



Swing door operator

**DORMA**

**ED 800**

**SERVO** >>>>  
<<<< **MATIC**

## The ultimate smart solution to swing door automation to suit every user requirement

The DORMA ED 800 is the highly efficient combination unit comprising the DORMA TS 83 door closer and a microprocessor controlled servo drive unit. This DUO-function offers a real enhancement for any swing door, no matter what type, adapting it to the needs of senior citizens and the physically challenged while offering optimum user safety. This type of door operator offers convenience to the able-bodied who benefit from the integrated door closer, while handicapped persons are able to activate the built-in drive function. Optional modes include a "Low Energy" automatic drive function and a servo "Power Assist" function.

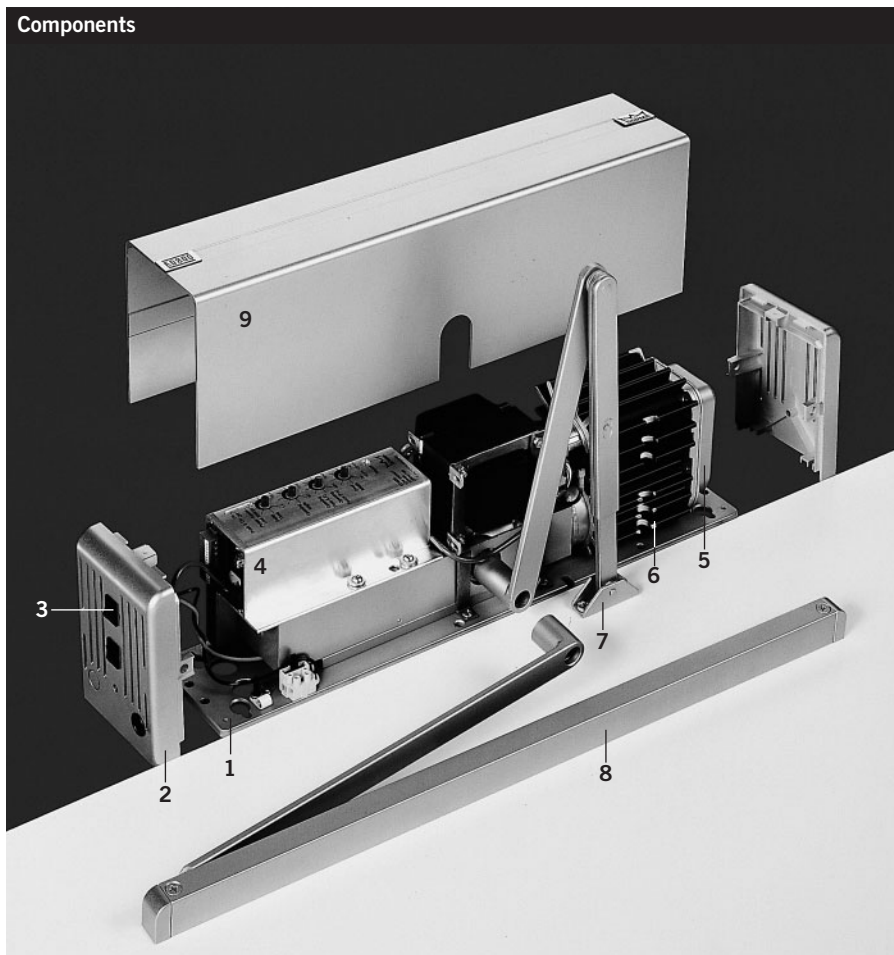
An integral open-assist function (Push & Go) can also be activated. Extra quiet operation of the drive unit also makes it suitable for critical applications and even for private use. Additional safety appliances or components are unnecessary. The door action is subject to constant monitoring, while force restriction and automatic obstruction detection virtually rule out any potential risk to the user. The DORMA ED 800 Servo-matic swing door operator complies with rigorous US standards governing "low energy" drives in accordance with ANSI A.156.19

### Benefits

- Single model for all applications
- System designed for universal use, also ideal for retrofitting
- Quick and easy to install
- Hardly needs any wiring
- Adjustable closer size, range: DIN 2-4
- Compact unit of timeless design
- Wide range of applications
- Low planning costs
- Automation of swing doors in line with individual requirements
- User convenience ensured even when main power is not drawn
- High degree of integrated user safety
- Exceptionally quiet operation



