

TS 73 EMF

Door closer



The proven solution for controlled hold-open of fire and smoke check doors

Universal application capability, stable hold-open point and assured quality.

The TS 73 EMF is a combination of hydraulic door closer and electro-magnetic hold-open unit. In conjunction with a smoke detection system (e.g. dormakaba RMZ), the TS 73 EMF can be used as a hold-open system for fire and smoke check doors.

The hold-open of the door is performed under electro-magnetic control. In the event of a fire, the door is reliably closed by the integral hydraulic closer. The closing cycle is also initiated by manual door operation or automatically in the event of a power failure.

The production plant is ISO 9001 certified.

Benefits

For the trade

- Efficient stocking thanks to non-handed, modular system
- Range of arm assemblies and accessories to provide an ideal solution even for special applications

For the fabricator/installer

- Easy to fix
- No adjustment of the hold-open point necessary
- Optimum adaptability thanks to adjustable latching action

For the specifier/architect

- Attractive, compact design
- Wide range of applications
- Hold-open possible between approx. 75° and 180°

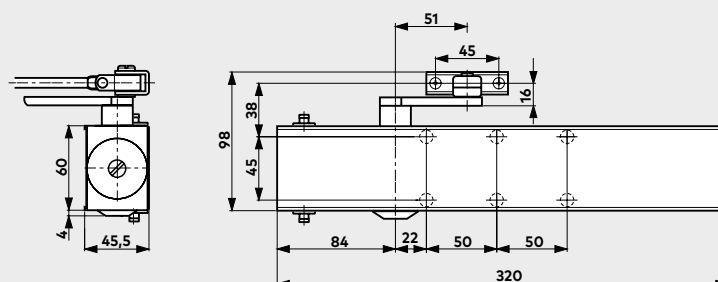
For the user

- To hold open, the door simply has to be opened to the required point and released
- Free selection of the hold-open point (opening angles over 75°); variable at any time without the need for adjustment of setting controls
- Convertible to free-swing door closer

Data and features		TS 73 EMF		
		EN 4	EN 5	EN 6
Closing force	Spring strength			
Standard doors ¹⁾	≤ 1,100 mm	●	–	–
	≤ 1,250 mm	–	●	–
	≤ 1,400 mm	–	–	●
Fire and smoke check doors ¹⁾	≤ 1,100 mm	●	–	–
	≤ 1,250 mm	–	●	–
	≤ 1,400 mm	–	–	●
Non-handed			●	
Arm	Standard		●	
	Slide channel		–	
Closing speed variable by valve			●	
Latching speed variable	by arm		●	
	by valve		–	
Backcheck			–	
Delayed action			–	
Hold-open point variable (opening angles between 75° and 180°)			●	
Free-swing arm assembly			○	
Input voltage		24 V DC ±15 %		
Power input max. in W		2		
Weight in kg		3,4		
Dimensions in mm	Length	320		
	Overall depth	45,5		
	Height	60		
Door closer compliant with EN 1154			●	
Hold-open device compliant with EN 1155			●	
CE mark for construction products			●	

● Yes – No ○ Option

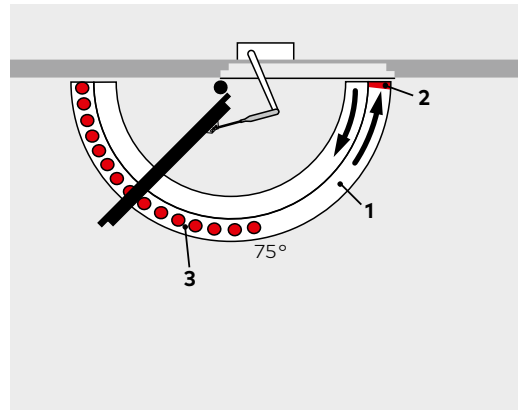
¹⁾ For applications involving particularly high or heavy doors, and doors which have to close against wind or draught conditions, the next larger closer size should be selected.



Standard and optional functions

The **closing speed** of the TS 73 EMF is infinitely variable by means of a valve.
In addition, the **latching action** can be adjusted via the closer arm.

