ES 200

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Sliding door operator

FLEXIBEL, SIMPLE AND MODULAR WITH DRIVE POWER TO SPARE

The new, innovative ES 200 sliding door operator system offers the perfect solution for all applications and service requirements. The ES 200, equipped with the DORMA **PowerDrive** technology, fulfills every demand imposed on operators in terms of adaptability to different door widths, door weight capacity and functionality.

The modular system

The modular design of the ES 200 provides an ideal basis for the implementation of new ideas and individual concepts in the design and construction of sliding door systems.
The identical mechanical components may be installed in all three versions of the operator (ES 200, ES 200-2D and ES 200 Easy).

DORMA has also opened up a new dimension with its control system. Now there is no longer any need to replace components when you want to expand the functionality of your system. In future, "docking" will be the order of the day. The modular control system comprises of the basic module (BM) and the function module (FM). Consequently, upgrading in accordance with individual customer requirements may be carried out without problem. Particularly impressive is the prefabricated **MiniDriveUnit**, industrially tested and equipped with all the necessary electrical and electronic components.

Integrated power

With its extra-powerful motor and a dynamic driving phase control, the integrated **PowerDrive** system ensures safe and reliable operation.
And it can readily cope with sliding door weights of up to 2 x 160 kg per door panel weight.

Exceptional cost-efficiency

With the ES 200, DORMA offers a drive system of modular design capable of covering every application on the basis of just a few components. The system offers easy assembly and installation, reduced storage and stocking costs, and simple maintenance for enhanced operational cost efficiency.

A system for the future

With this system you are investing in the future. You also have the security derived from our decades of experience in the automatics business – a history that sets DORMA apart as the market leader in drive and control systems for doors. The ES 200 corresponds to all the latest European and German standards and safety regulations.

Delivery formats

The ES 200 is available as a component kit, as a complete, pre-assembled operator or ready integrated in all DORMA sliding door systems.

Accessories

DORMA furthermore provides program switches, activators and door profiles all perfectly matched to the operator as ideal complementary components.

Features and benefits

- Modular, flexible system
- With DORMA **PowerDrive**: Dynamic driving phase control for particularly powerful operation – and with emergency power backup in the form of a rechargeable battery pack
- Industrially prefabricated and tested **MiniDriveUnit**
- Modular control system upgradeable with additional function modules
- Integrated DCW® (DORMA Connect and Work) bus system for easy integration of DORMA DCW® sensors and activators
- Easy commissioning via the integrated display
- May be combined with all customary door profiles
- Fully comprehensive range of accessories
- Reliable investment due to compliance with all relevant European and German standards

Our commitment to a sustainable future

We are committed to sustainable development as one of our business maxims. DORMA's aim is to ensure energy-saving and resource-conserving production, a high recycling ratio and the longevity of our quality products. Environmental Product Declarations (EPD), based on a holistic life cycle assessment, are used for the calculation of the sustainability of buildings.

EPD certificates are on www.dorma.com available.

Door parameters	ES 200
Single-panel sliding door	
– Clear passage width LW	700 – 3000 mm
– Door panel weight, max.	1 x 200 kg
Double-panel sliding door	
– Clear passage width LW	800 – 3000 mm
– Door panel weight, max.	2 x 160 kg
Clear passage height*	2100 – 3200 mm

*Other dimensions on request.

| Technical data of operator	
Height	100 and 150 mm
Installation depth	180 mm
Opening and closing force, max. 150 N	●
Opening speed (incremental setting)	10 – 70 cm/s
Closing speed (incremental setting)	10 – 50 cm/s
Hold-open time	0 – 180 s
Supply voltage, frequency	230 V, 50/60 Hz
Power consumption	250 W
Class of protection	IP 20
Admissible temperature	- 20 – + 60 °C
Admissible humidity (relative)	max. 93 % (non condensing)
Compliant with EU Low Voltage Directive and EMC Directive	●
Manufactured to ISO 9001	●
Environmental product declaration in accordance with ISO 14025 Programme holder: Institute Construction and Environment e.V. Declaration number: EPD-DOR-2013511-E	●

