasic programs of the system type.
- User - TMBasic programs created by the user.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TMBasic program" dialog

In the **Edit TMBasic program** dialog, you can create new TMBasic programs and edit existing records. Each record requires a unique number; it is recommended that you specify a name.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.



Program code input field:

Contains the TMBasic program's program code. The program syntax is stipulated by the TP4 terminal and can be found in the relevant documentation.

5.4.2.14 TMBasic messages

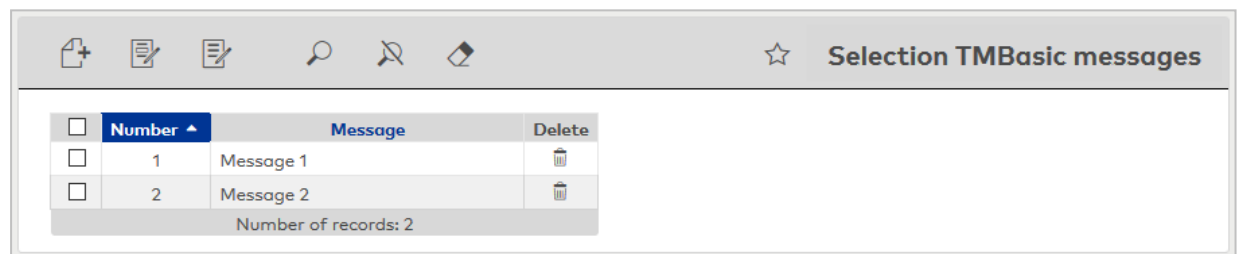
Using the TMBasic programs, TP4 terminals provide a flexible way of resolving special tasks. Messages from a TMBasic program are sent to the application as a number. In the application, this number must then be converted into a message with text.

Note: Thorough knowledge of the terminal is a prerequisite for programming the TMBasic programs and their messages. Therefore, TMBasic programs should only be executed by persons with expert knowledge. Please contact your service partner.

"Selection TMBasic message" dialog

The **Selection TMBasic messages** dialog displays all TMBasic messages created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

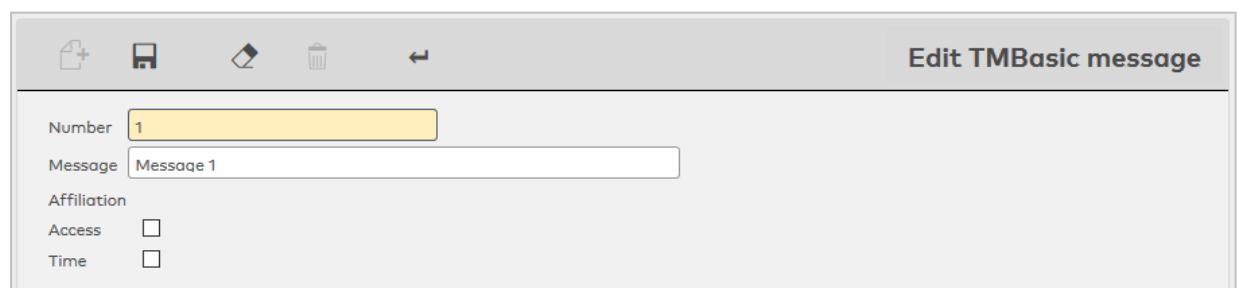


Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit TMBasic message" dialog

The **Edit TMBasic message** dialog can be used to create new TMBasic messages and edit existing records. Each record requires a unique number; it is recommended that you specify a name.

You can use the buttons in the toolbar to navigate between records, create a new record and save or discard changes made to the record. Use the **Back to selection** button to return to the selection dialog.

**Allocation:**

The allocation specifies the module in which the TMBasic is processed further and displayed. A message can be assigned to multiple modules.

Access checkbox:

Assigns the message to the access module.

- Activated: The message is assigned to the access system.
- Not activated: The message is not assigned to the access system.

Time checkbox:

Assigns the message to the time module.

- Activated: The message is assigned to the time system.
- Not activated: The message is not assigned to the time system.

5.4.3 ID card types

ID card types summarise definitions of how the ID card data is read by the readers and how this data is prepared for further processing.

When using standard ID cards, you only need to set a few default values. Descriptions down to bit level may be necessary with specially produced ID cards.

To keep administration as simple as possible, the properties of the ID cards are distributed between various tabs according to their parametrisation level with each tab containing only those properties that are necessary for the relevant parametrisation step. The parentheses around all parameters indicate the ID card types that are allocated to the devices.

The ID card types are allocated to readers and thus define which ID cards can be used to book to a reader. ID card types are allocated to ID cards in ID card administration if ID Card Administration Level 2 or 3 is activated.

MATRIX already contains several preconfigured ID card types.

Note: Inactivate all ID card types you do not need. If you have only activated one ID card type in your system, the selection fields for ID card types will be populated with the activated ID card type in all dialogs.

"Selection ID card types" dialog

The **Selection ID card types** dialog displays all ID card types created. The ID card types are required for device definition.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection ID card types				
☐	Number	Name	Active	Delete
☐	1	HITAG ID	☒	
☐	2	HITAG/EM	☒	
☐	3	MIFARE Classic ID	☒	
☐	4	LEGIC prime ID	☒	
☐	5	MIFARE DESFire CSN (ID)	☒	
☐	6	MIFARE Classic AoC	☒	
☐	7	LEGIC advant ID ISO 14443	☒	
☐	11	MIFARE Classic Standard	☒	
☐	12	LEGIC prime Standard	☒	
☐	13	MIFARE DESFire DORMA- Encoding	☒	
☐	21	Proximity (7/4)	☒	
☐	22	Proximity (7/10)	☒	
☐	23	SONY FeliCa	☒	
☐	31	TP3 M6Box ID - Proximity (6/10)	☒	
☐	41	MIFARE Classic Kaba CID	☒	
☐	42	LEGIC prime Kaba Group Header	☒	
☐	43	MIFARE DESFire Kaba CID	☒	
☐	44	LEGIC advant Kaba CID	☒	
☐	45	LEGIC advant GID (TAIFUN)	☒	
☐	50	QR-Code	☒	
Number of records: 20				

Active column:

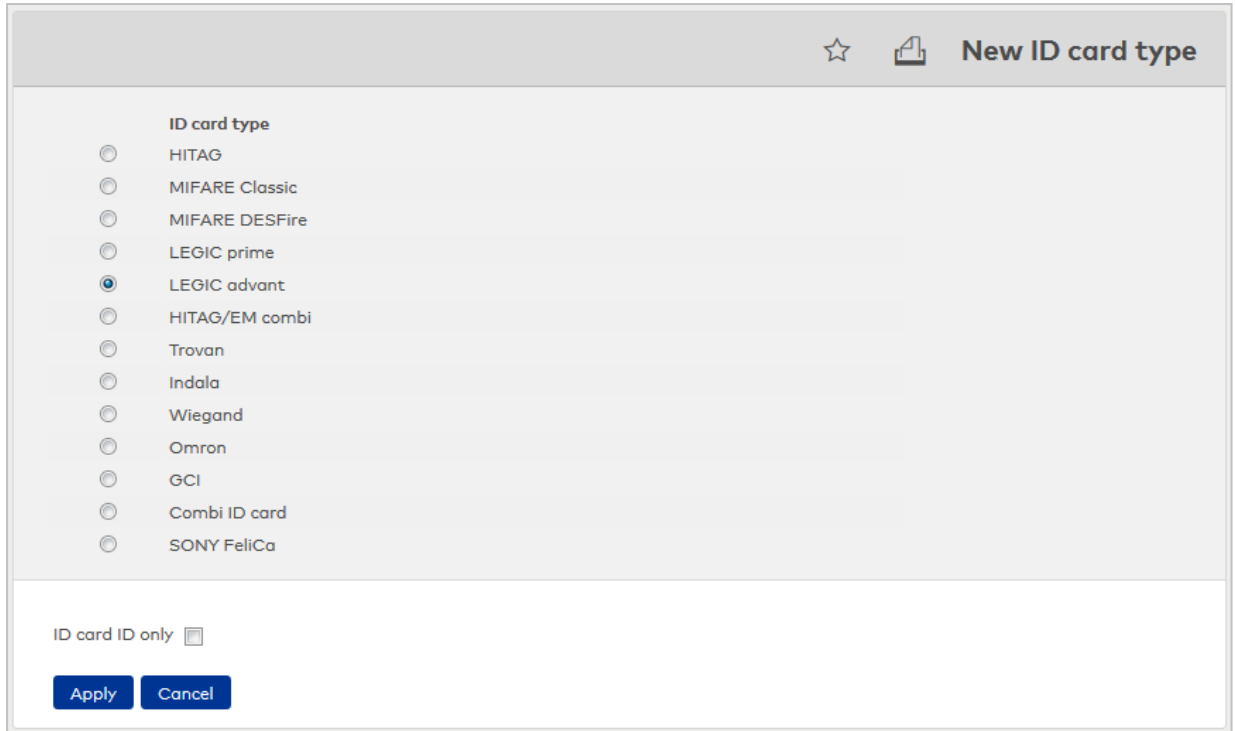
Indicates whether the ID card type is active in the system. Only activated ID cards are displayed in the selection fields for the ID card type.

Note: Deactivate all ID card types that you do not need to simplify dialogs that require you to select an ID card type. If you have activated only one ID card type in your system, the ID card type selection fields in other dialogs are populated with the activated ID card types.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"New ID card type" dialog

The **New ID card type** dialog displays all the available ID card types.



☆  **New ID card type**

ID card type

- ☐ HITAG
- ☐ MIFARE Classic
- ☐ MIFARE DESFire
- ☐ LEGIC prime
- ☒ LEGIC advant
- ☐ HITAG/EM combi
- ☐ Trovan
- ☐ Indala
- ☐ Wiegand
- ☐ Omron
- ☐ GCI
- ☐ Combi ID card
- ☐ SONY FeliCa

ID card ID only ☐

Apply **Cancel**

Select an option to transfer the default settings of this type to the new ID card type.

ID card ID only checkbox:

Means that only the ID card ID is read out by the reader. Select this checkbox if only the ID card is to be used in your system for legitimating.

Note: For Hitag® and Hitag®/EM combi and SONY FeliCa ID card types, the reader can only read the ID card ID. You cannot select the checkbox for these ID card types.

Apply button:

Transfers the selection to the **Edit ID card type** dialog. Click this button if you want to create the selected ID card type.

Cancel button:

Discards your selection. Click this button to return to the **Selection ID card types** dialog.

"Edit ID card type" dialog

Use the **Edit ID card type** dialog to create new ID card types for device definition and edit existing records. Each record requires a unique number; it is recommended that you specify a name.

The parameters saved are transmitted to the reader and checked during booking.

The default values of the relevant type are used for newly-created ID card types. If you are using the default ID card types that are available, you do not have to make any changes. Special adjustments are only necessary if your company uses ID cards with different encoding.

Note: The customer-specific AoC keys must be entered in order to use AoC/DoC functions with a DESFire ID card type (if this has not already been done using the device initialisation wizard).

The customer-specific encoding keys must be entered in order to use ID card encoding with ID card type 14 (if this has not already been done using the device initialisation wizard).

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

ID card type field:

Displays the basic type that was selected when it was created.

Import/export

Note: When importing and exporting ID card types, attention must be paid to the MATRIX version. It must match.

Note on system keys: If a system key is used, the same system key must be used for importing files as for exporting files. If not, it will not be possible to import the file and a corresponding message will be issued.

Password input field:

Contains the optional password for encrypting the export file.

Export button:

Click this button to start the export.

Select file button:

Click the button to open the explorer for selecting the import file. Once selected, the file name will be shown next to the button.

Import button:

Click this button to start the import.

ID card ID only checkbox:

Means that only the ID card ID is read out by the reader. Select this checkbox if only the ID card is to be used in your system for legitimating. You cannot change this option at a later time.

Active checkbox:

Enables the ID card type in the system. Only activated ID cards are displayed in the selection fields for the ID card type.

Note: Inactivate all ID card types you do not need. If you have activated only one ID card type in your system, the selection fields for the ID card type in other dialogs are populated with the activated ID card types so that no selection is required.

Note on combi ID cards:

Combi ID cards with different lengths are only possible if:

- Length of country code = 0 or same length with identical comparison value for both ID card types.
 - Length of company code = 0 or same length with identical comparison value for both ID card types.
 - Length of ID card version = 0 or same length for both ID card types.
 - IdentAssembler additional fields are not used.
-

The properties of the ID card descriptors, the ID card IdentAssemblers and the reader parameters, which are the same for all ID card types, are described below.

"ID card descriptor" tab

The **ID card descriptor** tab defines all the ID card parameters for the ID card descriptor. The ID card descriptor contains the decoded information for the ID card.

ID card descriptor	ID card ID assembler	Reader parameters
ID card number Start position 7 Length 10		
ID card version Start position 1 Length 0		
Company code Start position 1 Length 0		
Country code Start position 1 Length 0		
Checks Comparison value 1 Company code Country code Comparison value 2 Company code Country code Comparison value 3 Company code Country code		

Badge number area:

Contains information on the ID card number.

Start position input field:

Contains the start position of the ID card number in the ID card string.

Length input field:

Contains the ID card number's length from the start position.

Badge version area:

Contains information on the ID card version.

Start position input field:

Contains the start position of the ID card version in the ID card string.

Length input field:

Contains the ID card version's length from the start position.

Company code area:

Contains the company code's information.

Start position input field:

Contains the start position of the company code in the ID card string.

Length input field:

Contains the company code's length from the start position.

Encoding selection field:

Contains the encoding that is used for the company code.

Endian type selection field:

Contains the Endian type that is used for the company code.

Country code area:

Contains the country code's information.

Start position input field:

Contains the start position of the country code.

Length input field:

Contains the country code's length from the start position.

Checks area:

Contains the parameters of the comparison values (1-3) for additional comparison checks.

Company code input fields:

Contains additional comparison values for the company code.

Country code input fields:

Contains additional comparison values for the country code.

"ID card ID assembler" tab

The **ID card ID assembler** tab contains all the relevant ID card encoding parameters at the byte level.

Note: The OMRON ID card type does not require information for the ID card IdentAssembler. The tab is therefore inactive.

ID card descriptor	ID card ID assembler	Reader parameters
ID card number Start position 0 Start byte Length 4 Bytes Encoding HEX Endian type LITTLE		
Additional field 1 Start position Start byte Length Bytes Encoding ASCII Endian type BIG		
ID card version Start position Start byte Length Bytes Encoding ASCII Endian type BIG		
Additional field 2 Start position Start byte Length Bytes Encoding ASCII Endian type BIG		
Company code Start position Start byte Length Bytes Encoding ASCII Endian type BIG		
Checks Comparison value 1 Start position Start byte Comparison value		
Comparison value 2 Start position Start byte Comparison value		
Comparison value 3 Start position Start byte Comparison value		
Comparison value 4 Start position Start byte Comparison value		
Country code Start position Start byte Length Bytes Encoding ASCII Endian type BIG		

Badge number area:

Contains the ID card number's encoding parameters.

Start position input field:

Contains the ID card number's start byte position.

Length input field:

Contains the ID card number's length in bytes from the start position.

Encoding selection field:

Contains the encoding that is used for the ID card number.

Endian type selection field:

Contains the Endian type that is used for encoding the ID card number.

Badge version area:

Contains the encoding parameters for the ID card version specification.

Start position input field:

Contains the ID card version specification's start byte position.

Length input field:

Contains the ID card version's length in bytes from the start position.

Encoding selection field:

Contains the encoding that is used for the ID card version specification.

Endian type selection field:

Contains the Endian type that is used for encoding the ID card version specification.

Company code area:

Contains the company code's parameters.

Start position input field:

Contains the company code's start byte position.

Length input field:

Contains the company code's length in bytes from the start position.

Encoding selection field:

Contains the encoding that is used for the company code.

Endian type selection field:

Contains the Endian type that is used for the company code.

Country code area:

Contains the country code's parameters.

Start position input field:

Contains the country code's start byte position.

Length input field:

Contains the country code's length in bytes from the start position.

Encoding selection field:

Contains the encoding that is used for the country code.

Endian type selection field:

Contains the Endian type that is used for the country code.

Additional field 1 area:

Contains the parameters for a possible additional field.

Start position input field:

Contains the additional field's start byte position.

Length input field:

Contains the additional field's length in bytes from the start position.

Encoding selection field:

Contains the encoding that is used for the additional field.

Endian type selection field:

Contains the Endian type that is used for the additional field.

Additional field 2 area:

Contains the parameters for a second possible additional field.

Start position input field:

Contains the additional field's start byte position.

Length input field:

Contains the additional field's length in bytes from the start position.

Encoding selection field:

Contains the encoding that is used for the additional field.

Endian type selection field:

Contains the Endian type that is used for the additional field.

Checks area:

Contains the parameters of the comparison values (1-4) for additional checks.

Start position input fields:

Contains the relevant comparison value's start byte position.

Comparison value input fields:

Contains the name of the relevant comparison value.

"Reader parameters" tab

The **Reader parameters** tab contains the properties of the reader types which are primarily needed for the online readers.

ID card descriptor	ID card ID assembler	Reader parameters
Online read parameters		
Check digit type	NONE	
ID card reader type	Omron ABA magnetic strip or pri	

Online reader parameters:

The online reader parameters are needed for the online readers.

Check digit type selection field:

Specifies how the check digit on the ID card is to be evaluated.

ID card reader type selection field:

Contains a further selection for variants of the ID card type.

TIMAC format conversion input field:

Special format for sub-variants of the ID card type.

Note: Some ID card types provide special functions in the reader parameters. These depend on system configurations and, therefore, may deviate from the description.

"Reader parameters" tab (HITAG®/EM)

ID card descriptor	ID card ID assembler	Reader parameters
Online read parameters		
Check digit type	NONE	
ID card reader type	Omron ABA magnetic strip or pri	
EM 4102	☒	
EM 4450	☒	
Hitag 1	☒	
Hitag 2	☒	

Checkbox:

HITAG/EM is a combination mode for HITAG® and EM ID cards. You can use the checkbox to explicitly set which ID card types should be read. This makes it possible to exclude ID card types that are not used for security reasons.

Select the checkboxes for the permitted ID card types.

"Reader parameters" tab (MIFARE® Classic)

Key area:

Note: To activate the MIFARE readers you have to generate the key once. In the **Generate keys using customer number** field, enter the customer number (such as 0010) and click **Generate**. As an alternative, you can enter an existing key.

Generate keys using customer number input field:

Contains the customer number for generating the key.

Generate button:

Generates the key for the specified customer number.

Note: Alternatively, you can enter the key directly.

Read procedure key for MAD input field:

Contains the access key for the MAD (Mifare Application Directory) on the Mifare chip.

Write procedure key for MAD input field (optional for AoC):

Contains the write key for the MAD (Mifare Application Directory) on the Mifare chip.

Read procedure key for access sector input field:

Contains the access key for the data segment on the Mifare chip.

Master medium key index selection fields:

Use this selection to assign storage space on cards to keys that are to be saved as master medium keys on programming master cards.

Options: 0–7

Default value: 1

Key master medium input field:

Contains the key of the master medium.

Note: Terminals 96 00 and 97 00 can be commissioned using the preconfigured key without requiring a master card or desktop reader. In this case, there is no need to change the preconfigured master medium key for each customer.

Read procedure key for AoC sectors input field (optional for AoC):

Contains the access key for the AoC sectors on the Mifare chip with AoC usage data.

Write procedure key for AoC sectors input field (optional for AoC):

Contains the write key for the AoC sectors on the Mifare chip with AoC usage data.

Mifare transport key range (optional for AoC):

Mifare transport key

☒ Use default transport key
☐ Use custom transport key

Type A transport key

Type B transport key

GeneralPurposeByte (GPB)

Sector trailer access rights

Block 0 access rights

Block 1 access rights

Block 2 access rights

Byte sequence (access rights + GPB) **FF078069**

Use default transport key option:

Indicates whether the default transport key is used.

Note: Specifications for the transport key are then not required. The user-specific transport key area is blocked so that no data can be entered.

Use custom transport key option:

Indicates whether a specific transport key should be used. If the identifier is set, the following fields are enabled for editing.

Both the type A key and the type B key must be entered in the case of a user-specific key for securing the free sectors.

Type A transport key input field:

Contains the transport key of Type A. The key comprises 6 bytes and must be specified in hexadecimal format.

Value range: 0x000000000000–0xFFFFFFFFFFFF

Default value: 0xFFFFFFFFFFFF

Type B transport key input field:

Contains the Type B transport key. The key comprises 12 characters and must be specified in hexadecimal format.

Value range: 0x000000000000–0xFFFFFFFFFFFF

Default value: 0xFFFFFFFFFFFF

GeneralPurposeByte (GPB) input field:

Additional information on the transport keys: The general purpose byte consists of 2 characters and must be specified in hexadecimal format.

Value range: 0x00–0xFF

Default value: 0x69

Sector trailer access rights selection field:

For selecting access rights for the transport key.

Options:

- Key A (key A/B write, read/write access rights, key B read)
- Key A (read access right), key B (key A/B write, read/write access right)

Block 0 access rights selection field:

For selecting access rights for Block 0.

Options:

- Key A or B (read, write, inc, dec, trans, rest)
- Key A (read), key B (read, write)
- Key A (read) key B (read, write, inc, dec, trans, rest)
- Key B (read, write)

Block 1 access rights selection field:

For selecting access rights for Block 1.

Options:

- Key A or B (read, write, inc, dec, trans, rest)
- Key A (read), key B (read, write)
- Key A (read) key B (read, write, inc, dec, trans, rest)
- Key B (read, write)

Block 2 access rights selection field:

For selecting access rights for Block 2.

Options:

- Key A or B (read, write, inc, dec, trans, rest)
- Key A (read), key B (read, write)
- Key A (read) key B (read, write, inc, dec, trans, rest)
- Key B (read, write)

Byte sequence (access rights + GPB) display field:

Shows the byte sequence that results from the specified access permissions.

Access sector address area:

Access area address

☒ Addressing via sector ID (AID) 482F

☐ Addressing via segment number 0

Addressing via sector ID radio button:

Branches to the ID card sector using the sector ID.

Addressing via sector number radio button:

Causes the system to branch directly to the ID card sector.

Access area data block to be read out area:

Access area data block to be read out

Block type of first block 0

Block type number 1

Block type of first block input field:

Contains the index of the first data block in the data segment from which reading is to start.

Value range 0-2.

Block type number input field:

Contains the number of the data blocks that are to be read in the data segment.

Value range Value range 1-3.

AoC sector initialisation area (optional):

AoC sector initialisation

☒ Search entire MAD for free sectors

☐ Search parts of MAD for free sectors

Start sector

Number of sectors to be searched

Use continuous sectors only ☐

Search entire MAD for free sectors radio button:

Select this option if all free sectors on the Mifare chip can be used for AoC reference data.

Search parts of MAD for free sectors radio button:

Select this option if only certain sectors on the Mifare chip can be used for AoC reference data.

Start sector input field:

contains the sector where the search is to start.

Number of sectors to be searched input field:
contains the number of sectors to search through.

Use only continuous sectors checkbox:
in the defined area, only the connected block up to the first occupied sector is used.

"Reader parameters" tab (MIFARE® DesFire)

Generate master medium key button:

Transforms the key saved in the ID card type into a master medium key and saves this generated master medium key in the ID card type.

ID elements area:

Note: Only one ID element must be entered when using OSS ID cards. This element must be of the type "Read file".

Generate master medium key

ID elements

Element1 Read file ▼

Element2 ▼

Element3 ▼

Element4 ▼

Element5 ▼

AID F52291

File ID 1

Key number 1 ▼

Key *****

Master medium key index 1 ▼

Master medium key 4D16456521D5EEFC0000000038342E98D7694

Communication mode 128 bit AES (cipher) ▼

Start position reference data 2

Reference data length 16

Checksum creation ▼

Checksum position

Start position for checksum creation

Checksum creation length

Element1–5 selection fields:

Contain the element for which the subsequent data is valid.

Note: The appropriate fields are displayed when a further element is selected.

Options:

- Read file
- Read UID (randomised)
- Read UID
- Insert ID character
- Insert ID string

AID input field:

Contains the application identifier (AID) of the DESFire application, which contains the ID card identifier data.

File ID input field:

Contains the DESFire application file ID.

Key number selection field:

Contains the key number.

Options: 0–13

Key input field:

Contains the standard DESFire application read key assigned by the card manufacturer.

Note: For reasons of security, it is advisable to assign a custom key one time only. Please note that the read keys on the ID cards can only be rewritten once. Users are not informed by MATRIX of whether the standard read key has been replaced by a custom key.

Master medium key index selection fields:

Use this selection to assign storage space on cards to keys that are to be saved as master medium keys on programming master cards.

Options: 0–7

Key master medium input field:

Contains the key of the master medium.

Note: Terminals 96 00 and 97 00 can be commissioned using the preconfigured key without requiring a master card or desktop reader. In this case, there is no need to change the preconfigured master medium key for each customer.

Communication mode selection field:

Contains the DESFire application communication mode assigned by the card manufacturer.

Options:

- Unencrypted
- 112 bit DES (Mac)
- 112 bit DES (Cipher)
- 168 bit DES (Mac)
- 168 bit DES (Cipher)
- 128 bit AES (Mac)
- 128 bit AES (Cipher)
- 112-bit DES authentication with unencrypted communication
- 168-bit DES authentication with unencrypted communication
- 128-bit DES authentication with unencrypted communication

Start position reference data input field:

Contains the start position of the ID card identifier data.

Reference data length input field:

Defines the length of the reference data.

Checksum creation selection field:

Defines whether a checksum is created.

Options:

- Empty, no checksum is created.
- CRC, a CRC checksum is created.

Default value: Blank.

Checksum position entry field:

Defines where the checksum starts.

Start position for checksum creation input field:

Defines where the start position for checksum creation is located.

Checksum creation length input field:

Defines the length of the checksum creation.

PICC master key area (optional):

<u>PICC master key</u>	
PICC master key	***** Communication mode 128 bit AES

PICC master key input field:

Contains the PICC master key of the Mifare chip.

Communication mode selection field:

Contains the communication mode.

Options:

- 112 bit DES
- 168 bit DES
- 128 bit AES

AoC parameter area (optional):

<u>AoC parameter</u>	
Maximum AoC disc space (Bytes)	
Application master key	***** 128 bit AES Master medium key index 3
Master medium key for the AoC application master key	
Read key file	128 bit AES Master medium key index 4
Write key file	128 bit AES Master medium key index 6
Master medium key for AoC file write key	

Maximum AoC disc space (bytes) input field:

Indicates the maximum disc space in bytes that is to be available for the AoC application.

Application master key input field:

Contains the application master key of the AoC application. This key protects the AoC application. The key is used, among other things, when creating files. The master medium key index has a value of 3 as standard.

Master medium key for the AoC application master key input field:

Contains the master medium key for the AoC application master key.

Read key file input field:

Contains the read key file of the AoC application for reading the data. The master medium key index has a value of 4 as standard.

Write key file input field:

Contains the write key file of the AoC application for writing the data. The master medium key index has a value of 6 as standard.

Master medium key for AoC file write key input field:

Contains the master medium key for the AoC application write key.

Master medium key index selection fields:

Use this selection to assign storage space on cards to keys that are to be saved as master medium keys on programming master cards.

Options: 0–7



see also: [How to: Working with master media and master medium keys](#)

DoC DESFire parameter area (optional):

<u>DoC DESFire parameter</u>	
Maximum DoC disc space (bytes)	128
Application master key	***** 128 bit AES
Master medium key for the DoC application master key	
Read key file	128 bit AES
Write key file	128 bit AES Master medium key index 5
Master medium key for DoC file write key	

Maximum DoC disc space (bytes) input field:

Indicates the maximum disc space in bytes that is to be available for the DoC application.

Value range: 48–6144 bytes

Default value: 128 bytes

Application master key input field:

Contains the application master key of the DoC application. This key protects the DoC application. The key is used, among other things, when creating files.

Master medium key for the DoC application master key input field:

Contains the master medium key of the DoC application with which the DoC application master key can be transferred to the KCP reader.

Read key file input field:

Contains the read key file of the DoC application for reading the data.

Write key file input field:

Contains the write key file of the DoC application for writing the data. The master medium key index has a value of 5 as standard.

Master medium key for DoC file write key input field:

Contains the master medium key of the DoC application with which the file write key can be transferred to the KCP reader.

Master medium key index selection fields:

Use this selection to assign storage space on cards to keys that are to be saved as master medium keys on programming master cards.

Options: 0–7

DoC parameter area (optional):

The types that are written on the card are defined in this area.

DoC parameter

Data types to be written on the cards

Battery status ☒

Battery status checkbox:

Options:

- Activated: The battery status is written to the card.
- Not activated: The battery status is not written to the card.

Default value: Not activated.

OSS parameter area (optional):

The parameters for the use of OSS components are managed in this area.

<u>OSS parameter</u>	
AID	
Size of data files (bytes)	288
Size of event files (bytes)	192
Size of blacklist files (bytes)	64
Maximum number of events	16
Maximum number of blacklist entries	3
Event types to be written on the cards	
Low battery	☐
Battery replaced	☐
Lock jamming	☐
System event	☐
Internal error	☐
Error unlocking	☐
Tampering detected	☐
Blocked ID card detected	☐
Blacklist full	☐
Successful access	☐
Access denied	☐
<u>DoC parameter</u>	
Data types to be written on the cards	
Battery status	☒

AID input field:

Contains the application identifier (AID) of the DESFire application that manages the ID card OSS data. The AID must be identical to the ID element AID. Only exactly one ID element must be defined. The ID element must be of the type "Read file" and the key number must be 1 (= the OSS write key/read key). If no AID is entered, OS cannot be used.

Size of data files (bytes) input field (optional):

Contains the size of the OSS data files on the ID cards in bytes. If a value has been entered, the MATRIX OSS updater issues an error message if the calculated data for one OSS ID card exceeds this value.

Value range: All multiples of 32 between 32 and 9984.

Standard value is 288 bytes in line with the OSS standard.

Size of event files (bytes) input field (optional):

Contains the size of the OSS event files on the ID cards in bytes. When an event is saved, the system checks whether the size is adequate for saving the maximum number of events stated below if a value has been entered.

Value range: All multiples of 32 between 32 and 9984.

Standard value in line with OSS standard: 192 bytes

Size of blacklist files (bytes) input field (optional):

Contains the size of the OSS blacklist files on the ID cards in bytes. When a blacklist entry is saved, the system checks whether the size is adequate for saving the maximum number of blacklist entries stated below if a value has been entered.

Value range: All multiples of 32 between 32 and 9984.

Standard value in line with OSS standard: 64 bytes

Maximum number of events input field (optional):

Contains the maximum number of events that can be saved in the event file of the OSS ID cards.

Value range: 0 to 255; 0 (or empty) = No events are saved in the event file and no event file is required on the ID card.

Standard value in line with OSS standard: 16

Maximum number of blacklist entries input field (optional):

Contains the maximum number of blacklist entries that can be saved in the blacklist file of the OSS ID

cards.

Value range: 0 to 255; 0 (or empty) = No blacklist entries are saved in the blacklist file and no blacklist file is required on the ID card.

Standard value in line with OSS standard: 3

Event types to be written to the cards checkbox:

Specify all event types that are written in the OSS event file by the OSS components.

Cabinet lock Free Selection parameter area (optional):

This area is only available if the option **Free Selection Mode** is selected as the evolo terminal class on the **Cabinet lock** tab.

Cabinet lock Free Selection parameter	
Number of cabinet locks to assign	1
Write key file	
Master medium key index	2

Number of cabinet locks to assign selection field:

Contains the maximum number of cabinets that can be assigned to one ID card.

Write key file input field:

Contains the write key file for writing the data.

Master medium key index selection field:

Use this selection to assign storage space on cards to keys that are to be saved as master medium keys on programming master cards.

Options: 0–7

Note: The application for Free Selection Mode is only created on the card if the **Write number of cabinets to assign** option is activated on PC reader or the AccessOnCard station.

"Reader parameters" tab (LEGIC® prime)

Online read parameters	
Check digit type	NONE
ID card reader type	Omron ABA magnetic strip or proxy reader
Start segment number	1
Search string for read area	2C04
Start position for data to be read	18
Length of data to be read	10
Use checksum	☐
Checksum start position	
Checksum length	8
<u>AoC parameter</u>	
Search string for AoC segment	
Number of searches with the search string for AoC segment	

Start segment number input field:

Contains the number of the segment from which the specified search string is searched. This is important as the same search string can exist several times in different segments.

Search string for read area input field:

Contains the search string for the data segment to be evaluated for the LEGIC ID card.

Start position for data to be read input field:

Contains the starting byte position of the ID card data within the LEGIC data segment to be evaluated.

Length of data to be read input field:

Contains the length in bytes of the ID card data within the LEGIC data segment to be evaluated.

Use checksum checkbox:

Activates the CRC check. Select this checkbox if you want to carry out a CRC check.

Checksum start position input field:

Contains the start position of the CRC checksum entry. You only need to enter data here if the CRC check was activated.

