**DICTAMAT 650**

**Sliding Door Operator**

**Hold-Open, Damping and Closing System**

The DICTAMAT 650 door operator is designed for fire protection sliding doors with one or two leaves and a door width of up to 6.5 m.

The DICTAMAT 650 is a compact unit which provides an economic alternative for holding open and automatically close fire protection doors.

The adjustable closing speed is controlled by the magnetic brake system.

The closing spring force is transmitted to the door by a special steel drive rope which makes sure the spring tension remains constant, even after frequent use.

The DICTAMAT 650 door operator has been tested as a hold-open, damping and closing device by the National Material Testing Office in Dortmund, Germany and has been approved by the German Institute of Building and Construction Engineering in Berlin (approval no. Z.6.5-1903). Its quality is continuously controlled and monitored (contract no. Do.15.4).

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**Technical Data**

- Suitable for sliding doors of max. 6.5 m door width
- Closing force max. 160 N (special model also 320 N)
- Adjustable closing speed 0.08 to 0.2 m/s (magnetic brake system)
- Holding force of magnet approx. 300 N
- Power consumption 24 VDC / 2.2 W / 92 mA
- Controlled by smoke detector, emergency switch, relay
- Weight 18 kg
Dimensions

The door operator is always fixed with its bracket for plug-in mounting at the end of the rail. Please make sure sufficient space is available (min. 430 mm).

The bracket for plug-in mounting also allows for installation in other positions below the rail. Please ask for a special drawing, if you require such an installation.

The following drawing shows the drive unit mounted on the left end of the rail. If you need to mount it at the right end, remove the bracket and the plastic guide roller and fix them to the left side of the casing. For heavy doors, we generally recommend you mount the DICTAMAT 650 at the end of the rail where the door is in the closed position.

Drive Unit with Bracket for Plug-in Mounting on Rail

Rope Tensioner with Fixing Bracket and Idler Pulley with Bracket

Drawings of the accessories for doors with two leaves or for doors with free-running function are available on request. The dimensions of the other components (final dampers, smoke detector, hand release switch) can be found in other chapters of our catalogue.
DICTAMAT 650
Economic Operator for Closing Fire Protection Sliding Doors

Due to its compact design the DICTAMAT 650 is very easy to install. The door is kept open in the desired position by the integrated electromagnet until the 24 VDC power supply is interrupted by a smoke detector or a hand switch. To make sure the door closes completely in case of an alarm you should use a cutoff relay with alarm and reset key or a push-to-lock key (part no. 700132).

When the spring closes the door the closing speed is controlled by the magnetic brake system.

Electrical Connection

After the door operator has been installed the integrated electromagnet of the operator and the hand release switch need to be connected to the RM 3000+ smoke detectors (see diagram).

Mounting the Rope Tensioner with Fixing Bracket

Once the motor and idler pulley are in place, the rope tensioner with its fixing bracket needs to be fixed to the door. Make sure the rope runs exactly parallel to the rail. It is fixed with its lower part to the rope tensioner. Make sure that the opening direction of the operator corresponds to that of the door. It is also possible to use the DICTAMAT 650 for the opposite opening direction by connecting the upper half of the rope to the rope tensioner.

We recommend you put the rope in place when the door is completely closed. Once all components have been properly aligned to the rail and fixed the rope needs to be tensioned. To make sure the force of the spring is sufficient to close the door completely, open the door slightly. The closing force is increased by turning the tensioning screw in the direction indicated by the arrow. Turning in the opposite direction will reduce the force.

Mounting the Steel Rope

We recommend you put the rope in place when the door is completely closed. Once all components have been properly aligned to the rail and fixed the rope needs to be tensioned. To make sure the force of the spring is sufficient to close the door completely, open the door slightly. The closing force is increased by turning the tensioning screw in the direction indicated by the arrow. Turning in the opposite direction will reduce the force.

Force of Closing Spring

Adjustment

Move the door to the OPEN position and adjust the closing speed while the door is closing. This is achieved by lifting the locking spring and turning the adjustment ring (see diagram on preceding page). Turning it clockwise will reduce the closing speed. Please observe the relevant safety regulations of your country.

The force acting on an obstacle may not exceed 150 N.

This can be achieved by a slower closing speed and by installing additional dampers in the final positions (e.g. DICTATOR EDH). If the operating equipment is mounted at less than 3 m height, the covers on the drive unit pulley and the idler pulley may not be removed to avoid trapped fingers in the workings of the equipment.
DICTAMAT 650
For Fire Protection Doors with One or Two Leaves

Once the door has been opened by hand the DICTAMAT 650 electromagnetic hold-open system keeps the door open in the desired position until the power supply is interrupted by a smoke detector or a hand release switch (relay with release and reset key or push-to-lock switch). The integrated spring then automatically closes the door. The closing speed is controlled by the adjustable magnetic brake system. The force is transmitted to the door by a special steel drive rope which is fixed to the door with the rope fixing bracket which also tensions and secures the rope. The idler pulley is also fixed to the rail. The operator is supplied ready to install, including bracket for plug-in mounting in the rail.

Mounting and Operation

The operator hold-open system is connected to the power pack and the smoke detectors so that its 24 VDC power supply is interrupted in the event of an alarm.

Order Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
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<tbody>
<tr>
<td>DICTAMAT 650 (160 N) for left operating doors</td>
<td>700450</td>
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<tr>
<td>DICTAMAT 650 (160 N) for right operating doors</td>
<td>700451</td>
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<tr>
<td>DICTAMAT 650 with 320 N spring on request</td>
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Components Included

- Operator (with integrated closing spring, magnetic brake system and electromagnet)
- Bracket for plug-in mounting in rail
- 25 m steel drive rope with rope tensioner and fixing bracket
- Idler pulley with bracket for mounting to rail

Accessories

- Additional rope fixing bracket for doors with two leaves part no. 780990
- Free-movement system (door catch and special rope tensioner) see special leaflet
- EDHa / EDHM hydraulic dampers (only CLOSED position) from page 05.065.00
- Power pack E 450, 0.45 A/24 VDC part no. 040545
- "CLOSE" operating elements (dead man operation) from page 05.071.00
- RM 2000/3000+ smoke detector, hand release switch, RESET switch: see Fire Door Control Solutions