Basic module (BM)	ES 200
Modular design	●
Microprocessor-controlled function programs	
– Off	●
– Automatic	●
– Permanent Open	●
– Partial Open	●
– Exit Only	●
– Night-/Bank Function	●
Connections for – electro-mechanical locking device	●
– light barriers	●
Adjustment of all basic parameters via integrated display and pushbuttons	●
24 V output for external accessory	●
Read-out error memory with error codes	●
DCW® bus interface (Protokoll **D**ORMA **C**onnect and **W**ork)	●
Rechargeable battery pack for emergency operation	●

Function module (FM) – optional extra	
Pharmacy Function	●
Door status contact (three)	●
Main and secondary closing edge protection	●
Panic Closing Function	●
Bell contact	●
Airlock control	●
Synchronous operation	●

DIN 18650 and EN 16005 function module – optional	
The DIN 18650 and EN 16005 function module enables the tested monitoring of the secondary closing edges in order to comply with the German standard DIN 18650 and EN 16005.	○

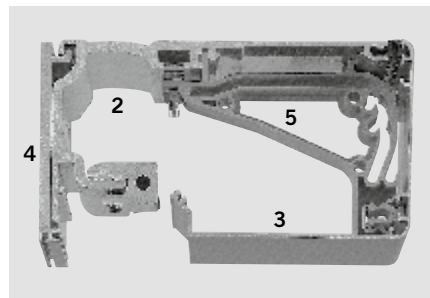| Additional equipment	
Electro-mechanical locking device (bistable)	○
Manual lock release for electro-mechanical locking device	○
Light barriers	○
Rechargeable battery pack (emergency opening, emergency closing)	○
Module for coupling to EIB or LON building management systems	○
Infrared detector	○