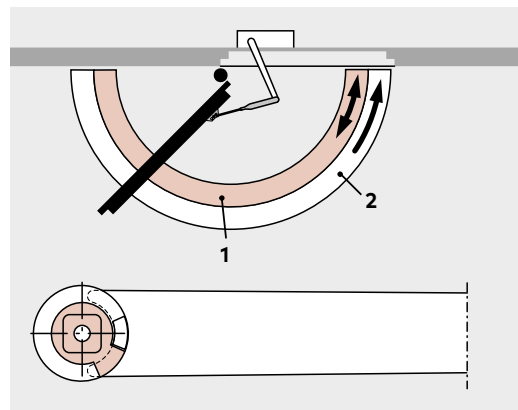
The **electro-magnetic hold-open device** is integrated in the hydraulic door closer. The hold-open point (available from an opening angle of 75°) is freely selectable. The door merely has to be opened to that angle required and then released. Depending on the door width and the size of the opening angle, a degree of fall-back of between 1° and 3° is possible.



- 1 Infinitely variable closing speed
- 2 Infinitely variable latching action (adjustable at arm)
- 3 Hold-open range

Free-swing arm assembly (option)

Equipped with a free-swing arm assembly, the TS 73 EMF can also be employed where doors are required to operate normally – functioning in the same way as doors without a door closer. If the door leaf is opened wide (min. 75°), the closer spindle is held in this position by the electro-magnetic hold-open device in the hydraulic closer body. However, the door can be freely operated by virtue of the free-swing function integrated in the arm. In the event of a fire or power failure, the door is reliably and securely closed automatically by the hydraulic door closer. Typical applications include fire and smoke check doors in senior citizen homes, homes for the disabled and hospitals etc.



- 1 Free-swing range
- 2 Fully controlled closing (de-energised)

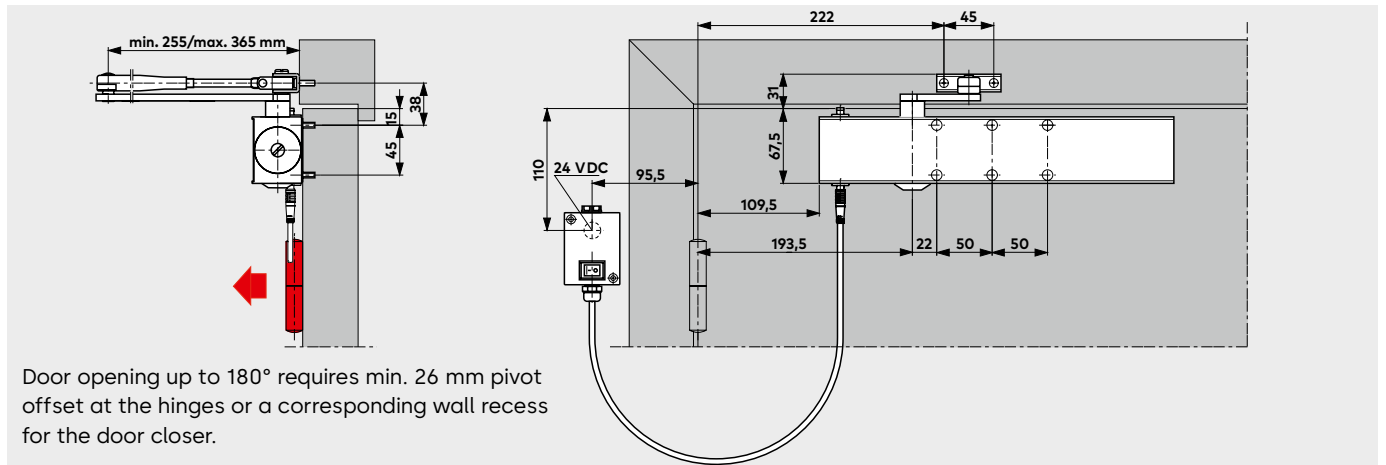
Note

In the case of double doors, the free-swing function may only be used on the active leaf.

