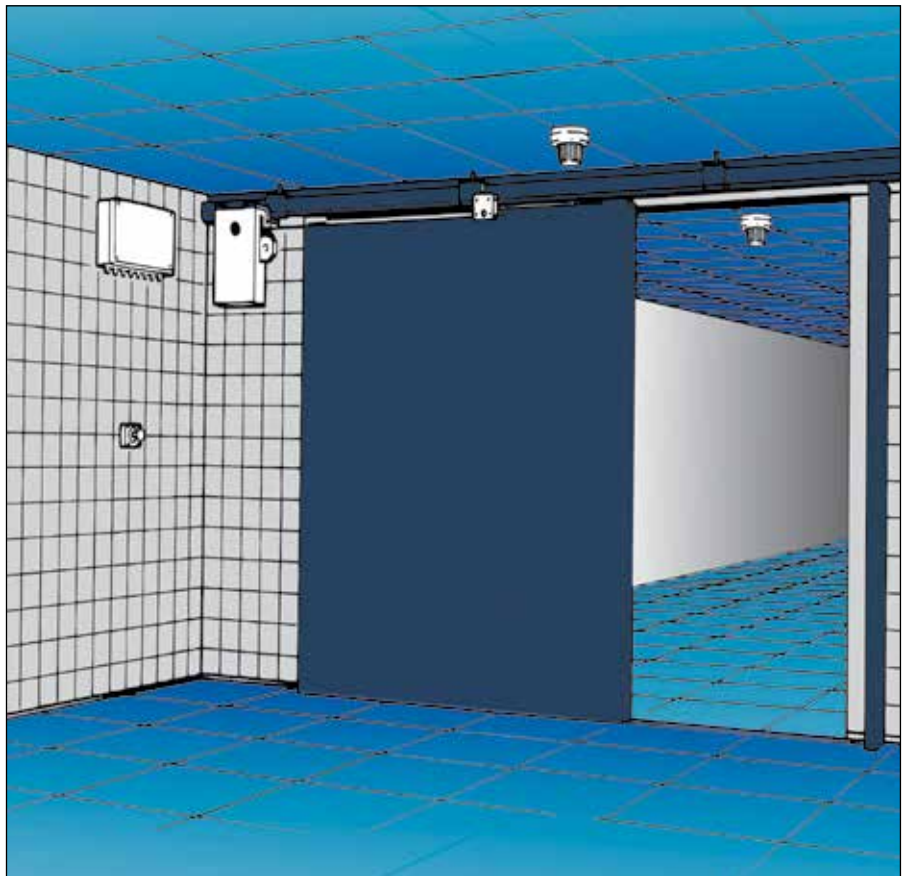


DICTATOR Fire Door Operators for Sliding and Hinged Doors

Fire door operators have to ensure the closing of doors and gates in case of fire alarm, even if the power supply fails. Therefore in Germany a **mechanical closing device** is obligatory. In some other countries you may use an emergency power supply, but have to provide a self-supervision of the emergency battery pack. Otherwise they might be empty when needed and the door would stay open.

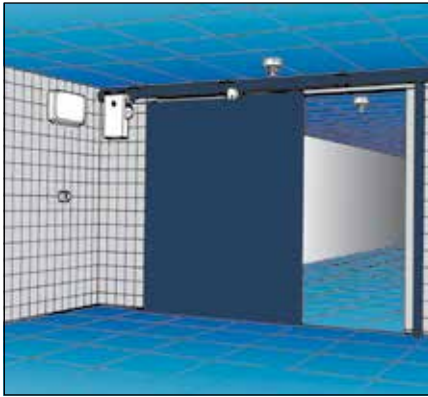
DICTATOR offers

- partial or complete **automation** of fire doors (depending on the frequency of operation, requirements and budget).
- a large and flexible **standard programme** of **modular** components, also suitable for special applications.
- **customized solutions** (e.g. door goes around a bend, very large door/gate, hazardous area, overhead doors).
- **easier and faster installation** because of the use of **CAD drawings** (e.g. if very little space is available, the exact position of the operator on the door is given in the drawing.).
- detailed **advice, installation** (if required), **bringing into service, maintenance, service** and **training**.



Technical Data

- DC door operators with integrated encoder
- DC door operators with separate limit switches
- Three-phase-current motors with separate limit switches
- Closing with counterweight provided on site
- Closing with integrated closing spring
- Semi-automatic operators to close sliding fire doors