● standard   ○ optional
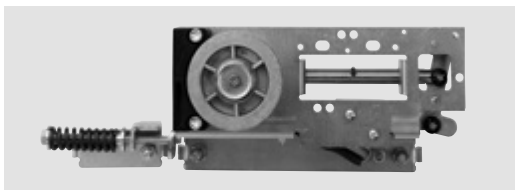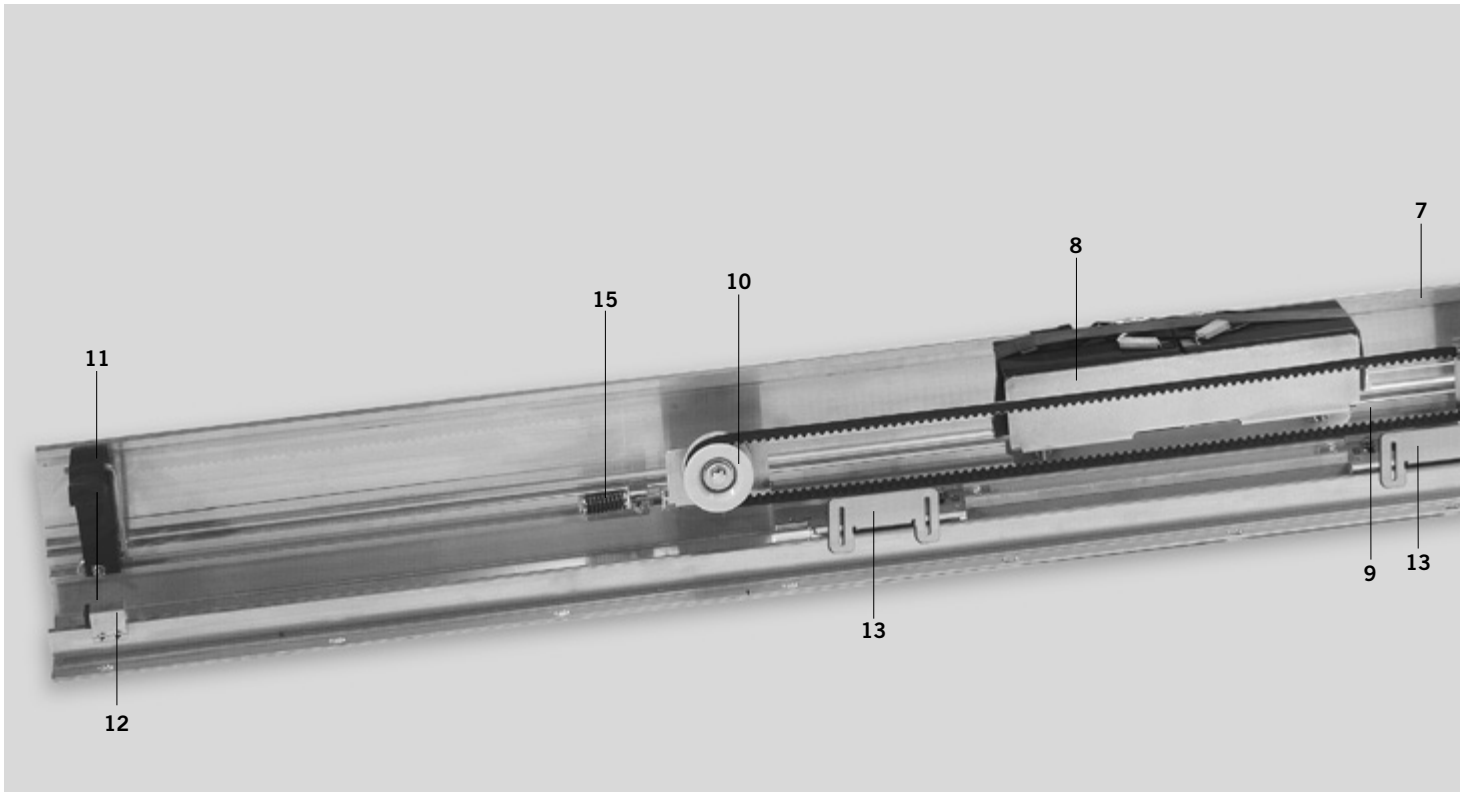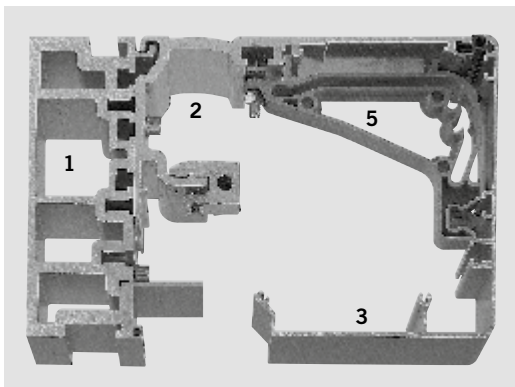
Pulley with integrated locking device
and belt tensioning device
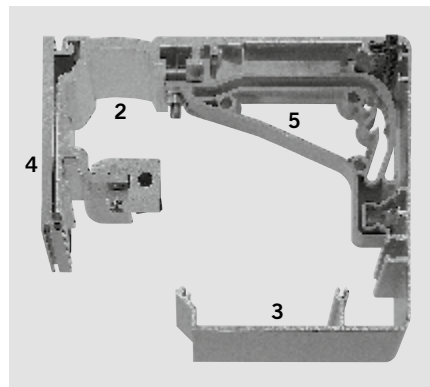
**Profiles for corridor installation, 100 mm**
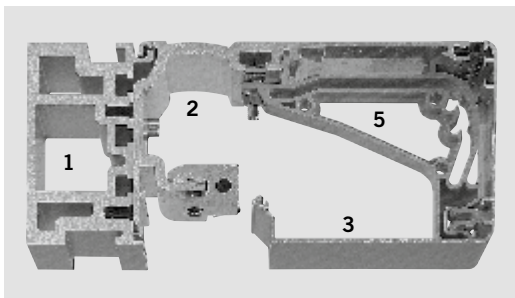

Profiles for wall installation, 100 mm

Our profiles for installation
heights of 100 mm and 150
mm, which are suitable for both
corridor or wall installation,
make the system suitable for all
kinds of applications.
The basic mechanical system,
with a low number of
components, is the same for
both installation heights.

