

Hinged Door Operators AC-21 DICTAMAT 310-21

The DICTAMAT AC-21 hinged door operators fulfil in combination with the SQUARE 940 control system (see page 04.037.00 and the following) the **demands of the EN 12453 for the "Safety in use of power operated doors"**.

The DICTAMAT 310-21 has been designed for large and/or heavy hinged doors. These door operators are equipped with a **mechanical brake** that assures the stop of the door within the required distance even without current. An integrated thermal cutout protects the operators from too high loads.

The position control is done with an **encoder**, integrated in the motor, that permits a very precise positioning.

Due to the mechanical brake the motor is blocked without current. If the door has to be moved by hand in case of a power failure, an additional **mechanical cranking device** can be supplied or the operators are provided with an electromagnetic clutch.

Dictator will gladly offer you a solution taking into account the requirements of your individual application.



Selection Criteria

- For hinged doors up to 2.5 m width
- Force of the door operator max. 700 Nm
- For doors up to max. 600 kg
- For up to 300 cycles per day (depending on the weight and speed of the door)
- Position control: integrated encoder or separate limit switches (on demand)
- Motor blocked without current
- Control system: SQUARE 940
- Meets the demands of the EN 12453



Summary

The AC-21 series offers the possibility of powered operation of extremely large and/or heavy doors according to the demands of the EN 12453. The modular system permits individual, customised solutions for each door. All door operators are based on similar modules and are operated by the same control system.

The values in the table below are just for orientation and a preselection. They may differ depending on the type and design of the door, additional standards and legal demands valid for the respective site.

For hinged doors there are basically two different door operators. But if necessary, further types are possible. Please ask for our technical support and a customised offer.

Technical Data

Type	Standard	XXL
Motor rating	0.18 kW	0.18 kW
Force of the motor max.	200 Nm	700 Nm
Opening and closing speed	separately adjustable	
at 50 Hz about s /90°	2	10
Voltage	230/400 VAC	
Nominal current (control system)	8 A	
Braking moment (mechanical brake)	4 Nm	4 Nm
Duty cycle	40 % ED	
IP rating	IP 54	
Opening angle max.	180°	
Position control	Encoder	
Weight (without accessories)	30 kg	55 kg
Width of the door max.	1.5 m	2.5 m
Weight of the door max.	300 kg	600 kg

Options

- Position Control

Die AC-21 swing door operators are generally equipped with an integrated encoder. This assures an extremely precise positioning of the door. As an option the DICTAMAT 310-21 door operators can also be furnished for the use with separate limit switches.

- Mechanical brake

The standard AC-21 operators are equipped with a mechanical brake making sure that even in case of a power failure the door is stopped within the required distances. In case of doors to which the EN 12453 standard does not apply, the door operators can be furnished also without the mechanical brake.

- Mechanical cranking device

All door operators with integrated mechanical brake impede a movement of the door without current. If the doors have to be moved manually in case of a power failure, the door operator can be furnished with an electromagnetic clutch or a mechanical cranking device.

- Accessories

Special accessories for customised specifications are available on demand.

- Forces

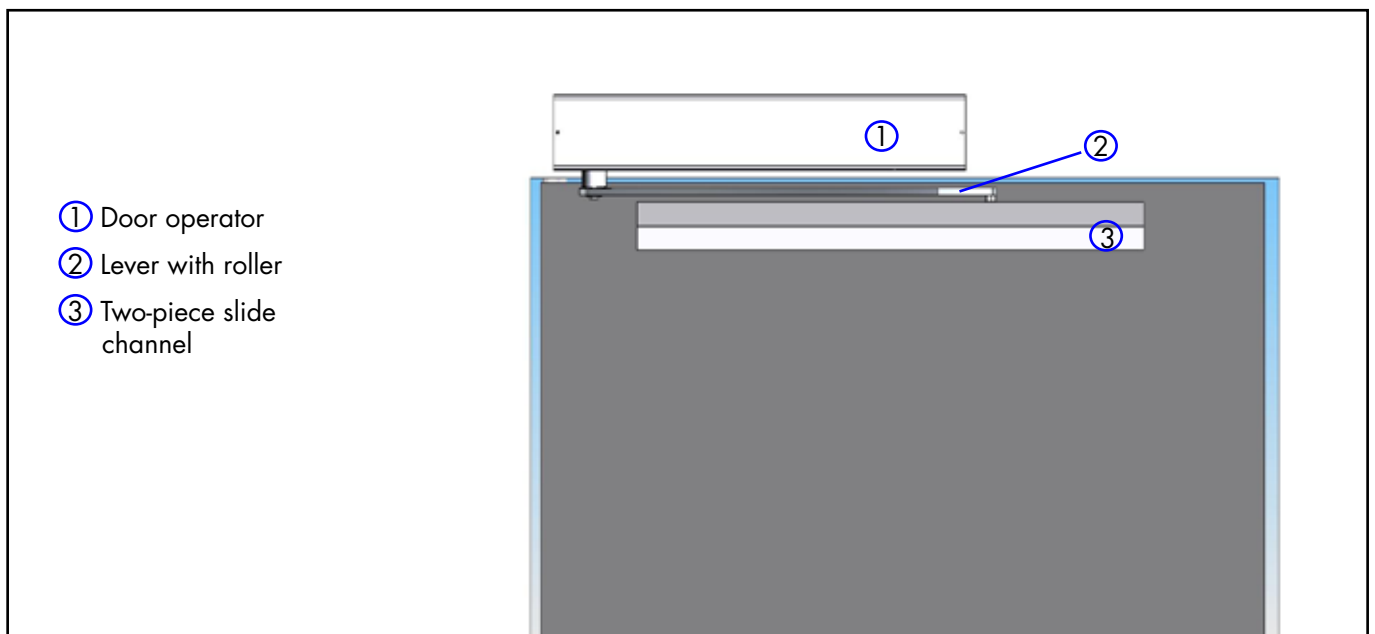
On demand the DICTAMAT 310-21 series is also available with other forces.