### Components



- 1 Mounting plate
- 2 End cap
- 3 Programme switch and ON/OFF switch
- 4 Electronic control unit
- 5 Gear unit
- 6 DC motor
- 7 Standard arm
- 8 Slide channel arm
- 9 Cover

Applications		
<b>Single leaf standard doors</b>		
Door leaf width		900 mm to 1200 mm
Door leaf weight, max.		90 kg
Frame reveal depth	Standard arm	-30 bis 178 mm
	Slide channel arm	0 mm

Technical data of the drive unit		
Can be used for mounting on hinge side and opposite hinge side and DIN left/right		
		●
Closing force		EN 2-4, adjustable
Dimensions	Height	108 mm
	Depth	152 mm
	Width/Length	540 mm
Weight per operator		18 kg
Opening angle, max.		115°
Power consumption, max.		170 W
Power Supply data		220-240 V, 50/60 Hz
Power supply for external accessories		12 V DC, max. 500 mA
Class of protection		IP 20
TÜV type-approved		●
Compliant with EU Low Voltage Directive		●
Quality-assured manufacture to ISO 9000		●

- standard
- optional

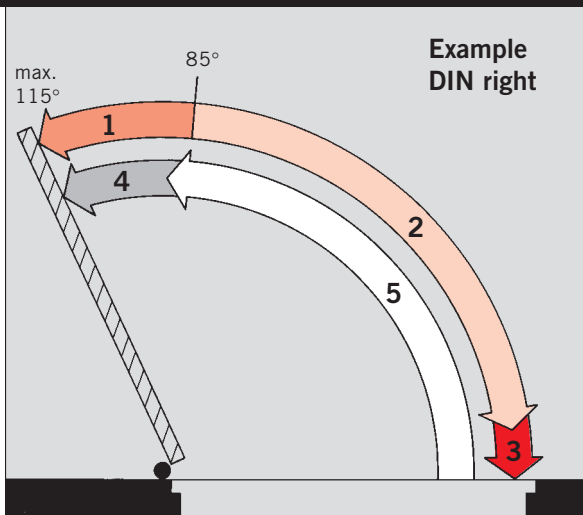
**SERVO** >>>>  
<<<< **MATIC**

Adjustable operating curve parameters	
Opening time, adjustable	3 to 10 s
Closing time, adjustable	≥ 4 s
Hold-open time, adjustable	5 to 65 s
Backcheck, adjustable	●
Delayed action, adjustable	●
Latching action, adjustable	●

Function programs	
Off	●
Power assist (Servo)	●
Automatic (Low Energy)	●
Special functions	
Airlock function	○
Timed airlock function	○
Push & Go function	●
Door closer function in deenergised condition	●

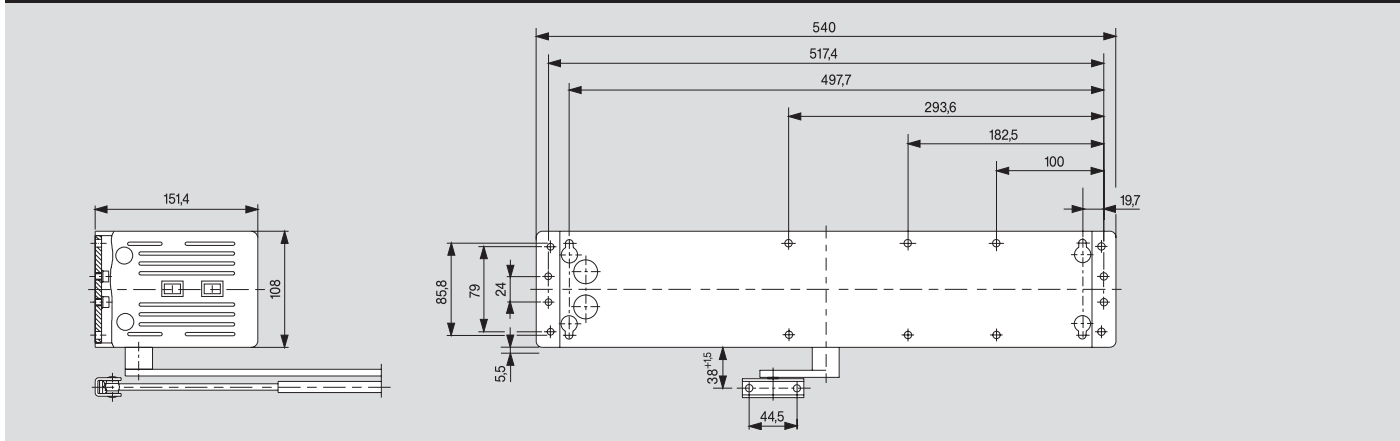
Prepared for connection of the following accessories	
Door locking device	
Electric strike (fail-safe/fail-secure principle)	
DORMA SVP anti-panic motor lock with automatic locking action	
Access control system	
Module for connecting to EIB buildings control	
2 different activators	
Radio remote control	