Profiles for corridor installation, 150 mm

Profiles for wall installation, 150 mm

1 Aluminium girder (LM)
2 Basic operator profile
3 Internal cover,
     100 mm or 150 mm high
4 Wall connection profile
5 Service cover bracket
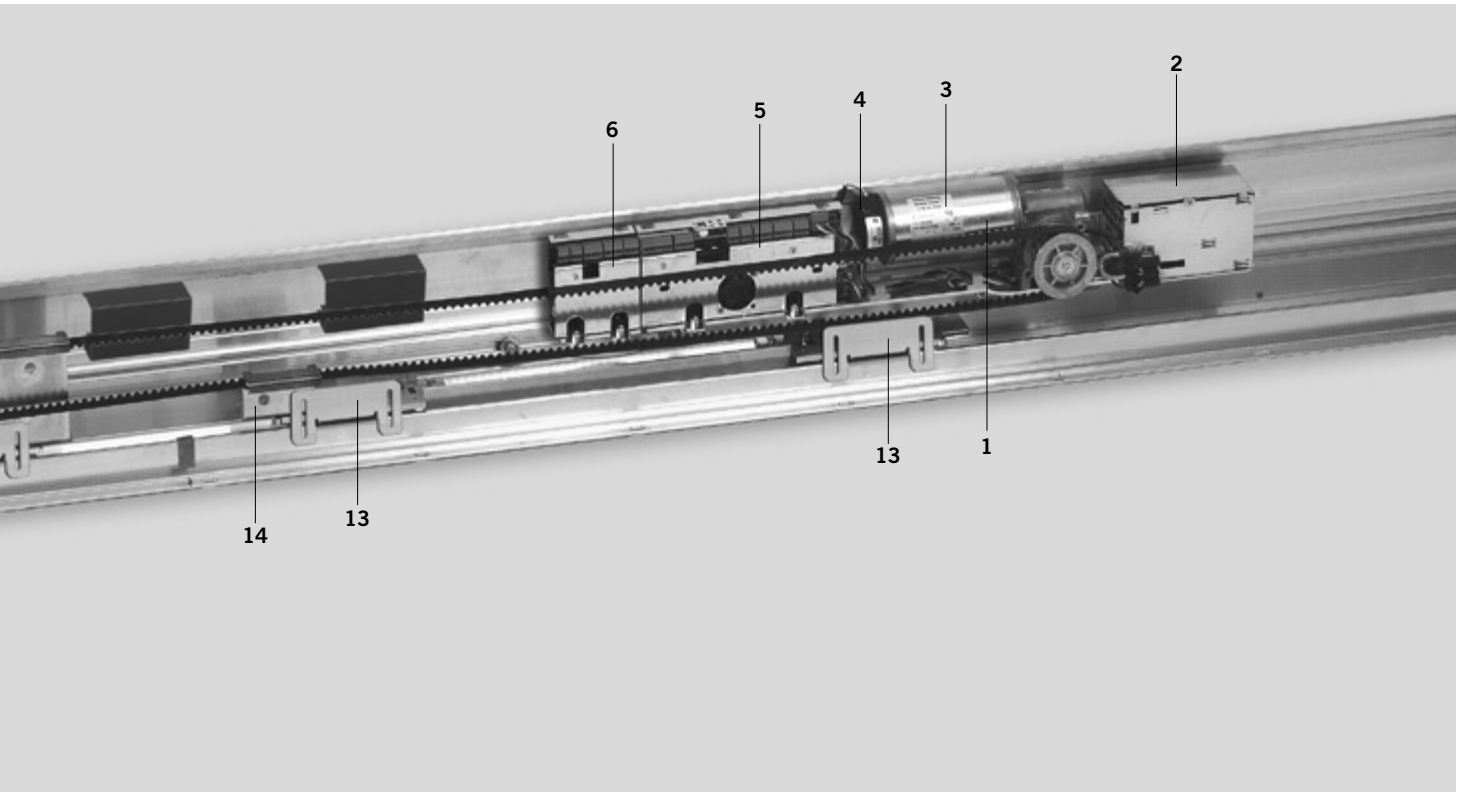
**MiniDriveUnit**
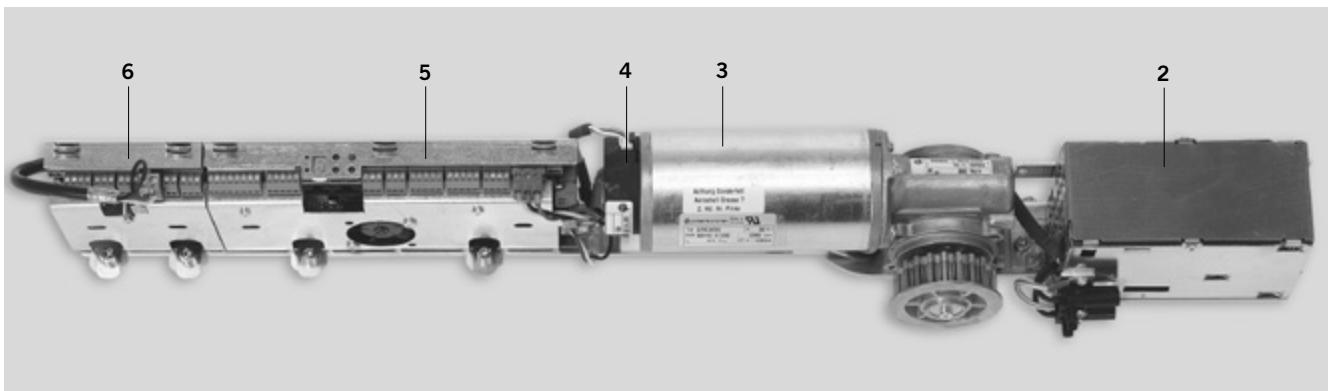
## At the core of the ES 200

