

Emergency exit and escape route system

SafeRoute from dormakaba



Table of contents

Introduction	05
Features and characteristics	06
SafeRoute monitors, controls and unlocks doors in case of danger	08
SafeRoute components	10
Choosing functions with licence cards	12
System examples	14
Single-door system	14
Multi-door system	15
Interlock door system with automatic doors	16
Network door systems	17
Control units and additional components	18
STL-G door terminal	18
SCU-DR – control unit	22
Components for mounting on DIN rails	24
Power supply units	26
SCU-UP – control unit	28
SCU-UP terminal supply sets	30
ST key switches	33
Additional components	34
Licence levels	38
Licence levels	38
Integrated additional functions	40
Door locking devices	42
STV 1xx	42
STV 2xx	44
STV 50x	46
STV-A adapter	48
SVP emergency-escape locks with automatic locking action	49
STV-ETS adapter for barrier systems	50
TMS Soft®	52
Panel control units	54
SCMC20	55
SCMC30	56
SCMC40	56
SCMC80	57
Safety instructions	58
EltVTR (German directive for electrical locking systems on escape route doors)	58
EN 13637	59



dormakaba 

Save lives, protect valuables

With regard to safety, doors in emergency exits and escape routes pose an enormous challenge as they have to meet contrasting requirements – protecting people's lives on the one hand, while protecting property on the other hand.

With escape routes, building regulations require doors to be easily opened from inside without external tools. At the same time, insurers, police and facility operators require the most secure lock possible against misuse and break-ins.

SafeRoute is a modular emergency exit and escape route system that successfully combines these contrasting requirements.



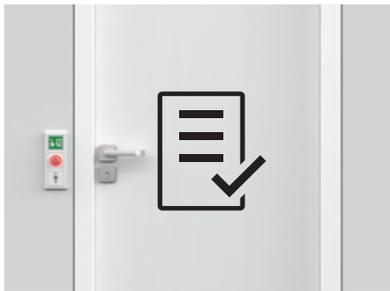
Illustration shows STL-G door terminal with backlit SES-UP escape route symbol and Europrofile cylinder. Versions with Swiss round cylinders are also available.



SafeRoute – Features and characteristics

Doors in emergency exits are subject to many different requirements. SafeRoute offers comprehensive functions and options for securing emergency exits, which is why it features a flexible and modular design.

The spectrum of use ranges from simple retrofitting of a door into a secure escape route door to installation of a complex escape route system with central monitoring and control via door management software or panel control unit.



Planning, installation and commissioning – simple and secure

SafeRoute has been developed with simple planning and commissioning in mind. The range of functions for each SafeRoute system can be determined using a three-level licence card model, while the hardware remains largely identical and can therefore be planned very efficiently. All system components are connected in any order with the four-wire DCW® bus. Commissioning with preconfigured parameters is enough for many requirements. The status display via the light ring provides assistance during commissioning and also makes operation and service easier as all system statuses are displayed in a differentiated manner.

Further customisation can be made with the TMS Soft® door management software.



Openly controlled in case of alarms

In the event of an alarm or danger, an individual escape route door or a group of doors is released via the emergency button or an external alarm system (e.g. smoke detector). The alarm is signalled visually and acoustically and can also be forwarded to a superordinate building control system if required.

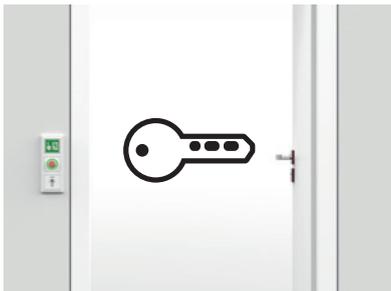
Additionally, all new escape route door functions in accordance with EN 13637 are possible with SafeRoute, for example automatic resetting of the alarm, so long as the escape route door has not been opened after activation of the emergency button (otherwise acknowledgement must be done on-site via the key switch). Even a time delay between activation of the emergency button and release is possible (please observe country-specific provisions).



Lock entrances securely

SafeRoute systems automatically lock escape route doors after authorised access. If relocking is not possible, door-open monitoring will send out an alarm.

- All components in the SafeRoute system are monitored for manipulation and tampering, down to the DCW® bus cable between the components.
- All events are monitored in real time and, if necessary, can be forwarded to external security systems.
- In conjunction with the emergency-escape locks with automatic locking action, insurance-compliant locking is automatically created – for increased protection against break-ins even with multipoint locking systems up to RC4 (depending on the door construction).



Authorised access

In its simplest version, authorised access is granted by unlocking with the key switch from inside.

Depending on the licence, there are up to three possibilities of unlocking:

- Short-term door release for quick movement (relocked after 3–180 seconds)
- Long-term door release (relocked after 3–120 minutes)
- Permanent unlocking

With additional components, the range of functions for a door can be expanded (depending on licence):

- DCW® outer key switch
- Touchscreen display with code keypad
- "Permanent open" controlled depending on time of day via integrated timer
- Remote control in conjunction with video monitoring or monitoring from another room, e.g. at prisons, closed departments etc.
- Release via an access control system



Everyday convenience function: "automated door opening"

With an additional revolving door drive and a self-locking motorised emergency-escape lock with automatic locking action, an escape route door secured with SafeRoute can automatically open after release or using controls based on the time of day.

- Comfort in daily operation
- Barrier-free escape routes with "automated door opening"



Network controlled and monitored

Escape route doors monitored with SafeRoute can be networked even over long distances and centrally monitored and controlled with the TMS Soft® door management software and SafeRoute panel systems. Depending on requirements, network connection is established via LON or LAN. The interfaces for OPC and ESPA allow for integration into existing building management systems.

Escape routes – from simple to complex

Depending on the licence chosen, additional functions and complex escape routes can also be realised.

- Bidirectional escape routes
- Escape routes as a combination of individual doors, e.g. as interlock groups for operating theatres, clean rooms, court rooms, penal institutions, etc.
- Logic functions

SafeRoute monitors, controls and unlocks doors in case of danger

SafeRoute monitors and controls the locking devices of doors in escape routes in accordance with the guidelines and standards of EltVTR (German directive for electrical locking systems on escape route doors) and EN 13637. In case of a hazard or malfunctions, the door is unlocked, while it otherwise remains locked on a day-to-day basis.

Escape route door with standard operation

The door is locked. Authorised use is usually made via a key switch on site. Depending on the individual requirement, the use of PIN codes, on-site access controls or an integrated real-time clock are also possible.

The status of the door is continuously monitored and displayed via the integrated light ring. In special cases, such as attempted tampering, a distinct visual signal as well as an acoustic alarm will be triggered.

Escape route door in case of alarm/danger

The door is locked. In cases of alarms and danger, the door is released via the emergency button or an external alarm system (e.g. smoke detector or central fire detection system). Additionally, an audible and visual alarm will be triggered.

Each SafeRoute system can be individually adapted to requirements on site, such as via time-delayed release of the door in case of alarm and/or automatic resetting of the alarm if the escape route door has not been opened (country-specific provisions must be observed).

Light ring for display of operational status

With different light signal combinations, the light ring on the emergency button provides information about the current status of the door and possible events in the SafeRoute system, such as in the event of authorised and unauthorised access and attempts at entry, and as visual support for operation and maintenance.

Modular expansion

The range of functions in a SafeRoute system can be expanded with additional modules, e.g. for use as a multi-door switchboard and for connecting to the superordinate building control system.



01

Illustrations show the flush-mounted terminal, consisting of the individual components of the SafeRoute control unit (SCU-UP) as a flush-mounted insert with a ST 55 key switch and an STD-UP touchscreen display. The current status of the door is shown via the light ring.

01 Standard operation

Door is locked: Light ring is red

02 Standard operation

Door is released, light ring is green, door can be opened

03 In case of alarm

Door is released, light ring is green and flashes yellow, door can be opened

04 Tampering notification

Light ring is red and flashes yellow, door cannot be opened, tampering notification for locked system



02



03



04



SafeRoute components

The basic components in a SafeRoute system are an electric door locking device (STV), a SafeRoute control unit (SCU) with a SafeRoute licence card (SLI) and an emergency button with a connected key switch (ST). With further components, a SafeRoute system can be expanded and adapted to individual purposes.

The SCU – a central operating and control unit with integrated emergency button

The SCU SafeRoute Control Unit becomes a central operating and control unit (master) through the inserted licence card and a connected key switch. Each SCU has an input for connection to a central hazard alert control unit and/or a central fire alarm control unit or a smoke detector for emergency release. External sensors/actuators can be integrated without a DCW® bus interface using additional inputs and outputs. Optional dormakaba DCW® components can be used to expand the functionality of a SafeRoute system as needed. Without a licence card, the identical SCU functions as an additional emergency button (slave), e.g. for bidirectional escape routes (escape route for both directions).

Connect components easily with DCW® bus

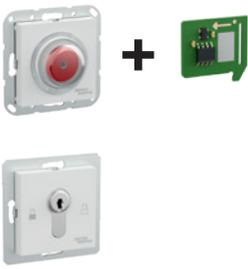
Intelligently connected via the DCW® bus (Dormakaba Connect and Work), the connected components detect each other and are centrally supplied with power at the same time. Up to four door locking devices can be connected to an SCU control unit (master). In addition, the connection of four similar DCW® components each is possible (e.g. up to four emergency buttons and four key switches). All components are connected in any topology with a four-core cable, and power can be supplied from any point in the system bus. The maximum bus length is 300 m. For maximum utilisation of the cable length, power can be supplied at multiple points.

Building-wide networking

Using the LON and LAN network standards, the escape route door systems in the building can be networked. From Basic set licence level upwards, systems can be expanded with a LON/LAN module can and centrally monitored and controlled with TMS Soft®. In this way, the SCU (master) forms the interface to the network.

STL-G NT door terminal with integrated power supply unit and backlit SES-UP escape route symbol. Connection to STV 1xx electro-mechanical locking device is only done via a four-wire cable (DCW® bus). Depending on the licence chosen, additional functions and complex escape routes can also be realised.

Basic components

<p>STV 1xx Electromechanical door locking device</p> 	<p>STV 2xx Electromagnetic door locking device</p> 	<p>STV 5xx Electromechanical door locking device for concealed frame installation</p> 	
			
<p>Basic set as master "All-in-one terminal" (with NT power supply unit)</p> 	<p>STL-G as master "All-in-one terminal" (with or without NT power supply unit)</p> 	<p>SCU-UP as master Individual components</p> 	<p>SCU DR as master DIN rail mounting and individual components</p> 
			
		<p>STL-G (slave)</p> 	<p>SCU-UP (slave)</p> 

SafeRoute Control Unit SCU as master

With the inserted licence card, an SCU becomes the control and monitoring centre (master). A master can monitor and control up to four escape route doors depending on the licence type. Each connected escape route door needs at least one emergency button with a connected key switch and an electric door locking device. Power for individual components is supplied from any point in the DCW® bus, e.g. through an STL-G with integrated power supply unit or an external power supply unit like PSU-24, NT 24-1.5s or USV-24 3.

Example selection of optional components

<p>SVP 2xxx DCW® M-SVP 22xx DCW® Self-locking motorised emergency-escape lock</p> 	<p>STL-G (slave) Additional emergency button and key switch</p> 	<p>SCU-UP (slave) Additional emergency button and ST key switch</p> 	<p>STV-A adapter For locking devices without DCW® bus (certifications in accordance with EltVTR or EN 13637 must be observed)</p> 	<p>LON or LAN network adaptors e.g. as SLAN-DR version</p> 	
		<p>ST xx DCW® Additional key switch</p> 	<p>SIO-DR I/O module DCW® Expansion for connection of analogue actuators and sensors</p> 	<p>SCMC20 Panel module insert for security-related switch-off from a control centre</p> 	<p>TMS Soft® Parameterisation and management software for Windows PC for managing and monitoring escape route door systems. With interfaces to external door management systems (e.g. OPC and ESPA).</p>

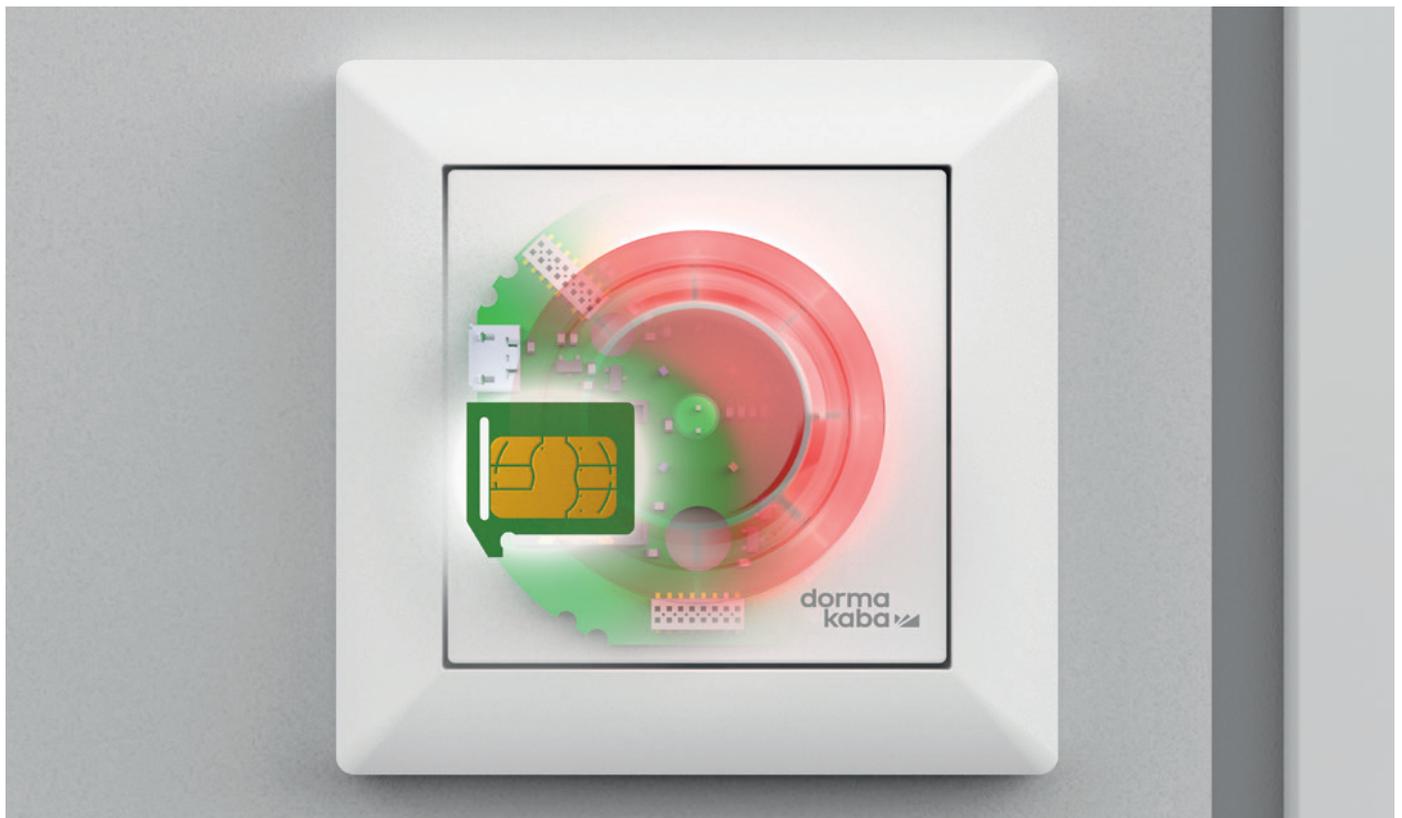


Choosing functions with licence cards

An escape route system can be easily set up as a ready-made basic supply set consisting of a surface-mounted terminal and licence card or as a modular system consisting of individual components and the Standard and Premium licence cards. If the requirements for the system's range of functions change during operation, adjustment via parametrisation or the selection of another licence card is always possible. An exchange of the installed hardware is not necessary.

There are three licence levels: Basic set including green surface-mounted terminal or white flush-mounted terminal with power supply unit, as well as the individual Standard and Premium licence cards for combination with terminals in any colour with and without power supply unit and with remote control units for DIN rail mounting. The licence cards remain in the SafeRoute control unit (SCU) during operation. With a licence card inserted, an SCU becomes a control and monitoring panel (master) with the possibility of using further SCUs (slaves). The Basic set is sufficient for setting up a simple system with the most important functions (e.g. setting of release duration).