Functions and settings	
<b>TS 83 door closer settings</b>	
1 Backcheck	
2 Closing time	
3 Latching time	
<b>Servomatic settings</b>	
4 Opening angle 85° – 115°	
5 Opening time	



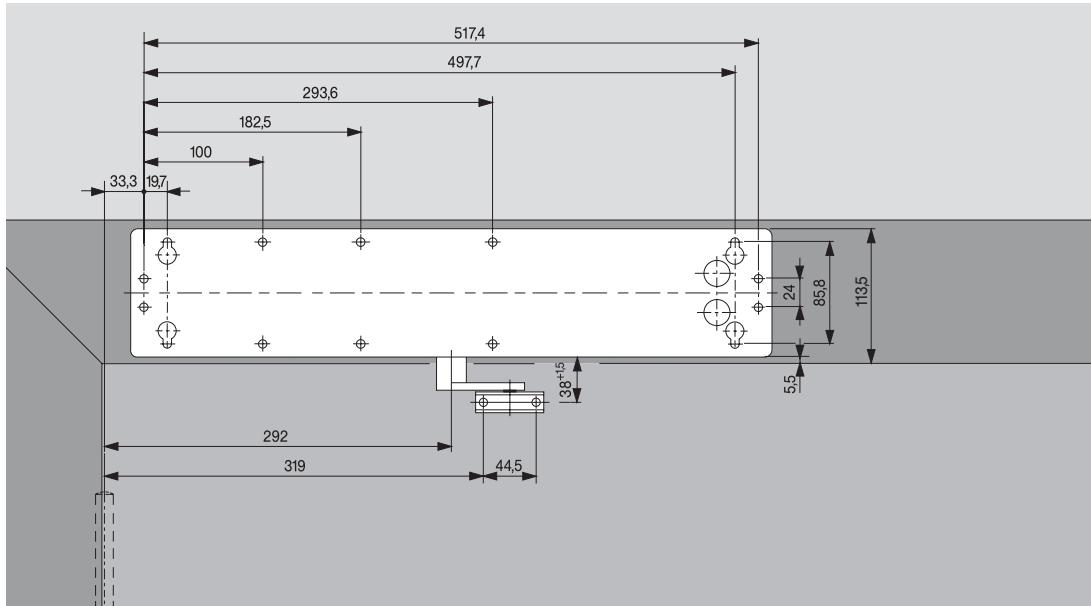
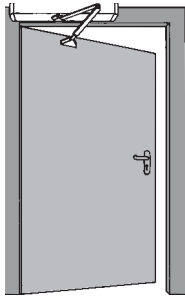
**Example DIN right**