The prefabricated **MiniDriveUnit** has been industrially tested with all the requisite electrical and electronic components, thus greatly facilitating the assembly, installation and maintenance of the operator.

Components

1 MiniDriveUnit
2 Power supply unit
3 Motor
4 Decoder
5 Basic module (BM)
6 Function module (FM)
7 Track rail and mounting profile
8 Rechargeable battery pack (optional)
9 Carrier head
10 Pulley (locking device)
11 Service cover bracket
12 End stop
13 Door connection with adjustment device
14 Belt connection
15 Belt tensioning device

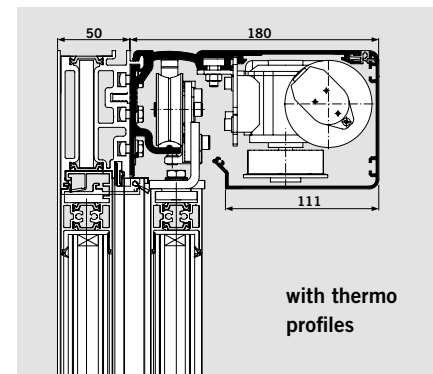# THE PROFESSIONAL OPERATOR FOR INDIVIDUAL DOOR DESIGN

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Door variants with ES 200, 100 mm installation height and special "profile" version

**with MANET
single-point fixings**

**with fine-frame
profiles G glass
clamping rail**
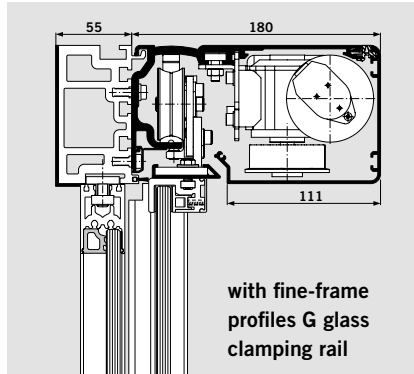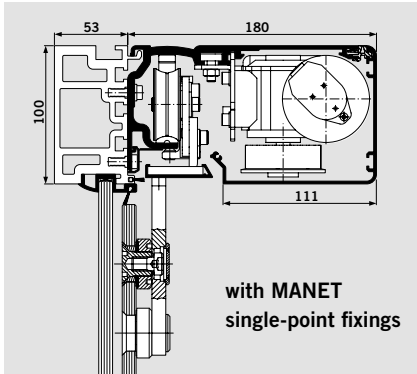
DORMA PowerDrive System
for particularly punchy performance

The door variants on this page
are shown as corridor installation with
aluminium girder (LM).

See page 4 for profiles for wall installation.

**with double-
glazing profiles
type G-FLEX**

**with standard
frame profiles
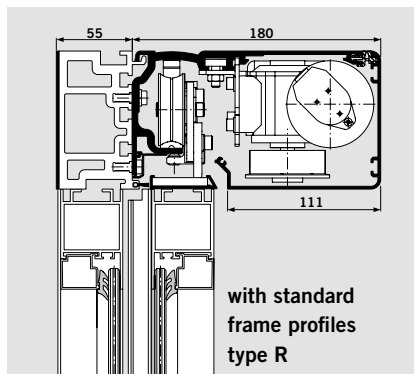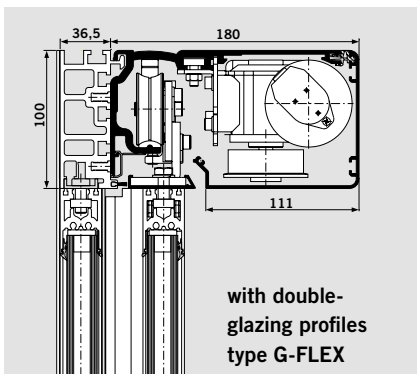type R**

**with thermo
profiles**

Door variants with ES 200, 150 mm installation height and special "profile" version

