

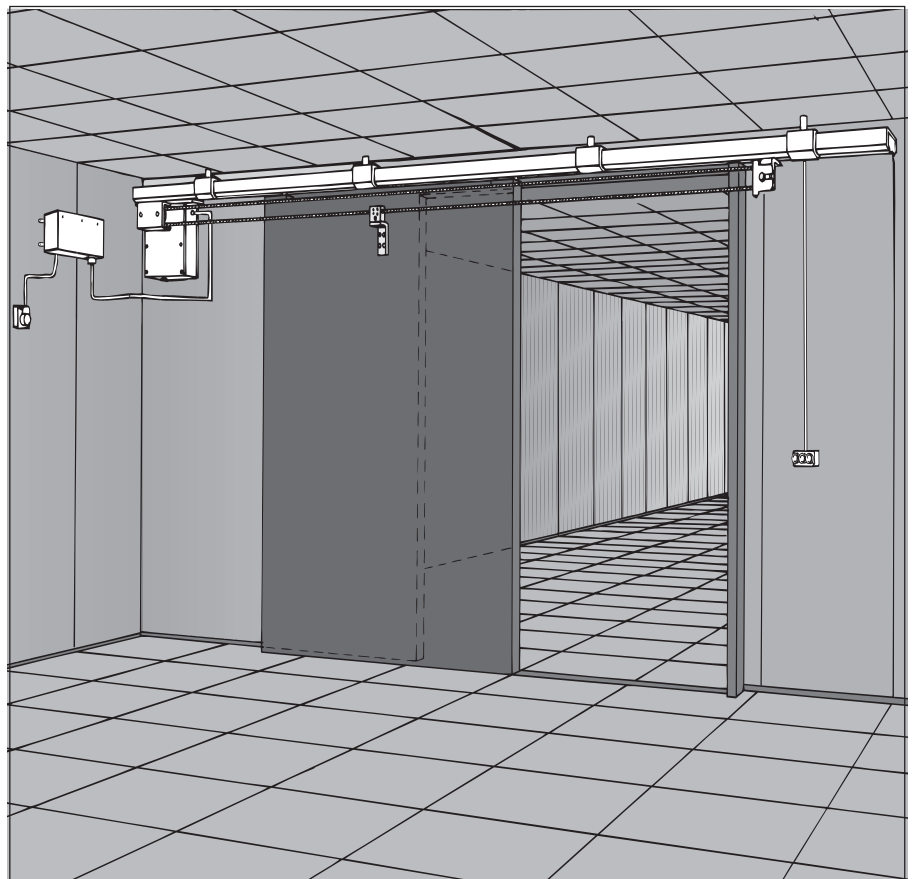
## Dictator Door Operators for Sliding and Hinged Doors

For decades Dictator has been specialising in the design and production of door operators, especially for the **commercial and industrial sector**.

The tables on the following pages will help you to select the right door operator for your door. In addition we also supply custom-built solutions and a large range of door operators for fire protection doors.

### Dictator offers

- **door operators to automate doors**, including cold store doors.
- a large standard range of **modular based** and therefore very flexible **door drives**, that can also be adapted to suit special requirements.
- **customised door operators** (e.g. for multi-media facilities, very large and heavy doors, heavy overhead doors, hazardous areas and so on).
- the use of **CAD to facilitate and speed up installation** (very important e.g. in case of restricted space: the exact placing of the operator is shown in the door drawing).
- extensive **advisory service, installation** (on demand), **maintenance, service, training seminars**.



### Technical Data

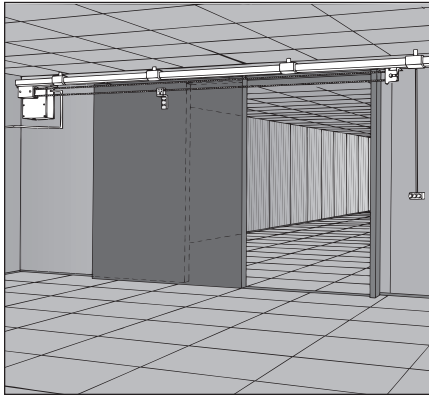
DC door operators with integrated encoder

DC door operators with limit switches

Three-phase-current (AC) door operators with integrated encoder

Three-phase-current (AC) door operators with separate limit switches

Customised door operators



## DICTATOR Door Operators - Summary

DICTATOR offers you a **standard program** of different door operators to automate your doors.

In addition we provide **customised designs**, for example for very large and heavy doors, for multi-media facilities, door or window installations with little space to house the operators, door operators for complex processing requirements. Amongst our customers for the customised designs are the Corte Inglés (shopping centres in Spain), the Madrid Airport, Hermès (Hermès building in Tokio).

### 1. Door Operators for Sliding Doors

The DICTATOR door operators DICTAMAT for sliding doors are used in very different applications, however mainly in the **industrial and commercial sector**. To this belong also sliding doors in the plant engineering and construction as well as for **cold stores**.

The DICTATOR product range provides DICTAMAT door operators for different door sizes and weights, with integrated position control or separate limit switches. The power transmission is effected either by revolving steel rope, toothed belt or chain. The choice of the appropriate door operator is influenced by the question whether the complete door installation has to meet the requirements of the EN 13241-1 and **EN 12453**. Especially for this purpose the modular operator series DICTAMAT 900-21 has been designed.