Dimensions



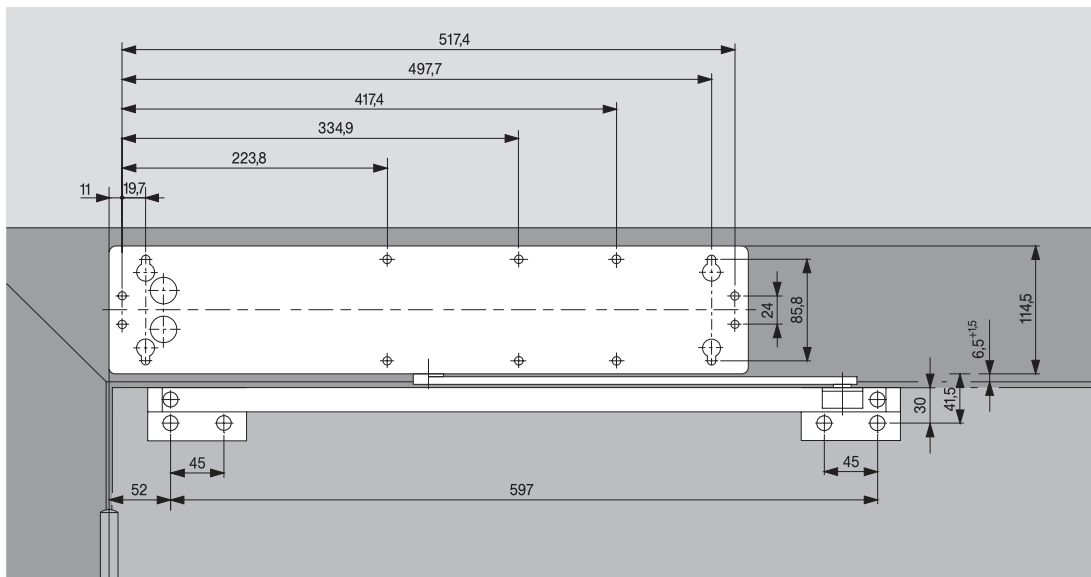
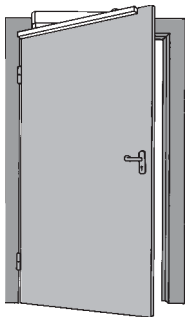
Lintel/Top jamb fixing on the opposite hinge (push) side

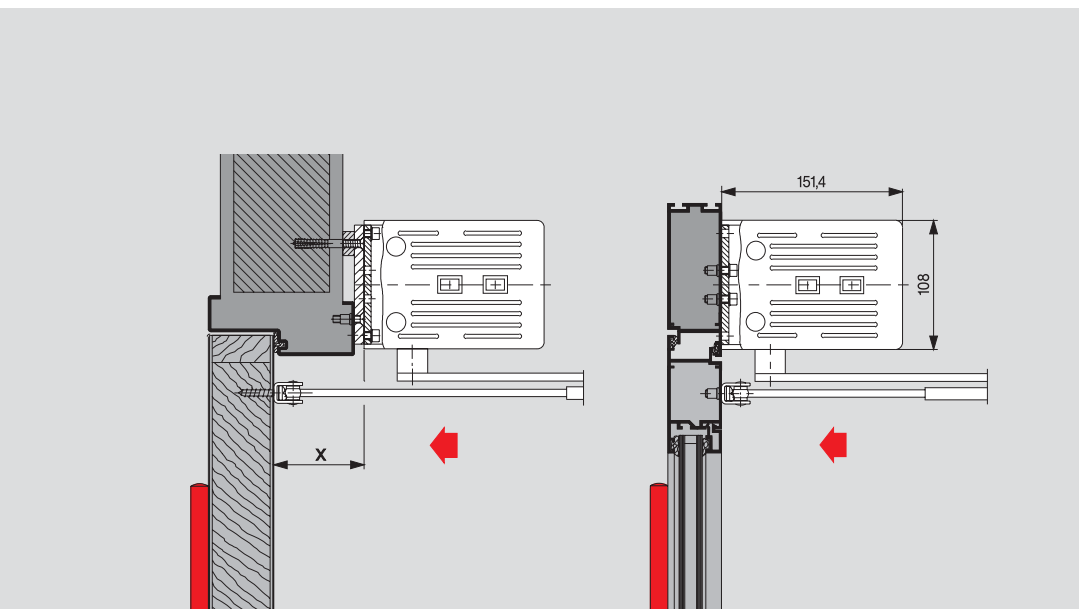
LH (ISO 6) and RH (ISO 5) door  
Example: RH (ISO 5) door