The connection of additional hardware such as SVP motorised locks, I/O modules and network adapters is already possible with the Basic set. The Standard and Premium licence levels also fulfil requirements that go far beyond pure escape route security, such as logic functions or an interlock control unit integrated via the DCW® system bus for up to four doors.



Note:

The licence model described here is valid from firmware version 2.0 of the SCU control unit used.
TMS Soft fully supports this licence model from version 5.0.048.

		SafeRoute Basic set	Standard	Premium	Premium with SCU VdS
Release	Via emergency button (with alarm trigger)	○	○	○	○
Unlock	Short-term door release	●	●	●	●
	Long-term door release (2 – 120 minutes adjustable)	●	●	●	●
	Permanent unlocking	○	○	○	○
	Via external alarm system (fire detection system, etc.)	○	○	○	○
	Reset sound when long-term/permanent door release is activated	○	●	●	●
	Different door release types available	○	●	●	●
	Different key switch operating times trigger different door release types (combination function)	○	●	●	●
Lock	After short-term door release has expired	○	○	○	○
	After long-term door release has expired	○	○	○	○
	After alarm reset	○	○	○	○
	If the door has not been opened following activation of the emergency button	●	●	●	●
	After a power failure	○	○	○	○
Alarm management	Immediately after closing	–	●	●	●
	Alarm volumes	●	●	●	●
	Time limits for acoustic alarm signals	●	●	●	●
	Activate/deactivate alarms	●	●	●	●
	Tampering alarm for housing	●	●	●	●
	Tampering alarm for forced entry	●	●	●	●
	SVP pre-alarm – Lever handle pressed	●	●	●	●
	Separate monitoring times until the Door open alarm is triggered after short-term/long-term door release	○	●	●	●
	Separate alarm durations for Door open after short-term/long-term door release	○	●	●	●
	Maintenance alarm	○	●	●	●
Connectivity	Automatic confirmation of smoke detector alarm	–	●	●	●
	Automatic confirmation of tampering alarm for housing	–	●	●	●
	Automatic confirmation of tampering alarm for forced entry	–	●	●	●
	External analogue key switches	●	●	●	●
	External DCW key switches	●	●	●	●
	SVI/SVA/SVP, M-SVP motor locks	●	●	●	●
Parameterisation/ visualisation/control with TMS Soft	DCW I/O modules	●	●	●	●
	Additional emergency buttons (e.g. for bidirectional escape routes)	○	○	○	○
	VdS C-compliant connection to intruder detection systems	–	–	–	●
	Via local RS232 interface of SCU devices	●	●	●	●
	Via LON	●	●	●	●
Free programming of inputs and outputs	Via LAN	●	●	●	●
	SCU devices	●	●	●	●
Time functions	DCW I/O modules	●	●	●	●
	Integrated real-time clock	–	●	●	●
	Definition of schedules (day, week, bank holidays, vacation periods, etc.)	–	●	●	●
Integrated additional functions (formerly separate SLI-A applications)	Historical memory with date and time stamp	–	○	○	○
	T1 release delay up to 15 seconds	●	●	●	●
	Logic functions	–	●	●	●
	Multi-door control (not in conjunction with SCU VdS)	–	–	●	–
Remote control functions via panel (SCMC)	Interlock control	–	–	●	–
	Remote control for normal daytime operation via LON and TMS Soft	●	●	●	●
	Remote control for normal daily operation via LAN and TMS Soft	●	●	●	●
Security features using panel (SCMC)	Remote control for normal daily operation via autonomous LON	●	●	●	●
	Central release	–	–	●	●
	T2 release delay up to 180 seconds	–	–	●	●
Miscellaneous	Release blocking	–	–	●	●
	Setting of brightness	●	●	●	●
	Setting of flashing frequency	–	●	●	●

– Not available ○ Available, parameters cannot be set ● Available and parameters can be set



SafeRoute System examples

Single-door system

Set-up of an individual door as a secured escape route door in accordance with EN 13637 and EltVTR

Necessary components

- 01** SafeRoute Basic set as control and monitoring centre with power supply unit, emergency button, key switch, integrated distributor board and including licence card
- 02** A door locking device (e.g. STV 1xx)
- 03** Connection of components via DCW® bus (four-core J-Y(St)Y cable 2x2x0.8 mm)

Functions

- In standard operation, the door is closed and locked, and can be temporarily or permanently unlocked with the key switch.
- If the door is closed again after authorised access, it is locked automatically.
- If the door remains open after authorised access, a pre-alarm will be triggered off after 30 seconds and a main alarm after another 60 seconds.
- In case of danger, the door will be released by pressing the emergency button or via a connected alarm system, such as a fire detector. In addition, an alarm will be triggered.

Further connection options with SLI Basic licence card

Analogue on Basic set, parameters can be set if required

Input 1: Static drive
Input 2: Fire or smoke detection system

Output 1: Locked
Output 2: General alarm (alarm signal)

Via distributor board (included in the scope of delivery):

- Pulse actuation
- Additional key switches
- External tamper switch
- Relay contact PCB, e.g. for potential-free "collective alarm" output

DCW® bus interface

STV 1xx, STV 2xx, STV 5xx, max. 4 door locking devices

An STV-A adapter for analogue dormakaba door locking devices or for integration of third-party products with analogue switch contacts without DCW® bus interface is also included in the Basic supply set (certifications in accordance with EltVTR or EN 13637 must be observed).

- DCW I/O modules for additional potential-free inputs and outputs
- DCW motorised locks, e.g. SVP 2000 F



Multi-door system

Set-up of an escape route system with up to four doors in accordance with EN 13637 and EltVTR.

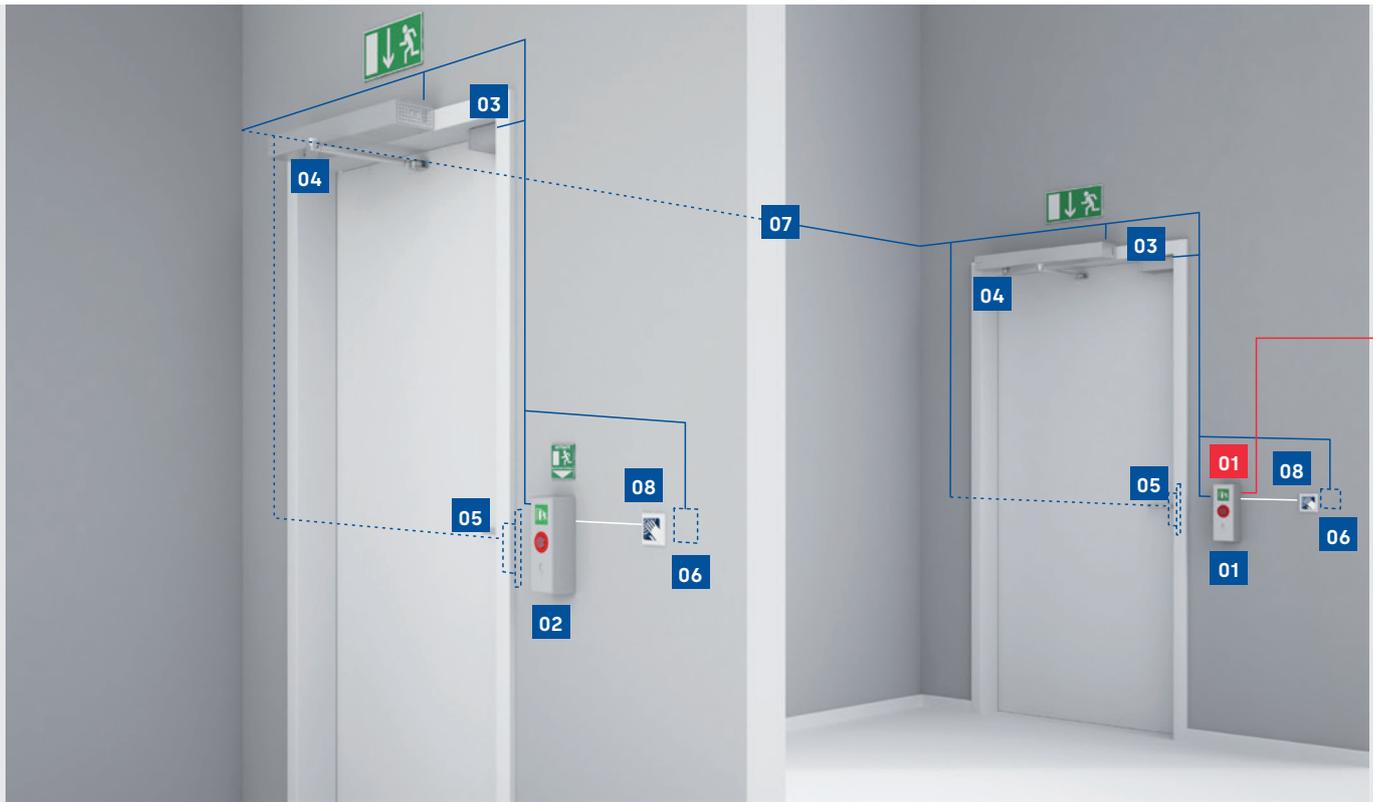
Necessary components

- 01** An SCU-DR as a control and monitoring centre (master) with licence card SLI Premium
- 02** Central power supply unit, e.g. NT-24 5
- 03** 4 STL-G door terminals (slave), emergency button and key switch
- 04** 4 door locking devices (e.g. STV 1xx)
- 05** Connection of components via DCW® bus (four-core J-Y(St)Y cable 2x2x0.8 mm)

Functions

- In standard operation, the doors are locked and can be temporarily or permanently unlocked with the key switch. Each door is individually operable.
- If a door is closed again after authorised access, it is locked automatically.
- If a door remains open after authorised access, a pre-alarm will be triggered off after 30 seconds and a main alarm after another 60 seconds.
- In case of danger, the doors will be centrally released by pressing the respective emergency button or via a connected alarm system, e.g. a hazard or fire alarm.
- Integration of doors into the TMS Soft® management software with real-time monitoring with optional LON/LAN module on the SCU-DR (master).

Further connection options with SLI Premium licence card
Analogue on the SCU (master and slave), parameters can be set
Input 1: Static drive Input 2: Fire or smoke detection system
Output 1: Locked Output 2: General alarm (alarm signal)
<ul style="list-style-type: none"> • ST-VP key switch distributor board • Relay contact PCB, e.g. for potential-free "collective alarm" output
DCW® bus interface
STV 1xx, STV 2xx, STV 5xx, max. 4 door locking devices
STV-A adapter for analogue dormakaba door locking devices or for integration of third-party products with analogue switch contacts without DCW® bus interface (certifications in accordance with EltVTR or EN 13637 must be observed)
SVP 2xxx DCW®, M-SVP 22xx DCW®, motorised emergency-escape locks for increased protection against break-ins (up to RC4)
ST 3x DCW®, ST 55 DCW® LED, max. 4 additional key switches
RS232 interface on the SCU-DR (master)
LON/LAN adapter SLON-UP, SLON-DR, SLAN-DR
Parametrisation via TMS Soft®



Interlock door system with automatic doors

Requirement: Set-up of a secured escape route with 2 automatic doors in accordance with EN 13637 and EltVTR (German directive for electrical locking systems on escape route doors). As interlock network for operating theatre entrances, clean rooms, court rooms, penal institutions etc.

Necessary components

- 01** An STL-G door terminal as a control and monitoring centre with SLI Premium licence card
 - 02** An STL-G door terminal (slave), emergency button and key switch
 - 03** 2 door locking devices (e.g. STV 1xx)
 - 04** 2 revolving door drives, e.g. ED 100 or ED 250 with safety sensors
 - 05** 2 motorised emergency-escape locks, e.g. SVP 2xxx DCW®
 - 06** 2 STD-UP touchscreen displays as access controls for automatic door opening
 - 07** Connection of the components via DCW® bus (four-core cable J-Y(St)Y 2x2x0.8 mm)
 - 08** 2 wall buttons for opening doors from inside, e.g. Magic Switch sensor buttons, connection directly to the SCU
- Power is supplied via the power supply unit of the revolving door drives.

Functions

- In standard operation, the doors are closed and locked. A door can only be opened if the other is closed and locked (interlock function).
- The interlock can be permanently unlocked with the key switch, e.g. for transport purposes.
- The length of time the door is open can be defined freely.
- If a door is closed again after authorised access, it is locked automatically.
- If a door remains open after authorised access, a pre-alarm followed by a main alarm will be triggered after a pre-defined period.
- In case of danger, the doors will be released by pressing the emergency button or via a connected alarm system, such as a fire detector. In addition, an alarm will be triggered.
- Historical memory with date and time stamp
- Integration of doors into the TMS Soft® management software with real-time monitoring with a LON module in one of the STL-G door terminals



Network door systems

All door systems can be parameterised, monitored and controlled building-wide with TMS Soft® via the LON or LAN network.

In addition to the door systems, the following components are needed

- 01** A LON/LAN interface (e.g. SLON-UP or SLAN-DR) on the SCU-xx (master) for each door system with Basic set licence level or above
- 02** A PC with LON/LAN interfaces and TMS Soft®
- 03** LON and/or LAN network
- 04** Optional panel control unit for control and monitoring without a PC (LON)

Functions

The scope of the functions for which parameters can be set depends on the licence level.

- Centrally control and monitor individual doors and door areas
- Log entries and cases of alarms with date and time stamps
- Set parameters for doors and store time profiles
- Interfaces to external building management systems (e.g. via OPC-DA)
- Allocation of doors for interlock areas when used in interlock application

Further connection options

Analogue on the SCU (master and slave), parameters can be set

2 inputs:

- One input used for the buttons
- One input used, e.g. for fire or smoke detection system

2 outputs:

- One output can be parameterised for the automatic door drive
- One output free for controlling external components, e.g. an external alarm siren (general alarm)

DCW® bus interface

STV 1xx, STV 2xx, STV 5xx, max. 4 electric door locking devices

STV-A adapter for analogue dormakaba door locking devices or for integration of third-party products with analogue switch contacts without DCW® bus interface (certifications in accordance with EItVTR or EN 13637 must be observed)

STV-ETS for connecting dormakaba barrier systems

SVP 2xxx DCW®, M-SVP 22xx DCW®, motorised emergency-escape locks for increased protection against break-ins (up to RC4)

SIO-DR and I/O DCW® module, additional programmable inputs/outputs

ST 3x DCW®, ST 55 DCW® LED, max. 4 additional key switches

RS232 interface on the SCU (master)

LON/LAN adapter SLON-UP, SLON-DR, SLAN-DR

Parametrisation via TMS Soft®

STL-G door terminal

Control unit with emergency button and key switch



The STL-G door terminal is comprised of an emergency button and key switch in a surface-mount casing. Together with an electrical locking device, the STL-G door terminal fulfils the requirements of EN 13637 and EltVTR (German directive for electrical locking systems on escape route doors).

With a licence card, the STL-G becomes a control and monitoring centre (master). Without a licence card, the STL-G door terminal can also be used as an additional door terminal for an escape route door as a "slave" in a group.