For hazardous locations DICTATOR offers **explosion-proof** three-phase-current **door operators**. Here we need the required degree of protection and the information where the control system is installed: inside or outside the hazardous area.

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. To this part the different DC-motors are fixed. The driving wheel is determined by the form of power transmission: either steel rope, toothed belt or chain. Furthermore the position control system can be added to the central module.

This *modular system* offers several important advantages:

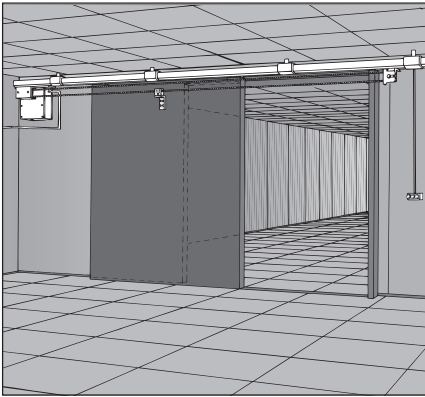
- *Individual combination of the modules* permits to *match the door operators to the requirements of the different doors - even on site* (our service team can e.g. increase the force of the door drive by adding a further gear box).
- The modular system *simplifies installation, service and maintenance*, as each module can be exchanged without any problem.
- *Short lead times*, even for door operators that have to be assembled to meet special requirements.
- 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 next pages should help you to select the right door operator for your application. Or you simply ask for our advice!

### 2. Door Operators for Hinged Doors

The DICTAMAT door operators for hinged doors are as well mainly used in the industrial and commercial sector. Some of the door operators open the doors up to 180°. For explosion-proof requirements DICTATOR provides a special, pneumatic door operator.

DICTATOR offers also for hinged doors customised solutions, e.g. for large and heavy hinged doors.



## 1. Door Operators for Sliding Doors - Summary

### ATTENTION

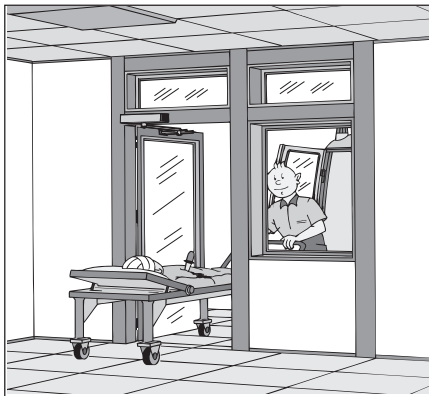
When deciding on the door operator verify whether the door is subject to EN 13241-1 and the door operator has to meet the requirements of the EN 12453 (see page 05.007.00 et sqq.)

## DICTATOR Door Operators - Summary, cont.

	Sliding door operators	Maximum door width	Force required to move the door	Max. door weight**	Position control		Speed	Power transmission*	Control system Remarks
					inte-grated	Limit switches			
<b>AC - 21</b>	DICTAMAT 900-21 0.18	6 m	370 N	600 kg	x	x	max. 0.4 m/s	Z	SQUARE 940 / EN 12453
	DICTAMAT 900-21 0.18	6 m	630 N	1000 kg	x	x	max. 0.2 m/s	Z	
	DICTAMAT 900-21 0.37	10 m	1200 N	1500 kg	x	x	max. 0.2 m/s	Z	
	DICTAMAT 900-21 0.55	10 m	2200 N	4000 kg	x	x	max. 0.15 m/s	Z	
<b>DC - 21</b>	DICTAMAT 3400-21 SE	unlimited	300 N	700 kg		x	max. 0.4 m/s	S	E82
	DICTAMAT 3400-21 ZL	7 m	300/500 N	700 kg	x		max. 0.35 m/s	Z	
	DICTAMAT 5000-21 ZE	unlimited	600 N	1300 kg	x		max. 0.22 m/s	Z	
	DICTAMAT 5000-21 ZL	7 m	600/1000 N	1300 kg	x	x	max. 0.22 m/s	Z	
<b>Customised operators</b>	Three-phase current fill 0.75 kW	unlimited							also explosion-proof SQUARE 940 / E82
	Direct current	unlimited							

\*\* max. door weight depends on the smooth running of the door

**\*Legend:**  
 K = chain  
 E = limit switches  
 L = integrated encoder  
 S = steel rope ø 4 mm  
 Z = toothed belt



**Dictator Door Operators - Summary, cont.**

**2. Door Operators for Hinged Doors Summary**

**ATTENTION**  
When deciding on the door operator verify whether the door is subject to EN 13241-1 and the door operator has to meet the requirements of the EN 12453 (see page 05.007.00 et sqq.)

	Opening			Closing		Door width		Force of the operator	max. opening angle	Remarks
	Motor	Spring	Air operated	Spring	Motor	up to 1.25 m	up to			
<b>Automatic hinged door operators</b>										
DICTAMAT 310	x			x			1.50 m	up to 200 Nm	180°	
DICTAMAT 310 XXL	x			x			2.50 m	up to 700 Nm	180°	
DICTAMAT 204	x			x			1.40 m	50 Nm	110°	Control system integrated, also fire protection
DICTAMAT 204I		x			x		1.40 m	50 Nm	110°	Control system integrated, in particular smoke ventilation
DICTAMAT BIA 31244			x	separate door closer		x		adjustable	95°	Hazardous areas, also fire protection
<b>Customised operators:</b> Three-phase current till 0.37 kW Direct current										On demand