Checksum length input field:

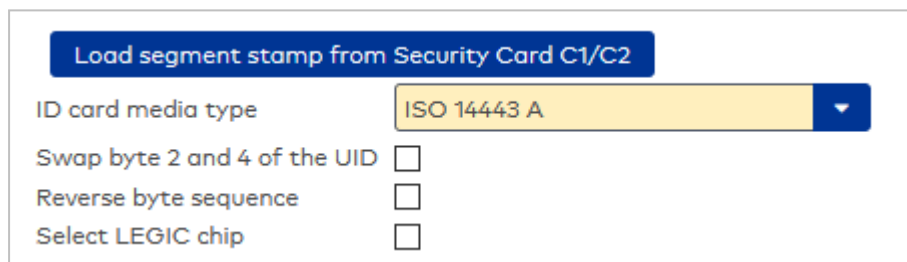
Contains the length of the CRC checksum entry in bytes.

AoC parameter area:**Search string for AoC segment** input field:

Contains the search string (stamp) for the AoC segment.

Number of searches with the search string for the AoC segment input field:

Contains the number of search strings (stamps) for the AoC segment.

"Reader parameters" tab (LEGIC® advant)


Load segment stamp from Security Card C1/C2

ID card media type: ISO 14443 A

Swap byte 2 and 4 of the UID: ☐

Reverse byte sequence: ☐

Select LEGIC chip: ☐

Load segment stamp from Security Card C1/C2 button:

Enables the segment stamp to be scanned using a PC reader.

ID card media type selection field:

Contains the ID card media type.

Options:

- ISO 15693
- ISO 14443 A
- ISO 14443 B
- Combined ISO14443 and ISO15693

Swap byte 2 and 4 of the UID checkbox:

Indicates if the bytes 2 and 4 of the UID are swapped.

Options:

- Activated: The bytes are swapped.
- Not activated: The bytes are not swapped.

Default value: Not activated.

Reverse byte sequence checkbox:

Indicates if there is a reversed byte sequence.

Options

- Activated: The byte sequence is reversed.
- Not activated: The byte sequence is not reversed.

Default value: Not activated.

Select LEGIC chip checkbox:

Indicates

Options:

- Activated:
- Not activated:

Cabinet lock Free Selection parameter area (optional):

This area is only available if the option **Free Selection Mode** is selected as the evolvo terminal class on the **Cabinet lock** tab.

Cabinet lock Free Selection parameter

Stamp of the Free Selection segment

Number of cabinet locks to assign 

Stamp of the Free Selection segment input field:

Contains the stamp of the free selection segment on the ID card. This information is required if Free Selection Mode is to be possible for cabinet locks.

Number of cabinet locks to assign selection field:

Contains the maximum number of cabinets that can be assigned to one ID card.

AoC parameter area (optional):

AoC parameter

AoC segment stamp

Key

AoC segment stamp input field:

Contains the stamp for the AoC segment.

Possible input:

- AoC STAMP = no information: AoC stamp = access stamp/occurrence = 2
- AoC STAMP = access stamp: Occurrence = 2
- AoC STAMP ! = access stamp: Occurrence = 1-n

Key input field:

Contains the key for the AoC segment.

DoC Advant parameter area (optional):

DoC advant parameter

Maximum DoC disc space (bytes)

DoC segment stamp

DoC segment key

Maximum DoC disc space (bytes) input field:

Indicates the maximum disc space in bytes that is to be available for the DoC application.

Value range: 48–6144 bytes

Default value: 128 bytes

DoC segment stamp input field:

Contains the stamp for the DoC segment.

Possible input:

- DoC STAMP = no information: DoC stamp = access stamp/occurrence = 2
- DoC STAMP = access stamp: Occurrence = 2
- DoC STAMP != access stamp: Occurrence = 1-n

DoC segment key input field:

Contains the key for the DoC segment.

DoC segment encryption type selection field:

Contains the encryption type for the DoC segment.

Options:

- LEGIC crypt
- Advant DES
- Advant 3 DES
- Advant AES

DoC parameter area (optional):

Defines the data type that is to be written to the card.

DoC parameter

Data types to be written on the cards

Battery status ☐

Battery status checkbox:

Options:

- Activated: The battery status is written to the card.
- Not activated: The battery status is not written to the card.

Default value: Not activated.

OSS parameter area (optional):

The parameters for the use of OSS components are managed in this area.

OSS parameter

Maximum OSS disc space (bytes)	
Maximum number of events	
Maximum number of blacklist entries	
OSS segment stamp	

Event types to be written on the cards

Low battery	☐
Battery replaced	☐
Lock jamming	☐
System event	☐
Internal error	☐
Error unlocking	☐
Tampering detected	☐
Blocked ID card detected	☐
Blacklist full	☐
Successful access	☐
Access denied	☐

DoC parameter

Data types to be written on the cards

Battery status ☒

Maximum OSS disc space (bytes) input field:

Indicates the maximum disc space in bytes that will be available for the OSS application.

Value range: 1–9999

Standard value in line with OSS standard: 400

Maximum number of events input field (optional):

Contains the maximum number of events that can be saved in the event file of the OSS ID cards.

Value range: 0–255; 0 (or empty) = No events are saved in the event file and no event file is required on the ID card.

Standard value in line with OSS standard: 6

Maximum number of blacklist entries input field (optional):

Contains the maximum number of blacklist entries that can be saved in the blacklist file of the OSS ID cards.

Value range: 0–255; 0 (or empty) = No events are saved in the event file and no event file is required on the ID card.

Standard value in line with OSS standard: 3

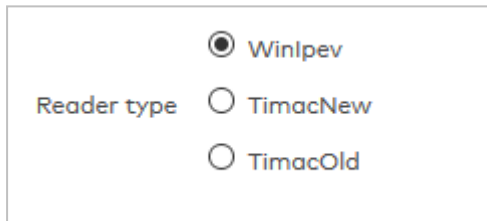
OSS segment stamp input field:

Contains the stamp for the OSS segment.

Event types to be written to the cards checkbox:

Specify all event types that are written in the OSS event file by the OSS components.

"Reader parameters" tab (Trovan)



Reader type

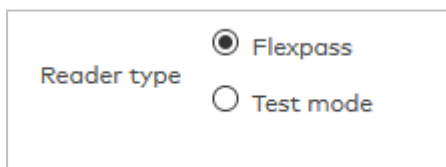
☒ Winlpev

☐ TimacNew

☐ TimacOld

Select the reader types to be used.

"Reader parameters" tab (Indala)



Reader type

☒ Flexpass

☐ Test mode

Select the reader types to be used.

"Reader parameters" tab (Wiegand and QR code)

Check digit type	NONE
ID card reader type	Wiegand driver with Wiegand interface
Encoding	Binary
LED parameters	2
Wiegand bit number	26

ID card number	Even parity
Number of bits 16	Number of bits 13
Bit start index 9	Bit start index 0

Company code	Odd parity
Number of bits 8	Number of bits 13
Bit start index 1	Bit start index 13

Country code	Version number
Number of bits 0	Number of bits 0
Bit start index 0	Bit start index 0

LED parameters selection field:

Contains the LED parameters to be used.

Wiegand bit number selection field:

Contains the Wiegand bit number to be used.

Badge number area:

Number of bits input field:

Contains the number of ID card number bits.

Bit start index input field:

Contains the ID card number's start bit.

Company code area:

Number of bits input field:

Contains the company code's number of bits.

Bit start index input field:

Contains the company code's start bit.

Country code area:

Number of bits input field:

Contains the country code's number of bits.

Bit start index input field:

Contains the country code's start bit.

Even parity area:

Number of bits input field:

Contains the even parity's number of bits.

Bit start index input field:

Contains the even parity's start bit.

Odd parity area:

Number of bits input field:

Contains the odd parity's number of bits.

Bit start index input field:

Contains the odd parity's start bit.

Version number area:**Number of bits** input field:

Contains the ID card version number's number of bits.

Bit start index input field:

Contains the ID card version number's start bit.

"Reader parameters" tab (GCI)

Data start	
Data length	

Data start input field:

Contains the ID card number's start bit.

Data length input field:

Contains the number of ID card number bits.

"Reader parameters" tab (SONY FeliCa)

Only the ID card ID can be read for this ID card type. No further reader parameters are required.

"ID card diagnosis" tab (MIFARE DESFire)

If ID card diagnosis is to be executed, use this tab to specify the ID card diagnosis parameters for MIFARE DESFire ID card types.

Note: This tab is only available if the system parameter Devices 130 is set to the value 1.

Each diagnosis element must be specified using the following data:

- Name
- AID (application ID)
- File ID
- Key number
- Key (if the communication mode "Unencrypted" was not selected)
- Start position reference data
- Reference data length

Diagnosis type Default diagnosis			
Diagnosis elements			
Name		AID	
		Key number	0
		Key	
		Communication mode	Unencrypted
		Start position reference data	
		Reference data length	

Diagnosis type selection field:

Contains the type of diagnosis.

Options:

- No ID card diagnosis, the other selection and input fields are hidden.
- Default diagnosis

Diagnosis elements:

This area contains the data required for the diagnosis.

Name input field:

Text field for describing the diagnosis parameters.

AID input field:

Free text field for the application ID.

File ID input field:

Free text field for the file ID string.

Key number selection field:

Contains the key number.

Value range: 0–13

Key input field:

Contains the access key.

Communication mode selection field:

Contains the communication mode.

Options:

- Unencrypted
- 112 bit DES (Mac)
- 112 bit DES (Cipher)
- 168 bit DES (Mac)
- 168 bit DES (Cipher)
- 128 bit AES (Mac)
- 128 bit AES (Cipher)
- 112-bit DES authentication with unencrypted communication
- 168-bit DES authentication with unencrypted communication
- 128-bit AES authentication with unencrypted communication

Start position reference data input field:

Contains the position where the reference data starts.

Reference data length input field:

Contains the length of the reference data.

Value range: 1–999

+ - buttons:

Use the plus button to add new diagnosis elements and the minus button to remove diagnosis elements.

"ID card encoding tab" (MIFARE DESFire)

This tab shows the parameters relevant to ID card encoding. They cannot be edited here.

Note: This tab is only available if the system parameter System 121 is set to the value 3.

Application master key		AID	
Write key file		File ID	
File size	32	Communication mode	
		Start position reference data	
		Number of keys	3
		Access rights	2012
		Application settings	09

Application master key input field:

Contains the application master key for ID card encoding.

Write key file input field:

Contains the write key file for ID card encoding.

File size input field:

Contains the size of the file that is created on the ID card during ID card encoding.

Further relevant parameters from the **Reader parameters** tab and fixed encoding parameters are displayed. They cannot be edited here.

"ID card encoding" tab (LEGIC® advant)

This tab contains the parameters that are relevant for encoding LEGIC® advant ID cards.

Note: This tab is only available if the system parameter System 121 is set to the value 3.

CID segment parameters	
CID segment stamp	
Data start position	
CID segment size	21
Number of stamp bytes for CID write protection (S_WRC)	7
AoC segment parameters	
AoC segment stamp	
AoC segment size	192
Number of stamp bytes for AoC write protection (S_WRC)	5
DoC segment parameters	
DoC segment stamp	
DoC segment size	192
Number of stamp bytes for DoC write protection (S_WRC)	5
Free Selection segment parameters	
Stamp of the Free Selection segment	
Free Selection segment size	48
Number of stamp bytes for Free Selection write protection (S_WRC)	0

... segment size input fields:

Contain the size of the segments to be created for the segment type in question.

Number of stamp bytes for ... write protection input fields:

Contain the number of stamp bytes required on the launching card to revoke write protection (WRC).

Further relevant parameters from the **Reader parameters** tab are displayed. They cannot be edited here.

Combi ID cards

Combi ID cards contain multiple read procedures. This means that just the one card can be used to make bookings at different readers. The ID string must be entered for the combi ID badge for each reading method and the corresponding badge type must be selected from the available badge types.

ID card type 1-5 selection fields:

Up to 5 ID card types can be specified for a combi ID card. Select the relevant ID card type for your combi ID card.

Note: If you only use a combi ID card in your system, you only need to activate the combi ID card. ID card types not activated are also displayed in the selection fields for the ID card types for the combi ID card.

5.4.3.1 Cabinet lock administration media

Cabinet lock administration media are ID cards configured for maintenance purposes. They allow cabinet locks to be opened despite reservations being in place.

Dialog "Selection Cabinet lock administration media"

The **Selection Cabinet lock administration medium** dialog shows all ID cards that are configured as administration media for cabinet locks.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Number	Name	Delete
1	Cabinet Lock Master 1	
2	Cabinet Lock Master 2	

Number of records: 2

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Dialog "Edit Cabinet lock administration medium"

The **Edit Cabinet lock administration medium** dialog is used to create new cabinet lock administration media and edit existing cabinet lock administration media. Each cabinet lock administration medium requires a unique number. It is recommended that you specify a name and a short name.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

ID card number input field:

Contains the ID card number for the cabinet lock administration medium.

Apply ID card number button:

If a PC reader is configured, you can also use the button to scan the ID card number directly.

Lock cabinet checkbox:

Specifies whether the administration medium can also lock the cabinet again. If the cabinet was previously locked (reserved), the reservation is retained after the cabinet is locked using the administration medium. The cabinet can only be re-opened using the ID card that reserved the cabinet and an administration medium. If the cabinet was previously open, the cabinet can only be reopened using an administration medium after being locked by an administration medium.

5.4.4 Master media

Note: The menu item for administrating master media is only present if at least one of the system parameters Devices 16 "Use dormakaba terminals", 17 "Use evolo whitelist components" or 18 "Use evolo wireless components" is activated.

Specialist ID cards required for synchronising evolo components and the evolo programmer are called master media. They are also known as programming masters or master ID cards.

When using MIFARE Classic or MIFARE DESFire ID cards in connection with evolo components or dormakaba terminals, MIFARE master media also serve to transfer ID card keys to the devices. To do so, the ID card keys are saved in specially coded and encrypted data packages. These data packages are known as master media keys in MATRIX. They are also known as site keys or system keys.

If ID cards of the MIFARE Classic Kaba CID (MATRIX ID card type 41) or MIFARE DESFire Kaba CID (MATRIX ID card type 43) types are used in connection with evolo components, dormakaba terminals or KCP compact/remote readers, the MIFARE master media delivered along with the ID cards will already have master medium keys. Using the **Edit Master medium** dialog, these can be loaded into MIFARE Classic or MIFARE DESFire ID card types.

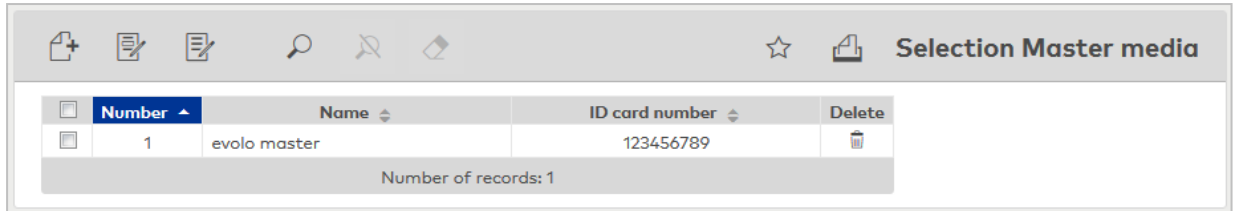
When using other ID cards of the Mifare Classic or Mifare Desfire type, it should first be assumed that the Mifare master medium is unwritten and can be used to transmit the master medium key using the **Edit Master medium** dialog.

Further information can be found in the section "Working with Matrix" under the heading [►Work with master media and master medium keys](#).

"Selection master media" dialog

The **Selection Master media** dialog displays all master media created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



Number	Name	ID card number	Delete
1	evolo master	123456789	

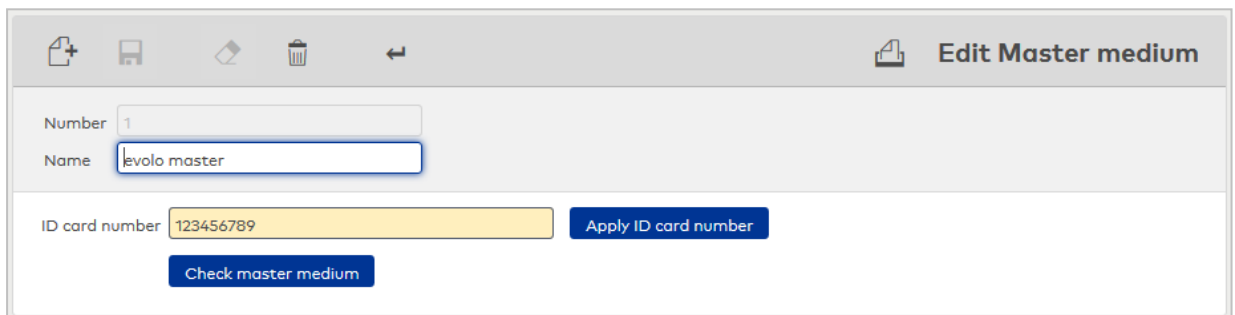
Number of records: 1

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Master medium" dialog

Use the **Edit Master medium** dialog to create new master media and edit existing master media.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.



Number: 1

Name: evolo master

ID card number: 123456789

Buttons: Apply ID card number, Check master medium

ID card number input field:

Contains the ID card number of the master medium.

As an alternative to entering the ID card number, it can be read using a PC reader.

Apply ID card number button:

If a PC reader is configured, you can also use the button to scan the ID card number directly.

Check master medium button:

Click the button to check the master medium. These checks require a locally installed Desktop Reader Manager configured in the device tree as PC reader or AccessOnCard Station to which a 91 08 desktop reader is connected. When the master medium is placed on the desktop reader, the system checks whether the master medium key currently present on the master medium contains the ID card keys that should be on the master medium according to the ID card type of the PC reader or the AccessOnCard station.

The result is displayed in the table.

Note: If Mifare Classic Kaba CID ID cards or Mifare Desfire Kaba CID ID cards are used, it is not possible to perform a complete master medium check as the ID card keys on which the master medium key is based are unknown in MATRIX. The table only shows which key index is occupied with a master medium key in the Actual assignment column.

ID card type : 13 MIFARE DESFire DORMA-Encoding

Schlüssel-Index	Ist-Belegung	Soll-Belegung	Belegung OK?
0	Unknown		OK
1	Unknown	Datei lesen - Leseschlüssel	Not OK
2	Read file - read key		OK
3		AoC-Parameter - Application Masterschlüssel	Not OK
4	Unknown	AoC-Parameter - Datei Leseschlüssel	Not OK
5			OK
6			OK
7			OK

☐ Delete remaining master medium assignments

Update master medium button:

Click the button to update the master medium with the master medium keys from the target status.

Note: Not available for ID cards of the Mifare Classic Kaba CID or Mifare Desfire Kaba CID types.

Delete remaining master medium assignments checkbox:

Indicates whether all master medium keys that are unknown according to the target assignment should be removed from the master medium when the master medium is updated.

Note: Not available for ID cards of the Mifare Classic Kaba CID or Mifare Desfire Kaba CID types.

Apply master medium key to ID card type button:

Click the button to read the master medium key from the master medium and enter it in the ID card type of the PC reader or the AccessOnCard Station.

Note: The button is only active if previous master medium checks were successful and the master medium key in the ID card type deviates from the master medium key of the master medium.

5.4.5 Radio keys

Radio keys are used by the XS/evolo online components, such as DP1 XS cylinder, DP1 XS Fitting and DP1 XS traffic point, for communication.

For this process, you can use a default key or a user-defined radio key.

Note: If you use a user-defined radio key, you are required to communicate its use to all components and diagnostics tools.

"Edit Radio key" dialog

Use the **Edit Radio key** dialog to define which radio key should be used for communication with the radio components.

You can use the buttons in the toolbar to save or discard the entries.

Default key radio button:

Uses the default key specified by the system.

User-defined key option:

Allows you to use your own remote key. Click **Generate key** or enter a key in the input field.

Generate key button:

Click the button to generate the radio key.

Key input field:

Input field for the user-defined key. Enter your remote key here if you do not want to use the default key. Up to 48 characters can be entered.

Note: If you have the user-defined key generated, the radio key generated will be displayed in this field.

5.4.6 LEGIC configuration packages

LEGIC configuration packages are required for managing and transferring LEGIC Mobile Access Connector key sets.

"Selection LEGIC configuration packages" dialog

The **Selection LEGIC configuration packages** dialog displays all configuration packages created.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit LEGIC configuration package" dialog

The **Edit LEGIC configuration package** dialog is used to generate configuration packages for initialising the Mobile Access reader and to transmit them to one or more configuration smartphones.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

The screenshot shows a web interface titled "Edit LEGIC configuration package". It features a toolbar with icons for adding, saving, deleting, and undoing. The form contains several input fields: "Number" (with value 1), "Name", "Short name", "LEGIC Mobile Access Connector" (a dropdown menu), "Configuration package name", and "Password". Below these fields is a table with three columns: "Device number", "Status", and "Remove package". At the bottom of the interface are three buttons: "Transfer", "Remove package everywhere", and "New entry".

LEGIC Mobile Access Connector selection field:

Contains the LEGIC Mobile Access Connector used to generate and transmit configuration packages.

Configuration package name input field:

Contains the name with which the configuration package has been entered in the LEGICCloud using the LEGIC Mobile Access Connector.

Password input field:

Contains the assigned password of the configuration package that must be entered when executing configuration in the VCP installer app.

Table:

Contains the device numbers of the smartphones used for configuration.

Transfer button:

Transfers the configuration package to the specified configuration smartphones.

Remove package everywhere button:

Deletes the configuration package from the specified configuration smartphones.

5.5 Reports (device management)

The reports in device management contain all relevant information on the statuses of the various components.

In addition to the components' current status, you can see whether the devices have any outstanding jobs, when the last data transfer (upload, download) took place, or what the battery's status is.

The **XS/evolo evaluation** report contains important information on the XS/evolo offline components created.

The **XS radio evaluation** report contains important information on wireless connections to the XS/evolo components created.

The **Terminal evaluation** report contains important information on the terminals created.

The **Device evaluation** report contains important information on all created devices and components connected to the terminals.

The **TMS evaluation** report contains important information on the TMS components created.
The **TMS history records** report contains important information on the history data of the TMS components.

Note: The TMS reports are only available if the TMS connection option is activated.

The **Terminal events** report contains important information on the terminal events that occurred.

"XS/evolo evaluation" dialog

The **XS/evolo evaluation** dialog displays the status of all installed XS/evolo components.

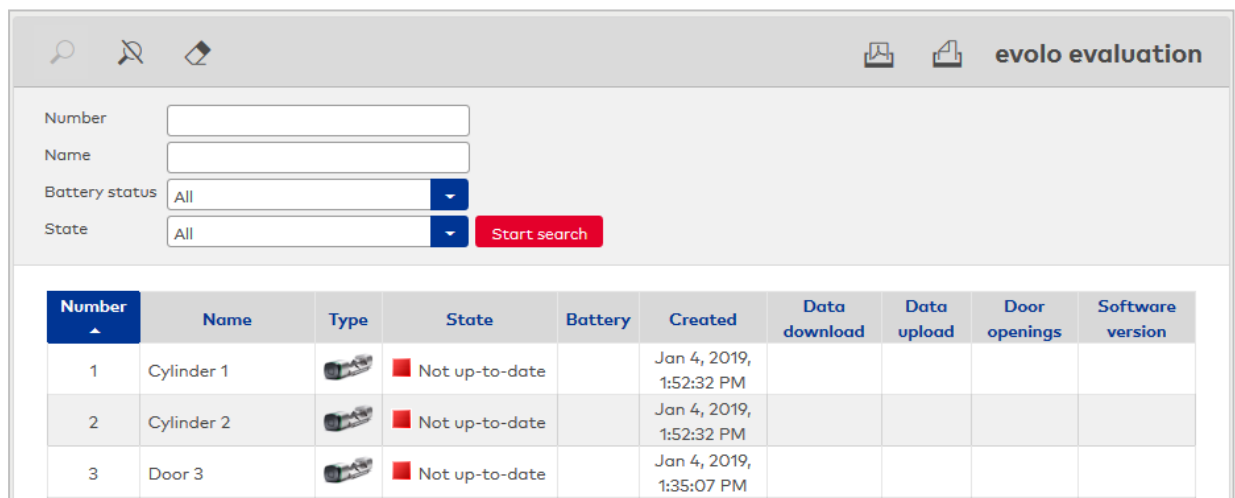
Note: If an incorrect configuration causes a component to have a time stamp which is more than 24 hours in the future compared to the server clock time, all the component's events and bookings are saved with the corresponding time stamp. The status reports are discarded for reasons of consistency. These include:

- Battery state
- Software version
- Number of door openings
- Overwrite history buffer (log buffer) yes/no

If such a situation should arise, this is entered into the log file and a reader-related event is generated which can be displayed in the reader's events log.

The **Search function** can be used to limit the selection using a single filter criterion or a group of filter criteria.

You can also filter according to battery status as well as update status.



Number	Name	Type	State	Battery	Created	Data download	Data upload	Door openings	Software version
1	Cylinder 1		 Not up-to-date		Jan 4, 2019, 1:52:32 PM				
2	Cylinder 2		 Not up-to-date		Jan 4, 2019, 1:52:32 PM				
3	Door 3		 Not up-to-date		Jan 4, 2019, 1:35:07 PM				

Battery status selection field:

Selection field for filtering the records by battery status. Select a status from the list.

State selection field:

Selection field for filtering the records by device state. Select a state from the list.

Table:

Displays all records which match the search parameters. Click a column title to sort the report in ascending or descending order.

Type column:

Contains an image of device.

State column:

Contains the data state of the device. The following states are possible:

 Up to date	The device has the current configuration data.	
 Not up to date	More recent configuration data is present that has not yet been transferred to the device.	The device must be synchronised. evolo whitelist components require • Either a subsequent "Load terminal" action for the evolo Programmer 1460 • Or an additional "Load traceback" event using the evolo Programmer 1460 beforehand XS offline components require • A "Load terminal" event using XS Manager
 Inactive	The device is marked as inactive.	The device must be set to "Active".

Holidays/bank holidays loaded to column:

This column shows the most recent date in the three reports for special days A/B and holidays up until which the special days and holidays were definitely fully loaded into the component. From this date onwards, loading is not guaranteed. A total of 20 holidays and 32 special days of type A and B can be loaded into the component.

Created column:

Contains the last date when data in the system that is relevant to this component was changed.

Data download column:

Contains the date when the data was last downloaded to the device.

Data upload column:

Contains the date when the data was last uploaded from the device.

Battery column:

Contains the battery's status.

Good = The battery status is good.

Critical = The battery status is critical and it should be replaced.

Note: If the XS/evolo components are connected to the system via a DP1 XS traffic point, a status change is automatically accepted.

Door openings column:

Contains the number of door openings that have taken place since the data was last uploaded from the device.

Note: If the XS/evolo components are connected to the system via a DP1 XS traffic point, the door openings are not transmitted and displayed.

Log buffer overflow column:

States whether the log buffer was exceeded. Yes = The buffer was exceeded. Records were lost. The interval for the upload should be reduced. No = The buffer was not exceeded.

Firmware version column:

Displays the current status of the firmware version of the device with version and date.

The firmware version is not yet known if the column does not display any information on it. The firmware version cannot be requested for some devices.

"XS radio evaluation" dialog

The **XS radio evaluation** dialog displays all the active radio components and the status changes per day are shown for the selected time ranges.

Indicating a number of status changes per day ensures the result set is limited to components with a problematic installation situation.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Only readers with more than x status changes per day input field:
Determines the number of status changes per day for the search.

Table:

All data records that match the search parameters are shown in the table. Click a column title to sort the report in ascending or descending order.

Type column:

Contains the image for the component.

State column:

Contains the state of the component. The following states are possible:

	The component is online.
	The component is offline and cannot be reached at the moment.

Date columns:

These columns contain the number of status changes on a given date.

"Terminal evaluation" dialog

The **Terminal evaluation** dialog displays the status of all active terminals.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Number	Name	State	Battery status	Last offline/online switch	Software version
1000	B6L-4P Terminal	Inactive		May 27, 2017 8:28:43 PM	
1200	B6L-4P Terminal	Inactive		May 27, 2017 8:28:43 PM	
1300	B6L Elevator	Inactive		May 27, 2017 8:28:43 PM	
2000	B6L Sluice	Inactive		May 27, 2017 8:28:43 PM	
3000	B6L Visitor	Inactive		May 27, 2017 8:28:43 PM	
5000	M6L Time	Inactive		May 27, 2017 8:28:43 PM	

Table:

Displays all records which match the search parameters. Click a column title to sort the report in ascending or descending order.

State column:

Contains the state of the device. The following states are possible:

	The terminal responds at regular intervals.
	The terminal cannot be reached currently.

Note: In the **Load/display terminal** dialog, more information on the status of devices is provided.

Battery status column:

Contains the battery's status.

Good = The battery status is good.

Critical = The battery status is critical and it should be replaced.

The battery status is not yet known if the column does not contain any information. The battery status cannot be determined for some devices.

Last offline/online switch column:

Displays the last change between online and offline.

Firmware version column:

Displays the current status of the firmware version of the device with version and date.

The firmware version is not yet known if the column does not display any information on it. The firmware version cannot be requested for some devices.

"Device evaluation" dialog

The **Device evaluation** dialog shows the status of all active devices that are connected to the terminals.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Device evaluation											
Number	Name	Terminal number	Terminal name	Bus	DCW	Address	Type	State	Last offline/online switch	Software version	
1	Reader 1	1000	B6L-4P Terminal	DP1		1	Reader	 Offline			
2	Reader 2	1000	B6L-4P Terminal	DP1		2	Reader	 Offline			
3	Reader 3	1000	B6L-4P Terminal	DP1		3	Reader	 Offline			
4	Reader 4	1000	B6L-4P Terminal	DP1		4	Reader	 Offline			
5	Reader 5	1000	B6L-4P Terminal	DP1		5	Reader	 Offline			
6	Reader 6	1000	B6L-4P Terminal	DP1		6	Reader	 Offline			
7	Reader 7	1200	B6L-4P Terminal	DP1		1	Reader	 Offline			
8	Reader 8	1200	B6L-4P Terminal	DP1		2	Reader	 Offline			

Table:

Displays all records which match the search parameters. Click a column title to sort the report in ascending or descending order.

Terminal number column:

Contains the number of the terminal that the device is connected to.

Terminal name column:

Contains the name of the terminal that the device is connected to.

Bus column:

Specifies which bus the device is connected to.

Possible display:

- DP1
- DCW
- TP1

DCW column:

For a DCW component, the type of component is shown in this column.

Address column:

Contains the physical address in the respective bus.

Type column:

Contains the type of device.

State column:

Contains the components' state.

 Online	The device responds at regular intervals.
 Offline	The device cannot be reached currently.
 Not active	The device is not active and is therefore not contacted or evaluated.

Last offline/online switch column:

Displays the last change between online and offline.

Firmware version column:

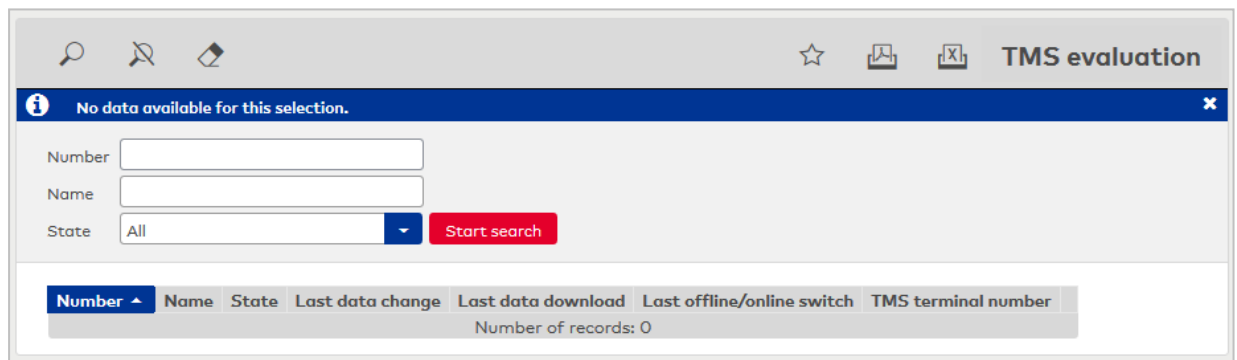
Displays the current status of the firmware version of the device with version and date.

The firmware version is not yet known if the column does not display any information on it. The firmware version cannot be requested for some devices.

"TMS evaluation" dialog

The **TMS evaluation** dialog displays the status of all the TMS components installed.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.


State selection field:

Selection field for filtering the records by device state. Select a state from the list.

Table:

Displays all records corresponding to the search parameters. Click a column title to sort the report in ascending or descending order.

Number column:

Contains the device's unique number.

Name column:

Contains the device's name.

State column:

Contains the device state. The data status and connection state are displayed.

The data status shows whether all the data has been transferred to the device and is up to date.

Display:

Up to date = The data in the device is up to date. No changes were made.