F Approval certification

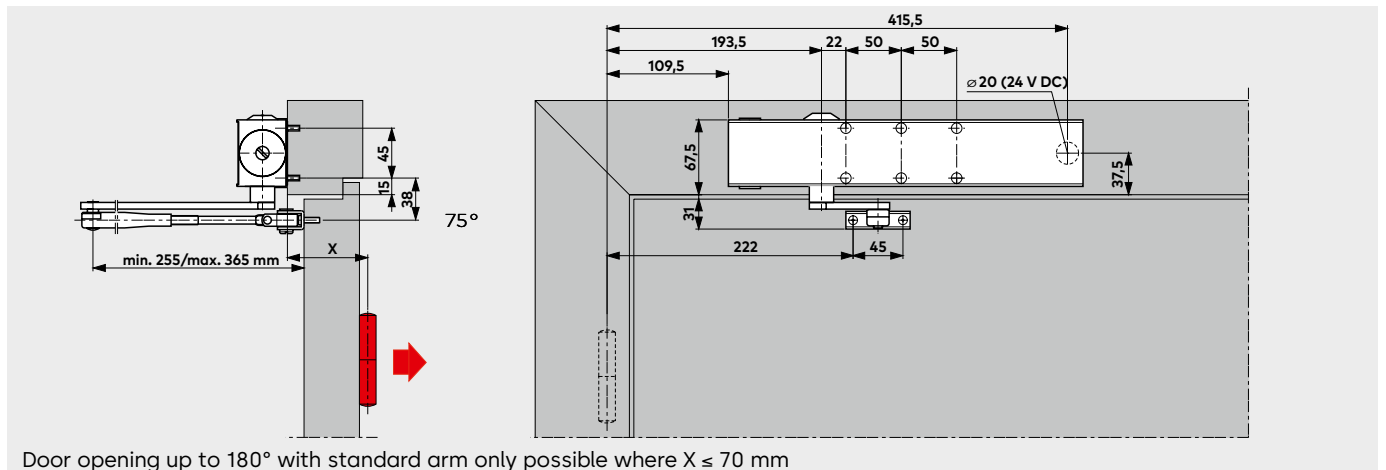
The TS 73 EMF has been approved as compliant with national building regulations by the German Institute for Building Technology DIBt, Berlin, in conjunction with the smoke detector systems dormakaba RMZ and other reputable smoke detector systems. Acceptance inspection is mandatory. When using the TS 73 EMF fixed to the top jamb, approval certification is additionally required in conjunction with the fire and smoke check door concerned.

Door leaf fixing, pull side



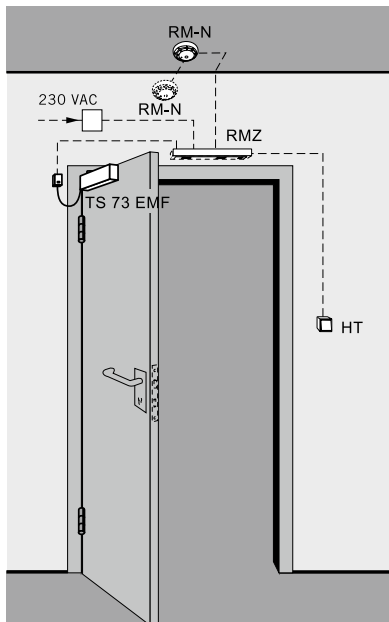
Example: LH/ISO 6 door; mirror image for RH/ISO 5 door.

Transom fixing, push side



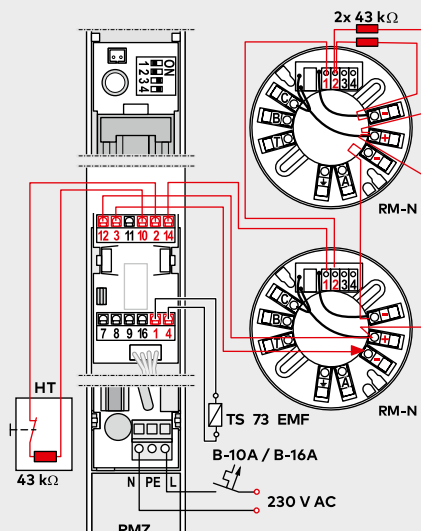
Example: RH/ISO 5 door; mirror image for LH/ISO 6 door.