Components

The AC-21 swing door operators transmit the power to the door with the help of a specially designed lever. They are normally fixed to the lintel or the door frame. It is very important to assure a safe and solid fixing of the door operator as there result very high forces when the mechanical brake enters into action.

The following picture shows the components of an AC-21 door operator system for swing doors.



Components Included DICTAMAT 310-21

- Door operator: worm gear transmission with a 230/400 VAC three-phase motor and integrated mechanical brake, thermal cutout, 2 m connection cable to the control system
- Lever with roller
- Slide channel for the lever to be fixed on the door (for power transmission)
- Integrated encoder

Additional Components

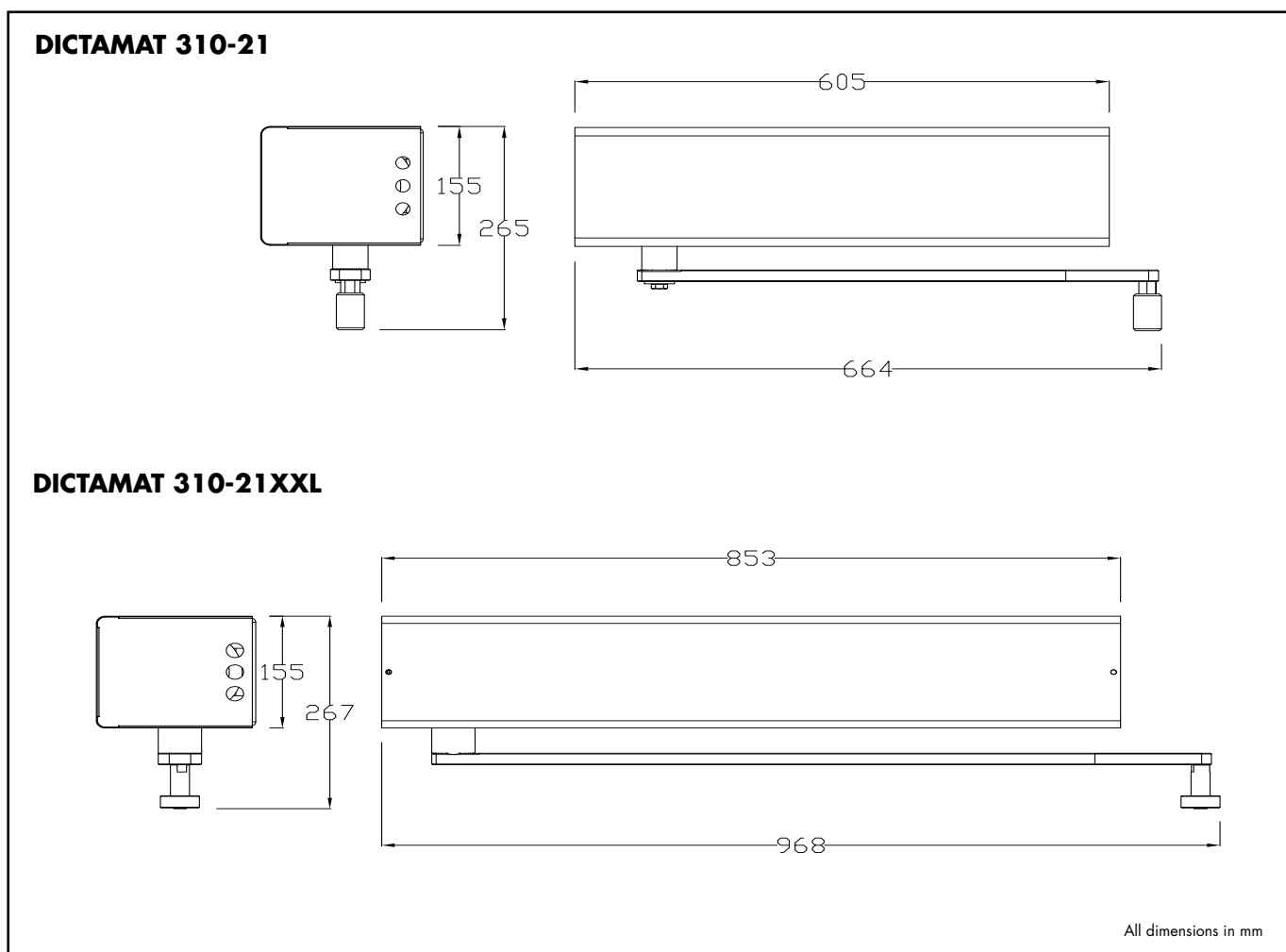
- Electromagnetic clutch
- Mechanical cranking device



DICTAMAT 310-21

The DICTAMAT 310-21 is available in two executions: the standard type and the XXL type for very large doors. The XXL-type uses the same motor as the standard type, however with a much stronger gear transmission. Therefore, the XXL type is considerably longer than the standard type.

Dimensions



Order Information Door Operators

DICTAMAT 310-21

part no. 790800

DICTAMAT 310-21 XXL

part no. 790820

Order Information Control System

SQUARE 940 control system

part no. 706094

Information about the control system can be found beginning on page 04.037.00.