Equipment and features

- Tampering-protected door terminal housing made of coated light metal frame and plastic front panel made of robust ABS V0
- Illuminated non-locking emergency button
- 8-fold segmented light ring as status display
- Integrated alarm siren
- Key switch for alarm acknowledgement, locking and unlocking with holder for profile half cylinder or 30/10 Swiss round cylinder, e.g. dormakaba penta
- Range of functions depends on the selected licence card
- Parameters for functions can be set with TMS Soft®
- Available with integrated power supply unit
- Comfortable installation thanks to hinged housing
- Easy wiring and reliable operation thanks to DCW® bus technology
- Easy set-up with "one-button commissioning"



- 01 System 55 shaft, slot for flush-mounted modules, e.g. for backlit SES-UP escape route symbol (accessories)
- 02 SafeRoute SCU-TL control unit with slot for an SLI licence card
- 03 Light ring for status display
- 04 Non-locking emergency button
- 05 Key switch with holder for profile half cylinder or Swiss round cylinder
- 06 Alarm siren and cover contact
- 07 Integrated power supply unit (for STL-G NT version only)
- 08 STL-G switches (accessories)
- 09 SLON-UP LON adapter (accessories)

STL-G**Connection options and possible accessories**

Internal ST key switch

Licence card

Key switch distributor board

STV-A adapter

Analogue inputs and outputs

Input 1: "Static drive" default

Input 2: "Fire or smoke detection system" default

Output 1: "Locked" default

Output 2: "General alarm (alarm signal)" default

DCW® bus interface

Max. 4 STV 1xx, STV 2xx, STV 5xx, STV-ETS electric locking devices (for connecting dormakaba barrier systems) or STV-A adapter (for analogue dormakaba door locking devices or for integration of third-party products with analogue switch contacts without DCW® bus interface (certifications in accordance with EltVTR or EN 13637 must be observed)

SVi/SVA/SVP 2xxx DCW®, M-SVP 22xx DCW®, motorised emergency-escape locks for increased protection against break-ins (up to RC4) and with automatic doors

I/O module DCW® additional module with 4 analogue inputs and outputs for integrating sensors/actuators

ST 3x DCW®, ST 55 DCW® LED, max. 4 additional key switches

SCU-UP or STL-G (without licence card) as "slave", emergency button with 1 ST connection, max. 4 additional SCU

- as bidirectional escape route
- as interlock or multi-door system

STD-UP touchscreen display (max. 4)

- as a "downcounter" for delayed release
- as access control with code keypad

RMZ DCW®, smoke detector/smoke detector with integrated power pack

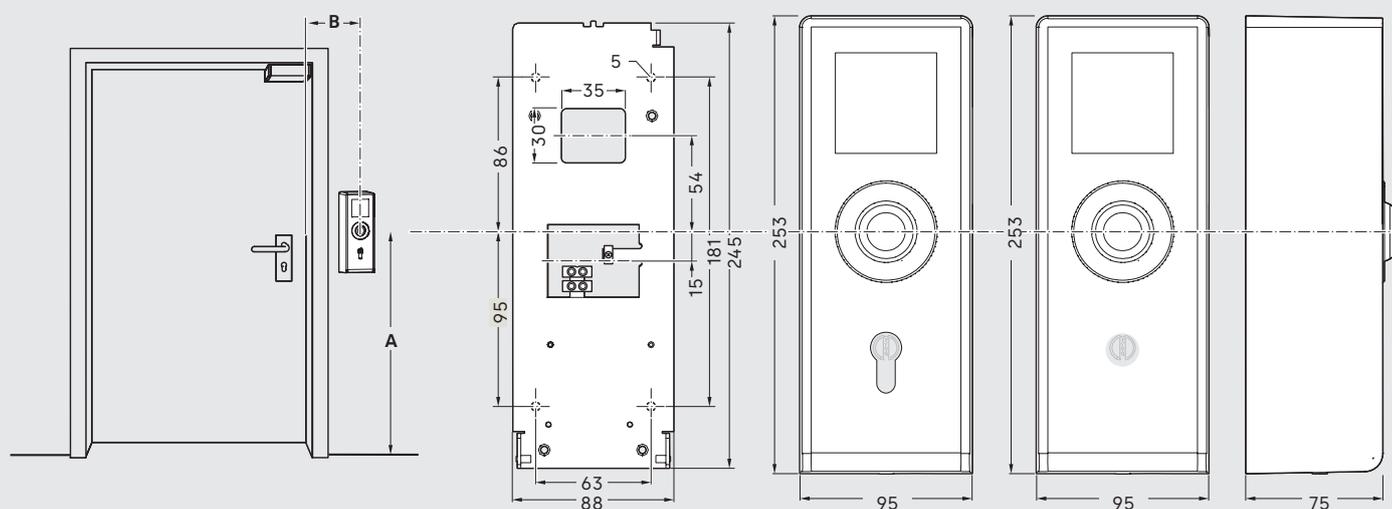
RS232 interface

LON/LAN adapter SLON-UP, SLON-DR, SLAN-DR

Parametrisation via TMS Soft®

Panel control unit

Without safety functions (remote control in normal day-to-day operation)



A EltVTR = 850–1200 mm

A EN 13637 = 800–1200 mm

B EN 13637 = max. 600 mm

STL-G 4xx for
profile cylinderSTL-G 6xx for Swiss
round cylinder

Colour variants and additional components

The STL-G door terminal is available in different colour variants. Other colours are also available on request. Each STL-G terminal can be fitted with an additional component, e.g. backlit escape route symbol SES-UP, in place of the standard blind covering. Depending on the functional requirements, the Basic supply set or a customised combination of individual components can be selected.

Frames

- White P 100, similar to RAL 9016
- Green P 400, similar to RAL 6001
- Stainless-steel finish Niro P 700, similar to RAL 9006

Front

- Black P 190, similar to RAL 9016
- White P 100, similar to RAL 9016
- Green P 400, similar to RAL 6001
- Stainless-steel finish Niro P 700, similar to RAL 9006



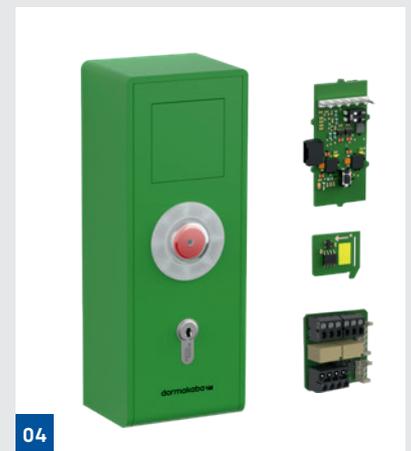
01



02



03



04

Technical data

Power supply	
Version without a power supply unit: via DCW® bus 24 V DC ±10%	
Version with a power supply unit:	
via 230 V AC ±10%	24 V DC
Output voltage	1 A
Output current max.	
Power input	
Closed-circuit current in case of alarm	65 mA 100 mA
Class of protection	IP32
Temperature range	-10 °C to +55 °C
Rel. Humidity	up to 93% (non-condensing)
Dimensions (W x H x D)	approx. 95 x 253 x 75 cm

STL-G door terminal

Included in supplied package: STL-G door terminal with integrated SCU-TL control unit with emergency button and key switch, emergency exit sticker, fastening material and blind covering (backlit SES-UP escape route symbol and locking cylinders are not included in supplied package)

	Colour Frame/front	Article no.	
		Without power supply unit	With Power supply unit
STL-G x10/NT	White/black	56430x10	56431x10
STL-G x11/NT	White/white	56430x11	56431x11
STL-G x12/NT	White/green	56430x12	56431x12
STL-G x14/NT	White/stainless steel	56430x14	56431x14
STL-G x20/NT	Green/black	56430x20	56431x20
STL-G x21/NT	Green/white	56430x21	56431x21
STL-G x22/NT	Green/green	56430x22	56431x22
STL-G x24/NT	Green/stainless steel	56430x24	56431x24
STL-G x40/NT	Stainless steel/black	56430x40	56431x40
STL-G x41/NT	Stainless steel/white	56430x41	56431x41
STL-G x42/NT	Stainless steel/green	56430x42	56431x42
STL-G x44/NT	Stainless steel/stainless steel	56430x44	56431x44

x = 4 for version for profile cylinder PZ

x = 6 for version for Swiss round cylinder CH - RZ



05



06



07



08

STL-G colour and design examples

- 01 STL-G 421 with blind covering
- 02 STL-G 414 with optional SES-UP
- 03 STL-G 612 with optional SES-UP
- 04 Basic set including licence card, distributor board ST-VP and STV-A adapter

Additional components

- 05 Backlit SES-UP escape route symbol
- 06 Key switch distributor board ST-VP
- 07 SLON-UP network adapter
- 08 STL-G V switches

Additional components for the STL-G door terminal		Article no.
SES-UP	Backlit escape route symbol	56490220
ST-VP	Key switch distributor board, for connecting e.g. additional key switches or an on-site access control system as pulse actuation and for adding two potential-free relay contacts	56330990
SLON-UP	LON network adapter The connection is established on the RS232 interface of the SCU control unit (master).	56450012
STL-G V	Distributor boards with ribbon cable to connect to the SCU-TL for convenient wiring of all components in a SafeRoute system in the door terminal housing	56430900

SCU-DR – control unit for mounting on DIN rails



Together with a licence card, the SCU-DR is operated as a control and monitoring panel (master). For setting up an emergency exit and escape route system in accordance with BS EN 13637 or EltVTR, at least one emergency button and one key switch (e.g. SCU-UP 2-item supply set or STL-G surface-mounted terminal) as well as a rod lock door locking device are necessary. Mounting is done on a DIN rail or in the NT G1 / NT G2 housing.

Equipment and features

- Integrated I/O module with four opto-coupler inputs for transmitting external signals and control commands, e.g. access control, analogue locks (SVP 4xxx/6xxx), or blocking input for IDS (energised between 5 V and 28 V AC/DC) and four outputs for actuating external components or for outputting floating contacts
- The default parameters can be adapted to requirements depending on licence and application.
- Display with LEDs for supporting configuration
- Installation on TS35 DIN rail as per EN 50022
- Easy wiring and reliable operation thanks to DCW® bus technology
- Easy set-up with "one-button commissioning"

SCU-DR

SafeRoute control unit for DIN rail mounting

5 64 12 300

Technical data SCU-DR

Power supply via DCW® bus 24 V DC ±10%	
Power input	30 mA
Inputs In 1 to In 4 at 5 V to 28 V AC/DC per input:	at 5V: 3 mA at 12V: 8 mA at 24V: 17 mA at 28V: 28 mA
Outputs Out 1 to Out 2	For each active relay, the power input goes up by approx. 11 mA
Class of protection	IP20
Temperature range	-10 °C to +55 °C
Rel. Humidity	up to 93% (non-condensing)
Dimensions (W x H x D)	approx. 106 x 92 x 65 cm

SCU-DR connection options and possible accessories depending on licence card	SLI Standard	SLI Premium
Analogue		
4 outputs and inputs for each	●	●
Tamper switch input (external cover/housing contact, opener)	○	○
Alarm system output, e.g. fire or smoke detector	○	○
DCW® bus interface		
Max. 4 STV 1xx, STV 2xx, STV 5xx, STV-ETS electric locking devices (for connecting dormakaba barrier systems) or STV-A adapter (for analogue dormakaba door locking devices or for integration of third-party products with analogue switch contacts without DCW® bus interface (certifications in accordance with EltVTR or EN 13637 must be observed)	○	○
SVP 2xxx DCW®, M-SVP 22xx DCW®, motorised emergency-escape locks for increased protection against break-ins (up to RC4)	●	●
ST 3x DCW®, ST 55 DCW® LED, max. 4 additional key switches	●	●
SCU-UP or STL-G (without licence card) as "slave", emergency button with connection 1 ST, max. 4 additional SCUs - as bidirectional escape route - as interlock or multi-door system	● -	● ●
SIO-DR I/O module DCW® additional module with 4 analogue inputs and outputs for integrating sensors/actuators, for DIN rail mounting	●	●
RS232 interface		
LON/LAN adapter SLON-UP, SLON-DR, SLAN-DR	●	●
Parametrisation via TMS Soft®	●	●
Panel control unit		
Panel control unit with remote control	●	●
Panel control unit as safety functions	-	●
- Not available ○ Available, parameters cannot be set ● Available and parameters can be set		

SafeRoute components for mounting on DIN rails



SIO-DR

Bus coupler module for connecting products with analogue switch contacts to the DCW® bus. 4 opto-coupler inputs (interface connection with signals between 5–28 V AC/DC) for external actuator control. 4 floating outputs for control of external components or to emit signals. Parameters for addresses for different requirements are preset.

- Individual requirements can be freely set with the TMS Soft parameterisation software (delayed activation, delayed deactivation, pulse, etc.).

SIO-DR	Additional module with 4 analogue inputs and outputs, for mounting on DIN rail, power supply via DCW® bus Closed-circuit current power input 6 mA, active relay max. 51 mA Power input for inputs per input: <ul style="list-style-type: none"> • 3 mA at 5 V • 8 mA at 12 V • 17 mA at 24 V • 28 mA at 30 V For installation in housing or a switch cabinet with at least IP30 Temperature range: –10 to +55 °C Dimensions (W x H x D) 106 x 92 x 65 mm (6 HP)	56450001
---------------	---	----------



SLON-DR network adapter

Enables linking of SafeRoute SCU control units to LON networks as well as visualisation and parameterisation via TMS Soft®. The connection is made to the RS232 interface of the SCU control unit (master).

Length of the RS232 connections max. 15 m per interface.

SLON-DR	LON network adapter for mounting on DIN rails 3 COM interfaces COM 1 to COM 3 (the ability to use more than one COM interface at the same time depends on the system parameterisation) Power supply 24 V DC ±10% (from DCW® bus) Current consumption 55 mA For installation in housing or switch cabinet with at least IP30 Temperature range: –10 to +55 °C Dimensions (W x H x D) 106 x 92 x 65 mm (6 HP)	56450011
----------------	--	----------



SLAN-DR network adapter

Enables linking of one of the SafeRoute SCU control units to the LAN TCP/IP network as well as the visualisation and parameterisation via TMS Soft®. The connection is made to the RS232 interface of the SCU control unit (master).

Length of the RS232 connection max. 15 m.

SLAN-DR	LAN network adapter for mounting on DIN rails 1 COM interface Power supply 24 V DC ±10% (from DCW® bus) Current consumption 60 mA For installation in housing or switch cabinet with at least IP30 Temperature range: –10 to +55 °C Dimensions (W x H x D) 106 x 92 x 65 mm (6 HP)	56450021
----------------	---	----------



NT-G lockable metal housing with tamper switch

Housing with integrated double-row DIN rail (each 15 HP) for DR components or USV 24 V DC power supply unit and AP 1224 battery pack, maximum four 1224 AP battery packs can be placed in the housing. Class of protection IP30.

NT-G	Lockable metal housing with tamper switch, on-site Europrofile half cylinder in accordance with DIN 18 252 required 230 V AC power supply Dimensions (W x H x D) 305 x 380 x 126 mm	56 126300
-------------	---	-----------



NT-G1 plastic housing for 2 DR components

Housing with integrated DIN rail, IP66 class of protection for interior and external mounting.

NT-G1	Tamper-proof plastic housing, prepared with a DIN rail (12 HP) Dimensions (W x H x D) 254 x 180 x 90 mm Including 7 M20 clamping glands for cable bushing	56 126301
--------------	---	-----------



NT-G2 plastic housing for 6 DR components

Housing with integrated DIN rail, IP66 class of protection for interior and external mounting.

NT-G2	Tamper-proof plastic housing, prepared with 2 DIN rails (18 HP each) Dimensions (W x H x D) 360 x 254 x 111 mm Including 12 M20 clamping glands for cable bushing	56 126302
--------------	---	-----------

SafeRoute components

Power supply units

Planning for power supply unit and DCW® bus wiring

The power supply in a SafeRoute system is supplied via the 24 V DC DCW® bus. The power can be supplied anywhere in the bus via one or more power supply units, depending on the number of components connected. The permissible total length of the bus cabling must not exceed 300 m. For systems in accordance with EN 13637 and EltVTR, a maximum voltage drop of $\pm 15\%$ is permissible.

For the DCW® bus, a J-Y(St)Y 2x2x0.8 mm cable is recommended ($\varnothing 0.8$ corresponds to a cross-section of 0.5 mm²). For short wiring routes, a J-Y(St)Y 2x2x0.6 mm cable can also be used ($\varnothing 0.6$ corresponds to a cross-section of 0.34 mm²).



USV-24 3

Power supply unit for mounting on DIN rails, with battery charge regulator, 24 V DC $\pm 5\%$, 3 A.

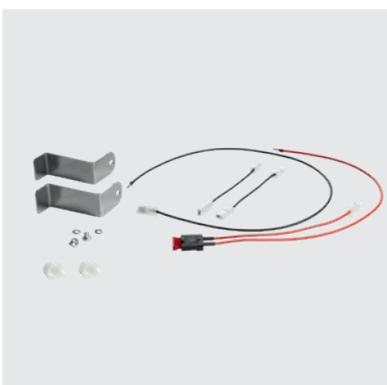
USV-24 3	Input voltage 100–240 V For installation in the NT-G housing, on-site housing or switch cabinet with at least IP30 Temperature range 0 to +50 °C Dimensions (W x H x D) 210 x 93 x 69 mm (12 HP)	56125150
-----------------	---	----------



Battery pack 12 V

Battery pack for USV-12 5 and USV-24 3 to maintain the function of the escape route door or the security system in the event of power failure or voltage drop.

Battery pack AP12V	2 units required in combination with USV 24 3 Output voltage 12 V DC Nominal capacity 3.4 Ah	56622403
---------------------------	--	----------



Cable set 24 V

Cable set for the connection of 2 battery packs.