**with MANET
single-point fixings**

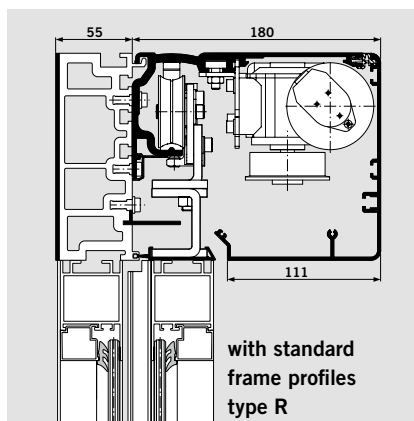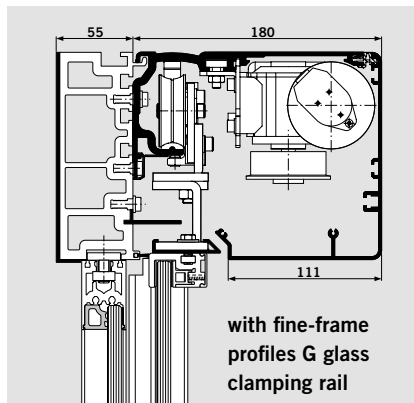**with fine-frame
profiles G glass
clamping rail**

**with double-
glazing profiles
type G-FLEX**

**with standard
frame profiles
type R**

**with thermo
profiles**

CONNECTIONS

6 x 0.8

each 8 x 0.8

6 x 0.8

Activator
(combined sensor: activator/safety sensor)

Drive unit
Control unit

$3 \times 1.5\ mm^2$

16 A

230/240 V AC 50/60 Hz

2 x 0.8 100 m

Emergency pushbutton, close to door

10 x 0.8 100 m

Program switch

4 x 0.8 100 m

Outside: Key switch, code card reader with floating contact or sim.

2 x 0.8 100 m

Inside: Pushbutton

*Safety sensors to monitor the secondary closing edges in accordance with DIN 18650 and EN 16005
**Safety sensors to monitor the main closing edge in accordance with DIN 18650 and EN 16005

PROGRAM SWITCHES

A program switch from DORMA's broad range of accessories allows the automatic door system to meet individual requirements and provides easy handling.

The corresponding 3-position program switches are available in various designs and suitable for all kinds of applications.

They offer various options, from a mechanical to a full-electronic version, alternatively also lockable via profile half-cylinder or in a full-electronic way via code..

- Up to 5 different functions: Off, Automatic, Exit Only, Partial Open, Permanent Open
- Electronic program switches in System 55 design to meet the highest aesthetical demands
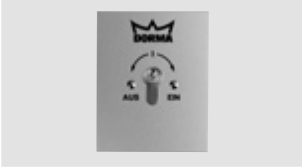
For sliding door operators	Designation	Specification	Installation system	Order No.
	PG-S1	5-position, aluminium, white, flush-mounted version, 80 x 80 x 40 mm	Gira S-Color	19135401150
	PG-S2	5-position, lockable, aluminium, white, flush-mounted version, 80 x 80 x 40 mm	Gira S-Color	19135602150
	EPS-S	Full-electronic program switch in System 55 design, 5-position, lockable via code or additional TL-ST S55 key switch, membrane keypad aluminium-coloured, white, flush-mounted version, 80 x 80 mm	System 55	16556901150

SWITCHES

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	Designation	Specification	Installation system	Order No.
	On/Off switch	White, aluminium, flush-mounting, 80 x 80 mm	Gira S-Color	19135403150
	Radar switch	„MAGIC SWITCH", proximity-type radar switch responds to movement, for flush-mounting, 80 x 80 mm		05076831332

PUSHBUTTON

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Palm pushbutton	Designation	Specification	Installation system	Order No.
		Single-pole changeover contact, single-type frame, white, flush-mounted version	System 55	19144701170

