

DC Door Drives for Hinged Doors DICTAMAT 204

The DICTAMAT 204 is an electro-mechanical hinged door operator with a micro-processor control system. It is an extremely versatile door operator and can be adjusted to comply perfectly with the requirements of each application.

Its major advantages:

- Adjustable spring force (door closer forces EN4 - EN6).
- For applications where the safety of persons is very important it can be adjusted to lower forces (e.g. in order to achieve an optimum solution for disabled persons in hospitals, old-people and nursing homes).
- Very low noise level.
- Control panel with LCD display and menu control for the adjustment of a large variety of additional functions.
- Special execution for the opening by spring, closing by motor e.g. for doors being part of a smoke vent installation (type INVERS).
- Compact design, reduced height.

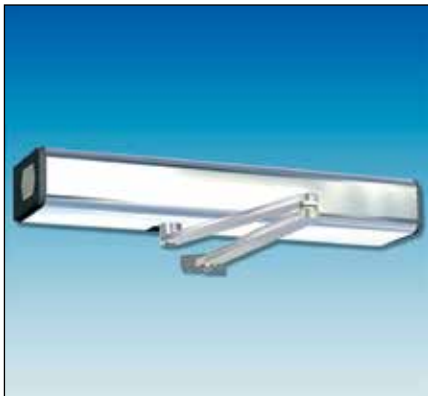
In case of a power failure the door can be moved by hand without effort. The door drive operates like a door closer.

The standard execution of the door operator has a stainless steel cover.



Selection Criteria

• Width of door leaf	max. 1.4 m (with a door weight of 100 kg)
• Door weight	depending on door width, see diagram on the following page
• Motor force	50 Nm
• Suitable	for continuous operation
• Opening angle	adjustable between 70° and 115°
• Position control	memorising of positions during teach-in run
• Motor without current	easy to move, operates like normal door closer
• Basic functions	OPEN, automatic closing, reverse function, Further functions adjustable with a separate control panel.



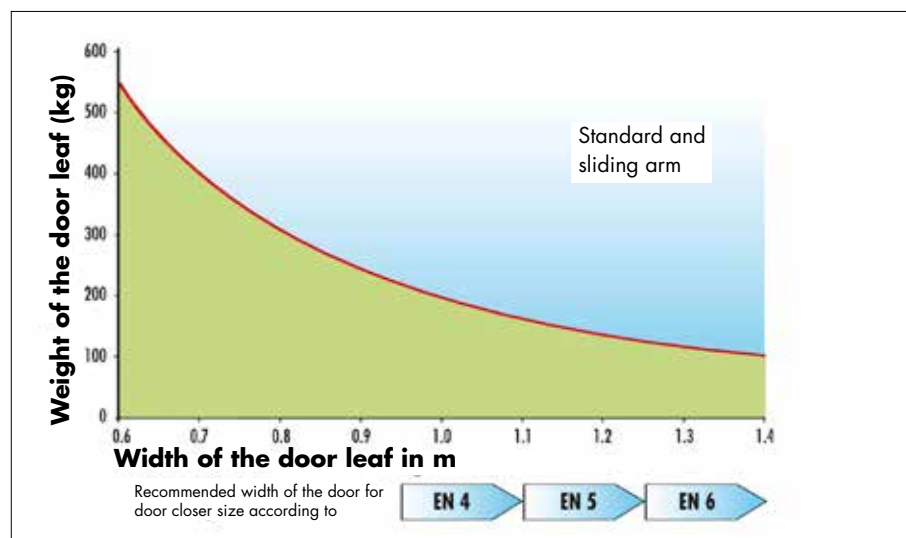
Applications, Dimensions

The diagram below indicates the maximum door weight - depending on the width of the door - up to which the DICTAMAT 204 door operator can be used.