Example application: Hold open system TS 73 EMF + RMZ + 2x RM-N



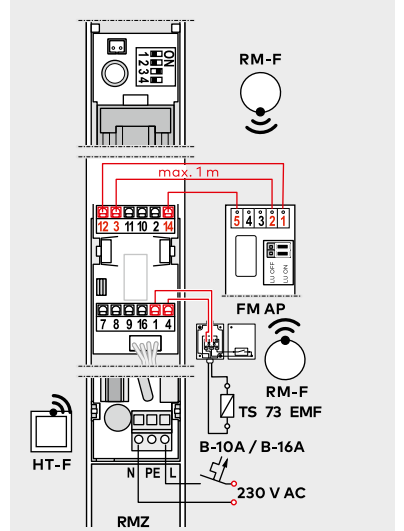
Example of connection plan RMZ with RM-N

Recommended cabling
 230 V AC NYM 3 x 1,5 mm² (max.)
 24 V DC J - Y (St) Y 2 x 2 x 0,6 mm² / 0,8 mm²

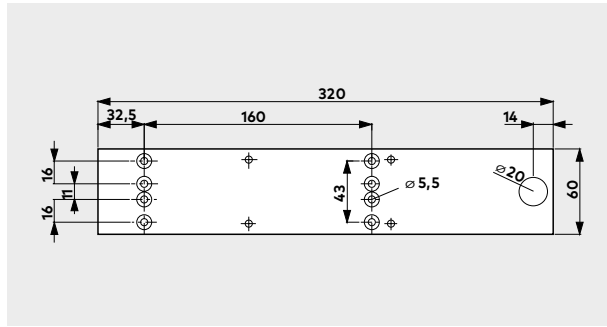
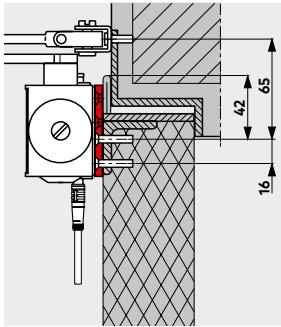


RMZ with FM AP/RM-F radio module

Recommended cabling
 230 V AC NYM 3 x 1,5 mm² (max.)
 24 V DC J - Y (St) Y 2 x 2 x 0,8 mm²

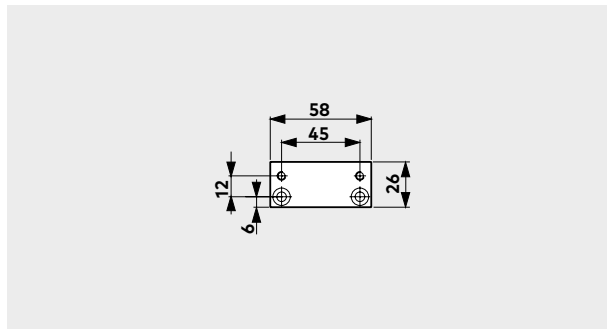
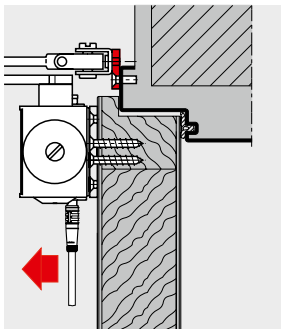


Accessories



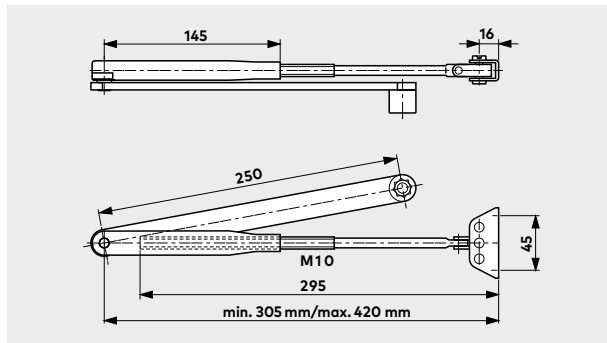
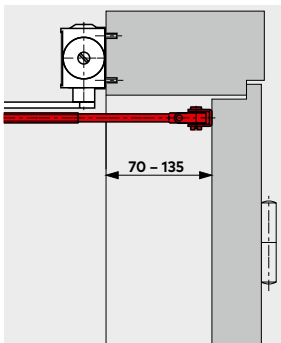
Mounting backplate

For pull and push side fixing. For mounting the TS 73 EMF to fire and smoke check doors and also doors in which no direct fixing is possible; with hole group per Supplement 1 to EN 1154.