Not up to date = The data in the device is not up to date.

The connection status shows the connection with the device.

Display:

Offline = There is currently no connection with the device.
Online = There is a connection with the device.

Note: In the **Load/display terminal** dialog, more information on the status of devices is provided.

Last data download column:
Contains the date on which the most recent download took place.

Last data change column:
Contains the date of the last data change.

Last offline/online switch column:
Contains the date on which the most recent change between offline and online took place.

TMS terminal number column:
Contains the terminal number used in TMS for managing the device.

Note: This number does not necessarily correspond to the logical device number in dormakaba MATRIX.

Transfer data button:
Click this button to transfer the data to the device.

"TMS history records" dialog

The **TMS history records** dialog displays the history data as a report.

The history data of the TMS devices is output with a time stamp and source. The basic status (door closed/open, TV locked/unlocked or TV locked/unlocked) is shown for each TMS device. All other statuses are displayed when the status occurs.

Note: TMS Basic type devices cannot store history records and are therefore not displayed in this report.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

TMS history records

No data available for this selection.

Number

State

Name

From

Until

Start search

Number

Name

Event time stamp

State

Source

Transfer time stamp

Number of records: 0

Events table:

Number column:
Contains the number of the TMS device.

Name column:
Contains the name of the TMS device.

Event time stamp column:
Contains the time when the event occurred. The history records are stored in the device using a LIFO (Last-In First-Out) process and are accurate to the minute.

State column:
Contains the status of the TMS device at the specified time.

Source column:

Contains the source that triggered and/or detected the status change.

Transfer time stamp column:

Contains the transfer time of the message.

"Terminal events" dialog

The **Terminal events** dialog displays all events on a terminal during a selected period. The events are displayed with a time stamp, message text and detailed source data.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

The screenshot shows the 'Terminal events' dialog box. It features a search bar at the top with the text 'Battery change'. Below the search bar, there are input fields for 'Number', 'Name', 'From' (set to 06/01/2017), and 'Until' (set to 06/15/2017). A red 'Start search' button is located below these fields. At the bottom of the dialog, there is a table header with the following columns: 'Number', 'Name', 'Time stamp' (which is currently selected and highlighted), 'Native code', 'Message', 'ID card', 'Bus', 'Address', 'Device', and 'Transfer time stamp'. Below the table header, it indicates 'Number of records: 0'.

Message multiple selection:

Filter function for searching for particular messages.

Events table:**Number** column:

Contains the number of the terminal where the event took place or where an event was reported.

Name column:

Contains the name of the terminal where the event took place or where an event was reported.

Time stamp column:

Contains the time when the event occurred.

Native code column:

Contains the native code of the terminal.

Message column:

Contains the type of message.

Bus column:

Contains the bus to which the device is connected.

Address column:

Contains the address of the device.

Device column:

Contains information on the device.

Transfer time stamp column:

Contains the transfer time of the message.

5.6 Diagnosis

The Diagnosis section offers a series of dialogs that help with commissioning and searching for errors in connection with the terminal periphery.

It provides information on the software installed in the terminals and its associated range of functions.

Extensive data analysis, based on the current data inventory and the terminal configurations, signals online the current status of the peripherals and whether there are problems with individual components.

During commissioning, the status of the inputs and outputs can be shown, which allows quick and easy diagnosing of wiring problems.

The **Data analysis** menu provides information on whether the current data inventory can be loaded onto the terminals and whether the associated functions of the terminals can be executed.

Use **Check communication zones** in the menu to check the communication zones which have been set for the security areas and the functions which have been set up.

Use the **Function overview** in the menu to call up what software is installed on the terminals and which of the terminals' functions can be executed.

Use the **Terminal manager data export** menu item allows you to export the whole data inventory of the terminal manager.

The **Job log** menu item displays the tasks that have not been successfully executed.

5.6.1 Data analysis

Data analysis comprises a check to determine which particular data is being loaded onto a terminal and whether the functions are supported by the firmware version concerned.

Note: the data analysis can only be fully performed if communication has already taken place with the device and the firmware version of the device is known. If this is not the case, only statements relating to the memory capacity can be made.

For larger systems with many terminals and a larger number of managed persons, data analysis takes a considerable time, so it is advisable not to run the data analysis every time that the dialog is opened. The running of the data analysis can therefore be time controlled.

"Data analysis overview" dialog

The **Data analysis overview** dialog displays the terminals according to the device administration tree structure in the left-hand section of the dialog interface. The right-hand section contains the device-specific settings and information on functions.

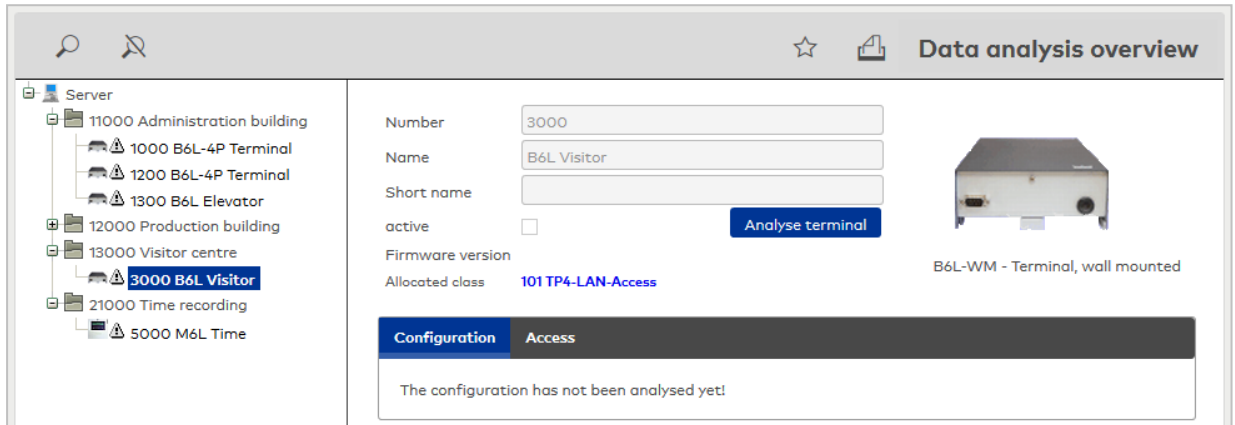
To expand the tree, click the plus sign in front of each node. Click the required element in the device tree to open a device-specific dialog. The dialog opens in the right-hand window section and the data analysis of the selected device is shown.

Problematic terminals are indicated as such with suitable symbols in the tree structure. If the data analysis has not yet been updated when the dialog for a terminal is opened and updating tasks are still outstanding, this is also indicated by a symbol.

The symbols are as follows:

	The terminal is offline or inactive. Data analysis is not possible.
	Functions are only partially supported.
	There are unsupported functions.
	Data is not up-to-date and updating tasks are still outstanding.

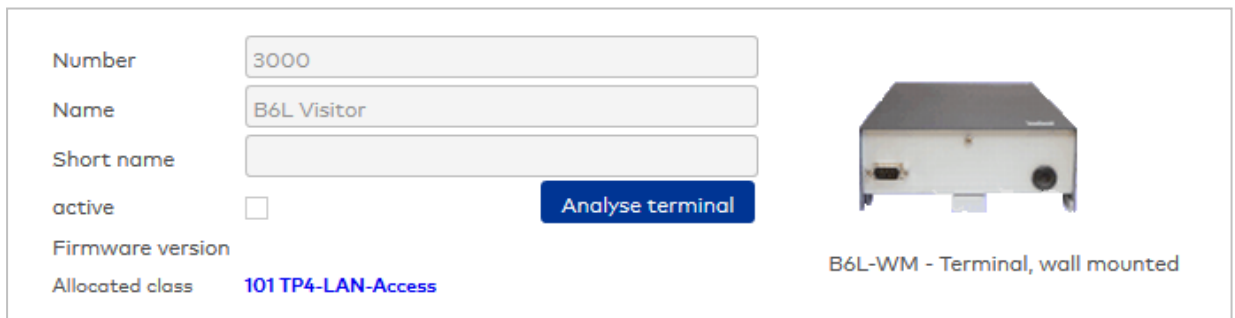
You can use the buttons in the toolbar to open and close the search and update or print the status display.



The setup of device-specific dialogs is the same for all device versions. Depending on the current data, information on configuration and the functions that are supported and used for access is provided on the various tabs.

Header data

The header data contains the number and names of the terminal and information on the installed and recommended version.



Number display field:

Contains the terminal's unique number

Name display field:

Contains the name of the terminals

Short name display field:

Contains the short name of the terminals

Firmware version display field:

Contains the firmware version for the terminal.

If the version is shown in red, an update to a later firmware version is possible.

Recommended display:

Contains the recommended firmware version for the terminal, if there is one. The firmware for the terminal should be updated to the displayed version.

If there is no later firmware version available, the field is not displayed.

Allocated class display field:

Contains the allocated class of the terminal.

Configuration

This tab shows the configuration that has been set for the terminal and the actual required number of records to be loaded onto the terminal.

	configured	required	
<u>Employee record settings</u>			
Number of employee records	1000	0	
Number of combined permissions	0	0	
Number of reader permissions per person	25	0	
<u>Access settings</u>			
Access calendar number	0	2	🔴
Number of manual special days/bank holidays (access)	0	43	🔴
Number of holidays	0	0	
Number of access daily programs	0	10	🔴
Number of access weekly profile	0	7	🔴
Number of access profiles	0	0	
Number of door daily programs	0	0	
Number of door weekly profiles	0	0	
Number of VBI permissions	0	0	
Number of interlock controls	0	0	
Number of AoC readers	0	0	
Number of security areas	0	0	
Number of security area daily programs	0	0	
Number of IDS profiles	0	0	
<u>Time settings</u>			
Number of variable booking instructions	10	9	
Number of SAP absence reasons	0	0	
Number of SAP wage types	0	0	
Number of time daily programs	30	0	
Number of minimum break plans	3	1	
<u>Terminal settings</u>			
Number of permission levels	0	0	
Number of reader function definitions	10	0	
Number of traffic point parameters	0	0	
Number of MUX definitions	0	0	
Number of elevator controls	1	0	
Number of InputPortDefinitionen	0	0	
Size of TmBasic programs	0	0	
<u>Employee record element configuration</u>			
Individual office release permission for online doors	No	No	

Files:

For all the terminal's files, you can see how many records the file administration of the terminal is configured for and how many records are actually transferred to the terminal.

configured column:

Contains the number of configured records. This number can be saved in the terminal.

required column:

Contains the number of records that are loaded onto the terminal according to the current data inventory.

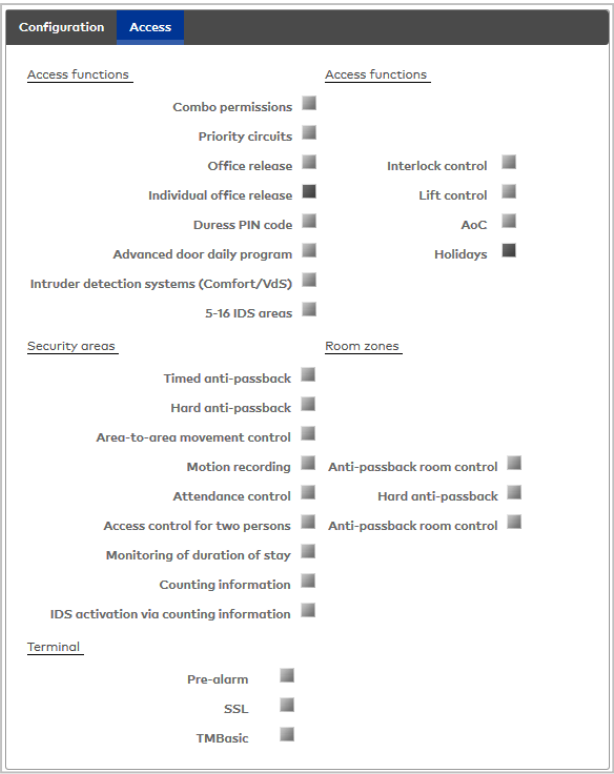
The number is shown in red if the terminal is configured with a small number. Otherwise it is shown in green.

Access

This tab contains the access functions and an identifier indicating whether these functions are supported by

the terminal configuration.

Note: The tab is only available if the Access option is activated.



Status display:

The status displays indicate if the function is supported.

Options:

	Function cannot be executed by the terminal.
	Function is used and supported.
	Function is supported by the terminal, but not used.
	Function is not supported by the terminal.

"Edit data analysis configuration" dialog

Use the **Edit Data analysis configuration** dialog to define the intervals for the data analysis. You can also use it to run an unscheduled data analysis.

The data analysis takes place on the selected weekdays at the specified time.

You can use the buttons in the toolbar to save, reject or print the changes to the configuration.

Automatic data analysis selection field:

The selection defines when the data analysis is performed.

Options:

- Never: The data analysis is never performed.
- Per day: The data analysis is performed at the specified times. This setting is recommended for larger systems or if a lot of changes are still to be made to the data.

Default value: Never.

Days Sunday to **Saturday** checkboxes:

Result in a recurring data analysis on the relevant weekday.

Options:

- Activated, a data analysis is performed on this weekday.
- Not activated, no data analysis is performed on this weekday.

Default value: Not activated.

Time input field:

Contains the time when the data analysis is to take place. Enter a time in hh:mm format.

Run unscheduled data analysis now button:

Results in an immediate data analysis. Click this button to run a data analysis immediately regardless of the intervals that were set.

5.6.2 Check communication zones

The functions of the security areas require that the participating devices exchange information with each other about access bookings. To do this, the devices need to belong to the same communication zone.

In the diagnosis, the communication zones which have been set for the security areas and the functions which have been set up are checked.

The functions are:

- Access
 - Hard anti-passback
 - Area-to-area movement control
 - Motion recording
- Attendance recording
 - Attendance control for two persons
- Monitoring of duration of stay
 - Counting information
 - IDS arming via counting information

"Check communication zones" dialog

The **Check communication zones** dialog shows the status of the communication zones of security areas/room zones with the allocated terminals, their communication zones and the functions set in each case.

Note: Depending on the setting, security areas or room zones form the basis for the check.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Note: When searching the fields "Security area", "Communication zone" and "Terminal", a full-text search is executed using the text entered. It is not possible to search ranges with ";" or "-".

Active functions multiple selection:

Limits the check to the selected functions.

Communication zones selection fields:

Options for comparing the communication zones during the check, depending on the other checking criteria.

Options:

- All: All the communication zones are displayed.
- Different: The different communication zones are displayed.
- Of same type: The communication zones of the same type are displayed.

Table:

The table contains the results of the check.

State column:

Contains the status of the check:

- Red triangle for different communication zones and functions of the terminal that are activated at the same time. The correctness of the functions is not guaranteed.
- Yellow triangle for different communication zones, but no activated functions.
- No symbol/blank for communication zones of the same type.

Security area/room zone column:

Contains the security area/room zone for which the check was performed.

Communication zone column:

Contains the communication zone for which the check was performed.

- Terminal** column:
Contains the terminal for which the check was performed.
- Active functions** column:
Contains the list of active functions.

5.6.3 Function overview

The function overview is derived from the version of the application and the firmware installed in the terminal periphery. This derivation is static and provides an overview of which functions are possible using the terminals.

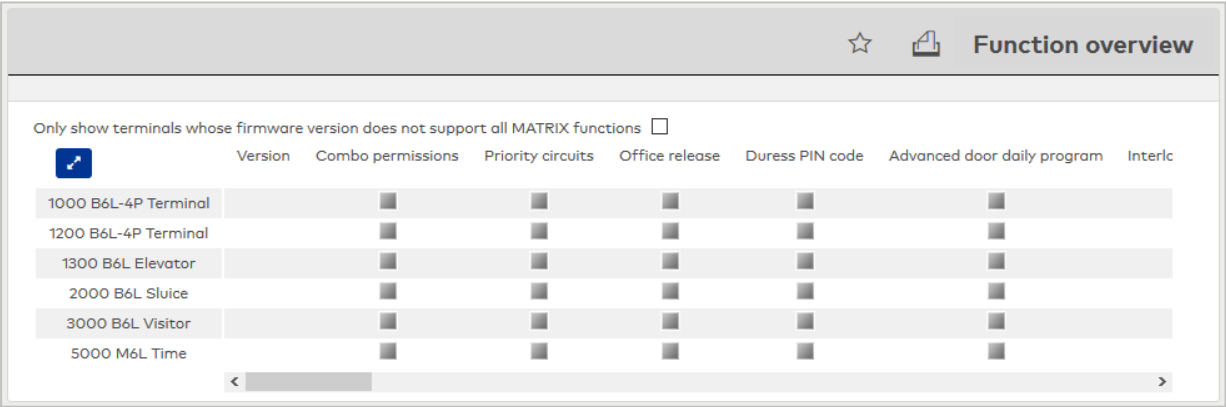
Where possible, the function overview contains information on available updates.

Note: Some functions are also possible to a limited extent with older versions of the firmware. These are mainly functions initially for local use on one terminal that have been upgraded for use on all the terminals in a later version.

"Function overview" dialog

The function overview is presented in a table, which shows the installed terminal periphery with their firmware versions and associated functions.

Depending on the firmware, some functions are only supported to a limited extent. A function is supported to a limited extent if it can be executed locally on the terminal, for example. The same function is fully supported if it is supported by all terminals.



Only show terminals whose firmware version does not support all MATRIX functions checkbox:
When this checkbox is activated, only those terminals that do not support all the installed MATRIX version's functions are shown. All other terminals are hidden in the table.

Function table:
The table shows all set up terminals and the functions that are supported by these terminals.

Version column:
Contains the version of the firmware installed on the terminal. If no version is specified, communication has not yet been established with the terminal. In this case, the function indicator is also set to 'unknown'.

Table intersections:
Contain identifiers indicating whether the function is supported. Support status is shown as follows:

	Function is not supported.
	Function is supported.

	Function is not fully supported.
	Unknown, as no communication has taken place with the terminal yet.

5.6.4 Terminal manager data export

You can export the whole data inventory of the terminal manager and save it locally on your computer for diagnostic purposes.

In addition to the configuration data of devices, the data also includes all data from the "Classes" and "Class settings" section.

"Terminal manager data export" dialog

Use the **Terminal manager data export** dialog to export all terminal manager data and save it locally on your computer. The different files are exported as a compressed ZIP file.



Export terminal data button:

Initiates the terminal manager data export.

Note: The querying of the storage location and file depends on the browser.

5.6.5 Job log

This area of diagnosis provides information about terminal jobs. Actions such as loading of data to a terminal and, for example, firmware download to components are displayed.

The data retention realm is determined via the specified data housekeeping limit for messages and events.

"Job log" dialog

All terminal jobs are shown in the **Job log** dialog, such as data upload processes or firmware updates.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

The screenshot shows a web interface titled "Job log". At the top, there is a toolbar with icons for search, filter, and print. Below the toolbar, there are search filters: "Number" (empty), "Name" (empty), "From date" (27/6/2019), and "Until date" (27/6/2019). A red "Start search" button is located below the filters. Below the filters is a table with the following data:

Number	Name	Date/time	Text/parameters	Delete
15	evolo wireless Gateway 9040	27/6/2019 08:52:26	Deleting old jobs for terminal 15.	
7000	M6L	27/6/2019 11:21:06	Deleting old jobs for terminal 7000.	
7000	M6L	27/6/2019 11:10:19	Deleting old jobs for terminal 7000.	

Table:

Last name input field:

Contains the name of the terminal.

Date/time column:

Contains the date and time when the terminal job was executed.

Text/parameters column:

Contains information about the terminal and the job executed.

Note: When updating the firmware of KCP devices, two identical entries are shown in the job log as two components must be transferred. This is not an error.

5.7 Corrections

Changes can be made to the master data records using corrections. The dialog is designed to make many different types of corrections and also allows you to enter many corrections at the same time. The dialog provides a generating function and a related searching procedure for applying the same corrections to different master data. Input entries in the dialog interface are saved as correction records in the database and processed in a correction process. Corrections are applied directly to the master data and are valid immediately.

"Edit corrections" dialog

Use the **Edit Corrections** dialog to record the various corrections and display incorrectly processed correction records for revision. The input fields are located in the upper section of the dialog and the corrections already recorded or incorrectly processed are displayed in the lower section.

Use the buttons on the toolbar to save and discard the correction inputs and start processing corrections or print or delete the displayed records. You can display the progress of correction processing by clicking the **Refresh** button.

Corrections are recorded or edited in the input line. The composition of the line matches the correction type selected.

Correction type selection field:

Selecting the correction type determines the master data reference and the parameter fields in the input line.

Search button (magnifier):

Opens a selection dialog that is based on the correction types. One or more records can be chosen from this dialog. If you select multiple records, an * is displayed in the input field.

Other **selection and input fields**:

The other selection and input fields relate to the correction type selected.

Apply button:

Use this button to create the correction records and transfer them into the table. One correction record is generated for each master data record.

Corrections () progress display

After startup, the number of corrections is displayed with the current status. These are updated at time intervals of 2 seconds in order to show the progress.

Total	Number of corrections in the table
Open	Corrections that must still be processed
Failed	Corrections that could not be completed; the entries remain in the table where they can be corrected or deleted.
New	Newly entered corrections for which correction processing has not yet been triggered

Table:

The table displays all correction records that have been newly created but not yet processed. The correction records can be deleted or modified. Click the **Change line** button of a correction record. The entry will then be loaded into the input line and can be directly altered.

Correction type column:

Displays the type of correction for the correction record.

Number/name column:

Displays the number and name of the master data records to which the correction is applied.

Valid from/valid until column:

Enter a start and end date for validity.

Parameter column:

Displays the parameters required for correction. The master data reference and the new value are displayed, respectively.

Error message column:

Displays a message if a correction record could not be processed.

6 Dialogs in Self Service

The **Self Service** area contains all dialogs for personal login.

These include views and reports of your personal data, dialogs for tasks in the workflows area, and dialogs for customising the system to your personal requirements.

Access to the system is granted via the persons in the person administration. The person is thereby set up as a user in the system and can log into the system with their user ID and password. Once they have been allocated the appropriate user role, the person is assigned access permissions for the dialog interface.

Note: If there is no person for a user in the system, the dialogs with the personal data are not available.

Use the **My requests** menu item to manage the requests you have set and view their status.

The **Approvals** menu item displays all workflows that you still have to edit or about which you have received information.

Use the **History** menu item to view your approved workflows.

Use the **Substitute settings** to specify when your substitutes can approve workflows and what information they receive.

Use the **Reservations** menu item to display an overview of the existing reservations. You can create new reservations or edit or delete existing reservations.

Use the **Visitor reservations** menu item to register planned visitors.

Use the **Visitor terminal** menu item to register planned visitors.

Use the **Persons access requests** menu item to create requests for access permissions for persons.

Use the **External company employee access requests** menu item to create requests for access permissions for external company employees.

Use the **Access permissions** menu item to display all doors for which access permission exists.

Use the **Booking** dialog to allow authorised employees to perform their bookings in a web dialog.

Use the **My person** dialog to view your personal data and holiday accounts.

The **Monthly overview** contains an overview of the relevant bookings and different time accounts.

The **Yearly overview** displays an overview of absence times in calendar form.

The **Absences** report provides an overview of the absence times per month.

The **Daily data** report provides an overview of the absence times per day.

The **Monthly data** report provides an overview of the absence times per month.

The **Specifics** report provides an overview of missing bookings and other specifics.

Use the **Corrections** dialog to obtain an overview of the corrections performed and to perform various corrections yourself subject to the corresponding permission.

Use the **Notification actions** menu item allows each user to determine which notifications are to be displayed.

Use the **Change password** dialog to change your password for accessing the system.

The **Change view** dialog lets you change the font size and the appearance of the application.

The **Fixed lists settings** menu item allows each user to individually configure the content of various lists such as the monthly overview, yearly overview or lists with the daily and monthly data.

The **Report configurations** menu item lets you create and edit your own report configurations.

Use the **PC reader** dialog to set the port for the PC reader.

Use the **ID card diagnosis** dialog, you can read the ID card data quickly and easily using a PC reader.

The **Reports and Special reports** menus display the reports which have been created with the report configurator and enabled for the application in the Self Service. If no reports are present, the menu items are not displayed.

Use the **Help** menu to access general information regarding the installed basis of dormakaba MATRIX and to start online help.

Use the **Logout** menu item to log out from dormakaba MATRIX.

6.1 My requests

Once a workflow has been initiated, it is managed in the system as an active workflow until all approval steps are completed or the workflow is rejected.

The current workflow status of your requests is displayed in **My requests**.

"Selection My requests" dialog

The **Selection My requests** dialog displays your personal requests.

The **Search function** can be used to limit the selection using a single filter criterion or a group of filter criteria.

The screenshot shows the 'Selection My requests' dialog. At the top, there are icons for document, search, and other functions. Below the icons, there are two date input fields: 'Creation date - from' with the value '06/01/2017' and 'until' with the value '06/15/2017'. A red 'Start search' button is next to the 'until' field. Below the date filters is a table with the following columns: 'Creation date', 'Correction type', 'Date 1', 'Date 2', 'Parameter', 'Comment', 'State', and 'Step'. The table contains three rows of data:

Creation date	Correction type	Date 1	Date 2	Parameter	Comment	State	Step
6/13/2017 03:22	Person access permission (4)	06/19/2017	06/21/2017			Denied	
6/13/2017 03:18	Person access permission	06/15/2017	06/16/2017			Approved	1 / 1
6/13/2017 03:12	Holiday	07/25/2017	07/27/2017			In progress	1 / 4

Below the table, it says 'Number of records: 3'.

Creation date column:

Contains the date on which the request was created.

Correction column:

Contains the correction type of the request.

Date 1 column:

Contains the "valid from" date for the manual booking activated by the approved request. In the case of a request for a holiday, this is the start of the holiday. In the case of a request for business authorisation permission, this is the first day from which the requested permission is to apply.

Date 2 column:

Contains the "valid until" date for the manual booking activated by the approved request. In the case of a request for a holiday, this is the end of the holiday.

Parameter column:

Contains additional parameters for the correction type if these are required. In the case of a business authorisation permission, the parameter indicates whether the permission is set or reset, for example.

Comment column:

Contains a comment on the request, if defined.

State column:

Contains the current state of the workflow.

Options:

	Approved
	In progress
	Pending
	Denied

Step column:

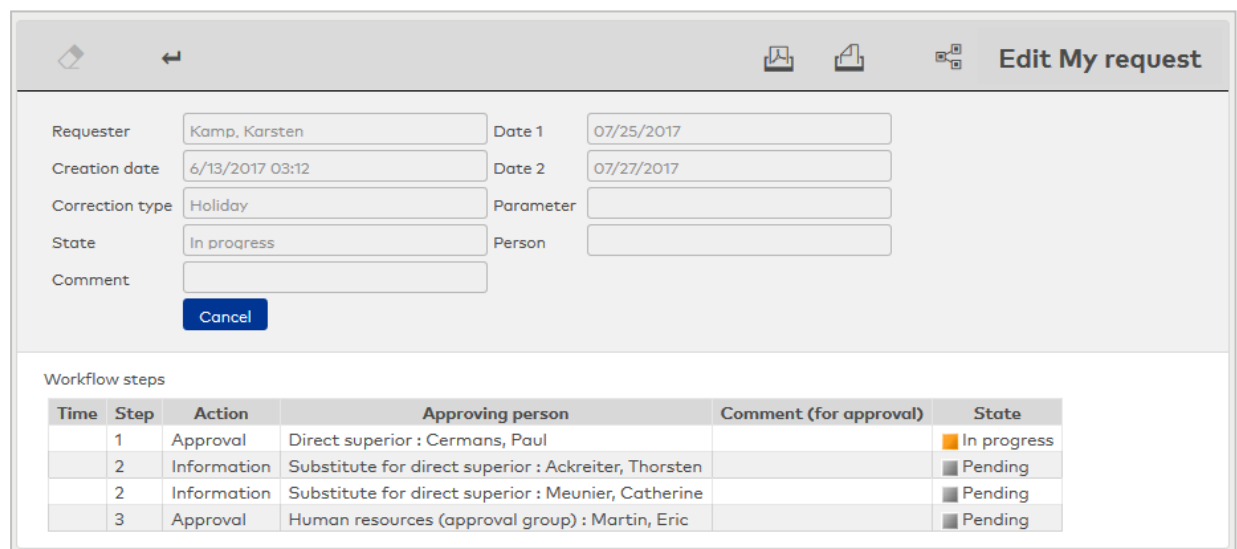
Contains the number of the currently pending approval step.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit My request" dialog

The **Edit My request** dialog provides detailed information about the request.

Use the buttons in the toolbar to print the record or refresh the view. Use the **Back to selection** button to return to the selection dialog.



Time	Step	Action	Approving person	Comment (for approval)	State
	1	Approval	Direct superior : Cermans, Paul		 In progress
	2	Information	Substitute for direct superior : Ackreiter, Thorsten		 Pending
	2	Information	Substitute for direct superior : Meunier, Catherine		 Pending
	3	Approval	Human resources (approval group) : Martin, Eric		 Pending

Requester display field:

Contains the workflow requester's last name and first name.

Creation date display field:

Contains the date and time when the workflow was created.

Correction type display field:

Contains the correction type for the workflow.

State display field:

Contains the current state of the workflow.

Comment display field:

Contains a comment on the workflow, if defined.

Date 1 display field:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a

workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 display field:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Parameters display field::

Contains additional parameters for the correction type if these are required. In the case of a business authorisation permission, the parameter indicates whether the permission is set or reset, for example.

Person display field:

Contains the person for whom a request for access permission has been made.

Room zone display field:

Contains the room zone, if a request for access permission for a room zone has been made.

Weekly profile display field:

Contains the weekly profile in conjunction with a request for access permission.

Cancel button:

This button allows you to cancel the workflow.

Workflow steps table:

The table contains the steps of the work flow that are completed or still pending.

Time column:

Contains the date and time when the applicable step was processed. The column is blank if the applicable step has not yet been processed.

Step column:

Contains the sequence in which the workflow steps are processed.

Action column:

Contains the action for the specified workflow step.

Approving person column:

Contains the approver who has processed this step or still has to do so.

Comment (for approval) column:

Contains the comment of the approving person.

State column:

Contains the current state of the workflow.

Options:

	Approved
	In progress
	Pending
	Denied
	Cancelled

6.2 Approvals

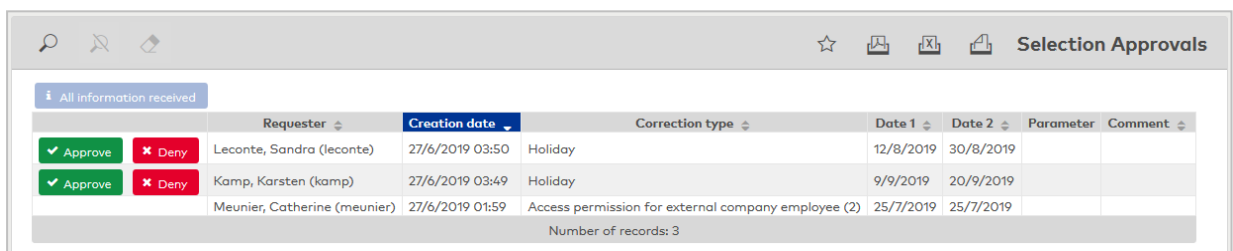
As an approver, the approvals give you access to the requests that you still have to process or about which you have received information as part of the workflow.

Note: The Selection **Approvals for request** dialog is only available in the case of access requests for persons if the access request consists of a number of persons or room zones.

"Selection Approvals" dialog

The **Selection Approvals** dialog displays all workflows that you still have to edit or about which you have received information.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.



		Requester	Creation date	Correction type	Date 1	Date 2	Parameter	Comment
☒	☒	Leconte, Sandra (leconte)	27/6/2019 03:50	Holiday	12/8/2019	30/8/2019		
☒	☒	Kamp, Karsten (kamp)	27/6/2019 03:49	Holiday	9/9/2019	20/9/2019		
☒	☒	Meunier, Catherine (meunier)	27/6/2019 01:59	Access permission for external company employee (2)	25/7/2019	25/7/2019		

Number of records: 3

Click the respective button to approve or deny the request. Click to open a record to view further information.

Requester column:

Contains the last name and first name of the workflow requester.

Creation date column:

Contains the date and time when the workflow was created.

Correction type column:

Contains the correction type for the workflow.

Date 1 column:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 column:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Parameter column:

Contains additional parameters for the correction type if these are required.

Comment column:

Contains a comment on the workflow, if defined.

"Selection Approvals for request" dialog

The **Selection Approvals for request** dialog displays all partial requests for an access request that you still need to edit or about which you have received information.

Partial requests are generated by the system if an access request is made for a number of persons or room zones.

The table displays the corresponding search results. Click a column header to sort the report by a characteristic in ascending or descending order. Click an entry to open the relevant record.