Cable set 24 V	Cable set for the connection of 2 battery packs	56622404
-----------------------	---	----------

**NT 24 5**

Power supply unit for mounting on DIN rails, 24 V DC $\pm 5\%$, 2.5 A.

NT 24 5	Input voltage 100–240 V Output voltage 24 V DC $\pm 5\%$, 2.5 A For installation in NT-G, NT-G 1, NT-G 2, on-site housing or switch cabinet with at least IP30 Temperature range 0 to +50 °C Dimensions (W x H x D) 72 x 93 x 69 mm (4 HP)	56125100
----------------	---	----------

**RZ-01 with housing**

Power supply unit with LED operating status indicator, 24 V DC $\pm 5\%$, 0.6 A.

RZ-01	Input voltage 230 V AC $\pm 10\%$ Output voltage 24 V DC $\pm 5\%$, 0.6 A Class of protection IP21 Temperature range 0 to +50 °C Dimensions (W x H x D) 160 x 80 x 62 mm	56030100
--------------	---	----------

**PSU 24 flush-mounted power supply unit**

Switching power supply unit for power supply in accordance with EN 60950 for installation in flush-mounted boxes (62 mm deep).

PSU-24	Switching power supply unit in accordance with EN 60950 Input voltage 230 V AC $\pm 10\%$, 50/60 Hz Output voltage 24 V DC Output power 600 mA Dimensions (W x H x D) 51 x 51 x 24 mm (max. diagonal 55 mm)	56030101
---------------	--	----------

**NT 24-1.5 with housing**

Power supply unit 24 V DC $\pm 5\%$, 1.5 A.

NT 24 V-1.5	Input voltage 230 V AC $\pm 15\%$ Output voltage 24 V DC $\pm 5\%$, 1.5 A Class of protection IP21 Temperature range 0 °C to +50 °C Dimensions (W x H x D) 200 x 120 x 75 mm	56332100
--------------------	---	----------

SCU-UP – control unit with emergency button for installation into a flush-mounted socket



The SCU-UP with emergency button is always used with a key switch (e.g. analogue ST 55 key switch). Together with an electrical locking device, the SCU-UP fulfils the requirements of EN 13637 and EltVTR (German directive for electrical locking systems on escape route doors).

Together with a licence card, the SCU-UP becomes a control and monitoring panel (master). Without an inserted licence card, a SCU-UP can be used as an additional emergency button in an escape route system as a "slave".

Equipment and features

- Illuminated non-locking emergency button
- Integrated 8 segment light ring as status display
- Integrated 4 wire DCW® bus interface
- Integrated sabotage switch
- Integrated alarm siren
- Inputs: up to 4 integrated (depending on the system configuration: 2 via system cable and 2 via terminals). Can be expanded with I/O modules by up to 16 opto-coupler inputs.
- Outputs: 2 integrated (via connection terminals, GND switching). Can be expanded with I/O modules by up to 16 floating outputs.
- Use of automatic alarm acknowledgement in accordance with EN 13637 possible
- Connection option for analogue key switch ST 55 and up to 4 DCW® key switches
- Functional scope depends on the selected licence card
- Parameters for functions can be set freely with TMS Soft® (from SLI Basic licence card upwards)
- Easy wiring and reliable operation thanks to DCW® bus technology

Colour variants and additional components

The SCU-UP control unit with emergency button is available in three colour variants. Door terminals can be combined with other SafeRoute components according to individual requirements, e.g. backlit escape route symbol SES-UP. The most popular combinations are also available as supply sets (Page 30).

SCU-UP emergency button/control unit		
SCU-UP control unit with emergency button for installation in flush-mounted sockets (minimum depth 42 mm, recommended depth 62 mm)		
		Order no.
SCU-UP W	White	564 11100
SCU-UP S	Silver	564 11101
SCU-UP A	Anthracite	564 11115

SCU-UP connection options and possible accessories depending on licence card	SLI Standard	SLI Premium
ST 55 key switch	●	●
Analogue		
Input 1: "Static drive" default Input 2: "Fire or smoke detection system" default	●	●
Output 1: "Locked" default Output 2: "General alarm (alarm signal)" default	●	●
DCW® bus interface		
Max. 4 STV 1xx, STV 2xx, STV 5xx, STV-ETS electric locking devices (for connecting dormakaba barrier systems) or STV-A adapter (for analogue dormakaba door locking devices or for integration of third-party products with analogue switch contacts without DCW® bus interface (certifications in accordance with EltVTR or EN 13637 must be observed)	○	○
SVP 2xxx DCW®, M-SVP 22xx DCW®, motorised emergency-escape locks for increased protection against break-ins (up to RC4) and with automatic doors	●	●
I/O module DCW® additional module with 4 analogue inputs and outputs for integrating sensors/actuators	●	●
ST 3x DCW®, ST 55 DCW® LED, max. 4 additional key switches	●	●
SCU-UP or STL-G (without licence card) as "slave", emergency button with connection 1 ST, max. 4 additional SCU - as bidirectional escape route - as interlock or multi-door system	● -	● ●
STD-UP touchscreen display (max. 4) - as a "downcounter" for delayed release - as access control with code keypad	● ●	● ●
RMZ DCW®, smoke detector/smoke detector with integrated power pack	○	○
RS232 interface		
LON/LAN adapter SLON-UP, SLON-DR, SLAN-DR	●	●
Parametrisation via TMS Soft®	●	●
Panel control unit		
Panel control unit as remote control	●	●
Panel control unit with safety functions	-	●

- Not available

○ Available, parameters cannot be set

● Available and parameters can be set

Technical data SCU-UP	
Power supply via DCW® bus 24 V DC ±10%	
Power input	Closed-circuit current 65 mA In case of alarm 100 mA
Class of protection	IP32
Temperature range	-10 °C to +55 °C

SCU-UP terminal supply sets for installation in flush-mounted sockets



The SCU-UP terminal supply set consists of the SCU-UP components with emergency button and a key switch (ST) for installation in flush-mounted boxes. Together with an electrical locking device, the installation sets fulfil the requirements of EN 13637 and EltVTR (German directive for electrical locking systems on escape route doors).

Together with a licence card, the SCU-UP terminal becomes a control and monitoring panel (master). Without a licence card, the SCU-UP terminal can also be used as an additional door terminal for an escape route door as a "slave" in a group.

Equipment and features

- Inputs: up to 4 integrated (depending on the system configuration: 2 via system cable and 2 via terminals).
Outputs: 2 integrated (via terminals, GND switching). Can be expanded with I/O modules by up to 16 floating outputs.
- Integrated sabotage switch
- Illuminated, non-locking emergency button – automatic alarm acknowledgement if the escape route door has not been opened (only permitted under EN 13637)
- 8 segment light ring as status display
- Integrated alarm siren and visual alarm indication
- Key switch for alarm acknowledgement, locking and unlocking with holder for 30/10 profile half cylinder, e.g. dormakaba penta
- Functional scope depends on the selected licence card
- Parameters for functions can be set freely with TMS Soft®
- Easy wiring and reliable operation thanks to DCW® bus technology



3-item SCU-UP supply set with emergency button, ST 55 key switch and PSU-24 power supply unit

Door terminal set comprising of SCU-UP control unit/emergency button and TL-ST S55 key switch as flush-mounted inserts for System 55 as well as double-type cover frames, locking cylinder is not included in supplied package, incl. flush-mounted PSU-24 power supply unit. Basic flush-mounted supply set also includes licence card, key switch distributor board and STV-A adapter for analogue locking devices.

Technical data SCU-UP

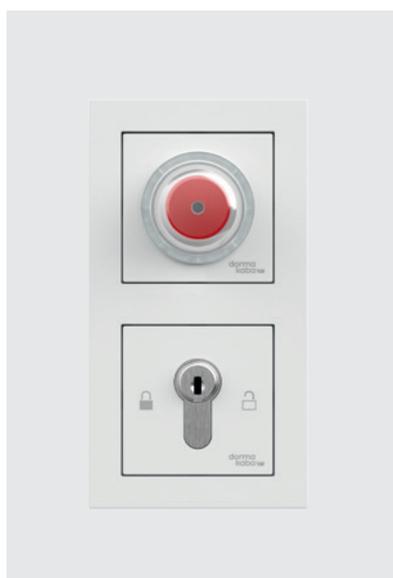
Power input approx. 65 mA in closed-circuit current, approx. 100 mA in case of alarm
 Class of protection IP32
 Temperature range -10 to +55 °C
 Rel. humidity 93% (non-condensing)

Technical data PSU-24 power supply unit

Input voltage 230 V AC $\pm 10\%$, 50/60 Hz
 Output voltage 24 V DC
 Output power 600 mA
 Observe maximum output current. With long cable lengths or many bus devices, supply voltage from multiple feeds may be needed, e.g. to STV door locking devices.

Order no.

SCU-UP NT Set S55 E2W	White	56423000
SCU-UP NT Set S55 E2S	Silver	56423001
SCU-UP NT Set S55 E2A	Anthracite	56423002
Basic flush-mounted terminal supply set	White	56423100



2-item SCU-UP supply set with emergency button and ST 55 key switch

Door terminal set comprising of SCU-UP control unit/emergency button and TL-ST S55 key switch as flush-mounted inserts for System 55 as well as double-type cover frames, locking cylinder is not included in supplied package.

Power supply 24 V DC via DCW® bus
 Power input approx. 65 mA in closed-circuit current, approx. 100 mA in case of alarm
 Class of protection IP32
 Temperature range -10 to +55 °C
 Rel. humidity 93% (non-condensing)

Order no.

SCU-UP Set S55 E2W	White	56422000
SCU-UP Set S55 E2S	Silver	56422001
SCU-UP Set S55 E2A	Anthracite	56422002

Terminal supply sets in Feller Edizio design

Only available in Switzerland via dormakaba Switzerland Ltd



Verification of suitability EltVTR

EN 13637



Verification of suitability EltVTR

EN 13637

STL-UP F22 and STL-UP F32 SES supply sets

Door terminal sets for installation in double or triple-type device boxes (min. depth 48 mm).

Both sets are suited for plugging in an SLI licence card for use as a SafeRoute control unit (master) or for use without a licence card as an additional emergency button (slave). Connection via DCW® system bus. 24 V DC power supply via external dormakaba power supply unit, via DCW® system bus or via 24 V DC on site.

Power supply:	via DCW® bus 24 V DC +/- 10%
Power input:	Closed-circuit current 65 mA, in case of alarm 100 mA
Power input with illuminated emergency exit sign:	Closed-circuit current max. 125 mA, in case of alarm max. 160 mA.
Ambient temperature:	- 10 °C to +55 °C
Class of protection:	IP32 (illuminated emergency exit sign IP30)
Rel. Humidity:	93% (non-condensing)

Double-type supply set

Door terminal set consisting of control unit/SCU-UP emergency button and TL-ST key switch for on-site key switch cylinders (e.g. dormakaba 1007F) pre-installed on base plate with Feller Edizio double-type cover frame.

Order no.

STL-UP F22	Signal green	Edizio due	2041088
-------------------	--------------	------------	---------

Triple-type supply set with illuminated emergency exit sign

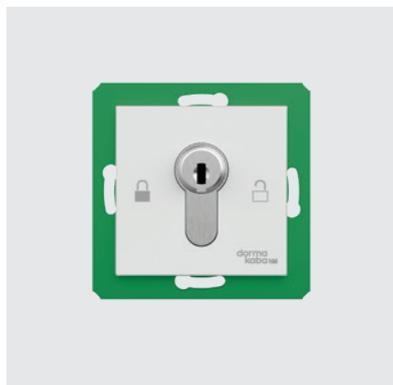
Door terminal set consisting of control unit/SCU-UP emergency button, TL-ST key switch for on-site key switch cylinders (e.g. dormakaba 1007F) and illuminated emergency exit sign
SES-UP as per EN 13637, pre-installed on base plate with Feller Edizio triple-type cover frame.

Order no.

STL-UP F32 SES	Signal green	Edizio due	2041089
-----------------------	--------------	------------	---------

ST key switches

ST key switch for the unlocking and locking of doors in the SafeRoute emergency exit and escape route system and for resetting an alarm. Up to three functions can be switched. The range of functions is dependent on the inserted licence card in the SCU control and monitoring centre (master).



ST 55

For connection to SCU-UP, incl. pre-assembled connection cable to the SCU-UP, manipulation-proof, prepared for installation of a 30/10 profile half cylinder.

Power supply via SCU-UP

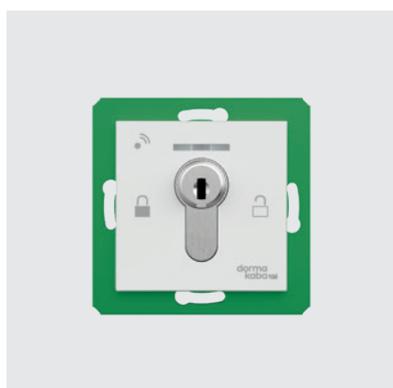
Class of protection IP32

Temperature range -10 to +55 °C

Rel. Humidity 93% (non-condensing)

Order no.

ST 55 W	White	56330510
ST 55 S	Silver	56330501
ST 55 A	Anthracite	56330515



ST 55 DCW® LED

For connection to the DCW® bus, with multi-colour status display and proximity sensor integrated in the cover, manipulation-proof, prepared for installation of a 30/10 profile half cylinder.

Power supply via DCW® bus

Power input: approx. 20 mA in closed-circuit current, approx. 50 mA in case of alarm

Class of protection IP30,

temperature range -10 to +55 °C

Rel. humidity 93% (non-condensing)

Order no.

ST 55 DCW® LED W	White	56330910
ST 55 DCW® LED S	Silver	56330901
ST 55 DCW® LED A	Anthracite	56330915



ST 3x DCW® in light metal housing

Key switch in manipulation-proof version with LED display (red/green), silver LM housing with front plate, suitable for surface-mounted and flush-mounted installation, prepared for installation of a 30/10 half cylinder.

Power supply via DCW® bus

Current consumption approx. 20 mA in closed-circuit current

Class of protection IP30

Temperature range -10 to +55 °C

Rel. humidity 93% (non-condensing)

Housing dimensions (W x H x D) approx. 75 x 75 x 50 mm,

Front plate (flush-mounted installation) 90 x 100 x 2 mm

Order no.

ST 32 DCW®	Prepared for 30/10 profile half cylinder	56343200
ST 34 DCW®	Prepared for 30/10 round half cylinder	56343400

Additional components



SES-UP Backlit escape route sign in accordance with EN 13637

Backlit escape route symbol for installation in flush-mounted sockets (62 mm deep) in accordance with DIN as a System 55 insert

- Active lighting with 4 LEDs (warm white)
- Replaceable pictogram inserts for systems with and without a time delay
- Also permitted in SafeRoute systems instead of the EltVTR backplate (see test certificates)

SES-UP	Backlit escape route symbol, power supply 24 V DC $\pm 15\%$, stabilised Power input max. 60 mA Class of protection IP30 Temperature range -10 to +55 °C	56490220
---------------	---	----------



SLON-UP network adapter

The SLON-UP network adapter enables the connection of up to 2 SafeRoute control units SCU to a LON network (possible functions when connecting more than one control unit depend on the system configuration).

The SLON-UP network adapter is designed for installation in flush-mounted sockets (62 mm deep) in accordance with DIN. The connection is established on the RS232 interface of the SCU control unit (master). The SLI Basic licence card is the minimum requirement.

SLON UP	LON network adapter Power supply 24 V ±15% Power input approx. 30 mA Class of protection IP20 Temperature range -10 to +55 °C Rel. humidity 93% (non-condensing) Interfaces COM 1 and COM 2	56450012
----------------	---	----------



DCW® UP I/O module

Bus coupler module for connecting products with analogue switch contacts to SafeRoute via the dormakaba DCW® bus.

3 opto-coupler inputs (interface connection with signals from 5 to 30 V AC/DC) for external actuator control. 2 outputs for control of external components. Parameters for individual requirements can be set freely with TMS Soft® from version 5.0 upwards (depending on licence).

DCW® UP I/O module	Installation in standard device boxes (62 mm deep) in accordance with DIN Power supply 24 V DC via DCW® bus Power input max. 60 mA Maximum load current for relay outputs 45 V DC/35 V AC, 2 A Recommended cable J-Y(St)Y 2 x 2 x 0.6 mm	19357100
---------------------------	--	----------

Additional components



4-fold I/O module DCW/LON/LAN

Bus coupler module for connecting products with analogue switch contacts to SafeRoute via the dormakaba DCW® bus.