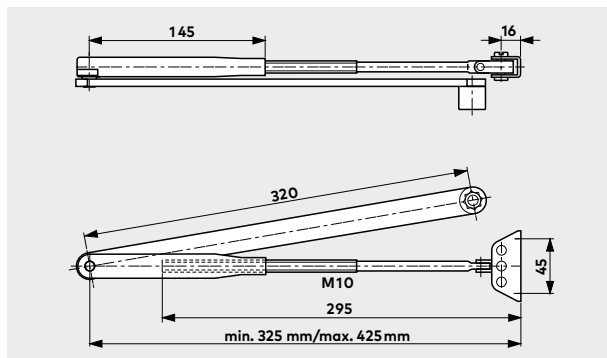
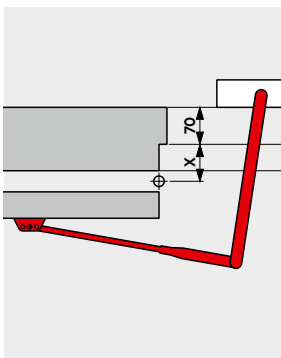
Hinge plate

For pull-side installation of the arm on particularly narrow door frames.



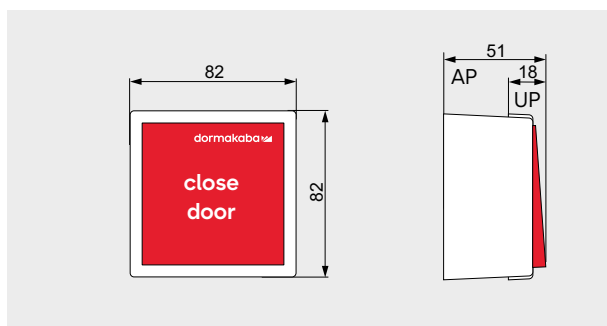
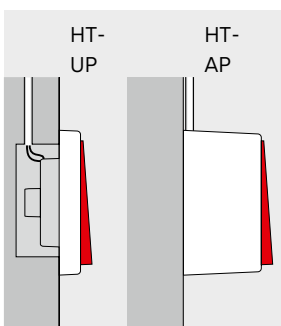
Extended adjustable arm

For push side fixing. For adapting the TS 73 EMF to door sets with frame reveal depths between 70 and 135 mm.



Extended arm assembly

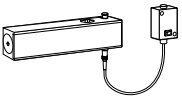




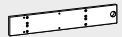

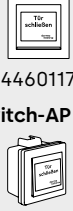

For push side fixing. For increasing the door opening to 180° in door sets with a frame reveal depth of max. 70 mm and where $X < 70$ mm.



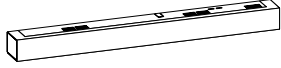
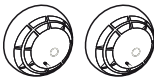




Switch System 55

According to the code of practice for hold-open systems issued by the DIBt, Berlin, a manual release switch must be installed in the case of free-swing door closers.

Standard equipment and optional accessories

TS 73 EMF hold-open device Door leaf fixing, pull side	Standard arm	Free swing arm	Extended adjustable arm	Extended arm assembly	Mounting backplate	Hinge plate	Switch-UP Switch-AP
							
	□ 7540xx00	□ 530005xx	□ 7540xx01	□ 7540xx34	7300xx10	830014xx	19144601175 19144601175 + 5158533332
Spring strength EN 4 ■ 530101xx	■ □	■ □			△	△	△
Spring strength EN 5 ■ 530401xx	■ □	■ □			△	△	△
Spring strength EN 6 ■ 530701xx	■ □	■ □			△	△	△
TS 73 EMF hold-open device Transom fixing push side							
							
Spring strength EN 4 ■ 531101xx	■ □	■ □	■ □	■ □	△		△
Spring strength EN 5 ■ 531401xx	■ □	■ □	■ □	■ □	△		△
Spring strength EN 6 ■ 531701xx	■ □	■ □	■ □	■ □	△		△

xx Colour	■ Closer body separate
	□ Arm assembly separate
	△ Optional accessory
01 Silver	
09 Special colour	

Smoke detector system	
RMZ 648000xx	
RM-N 64830900 packaging unit 2 pcs.	
FM AP radio module Silver (RAL 9006) 57290001 White (RAL 9016) 57290011 Special colour 57290009	
RM-F radio smoke detector 57280011 packaging unit 2 pcs.	
HT-F radio push button 57300011	
FM AP Console 9900057005003	

Specification text

TS 73 EMF

Hold-open device with electrohydraulic hold-open function and integral pressure compensation feature for stable, infinitely variable and temperature-immune hold-open positions at door opening angles between 75° and 180°. Closing speed and latching action infinitely variable. Non-handed. Operating voltage 24 V DC.