Lintel/Top jamb fixing on the hinge (pull) side

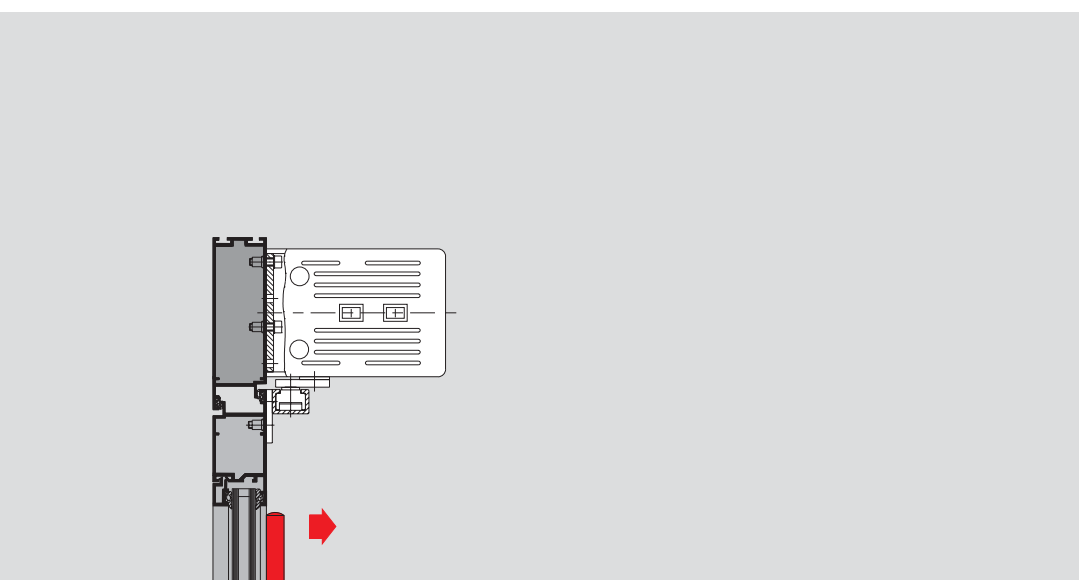
LH (ISO 6) and RH (ISO 5) door  
Example: LH (ISO 6) door





**Standard arm**

Lintel depths  
-30 to 178 mm



**Slide channel arm**

Lintel depth  
0 mm  
Mounting plate  
for rebated doors

## The intelligent safety concept

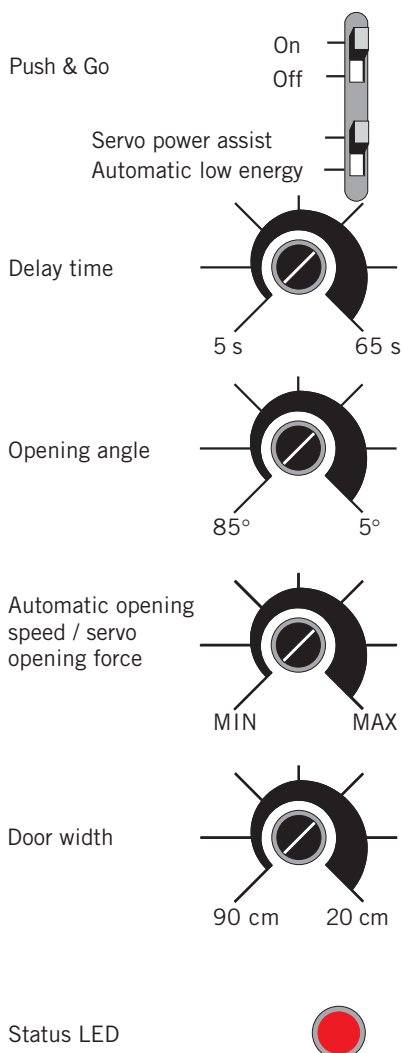
With the Servomatic feature activated, the intelligent microprocessor control system provides constant monitoring of the door action. If the door happens to strike an obstacle, it is

immediately stopped and balanced. The servo function now enables the user to open the door further with an absolute minimum of force. At no risk to the user whatsoever. The ensuing

forces are kept extremely low by the "Low Energy" features. Accordingly, no additional safety components such as sensor strips etc. are necessary.

### DORMA ED 800 Control module

#### Operating mode



#### Open assist switch (Push & and Go):

If this mode is enabled ("ON"-Position), the Servomatic feature is activated by giving the door a short push. In this case, there is no real need to install, say, an additional wall-mounted pushbutton.

#### Power Assist/ Low Energy selector:

Switching to the "Power Assist" position activates the servo mode. The user is then able to open the door with an absolute minimum of effort. Moving the switch to the "Low Energy" position serves to activate the automatic function. The door automatically opens slowly to minimize both force and power consumption.

#### Hold-open time adjustment:

Infinitely variable setting of hold open time (delay function) possible from 5 to 65 seconds.

#### Opening angle adjustment:

Adjustment of opening angle from 85 to 115°.