←
☆ 📄 **Selection Approval for request**

✔ Approve all
✘ Deny all
ℹ All information received

Requester

Date 1

Creation date

Date 2

Comment

Application form

		Action	Correction type	Person	Room zone	Weekly profile
✔	✘	Approval	Access permission for external company employee	Schilling, Wolfgang	2 - Chief executive	1 - Always
✔	✘	Approval	Access permission for external company employee	Schmitz, Peter	2 - Chief executive	1 - Always

Number of records: 2

Approve all button:

This button approves all requests shown in the table simultaneously.

Deny all button:

This button rejects all requests shown in the table simultaneously.

All information received button:

You use this button to confirm all information.

Requester display field:

Contains the workflow requester's last name and first name.

Creation date display field:

Contains the date and time when the workflow was created.

Date 1 display field:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 display field:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Comment display field:

Contains a comment on the workflow, if defined.

Application form button:

You can use this button to open the form which was used to create the original workflow.

Partial requests table:

This table contains the partial requests which are produced by the original workflow if an access request has been made for a number of persons or room zones. They can be approved or denied individually.

Action column:

The current approval step is displayed in this column. The icons in the columns to the left of this column show the possible actions that you can execute directly.

✔	Approve workflow
✘	Reject workflow

Correction type column:

Contains the correction type for the workflow.

Person column:

Contains the person for whom the request was made plus their first and last names.

Room zone column:

Contains the room zone for the access permission.

Weekly profile column:

Contains the weekly profile for the access permission.

"Edit Approval" dialog

The **Edit Approval** dialog provides you with detailed information about the workflow. You can approve or reject the workflow.

Use the **Back to selection** button to return to the selection dialog.

Time	Step	Action	Approving person	Comment (for approval)	State
1	1	Approval	Direct superior : Cermans, Paul		In progress

Number of records: 1

Requester display field:

Contains the workflow requester's last name and first name.

Creation date display field:

Contains the date and time when the workflow was created.

Correction type display field:

Contains the correction type for the workflow.

State display field:

Contains the current state of the workflow.

Comment display field:

Contains a comment on the workflow, if defined.

Date 1 display field:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 display field:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Parameters display field::

Contains additional parameters for the correction type if these are required. In the case of a business authorisation permission, the parameter indicates whether the permission is set or reset, for example.

Person display field:

Contains the person for whom a request for access permission has been made.

Room zone display field:

Contains the room zone, if a request for access permission for a room zone has been made.

Weekly profile display field:

Contains the weekly profile in conjunction with a request for access permission.

Application form button:

Activate this button to call up the application form which is the basis for the workflow. Application forms are used for requests for access permissions for one or more persons. A workflow is derived from this request for each person named.

Comment input field:

You can enter a comment here.

Buttons:

Click the buttons to execute the current approval step. If you only receive information, you can acknowledge its receipt.

Workflow steps table:

The table contains the steps of the work flow that are completed or still pending.

Time column:

Contains the date and time when the applicable step was processed. The column is blank if the applicable step has not yet been processed.

Step column:

Contains the sequence in which the workflow steps are processed.

Action column:

Contains the action for the specified workflow step.

Approving person column:

Contains the approver who has processed this step or still has to do so.

Comment (for approval) column:

Contains the comment of the approving person.

State column:

Contains the current state of the workflow.

Options:

	Approved
	In progress
	Pending
	Denied
	Cancelled

6.3 History

A list of all approved workflows is displayed in the history. The details of each workflow can be called up in the display dialog.

"Selection History" dialog

The **Selection History** dialog displays all workflows which you have approved or rejected.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Action	Requester	Creation date	Correction type	Date 1	Date 2	Parameter	Comment	State
Approval	Kamp, Karsten (kamp)	6/13/2017 03:22	Person access permission	06/19/2017	06/21/2017			Denied
Approval	Kamp, Karsten (kamp)	6/13/2017 03:22	Person access permission	06/19/2017	06/21/2017			Denied
Approval	Kamp, Karsten (kamp)	6/13/2017 03:22	Person access permission	06/19/2017	06/21/2017			Denied
Approval	Kamp, Karsten (kamp)	6/13/2017 03:22	Person access permission	06/19/2017	06/21/2017			Denied
Approval	Kamp, Karsten (kamp)	6/13/2017 03:18	Person access permission	06/15/2017	06/16/2017			Approved

Number of records: 5

Action column:

Contains the action for the workflow.

Requester column:

Contains the last name and first name of the workflow requester.

Creation date column:

Contains the date on which the workflow was created.

Correction column:

Contains the correction type of the workflow.

Date 1 column:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 column:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Parameter column:

Contains additional parameters for the correction type if these are required. In the case of a business authorisation permission, the parameter indicates whether the permission is set or reset, for example.

Comment column:

Contains a comment on the workflow, if defined.

State column:

Contains the current state of the workflow.

Options:



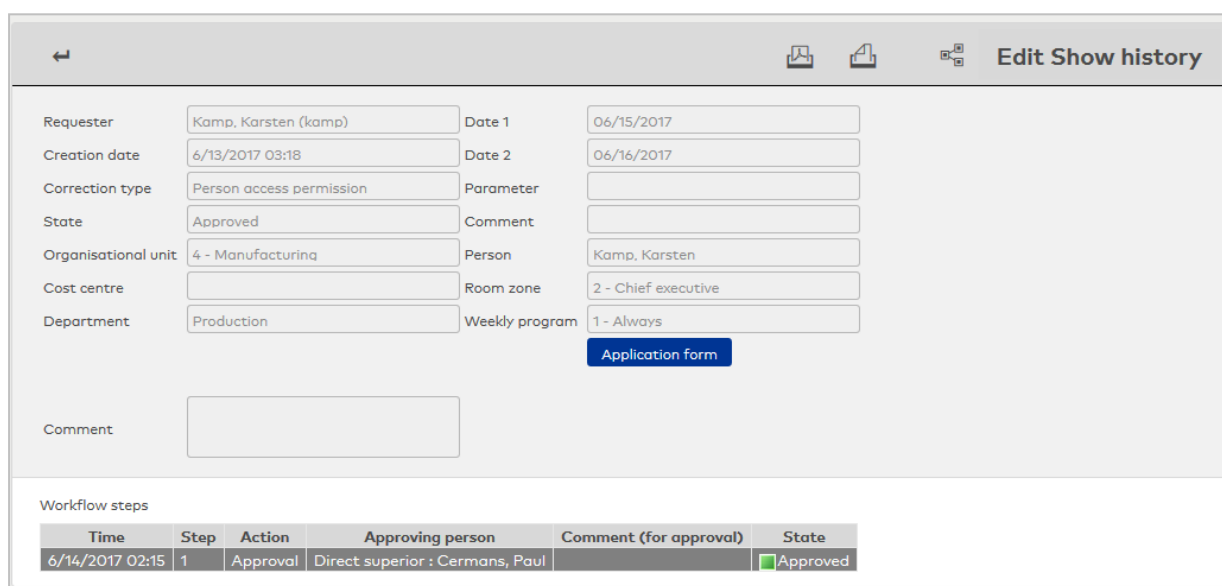
	In progress
	Pending
	Denied
	Cancelled

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Show history" dialog

The **Show history** dialog displays the details of the workflow.

Use the buttons in the toolbar to navigate between data records or print individual records. Use the **Back to selection** button to return to the selection dialog.



Time	Step	Action	Approving person	Comment (for approval)	State
6/14/2017 02:15	1	Approval	Direct superior : Cermans, Paul		 Approved

Requester display field:

Contains the workflow requester's last name and first name.

Creation date display field:

Contains the date and time when the workflow was created.

Correction type display field:

Contains the correction type for the workflow.

State display field:

Contains the current state of the workflow.

Comment display field:

Contains a comment on the workflow, if defined.

Date 1 display field:

Contains the "valid from" date for the manual booking activated by the approved workflow. In the case of a workflow for a holiday, this is the start of the holiday. In the case of a workflow for the business authorisation permission, this is the first day from which the permission applied for should be valid.

Date 2 display field:

Contains the "valid until" date for the manual booking activated by the approved workflow. In the case of a work flow for a holiday, this is the end of the holiday.

Parameters display field::

Contains additional parameters for the correction type if these are required. In the case of a business authorisation permission, the parameter indicates whether the permission is set or reset, for example.

Person display field:

Contains the person for whom a request for access permission has been made.

Room zone display field:

Contains the room zone, if a request for access permission for a room zone has been made.

Weekly profile display field:

Contains the weekly profile in conjunction with a request for access permission.

Workflow steps table:

The table contains the steps of the work flow that are completed or still pending.

Time column:

Contains the date and time when the applicable step was processed. The column is blank if the applicable step has not yet been processed.

Step column:

Contains the sequence in which the workflow steps are processed.

Action column:

Contains the action for the specified workflow step.

Approving person column:

Contains the approver who has processed this step or still has to do so.

Comment (for approval) column:

Contains the comment of the approving person.

State column:

Contains the current state of the workflow.

Options:

	Approved
	In progress
	Pending
	Denied
	Cancelled

6.4 Substitute settings

In the substitute settings, you can specify the conditions under which your substitutes can issue approvals and which information the substitutes receive.

"Edit Substitute settings" dialog

Use the **Edit Substitute settings** dialog to specify the conditions under which your substitutes can issue approvals and whether the substitutes receive information.

You can use the buttons in the toolbar to save or reject the changes.

Edit Substitute settings

Substitute for approvals

Setting for all substitutes: Substitutes are never allowed to approve

Send information to substitute: ☐

Substitutes from organisational structure

Organisational unit: 4 - Manufacturing

Active	Approving person	Department	Employee number
☐	Ackreiter, Thorsten (ackreiter)		1
☒	Meunier, Catherine (meunier)	2 - Production	8

Number of records: 2

Substitute for own requests

Allocated substitutes

Last name	First name	User ID		
Hochmeyer	Gertrud	hochmeyer		
Kamp	Karsten	kamp		

New entry

Default substitute: Hochmeyer, Gertrud (hochmeyer)

Substitute for approvals

Setting for all substitutes selection field:

Options:

- Substitutes are always allowed to approve.
- Substitutes are never allowed to approve.
- Substitutes are only allowed to approve if an absence type has been set for the superior.
- Substitutes are only allowed to approve in the specified period. With this option, date fields are also displayed for entering the time period.

Send information to substitute checkbox:

Specifies whether information is sent to the substitute.

- Activated: Information is sent to the substitute.
- Not activated: Information is not sent to the substitute.

Default value: Not activated.

Substitutes from organisational structure table:

The table displays the substitutes in line with the organisational structure. Any user can activate or deactivate the substitutes as required.

Active column:

Indicates whether the substitute is activated.

Options:

- Activated: The substitute is activated and can execute the action for all substitutes in line with the selection.
- Not activated: The substitute is not activated.

Default: Activated.

Approving person column:

Contains the last and first name of the substitute.

Department column:

Contains the department of the substitute.

Employee number column:

Contains the substitute's employee number.

Substitute for own requests

Note: This area is only present if this option has been enabled for the associated user group.

Allocated substitutes table:

Any user can enter substitutes in the table. These substitutes are automatically notified in the event of a workflow request, or corrections can be entered if a substitute is required.

Last name column:

Contains the substitute's last name.

First name column:

Contains the substitute's first name.

User ID column:

Contains the substitute's MATRIX user ID.

Default substitute selection field:

Select a default substitute who is preselected when a workflow is requested. Any person entered in the table can be selected.

6.5 Reservations

Reservations can be used to plan room occupancies on a specified date. Further participants can be entered for every reservation. Participants are then automatically granted access permission to the reserved room on the specified date.

All authorised persons can make reservations independently in the self-service area.

In addition, room management in the Access menu can be used to grant selected persons access permission to all reservations. This allows reservations of persons to be changed or deleted by third parties in special cases, such as sickness or absence of persons.

"Selection Reservations" dialog

The **Selection Reservations** dialog displays all existing reservations for rooms for each day along with the date, time and responsible person.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Date	From time	Until time	Room	Person	Department	Phone
Jun 12, 2017	19:00	24:00	Seminar room	Hochmeyer, Gertrud	Sales	0456/123-20
Jun 13, 2017	10:00	24:00	Seminar room	Hochmeyer, Gertrud	Sales	0456/123-20

Number of records: 2

"Edit Reservation" dialog

Use the **Edit Reservations** dialog to create new room reservations and edit existing reservations.

You can use the buttons in the toolbar to navigate between records, to create, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.

Room selection field:

Selection of the room to be reserved.

Reserved from date field:

Contains the date when the reservation starts. Enter a date or click the calendar icon and select a date.

Time input field:

Contains the time when the reservation starts. Enter the appropriate time.

Reserved until date field:

Contains the date when the reservation ends. Enter a date or click the calendar icon and select a date. The field may remain empty for one-day reservations. The date is then automatically adopted from the

Reserved from field.

Time input field:

Contains the time when the reservation ends. Enter the appropriate time. If you do not specify a time, it is set to 23:59.

Reserved by:

Contains the person who has reserved the room. When creating a new reservation the registered person is entered here. The person reserving can be changed if required.

Note: Use the magnifier  to open the selection dialog for Persons.

Employee number display field:

Contains the employee number of the person making the reservation.

Name display field:

Contains the last name of the person making the reservation.

First name display field:

Contains the first name of the person making the reservation.

Department display field:

Contains the department of the person making the reservation.

Phone display field:

Contains the phone number of the person making the reservation.

Participants table:

The table contains the participants to whom the necessary access rights are assigned during the reservation.

Note: Use the magnifier  to open the selection dialog for Persons.

Person column:

Contains the last name and the first name of the invited person.

Department column:

Contains the department of the invited person.

Phone column:

Contains the phone number of the invited person.

"Selection persons" dialog

Use the **Selection Persons** dialog to search for persons and directly apply them to the invoking dialog.

Note: When the **Several ID cards per person** option is active, an individual record for the person is displayed in the table for every ID card.

Selection Persons							
☐	Last name ^	First name ^	Department ^	Employee number ^	ID card number ^	ID card label ^	Blocked ^
☐	Ackreiter	Thorsten		1	9001	001	☐
☐	Cermans	Paul	2 - Production	7	8203	203	☐
☐	Hochmeyer	Gertrud	2 - Production	5	8201	201	☐
☐	Kamp	Karsten	2 - Production	9	8205	205	☐
☐	Leconte	Sandra	2 - Production	10	8206	206	☐
☐	Legrand	Marc	2 - Production	6	8202	202	☒
☐	Meunier	Catherine	2 - Production	8	8204	204	☐
Number of records: 7							

Select one or more entries and click **Apply selected search results** in the toolbar.

6.6 Visitor reservation

In a visitor reservation, you store information on who wants to visit you and when.

The visitor reservations are provided to the receptions in the visitor overview and can help to optimise allocation of visitors.

For recurring visitors, you can use visitor reservations that have already been created as a template for a new visit. In general, only the date values of the visit are then required.

"Selection visitor reservation" dialog

The **Selection Visitor reservations** dialog displays all visitor reservations created along with their state.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

+

☆

Selection Visitor reservations

Title

▼

Last name

First name

Company

Visit from

until

🔍 Start search

☐	State	Title	Last name ▲	First name	Company	Visit from	until	Purpose	Name of visited person	First name of visited person	Delete
☐			Bob	Bob							
☐			Winter	Eva							

Number of records: 2

Visitor reservations table:

The visitor reservation table contains all active visitor reservations and all ended visitor reservations.

New column:

Click the **New** icon in the table row to use a visitor reservation as a template for a further reservation. This function is independent of the visitor status.

State column:

Contains the current state of the visit.

Possible display:

	Visit is reserved
	Visit is pre-activated
	Visit is active
	Visit is interrupted
	Visit is finished

"Edit visitor reservation" dialog

Use the **Edit visitor reservation** dialog to create new visitor reservations and edit or delete existing visitor reservations.

Use the buttons in the toolbar to navigate between records, create, copy and delete a record, and save or discard changes to the record. Use the **Back to selection** button to return to the selection dialog.

Visitors

This area contains information on the visitor.

Visitor selection field:

Selection field for the visitor. The visitor's contact data is shown in the display fields once selected or applied.

Note: Use the magnifier  to open the selection dialog for visitors to select the visitor or, if necessary, change the visitor. You can use the central toolbar to create a new visitor and then apply if the visitor has not yet been created in the system.

New advance reservation for this visitor button.

This button creates a new visitor reservation for the displayed visitor.

As a general rule, the only further information required is the details on the time of the visit.

Note: Unlike the central toolbar used to enter new entries, this button does not create any new visitors; it simply generates a new visitor reservation.

Additional visitor information

Additional details about the visitor can be entered, e.g. telephone number and e-mail address, depending on the configuration of the visitor dialog.

Person visited

This area contains information on the person visited.

Selection field:

Selection field for the person visited. The official data of the person visited is shown in the display fields once selected or applied.

Note: Use the magnifier  to open the selection dialog for persons to select or, if necessary, change the person visited.

Visit

This area contains information on the visit appointment.

Visit from column:

Contains the time and date the visit starts according to the schedule.

Visit until column:

Contains the time and date the visit ends according to the schedule.

Purpose column:

Contains the reason for the visit.

Comment input field:

Free text field for additional details on the visit.

Available fields if QR code access is activated:

QR access profile selection field:

Used to select an access profile for pre-activation using QR codes with access function.

Button :

Pressing the button sends an e-mail containing a generated QR code to the stated e-mail address. Please note that, if an e-mail address and access profile have already been set, an e-mail is sent automatically when the visitor is saved.

Note: E-mail template 13 "Visitor access with QR code" is used.

Available fields if LPN recognition access is activated:

Licence plate number input field:

Contains the licence plate number (LPN) of the visitor.

LPN access profile selection field:

Used to select an access profile for pre-activation using LPN recognition.

Note: Pre-activation using a QR code or LPN recognition: The system parameter Access 74 "Access validity period before visit" defines the period during which the visitor can enter the car park before the beginning of the visit appointment. During this period, the visit has the status "Pre-activated".

"Selection persons" dialog

Use the **Selection Persons** dialog to search for persons and directly apply them to the invoking dialog.

Note: When the **Several ID cards per person** option is active, an individual record for the person is displayed in the table for every ID card.

Selection Persons						
Last name ▲	First name ▲	Department ▲	Employee number ▲	ID card number ▲	ID card label ▲	Blocked ▲
Ackreiter	Thorsten		1	9001	001	☐
Cermans	Paul	2 - Production	7	8203	203	☐
Hochmeyer	Gertrud	2 - Production	5	8201	201	☐
Kamp	Karsten	2 - Production	9	8205	205	☐
Leconte	Sandra	2 - Production	10	8206	206	☐
Legrand	Marc	2 - Production	6	8202	202	☒

Click an entry to directly apply the corresponding record.

"Selection Visitor" dialog

Use the **Selection Visitor** dialog to search for visitors and directly apply them to the invoking dialog; if required, you can also create new visitors.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Select one or more entries and click **Apply selected search results** in the toolbar.

6.7 Visitor terminal

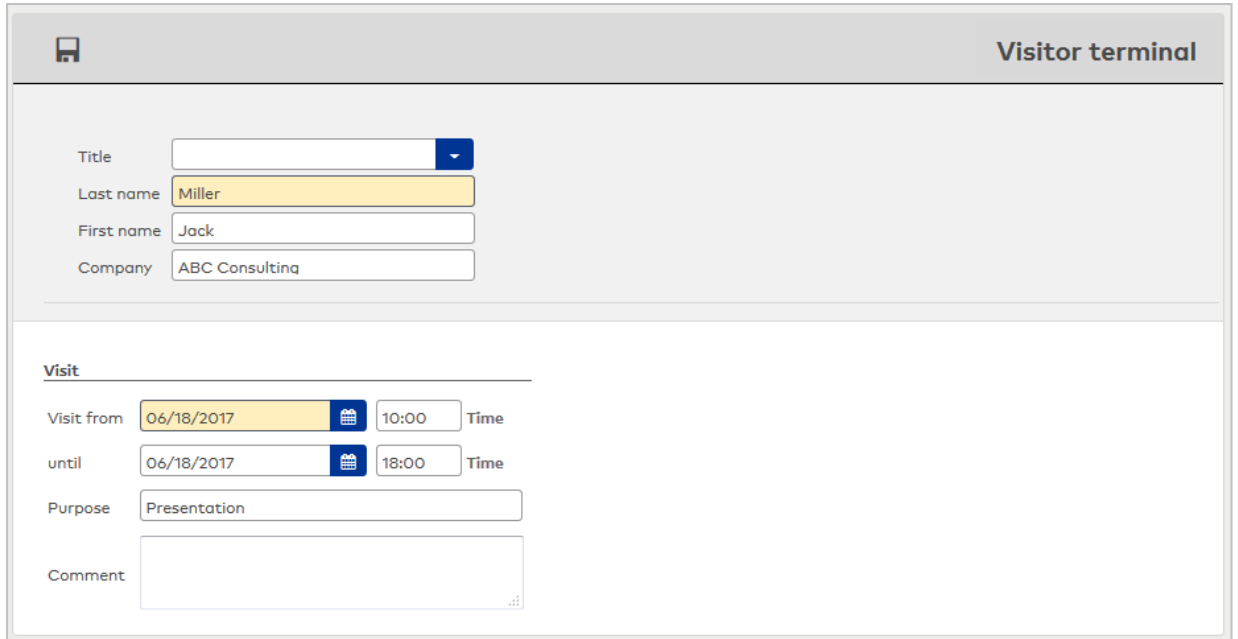
If a separate visitor terminal is installed in your company foyer, visitors can log in and enter their personal details themselves. Once entered, their data is then available to reception.

"Edit visitor terminal" dialog

Visitors can log in themselves in the **Edit visitor terminal** dialog.

You can use the buttons in the toolbar to save the record. The help function is not available in this dialog, as the dialog is used in public areas.

Note: The dialog remains open after saving ready for another login.



The screenshot shows a 'Visitor terminal' interface. At the top, there is a 'Title' dropdown menu. Below it are input fields for 'Last name' (containing 'Miller'), 'First name' (containing 'Jack'), and 'Company' (containing 'ABC Consulting'). A horizontal line separates this section from the 'Visit' section. The 'Visit' section contains a 'Visit from' field with a date '06/18/2017' and a time '10:00' (labeled 'Time'). Below it is an 'until' field with a date '06/18/2017' and a time '18:00' (labeled 'Time'). There is a 'Purpose' field containing 'Presentation' and a 'Comment' text area at the bottom.

Information on the visitor:

Title display field:
Contains the visitor's title if available.

Name display field:
Contains the visitor's last name.

First name display field:
Contains the visitor's first name.

Company display field:
Contains the company where the visitor is employed.

Visit: Contains information on the visit.

Visit from column:
Contains the time and date the visit starts according to the schedule.

Visit until column:
Contains the time and date the visit ends according to the schedule.

Purpose column:
Contains the reason for the visit.

Comment input field:
Free text field for additional details on the visit.

6.8 Persons access requests

If access requests for persons are approved using workflows, you first need to make a corresponding access request for the room zones and the period required for the persons. This is often necessary if the access permission needs to be extended for a certain period of time.

The request is included in the workflow process when saved and then proceeds through the stipulated steps until it is approved or denied. The approval or rejection can be issued to everyone or individual persons during this process.

If approved, the requested access permissions are entered for the persons and transmitted to the terminal peripherals.

"Selection Persons access requests" dialog

The **Selection Persons access requests** dialog lists all existing requests for access permissions for persons.

The [Search function](#) can be used to limit the selection using a single filter criterion or a group of filter criteria.

Selection Persons access requests						
☐	Request date	Registered person	Registered room zone	from	until	Delete
☐	6/15/2017 01:59	Hochmeyer, Gertrud; ...	2 - Chief executive	07/18/2017 00:00:00	07/18/2017 23:59:59	
☐	6/13/2017 03:22	Leconte, Sandra; ...	2 - Chief executive	06/19/2017 00:00:00	06/21/2017 23:59:59	
☐	6/13/2017 03:18	Kamp, Karsten	2 - Chief executive	06/15/2017 00:00:00	06/16/2017 23:59:59	
Number of records: 3						

Request date column:

Contains the date and time when the request was started.

Not started is displayed in the column if a request has only been saved, but not started.

Registered person column:

Contains the person for the access permission.

Registered room zone column:

Contains the room zone for the access permission.

From column:

Contains the date for the first day of the access permission.

Until column:

Contains the date for the last day of the access permission.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Persons access requests" dialog

Use the **Edit Persons access requests** dialog to edit the access requests for persons. Editing is completed in two steps: Firstly, enter all the requests to be executed. There are no restrictions with regard to the number and type of requests.

Then click the **Start corrections** button. Only now are the requests transferred to the system and can no longer be changed or deleted.

Use the buttons on the toolbar to save or discard the correction inputs and to start processing the corrections.

Edit Persons access request

Requester

First name Last name

Phone E-mail

Access validity period

Date from until

Comment

Access permissions for persons

Person	Department	Phone	Delete
Hochmeyer, Gertrud	4 - Sales	0456/123-20	
Legrand, Marc	2 - Production	0456/123-21	
Meunier, Catherine	2 - Production	0456/123-23	

Access permissions for room zones

Room zone	Access weekly profile
2 - Chief executive	1 - Always

Further related room zones

- 1 - Foyer - administration
- 3 - Administration and others
- 4 - Head of administration
- 8 - Head of production
- 9 - Material stores

Requester:

The requester for the access permissions is displayed.

Name display field:

Contains the last name of the requester.

First name display field:

Contains the first name of the requester.

Phone display field:

Contains the phone number of the requester.

E-mail display field:

Contains the e-mail address of the requester.

Access validity period:

Date from field:

The "from" date contains the first day for the access permission.

Note: The "from" date must be the same as or later than the current date, as access permissions cannot be effective in the past.

Until date field:

The "to" date contains the last day for the access permission. The "to" date must be the same as or later than the "Date from" field.

Comment input field:

Free text field for a comment.

Access permissions for persons:

The persons for whom the request is being made are entered into the "Access permissions for persons".

Note: The block for persons is only available if you have the corresponding permissions.

Person column:

Contains the person's last name and first name.

Department column:

Contains the department which the person belongs to.

Phone column:

Contains the person's phone number.

Magnifier button:

The magnifier function opens the dialog to select persons.

Persons are displayed in the table once they have been applied.

Access permissions for room zones:

In the access permissions for room zones, the room zones are defined and linked to an access weekly profile.

Room zone column:

Contains the room zone.

Options:

- All room zones allocated to the room zone group.

Access weekly profile: column:

Contains the access weekly profile.

Options:

- All access weekly profiles which are allocated in the weekly profile allocation.

Further related room zones:

Display of the further related room zones, if the room zones for which the request is being made have further related room zones.

"Selection persons" dialog

Use the **Selection Persons** dialog to search for persons and directly apply them to the invoking dialog.

Note: When the **Several ID cards per person** option is active, an individual record for the person is displayed in the table for every ID card.

Selection Persons							
☐	Last name ^	First name ^	Department ^	Employee number ^	ID card number ^	ID card label ^	Blocked ^
☐	Ackreiter	Thorsten		1	9001	001	☐
☐	Cermans	Paul	2 - Production	7	8203	203	☐
☐	Hochmeyer	Gertrud	2 - Production	5	8201	201	☐
☐	Kamp	Karsten	2 - Production	9	8205	205	☐
☐	Leconte	Sandra	2 - Production	10	8206	206	☐
☐	Legrand	Marc	2 - Production	6	8202	202	☒
☐	Meunier	Catherine	2 - Production	8	8204	204	☐
Number of records: 7							

Select one or more entries and click **Apply selected search results** in the toolbar.

6.9 External company employee access requests

If external company employee access requests are approved using workflows, they first need to make a corresponding access request for the room zones and the period required for the external company employees. This is often necessary if the access permission needs to be extended for a certain period of time.

The request is included in the workflow process when saved and then proceeds through the stipulated steps until it is approved or denied. The approval or rejection can be issued to everyone or individual persons during this process.

If approved, the requested access permissions are entered for the persons and transmitted to the terminal peripherals.

"Selection External company employee access requests" dialog

The **Selection External company employee access requests** dialog lists all existing requests for access permissions for external company employees.

Request date	Registered person	Registered room zone	from	until	Delete
Not started	Schilling, Wolfgang; ...	2 - Chief executive	01/29/2019 00:00:00	01/29/2019 23:59:59	
1/15/2019 04:16	Schilling, Wolfgang; ...	2 - Chief executive	11/01/2018 11:35:33	11/15/2018 11:35:33	

Number of records: 2

Request date column:

Contains the date and time when the request was started.

Not started is displayed in the column if a request has only been saved, but not started.

Registered person column:

Contains the person for the access permission.

Registered room zone column:

Contains the room zone for the access permission.

From column:

Contains the date for the first day of the access permission.

Until column:

Contains the date for the last day of the access permission.

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit External company employee access requests" dialog

Use the **Edit External company employee access requests** dialog to executed all access requests for external company employees.

Editing is completed in two steps: Firstly, enter all the requests to be executed. There are no restrictions with regard to the number and type of requests. Secondly, transfer the requests to the system. To do this, click the **Start corrections** button. Requests transferred to the system cannot be changed or deleted.

Use the buttons on the toolbar to save or discard the correction inputs and to start processing the corrections.

Edit External company employee access request

Requester

First name: Paul Phone: 0456/123-22

Last name: Cermans E-mail: p.cermans@demo.com

Access validity period

Date from: 01/29/2019

until: 01/29/2019

Comment:

Access permissions for external company employees

Person	Company	Phone	Delete
Schilling, Wolfgang	ACME		
Schmitz, Peter	ACME		

Number of records: 2

Access permissions for room zones

Room zone	Access weekly profile		
2 - Chief executive	11 - Production		

Number of records: 1

Requester:

The requester for the access permissions is displayed.

Name display field:

Contains the last name of the requester.

First name display field:

Contains the first name of the requester.

Phone display field:

Contains the phone number of the requester.

E-mail display field:

Contains the e-mail address of the requester.

Access validity period:

Date from field:

The "from" date contains the first day for the access permission.

Note: The "from" date must be the same as or later than the current date, as access permissions cannot be effective in the past.

Until date field:

The "to" date contains the last day for the access permission. The "to" date must be the same as or later than the "Date from" field.

Comment input field:

Free text field for a comment.

Access permissions for persons:

The external company employees for whom the request is being made are entered in the "Access permissions for persons".

Note: The block for persons is only available if you have the corresponding permissions.

Person column:

Contains the person's last name and first name.

Company column:

Contains the person's company affiliation.

Phone column:

Contains the person's phone number.

Magnifier button:

The magnifier function opens the dialog to select external company employees.

External company employees are displayed in the table once they have been applied.

Access permissions for room zones:

In the access permissions for room zones, the room zones are defined and linked to an access weekly profile.

Room zone column:

Contains the room zone.

Options:

- All room zones allocated to the room zone group.

Access weekly profile: column:

Contains the access weekly profile.

Options:

- All access weekly profiles which are allocated in the weekly profile allocation.

Further related room zones:

Display of the further related room zones, if the room zones for which the request is being made have further related room zones.

"Selection External company employees" dialog

Use the **Selection External company employees** dialog to search for external company employees and directly apply them to the invoking dialog.

Note: When the **Several ID cards per person** option is active, an individual record for the person is displayed in the table for every ID card.

Last name	First name	External company	ID card number	ID card label	Blocked
Schilling	Wolfgang	ACME	19001	ACME 19001	☐
Schmitz	Peter	ACME	19002	ACME 19002	☐

Number of records: 2

Select one or more entries and click **Apply selected search results** in the toolbar.

6.10 Access permissions

The report lists all doors for which access permissions are present.

Further details can be displayed for every access permission.

"Display Access permissions" dialog

The **Display Access permissions** dialog lists all doors for which access permission exists.

Use the buttons in the toolbar to refresh the display.

Last name: Cermans, Paul
 Employee number: 7

Number	Door name	Short name	Access weekly profile	Source
2	A-P connecting door	A-010	11 - Production	Access profile 21
6	Production - main entrance	P-002	11 - Production	Access profile 21
7	Salesroom - customers	P-003	11 - Production	Access profile 21
8	Production - rolling gate	P-004	11 - Production	Access profile 21
59	Salesroom - employees	P-005	11 - Production	Access profile 21
60	Head of production	P-006	11 - Production	Access profile 21
61	Material stores	P-007	11 - Production	Access profile 21
104	Berlin room	Be	1 - Always	Locking plan 1

Number of records: 8

Click a line to display the detailed information concerning access permission.

"Display Access permission details" dialog

The **Display Access permission details** dialog displays the various time frames of the access daily time for the selected day in the form of time bars and lists the access daily times of the access weekly profile for each weekday.

You can use the buttons in the toolbar to print the display or return to the access permissions display.

