

# MD5B-24(-S)/-230(-S)



## On/Off or 3-point 24 V AC/230 V AC Damper Actuator 5 Nm (45 in-lb)

MD5B series damper actuators for operating air control dampers in ventilation and air-conditioning systems for building services installations

- For air control dampers up to approx. 1 m<sup>2</sup> (1.2 yard<sup>2</sup>)
- Torque 5 Nm (45 in-lb)
- Nominal voltage AC/DC 24 V or 230V
- Control: On/Off or 3-point
- Option Integrated auxiliary switch

### SPECIFICATIONS

#### Part numbers:

MD5B-230	875-1001-000
MD5B-230-S	875-1003-000
MD5B-24	875-1005-000
MD5B-24-S	875-1007-000

#### Power supply:

MD5B-24(-S)	24 V AC ±20%, 50–60 Hz, 24 V DC ±20%
MD5B-230(-S)	230 V AC –56% to +15%, 50–60 Hz

#### Power consumption:

In operation:

1 W @ nominal torque	MD5B-24(-S)
1.5 W @ nominal torque	MD5B-230(-S)

At rest:	MD5B-24(-S) 0.2 W
	MD5B-230(-S) 0.4 W
For wire sizing:	MD5B-24(-S) 2.0 VA
	MD5B-230(-S) 4.0 VA

Auxiliary switch. 1×EPU, 1 mA...3 (0.5) A, 250 V AC  
Switching point. (adjustable 0–100%)

#### Connection cable:

Actuator	1 m (3.3 ft), 3×0.75 mm <sup>2</sup> (AWG 18)
Auxiliary switches (-S)	1 m (3.3 ft), 3×0.75 mm <sup>2</sup> (AWG 18)

Angle of rotation max. 95°  
(adjustable by mechanical stops)

Torque	min. 5 Nm (45 lb-in) @ nominal voltage
Running time	150 s
Direction of rotation	Reversible with switch
Position indication	mechanical

#### Standards conformity:

EMC 2004/108/EC

LVD 2006/95/EC (230 V only)

#### Protection class:

MD5B-24(-S)	III Safety extra-low voltage
MD5B-230(-S)	II Totally insulated
Enclosure rating	IP 54
Ambient humidity	95% r.H (EN 60730-1)

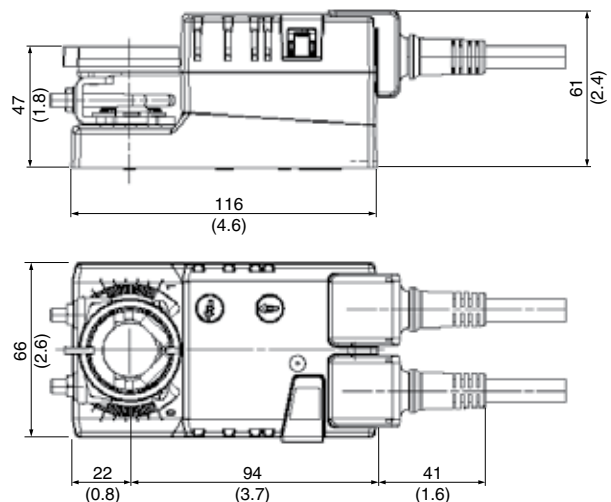
#### Ambient temperature:

Operation	–30 to +50 °C (–22 to +122 °F)
Storage	–40 to +80 °C (–40 to +176 °F)
Sound power level	max. 35 dB (A)
Maintenance	Maintenance-free

#### Weight:

MD5B-24(-S) Approx 0.6 kg (1.3 lb.)

### DIMENSIONS mm (in)



Damper spindle (in.)	Length mm (in.)	Ø mm
	min. 37 (1.46)	6 ... 20 (0.2 ... 0.78)

## FUNCTION

### Simple direct mounting

Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

### Manual override

Manual operation is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed or detented).

### Adjustable angle of rotation

Adjustable angle of rotation with mechanical end stops.

### High functional reliability

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

### Flexible signalization


Flexible signalization with adjustable auxiliary switch (0 ... 100%).

## ACCESSORIES

Please refer to data sheet G-30-90

“Accessories Damper Actuators”  
(part.no. 0-003-2251).

## SAFETY NOTES


 **The damper actuator is not allowed to be used outside the specified field of application, especially in aircraft.**

**Caution: 230 V voltage !**

**The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.**

**The cables must not be removed from the device.**

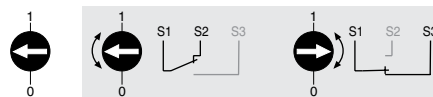
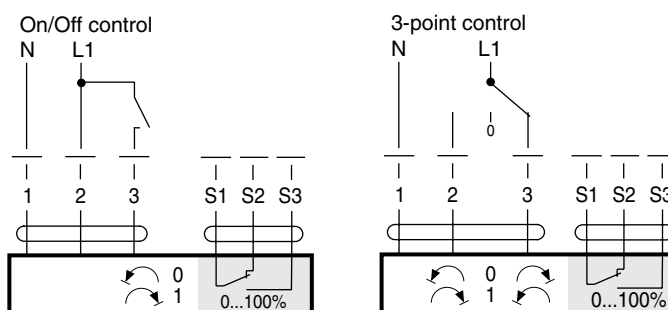
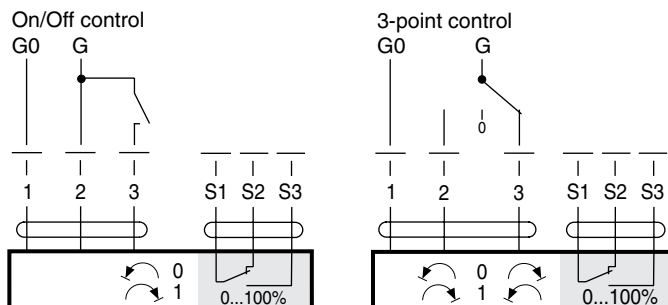
**When calculating the required torque, the specifications supplied by the damper manufacturers (cross section, design, installation site), and the air flow conditions must be observed.**

 **The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.**

## WIRING




Direction of rotation



Auxiliary switch


## WIRING

### MD5B-230(-S)

 **Caution: 230 V voltage!**

Other actuators can be connected in parallel.  
Please note the performance data.

### MD5B-24(-S)

 **Connection via safety isolating transformer!**

Other actuators can be connected in parallel.  
Please note the performance data.