#### Mode-governed setting:

##### a) Automatic mode –

##### "Low Energy":

Progressive adjustment of opening speed

##### b) Servo mode –

##### "Power Assist":

Infinitely variable settings of opening force.

#### Setting of door width:

Infinitely variable setting from 900 to 1200 mm.

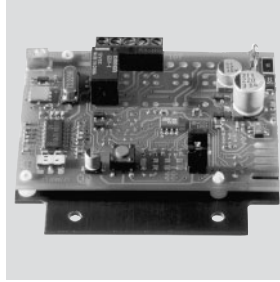
#### Twin-colour status LED:

Green flashing action denotes correct installation and functioning.

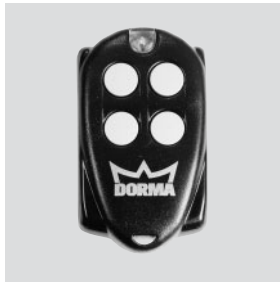
Repetitive red flashing action signifies malfunction or faulty installation.

**ED 800 activators**

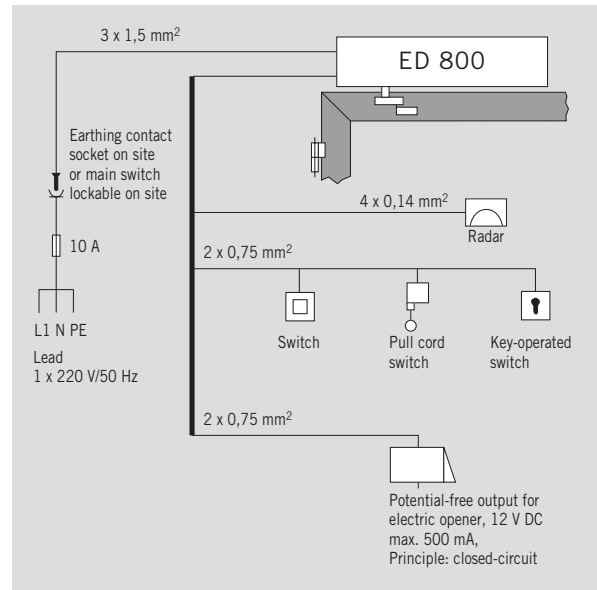

“Mercur” radar motion detector



Radio receiver



Radio transmitter


**ED 800 cable connections and wiring**


Large area pushbutton, surface or flushed mounted, with or without “Open door” wording (variant for surface mounting also available as radio transmitter variant)

**Specification text ED 800, 1-leaf version, standard doors**
**Door parameters:**

- Door widths from 900 to 1200 mm
- Door leaf weight max. 90 kg
- Opening angle up to 115°
- Operator dimensions (height x depth x width): 108 mm x 166 mm x 540 mm
- Function programs: OFF – AUTOMATIC – EXTENDED HOLD-OPEN (the operator closes the door automatically after 5 minutes) – POWER ASSIST
- Connection voltage 220 V to 240 V AC, 50/60 Hz, 12 V AC, 0.5 A
- Mounting on hinge side (slide channel arm) and opposite hinge side (standard arm)

Electro-hydraulic operator for swing doors with electronic control system and integrated door closer, manual access in the event of power failure, currentless door closer function (EN 2-4). Hold open time progressively adjustable from 5 s to 65 s, opening and closing times, Push & Go function, low energy and power assist mode adjustable.

Compliant with the most recent versions of guidelines for power-operated windows, doors and gates, German code ZH 1/494, accident prevention regulations, EMC directive **CE**, VDE regulations. US Standard ANSI 156.19.

**Mounting:**

- ( ) Hinge side with slide channel arm (lintel depth 0 mm)
- ( ) Opposite hinge side with standard arm
  - ( ) Lintel depth –30 mm to 76 mm
  - ( ) Lintel depth 77 mm to 178 mm

Colour: ( ) silver ( ) RAL 9016

Activators: ( ) Switch ( ) Radar motion detector

**Services:**

- ( ) Installation ( ) Commissioning ( ) Maintenance contract

**Make:**

DORMA ED 800

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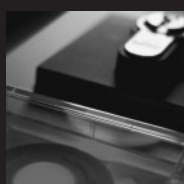
Door Control



Automatic



Glass Fittings and Accessories



Security/ Time and Access (STA)



Movable Walls