Door: 7 - Salesroom - customers

00:00 06:00 12:00 18:00 24:00

Access

PIN code check 06/29/2017

Permanent opening

Access permission

Access weekly profile: 11 - Production

Day	Interval 1	Interval 2	Interval 3	Interval 4	Substitute programs
Monday	06:00 - 20:00				Bank holiday: Never
Tuesday	06:00 - 20:00				Bank holiday: Never
Wednesday	06:00 - 20:00				Bank holiday: Never
Thursday	06:00 - 20:00				Bank holiday: Never
Friday	06:00 - 20:00				Bank holiday: Never
Saturday	06:00 - 14:00				Bank holiday: Never
Sunday					

Substitute programs:

Access daily time	Interval 1	Interval 2	Interval 3	Interval 4
Never				

Time bar display:

The top section shows the time frames of the door daily time program of the respective door. Possible time ranges for access permission, access with PIN code checks and time ranges for permanent opening are also shown for the selected date. Output starts with the current date.

In the lower section, all time ranges from all the person's access permissions for the door are displayed depending on the selected date. In this way, potential conflicts are identified quickly.

Access time bar:

Displays time ranges when access bookings are possible via the door daily time.

PIN code check time bar:

Displays time ranges when access bookings with PIN code checks are permitted by the door daily time.

Permanent opening time bar:

Displays the time ranges in which the door is unlocked via the door daily time.

Access permission: time bar:

Displays the time ranges in which the person has access permission.

Date field:

The dates for the display are selected using the date field. You can enter a date directly or scroll through the dates using the arrows.

Display field:

Contains the access weekly profile with number and name and the door.

Table of access intervals:

Based on the access weekly profile, the access daily times for the individual weekdays are displayed with the defined intervals for access and possible substitute programs.

Day column:

Contains the weekday.

Interval 1 - 4 columns:

Contains time intervals 1 to 4 for access.

Substitute program time bar:

Contains the day type and the name for the substitute program which is valid for the day types concerned.

Substitute programs table:

The substitute programs table displays the time intervals for the access daily times shown.

Access daily time column:

Contains the name of the access daily time.

Interval 1 - 4 column:

Contains time intervals 1 to 4 for access.

6.11 Booking

In addition to the option of performing bookings on the terminals, bookings can also be recorded in the web application or mobile application.

For the booking time, the current day and the current time of the server is used.

"Edit booking" dialog

The **Edit Booking** dialog allows you to view your bookings for the current day and use the buttons to make further bookings. As soon as you have initiated a booking, it is sent to the server for allocation. The message line shows you information on whether the booking has been saved and allocated.

Note: The number and type of buttons available depends on the configuration and may be different for each system. The description of the "Arrive", "Leave", and "Business authorisation" buttons should therefore only be regarded as an example.

The booking type assigned for the booking in the system is shown in the "Booking type" column in the table.

Edit Booking

Last name: Cermans Employee number: 7

First name: Paul

Department: 2 - Production

Cost centre:

Bookings today

Time	Booking type
15:49	Booking error - BA leave

Arrive Leave BA - leave BA - arrive

Buttons:

Use the buttons to execute the bookings. The acknowledgement of the booking appears in the message line. After execution, the booking is displayed in the bookings table.

Note: If time accounts are allocated to the info records and the display is activated in the configuration of the info records, the info records and the bookings will be displayed on separate tabs. If no info records have been used, only the bookings are available and no tabs are used in the dialog.

Bookings tab:

This tab displays all bookings from the current day and is used to make new bookings.

Buchung bearbeiten

Buchungen heute

Uhrzeit	Buchungsart	Parameter
22:02	Kostenstellenwechsel	1 - Kostenstelle 1

Kommen Gehen Dienstgang Gehen Dienstgang Kommen

Kostenstelle: Kostenstellenwechsel

Abwesenheitsort: 1 - Kostenstelle 1, 2 - Kostenstelle 2, 3 - Kostenstelle 3. Gehen mit Abwesenheit

Info tab:

This tab displays the info records entered with their current values.

Aktuelle Informationen	
Holiday taken - current year	0,00
Remaining holiday - current year	97,00
Balance	-50:46
Balance previous day	-34:47

Current information:

The table displays the current values of the configured info records.

Account column:

Contains the name for the account.

Value column:

Contains the current value of the account.

6.12 Time allocation cost centres

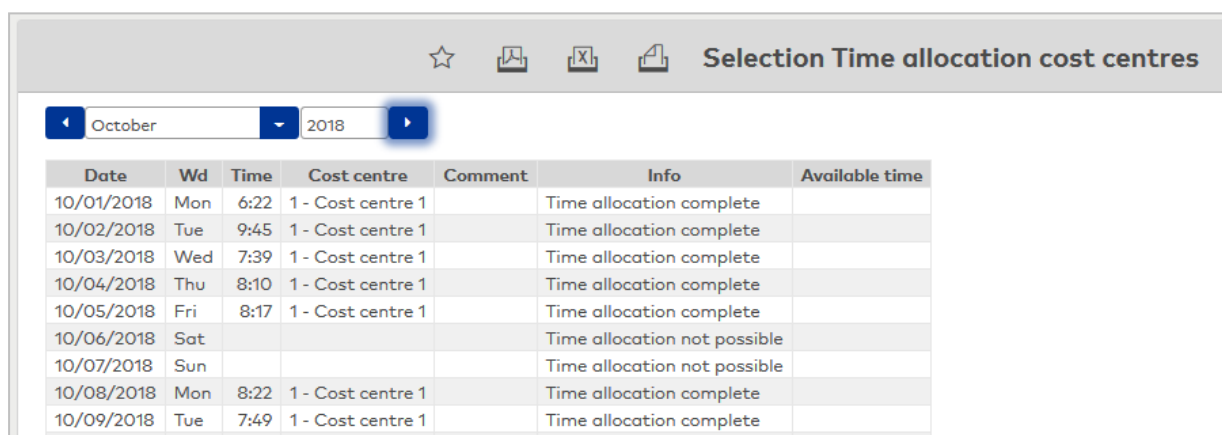
When using cost centre registration with time allocation, authorised persons can allocate their working hours to cost centres.

Allocations can be made up to the previous day.

Note: The dialogs are active if the system parameter Time 120 is set to a value of 2.

"Selection Time allocation cost centres" dialog

The **Selection Time allocation cost centres** dialog displays time allocations for the cost centres per day. One month is always displayed. Click an entry to edit the time allocation.



Date	Wd	Time	Cost centre	Comment	Info	Available time
10/01/2018	Mon	6:22	1 - Cost centre 1		Time allocation complete	
10/02/2018	Tue	9:45	1 - Cost centre 1		Time allocation complete	
10/03/2018	Wed	7:39	1 - Cost centre 1		Time allocation complete	
10/04/2018	Thu	8:10	1 - Cost centre 1		Time allocation complete	
10/05/2018	Fri	8:17	1 - Cost centre 1		Time allocation complete	
10/06/2018	Sat				Time allocation not possible	
10/07/2018	Sun				Time allocation not possible	
10/08/2018	Mon	8:22	1 - Cost centre 1		Time allocation complete	
10/09/2018	Tue	7:49	1 - Cost centre 1		Time allocation complete	

Date column:

Contains the date of the time allocation.

Wd column:

Contains the weekday of the date.

Time column:

Contains the time in hours and minutes allocated to the cost centre.

Cost centre column:

Contains the time allocation cost centre.

Info column:

Contains information for the day.

Possible display:

- Time allocation not possible: An allocation for the day is not possible as no working hours are available.
- Time allocation complete: All working hours for the day have been allocated to cost centres.
- Time allocation incomplete: All working hours for the day have not been allocated to cost centres.
- Time allocation incorrect: Too many working hours for the day have been allocated to cost centres. This could be caused by reallocation if fewer working hours were calculated for a day.

Available time column:

Contains the time that has not yet been allocated to cost centres for the day.

Open a record by clicking it.

"Edit Time allocation cost centres" dialog

The **Edit Time allocation cost centres** dialog is used to allocate the working hours for the selected day to the cost centres.

Time input field:

Enter the time allocated to the cost centre in hours and minutes (h:mm).

Cost centre selection field:

Select the cost centre to which the time will be posted.

Selection: all allocated cost centres.

Comment input field:

Enter a comment as free text.

6.13 My person

Provided you have a personal user account, the **My person** menu item gives you access to your personal data such as bookings and your holiday accounts.

Depending on the rights activated, you can independently perform manual bookings and book absence times such as holidays, flexitime or other absence times.

Note: The range of functions depends on the allocated user role.

"Employee record" dialog

The **Employee record** dialog displays your personal data such as holiday accounts and personal and official data.

Note: The dialog described is a standard dialog for time management. The header and tabs in this dialog may contain different fields, depending on how the system is integrated in your company.

You can use the buttons in the toolbar to print the records.

Dialog header

The header data contains the key data for your person.

Holiday accounts

The **Holiday accounts** tab contains an overview of the current holiday accounts for the previous year, the current year and the next year.

	Previous year	Current year	Next year
Remaining holiday form previous year	43,0	67,0	97,0
Holiday	30,0	30,0	30,0
Severely handicapped holiday			
Additional holiday 1			
Total holiday	73,0	97,0	127,0
Holiday taken	6,0	0,0	
Holiday expired			
Remaining holiday	67,0	97,0	
Planned holiday		0,0	
Holiday will not expire		☐	

Official data

The **Official data** tab contains official contact data and additional information on company affiliation and function. To alter the data, please contact the responsible department.

Place of employment		Day of joining	09/01/2006
Phone	0456/123-22	Function	
Mobile phone	0165/53329987	Identifier	
E-mail	p.cermans@demo.com		

Personal data

This tab contains the personal information. To alter the data, please contact the responsible department.

Place of employment		Function	
Phone	0456/123-22	Identifier	
Mobile phone	0165/53329987		
E-mail	p.cermans@demo.com		

6.14 Monthly overview

The **Monthly overview** provides a clear representation of all bookings on the time system and the various time accounts.

Output is on a monthly basis, and you can scroll between the months.

"Display Monthly overview" dialog

The **Display Monthly overview** dialog displays bookings with date and time, and accounts and information on absence times for a selected time period.

Note: If monthly data exists within the time range, the **Monthly data** table displays this data.

You can use the buttons in the toolbar to print the report or save it as a PDF, or to call up the configuration dialog for the report.

▼

▶

Monthly overview

Last name
First name
Department

Employee number

◀

June

▶

2017

▶

Date	Wd	From	To	Absence	Target time	Actual time	Daily balance	Balance
06/01/2017	Thu	08:00	16:45		8:00	8:00		-18:47
06/02/2017	Fri	08:00	16:45		8:00	8:00		-18:47
06/03/2017	Sat							-18:47
06/04/2017	Sun			Bank holiday				-18:47
06/05/2017	Mon			Bank holiday	8:00	8:00		-18:47
06/06/2017	Tue	08:00	16:45		8:00	8:00		-18:47
06/07/2017	Wed	16:19	16:20 SysLeDC		8:00		-8:00	-26:47
06/08/2017	Thu	08:00	16:45		8:00	8:00		-26:47
06/09/2017	Fri	10:25	10:25 SysLeDC		8:00		-8:00	-34:47
06/10/2017	Sat							-34:47
06/11/2017	Sun							-34:47
06/12/2017	Mon	18:52	18:53		8:00	0:01	-7:59	-42:46
06/13/2017	Tue	08:00	16:45		8:00	8:00		-42:46
06/14/2017	Wed	08:00	16:45		8:00	8:00		-42:46
06/15/2017	Thu	14:18		Bank holiday				

Number of records: 15

Monthly data

Month	Target	Actual	Absence times	Balance previous day
June	80:00	56:01	8:00	-42:46

Number of records: 1

Month and **year** date fields:

You can scroll between the months using the arrow, or enter the month and year directly in the input fields.

Table:

The table displays the data for the monthly overview.

Welche Werte in der Tabelle ausgegeben werden, ist für jeden Benutzer im System über die [Personal fixed reports settings](#) oder über den Quersprung in der zentralen Symbolleiste separat konfigurierbar.

Corrections:

Click a specific day to open the [Edit Daily corrections dialog](#). You can use this dialog to make various corrections to the date displayed and insert, change and delete bookings.

Note: The possible corrections depend on the individual rights in relation to the correction types.

"Edit Daily corrections" dialog

Use the **Edit Daily corrections** dialog to enter, change, delete or cancel absences for a selected day.

This dialog can be called up by clicking a day in the yearly overview or the monthly overview.

You can use the buttons in the toolbar to print the daily corrections.

Date field:

Contains the day for which the daily correction is to be performed.

Apply button:

Applies the entries, performs the allocation and then closes the dialog.

Allocate button:

Applies the entry and performs the allocation. The current values are displayed in the dialog.

Cancel button:

Rejects the changes and closes the dialog.

Comment text field:

Free text to describe the correction.

Work schedule - day selection field:

Contains the work schedule for a one-off change. At the end of the day, the original work schedule becomes valid again.

Options:

- All work schedules created in the system.

Daily program - day selection field:

Contains the time daily program for a one-off change. At the end of the day, the original time daily program becomes valid again.

Options:

- All time daily programs created in the system.

Do not calculate break 1-3 checkbox:

Contains the identifiers for the various breaks if these should not be calculated.

Options:

- Not activated: The break is calculated.
- Activated: The break is not calculated.

Maximum working hours - day input field:

Specifies the maximum number of working hours for the day. This specification overrides all other information about the maximum number of working hours for this day.

Maximum business authorisation period - day input field:

Specifies the maximum business authorisation period for the day. This specification overrides all other information about the maximum business authorisation period for this day.

Extended work time from, until time fields:

To enter from and until times for an extended work time. Specifying an extended work time affects the pre-/post-range time period in which bookings are recorded, but not allocated. When the work time is extended, the bookings are included in the calculation.

If you only wish to extend the work time at the start, specify a "from" time before the start of the work

time. If you wish to extend the work time at the end, specify an "until" time after the end of the work time.
Input format: hh:mm

Workflow:

The table displays the workflows which have not yet been approved.
The workflows can be approved directly or rejected.

Absence times area:

You can enter additional absences of several days in this area. An existing whole or half day absence is displayed and can be changed or deleted, if necessary. A change results in deletion of the existing absence and creation of the new absence.

Note: If the details of an existing absence are changed, a new absence is created which overwrites the existing absence in the overlapping time range. The existing absence remains unchanged.
If the absence is not enabled for use in the Daily corrections dialog, a corresponding absence is shown in read mode and the absence cannot be deleted.

Whole day/1st half day:

Selection of an absence for the day. You can enter a time range for absences of several days. If no dates are entered in the date fields, the absence is generated only for the day shown in the area at the top of the dialog.

Options:

- All absences released for the booking.

2nd half day:

For entering a second half day absence.

Time accounts area:

The table contains the time accounts that you can directly change via the dialog.

Account column:

Contains the number and name of the account.

Current value column:

Contains the current value of the account.

Value column:

For entering the value by which the account is to be changed. A positive value is added, a negative value is subtracted.

Bookings area:

The bookings table contains all bookings for a day. Where booking pairs cannot be formed, an empty input field is displayed for the time of the missing booking.

You can create new bookings using the **New entry** button or delete existing bookings. To change bookings, you must open the booking for editing by using the button after the **Type** column and then change the booking type.

Note: Arrive bookings are shown in the two columns on the left and leave bookings in the two columns on the right, together with their time and type.
When entering new bookings, the types of booking that are possible depend on the configuration. It is therefore also possible to enter leave bookings in the columns on the left and arrive bookings in the column on the right.

From column:

Indicates the time for the arrive booking.

From Type column:

Contains the possible booking types for arrive bookings.

Until column:

Indicates the time for the leave booking.

Until **Type** column:

Contains the possible booking types for leave bookings.

Other corrections area:

In this area, you can make further corrections that require additional parameters. When a correction is selected, the input fields for the parameters are enabled. The selection of the possible correction types is configured via the **Edit Configuration** dialog.

Apply button:

Applies the corrections to the table.

Table

Corrections that have already been processed can be marked directly in the table for cancelling. Newly entered corrections can be selected again for editing. The actions possible in each case are shown in the **Actions** column.

Correction type column:

Contains the correction type of the booking.

Time column:

Contains the time of the booking. If no time is shown, the booking is at the start of the time daily program.

Parameter column:

Depending on the correction type, the parameters are displayed that apply to the booking.

6.15 Yearly overview

The **Yearly overview** provides you with a clear representation of all absence times, workdays, other days and the allocation-related time daily programs.

Output is in calendar form on a yearly basis.

"Yearly overview" dialog

The **Yearly overview** dialog displays the absence times, workdays or other specifics such as days without attendance and the time daily programs in calendar form for the selected year.

If you are subject to shift administration, you will also find your personal extra shifts here.

Use the tabs to switch between the calendar view, the total absence times and the personal extra shifts entered.

"Calendar" tab

The **Calendar** tab contains the absence times and daily programs in the form of a calendar view.

The display can be selected using the **Display** selection field.

View: Yearly overview + daily programs - per day example.

Calendar

Absence times totals

Display

Yearly overview

2018

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
January	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
February	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
March	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
April	BH	.	.	.	.	.	.	.	.	.	.	H	H	.	.	H	H	H	H	H	.	.	H	H	H	H	H	.	.	H	.	
May	H	H	H	H	.	.	H	.	.	.	.	.	.	.	.	.	.	.	.	BH	.	.	.	.	.	.	.	.	.	.	.	.
June	.	.	.	.	.	.	MeLe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
July	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
August	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
September	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
October	MeLe	.	.	.	.	.	.	.	.	.	.	Fl	.	.	.	.	.	.	SL	SL	SL	SL	SL	SL	SL	SL	Fl	.	.	.	.	
November	BH	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
December	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	BH	BH	.	.	.	.	.

Display selection field:

Contains the options to be displayed:

Options:

- Yearly overview: with absence times, workdays and special days such as absence without excuse and days without target time. The columns of the overview are oriented to the date.
- Yearly overview - per day: as yearly overview. The columns of the overview are oriented to the weekdays.
- Yearly overview + time daily programs: Yearly overview with added line with the time daily programs. The time daily programs are output in the first line.
- Yearly overview + time daily programs - per day: As yearly overview + daily programs. The columns of the overview are oriented to the weekdays.
- Daily programs: only the daily programs are displayed.
- Daily programs - per day: as daily programs. The columns of the overview are oriented to the weekdays.

"Daily programs" calendar view

For the past, the time daily programs are displayed according to the allocation; for the future, the planned time daily programs are displayed according to the current shift profile and the planned shift allocations. If the person is not subject to shift administration, the time daily programs are displayed according to the work schedule.

In the two-line versions of the display, the time daily programs are shown in the first line.

"Yearly overview" calendar view

The workdays and other specifics are displayed in this line, along with the bank holidays and absence times.

Details in the display:

- Days before and after the validity period, on which the person is included in time management, and days in the future that are not absence times or bank holidays.
- Days without target time. These are days without target time or attendance. These are usually the weekend. For part-time employees or persons subject to shift administration, these also include days on which the person does not work.
- Bank holidays
- Absence times with short name
- Attendance. These are days with target time when the person was present.
- Absence without excuse. These are days with target time on which no working hours were allocated.

Note: The display for non-relevant days, days with attendance, days with absence without an excuse and days without target time is configured in the system parameters. Both the colour and the symbol for the display can be predefined.

"Absence times totals" tab

The **Absence times totals** tab displays the various absence times and their daily totals and time sums in the form of a table.

Note: All active absence types and absence groups are shown in the columns, even if the absence did not apply to the year in question.

Calendar	Absence times totals																		
2018	Att	BH	Ho	Si	Fl	SpHol	MeLeSwP	SL	SdWAccW	PI	M	W/oP	Bt	BA	BTdw	V	FE	MS	
January	23.0																		
February	20.0																		
March	22.0																		
April	8.0	1.0	13.0																
May	18.0	1.0	5.0																
June	21.0						1.0												
July	22.0																		
August	23.0																		
September	20.0																		
October	13.0			7.0	2.0		1.0	7.0											
November		1.0																	
December		2.0																	
Totals in days	190.0	5.0	18.0	7.0	2.0		2.0	7.0											
Time sum		24:00	144:00	40:00			4:00	40:00											

Note: The attendance days are shown in the first left-hand column after the month. These are generally the days on which the person is registered as present in the system.

"Extra shifts" tab

The **Extra shifts** tab displays your personal extra shifts, if you are subject to shift administration.

Extra shifts					New entry
Time daily program	From date	Until date			
10 - Early	06/16/2017	06/17/2017			
3 - Weekend	06/24/2017	06/24/2017			
Number of records: 2					

Extra shifts table:

This table contains the individual extra shifts.

Time daily program selection field:

Contains the time daily program for the extra shift.

Options:

- All time daily programs in the system.

Date from, until date fields:

Contain the date of the extra shift, if the extra shift only applies for one day.

For extra shifts lasting several days, the "Until" date is the last day of the extra shift.

6.16 Absence times

The report of **Absence times** provides a clearly arranged evaluation of absence times using a freely selectable time period with the date, accumulated days and hours, and the reason for absence.

"Display Absence times" dialog

The **Display Absence times** dialog displays the absence times on a yearly basis as a report.

You can use the buttons in the toolbar to configure the output of the report, print out the report, or save it as a PDF.

From	To	Absence	Number of days	Time credit	Correction date	Comment
05/15/2017	05/19/2017	Sick leave	5,0	40:00	06/15/2017	
08/07/2017	08/09/2017	Further education	3,0	24:00	06/15/2017	
08/14/2017	08/18/2017	Holiday	5,0	40:00	06/15/2017	

Number of records: 3

Year input field:

Contains the year to be output. You can navigate between the years using the arrow keys.

Table:

The table displays the absences.

Welche Werte in der Tabelle ausgegeben werden, ist für jeden Benutzer im System über die [Personal fixed reports settings](#) oder über den Quersprung in der zentralen Symbolleiste separat konfigurierbar.

6.17 Daily data

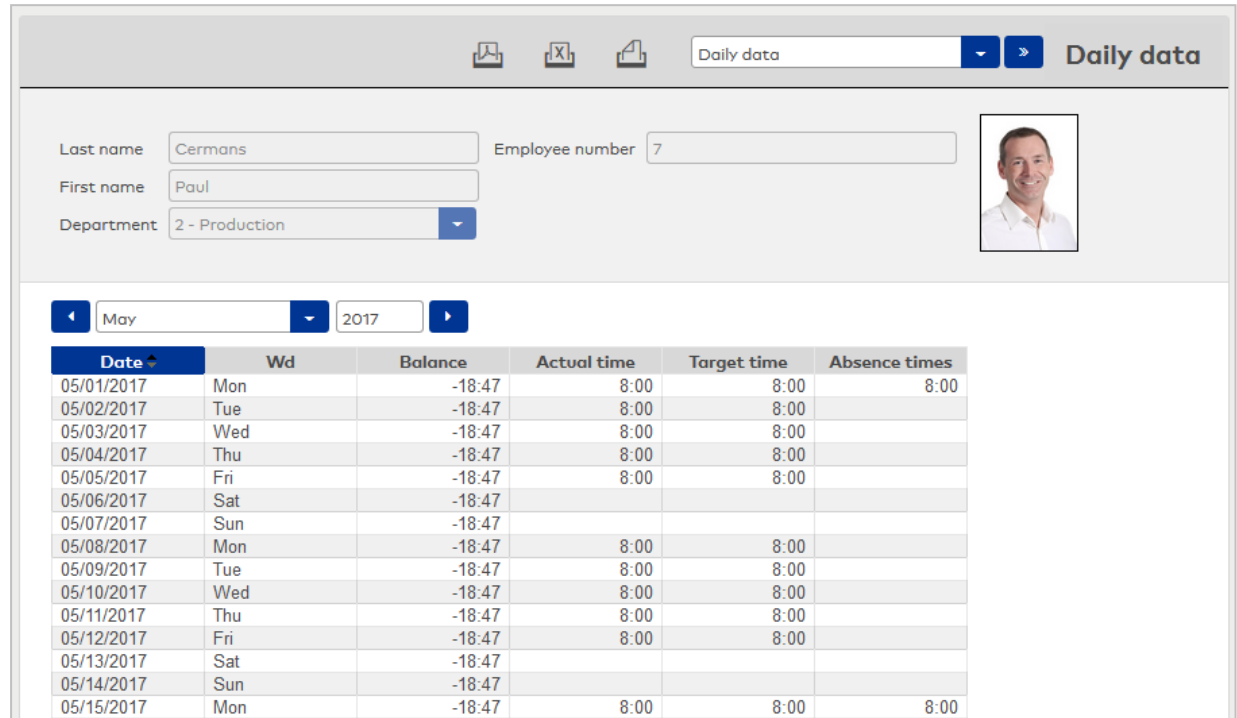
The **Daily data** provides a clearly arranged evaluation of time accounts per calendar day. In addition to actual and target times, this data also includes business authorisation periods, absence times or break times for the selected calendar day and the accumulated balance up to this calendar day.

Daily data can only be displayed for completed days.

"Display Daily data" dialog

The **Display Daily data** dialog displays the different accounts and special master data allocations such as the work schedule per day.

You can use the buttons in the toolbar to print the report or to save it as a PDF. Use the **Back to selection** button to return to the selection dialog.



Date	Wd	Balance	Actual time	Target time	Absence times
05/01/2017	Mon	-18:47	8:00	8:00	8:00
05/02/2017	Tue	-18:47	8:00	8:00	
05/03/2017	Wed	-18:47	8:00	8:00	
05/04/2017	Thu	-18:47	8:00	8:00	
05/05/2017	Fri	-18:47	8:00	8:00	
05/06/2017	Sat	-18:47			
05/07/2017	Sun	-18:47			
05/08/2017	Mon	-18:47	8:00	8:00	
05/09/2017	Tue	-18:47	8:00	8:00	
05/10/2017	Wed	-18:47	8:00	8:00	
05/11/2017	Thu	-18:47	8:00	8:00	
05/12/2017	Fri	-18:47	8:00	8:00	
05/13/2017	Sat	-18:47			
05/14/2017	Sun	-18:47			
05/15/2017	Mon	-18:47	8:00	8:00	8:00

Date fields:

The date fields contain the month and year for the display.

You can select the month in the selection field and change the year in the input field.

You can use the arrows to scroll backwards or forwards one month at a time.

Table:

The table displays the daily data.

Welche Werte in der Tabelle ausgegeben werden, ist für jeden Benutzer im System über die [Personal fixed reports settings](#) oder über den Quersprung in der zentralen Symbolleiste separat konfigurierbar.

6.18 Monthly data

The **Monthly data** contains a clear evaluation of the time accounts for the months of a year.

Note: Monthly data can only be displayed for completed months.

"Display Monthly data" dialog

The **Display Monthly data** dialog displays different accounts for the selected year.

You can use the buttons in the toolbar to print the report or to save it as a PDF. Use the **Back to selection** button to return to the selection dialog.

Month	Balance previous day	Actual	Target	Absence times
January	-10:47	176:00	176:00	
February	-10:47	160:00	160:00	
March	-18:47	176:00	184:00	
April	-18:47	160:00	160:00	16:00
May	-18:47	184:00	184:00	56:00
June	-42:46	56:01	80:00	8:00

Number of records: 6

Year input field:

Contains the year to be displayed.

You can use the arrows to scroll backwards or forwards one year at a time.

Table:

The table displays the monthly data.

Welche Werte in der Tabelle ausgegeben werden, ist für jeden Benutzer im System über die [Personal fixed reports settings](#) oder über den Quersprung in der zentralen Symbolleiste separat konfigurierbar.

6.19 Specifics

The **Specifics** report provides a clear evaluation of all deviations in the time system relating to persons, such as overlooked arrive or leave bookings.

Output is on a monthly basis, and you can scroll between the months.

"Specifics" dialog

The **Specifics** dialog displays missing bookings or other deviations.

You can use the buttons in the toolbar to print the report or to save it as a PDF. Use the **Back to selection** button to return to the selection dialog.

Date/Time	Weekday	Name
03/29/2017 09:38	Wednesday	Leave booking forgotten
03/29/2017	Wednesday	No presence

Number of records: 2

Date fields:

The date fields contain the month and year for the display.

You can select the month in the selection field and change the year in the input field.

You can use the arrows to scroll backwards or forwards one month at a time.

Table:

The table displays the specifics.

Welche Werte in der Tabelle ausgegeben werden, ist für jeden Benutzer im System über die [Personal fixed reports settings](#) oder über den Quersprung in der zentralen Symbolleiste separat konfigurierbar.

6.20 Corrections

Corrections are used to make changes to your employee record, book absence times such as holiday or insert forgotten arrive and leave bookings.

The dialog is designed to make many different types of corrections and also allows you to enter multiple corrections at the same time.

"Corrections" dialog

Use the **Corrections** dialog to enter new corrections or delete previously allocated corrections for your person.

You can use the buttons in the toolbar to print the report or to save it as a PDF.

Correction type	Parameter	Valid	Valid (2nd booking)	Valid until	Correction date	State	Error message	Comment	User ID	User name	User first name		
1603 - Set maximum business authorisation period	8:00	06/07/2017			6/7/2017 04:31	Successful			admin	Administrator			
1629 - Overtime permission - day	Yes	06/09/2017			6/7/2017 04:31	Successful			admin	Administrator			
2030 - Business trip		06/29/2017		06/30/2017	6/15/2017 02:31	Successful			cermans	Cermans	Paul		

Correction type selection field:

For selecting a correction type in order to filter the display for this correction type.

Options:

- All correction types set up in the system.

Valid from and **Valid until** date fields:

Contains the first and last day of the time range for searching corrections for persons.

To change a date, enter the date directly or click the calendar icon and select a date.

Apply button:

Use this button to create the correction records and transfer them into the table.

Welche Werte in der Tabelle ausgegeben werden, ist für jeden Benutzer im System über die [Personal fixed reports settings](#) oder über den Quersprung in der zentralen Symbolleiste separat konfigurierbar.

Note: The user role permissions and status of the correction record (e.g. New or Error) determine whether an applied correction record can be edited at a later time.

6.21 Notification actions

In the notification actions, you can define which messages will be displayed to you in the info centre and specify the messages for which you will receive an e-mail notification.

"Selection notification actions" dialog

The **Selection Notification actions** dialog displays all aspects of notification management.

The notification actions include the notifications displayed in the info centre and the notifications that lead to an e-mail notification being sent.

Selection Notification actions		
Number	Name	Short name
1	Info centre	
2	E-mail notifications	
Number of records: 2		

"Edit notification action - info centre" dialog

Use the **Edit Notification action - info centre** dialog to select the notifications issued for your user account in the info centre.

You can use the buttons in the toolbar to save changes to the record. Use the **Back to selection** button to return to the selection dialog.

Edit Notification action - info centre	
Number	1
Name	Info centre
Short name	
Available notifications/actions - Door opening timeout - Error states (e.g. offline) - Forced entry - Low battery - Tampering	Allocated notifications/actions ???eventEntry.7.name??? - Status of the person import without ID card - TMS components status - XS/AIR battery state - XS/AIR components status

Available notifications/actions report:

Contains all the available notifications and actions that are not displayed. Click a notification to select it, and click the right arrow to add the notification.

Allocated notifications/actions report:

Contains all the notifications and actions that are displayed to the user in the info centre. Click a notification to select it, and click the left arrow to remove the allocation of this notification.

Note: To select several entries simultaneously press the Ctrl key while clicking.

"Notification action – Edit e-mail notifications" dialog

Use the **Notification action – Edit e-mail notifications** dialog to select the notifications that lead to an e-mail notification being sent to the user.

You can use the buttons in the toolbar to save changes to the record. Use the **Back to selection** button to return to the selection dialog.

Available notifications/actions report:

Contains all the available notifications and actions that do not lead to an e-mail notification being sent. Click a notification to select it, and click the right arrow to add the notification.

Allocated notifications/actions report:

Contains all the notifications and actions that lead to an e-mail notification being sent to the user. Click a notification to select it, and click the left arrow to remove the allocation of this notification.

Note: To select several entries simultaneously press the Ctrl key while clicking.

6.22 Change password

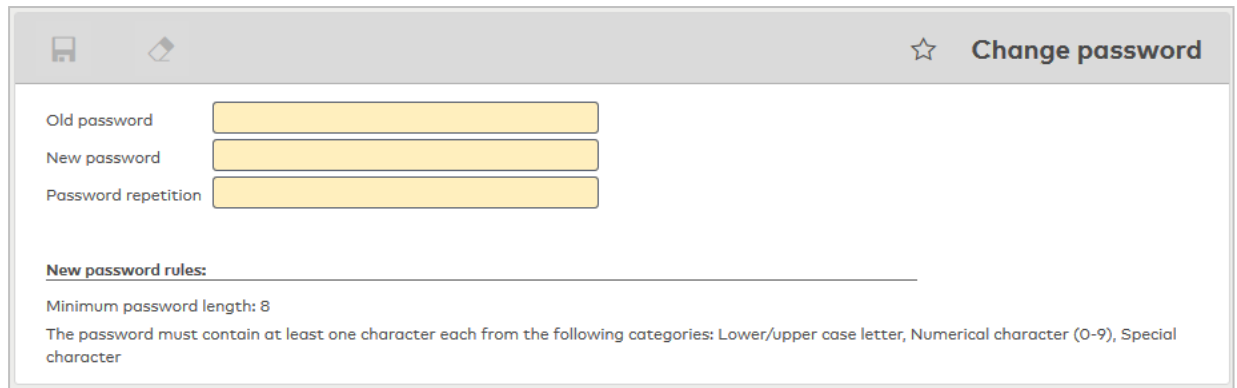
You can only log into the system with a valid password. You can change your password at any time. You should use this function regularly for security reasons.