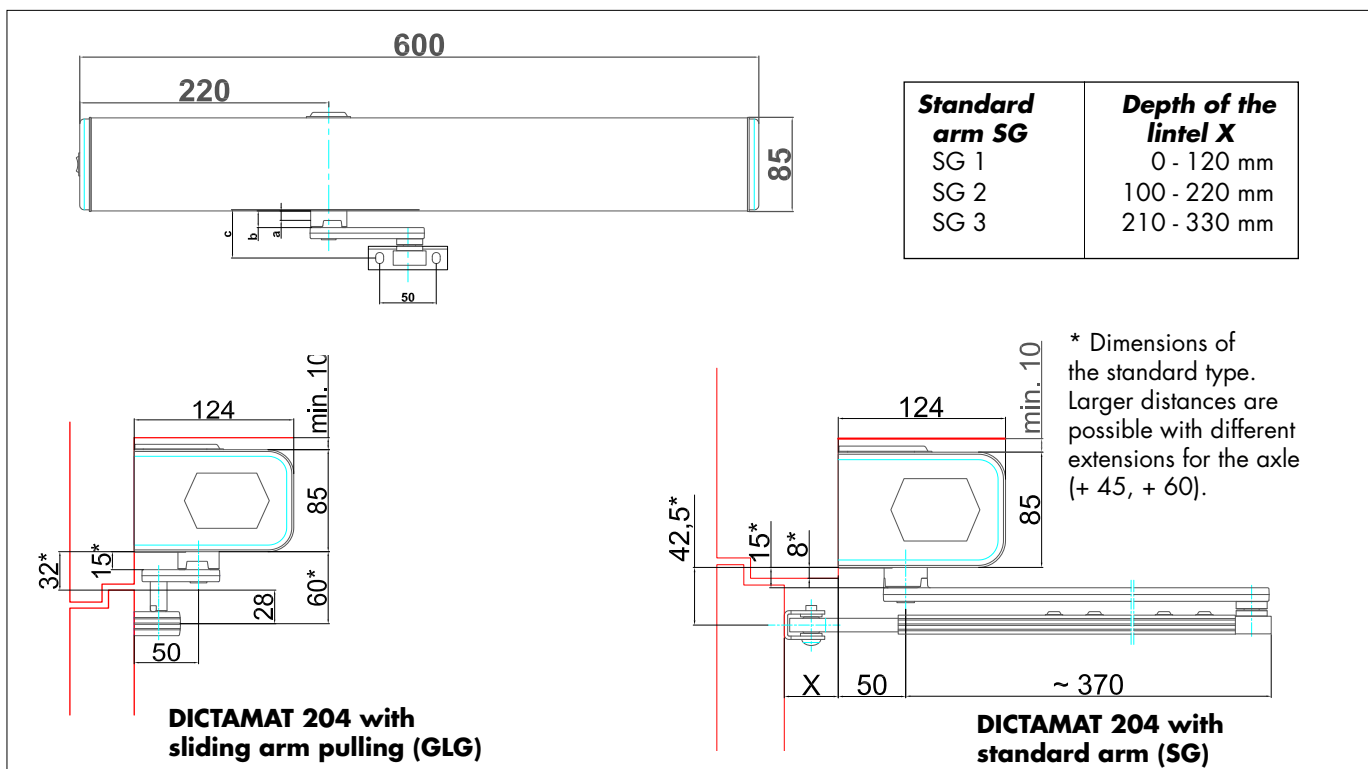
There are two different sets of lever arms available for the DICTAMAT 204 door operator: standard and sliding lever arm.

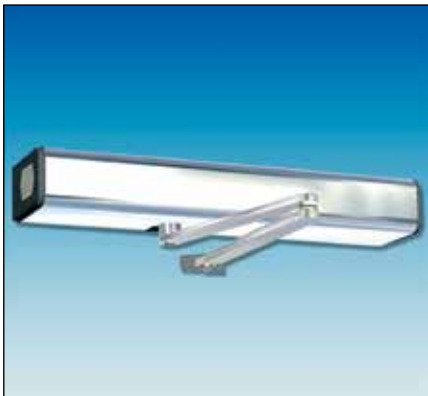
Ex works the DICTAMAT 204 is set for a sliding arm (pull-type). If the DICTAMAT 204 is to be used with the standard arm, this has to be programmed with the BDE-D control panel. The door operator is either fixed to the lintel above the door or to the door itself. For an installation on the door a flexible cable for the power supply of the door drive is available.

Door Sizes



Dimensions





Technical Data, Operating Functions

The DICTAMAT 204 door operator offers basic operating functions that can be adjusted with switches integrated into the lateral part of the casing.

By using the separate, electronic BDE-D control unit, additional functions can be activated and adjusted.

The door positions OPEN and CLOSED are automatically determined during a calibration run. Separate limit switches are not required. A further adjustment is possible with the BDE-D control unit.