4 opto-coupler inputs (interface connection with signals from 5 to 30 V AC/DC) for external actuator control. 4 potential-free outputs for actuating external components.

Parameters for individual requirements can be set freely with TMS Soft® from version 5.0 upwards (depending on licence).

The module can also be networked using a LON module and LON gateway or LAN module. Additional plug-in LAN or LON module required.

4-fold I/O module DCW/LON/LAN

Power supply 24 V DC via DCW® bus

56333451

Power input max. 45 mA

Power per opto-coupler input:

- 2.8 mA at 5 V:
- 8 mA at 12 V
- 17 mA at 24 V
- 28 mA at 30 V

Maximum load current for relay outputs 24 V DC/1 A

Recommended cable J-Y(St)Y 2 x 2 x 0.6 mm



DCW® bus distributor circuit board

DCW® bus distributor as branching circuit board for DCW® bus device for the DCW® bus, for installation in DCW® distributor housing or customer's own housing

DCW® Bus distributor

Dimensions 75 x 60 x 15 mm

56352100



DCW® distributor housing

DCW® distributor housing IP54 for installation of up to 4 bus devices and/or DCW® I/O modules.

DCW® Distributor housing

Dimensions 200 x 120 x 75 mm

56352000



BL 01 flashing light

Green flashing light in impact-resistant ABS housing, for horizontal mounting.
Approx. 80 flashes/minute

BL 01 Flashing light	Power supply 24 V DC Power input max. 250 mA Class of protection IP54 Temperature range -20 to +50 °C Dimensions Ø 108 mm, Height 133 mm	56330730
---------------------------------	--	----------



AS 01 siren

Multi-function siren for wall mounting in accordance with DIN. 28 programmable sound types with DIN tone, adjustable volume up to 98 dB/A maximum at 1 m. International emergency signal for evacuation.

AS 01 siren	Power supply 24 V DC Power input 32 mA depending on tone frequency class of protection IP65 Dimensions Ø 93 mm, Height 102 mm Temperature range -20 to +50 °C	56080100
--------------------	---	----------



DCW bus distributor flush-mounted

Distributor board with 6 terminal rows for installation in device boxes (62 mm deep) in accordance with DIN. Enables the connection of up to six DCW® bus devices and the separate power supply of 24 V DC +/-15% (stabilised) for the DCW® system bus.

DCW-BV UP	Cable recommendation: J-Y(ST)Y 2x2x0.6 mm or J-Y(ST)Y 2x2x0.8 mm	56352101
------------------	---	----------

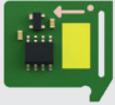


DCW bus distributor DIN rail

Distributor board with 12 terminal rows for mounting on TS35 DIN rail, three divider units. Enables the connection of up to 12 DCW® bus devices and the separate power supply of 24 V DC +/-15% (stabilised) for the DCW® system bus.

DCW-BV DR	Cable recommendation: J-Y(ST)Y 2x2x0.6 mm or J-Y(ST)Y 2x2x0.8 mm	56352102
------------------	---	----------

Licence levels



Together with an SLI licence card, an SCU becomes a control and monitoring panel (master). The scope of functions is determined based on the respective licence card.

Basic set (yellow)

The Basic set is a convenient supply set consisting of a green surface-mounted terminal with power supply unit, licence card, key switch distributor board and STV-A adapter.

Functions

- Comprehensive supply set consisting of hardware and licence card
- Prepared for the use of non-system locking devices (e.g. if analogue TV 500 is specified when retrofitting existing systems) thanks to the STV-A adapter included
- Freely programmable inputs and outputs
- Functions of the internal key switch freely configurable
- Setting of brightness of light ring
- Automatic release acknowledgement in accordance with EN 13637 (if the door has not been opened within 60 seconds)
- Networking via LON and LAN network (with optional LON or LAN adapter)
- Visualisation, control and parametrisation via TMS Soft® (with interface to superordinate building management systems)
- Panel technology via LON/LAN Remote control and visualisation without security relevance (e.g. opening doors for visitors during normal daytime operation)
- EN 13637 additional function "Time delay T1" (delaying of a release by up to 15 seconds) already integrated

Connection of further DCW® components:

All DCW® hardware components can be used. Up to four devices per device type can be connected to (e.g. four door locking devices and four key switches and four I/O modules, etc.)

SLI Standard (white)

The Standard licence card can be freely combined with all SCU control units and STL-G surface-mounted terminals in all colour combinations.

Functions

The SLI Standard licence card has the same range of functions as the Basic set with the following additional functions

- Operating time for triggering the long-term/permanent unlocking modes configurable
- Combi-function of short-term, long-term and permanent unlocking with optional deactivation of an unlocking mode
- Parameters for door-open monitoring can be set (time until pre-alarm / main alarm and duration of alarm)
- Separate door-open monitoring times can be set for each unlocking type
- Parameters for maintenance alarm can be set
- Setting of flashing frequency on light ring
- Integrated real-time clock with time switch (parameters for special days, public holidays, vacation periods, etc. can be set)
- Historical memory with date/time stamp
- Integrated logic functions for the inputs and outputs of common logics, such as AND logic, NAND logic, OR logic, etc.

Connection of further DCW® components:

All DCW® hardware components can be used. Up to four devices per device type can be connected (e.g. four door locking devices AND four key switches AND four I/O modules, etc.)

x = 4 for version for profile cylinder PZ
x = 6 for version for Swiss round cylinder CH - RZ

Basic set	Supply set including surface-mounted terminal	56434x22	SLI Standard	Licence card	56412003
------------------	---	----------	---------------------	--------------	----------



SLI Premium (light green)

The Premium licence card can be freely combined with all SCU control units and STL-G surface-mounted terminals in all colour combinations. It also integrates multi-door control, interlocks for up to four doors via the DCW® system bus and the use of panel safety functions.

Functions

The SLI Premium licence card has the same range of functions as SLI Standard with the following additional functions:

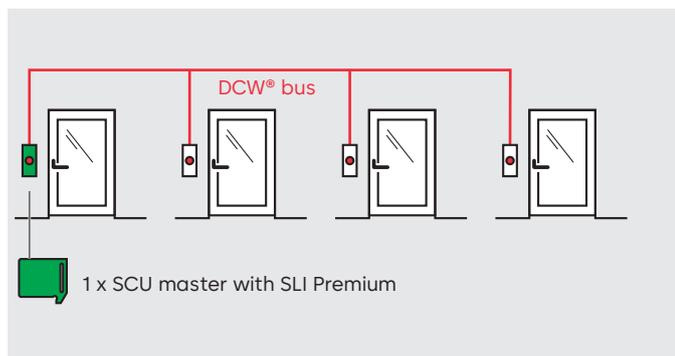
- Multi-door control or interlock control unit: With just a single SCU as master, up to four doors can be controlled and monitored independently or dependent on each other. The system wiring is made in the DCW® bus. For networking of up to 4 doors, only one network adapter (LON/LAN) is required.
- Security-related central release: By pressing the central emergency button SCMC20, the door can be released from a control centre (e.g. as a supplement to local release for additional security in assembly areas)
- Time-delayed release T2: EN 13637 defines an additional release delay of up to 180 seconds in conjunction with SCMC panel technology in a permanently manned control centre. During this time, the alarm is already active but the door is not yet released. Possible applications include particularly high security precautions against unauthorised use in prisons, museums, psychiatric wards, etc.
- In addition, EN 13637 defines the option of completely blocking a local release. Pressing the emergency button then only leads to an alarm message on the SCMC panel in the control centre.

Integrated additional functions

Various additional functions are integrated into the three licence levels Basic set, Standard and Premium. For example, up to four doors can be controlled and operated independently of each other with just one control unit.

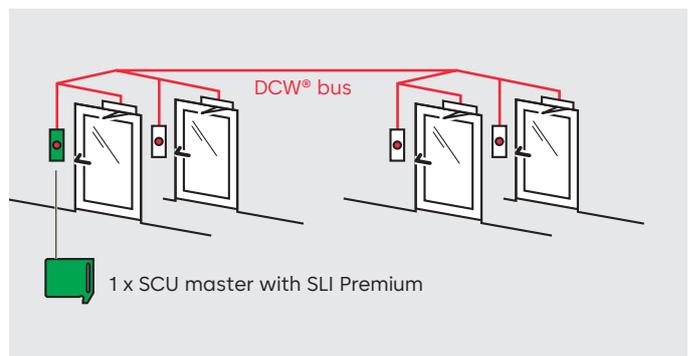
Multi-door control (integrated in Premium)

With just a single SCU as master, up to four doors can be controlled and monitored independently of each other. The system is wired in the DCW® bus. For networking of up to four doors, only one network adapter (LON/LAN) is required.



Interlock control unit (integrated in Premium)

With one SCU as the master, up to four doors can be controlled and monitored as an interlock system. The system is wired in the DCW® bus.



Logic functions (integrated from Standard)

Complex control unit requirements can be implemented with the logic functions. All the analogue inputs and outputs as well as most of the DCW® bus participants can be linked to each other.

- AND logic. Example: Signal on output 1 will be switched if there is a signal at input 1 and input 2.
- NAND logic. Example: Signal on output 1 will be switched if there is no signal at input 1 and/or input 2.
- OR logic. Example: Signal on output 1 will be switched if there is a signal at input 1 or input 2.
- MEMORY logic: Incoming set/reset signals can be directly or inversely connected with functions.
- CONNECTOR logic: Incoming or internal signals are forwarded (connected) via an output.
- PULSE SWITCH logic. Example: Signal (pulse) at input 1 alternately switches output 1 and output 2.

Release delay T1 (integrated from Basic set)

EN 13637 allows a delayed release after pressing the emergency button. The locking element is not released immediately, rather it remains continuously locked for the time t1. During the delay period, the alarm is already active. The delay is displayed in the integrated light ring of the SCU.

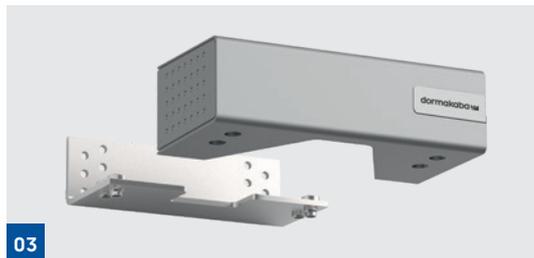
STV 1xx – electromechanical door locking device for lintel mounting



01



02



03



04



05

Electromechanical door locking device (closed-circuit current principle) for attaching to the frame lintel. Connection to the SCU exclusively via four-wire DCW® bus.

The STV 1xx door locking device opens without jamming and without delay. The maximum locking force corresponds to EltVTR and EN 13637 grade 3.

- Integrated contacts for monitoring the active/inactive status
- Protected from manipulation via tamper switch
- Robust coated metal housing
- Easy set-up and reliable operation thanks to 4-wire DCW® bus technology
- Mounting on flush-mounted doors with optional TV-Z mounts

STV 1xx door locking device

Delivery includes holder, shim plate set and hardware bag.

Power supply via DCW® bus, power input 280 mA, class of protection IP32, temperature range -10 to +55 °C, rel. humidity 93% (non-condensing).

For outdoor installation, weatherproofing is absolutely necessary.

Dimensions (W x H x D) approx. 190 x 58 x 87 mm

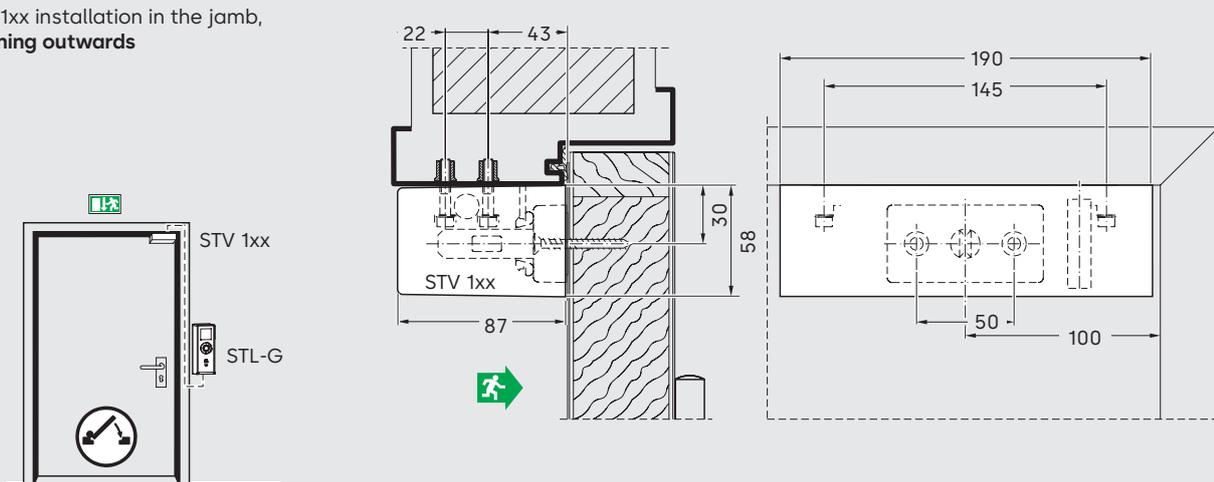
Order no.

01	STV 101	Silver	56442101
02	STV 111	White	56442111
03	TV-Z 101	Mount for door locking device STV 100 and STV 200 for flush mounting Dimensions (W x H x D) approx. 190 x 58 x 87 mm Silver	56522201
	TV-Z 111	White (like TV-Z 101)	56522211
04	TV-Z 01	Shim plate set for adjusting the mount for door locking device STV 1xx DCW® at rough installation tolerances. 2 items 1 mm thick, 1 item 3 mm thick.	56520101
05	TV-Z 015	Mounting unit for installation of door locking devices STV 100 and STV 200 on slim steel and wooden frames. Galvanised steel plate. Dimensions (W x H x D) approx. 190 x 5 x 80 mm	56520015

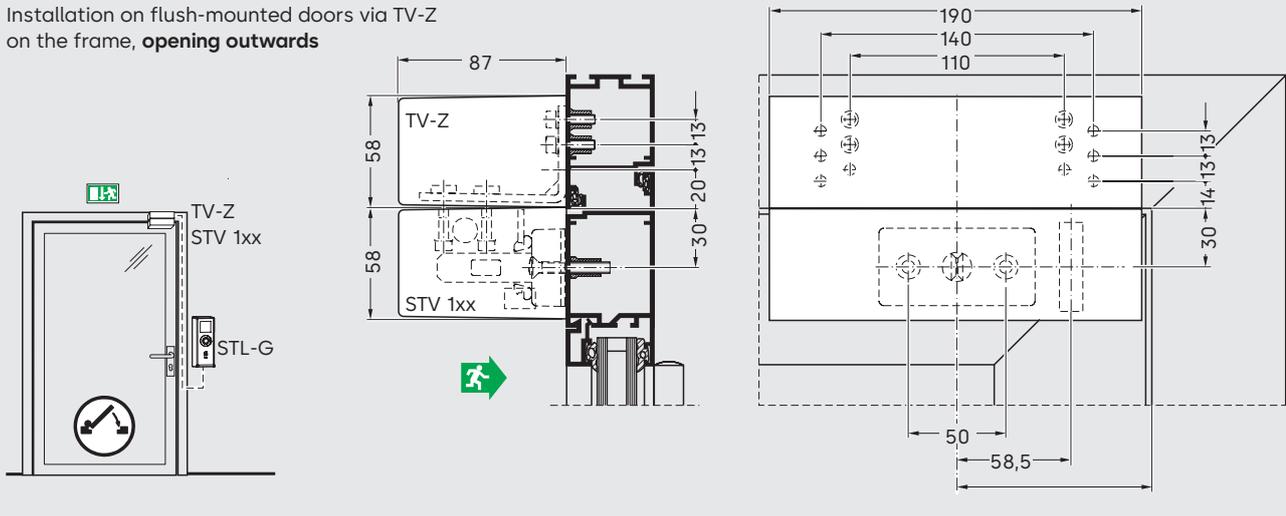
F Certificate of suitability

Installation on fire and smoke doors is only allowed if the usability certificates for these doors and their requirements are observed. Country-specific provisions must be observed.