"Change password" dialog

Use the **Change password** dialog to change your login password for MATRIX.

The length and validity period of the password are specified in the password rules and are defined in the password rules.

You can use the buttons in the toolbar to save or reject the changes.


Old password input field:

Contains your previously valid password. The password entered is not visible and is always displayed as placeholder characters.

New password input field:

Contains your future password. The password entered is not visible and is always displayed as placeholder characters.

Password repetition input field:

Contains your future password. The password entered is not visible and is always displayed as placeholder characters.

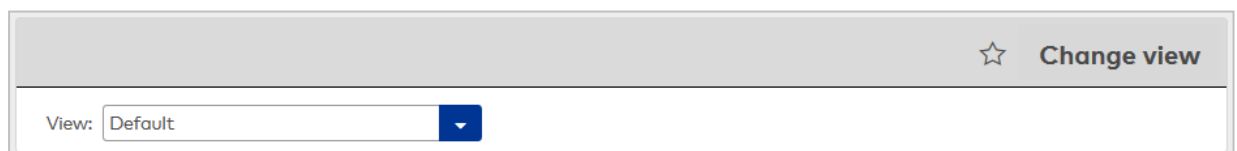
6.23 View

For the view of the dialogs, each user can choose between different font sizes and colours.

"Change view" dialog

In the **Change view** dialog, you can change the font size in combination with a colour scheme.

You can use the buttons in the toolbar to save or reject the changes.


View selection field:

Contains the scheme that is used for the font size in the browser.

6.24 Fixed reports settings

Use these settings to define the data and fields for the display for most reports.

Note: The corresponding dialogs for the settings can also be called up directly from the reports.

"Selection Fixed reports settings" dialog

The **Selection Fixed reports settings** dialog displays all fixed reports.

Reports which are opened in an employee record are individual reports. Reports which are opened in a menu tree are group reports. Both types can be configured separately.

Note: There is the option to create several views for some reports. These views show the respective configurations under the type of report with the corresponding name.
Only reports newly created by the user may be deleted.

You can use the buttons in the toolbar to edit selected reports or print a report containing the selected records. You can use the search function to search for reports individually using their number, name or short name.

Selection Fixed reports settings					
☐	Type ^	Report	Name	Origin	Delete
☐	Person group	Daily data	Daily data	Default	
☐	Person group	Holiday data	Holiday data	Default	
☐	Person group	Monthly data	Monthly data	Default	
☐	Person group	Status report	Status report	Default	
☐	Person group	Yearly overview	Yearly overview	Default	
☐	Person group	Absence	Absence	Default	
☐	Person group	Monthly overview	Monthly overview	Default	
☐	Person group	Specifics	Specifics	Default	
☐	Person group	Corrections - users	Corrections - users	Default	
☐	Person group	Corrections - persons	Corrections - persons	Default	
☐	Person group	Shift overview	Shift overview	Default	

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

"Edit Fixed reports settings" dialog

The **Edit Fixed reports settings** dialog is used to define which data is displayed in the fixed reports. The settings can be changed at any time and come into effect immediately after saving.

Further user-related views can be created for some reports. The dialog contains the extended toolbar in such cases.

The reports include:

- Daily data, Group and Individual
- Monthly data, Group and Individual
- Monthly overview, Group and Individual

The other views are also shown in the respective selection fields for the reports and can thus be opened directly.

Note: Only reports for which an access right exists are shown.

You can use the buttons in the toolbar to navigate between records, to save or reject changes made to the record, or to create or delete new records. Use the **Back to selection** button to return to the selection dialog.

Edit Fixed reports settings					
Type	Person group				
Report	Daily data				
Name	Daily data				

Absence times

Configuration for individual and group reports:

- Absence times

Selection report **columns**:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use in the absences report can be selected.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

Absence statistics

Configuration for the group reports of the absence statistics.

The configuration consists of the tabs:

- **General**: contains the columns for the report.
- **Absence type allocation**: Contains the absence types for the statistics.

General tab:

This tab is used to define the accounts and therefore the columns for display in the report.

The screenshot shows the 'General' tab interface. It features two main panels: 'Available columns' on the left and 'Allocated columns' on the right. Both panels have a search bar at the top. The 'Available columns' panel lists various account types such as '1 - WT 25%', '2 - WT 50%', '3 - WT 100%', 'Absence times', 'Account calculation profile', 'Account comparison profile', 'Actual time', 'Additional holiday', 'Additional holiday - previous year', and 'Additional holiday 2'. Below this list are checkboxes for 'Use short name', 'Total line', and 'Landscape', and an input field for 'CSV export delimiter'. The 'Allocated columns' panel shows a list of columns currently in the report, including 'Name', 'First name', 'Employee number', 'Events up to x days', 'Days up to x days', 'Events above x days', 'Days above x days', 'Mon', 'Tue', and 'Wed'. Between the two panels are four arrow buttons: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. To the right of the 'Allocated columns' panel are three vertical arrow buttons: up, down, and a middle button with a horizontal line.

Reports of the available and allocated columns:

Different columns can be added to the report or removed, depending on the selected report.

Available columns report:

Contains all employee record accounts and time accounts available for the report that are not displayed. Click a value to select it and click the arrow pointing right to add the value.

Allocated columns report:

Contains all employee record accounts and time accounts that are displayed in the report. Click a value to select it and click the arrow pointing left to remove the allocation of this item. Click the arrow pointing upwards or downwards to change the sequence in which the columns are shown in the report display.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

CSV export delimiter input field:

Contains the delimiter used to separate values for CSV exports.

Attendance status allocation tab.

Use this tab to define the absence types for the statistics.

Absence type			New entry
Name			
2012 - Sick leave without pay			
2013 - Sick leave			
2014 - Fallen sick during workday			

Table:

The booking types for display as Arrive or Leave are defined in the table.

Name column:

Contains the name of the absence type.

Options:

- All absence types created in the system.

Specifics and corrections

Configuration for individual and group reports:

- Specifics
- Corrections

Available columns

Cost centre

Work schedule

>

>>

<

<<

Allocated columns

Name (Person)

First name

Department

Employee number

ID card number

Date/Time

Weekday

Name

^

^

^

^

Landscape ☐

CSV export delimiter

Selection report columns:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use can be activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

Graphical time statistics

Configuration for the graphical time statistics report.

The configuration consists of the tabs:

- **General:** Contains the columns for the monthly overview.
- **Colours:** Contains the selection of colours for displaying the time bars.

"General" tab

The accounts to be displayed are selected in this tab.

Available columns

Absence times

Actual time

Bank holiday hours

Before/after work time

Break deduction

Break target

Break time

Breaks booked

Business authorisation period

Capped hours

Use short name

CSV export delimiter

>

>

<

<<

Allocated columns

Target time

Attendance

Selection report **columns**:
The columns to be output are assigned using the selection reports. All fields of the elapsed time type that are enabled for use can be activated.

Use short name checkbox:
Indicates if names or short names should be used for accounts.
Options:
• Not activated: Names are used.
• Activated: Short names are used.
Default value: Not activated.

"Colours" tab
This tab contains the colours for displaying the time bars in the statistics.

Account	Colour
10 - Extra Pay Sunday	
5 - Weekly Working Hours	
Absence times	
Actual time	
Before/after work time	
Booked breaks	
Break deduction	

The table contains all available accounts for time statistics.

Account column:
Contains the name for the account.

Colour column:
Contains the colour for time bar. Click the colour symbol to select.

Cost centres
Configuration of cost centre individual logs and cost centre total logs.

The screenshot shows a configuration window for fixed reports. It contains two main panels: 'Available columns' on the left and 'Allocated columns' on the right. Both panels have a search bar at the top. The 'Available columns' panel lists: Cost centre, Department, ID card number, Master cost centre, To master cost centre, and Work schedule. The 'Allocated columns' panel lists: Cost centre/group, Name, Employee number, Name (Person), First name, Working hours, Individual costs, General costs, and Overall costs. Between the panels are four navigation buttons: a right arrow (>), a right arrow with a plus sign (>+), a left arrow with a minus sign (<-), and a left arrow (<). To the right of the 'Allocated columns' panel are four buttons: an up arrow (^), an up arrow with a plus sign (^+), a down arrow with a minus sign (v-), and a down arrow (v). At the bottom left, there are two checkboxes: 'Total line' and 'Landscape', both of which are currently unchecked.

Selection report **columns**:

The columns to be output are assigned using the selection reports. All employee record fields and cost centre bookings that are enabled for use can be selected.

Total line checkbox:

Indicates whether the total line is displayed.

Options:

- Activated: The total line is displayed. Columns containing costs and elapsed times are totalled.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

Yearly overview

Configuration for the Groups yearly overview.

The configuration consists of the tabs:

- General: Contains the columns for the monthly overview.
- Groupings: Contains groups for the totals.
- Absence type allocation: Contains the allocation of the absence types to the groupings.

"General" tab

This tab is used to define the accounts and therefore the columns for display in the yearly overview.

The screenshot displays the 'Fixed reports settings' interface. It consists of two main panels: 'Available columns' on the left and 'Allocated columns' on the right. The 'Available columns' panel contains a list of fields including 'Additional holiday', 'Additional holiday - previous year', 'Additional holiday 2', 'Additional holiday 2 - next year', 'Additional holiday 2 - previous year', 'Additional holiday 3', 'Additional holiday 3 - next year', 'Additional holiday 3 - previous year', 'Additional holiday next year', and 'Balance'. The 'Allocated columns' panel shows 'Last name', 'First name', and 'Employee number' selected. Between the panels are navigation buttons: '>', '>>', '<', and '<<'. To the right of the 'Allocated columns' panel are buttons for moving items up and down: '^', '^', 'v', and 'v'. Below the panels are three checkboxes: 'Use short name', 'Total line', and 'Landscape', each followed by a small square icon. At the bottom is a 'CSV export delimiter' field with a small square icon.

Selection report **columns**:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use in the yearly overview report can be selected.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

"Groupings" tab:

The groups of absence types for generating totals are defined on this tab. The individual absences are selected on the **Absence type allocation** tab.

Number ▲	Name	Short name			New entry
1	Holiday				

Groups table:

The groups are created in the table.

"Absence type allocation" tab:

On this tab, the absence types are allocated to the groupings.

Name		
2001 - Holiday		

New entry

Groupings table:

Each grouping is assigned a table for allocating the absences. All absence types created in the system are available for selection.

Monthly overview

Configuration for the individual and group reports with the monthly overview.

The configuration consists of the tabs:

- **General:** contains the columns for the monthly overview.
- **Monthly data:** contains the columns for the monthly data.
- **Time accounts:** contains the time accounts that are displayed.
- **Reconciliation presentation:** contains the allocations of the time accounts from the reconciliations to the columns for the display.

"General" tab

This tab is used to define the accounts and therefore the columns for display in the monthly overview.

Available columns

- 1 - WT 25%
- 2 - WT 50%
- 3 - WT 100%
- Absence times
- Account calculation profile
- Account comparison profile
- Additional holiday
- Additional holiday - previous year
- Additional holiday 2
- Additional holiday 2 - next year

Allocated columns

- Date
- Weekday
- From
- To
- Absence
- Target time
- Actual time
- Daily balance
- Balance

☐ Use short name
 ☐ Landscape
 ☐ Show absence times with data range
 CSV export delimiter

Selection report columns:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use can be activated.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Landscape checkbox:
Defines the format for printouts and the PDF version of the report.
Options:
• Activated: The report is produced in landscape format.
• Not activated: The report is produced in portrait format.
Default value: Not activated.

"Monthly data" tab

This tab is used to define the employee record accounts and time accounts and therefore the columns for display of the line with the monthly data in the monthly overview.

The screenshot shows a user interface for selecting columns. On the left, a list titled 'Available columns' contains items like 'Additional holiday - previous year', 'Attendance' (which is highlighted), and 'Bank holiday hours'. On the right, a list titled 'Allocated columns' contains 'Month', 'Target time', 'Actual time', 'Absence times', and 'Balance previous day'. Between the two lists are four arrow buttons: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. To the right of the 'Allocated columns' list are four vertical arrow buttons: up, down, up, and down.

Selection report columns:
The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use can be activated.

"Time accounts" tab

This tab is used to select the accounts which are displayed together in the time accounts column.

Note: Each account is displayed in a separate line, provided the account contains a value that does not equal 0.

The screenshot shows a user interface for selecting columns. On the left, a list titled 'Available columns' contains '1 - WT 25%' and '2 - WT 50%'. On the right, a list titled 'Allocated columns' contains '3 - WT 100%'. Between the two lists are four arrow buttons: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. To the right of the 'Allocated columns' list are four vertical arrow buttons: up, down, up, and down. At the bottom left of the interface, there is a label 'Total line - monthly' followed by a small square icon.

Selection report columns:
The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use can be activated.

"Reconciliation presentation" tab

This tab is used to allocate the time accounts from the reconciliations to the columns in the monthly overview.

This allows, for example, the weekly actual time to be displayed in the "Actual time" column.

Note: The table lists all columns that are enabled for display in the monthly overview.

Column	Monthly reconciliation	Weekly reconciliation	Yearly reconciliation	Periodic reconciliation	
Date					
Weekday					
From					
To					
Absence					
Target time	Total target time				
Actual time	Total actual time				
Daily balance					
Balance					
Colour-coded account balance					

View ☐ Monthly reconciliation ☐ Weekly reconciliation ☐ Yearly reconciliation ☐ Periodic reconciliation

Column column:

Contains the column from the monthly overview.

Weekly reconciliation selection fields:

Contains the accounts from the weekly reconciliation.

Yearly reconciliation selection fields:

Contains the accounts from the yearly reconciliation.

Periodic reconciliation selection fields:

Contains the accounts from the periodic reconciliation.

Display:

These checkboxes are used to define which reconciliations are displayed in the monthly overview.

Note: Display is on the day on which the reconciliation was generated. The table shows a provisional monthly reconciliation for the monthly reconciliation, which contains the totals up to the previous day.

Monthly reconciliation checkbox:

Defines whether monthly reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Weekly reconciliation checkbox:

Defines whether weekly reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Yearly reconciliation checkbox:

Defines whether yearly reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Periodic reconciliation checkbox:

Defines whether periodic reconciliations are displayed.

Options:

- Activated: The reconciliations are displayed.
- Not activated: The reconciliations are not displayed.

Default value: Not activated.

Period overview

Configuration for the Period overview report. The configuration consists of the tabs:

- General
- Grouping
- Absence type allocation
- Calculation

"General" tab

The accounts to be displayed are selected in this tab.

Selection report columns:

The columns to be output are assigned using the selection reports. All accounts with the types Elapsed time and Daily counter are available for selection.

Use short name checkbox:

Indicates if names or short names should be used for accounts.

Options:

- Not activated: Names are used.
- Activated: Short names are used.

Default value: Not activated

Total line - absent checkbox:

Indicates whether the total line for absent persons is displayed for the shift groups. For the past, the absence times are displayed according to the allocation; for the future, the planned absence times are displayed.

Options:

- Not activated: The total line is not displayed.
- Activated: The total line is displayed.

Default value: Activated.

"Groupings" tab:

The groupings for generating absence times totals are defined under this tab. Groupings are created in a table. Each grouping is assigned a unique number that is only unique for the respective configuration and a name in the respective language. The groupings form the basis for the selection reports on the Absence

times allocation tab.

Number ▲	Name	Short name			New entry
1	Holiday				

Number column:

Contains the unique number of the grouping for this configuration.

Name column:

Contains the name of the grouping.

Short name column:

Contains the short name of the grouping.

"Absence times allocation" tab:

On this tab, the absence types are allocated to the groupings. An absence type may be allocated to multiple groupings. There is a separate selection report for each grouping.

Holiday					
Name ▲			New entry		
2001 - Holiday					

Name column:

Contains the allocated absence type.

"Calculation" tab:

The calculation rules for the totals are assigned to the selected accounts on this tab.

Selected columns	Calculation
Name	
First name	
Balance	Last value ▼
Actual time	Total of all days ▼
Target time	Total of all days ▼
Daily balance	Total of all days ▼

Selected columns column:

Contains the column for the report with the name.

Calculation column:

Contains the calculation rule for generating the total.

Options:

- Last value: Value from the last daily reconciliation of the time range.
- Total of all days: All days are added.
- Total from last reconciliation: All days are added from the last reconciliation.

Shift overview

Configuration for the Shift overview report. This configuration is also used for selecting persons for the report.

Selection report **columns**:

The columns to be output are assigned using the selection reports. All employee record fields that are enabled for use can be activated.

Total line - present checkbox:

Indicates whether the total line for persons present is displayed for the shift groups. For the past, the time daily programs are displayed according to the allocation; for the future, the planned time daily programs are displayed according to the current shift profile and the planned shift allocations.

Options:

- Not activated: The total line is not displayed.
- Activated: The total line is displayed.

Default value: Activated.

Total line - absent checkbox:

Indicates whether the total line for absent persons is displayed for the shift groups. For the past, the absence times are displayed according to the allocation; for the future, the planned absence times are displayed.

Options:

- Not activated: The total line is not displayed.
- Activated: The total line is displayed.

Default value: Activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

Status report

Configuration for individual and group reports:

- Status report

The configuration consists of the tabs:

- **General**: Contains the report columns.
- **Attendance status allocation**: contains the booking elements for the attendance and absence status.

"General" tab:

This tab is used to define the accounts and therefore the columns for display in the report.

The interface consists of two main panels: 'Available columns' and 'Allocated columns'. The 'Available columns' panel lists 'Cost centre' and 'Work schedule'. The 'Allocated columns' panel lists 'Name', 'First name', 'Employee number', 'ID card number', 'Department', 'Attendance', 'Absence', and 'Without excuse'. Between the panels are four arrow buttons: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. To the right of the 'Allocated columns' panel are four vertical arrow buttons: up, double up, down, and double down. Below the panels are two checkboxes: 'Landscape' (checked) and 'CSV export delimiter' (unchecked).

Selection report columns:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use in the status report can be activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

"Attendance status allocation" tab:

The various bookings which determine the attendance or absence status are defined on this tab.

The interface is divided into two sections. The first section, 'Allocation of attendance status to colours', shows a table with two rows: 'Present' with a green color swatch and an edit icon, and 'Absent' with a grey color swatch and an edit icon. The second section, 'Allocation of booking elements to arrival or leave', shows a table with columns 'Booking types', 'Allocation', and two empty columns for edit and delete icons. A 'New entry' button is located to the right of the table. The table contains the following data:

Booking types	Allocation		
1000 - Arrive	Present		
1001 - Leave	Absent		
1002 - Business authorisation - leave	Absent		
1003 - Business authorisation - arrive	Present		
1009 - Hourly absence - end	Present		
1010 - System - arrive	Present		
1011 - System - leave	Absent		
1210 - System - leave DC	Absent		
1212 - System - BAend	Absent		

At the bottom of the table, it says 'Number of records: 9'.

Allocation of attendance status to colours:

Contains the colour for the display of the Present and Absent time ranges. Click the colour symbol to select.

Allocation of booking types to absent and present:

The booking types for displaying the time ranges as absent or present are defined in the table.

Booking type column:

Contains the booking type for the allocation.

Options:

- All time system booking types created in the system.

Allocation column:

Contains the allocation as Arrive or Leave.

Options:

- Arrive
- Leave

Daily and monthly data

Configuration for individual and group reports:

- Daily data
- Monthly data

Selection report **columns**:

Various columns can be allocated to the report using the selection report. All employee records and time accounts available for the respective report can be selected.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

Holiday data

Configuration for individual and group reports:

- Holiday data

Selection report **columns**:

The columns to be output are assigned using the selection reports. All employee record fields and time accounts that are enabled for use in the holiday report can be selected.

Use short name checkbox:

Indicates if names or short names should be used for column headers. If the short name is selected, the absence types are also displayed with their respective short names.

Options:

- Not activated: Names of columns and absence types are used.
- Activated: Short names are used.

Default value: Not activated.

Total line checkbox:

Indicates whether the total line is shown with the group reports.

Options:

- Activated: The total line is displayed. The total consists of the daily counter and time sum accounts added together.
- Not activated: The total line is not displayed.

Default value: Not activated.

Landscape checkbox:

Defines the format for printouts and the PDF version of the report.

Options:

- Activated: The report is produced in landscape format.
- Not activated: The report is produced in portrait format.

Default value: Not activated.

6.25 PC reader

User-specific details are required in the following cases:

- If a PC reader is connected to a workstation for reading ID cards, the system needs to know which port and which host name must be used to contact the local PC reader. Deviations from the standard settings must be stored and activated in the system.
- A PC reader can be permanently assigned to each user if proxies are used for communication between peripheral equipment and the Desktop Reader Manager.

No input is required if the standard settings are used.

"PC reader" dialog

Use the **PC reader** dialog to define user-specific settings for communication with the PC reader.

Note: The standard port for PC reader is specified in system parameter System 131.

The screenshot shows a dialog box titled "PC reader". At the top, there is a status message: "State: Local PC reader settings not activated, reverting to default." Below this, there are two input fields: "PC reader host name" with the value "127.0.0.1" and "Port for PC reader" with the value "18080". An "Activate" button is positioned below the port field. At the bottom, there is a section titled "User device allocation" which contains a dropdown menu labeled "PC reader".

Status display:

Shows whether local settings have been activated for the PC reader.

Host name for PC reader input field:

Enter the host name stored in the certificate if the local PC reader is addressed via HTTPS.

Note: This field is only available if system parameter System 132 is activated.

Port for PC reader input field:

Specifies the port for software data exchange for the PC reader.

Activate button:

This button applies the settings made for the local computer.

Deactivate button:

Use this button to deactivate the local settings. After deactivation, the standard settings will be reactivated.

Note: Host name and port connection data only apply to the local computer.

User device allocation

PC reader selection field:

Contains a PC reader that is permanently allocated to the user. Permanent allocation is particularly necessary if proxies are used for communication between peripheral equipment and the Desktop Reader Manager.

6.26 Encoding station

A user-specific encoding station must always be selected if the system contains multiple encoding stations or if proxies are used for communication between peripheral equipment and the Desktop Reader Manager.

"Encoding station" dialog

Use the **Encoding station** dialog to define user-specific settings for communication with the encoding station.

User device allocation

Encoding station selection field:

Contains an encoding station that is permanently assigned to the user.

6.27 ID card diagnosis

With the ID card diagnosis, you can easily read and display the ID card data using a PC reader.

"ID card diagnosis" dialog

The **ID card diagnosis** dialog displays the key data of the read ID card.

To read ID cards, you need a suitable PC reader.

ID string display field:

Contains the ID string of the ID card.

ID card number display field:

Contains the ID card number.

Country code display field:

Contains the country code.

ID card version display field:

Contains the ID card version.

Company code display field:

Contains the company code.

Load ID card button:

Click the button to read the ID card placed on the reader. The ID card data is displayed in the display fields.

6.28 Reports and Special reports

The reports which you have defined yourself, which were created with the report configurator and are enabled for the Self Service, are available here.

Note: The reports must be activated for the display in the reports main menu, otherwise they are listed under **Special reports** in the menu.

Click a report to call it up and display it. If the report is linked to a search profile which still contains wildcards for the search, the corresponding input fields for the search are displayed. Once the search values have been entered, the search can be executed and the result is displayed in the report.

"Display Report" dialog

Use the **Display report** dialog to display the configurable reports. The dialog title contains the name of the report.

Example: Report with parameter input

☆
🖨️
📄
📄

Display Blocked persons

Blocking reason
i

Start search

Blocked persons

Department	Last name	First name	Blocking reason
1 - Administration	Matrino	Johanna	Blocked
2 - Production	Legrand	Marc	Blocked

Number of records: 2

Example: Fixed report without parameter input

☆
🖨️
📄
📄

Display Blocked persons

Blocking reason
i

Start search

Blocked persons

Department	Last name	First name	Blocking reason
2 - Production	Legrand	Marc	Blocked
1 - Administration	Matrino	Johanna	Blocked

Number of records: 2

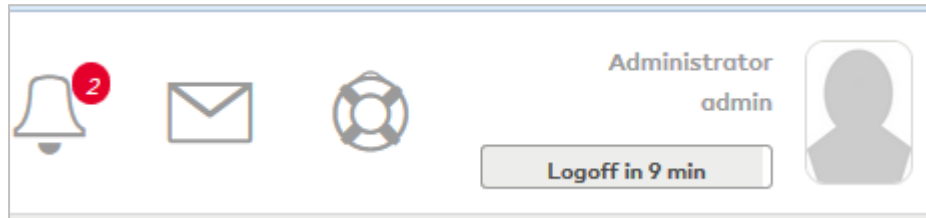
The table contains the fields configured in the search profile report layout.

7 Info centre

The info centre contains references to pending jobs which have to be executed.

If you are an approver for workflows, workflows pending approval are displayed for you.

The info centre or the workflows can be accessed using the **Info centre** or **Workflows** icons.



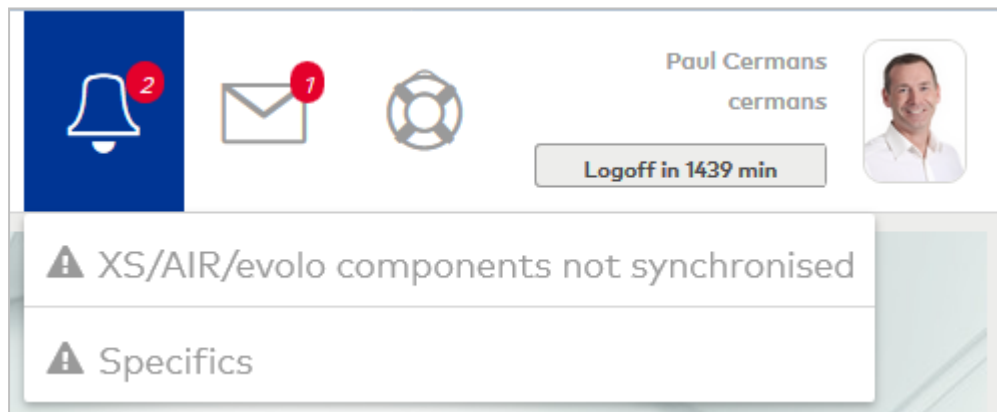
Note: A red symbol indicates that important jobs are outstanding.

If there are several jobs pending in the info centre, a selection dialog opens. If there is only one job pending, the relevant dialog for editing opens up directly.

"Info centre" display

The **Info centre** displays in menu form all the pending jobs still to be processed. Jobs pending include, for example, the synchronisation of XS/evolo offline components or the allocation of ID cards to persons who have not been allocated an ID card.

Click an entry to open the relevant dialog.



"Selection Imported persons without ID cards" dialog

The **Selection Imported persons without ID cards** dialog displays in a table all persons who have not yet been allocated an ID card.

Click an entry in the table to open the dialog for editing persons.

Selection Imported persons without ID cards User:admin







Selection	External system ID	External system	Last name	First name	Employee number
☐	00000007	T90CLNT090	Michael Hintz		24
☐	00000014	T90CLNT090	Michael Wunder		31

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

External system ID column:

Contains the unique identifier of the person from the external system.

External system column:

Contains the identifier of the external system, from which the person was imported.

Last name column:

Contains the person's last name.

First name column:

Contains the first name of the person.

Employee number column:

Contains the unique employee number of the person.

"Selection specifics" dialog

The **Selection Specifics** dialog displays a table with all persons and their deviations from the time allocation.

Click an entry in the table to open the dialog for editing persons.



☆ **Selection Specifics**

◀ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 ... 256 ▶

Last name ▲	First name	Department	Datum	Tag	Besonderheit
Ackreiter	Thorsten		12/28/2015	Monday	No presence
Ackreiter	Thorsten		12/29/2015	Tuesday	No presence
Ackreiter	Thorsten		12/30/2015	Wednesday	No presence
Ackreiter	Thorsten		12/31/2015	Thursday	No presence
Ackreiter	Thorsten		01/04/2016	Monday	No presence
Ackreiter	Thorsten		01/05/2016	Tuesday	No presence
Ackreiter	Thorsten		01/06/2016	Wednesday	No presence
Ackreiter	Thorsten		01/07/2016	Thursday	No presence
Ackreiter	Thorsten		01/08/2016	Friday	No presence
Ackreiter	Thorsten		01/11/2016	Monday	No presence

1-10 of 2,557

◀ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 ... 256 ▶

Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Last name column:

Contains the person's last name.

First name column:

Contains the first name of the person.

Department column:

Contains the department to which the person is allocated, with the number and name.

Date column:

Contains the date and time when the specific occurred.

Day column:

Contains the day on which the specific occurred.

Specifics column:

Contains the name of the specific.

8 Wizards

Wizards help you in your daily work or when setting up your system.

Wizards are task-oriented input methods combining several logical process steps from different dialogs in a single dialog and firmly specifying the prescribed sequence of the steps. This is based on the different steps which you must perform in individual dialogs. All additional actions which are needed to finish a task are triggered at the end of the dialog entry where necessary. This includes primarily the configuration and basic supply of the terminal periphery if they have been created or changed in the course of the wizard application.

The different steps in the wizard are designed to make it possible to enter a number of master data records.

Each step in the wizard deals with a task from the dialog system, such as creating XS/evolo offline components. The entries are verified as you complete a step. Switching to the next step is not possible until verification is positive. The next step is based on the previous step and contains the previously entered data as input parameters. For example, you can create associated doors on the basis of new XS/evolo offline components.

Likewise, intermediate steps can be performed in the wizard if additional master data is required, which will be used in the further course of the wizard. If you return to the previous step, you may view the data entered there and changed them again if required.

If the quantity is changed in a dialog module, this will also affect the steps that follow. If the quantity is reduced, data already entered before in the next steps may be lost since the table is reduced there to reflect the changed quantity. If the quantity is increased, you must complete your input entries in the subsequent steps.

Note: The wizards are normally designed to permit the input of most properties. Individual changes on the new data records must subsequently be made in the modification dialogs.

"Wizards" dialog

The **Wizards** dialog displays all wizards created.

Click the wizard you would like to execute.

Wizards	
Wizard	Description
Start wizard	Assembly selection, system parameters, functionality selection
Device initialisation wizard	Device initialisation wizard
XS/evolo offline doors	XS/evolo offline components, room zones, doors
XS/evolo offline door with access permission	XS/evolo offline components, room zone, door, access permissions
Terminal with readers and doors	Terminal, readers, doors, room zones
Apply persons to Time	Provide persons for the Time module and initialise
Change device type for XS/evolo components	Wizard for changing the device type of XS and evolo components
Change device type of dormakaba terminals	Wizard for changing the device types of 97 00/96 00 type dormakaba terminals to B-COMM terminals
Switching between time management and time recording	Time recording/time management switching wizard

Wizard column:

Contains the name of the wizard.

Description column:

Contains a short description of the wizard with the most important work steps.

8.1 Device initialisation wizard

The device initialisation wizard provides support when commissioning devices and the required additional MATRIX components.

General operating instructions:

Next button:

This button only becomes active once all necessary input has been made for the respective step. Clicking this button confirms your input. It also implements device configuration immediately in MATRIX and displays this in the MATRIX message line.

Back button:

Click this button to review the previous step or to make changes to your input. Please note that devices cannot be removed using the device initialisation wizard once they have been created.

Cancel button:

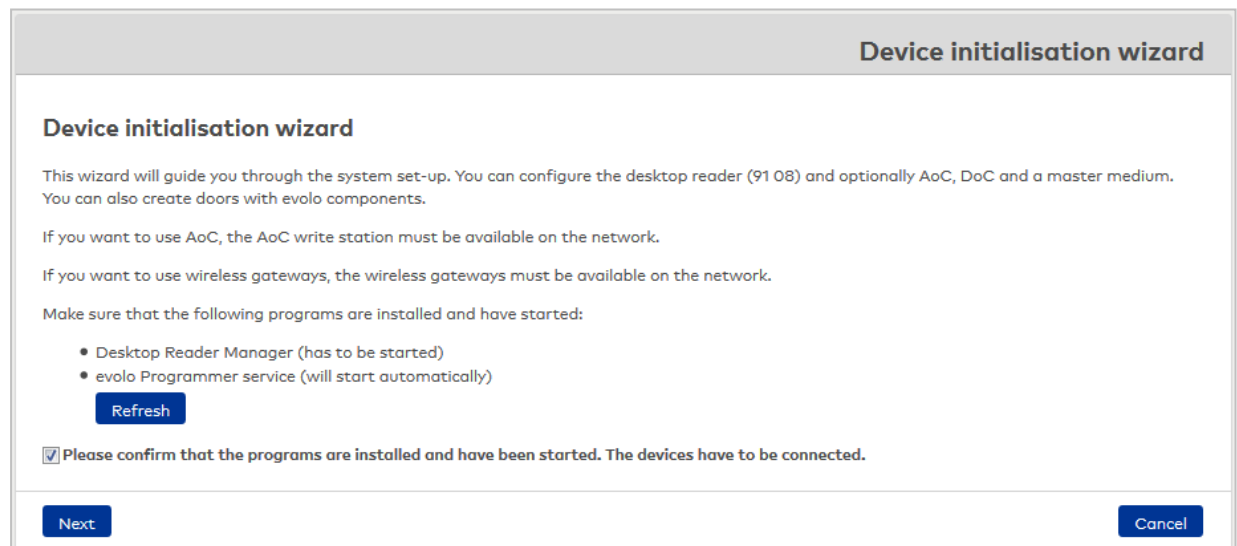
Click this button to close the wizard prematurely. You can restart the wizard at any time to continue the installation process.