Technical Data DICTAMAT 204

Force of the motor	driving torque 50 Nm maximum
Closing force spring (force according to EN)	EN4 to EN6, adjustable
Opening speed	adjustable from 3 to 20 sec./ 90° (16)
Closing speed	adjustable from 5 to 20 sec./ 90° (7)
Opening angle	70 - 115°
Hold-open time	adjustable between 0 and 60 sec. (2)
Voltage / Nominal current	230 VAC, 50/60 Hz
Output voltage/Power supply (secondary)	24 VDC / max. 1 A
Motor rating	67 W (Standby: consumption 13 W)
Duty cycle	100 % ED
IP rating	IP 40 / max. 85 % rel. humidity, not bedewing
Noise level	max. 18 db
Operating temperature	-15° to +50 °C
Weight (without accessories)	12 kg

(The values in brackets represent the standard values set in production.)

Basic Operating Functions

The following basic functions are adjusted directly on the DICTAMAT 204 door operator:

- Automatic: an OPEN-command opens the door; automatic closing after the preset time (standard time 2 seconds).
- Continuously open: door opens automatically and stays in the OPEN position.
- Manual operation: door operator works just like a normal door closer, manual opening, closing by the integrated spring.

For the OPEN-command there are various possibilities: motion detector, push button, remote control etc. They must be equipped with a potential-free contact (NO).

Additional Options with the Electronic BDE-D Control Panel



The electronic control unit BDE-D allows the adjustment of further operating functions. The following options can be programmed with a **mobile BDE-D unit**:

- Adjustment of the opening and closing speed, the hold-open time, the reverse level, the closing force and the opening angle.
- Push-and-Go: triggering the operator by pushing the door lightly (response after 0.5 - 1°); door closes after the pre-set time. No operating equipment necessary.
- One-way/night operation: door only opens from inside (to leave the building).
- Locking of the door: connection possibility for an electric door lock (24 VDC).
- Different levels of manual operation (e.g.: door normally opened by hand; using a remote control the door opens automatically).
- Doors with two leaves: closing sequence control.

A **permanently installed BDE-D control unit** allows the realization of an

- interlock function for two doors with one leaf each.



DICTAMAT 204 For Single and Double-Leaved Hinged Doors

The DICTAMAT 204 is also used on doors with two leaves or interlocks with two single-leaved doors. Both door operators are then linked with a CAN isolator. A BDE-D control unit is required for the adjustments. Both opening and closing speed as well as hold-open time are identical for both door operators. The opening angle and the response level for the automatic reverse can be adjusted separately. Furthermore it can be chosen whether just one or generally both leaves open on an OPEN impulse.

If the DICTAMAT 204 is used on doors that have to open in case of an emergency, even without current (e.g. doors in smoke vent installations), the DICTAMAT 204 **INVERS** has to be used: its integrated spring opens the door, the motor closes the door.

Safety

The DICTAMAT 204 has an integrated load control that guarantees the safety of persons and material. Obstacles within the opening/closing range of the door are recognised immediately: while opening the door operator stops and when starting the next opening movement it is done at a very slow speed. During the closing the door operator reverses upon hitting an obstacle and opens the door again completely. The response level for the detection of an obstacle can be adjusted with the BDE-D control panel.

For applications where a lot of the people using the door are either of advanced age or of slower reaction possibilities (e.g. hospitals, old-people and nursing homes) the force of the door operator can be reduced.

In any case it is recommended to install additional safety equipments.

Components Included DICTAMAT 204

Door operator with 24 VDC motor and closing/opening spring, control system

The following components are not included in the delivery: lever arms and the BDE-D control panel. They have to be ordered separately as well as operating and safety elements.

Order Information

DICTAMAT 204 for standard* and sliding arm (pulling)	part no. 710100
DICTAMAT 204GG for sliding arm, pulling or pushing*	part no. 710101
DICTAMAT 204IN, opening with spring, closing with motor	part no. 710102

* BDE-D control panel required for the adjustment

Accessories Required

Standard arm SG 1, depth of lintel 0 - 120 mm	part no. 710115
Standard arm SG 2, depth of lintel 100 - 220 mm	part no. 710116
Standard arm SG 3, depth of lintel 210 - 330 mm	part no. 710117
Sliding arm GLG	part no. 710118
Flexible cable (required for installation on the door)	part no. 710276

Further Accessories

Electronic BDE-D control unit, mobile or surface installation	part no. 710119
Electronic BDE-D control unit, for flush mounting	part no. 710121
CAN-Isolator, for doors with two leaves	part no. 710123
Extension for standard arm 65 (see page 04.046.00:*+ 45 mm)	part no. 710126
Extension for standard arm 80 (see page 04.046.00:*+ 60 mm)	part no. 710127
Radar motion detector "Eagle One"	part no. 700389
Finger guard blind (L = 1,95 m)	part no. 710132

Safety contact bar 4 Safe in different lengths**

**See information on the safety and operating elements starting on page 04.049.00