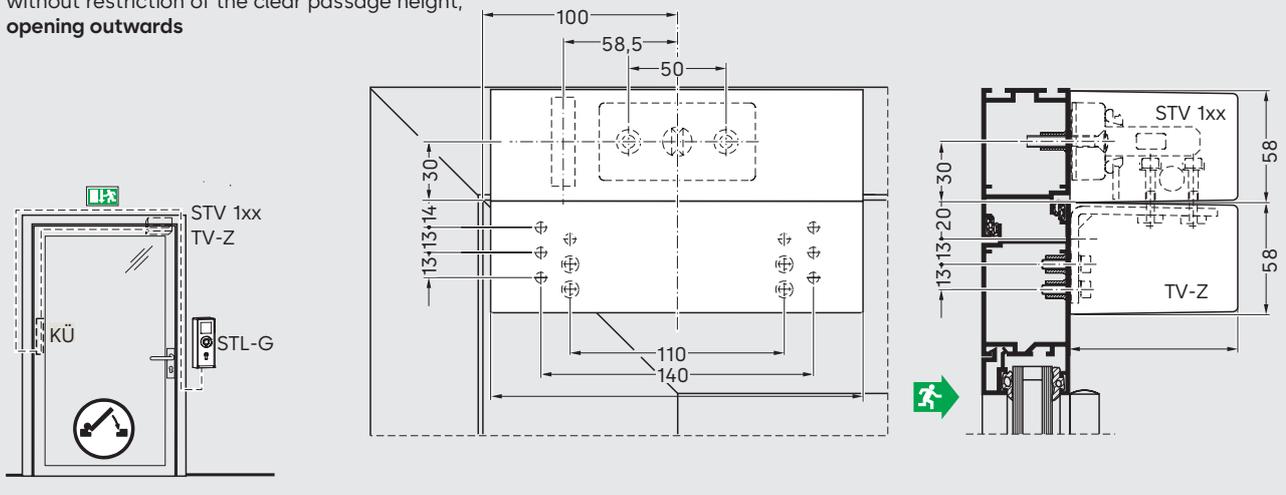
STV 1xx installation in the jamb, opening outwards



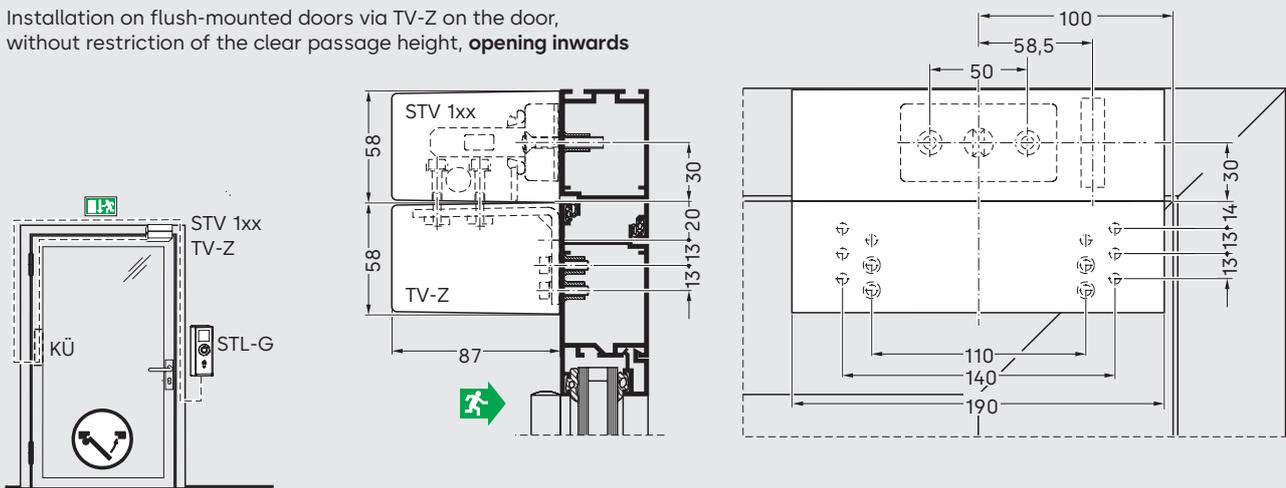
Installation on flush-mounted doors via TV-Z on the frame, **opening outwards**



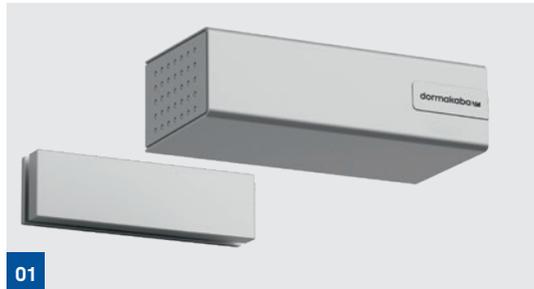
Installation on flush-mounted doors via TV-Z on the outside of the door, without restriction of the clear passage height, **opening outwards**



Installation on flush-mounted doors via TV-Z on the door, without restriction of the clear passage height, **opening inwards**



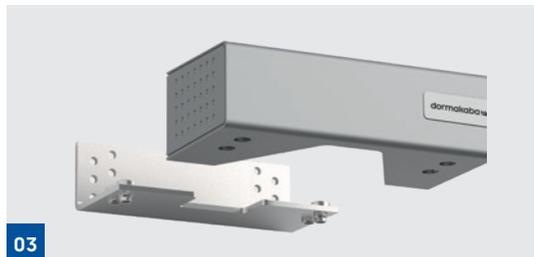
STV 2xx – electromagnetic door locking device for lintel mounting



01



02



03



04

Electromagnetic door locking device (closed-circuit current principle) for attaching to the frame lintel. Connection to the SCU exclusively via four-wire DCW® bus. The STV 2xx door locking device opens without jamming and without delay. The maximum locking force corresponds to EltVTR and EN 13637 grade 3.

- Integrated contacts for monitoring the active/inactive status
- Protected from manipulation via tamper switch
- Robust coated metal housing
- Easy set-up with three-dimensional adjustability and reliable operation thanks to 4-wire DCW® bus technology
- Mounting on flush-mounted doors with optional TV-Z mounts

STV 2xx door locking device

Delivery includes counter-plate and mounting material.

Power supply via DCW® bus, power input max. 200 mA,

Maximum load current 24 V DC, 500 mA inductive, 24 V DC, 1.0 A resistive.

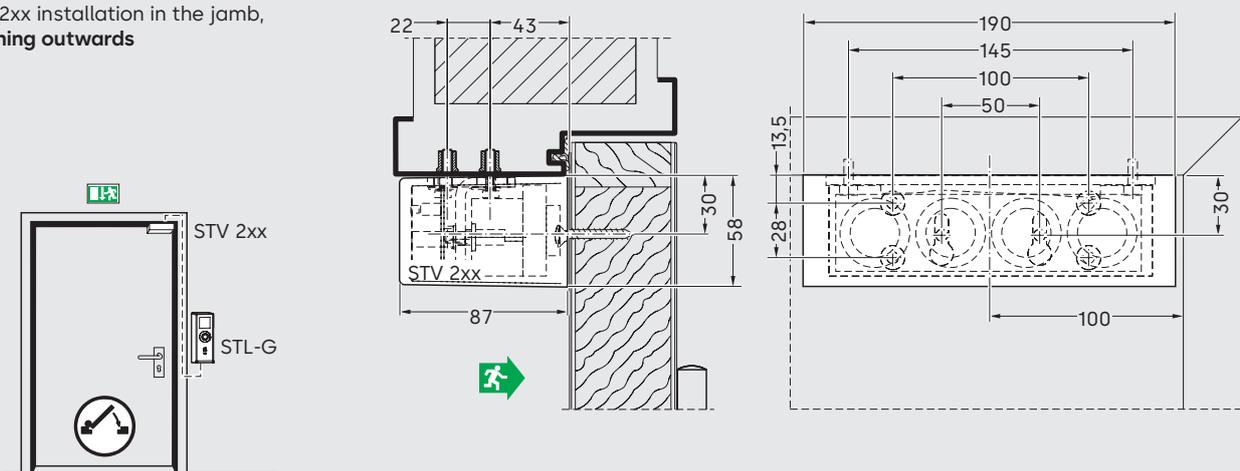
Class of protection IP32, temperature range -10 to +55 °C, rel. humidity 93% (non-condensing). For outdoor installation, weatherproofing is absolutely necessary. Dimensions (W x H x D) approx. 190 x 58 x 87 mm

		Order no.	
01	STV 201	Silver	56442201
02	STV 211	White	56442211
03	TV-Z 101	Mount for door locking device STV 100 and STV 200 for flush mounting Dimensions (W x H x D) approx. 190 x 58 x 87 mm Silver	56522201
	TV-Z 111	White (like TV-Z 101)	56522211
04	TV-Z 015	Mounting unit for installation of door locking devices STV 100 and STV 200 on slim steel and wooden frames. Galvanised steel plate. Dimensions (W x H x D) approx. 190 x 5 x 80 mm	56520015

F Certificate of suitability

Installation on fire and smoke doors is only allowed if the usability certificates for these doors and their requirements are observed. Country-specific provisions must be observed.

STV 2xx installation in the jamb, opening outwards



STV 50x – electromechanical door locking device for covered frame installation

Electromechanical door locking device (closed-circuit current principle) for covered frame installation. Connection to the SCU exclusively via 4-wire DCW® bus. The STV 50x door locking system opens without jamming and without delay. The maximum locking force corresponds to EltVTR and EN 13637 grade 3.

- Integrated contacts for monitoring the active/inactive status
- Concealed frame installation for vandalism protection
- Easy set-up with adjustable latch and reliable operation thanks to DCW® bus technology
- Integrated door status monitoring (door open, door closed)

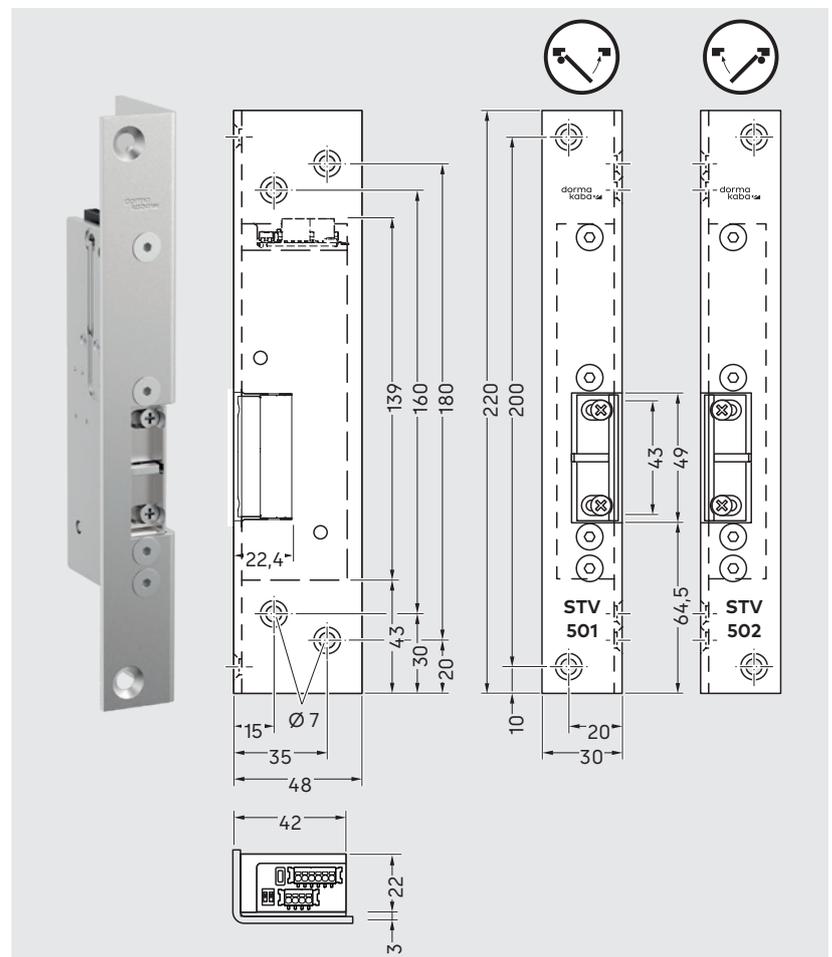
STV 50x door locking device

Supply with flange-mounted striking plate and hardware bag.
 Power supply via DCW® bus
 Power input 80 mA (locked), 20 mA (unlocked)
 Class of protection IP32
 Temperature range -10 to +55 °C,
 Rel. humidity 93% (non-condensing)

		Order no.
STV 501	With angled strike plate for rebated doors DIN-L	56442501
STV 502	With angled strike plate for rebated doors DIN-R	56442502
STV 505	With flat strike plate for non-rebated doors DIN-L	56442505
STV 506	With flat strike plate for non-rebated doors DIN-R	56442506
STV 507	With flat strike plate and latch guide for non-rebated doors DIN-L	56442507
STV 508	With flat strike plate and latch guide for non-rebated doors DIN-R	56442508

Additional special strike plates can be found in the price list.

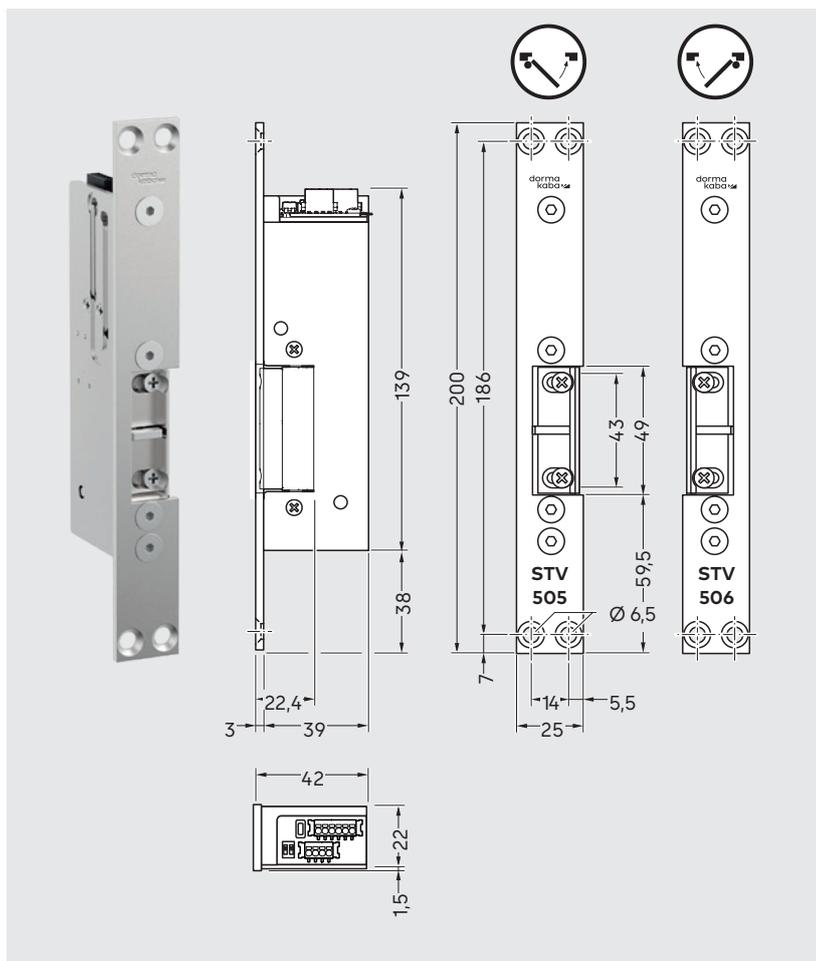
STV 501/STV 502



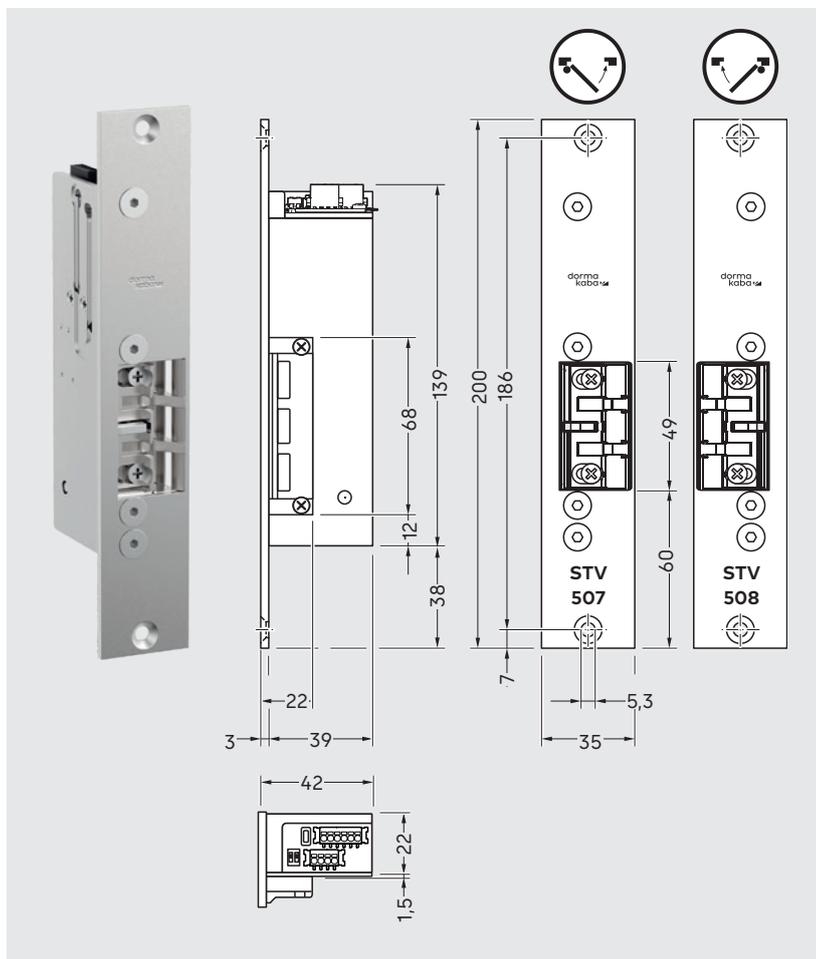
F Certificate of suitability

Installation on fire and smoke doors is only allowed if the usability certificates for these doors and their requirements are observed. Country-specific provisions must be observed.