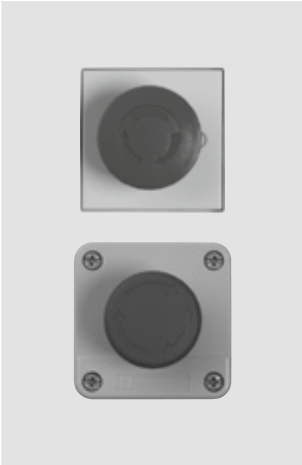| Key switches	Designation	Specification	Installation system	Order No.
	KT 3-1	1 NO contact with profile half-cylinder, may be replaced for any profile half-cylinder of a master key system, key only retractable in neutral position, aluminium, metal, 75 x 75 x 60 mm		
	KT 3-1 UP	flush-mounted version		05054531332
	KT 3-1 AP	surface-mounted version		05054631332
	KT 8	Lettering "Auf, Zu" (German for "Open/Closed"), 2 NO contacts, with profile half-cylinder, may be replaced for any profile half-cylinder of a master key system, key only retractable in neutral position, aluminium, metal, 75 x 75 x 60 mm		
	KT 8 UP	flush-mounted version		05054831332
	KT 8 AP	surface-mounted version		05054931332
	TL-ST S55	Switch with single-pole changeover contact, for profile half-cylinder by others to DIN 18252, locking cam centre 30 – 32.5 mm, overall length 40.5 – 43,5 mm, locking cam position left (90°), incl. cover for System 55, not suitable for box for surface-mounting, not including profile half-cylinder, **not including frame**		
	TL-ST S55 W	White	System 55	56330710
	TL-ST S55 S	Silver-coloured	System 55	56330701
	TL-ST S55 A	Anthracite	System 55	56330715
	KT 3-2	1 NO contact with profile half-cylinder, may be replaced for any profile half-cylinder of a master key system, key only retractable in neutral position, exchange cover, „Ein/Aus" lettering (German for „On/Off"), aluminium, flush-mounted version: 125 x 100 mm, surface-mounted version: 70 x 90 mm		05054731332

EMERGENCY PUSHBUTTONS

	Designation	Specification	Installation system	Order No.
	NAT	Designed to interrupt the automatic movement of the door, emergency pushbutton (function: Emergency Off) for automatic door operators, manufactured to ZH 1/494 or BGR 232, DIN 18650 and EN 16005, red knob with yellow centre insert, max. load current: 10 A at 230 V AC		
	NAT 1	NO contact: 1, NC contact: 1, white frame, flush-mounted version, 80 x 80 mm	System 55	90400025
	NAT 2 no picture	Function "Emergency Opening" with green knob, NO contact: 1, NC contact: 1, max. load current: 10 A at 230 V AC, white frame, flush-mounted version, 80 x 80 mm	System 55	90400035
	NAT 4	NO contact: 1, NC contact: 1, surface-mounted version, 68 x 68 mm		05027031332
	TL-N S55	Highly-illuminated emergency pushbutton environment with visual locking status indication, optical and acoustic alarm via yellow flashlight and integrated alarm siren, sabotage-proof, behind glass, **not including frame** NO contact: 1, NC contact: 1, max. load current: 1 A at 24 V DC, flush-mounted version, 80 x 80 mm	System 55	56330500

LIGHT BARRIERS

|	Designation	Specification	Order No.
	Prosecure light barrier	Designed to safeguard the passage area of automatic sliding doors via presence detection of moving people and objects (not compliant with DIN 18650 and EN 16005) Counter light barrier comprising transmitter and receiver	86210500

ACTIVE INFRARED DETECTORS

Safety sensors / Combi sensors	Designation	Specification	Colour	Order No.
	Prosecure Opti Scan	The active infrared curtain according EN 16005 ensures optimum protection of the area at the side of the door. It protects people in the danger area of the opening door panel.	black silver coloured white	86301100 86302100 86303100
	Prosecure Opti Scan 1	The active infrared curtain according DIN 18650 and EN 16005 ensures optimum protection of the area at the side of the door. It protects people in the danger area of the opening door panel.	black silver coloured white	86301101 86302101 86303101
	Prosecure Opti Combi	Quick and easy to install, wide field can be used as a light barrier substitute, LCDDisplay, Precise positioning of the AIR curtain thanks to inclination angle display on a clear scale, direction recognition (DIN 18650 and EN 16005)	black silver coloured white	86711400 86712400 86713400
	Prosecure Opti Combi 1	Very flexible field settings, active infrared curtain is self-monitoring, crossing traffic optimization, precise positioning of the AIR curtain thanks to inclination angle display on a clear scale, direction recognition. (DIN 18650 and EN 16005)	black silver coloured white	86711401 86712401 86713401