The dialogs for the process steps are explained below. The individual steps depend on your licence and the components selected in the step "What do you want to configure?".

Start dialog

The Desktop Reader Manager and evolo programmer service must both be started for installation to complete successfully. The respective devices must also be available.

- Read the information on initialisation and confirm that the required additional components have been installed and started.



The screenshot shows a dialog box titled "Device initialisation wizard". The main content area contains the following text: "This wizard will guide you through the system set-up. You can configure the desktop reader (91 08) and optionally AoC, DoC and a master medium. You can also create doors with evolo components." Below this, it states: "If you want to use AoC, the AoC write station must be available on the network." and "If you want to use wireless gateways, the wireless gateways must be available on the network." It then lists the required programs: "Make sure that the following programs are installed and have started:" followed by a bulleted list: "• Desktop Reader Manager (has to be started)" and "• evolo Programmer service (will start automatically)". There is a "Refresh" button below the list. At the bottom, there is a checked checkbox with the text: "Please confirm that the programs are installed and have been started. The devices have to be connected." The dialog box has a "Next" button at the bottom left and a "Cancel" button at the bottom right.

What do you want to configure?

In the first step of the wizard, select the components to be installed and the ID card type. The following steps change depending on the selection made here.

- Activate the components that you wish to configure in your system and select the ID card type. You can select one of the pre-installed ID card types or load your own ID card type. To do so, click the link **Upload individual compatible ID card type**.

Note: Please note that ID card encoding cannot be used with all ID card types.

What do you want to configure?

☒ Desktop reader 91 08 (with AoC write functionality)

☐ ID card encoding

☒ Master medium

☒ AccessOnCard

☒ AoC write station (AM 92 00/AM 92 30)

☒ AoC blocking reasons

☒ DoC

☐ evolo wireless Gateway 90 40

☒ Doors with evolo components

☒ evolo Programmer 1460

Select the ID card type for the devices created here.

14 - MIFARE DESFire Blanko

Upload individual compatible ID card type

Next

Cancel

Configure ID card type

This step configures the ID cards. A read key and write key must be entered in order to use MIFARE DESFire ID cards with AoC. Application master keys, read keys and write keys are required for encoding and reading purposes in order to be able to use ID card encoding.

- Click **Generate key** to generate the required keys and save them separately for reasons of security.
- If you already have keys, enter them in the fields.

Configure ID card type

Here you can configure the ID card type. You can change keys that have already been modified in the ID card type only.

AoC parameter

Read key

Write key

DoC parameter

Read key

Write key

ID card encoding parameter

Application master key

Read key

Write key

Note: If you generate write and read keys here, make sure to save them in a secure directory.

Generate key

Save key

Back

Next

Cancel

Configure desktop reader

This step creates a 91 08 desktop reader in MATRIX. The IP address and port of the computer to which the desktop reader is connected are required to enable communication between the 91 08 desktop reader and Desktop Reader Manager.

- The IP address of the connected computer is entered as standard. The standard port is port 3501. Adjust the details if required. Click **Create and load** to transfer the communication data to the desktop reader. The dialog shows whether configuration has been successful.

Configure desktop reader

Connect the desktop reader 91 08 to your computer and make sure that Desktop Reader Manager has started. Enter the IP address of the computer to which the desktop reader 91 08 is connected. This desktop reader also allows writing AoC data.

An IP address/host name has already been identified for you; you can change it if required.

IP address/host name

Port

Save and load

Number	Name	State	Data status	Open jobs
9000	Desktop reader 91 08	Offline	No configuration data	19

Number of records: 1

Back

Next

Cancel

Configure stamp (Legic Advant only)

Legic Advant ID cards require a segment stamp.

- Enter the provided segment stamp manually or scan it by placing the provided security card C2 on the desktop reader and clicking on the **Load segment stamp from Security Card C2** button.

Configure stamp

Enter the 14-digit segment stamp for your ID cards here.

Segment stamp Load segment stamp from Security Card C2

Back Next Cancel

Initialise desktop reader (LEGIC Advant only)

The desktop reader must be configured once (initialised) if using LEGIC Advant ID cards.

- Place the initialisation card (SAM63) on the desktop reader. This process may take up to 15 seconds. Check whether the initialisation process has been successful in Desktop Reader Manager.

Initialise desktop reader

The readers need permission to write to the AoC related sections of the ID cards. Place the initialisation card (SAM63) onto the desktop reader and wait for confirmation by the Desktop Reader Manager.

Back Next Cancel

Configure AoC (LEGIC Advant)

This step creates the ID cards' AoC configuration. A segment stamp must be entered in order to use LEGIC Advant ID cards with AoC.

- Enter the segment stamp of your LEGIC Advant ID cards in the field.

Configure AoC

Enter the 14-digit segment stamp for your ID cards here.

Segment stamp

Back Next Cancel

Create master medium

This step creates a master medium in MATRIX. The master medium is required for synchronisation of evolo components and the evolo programmer and must be configured once.

- Place the master medium on the desktop reader and click **Save master medium**.

Create master medium

Place the master medium onto the desktop reader and click "Load and save master medium". The master medium is written and the keys will be updated.

ID card number Load and save master medium

Back Next Cancel

Configure AoC write station

This step creates a further AoC write station in MATRIX. This can either be a terminal of the type AM 92 00 or AM 92 30 with one or two registration units or a further desktop reader (AccessOnCard station) that is connected to a different computer.

If the option **with access** has been activated for a registration unit, a door will be generated at the same time and the door relay of the registration unit will be set to "Output 1".

- Select an AoC write station and enter the IP address (host name) and port.
- Select at least one registration unit for AM 92 00 or AM 92 30 terminals.
- Activate the checkbox **with access** if access booking will also be made on the AoC write station. If not, the terminal will only function as an AoC charging station.
- Click **Create and load**. The dialog shows whether configuration has been successful.

Configure AoC write station

In this step you can create another AoC write station: either an AM 92 00/AM 92 30 or a standalone AccessOnCard station (with connected desktop reader). The AccessOnCard station has to be installed on a different computer. Make sure that Desktop Reader Manager is installed on this computer and has started.

Select AoC write station: AM 92 00 TP4 - terminal

IP address/host name: localhost

Port: 3001

Registration units

Physical address 1: 90 0x registration unit ☒ with access

Physical address 2: 90 0x registration unit ☐ with access

Save and load

Number	Name	State	Data status	Open jobs
9001	AoC write station	Unknown	No configuration data	30

Number of records: 1

Back **Next** **Cancel**

Initialise AoC write station (LEGIC Advant only)

The AoC write station must be configured once (initialised) if using LEGIC Advant ID cards.

- Hold the initialisation card (SAM63) in front of the AoC write station. Check whether the initialisation process has been successful in Desktop Reader Manager.

Initialise AoC write station

The write station readers need permission to write to the AoC related sections of the ID cards. Present the initialisation card (SAM63) to the AoC write station readers and wait for confirmation.

Back **Next** **Cancel**

Create wireless gateways

This step creates one or more wireless gateways in MATRIX. The wireless gateways must be connected to the network and must be in the delivered state.

- Click the plus symbol to add a new wireless gateway and enter the IP address or host name. Click **Save and load**. The dialog shows whether configuration has been successful.

Create wireless gateways

Make sure the gateways you want to use are in delivered state and connected to the network. You can add gateways by clicking the plus icon and enter the gateway IP addresses. To search for devices, you can use the MATRIX Device Scanner available on the installation medium.

Add gateway +

Name	IP address/host name	Delete
wireless Gateway 90 40	localhost	

Number of records: 1

Save and load

Number	Name	State	Data status	Open jobs
9004	wireless Gateway 90 40	Offline	Data load initiated	7

Number of records: 1

Back

Next

Cancel

Doors – Create doors

The device initialisation wizard can be used to easily create multiple devices in MATRIX at the same time and give them default settings for TimePro and the door weekly profile. The time intervals for permanent opening and office release are transferred to the selected door weekly profile.

- Select the desired number for every device type and configure the default settings if necessary.

Create doors

Create your doors here. In the next step you can assign names to them, change door numbers (if required) and customise the TimePro and door weekly profile defaults.

Number doors from

3

TimePro default

Permanent release

Door weekly profile default

Always

Add an optional permanent opening or office release to the selected weekly profile.

Permanent opening

Office release

Select the number of doors you want to create per component

	evolo digital cylinder	2
	evolo c-lever pro	2
	evolo c-lever air	0

Back

Next

Cancel

Doors – Detail view

In this step, all doors are listed along with the allocated devices and default settings. The data can be individually adjusted for each separate device.

- Check the preset data. If necessary, assign new door numbers or names or select different weekly profiles or TimePro settings for individual devices.

Type	Door number	Name	Wireless gateway	Weekly profile	TimePro
90 0x registration unit	9002	AM 92 00 TP4 - Registration unit 1		Always	
evolo digital cylinder	3	Door 3		Always	Permanent release
evolo digital cylinder	4	Door 4		Always	Permanent release
evolo c-lever pro	5	Door 5		Always	Permanent release
evolo c-lever pro	6	Door 6		Always	Permanent release

Number of records: 5

Back Next Cancel

Doors – Permission allocation

This step allocates default permissions to new doors.

- Select an option to allocate permissions to the doors created in the previous step using the locking plan or access profile. If you wish to allocate permissions at a later time, select **No allocation**.

Permission allocation

You can allocate the new doors to a locking plan or access profile. If you want to do so later, select "No allocation".

☒ Locking plan
 < New locking plan >

☐ Access profile
 < New access profile > with access weekly profile 1 - Always

☐ No allocation

Back Next Cancel

Configure Programmer 1460 and load components

This step creates an evolo 1460 programmer in MATRIX. Ensure that the evolo 1460 programmer is connected and operational. The IP address and port of the computer to which the programmer is connected and the evolo programmer service password are required for communication with the programmer.

- Enter the IP address (host name), port and password and click **Create and load**. The dialog shows whether configuration has been successful.

Configure Programmer 1460 and load components

Connect the Programmer and enter the IP address of the computer to which the Programmer is connected. In the "Password" field, enter the password you specified during the installation of the evolo Programmer service.

Note: An IP address has already been identified for you; you can change it if required.

IP address/host name: localhost

Port: 3502

Password: ●●●●●

Save and load

Number	Name	State	Data status	Open jobs
9005	Programmer 1460	Not up-to-date	Data incorrect	0

Number of records: 1

Note: It is correct that at this point the status is not up to date yet. If the data status is incorrect (Programmer not available) remove the USB cable, reconnect and check if the evolo Programmer service has started.

Back Next Cancel

AoC blocking reasons

This step flags reasons for blocking that are relevant to the AoC ID cards.

- Activate the checkboxes of the blocking reasons that must be set on the AoC black list.

AoC blocking reasons

Select the blocking reasons for the AoC blacklist. An ID card will then be blocked at the components even though its AoC permission is still valid. If you select one of these blocking reasons, all relevant components will be flagged as "not up to date" and you have to update them using the Programmer.

☐ 1 - Blocked
 ☐ 2 - On temporary leave
 ☐ 3 - Former employee

Back
Next
Cancel

Configuration completed

This step provides you with information concerning how to continue.

Configuration completed

The device initialisation wizard has finished.

You now have to use the Programmer to transfer (update) the individual evolo component configurations. You can then create the persons you want to include in the access control. Make sure to assign an ID card number and access rights. The gateway will automatically transfer the permissions to the evolo components or write them to the ID cards.

Notes

- CAUTION! If you have changed or added wireless components you must configure them and connect them to the relevant gateway within 90 minutes. You then need to initiate data loading at the wireless components affected.

Finish
Cancel

8.2 "XS/evolo offline doors" wizard

The XS/evolo offline doors wizard allows you to create new XS/evolo offline components with the related doors. Use this wizard when placing a system into operation or if you want to set up a number of XS/evolo offline components.

The wizard consists of seven process steps. The dialogs for the process steps are explained below.

General information regarding XS/evolo offline components

The wizard starts with the dialog module for the general properties of the XS/evolo offline components. Here you determine how many XS/evolo offline components you want to create. The number also determines how many doors you create in this wizard.

General properties of XS/evolo offline components

Create devices under: Server

Number of XS offline components: 1

Device type: XS cylinder offline

ID card type: 1 - HITAG ID

Terminal class: 1 - XS

Master medium:

Door release pulse length (DRP): 5 Seconds

active: ☒

AoC reader: ☐

Next

Create devices under selection field:

Contains the node in the device tree under which the XS/evolo offline components are created. All nodes under which XS/evolo offline components are permitted are available for selection.

Number of XS offline components input field:

Use the number to determine how many XS/evolo offline components and doors you will create. The value will be adopted in the subsequent steps to structure the table.

Device type selection field:

Contains the possible device types. The device types for XS/evolo offline components are displayed.

ID card type selection field:

Contains the ID card type. All active ID card types created in your system are available for selection.

Terminal class selection field:

Contains the device class defined in the class administration.

Master medium field (only for evolo device types):

Contains the master medium to be used. All master media created in your system are available for selection.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds.

active checkbox:

Identifier indicating whether the XS/evolo offline components are active.

Note: This setting is applied to the next work step on a one-off basis as a default setting and can be retrospectively adjusted for individual components if necessary.

Options:

- Activated: The components are listed as activated in the system and taken into account for data distribution.
- Not activated: The components are listed as inactivated in the system and are not taken into account for data distribution.

Default value: Activated

AOC readercheckbox:

Indicates if AoC bookings are also permitted on the reader.

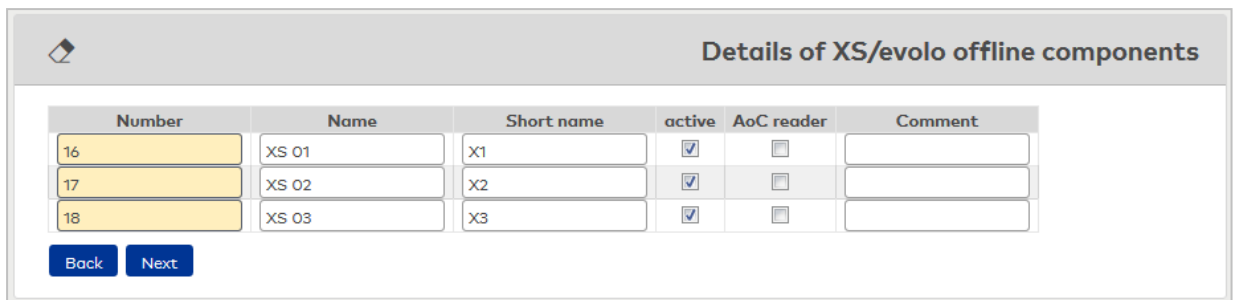
Note: The column for the AoC identifier is only available if the "AoC" option is activated in the system parameters.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Details of XS/evolo offline components

This step is used to define the specific properties of the XS/evolo offline components. The number of rows in the table corresponds to the number of XS/evolo offline components selected in the previous step.



Number	Name	Short name	active	AoC reader	Comment
16	XS 01	X1	☒	☐	
17	XS 02	X2	☒	☐	
18	XS 03	X3	☒	☐	

Back Next

Number input field:

Contains the logic device number for the device. This number is also suggested as a door number in the next steps. You can change the number if necessary.

Name input field:

Contains the names of the XS/evolo offline components.

Short name input field:

Contains the short names of the XS/evolo offline components.

active checkbox:

Indicates if the component is active.

AoC reader checkbox:

Indicates if AoC bookings are also permitted on the reader.

Note: The column for the AoC identifier is only available if the "AoC" option is activated in the system parameters.

Comment input field:

Free text field for comments.

Back button:

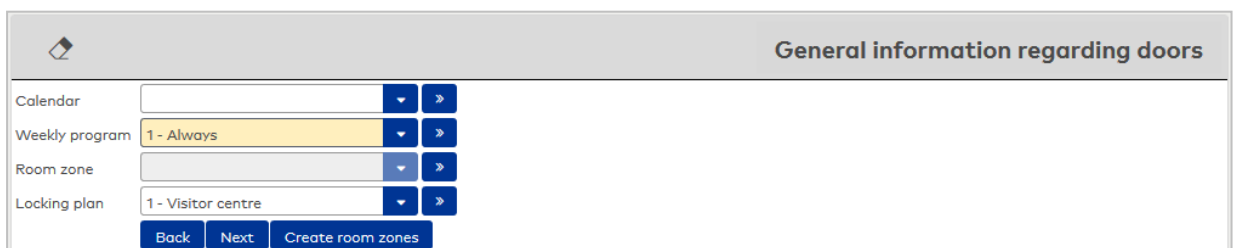
Click this button if you want to review the previous step or to make changes.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

General information regarding doors

This step is used to define general information about the doors.



Calendar

Weekly program 1 - Always

Room zone

Locking plan 1 - Visitor centre

Back Next Create room zones

Calendar selection field:

Contains the calendar for the door control.

Weekly profile selection field:

Contains the door weekly profile for the door control. This setting is adopted in the next step as a suggestion, where it can be changed if necessary.

Room zone selection field:

Contains the room zone to which the door/reader is allocated. The allocation to a room zone is optional.

Note: If you allocate the door to a room zone, the door cannot be allocated to a locking plan at the same time. Selecting a room zone deactivates the selection field for the locking plan.
This setting is applied to the next work step on a one-off basis as a default setting and can be retrospectively adjusted for individual components if necessary.

Tip: If you have not yet created the required room zone, you can create new room zones by clicking the **Create room zone** button.

Locking plan selection field:

Contains a locking plan to which the door is allocated. The allocation to a locking plan is optional.

Note: If you allocate the door to a locking plan, the door cannot be allocated to a room zone at the same time. Selecting a locking plan deactivates the selection field for the room zone.

This setting is applied to the next work step on a one-off basis as a default setting and can be retrospectively adjusted for individual components if necessary.

Back button:

Click this button if you want to review the previous step or to make changes.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Create room zone button:

Click the button if you want to switch to the work step for creating new room zones.

Details of doors

In this step the doors are created and the specific properties defined. The number of the possible new doors corresponds to the selected number of XS/evolo offline components from the first step. They are indicated immovably at the beginning of a row. In addition to the number, the names and short names are adopted from the readers as suggestions for the doors.

Details of doors

Reader number	Name	Door number	Name	Short name	Room zone	Locking plan	Weekly program	Data group 1	Data group 2
14	XS 01	14	XS 01	X1		1 - Visitor centre	1 - Always		
Back		Finish							

Reader number display field:

Contains the reader number of the reader to which the door is allocated.

Name display field:

Contains the name of the reader.

Door number input field:

Contains the number of the new door. The reader number is accepted as a suggestion. The number can be changed if necessary.

Note: If certain numbers or even the entire number range for the doors are no longer available, the field remains empty and you must enter an available number.

Name input field:

Contains the name for the door. The reader's name, which you can change if necessary, is adopted as a suggestion.

Short name input field:
Contains a short name for the door. The reader's short name, which you can change if necessary, is adopted as a suggestion.

Room zone selection field:
Contains the room zone to which the door/reader is allocated. The allocation to a room zone is optional.

Note: If you allocate the door to a room zone, the door cannot be allocated to a system and a locking plan at the same time. Selecting a room zone deactivates the selection fields for the system and the locking plan.

Locking plan selection field:
Contains a locking plan to which the door is allocated. The allocation to a locking plan is optional.

Note: If you allocate the door to a locking plan, the door cannot be allocated to a room zone at the same time. If you have selected a room zone for the door, the selection field for the locking plan is deactivated.

Weekly profile selection field:
Contains the door weekly profile. The weekly profile from the previous step is suggested. You can select a different weekly profile if necessary.

Back button:
Click this button if you want to review the previous step or to make changes.

Finish button:
Once you have completed your inputs, click this button to close the wizard.

General information regarding room zones
This step defines the general information regarding the room zones that you want to create.

General information regarding room zones

Number of room zones

1

Back

Next

Number of room zones input field:
This number determines how many room zones you will create. The value will be adopted in the subsequent steps to structure the table.

Back button:
Click this button if you want to review the previous step or to make changes.

Next button:
Click this button after you have finished all your entries to continue with the next work step.

Details of room zones
In this step the room zones are created and the specific properties defined. The number of the possible new room zones corresponds to the number of room zones from the previous steps.

Details of room zones

Number	Name	Short name	Data group 1	Data group 2
12				

Back

Next

Number input field:
Contains the number of the room zone. The smallest available number for the room zone is suggested. You can change the number if necessary.

Name input field:

Contains the name of the room zone.

Short name input field:

Contains the short name of the room zone.

Back button:

Click this button if you want to review the previous step or to make changes.

Finish button:

Once you have completed your inputs, click this button to close the wizard.

Finish

All of your inputs are verified again in this step. If this verification is successful, the data records are created and saved.

Transfers required for the XS/evolo offline components are triggered automatically and the data is prepared for synchronisation.

Note: You must manually update the XS/evolo offline components using the XS Manager. Information on this process can be found in the XS/Info and the XS assessment in device administration.

8.3 "XS/evolo offline door with access permission" wizard

Use the XS/evolo offline door wizard to create new XS/evolo offline components with the associated door and to grant access permissions for the new reader.

The wizard consists of six process steps. The dialogs for the process steps are explained below.

XS/evolo offline components

The wizard starts with the dialog module for the information on the XS/evolo offline components.

The screenshot shows the 'XS/evolo offline components' dialog box. It contains the following fields and controls:

- Reader number:** A text input field containing the value '16'.
- Name:** An empty text input field.
- Short name:** An empty text input field.
- Create device below:** A dropdown menu with 'Server' selected.
- Device type:** A dropdown menu with 'XS cylinder offline' selected.
- ID card type:** A dropdown menu with '1 - HITAG ID' selected, accompanied by a blue arrow button.
- Terminal class:** A dropdown menu with '1 - XS' selected, accompanied by a blue arrow button.
- Master medium:** A dropdown menu.
- Door release pulse length (DRP):** A text input field containing '5', followed by the unit 'Seconds'.
- active:** A checked checkbox.
- AoC reader:** An unchecked checkbox.
- Next:** A blue button at the bottom right.

Reader number input field:

Contains the logic device number for the device. The next available device number is suggested, which you can accept or overwrite with a different available device number. The number is also suggested as a door number in the next steps.

Name input field:

Contains the name of the XS/evolo offline components.

Short name input field:

Contains the short name of the XS/evolo offline components.

Create device below selection field:

Contains the node in the device tree under which the XS/evolo offline components are created. All nodes under which XS/evolo offline components are permitted are available for selection.

Device type selection:

Contains the possible device types. The device types for XS/evolo offline components are displayed.

ID card type selection field:

Contains the ID card type defined in the class administration.

Terminal class selection field:

Contains the device class defined in the class administration.

Master medium field (only for evolo device types):

Contains the master medium to be used. All master media created in your system are available for selection.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds.

active checkbox:

Indicates if the component is active.

AoC reader checkbox:

Indicates if AoC bookings are also permitted on the reader.

Note: The column for the AoC identifier is only available if the "AoC" option is activated in the system parameters.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Door

This step defines the properties of the door that is to be allocated to the reader.

The screenshot shows the 'Door' configuration wizard. The fields are as follows:

- Door number: 15
- Name: Store 15
- Short name: S15
- Calendar: 1 - Default
- Weekly program: 1 - Always
- Room zone: (empty)
- Data group 1: (empty)
- Data group 2: (empty)

Buttons at the bottom: Back, Create room zones, Next.

Door number input field:

Contains the number of the new door. The number is adopted from the previous step as a suggestion, which you can change if required.

Note: If certain numbers are no longer available for the door, the field remains empty and must be filled by you with an available number.

Name input field:

Contains the name for the door. The reader's name, which you can change if necessary, is adopted as a suggestion.

Short name input field:

Contains a short name for the door. The reader's short name, which you can change if necessary, is adopted as a suggestion.

Calendar selection field:

Contains the calendar for the door control.

Weekly profile selection field:

Contains the door weekly profile for the door control. The selection for the weekly profile is adopted as a suggestion in the next step, where it can be changed if necessary.

Room zone selection field:

Contains the room zone to which the door/reader is allocated. The allocation of a room zone is optional.

Note: If you allocate the door to a room zone, the door cannot be allocated to a locking plan at the same time.

Tip: If you have not yet created the required room zone, you can create new room zones with the **Create room zones** button.

Back button:

Click this button if you want to review the previous step or to make changes.

Create room zone button:

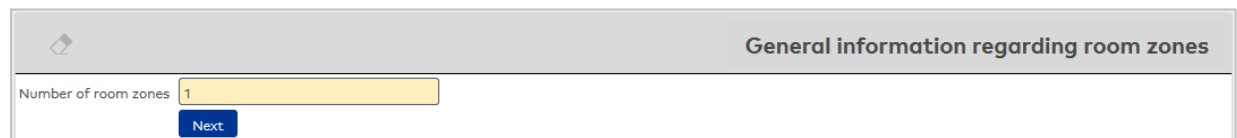
Click the button if you want to switch to the work step for creating new room zones.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

General information regarding room zones

This step defines the general information regarding the room zones that you want to create.

**Number of room zones** input field:

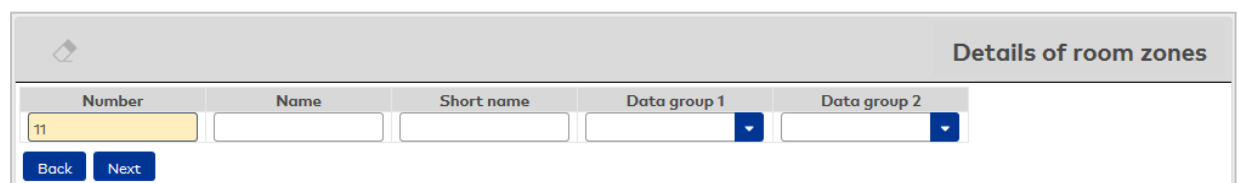
This number determines how many room zones you will create. The value will be adopted in the subsequent steps to structure the table. The value 1 is the default value. However, you can also create several new room zones in this work step.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Details of room zones

The properties of the room zones are defined in this step.

**Number** input field:

Contains the number for the room zone. The next available room zone number is suggested, which you can accept or overwrite with a different available number.

Name input field:

Contains the name for the room zones.

Short name input field:

Contains a short name for the room zones.

Back button:

Click this button if you want to review the previous step or to make changes.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Details of access permissions

This step allows you to set up the access permissions for the new door. The concept of the corrections is used for the allocation.

The new door is predefined in the parameter and cannot be changed here. Only the possible correction types are offered. No selection is possible.

The correction types include:

- Access profiles – add doors
- Person – add special permission door

Access profile - add doors

Access profile input field:

Contains the access profile to which the door is to be added.

Use the  symbol to open the selection dialog for the access profiles to search for and apply a specific access profile or a group of profiles. If you have applied several access profiles this is indicated by a * in the input field.

Weekly profile selection field:

Contains the access weekly profile for the access permissions

Person – add special permission door

Person input field:**ID card** input field:

Contains the persons to whom the special permissions for the door are to be added.

Use the  symbol to open the selection dialog for the persons to search for and apply a specific person or a group of persons. If you have applied several persons this is indicated by a * in the input field.

Note: If ID card administration is activated for your system, the permissions are generated for the ID cards. Accordingly, you can grant special permissions for ID cards instead of persons.

The **Person** input field is replaced by the **ID card** input field.

Weekly profile selection field:

Selection of the access weekly profile for the access permissions.

Valid from input field:

Displays the validity start date for the special permission. Do not enter a **Valid from** date if there is no restriction on the date from which the special permission is valid.

Valid from input field:

Displays the validity end date for the special permission. Do not enter a **Valid till** date if there is no restriction on the period for which the special permission remains valid.

Back button:

Click this button if you want to review the previous step or to make changes.

Finish button:

Once you have completed your inputs, click this button to close the wizard.

Finish

All of your inputs are verified again in this step. If this verification is successful, the data records are created and saved.

Transfers required for the XS/evolo offline components are triggered automatically and the data is prepared for synchronisation.

Note: You must manually update the XS/evolo offline components using the XS manager. Information on this process can be found in the XS/Info and the XS assessment in device administration.

8.4 "Terminal with readers and doors" wizard

You can use this wizard to create a new terminal with readers and the associated doors. Use the wizard when commissioning a system or when you want to set up another terminal with readers and doors.

The wizard consists of eight process steps. The dialogs for the process steps are explained below.

Terminal information

The wizard starts with the dialog for the general terminal information.

Terminal number input field:

Contains the logic device number for the terminal. The smallest available number for the terminal is suggested. You can change the number if necessary.

Terminal name input field:

Contains the name for the terminal.

Create terminal beneath selection field:

Contains the node in the device tree under which the terminal is created. All nodes under which terminals are permitted are available for selection.

Device type selection:

Contains the possible device types. The device types for terminals are displayed.

Terminal class selection field:

Contains the device class defined in the class administration.

IP address/host name input field:

Contains the network IP or the DNS name of the terminal.

Active checkbox:

Identifier indicating whether the terminal is active.

Port input field:

Contains the terminal's network port. The default port is 3001.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

General information regarding readers

The general properties of the readers are defined in the next step. Here you determine how many readers you want to create. The number also determines how many doors you create in this wizard.

The screenshot shows a wizard window titled "General information regarding readers". It contains the following fields and controls:

- Number of readers:** A text input field containing the value "1".
- Device type:** A dropdown menu showing "90 0x".
- ID card type:** A dropdown menu showing "1 - HITAG ID".
- Variable booking instruction:** A dropdown menu showing "1 - Access".
- Door release pulse length (DRP):** A text input field containing "5", followed by the unit "Seconds".
- active:** A checkbox that is checked.
- Navigation:** "Back" and "Next" buttons at the bottom.

Number of readers input field:

With the numbers of readers you determine how many readers and doors you will create. The value will be adopted in the subsequent steps to structure the table.

Device type selection:

Contains the possible device types. The relevant device types for readers are displayed. In the next step, the device type can be individually adjusted for every reader.

ID card type selection field:

Contains the ID card type. All active ID card types created in your system are available for selection.

Variable booking instruction selection field:

Contains the variable booking instruction that is executed when a booking is made on these readers. In the next step, the variable booking instruction can be individually adjusted for every reader.

Door release pulse length (DRP) input field:

Contains the duration of the door release pulse for the door opening in seconds.

Back button:

Click this button if you want to review the previous step or to make changes.

Active checkbox:

Identifier indicating whether the reader is active.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Reader details

The general properties of the readers are defined in this step. The number of the lines of the table corresponds to the number of readers from the previous step.

Number	Name	Short name	active	Device type	physical address	Variable booking instruction	Comment
16			☒	90 0x	1	1 - Access	
17			☒	90 0x	2	1 - Access	

Back Next

Number input field:

Contains the logic device number for the reader. The smallest available number is suggested. You can accept it or adapt, if needed. The numbers for the readers are also adopted as suggestions by the next steps for the door numbers.

Name input field:

Contains the name for the reader.

Short name input field:

Contains a short name for the reader.

active checkbox:

Identifier indicating whether the reader is active.

Device type selection:

Contains the possible device types. The relevant device types for readers are displayed.

Physical address selection field:

Contains the unique address in the DP1 bus for DP1 readers. DP1 readers can contain the physical addresses 1-31 in the DP1 bus. All addresses still available are displayed.

Variable booking instruction selection field:

Contains the variable booking instruction that is executed when a booking is made on these readers.

If you have selected the device class for DCW readers in the previous step, the selection contains the addresses that are still available for the DCW bus in the 1-4 range. It does not take other DCW device types such as I/O modules into account, as these form a separate address space.

Comment input field:

Free text field for comments.

Back button:

Click this button if you want to review the previous step or to make changes.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

General information regarding doors

This step is used to define general information about the doors.

Calendar

Weekly program 1 - Always

Room zone

Locking plan

Back Next Create room zones

Calendar selection field:

Contains the calendar for the door control.

Weekly profile selection field:
Contains the door weekly profile for the door control. In the next step, the weekly profile can be individually adjusted for every reader.

Folder selection field:
If you have created folders in your system, you can use this option to select the folder in which the new doors are to be created.

Room zone selection field:
Contains the room zone to which the door/reader is allocated. The allocation of a room zone is optional.

Note: If you allocate the door to a room zone, the door cannot be allocated to a locking plan at the same time.

Tip: If you have not yet created the required room zone, you can create new room zones with the **Create room zones** button.

Locking plan selection field:
If required, you can allocate the new doors to an existing locking plan.

Back button:
Click this button if you want to review the previous step or to make changes.