1. Fully Automatic Operators for Sliding Fire Doors

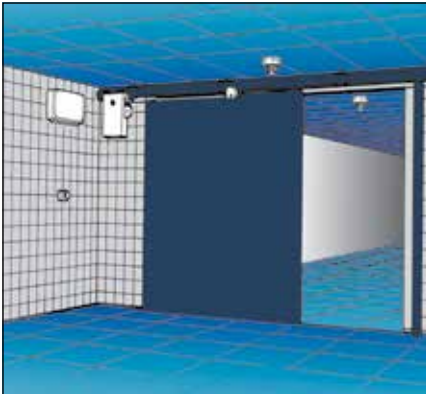
DICTATOR Fire Door Operators - Summary

	Motor	Closing			Width of door			Force to open the door		Approval
		Counter-weight	Spring rope pulley	Battery back-up	up to 6.5 m	up to 7 m	unlimited*	till 300 N 700 kg**	till 600 N 1300 kg**	
Fully-automatic sliding door operators	Voltage									in Germany with control system
DICTAMAT 8000-21 ZLM	48 VDC		x (integrated)		x				x floor 1000kg	Square 800
DICTAMAT 7000-21 ZEM	48 VDC	x				x				Square 800
DICTAMAT 7000-21 ZLM	48 VDC	x				x				Square 800
DICTAMAT 3700-21 ZEM	24 VDC	x				x				Square 800
DICTAMAT 3700-21 ZEM	24 VDC	x	x (sep.)			x				Square 800
DICTAMAT 3700-21 ZLM	24 VDC	x				x				Square 800
DICTAMAT 700 (S) also explosion-proof	230/400 VAC	x	x (sep.)			x				E8 with frequency-converter + AR20
Customised operators:										
Three-phase current till 0.75 kW	AC	x				x				800 N door 1800kg
Direct current	DC	x				x				E8 with frequency-converter + AR20

M = integrated magnet
** max. door weight depends on its smooth running

E = position control with separate limit switches
L = position control with integrated encoder

Legend:
Z = toothed belt



DICTATOR Fire Door Operators - Summary, cont.

DICTATOR offers a variety of either fully or semi-automatic standard door operators for fire protection doors. In addition we design and develop customised drive units, e.g. for very large doors, for door and window installations with little space left for the drive unit or for overhead fire protection doors, **explosion-proof door operators** and so on.

The force of the motor is transmitted either by a toothed belt (Z) or a chain (K). The revolving toothed belt/chain permits even to move **doors with two leaves with one door drive and one control system** only.

All door operators and control systems mentioned in the tables are explained in detail on the following pages.

1. Fully-Automatic Sliding Fire Door Operators - cont.

The fully-automatic DICTATOR door operators DICTAMAT are used on **doors**, that are **frequently opened and closed**. These doors can be integrated without any problem in the course of manufacture, e.g. as separation to the clean area or to sparsley heated areas, when fork lift trucks run frequently between the different areas.

The fully-automatic DICTATOR door operators DICTAMAT are available for different doors sizes, with integrated position control (encoder) or separate limit switches, closing either with an integrated spring or a counter weight provided on site.

The **direct current (DC) door operators** of the **series DC-21** are designed as a *modular system*. They all feature one central module: the gear module on which the different DC motors are flanged. The driving wheel is determined by the form of power transmission: either toothed belt or chain. Furthermore the position control system can be added to the central module.

This *modular system* offers several important advantages:

- *Individual combination of the modules* permits at a very high extent to match the door operators to the requirements of the different doors - even on site (our service team can e.g. increase the force of the door drive by adding a further gear box).
- The modular system *simplifies installation, service and maintenance*, as each module can be exchanged without any problem.
- *Short lead times* even for door operators having to be assembled especially.
- All door operators of the modular system are similar and therefore fast and easy to understand and to handle, even when using different types of the modular system.

The summary on the previous page should help you to select the right door operator for your application. Or you simply ask our advice!

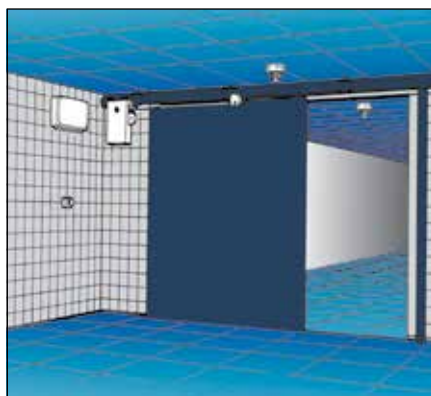
2. Semi-Automatic Sliding Fire Door Operators

	Closing		Width of the door		
	Counter-weight	Closing spring	up to 6.5 m	up to 8 m	un-limited*
Semi-automatic sliding door operators					
DICTAMAT 650		x (integrated)	x		
DICTAMAT 560		x (separately)	x		
DICTAMAT 570	x				x

The semi-automatic DICTATOR door operators are designed for doors that are **rarely opened** and then normally **stay open**. They keep the door open in every position. In case of alarm or after a closing command the counter weight or the spring rope pulley will close the door. The closing speed is controlled by the adjustable magnetic brake of the door operator.

All semi-automatic DICTAMAT operators are approved in Germany for the use on fire sliding doors.

*All drive units operating with rope are delivered with a steel rope of 25 m. If this should not be enough (column "width of door": unlimited), please order a longer rope.



dictator Fire Door Operators - Summary, cont.

dictator provides operators not only for fire protection sliding doors. We also offer solutions for hinged doors, even for special applications as fire protection doors in explosive sectors. Or for very large and heavy hinged doors. For these you would need an individual approval of the responsible authorities.

Information on our dictamat 306 we will send you on demand.

3. Operators for Hinged Fire Protection Doors

	Open	Close	Width of door	Opening angle max.	Approval in Germany
Automatic hinged door operators	motor	integrated closing spring			
dictamat 204B	x	x	max. 1,4 m	110°	Z-6.5-1944
dictamat 306	x	x	max. 1,5 m	180°	individual approval