MOTION DETECTORS

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Motion detectors	Designation	Specification	Colour	Order No.
	Prosecure Easy Motion Mono	Full-automatic access on pulse activation; adjustable inclination angle, inclined field of view and field size, LED status indicator, not in accordance with EN 16005 Ambient temperature –20 °C to 60 °C	black silver coloured white	86001000 86002000 86003000
	Prosecure Easy Motion Stereo	Adjustable inclination angle, inclined field of view and field size, direction recognition, cross-traffic suppression, immunity, LED status indicator, not in accordance with EN 16005 Ambient temperature –20 °C to 60 °C	black silver coloured white	86011000 86012000 86013000
	Prosecure Opti Motion Mono	Adjustable inclination angle, inclined field of view and field size, direction recognition, immunity, LED status indicator Ambient temperature –20 °C to 60 °C	black silver coloured white	86101000 86102000 86103000
	Prosecure Opti Motion Stereo	Adjustable inclination angle, inclined field of view and field size, direction recognition, cross-traffic suppression, Slow Motion function, immunity, LED status indicator Ambient temperature –20 °C to 60 °C	black silver coloured white	86111000 86112000 86113000

Accessories	Designation	Specification		Order No.
	Rain protection cover	For Easy Motion detectors		86031900
	Rain protection cover/ ceiling angle bracket	For Opti Motion detectors		86131900
	Prosecure Remote Control	Remote control for programming Prosecure Opti Motion detectors or products from other brands, for the convenient and exact adjustment of high-mounted sensors, self-explaining menu navigation, LCD display, ambient temperature -20 °C to 60 °C		86991900

TRIMS AND BOXES FOR SURFACE-MOUNTED PUSHBUTTONS AND SWITCHES

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	Designation	Specification	Dimensions in mm (W x H x D)	Installation system	Order No.
	System 55	**Cover frame (Programm STA)**			
	FR-S55 1	Single-type trim, Standard 55, white	80.7 x 80.7	System 55	56391110
	FR-S55 2	Double-type trim, Standard 55, white	151.8 x 80.7	System 55	56391210
	FR-S55 3	Triple-type trim, Standard 55, white	223.3 x 80.7	System 55	56391310
	FR-E2W 1	Single-type trim, E2 55, white	80.8 x 80.8	System 55	56392110
	FR-E2W 2	Double-type trim, E2 55, white	151.9 x 80.8	System 55	56392210
	FR-E2W 3	Triple-type trim, E2 55, white	223.4 x 80.8	System 55	56392310
	FR-E2S 1	Single-type trim, E2 55, silver	80.8 x 80.8	System 55	56392101
	FR-E2S 2	Double-type trim, E2 55, silver	151.9 x 80.8	System 55	56392201
	FR-E2S 3	Triple-type trim, E2 55, silver	223.4 x 80.8	System 55	56392301
	FR-E2A 1	Single-type trim, E2 55, anthracite	80.8 x 80.8	System 55	56392115
	FR-E2A 2	Double-type trim, E2 55, anthracite	151.9 x 80.8	System 55	56392215
	FR-E2A 3	Triple-type trim, E2 55, anthracite	223.4 x 80.8	System 55	56392315
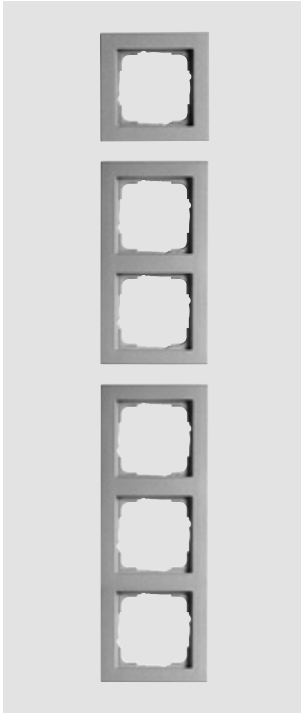
Please see STA price list for further trims and versions.

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