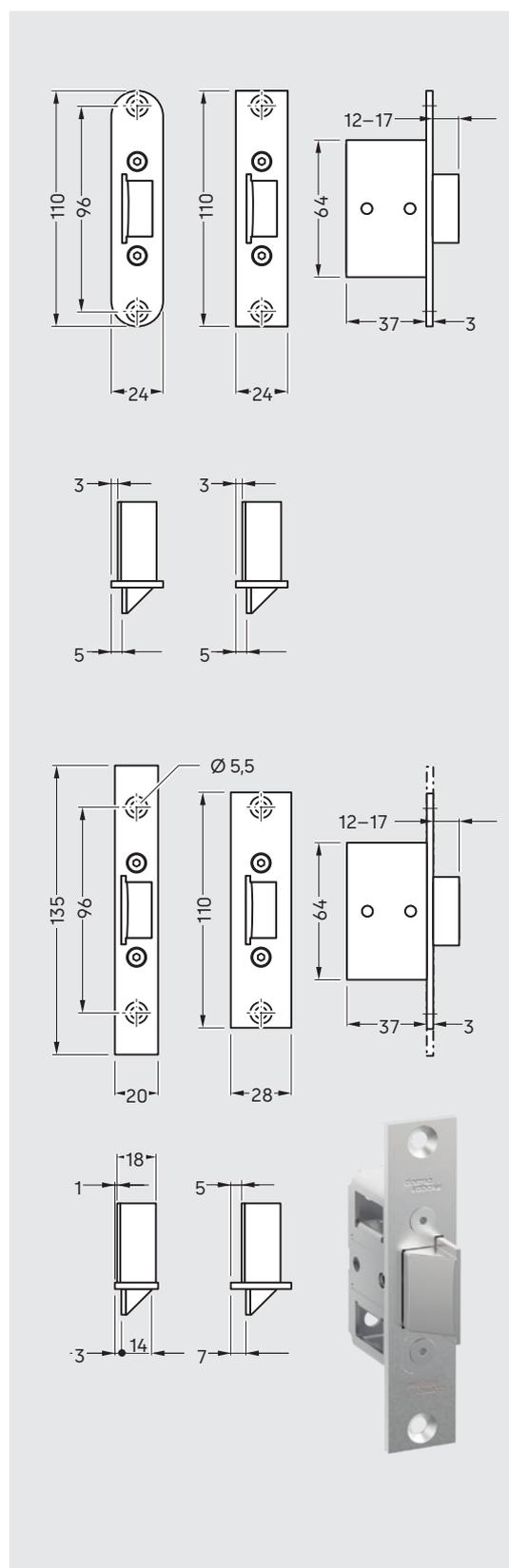
STV 505/STV 506



STV 507/STV 508



TV-Z 510



TV-Z 510

Mortise latch lock as a counterpart to STV 50x for installation in door leaf.

Order no.

Faceplate 24 x 110 x 3	15 198 124
Faceplate 24 x 110 x 3, rounded edges	15 198 224
Faceplate 28 x 110 x 3	15 198 128
Faceplate 20 x 110 x 3	15 198 120

STV-A adapter

for connecting door locking devices without DCW[®] interface



STV-A adapter for analogue dormakaba door locking devices or for integration of third-party products with analogue switch contacts without DCW[®] bus interface (certifications in accordance with EltVTR or EN 13637 must be observed).

- Easy set-up (configuration LED) and reliable operation thanks to DCW[®] bus technology
- Smaller size with protective housing for installation in door frame
- 24 V switched voltage for door locking device magnet
- Analogue querying of latch, anchor and door contact

Technical data

Supply voltage	24 V DC \pm 15%
Holding force	Dependant on locking device
Power input	20 mA (STV-A) plus power input (max. 800 mA) of the certified electrical locking device
Class of protection*	IP32
Temperature range*	-10 °C to +55 °C
Rel. Humidity*	up to 93% (non-condensing)
Dimensions	31 x 63 x 17 mm

* Cable length between STV-A and analogue locking element max. 5 m.
This data applies exclusively to the STV-A adapter. The certified electrical locking device used may deviate from the data specified above.

	Order no.
STV-A adapter	56442900

SVP emergency-escape locks with automatic locking action

High building security, more day-to-day comfort and flexibility



SVP 2xxx DCW® and M-SVP 22xx DCW® self-locking motorised emergency-escape locks in a SafeRoute system increase protection against break-ins and expand the scope of functions of escape route doors.

- Access from outside without additional key switch. Short-term door release via the SVP locking cylinder.
- Monitoring and response functions "Door open/closed", "Lock locked/unlocked", "Lever handle operation/emergency unlocking"
- Can be combined with automatic revolving door drive
- Increased break-in protection (insurance-compliant locking) in suitable door systems, up to RC4 with multiple locking emergency-escape lock M-SVP 22xx DCW®
- In combination with SafeRoute control units from Basic set
- Easy set-up and reliable operation thanks to DCW® bus technology
- Visualisation, control and parameterisation via TMS Soft® (with interface to superordinate building management systems)

SVP 2xxx DCW® and M-SVP 22xx DCW® are available in different design variants for timber and framed doors. Detailed information can be found in the technical brochure for SVP emergency-escape locks with automatic locking action.

SafeRoute functions SVP 2xxx DCW® and M-SVP 22xx DCW®	Basic set	SLI Standard	SLI Premium
Access from outside via the profile cylinder	●	●	●
Monitoring and response functions "Door open/closed", "Lock locked/unlocked", "Lever handle operation/emergency unlocking"	●	●	●
Permanent Open with automatic revolving door drive (daily operation)	●	●	●
Visualisation, control and parameterisation via TMS Soft® (with interface to superordinate building management systems)	●	●	●

– Not available ○ Available, parameters cannot be set ● Available and parameters can be set

Analogue SVP 4xxx/6xxx can also be combined with SafeRoute and allow for increased comfort functions as well as insurance-compliant locking, connectable via DCW® I/O module.

STV-ETS adapter for barrier systems

Access control and SafeRoute



01

Barrier systems such as sensor barriers, swing doors and tripod turnstiles are used for access regulation and access control. In the event of alarm or danger, the systems must release the escape route. dormakaba offers a suitable solution for every requirement. In terms of a SafeRoute system, the systems meet the requirements of EN 13637 and EltVTR, as far as the applicable standards permit it.

- Automatic releasing of escape routes in the event of alarm and danger
- Central controlling and monitoring of up to four systems with only one SafeRoute control unit (SCU)
- Visualisation and controlling via TMS Soft® possible (with interface to superordinate building management systems)
- Easy set-up and reliable operation thanks to DCW® bus technology



02



03



04

Prerequisites

- The barrier system is operated with the ETS22cc PCB, e.g. Argus, Charon or Kerberos
- The STV-ETS adapter is required for connecting the ETS22cc PCB to the DCW® bus
- The escape function is controlled using a SafeRoute control unit (SCU-UP, SCU-TL or SCU-DR)
- Each system must be equipped with a separate STV-ETS and at least one emergency button for release.

- 01 Argus sensor barriers with integrated SafeRoute emergency exit and escape route system
- 02 Kerberos tripod turnstile
- 03 Charon swing doors
- 04 STV-ETS adapter

Technical data STV-ETS adapter

Supply voltage	24 V DC ±15%
Power input	max. 42 mA
Class of protection*	IP00
Temperature range*	-10 °C to +55 °C
Rel. Humidity*	up to 93% (non-condensing)

Order no.

STV-ETS adapter

16719401175

TMS Soft® – door management

Parameterise, visualise and control central doors



System requirements:

PC with at least Intel Core i5 or AMD Ryzen 5 processor, 8 GB main memory, 1 GB free hard drive capacity, graphics card with a minimum resolution of 1280x768 pixels, mouse, serial interface / USB port, Windows 8, 10, 11 or Server 2022 operating system.

The universal PC software for comfortable control, management, monitoring and documentation of networked door systems (escape route security, lock systems, revolving door drives, sliding door drives, bi-folding door drives, I/O modules, central tableau technology etc.). An unlimited number of door systems can be managed in real time with TMS Soft®.

Can also be used for local parameterisation of SafeRoute and TMS standalone systems via serial interface.

Functions

- Management, monitoring and documentation of doors and their functions
- Changes to the default settings (parameters), e.g. unlocking and relocking times, times until pre-alarm and main alarm
- Changes to the default settings for the analogue inputs and outputs of the SCUs and the I/O modules
- Parametrisation for the SVP/M-SVP lock functions
- Parametrisation for the multi-door control, interlock control and logic function applications
- Setting of timer functions and definition of the time periods
- Setting of brightness and flashing frequency of light ring
- Administration of integrated access controls with the code keypad

Monitoring

- Remote unlocking of doors
- Alarm management (activation/deactivation of alarms)
- Tampering monitoring
- Door-open monitoring
- Historical memory of door events

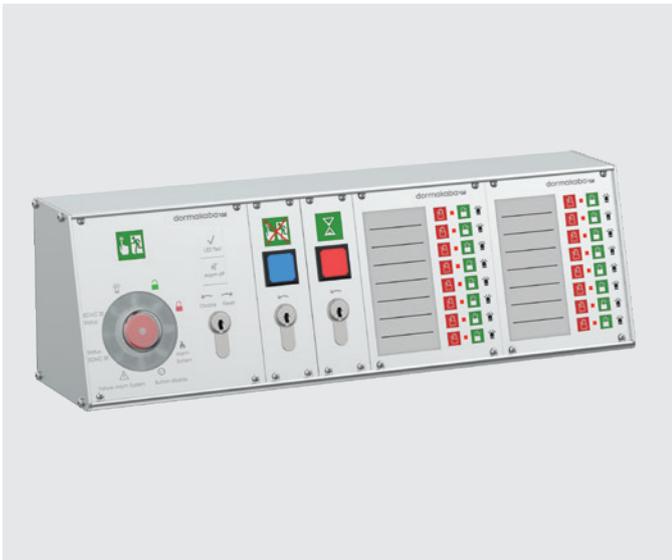
Networking

- Via LON or LAN
- Connection to building management via an optional OPC server
- Connection to building management software via direct database interfaces (depending on the manufacturer of the building management software)

		Order no.
TMS Soft® V5.x Basic	Control unit, parametrisation and visualisation software for SafeRoute and TMS individual systems via serial interface. USB to serial adapter is required where necessary. See below. Software available as free download from dormakaba.com.	
TMS Soft® V5.x	Control unit, parametrisation and visualisation software for dormakaba door systems via serial interface. USB to serial adapter is required where necessary. See below. Delivery of software on USB stick and serial connection cable. TMS Soft® full version with LON/LAN network connection, parametrisation of dormakaba door operators and data provision for building management systems via OPC	56480002
TMS OPC Server	<p>To couple the TMS Soft® with OPC-supporting building or security management systems. The TMS OPC server supports the following OPC (OLE for process control):</p> <ul style="list-style-type: none"> • Data Access V1.0A • Data Access V2.05 • Data Access V3.0 • Alarms and Events Specification 1.10. • Conditional Alarms from 1/2009 <p>The OPC server:</p> <ul style="list-style-type: none"> • is implemented as OutProc-COM service • supports the Windows 2000, XP, Vista, 7, 8 and 10, 11 and Server 2022 operating systems <p>Doors in TMS Soft® are provided as a data point with all status bits. Individual bits can be defined as a data point through configuration via an XML file. Alarm and Event (AE) is possible for complete data points or individual bits of a data point. AE supports the type "Simple Event" and supplies data point values. Furthermore, "AE Conditional" is supported with "acknowledgement" (acknowledgement-dependent alarms and events).</p>	56339150
USB/RS232 adapter	Converter module RS232 with USB connection. Enables the connection between PCs without serial port and the TMS PC adapter.	1900070402708
USB/LON network adapter	Gateway for networking of dormakaba door management systems with TMS LON modules and for connection via USB to PC systems with dormakaba TMS Soft®.	56333403

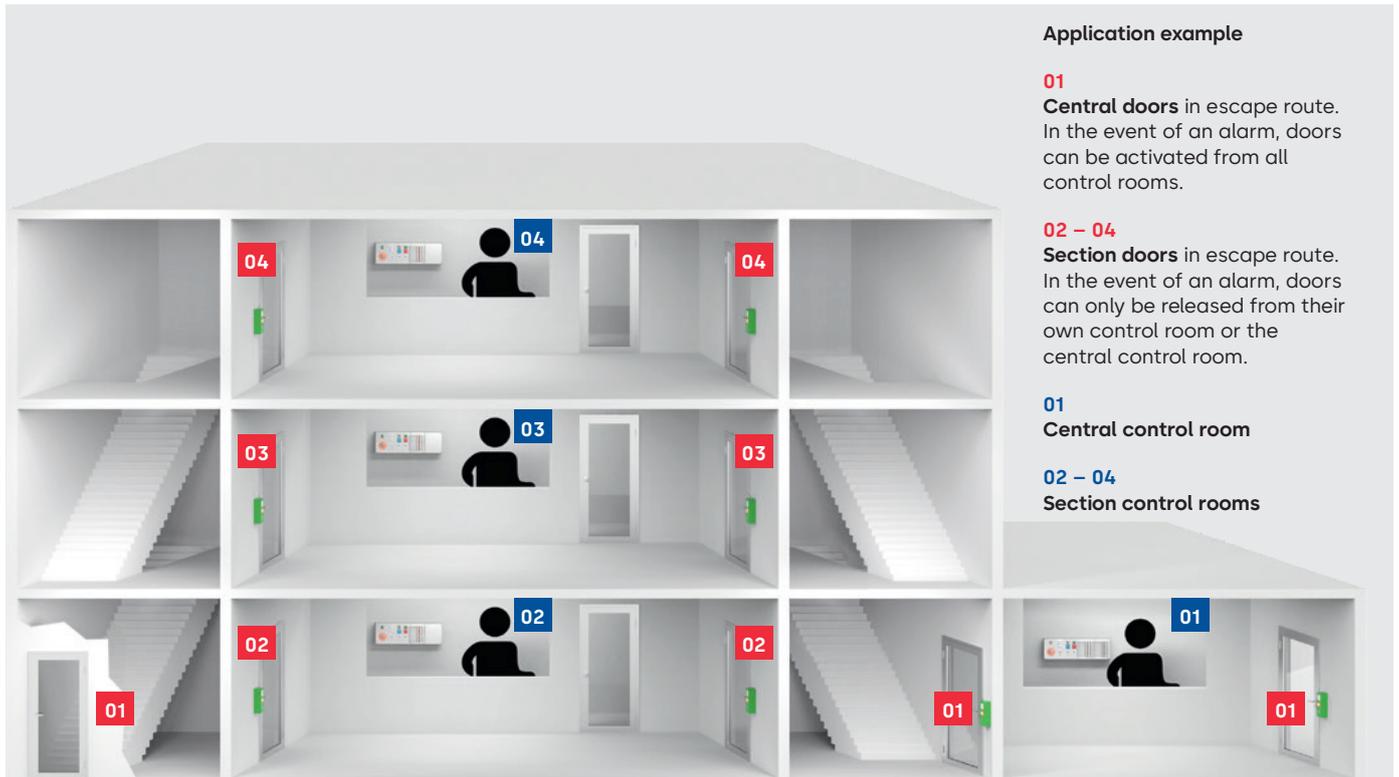
Panel controls

Visualise and control doors without a PC from a control centre



With the panel systems, individual doors, door groups and spatial sections can be monitored and controlled in real time. Depending on the requirements, a panel system can be assembled individually. Additional functions can be enabled by using panel extensions and connecting external control devices.

