## **DORMA ED 250**



## SWING DOOR OPERATOR AND SWING DOOR SYSTEM

#### **PRODUCT FEATURES**

With the ED 100 / ED 250 swing door operator Dorma Kaba offers an electromechanical swing door operator for various fields of application. The operator may be installed as a push version with standard arm assembly and as a pull version with slide channel.

- Modular design and variable functional range
- Door widths up to 1600 mm (ED 250)
- Door weights up to 400 kg (ED 250)
- New: with integrated smoke detector
- For single- and double-leaf swing doors
- May be installed as a push or pull version
- New: The smoke pressure ventilation function SPV ensures reliable drive behaviour even under varying pressure conditions in buildings.
- New: Evacuation function enables barrier-free evacuation in the event of an alarm.
- Can be extended by the integrated emergency power supply ED UPS, which ensures uninterrupted operation of the drive in the event of a power failure.

#### Wind load control

The ED 100 / ED 250 swing door operator is especially suitable for exterior doors that are subjected to varying wind loads and for interior doors separating rooms where different air pressures prevail.





## **GENERAL SPECIFICATIONS**

Dimensions (W x H x D)	685 x 70 x 130 mm (Weight 12 kg)
Power:	230 V AC +10 % / -15 %, 50 Hz
Max. power consumption:	240 Watts
Power supply for external accessories	24 V DC +/- 10 %, 1.5 A
Opening angle	Max. 110°
Fire class:	Non rated
Class of protection:	IP 20
Closing force SS-EN 1154	EN 4-7 step-less adjustable
Max. weight of door leaf:	400kg (depending on the width of the door leaf)
Door-leaf width	700 – 1,600 mm
Opening speed 0 – 90°:	4* – 21 sec.
Closing speed 90 - 0°:	5* – 21 sec.

## **REQUIRED OPERATING CONDITIONS**

Ambient temperature	- 15 - + 50 °C
Only suitable for dry environments	Relative humidity max. 93 % (non-condensing). <b>Note</b> : Can be supplied with weather cover (10007824)!

## **SYSTEMS OVERVIEW**

# BAGGERØD

#### **BASIC CONFIGURATION**

Dorma ED 250 is "motion/push pull" activated. So it can operate the door without any options included.

#### **Door Normally closed**

This mode is standard setup for ED 250

### **Door Normally open**

The ED 250 has a switch on the side of the unit to set the door in open position.

The system can also be supplied with a separate selector/button, to switch between open and closed mode.

## ED 250 door drive system:

Push button operated system configuration with electric striker plate and safety sensor.

- 1. Power supply (drive unit)
- 2. Outside Push button
- 3. Outside Key switch/Hold open switch
- 4. Inside Push button
- Panic Push button/foot switch (normally inside)
- 6. Electronic unlocking (electric striker plate)
- Optic Sensors (option for automated systems and requirement for extra strong systems)
- 8. STEP frame cable transfer unit (Option for sensors on door leaf)

**Note:** Automation of the unit requires electric unlocking (electric striker plate or lock case). Electric unlocking inside a door leaf require a cable lead system inside the door leaf.



ED 250 can be supplied with a variety of configurations. All options have to be ordered In addition to the ED 250 Assembly. Below are some pre defined configurations that Baggerød have made.



## **ED 250 DOOR OPERATION SYSTEMS**

The main unit are motion operated, so when pull or push the door handle, the door opens, and stays open a short while before slowly closing. In addition to that you can add functionality and automation by adding push buttons etc.

# There are two configuration of the main drive module: Outside installation (pulling)

ED250 Assembly for outside installation (pulling motion):



	Baggerød art. No.	Description	Manuf. art. No.
A STATE OF THE STA	40351	Electric unit ED250 LE, without front cover or arm.	29202311
	40350-1	Front Cover (Silver)	29241001
	10006131	Glide rail arm "pulling"	29275021
.1	40350-3	Power cable ED 100/250 230Vac with strain relief	29263001

## Inside installation (pushing).

ED250 Assembly for Inside installation (pushing motion) - Max frame depth 225mm:



	Baggerød art. No.	Description	Manuf. art. No.
	40351	Electric unit ED250 LE, without front cover or arm.	29202311
	40350-1	Front Cover (Silver)	29241001
	10006154	Standard arm "pushing" 0-225 mm (silver)	29271001
,	40350-3	Power cable ED 100/250 230Vac with strain relief	29263001



All options must be ordered separately (not included with the ED 250 drive).

## **OPEN/CLOSE SWITCHES**

These switches have the same electronic but different design.

DE	40368	Elbow switch AK 108 in aluminium. For indoor and outdoor use. IP 67	90410090
D H	10012071	Elbow switch AK 207 in aluminium (Symbol marked without language) H=245, W=80, D=23mm, Material: Aluminum / ABS plastic Moisture-protected: IP class 67	7030000014471
	10002857	Push button/"Foot Switch" Heavy design with black plastic housing. Impact resistant plastic for application in heavily used areas. IP 67 (5026931332)	4355221
500	10008885	Ex push button, Bartec.	282-1764
Eman	ETO	Touch-free switch, Dorma ETO: Engineering to Order.	
	10011114	Ex combined push button and key switch, Bartec.	
	10002345	Pull-wire switch (ZT), complete. 10 A, 380 V DC, IP 65, (incl. brackets, cord, plastic ball end, for surface- mounting	90410020
1 2 3 4 5 6 7 8 9 6 0 4	ETO	Electronic access control ETO: Engineering to Order.	
	ETO	Motion sensor for door operation. ETO: Engineering to Order.	
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## SPECIAL PURPOSE SWITCHES/SELECTORS

	10002399	Switch Elko 1 Pol, Dorma Used as Hold open switch	1411883 RS16/1P
E	40381	Key switch NB 3-1 UPL	5054531332
	10002914	Key switch compl. Eaton	M22-WRS/KC11/ I216526
	10011114	Ex Key switch, Bartec.	
	10011113	Ex selector switch, Bartec.	



## MOTION SENSORS FOR SAFETY: 10005010 86501300 Flatscan LZR safety "Laser" Safety sensor for swing doors 10003178 Prosecure OPTI SAFE, IR detector 7030000014106 750mm 7030000014107 10005828 Prosecure OPTI SAFE, IR detector 900mm **TOILET OPTIONS:** WC occupied indicator. 5111631332 40380 LED Light Red / Green 24V DC LED light control relay 8-24V, for WC occupied indicator 17AA11 7005701423025 10001373 **CABLE LEAD** 10005604 STEP frame cable transfer unit. ST1283 For cable transfer from door frame into the door leaf. 10011971 Frame for cable lead 10011971 **ACCESSORIES:** 40361 Strength/power upgrade card. 29251020 Makes the unit stronger. This unit requires safety sensors! 7030000014108 10008951 y-cable for use of 2 x safety sensors 10007824 10007824 Weather cover for ED 250. 9400071AB23 10005470 Lock Case LK565/50 LH for use on ED 250 operated doors with micro switch (which signals the position of the latches). Assa Abloy. 10005469 Lock Case LK565/50 RH for use on ED 250 operated doors with 9400071AA23 micro switch (which signals the position of the latches). Assa Abloy. **DISTANCE ADAPTERS/EXTENSIONS:** 2000275 Shaft adapter L=90mm, ED250 New type with spline 29278019 29278016 10006740 Shaft adapter L=60mm, ED250 New type with spline 10006991

FOR ELECTRIC UNLOCKING, PLEASE SEE "ELECTRIC OPTIONS AND ACCESSORIES"

Shaft Adapter L=30mm, ED250 New type with spline

10006991