General building regulations approval issued by DIBt, Berlin, for use in hold-open systems. Acceptance inspection mandatory.

Installation

- Door leaf fixing, pull side
- Transom fixing, push side

Spring strength

- EN 4
- EN 5
- EN 6

Arm type

- Standard
- Free-swing
- Extended adjustable arm
- Extended arm assembly

Accessories

- Mounting backplate
- Upstand bracke
- Manual switch

Color

- Silver
- Special colour (sim. to RAL)

Make

- dormakaba TS 73 EMF

Hold-open systems regulations / information

The use of hold-open systems is subject to special regulations based on official approval requirements. These relate in particular to the final inspection (acceptance), continuous monitoring and maintenance. The regulations and instructions provided below are intended as an aid, pursuant to statutory regulations that apply e.g. in Germany, to ensure that all participants are properly informed of the most important requirements that relate to the installation and operation of hold-open systems.

Further information can be found in the following documents:

- Guidelines for hold-open systems, published by the German Institute for Building Technology, Berlin. [Code of practice relating to hold-open systems issued by the German Institute for Building Technology, Berlin]
- General building regulations pertaining to the approval of the hold-open system concerned
- EN 1155

1. General

1.1 In the case of fire doors (and similar shutters/closures/barriers) that are held open by hold-open systems, the sweep area necessary for the closing operation must be kept constantly clear. This area must be clearly identified by lettering, floor markings or similar. Where necessary, structural measures must also be implemented to ensure that cables, leads, lines, pipes, stored/deposited goods or components (e.g. false ceilings or other overhead items/elements) are reliably prevented from falling into the sweep area.

1.2 Wherever possible, smoke detectors should be used for hold-open systems. For hold-open systems for fire doors in emergency escape routes, smoke detectors must be used.

1.3 Each hold-open device must also be capable of being released by hand, without adversely affecting the functional capabilities of the automatic release device. In the case of door closers with electro-magnetic hold-open, the manual release may be performed by a small tug applied to the door leaf. If holding electro-magnets or free-swing door closers are used, a pushbutton must be provided to facilitate manual release. The manual release pushbuttons employed for this purpose must be red and carry the wording "Close Door" or equivalent. The pushbutton must be located in the immediate vicinity of the door and must not be concealed by the door when this is held open.

2. Commissioning

2.1 In Germany and countries governed by DIN regulations: Following on-site installation of the operable hold-open system, its functional integrity and quality of installation must be confirmed by an acceptance inspection procedure. The acceptance inspection may only be performed by skilled personnel of manufacturers of monitoring and/or hold-open devices, skilled personnel authorized by same, or skilled personnel from an accredited inspection agency.

2.2 In Germany and countries governed by DIN regulations: Once the acceptance inspection has been successfully completed, the operator shall permanently fix on the wall, in the immediate vicinity of the door, a plate supplied by the manufacturer of the hold-open system measuring 105 mm x 52 mm and carrying the inscription Hold-open system Inspected by... (company logo with month and year of acceptance inspection) or equivalent

2.3 The operator is to be provided with a certificate detailing the successful acceptance inspection; this certificate must be retained by the operator.

3. Routine Inspection

3.1 The hold-open system must be kept by the operator in a constantly good operating condition, and inspected at least once a month to ensure that it is functioning properly.

3.2 In addition, the operator is obliged at least once a year, or at shorter intervals if specified in the approval certificate, to inspect all the devices to ensure that they are operating and interacting properly and without fault, and to carry out or instigate adequate maintenance. The associated test, inspection and the maintenance work may only be performed by an expert or an appropriately trained person

3.3 The scope, result and time of the periodic inspection are to be recorded. These records must be retained by the operator.

Our Sustainability Commitment

We are committed to foster a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations. Sustainability at product level is an important, future-oriented approach in the field of construction. In order to give quantified disclosures of a product's environmental impact through its entire life cycle, dormakaba provides Environmental Product Declarations (EPD), based on holistic life cycle assessments.

www.dormakaba.com/sustainability



Our offering

Access Automation Solutions

Entrance Automation
Entrance Security



Access Control Solutions

Electronic Access & Data
Escape and Rescue Systems
Lodging Systems



Access Hardware Solutions

Door Closers
Architectural Hardware
Mechanical Key Systems



Services

Technical Support
Installation and commissioning
Maintenance and Repair



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Subject to technical modifications.



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