Next button:
Click this button after you have finished all your entries to continue with the next work step.

Details of doors

In this step the doors are created and the specific properties defined. The number of the possible new doors corresponds to the number of readers from the previous step. The readers are indicated immovably at the beginning of a line. In addition to the number, the names and short names are adopted from the readers as suggestions for the doors.

Details of doors

Reader number	Name	Door number	Name	Short name	Room zone	Locking plan	Weekly program	Data group 1	Data group 2
17		17					1 - Always		

Back

Finish

Reader number display field:
Contains the reader number of the reader to which the door is allocated.

Name display field:
Contains the name of the reader.

Door number input field:
Contains the number of the new door. The reader number, which you can change, if needed, is adopted as a suggestion.

Note: If certain numbers or even the entire number range for the doors are no longer available, the field remains empty and you must enter an available number.

Name input field:
Contains the name of the door. The reader's name, which you can change if necessary, is adopted as a suggestion.

Short name input field:
Contains a short name for the door. The reader's short name, which you can change if necessary, is adopted as a suggestion.

Room zone selection field:
Contains the room zone to which the door/reader is allocated. The allocation of a room zone is optional.

Note: If you allocate the door to a room zone, the door cannot be allocated to a system and a locking plan at the same time. Selecting a room zone deactivates the selection fields for the system and the locking plan.

Tip: If you have not yet created the required room zone, you can create new room zones with the **Create room zones** button.

System selection field:

Contains the system to which the door belongs. The allocation of a system is optional.

Note: If you allocate the door to a system, the door cannot be allocated to a room zone at the same time. If you have selected a room zone for the door, the selection field for the system is inactivated.

The selection field is only visible if the option 'System administration' is activated in the system parameters.

Locking plan selection field:

Contains the locking plan to which the door is allocated. The allocation to a locking plan is optional.

Note: If you allocate the door to a locking plan, the door cannot be allocated to a room zone at the same time. If you have selected a room zone for the door, the selection field for the locking plan is deactivated.

Weekly profile selection field:

Contains the door weekly profile. The door weekly profile from the previous step is suggested. You can select a different door weekly profile, if needed.

Back button:

Click this button if you want to review the previous step or to make changes.

Create room zone button:

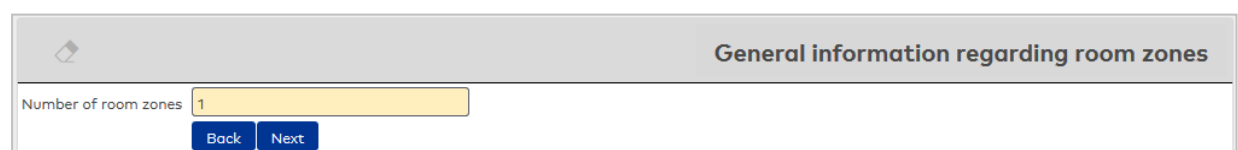
Click the button if you want to switch to the work step for creating new room zones.

Finish button:

Once you have completed your inputs, click this button to close the wizard.

General information regarding room zones

This step defines the general information regarding the room zones that you want to create.



Number of room zones input field:

This number determines how many room zones you will create. The value will be adopted in the subsequent steps to structure the table.

System selection field:

Specification of a system to which the room zone is allocated. The allocation of a system is optional.

Note: The selection field is only visible if the option 'System administration' is activated in the system parameters.

Back button:

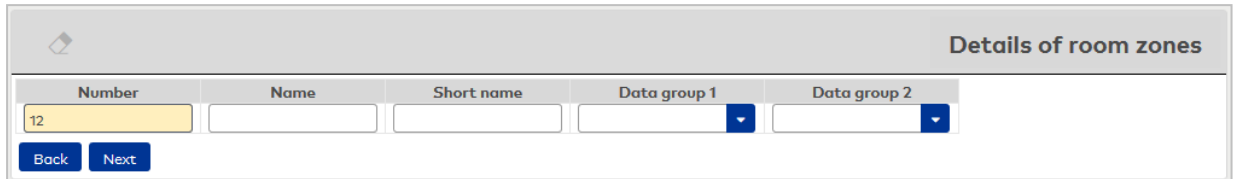
Click this button if you want to review the previous step or to make changes.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Details of room zones

In this step the room zones are created and the specific properties defined. The number of the possible new room zones corresponds to the number of room zones from the previous steps.



Number	Name	Short name	Data group 1	Data group 2
12				

Back Next

Number input field:

Contains the number of the room zone. The smallest available number for the room zone is suggested. You can change the number if necessary.

Name input field:

Contains the name of the room zone.

Short name input field:

Contains the short name of the room zone.

Back button:

Click this button if you want to review the previous step or to make changes.

Finish button:

Once you have completed your inputs, click this button to close the wizard.

Finish

All of your inputs are verified again in this step. The data records are created and saved if the verification is successful.

Necessary transfers for the terminal are triggered automatically.

Note: You do not need to perform the configuration and upload of the data to the terminal manually, since this is started by the wizard.

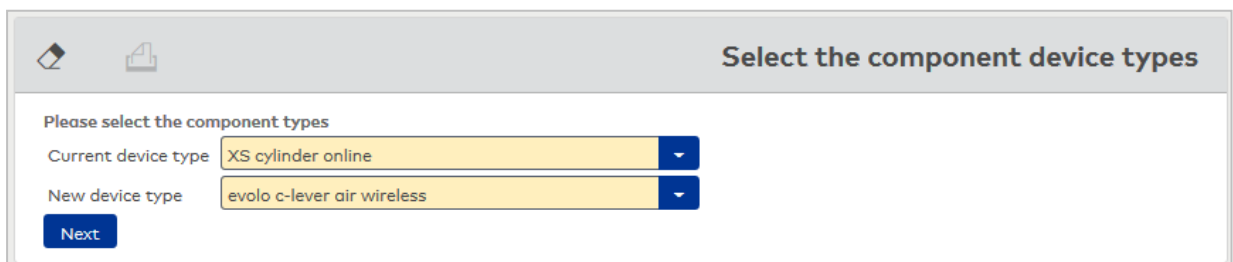
8.5 "Change device type for XS/evolo components" wizard

Use the "Change device type for XS/evolo components" wizard to change the device type of installed XS/evolo components. The wizard is normally used if installed components are replaced by new XS/evolo components.

The wizard consists of three process steps. The dialogs for the process steps are explained below.

Select the component device types

Enter the wizard with the dialog module for selecting the current device type which you wish to replace.



Select the component device types

Please select the component types

Current device type XS cylinder online

New device type evolo c-lever air wireless

Next

Current device type selection field:

Contains the type of components which needs to be changed. All standalone and wireless device types

permitted by system configuration are available for selection, regardless of which devices are actually configured.

New device type selection field:

Contains the new device type. The selection depends on the selection of the current device type.

Select attributes and components

In this process step, select the attributes and required components. The selection depends on the device combination that has been chosen.

Note: The values of all other attributes, such as name, AoC or OSS identifier with the AoC or OSS IDs, door allocation and all permissions, are adopted by the output component.

Select attributes and components

Current device type: evolo c-lever air wireless

New device type: evolo wireless mechatronic cylinder

Terminal class: 5 - evolo

ID card type: 3 - MIFARE Classic ID

Master medium: 1 - evolo master

Wireless gateway: 23 - evolo wireless Gateway 9040

evolo TimePro: Permanent release

Available components

- 24 evolo c-lever air wireless 1

Selected components

- 25 evolo c-lever air wireless 2
- 26 evolo c-lever air wireless 3

Back Finish

Terminal class selection field:

Contains the terminal class with the basic settings for the device.

Options:

- All terminal classes which have been defined for the device.

ID card type selection field:

Contains the ID card type. The ID card type defines the reader technology for the reader and contains information about the ID card data should be interpreted.

Options:

- All created and active ID card types for the device type.

Master medium selection field:

Contains the master medium used for synchronisation with the evolo programmer. This is not a mandatory field if the components are set to inactive.

Options:

- All created master media.

Back button:

Click this button if you want to review the previous step or to make changes.

Finish button:

Once you have completed your inputs, click this button to close the wizard.

Finish

All of your inputs are verified again in this step. If this verification is successful, the data records are created and saved.

8.6 "Change device type of dormakaba terminals" wizard

Use the **Change device type of dormakaba terminals** wizard to change previously created devices of the type dormakaba 96 00 or 97 00 terminal into terminals that must be configured via B-COMM.

The wizard only consists of one dialog.

dormakaba 97 00 / 96 00 terminals selection report:

Contains all dormakaba 96 00 and dormakaba 97 00 terminals present in the system.

B-COMM terminals selection report:

Contains all components selected for replacement using the arrow buttons.

B-COMM terminal class selection field:

Contains the terminal class with which the selected terminals will be created as B-COMM terminals.

Options:

All defined terminal classes for the B-COMM device types.

Finish button:

Once you have completed your input, click this button to apply the changes.

Warning: The changes will be made without any further query. The changes cannot be undone.

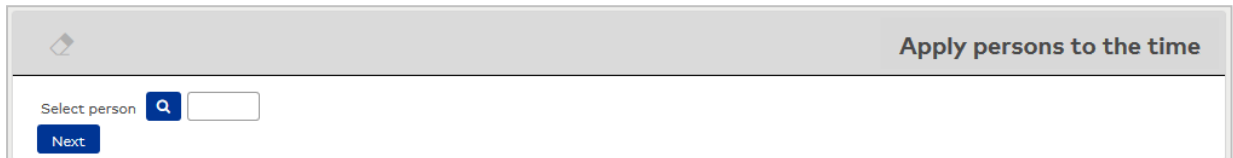
8.7 "Apply persons to the time" wizard

The "Apply persons to the time" wizard allows you to transfer persons from the access system to the time system. The initial settings for time allocation are used for this.

The wizard consists of three process steps. The dialogs for the process steps are explained below.

Selection Persons

The wizard starts with selection of the persons who are to be transferred to the time system.



Select person **magnifier**:

Click the magnifier to open the **Select persons** dialog.

Mark the required persons and accept them for transfer.

Select person **input field**:

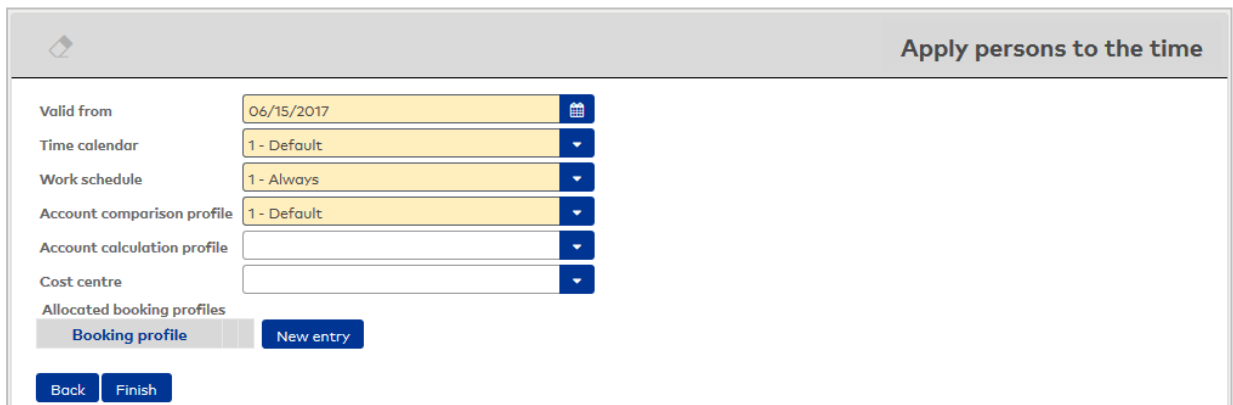
If you only want to transfer one person, you can also enter the employee number directly in the input field.

Next button:

Click this button after you have finished all your entries to continue with the next work step.

Details of persons

Initial settings for the persons are configured at this stage.



Valid from date field:

Contains the date from which the person is included into time allocation. Enter a date, or click the calendar icon and select a date.

After saving, the field can only be changed by performing a correction, provided that a "Valid until" date has been entered. The calendar icon is then no longer visible.

Time calendar selection field:

Contains the calendar with respective bank holidays and special days.

Options:

- All calendars created in the system.

The calendar allocation can be changed using a field-specific correction if required.

Work schedule selection field:

Contains the work schedule with the time daily programs for time allocation.

Options:

- All work schedules created in the system.

Account comparison profile:

Contains the account comparison profile with the account reconciliations and resetting of accounts to zero.

Options:

- All account comparison profiles created in the system.

Account calculation profile selection field:

Contains the account calculation profile for the daily calculation of time accounts.

Options:

- All account allocation profiles created in the system.

Cost centre selection field:

Contains the cost centre to which the person belongs. Select the relevant cost centre from the list.

Options:

- All cost centres created in the system.

Allocated booking profiles:

Booking profiles define the terminals on which the person is permitted to book. Each person may be allocated several time booking profiles.

Booking profile column:

Contains the allocated booking profiles.

Back button:

Click this button if you want to review the previous step or to make changes.

Finish button:

Once you have completed your inputs, click this button to close the wizard.

Finish

All of your inputs are verified again in this step. If this verification is successful, the data records are created and saved.

Transfers required for the XS/evolo offline components are triggered automatically and the data is prepared for synchronisation.

Note: You must manually update the XS/evolo offline components using the XS Manager. Information on this process can be found in the XS/Info and the XS assessment in device administration.

8.8 "Switching between time management and time recording" wizard

This wizard allows you to switch from a configured time recording system to a time management system or vice versa.

Note: Please note the information on switching, as fundamental changes will be made to the system.

Switching between time management and time recording

Attention: Switching systems has a profound impact on the Time module!
Switching may only be carried out on start-up and by qualified personnel.
Remember to run a backup before switching.

Switch to time management system

The employee record fields "TimeRecordingFrom", "TimeCalendar", "TimeWeeklyPlan" and "AccountClearingProfile" will be mandatory.
After running the wizard you have to make meaningful settings for these four fields for all persons!
If the option "Change by correction" is available for an employee record field, this setting will be applied.
The predefined "TimeCalculation" value for the employee record field will be set to "true".
For all persons in the system the "TimeCalculation" field will be set to "true".
For the "admin" and "matrix" users, configuration will be set to 12 (time allocation) in the "Person administration".

Switch to TM system

Switch to time recording system/SAP

The employee record fields "TimeRecordingFrom", "TimeCalendar", "TimeWeeklyPlan" and "AccountClearingProfile" will be optional.
All employee record field with the setting "Change by correction" will be set to "Direct".
The predefined "TimeCalculation" value for the employee record field will be set to "false".
For all persons in the system the "TimeCalculation" field will be set to "false".
For the "admin" and "matrix" users, configuration will be set to 8 (SAP) in the "Person administration".

Switch to TR system

Switch to TM system button:

Click this button to switch the time module to time management.

Switch to TR system button:

Click this button to switch the time module to time recording.

9 Client systems

Client systems include functions for creating and managing clients.

Note: The client system is only available with the respective license.

The client system can administrate clients with either sharing or non-sharing hardware. Select the option clients with non-sharing hardware if all clients have their own devices and terminals. With this option, sharing the server's device interfaces, such as serial interface or USB interface, is not possible.

If a device is to be shared, the shared hardware option needs to be activated.

It can be activated using a system parameter which you can set using the corresponding administration rights

Note: Prior to setting up clients you should make sure to set up the correct client option as the setting cannot be changed after creating clients.

To set up new clients, a special login as client administrator is required. The menu displayed after logging on contains only a few menu items required for setting up new clients.

To launch client administration, select the group in the Windows **All programs** menu **MATRIX** and click **MATRIX client administration**.

Use the following login data to log on to the system:

User ID: superadmin

Password: sa

Use the **Clients** menu item to manage the clients of the system.

Use the **User roles** menu item to control the client users' access permissions for the system and the records.

Use the **Change password** to change your password for accessing the system.

The **Help** menu item provides access to general information of the installed basis of dormakaba MATRIX and you can start Online help.

Log out of dormakaba MATRIX by selecting **Logout** from the menu.

9.1 clients

Clients are sharing the system but have their own view of their data.

For the client option with non-shared hardware, clients independently manage their devices and terminals.

For the client option with shared hardware, various clients use the same hardware. As some of the settings for the devices such as door programs work regardless of the clients, the client creating the respective master data has to grant access permissions to the respective master data for the other clients.

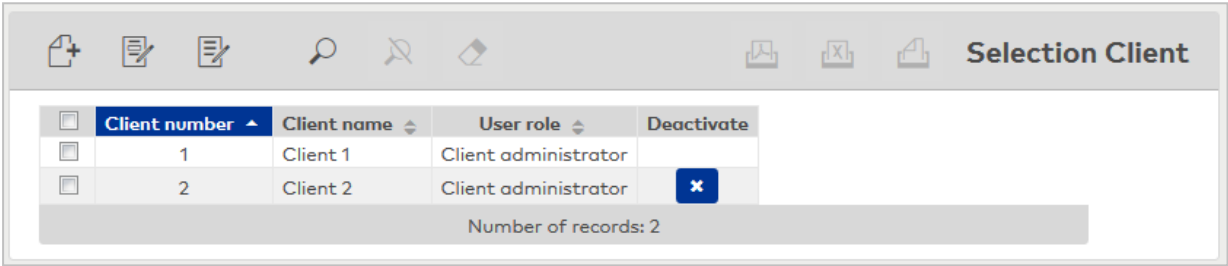
The release of access permissions to master data for other clients is performed with [Data releases](#).

Note: There should be a client responsible for each client system with shared hardware who has the rights for managing the devices and who assumes the general administrative duties such as data backup and the control of the messages. You should only assign the 'admin' user role to the client which has the corresponding dialog rights.

"Selection Client" dialog

The **Selection Client** dialog displays all clients created. Each client is represented by a unique number and a name.

Use the buttons in the toolbar to create new clients or to edit selected clients. You can use the search function to search for individual clients using their number or name.



Open a record by clicking it. Open multiple records by highlighting the records and clicking the **Edit selected search results** symbol.

Number column:
Contains the client's unique number.

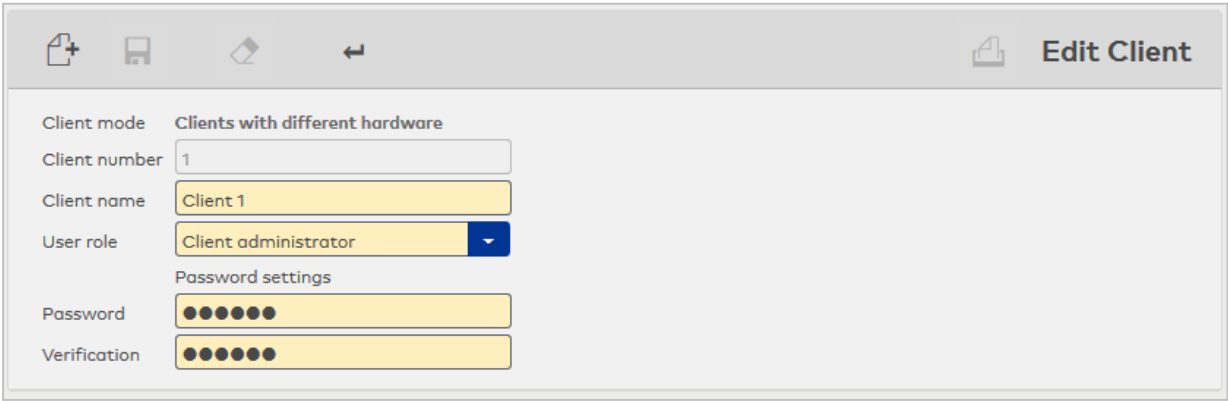
Name column:
Contains the client's name.

Deactivate column:
To deactivate a client, click the symbol in the column. Deactivation will cause all persons and ID cards of the client to be deleted. The client is no longer displayed in the table after deactivation.

"Edit Client" dialog

Use the **Edit Client** dialog to create new clients and edit existing clients.

You can use the buttons in the toolbar to navigate between records, to create a new record, to copy, delete or print a record and to save or reject changes made to the record. Use the **Back to selection** button to return to the selection dialog.



Client number input field:

Contains the client's unique number. When you create a new record, the number increases automatically by an increment of one. However, you can also enter your own number using between 1 and 4 digits (1-9999).

Client name input field:

Contains the client's name. When you enter a new name, you can enter any combination of figures and letters. This field is language-dependent.

Permissions group selection field:

Selection of the permissions group for the client's administrator. Use the permissions group to determine the basic rights for the client.

For demonstration purposes checkbox:

Indicates whether demo data is to be transferred for the new client. In a time system, the demo data is not allocated until the dormakaba MATRIX service is restarted for the new clients.

Note: This option is only active when creating a new client that uses non-shared hardware.

Options:

Activated: Demo data is transferred for the new client.

Not activated: Demo data is not transferred.

Default value: Not activated.

Password settings

An administrator is set up for each new client when saving. The administrator requires a password to log on the system.

Password input field:

Contains the administrator's password for the login to the system. The password entered is not visible but always displayed as six bullet points.

Verification input field:

Contains the administrator's password for the login to the system a second time. Confirm by entering the password again.

10 Additional applications

For some functions, dormakaba MATRIX requires additional applications that are operated together with dormakaba MATRIX and are usually installed on the computer where they are used.

Note: The required software for the additional application is included on the CD for dormakaba MATRIX.

Additional applications for dormakaba MATRIX are:

AoC PC Software:

You need the AoC PC Software for the AoC loading stations to write the AoC data with the access permissions on the AoC ID cards. You will find the description for this application in a separate documentation.

XS Manager:

The XS Manager is a stand-alone application for data exchange between dormakaba MATRIX and the XS/evolo offline components. You will find the description for this application in a separate documentation.

PC reader application:

You need the PC reader application to connect a PC reader to load ID cards. You will find the description for this application in the section on [PC reader](#).

10.1 PC reader

You can use a PC reader to read and transfer the ID card data for creating a new ID card directly into dialog input fields.

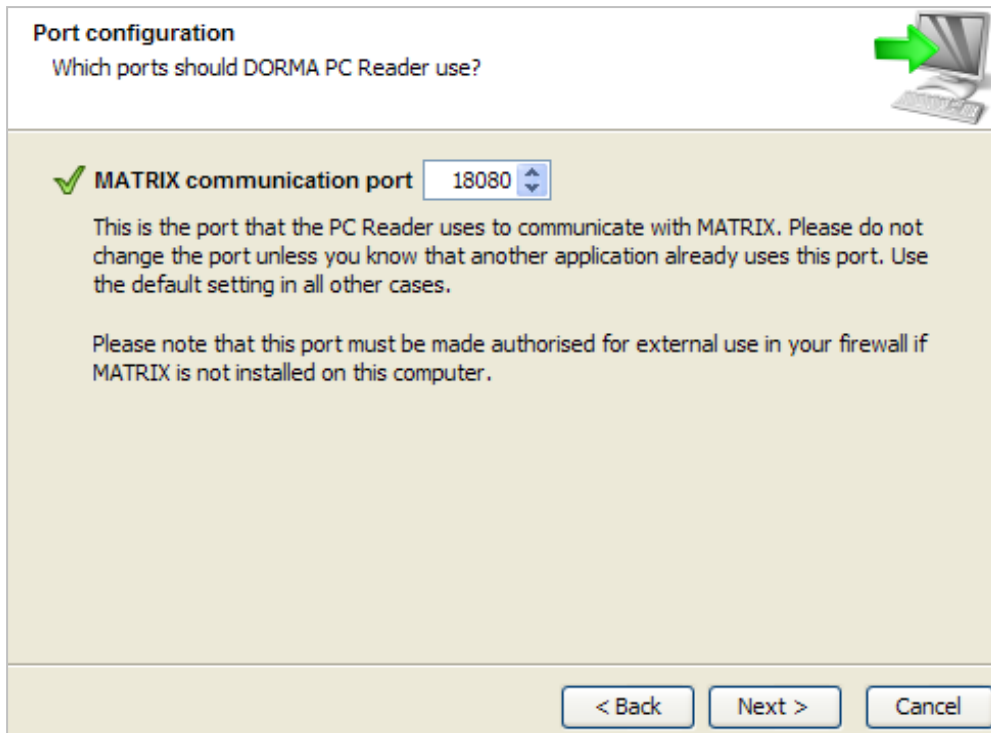
The additional PC reader application is required for the PC reader to transmit data to dialogs.

Installation

The PC reader software is included on the dormakaba MATRIX CD. Perform the following steps for installation:

1. Insert the CD in the CD-ROM drive. Close the Setup if it does not start automatically.
2. Go to the folder XX on the CD and start the file 'PCReader_Windows_Setup_x_x.exe' (whereby x_x designates the version number).
3. Select a language version and click **OK**. The selected language will be used for the rest of the installation.
4. The set-up wizard will start. Click **Next**.
5. Read the license agreement, select **I accept the terms of the agreement** and click **Next**.

6. The application data will now be installed on your computer. This procedure can take a few minutes. Change the port suggested for the communication only if this is necessary.



7. Click Next and follow the further instructions.
8. At the end of the installation click **Finish** to complete the installation.

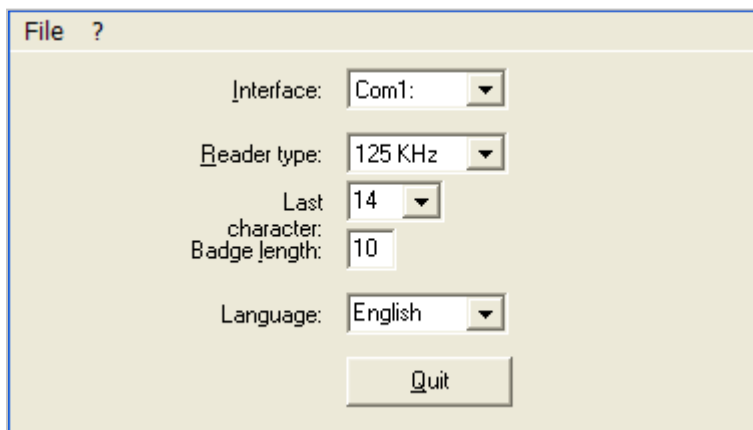
Start PC reader

After the software has been installed, you can start it in the "All programs" menu.



User interface

After starting the PC reader software, you can use the configuration dialog to configure the settings for the interface and the reader type.



Interface selection field:

This is where you set up the interface to which the PC reader is connected.

Reader type selection field:

Select the reader type here which corresponds to your ID cards. The following types are available for

selection:

HiTag: For HiTag ID cards

125 kHz:

Mifare: For Mifare ID cards

Legic: For Legic ID cards

Last character input field:

With the last character you define if the end of the ID card data is at the 14th or the 19th position.

ID card length input field:

Length of the ID card string to be read.

Note: The ID card length must agree with the ID card length set in the application under the ID card type.

Language selection selection field:

Defines the language for the dialog.

Quit button:

Quits the dialog interface. Click the button to close the dialog. The application remains active and is displayed as symbol in the task bar. To quit the application, left-click the symbol and select the **Quit** menu item. You can activate the configuration dialog again using the **Display** menu item.

11 Help

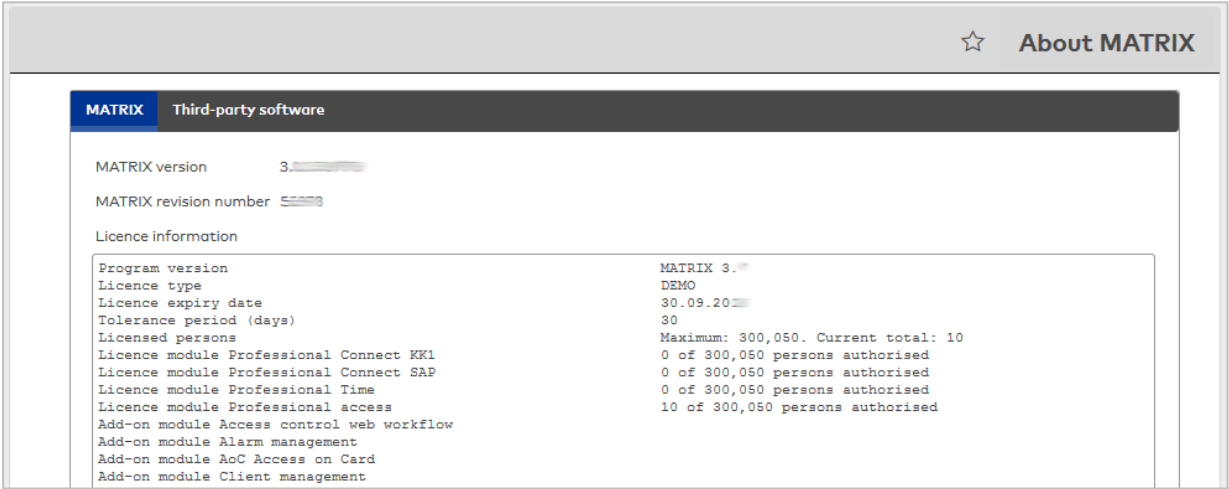
The **Help** menu item provides access to general information of the installed basis of dormakaba MATRIX and you can start the user documentation in the form of Online help.

Use the **About MATRIX** menu item to view the most important information on your installed system.

Use the **User documentation** menu item to open the user documentation for MATRIX.

"About MATRIX" dialog

The **About MATRIX** dialog contains important information about your system.



MATRIX tab:

This tab shows the licence information and the installed additional modules.

MATRIX version display field:

Display of the version number of dormakaba MATRIX.

MATRIX revision number display field:

Display of the revision number of dormakaba MATRIX. You will need the revision number for support requests.

Licence information display field:

This field contains the licence information and displays all of your system's installed additional modules.

Third-party software tab

This tab shows the third-party software used.

12 Glossary

C

Calendar

The calendar forms the basis of the company- and regional-dependent definition of bank holidays and manual special days such as company holidays. Each day is allocated to a specific day type which has specific access programs defined.

Client

Clients are sharing the system but have an own view of the data. For the client option with non-shared hardware, clients independently manage their devices and terminals. For the client option with shared hardware, various clients use the same hardware.

D

Data housekeeping limit

You use the data housekeeping limit to specify the period specific data are stored in your system until they are automatically deleted from the system.

Data releases

Data releases grant access permissions to certain master data for other clients. In this way, other clients receive reading rights and can use the master data for various assignments. Primarily, releases are used for doors in the area of access rights with several clients using the same doors.

Default value

Value that is entered as the predefined value when creating or resetting a device.

Device classes

Device classes combine the properties of devices with identical functions and identical hardware properties.

E

Endian type

Describes the arrangement of bytes. There is a difference between two types: With LITTLE, the least significant byte is saved first (little end first); with BIG, the most significant byte is saved first (big end first).

H

Hard anti-passback

Creates a lock that prevents multiple access to a room zone by a person.

L

Language-dependent

The display of language-dependent data depends on the relevant user profile. The language variants are managed using the system texts (System - Administration - Texts).

M

Master medium

A master medium (AKA: programming master or master ID card) is a special ID card that is required to synchronise evolo components with the evolo Programmer and to transfer Mifare ID card keys to evolo components or Kaba terminals.

Master medium keys

A master medium key (AKA: site key or system key) is a specially coded and encrypted data package in which a Mifare ID card key is packed. Mifare ID card keys are saved on master media in the form of master medium keys or transferred to devices such as evolo components, Kaba terminals or KCP compact/remote readers.

O

Offline components

Offline components are standalone components, meaning all readers, fittings and cylinders attached to doors that work without having any direct connection to the application. Data is supplied via XS manager (XS offline components) or evolo Programmer (evolo standalone components).

P

Person

Persons are employees whom you allocate access permissions. The person needs an ID card for identification when booking to gain access.

R

Reader

Readers are connected direction-dependent to a door. Room zones are formed by grouping readers into organisational units. The reader functions are defined in the access module via the door administration.

Revision

Changes made to the system data using the dialog interface are logged in the revision.

S

Service information

The service information provides all operation-relevant information on the system and the options that are installed.

U

User groups

User groups are used to manage permissions to the system for all users. Access can be set individually for all system dialogs and functions as full access, or as read-only access.

Users

The term user refers to persons operating the system and maintaining the various master data in the individual dialogs of the system. There is a difference between users and persons, who merely receive access permissions.

W

Wizards

Wizards are task-oriented input methods that combine multiple logical process steps from different dialogs in a single dialog or that combine a sequence of dialogs to simplify configuration. Any further actions that are needed to finish a task are triggered at the end of dialog entry where necessary. These primarily include configuration and basic supply of terminal peripherals which have been created or changed by the wizard application.

Working hours models

Working hours models are a combination of components to define the daily program which is used while taking calendar-related specifics on a particular day into account. The Working hours models are used with: work schedule planning in the time system · door control during access · access permissions in the access system · motion recording in the access system. The components of the working hours models include: · calendar · special days · day types · processing types · weekly profiles · daily programs.

X

XS Manager

The XS manager is a stand-alone application, but is also part of MATRIX. The XS manager is used to exchange data between the application and XS offline components. XS manager features its own dialog interface for operation.

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