- Central control and monitoring of SafeRoute escape route doors
- Centralised release of individual doors and sections, e.g. from a permanently staffed control room
- Specific opening of individual doors
- Definition of door groups or door sections
- Blocking or delaying releases after pressing the emergency button on site (protection against misuse of escape routes)
- Connection via LON or LAN network



Application example

01

Central doors in escape route. In the event of an alarm, doors can be activated from all control rooms.

02 – 04

Section doors in escape route. In the event of an alarm, doors can only be released from their own control room or the central control room.

01

Central control room

02 – 04

Section control rooms

SCMC-H12 panel housing

The SCMC-H12 panel housing is for indoor installation. The housing acts as a support for the 19" panel components and can be closed with optional blind plates.

- Table or wall mounting
- Support width: 84 HP (horizontal pitches)
- Class of protection IP30

	Order no.
SCMC-H12 panel housing Dimensions: 429 x 133 x 102 mm	56460012
SCMC01 blind plate 8 HP	56460001
SCMC02 blind plate 21 HP	56460002



SCMC20: Central control unit with emergency button

The SCMC20 control unit is a 19" panel component for controlling and monitoring one or a group of SafeRoute escape route doors. The doors are unlocked centrally with the emergency button and/or a connected alarm system. The light ring displays information on the current status of the doors or door group.

The SCMC20 is connected to the SafeRoute escape route doors (SCU master) via a LON network.

Functions

- Centralised release of assigned SafeRoute escape route doors via the integrated emergency button
- Status display of the assigned escape route doors
- Display of alarms
- Expandable with the SCMC30, SCMC40 and SCMC80 panel components

Technical requirements (additionally required)

- SLON-UP network adapter for connecting the SCMC20 to the LON network
- External power supply, e.g. SCMC NT plug-in power supply unit (24 V / 420 mA)
- Locking cylinder 30/10 (profile cylinder version)
- SLI Premium licence card in the assigned SafeRoute control centres (SCU master)
- Parameterisation and set-up is carried out with TMS Soft® Professional 5.x and LON binding

Technical data	
Supply voltage	24 V DC ±15% or better
Power input	Closed-circuit current 75 mA LED test 135 mA
Degree of protection	IP30 (depending on the housing used)
Temperature range	-10 °C to +55 °C
Rel. Humidity	up to 93% (non-condensing)
Dimensions	132 x 128 x 60 mm, 19" component (26 HP)

	Order no.
SCMC20	56460020
SCMC NT (not shown)	56366005
SLON-PL (not shown)	56450010
SLON-UP network adapter (not shown)	56450012





SCMC30: Blocked release of an escape route door

The SCMC30 panel unit is an extension to the SCMC20 control unit. The SCMC30 panel extension can activate the "Blocked release" mode according to EN 13637 to disable the local emergency button of a SafeRoute escape route door. Release is only possible from a central location when this function is enabled.

- Key switch to activate the function
- Illuminated button as status display "Blocking active/inactive"
- Connection to the SCMC20 control unit via the supplied ribbon cable

Safety notice

In accordance with EN 13637, the "Blocked release" functions may only be used in conjunction with centralised release and a permanently manned centre. Country-specific building law as well as the relevant laws, regulations, directives, standards, etc. must be observed.

Technical data	
Power supply	Via connection to the SCMC20
Degree of protection	IP30
Temperature range	-10 °C to +55 °C
Rel. Humidity	up to 93% (non-condensing)
Dimensions	128 x 41 x 52 mm 19" component (8 horizontal pitches)
	Order no.
SCMC30	56460030



SCMC40: Time delay T2 of the release of an escape route door (grade 2 in accordance with EN 13637)

The SCMC40 panel unit is an extension of the SCMC20 control unit. Release of the escape route doors when pressing the emergency button on the escape route door can be delayed once by a maximum of 15 seconds (T1 delay according to EN 13637). As long as T1 is active, an additional T2 delay of up to 180 seconds can be activated once on the SCMC40 panel extension.

- Key switch to activate the function
- Illuminated button as status display "Delay active/inactive"
- Connection to the SCMC20 control unit via the supplied ribbon cable

Safety notice

In accordance with EN 13637, the "Time delay T2" functions may only be used in conjunction with centralised release and a permanently manned centre. Country-specific building law as well as the relevant laws, regulations, directives, standards, etc. must be observed.

Technical data	
Power supply	Via connection to the SCMC20
Degree of protection	IP30
Temperature range	-10 °C to +55 °C
Rel. Humidity	up to 93% (non-condensing)
Dimensions	128 x 41 x 52 mm 19" component (8 horizontal pitches)
	Order no.
SCMC40	56460040

SCMC80: Display and control panel for controlling individual doors

The SCMC80 is a 19" panel component for visualising and controlling up to eight individual doors. In conjunction with a central release unit SCMC20, up to eight SCMC80 can be integrated via a four-wire cable (DCW® bus) for a panel unit of max. 64 doors.

With one SLON or SLAN adapter per panel module insert, any number of visualisations and controls can be implemented.

Functions

- Centralised locking and unlocking of individual escape route doors
- Door status display (locked, permanently unlocked, unlocked for a short time, unlocked for a long time)
- Alarm display when an alarm has been triggered on site
- Display when the escape route door is locked via an SCMC20
- Labelling field for inserts

Technical requirements

- DCW® operation: The SCMC80 is an extension of the SCMC20 control unit. The connection to the SCMC20 is made via the DCW® bus.
- LON or LAN operation: The SCMC80 is connected to the SafeRoute escape route doors (SCU master) via a LON or LAN network. Each SCMC80 must be extended with an SLON or SLAN network adapter. An external 24 V DC power supply is required.
- Parameterisation and set-up is carried out with TMS Soft®.

The SCMC80 panel module insert can be used as a parallel display for TMS Soft 5.x visualisation and control via LON or LAN networking. Alternatively, the SCMC80 panel module insert can also be used via LON binding to visualise and control up to 8 doors per panel module insert without using TMS Soft 5.x.

Technical data	
Supply voltage	24 V DC ±15%
Power input	
LON operation with	10 mA
SLON-PL	25 mA
LAN operation with LAN module	50 mA
Class of protection*	IP32
Temperature range*	-10 °C to +55 °C
Rel. Humidity*	up to 93% (non-condensing)
Dimensions	31 x 63 x 17 mm 19" component (21 horizontal pitches)
	Order no.
SCMC80	56460080

SLAN-PL network adapter

SLAN-PL as LAN adapter for SCMC80 and for TMS/SVP control units. Enables connection to the LAN TCP/IP network.

SLAN-PL	56353001
----------------	----------

SLON-PL network adapter

SLON-PL as LON adapter for TE25/80 and for TMS/SVP control units. Enables connection to LON networks.

SLON-PL	56450010
----------------	----------



Safety instructions according to EltVTR

SafeRoute emergency exit and escape route systems are developed and manufactured in accordance with recognised state-of-the-art technology and recognised safety regulations. They are pursuant to the EltVTR (German directive for electrical locking systems on escape route doors) – December 1997 version – published in communication 5/98 of the DIBt (German Institute for Civil Engineering), Berlin. Test certificates from the MPA NRW and the VdS Cologne are available.



The installer and facility operator must observe the following instructions as escape route security systems must not be an obstacle in the unhindered escape of persons in case of danger.

Use

Emergency exit and escape route systems are electrical locking systems in escape route doors that counteract improper use of the escape route.

While using the SafeRoute emergency exit and escape route systems, the technical data and ambient conditions should be taken into account (also see the technical product documentation of dormakaba on this).

(Preliminary) construction inquiry/approval procedure

Emergency exit and escape route systems are construction products regulated in Germany in accordance with the Model Administrative Regulation for Technical Building Regulations (MVV TB) point C 2.6.11 or Building Rules List A Part 1, point 6.19. On the grounds of some special building regulations, it may be required to apply for an exemption in terms of § 67 Model Building Regulation. For this, claims in accordance with DIBt 5/98 must be included as collateral clauses in the building permit of the object. As the state of the art recognised across Europe, the use of EN 13637 for electrically controlled exit systems is recommended so long as this does not contradict the building law applicable at the time of construction at the place of use. Country-specific provisions must be observed as a matter of principle.

Planning and installation

A SafeRoute security system consists of at least one door terminal, one SCU control unit, one emergency button (or a relevant combination of these), one SLI Mini licence card and one electric door locking device (STV 1xx, STV 2xx or STV 5xx). The following can be connected depending on the licence card selected: additional emergency button, additional key switch or access control, monitored emergency escape locks or emergency escape motor locks, flashing light or external alarm siren, automatic revolving door drive, power supply unit with emergency power supply as well as fire detection and/or alarm system or smoke detector.



The door locking device on the escape route doors may be operated only with the products approved by dormakaba for this purpose.

The door terminal (local release) should be fixed in the immediate vicinity of the handle in such a way that the emergency button is at a height of 850 mm to max. 1200 mm above the floor.

The emergency button must be indicated with the “emergency exit” label. The label must be affixed in such a way that the arrow points to the emergency button.

In buildings with automatic extinguishing devices, fire alarm or other hazard alarm systems, it is logical that the escape route doors secured with SafeRoute are automatically unlocked when these systems are triggered.

If there is a permanently manned centre during operation with direct access to the escape route doors, release may also be carried out using this central unit.

The features of the fire and smoke doors must not be impaired by the installation of a door locking device (fire resistance duration or smoke control and self-locking function).

Changes to the fire protection terminals that are required for installation of door locking device and that are beyond the scope of the change permissible in the DIBt bulletin of 1/1996 require the general building inspectorate approval or consent from the responsible building authority in individual cases.



Maintenance guide

- Only use dormakaba spare parts or accessories approved by dormakaba.
- Any work on electrical devices that are not operated with safety extra-low voltage may only be carried out by a qualified electrician.
- The installation, commissioning and maintenance may only be done by a qualified person authorised by dormakaba.
- The key for products that are not operated with safety extra-low voltage may only be handed over to a qualified electrician.

Provisions

The below standards and guidelines (current version) must be observed:

- DIBt communication 5/98
German directive for electrical locking systems on escape route doors (EltVTR)
- DIBt communication 1/96
Changes to fire doors
- DIN VDE 0100, 0800, 0815
Provisions on electrical installations
- DIN 0833 – Part 1–3
Requirements for alarm systems (GMA) for fire, burglary and attack
- Building rules list A part 1
- Special building regulations

Country-specific provisions, standards and guidelines must be observed.

Safety instructions according to EN 13637

SafeRoute emergency exit and escape route systems are developed and manufactured in accordance with recognised state-of-the-art technology and recognised safety regulations. They comply with the specifications of EN 13637:2015-12 "Locks and building hardware – electrically controlled exit systems for use on escape route doors – Requirements and test methods". MPA NRW test certificates are available.



The installer and facility operator must observe the following instructions as escape route security systems must not be an obstacle in the unhindered escape of persons in case of danger.

Usage

SafeRoute emergency exit and escape route systems enable the electric controlling of exit systems in accordance with EN 13637 with electric control units, trigger elements and locking devices. It should counteract the improper use of an escape route. While using the SafeRoute emergency exit and escape route systems, the technical data and ambient conditions should be taken into account (also see the technical product documentation of dormakaba on this).

(Preliminary) construction inquiry/approval procedure

SafeRoute emergency exit and escape route systems correspond to the recognised state-of-the-art and the specifications of EN 13637. Due to some special building regulations and possibly conflicting national building regulations, it may be necessary that the use of EN 13637 or of individual functions in accordance with EN 13637 requires an approval from the responsible local planning and building authorities. Country-specific provisions are to be checked and observed as well as, if required, are to be included in the building permit of the object as collateral clauses.

Planning and installation

A SafeRoute system is comprised of at least a door terminal, control unit, door locking device and SLI licence card components. The following can be connected depending on the licence card selected: additional emergency button, additional key switches or access control, monitored emergency escape locks or emergency escape motor locks, flashing light or external alarm siren, touchscreen displays, networking modules, I/O modules, automatic revolving door drive, power supply unit with emergency power supply as well as fire detection and/or alarm system or smoke detector.



The door locking device on the escape route doors may be operated only with the products approved by dormakaba for this purpose.

In buildings with automatic extinguishing devices, fire alarm or other hazard alarm systems, it is logical that the escape route doors secured with SafeRoute are automatically unlocked when these systems are triggered.

Position of door terminals

The door terminal (local release) should be fixed in the immediate vicinity of the escape route door in such a way that the emergency button is at a height from 800 mm to max. 1200 mm above the floor and max. 600 mm away from the escape route door.

Indication of emergency button

The emergency button has to be indicated depending on the version of the system (with or without time delay) with the pictogram for electrically controlled exit systems in accordance with EN 13637 or EN ISO 7010:2012. The size of the pictogram is at least 8,000 mm², or at least 2,500 mm² if it is actively illuminated. The pictogram must be affixed in the immediate vicinity of the emergency button.

Central escape route control system / CMC

If there is a permanently manned centre during operation with view of the escape route door (either direct or through continuous video monitoring), the controlling can also be done from this central location (central escape route control unit). An activation of time delay level 2 and/or blocking of the release are only permitted in conjunction with a centralised escape route control system in accordance with EN 13637. Country-specific provisions must be observed.

Fire and smoke protection requirements

The features of the fire and smoke doors must not be impaired by the installation of a door locking device (fire resistance duration or smoke control and function of self-locking). Changes to the fire protection terminals that are required for installation of the door locking device and that are beyond the scope of the changes permissible in the respective country require a building inspectorate approval, if applicable, or consent in individual cases. An agreement with the permit holder of the fire protection terminal and/or the responsible local planning and building authorities may be required. Country-specific provisions must be observed.



Maintenance guide

Only use dormakaba spare parts or accessories approved by dormakaba. Any work on electrical devices that are not operated with safety extra-low voltage may only be carried out by a qualified electrician. Installation, commissioning and maintenance may only be done by a qualified person authorised by dormakaba. The key for products that are not operated with safety extra-low voltage may only be handed over to a qualified electrician. Country-specific provisions for the routine check of exit systems must be observed.

Provisions

In addition to the regulations of EN 13637, the country-specific building law as well as standards, provisions and guidelines, particularly on use of escape route security systems, on changes to fire protection terminals, on installing electric devices, regulations for hazard alarm systems, special building regulations and other relevant regulations must be observed in their respective latest version.

Our commitment to sustainability

We promote sustainable development along our entire value chain and keep our economic, ecological and social responsibility for future generations in view at all times. Sustainability at the product level is an important and future-orientated approach in the building industry. To offer quantified data on the environmental effect of a product throughout its entire lifecycle, dormakaba provides Environmental Product Declarations (EPD) based on overall lifecycle assessments.

www.dormakaba.com/sustainability



Our offer

Access automation solutions

Entrance automation
Entrance Security



Access control solutions

Electronic access and time recording systems
Escape and rescue route systems
Lodging systems



Access hardware solutions

Door closers
Door control
Mechanical key systems



Services

Advice and planning
Installation and commissioning
Maintenance and repair



WN 05459251532, 06/2024
Subject to technical changes



dormakaba.com

dormakaba
Deutschland GmbH
DORMA Platz 1
DE-58256 Ennepetal
T +49 2333 793-0
info.de@dormakaba.com
dormakaba.de

dormakaba
Luxembourg SA
Duchscherstrooss 50
LU-6868 Wecker
T +352 26710870
info.lu@dormakaba.com
dormakaba.lu

dormakaba
Austria GmbH
Ulrich-Bremi-Straße 2
AT-3130 Herzogenburg
T +43 2782 808-0
office.at@dormakaba.com
dormakaba.at

dormakaba
Schweiz AG
Lerchentalsstrasse 2a
CH-9016 St. Gallen
T +41 848 85 86 87
info.ch@dormakaba.com
dormakaba.ch