



MD20B -24/-230

G-30-10

On/Off or 3-point 24 V AC/230 V AC
Damper Actuator 20 Nm (180 in-lb)

6 February 2006

MD20B 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. 4 m² (4.8 yard²)
- Torque 20 Nm (180 in-lb)
- Nominal voltage AC/DC 24 V or 230 V
- Control: On/Off or 3-point



TECHNICAL SPECIFICATION

Part numbers:

- MD20B-230 875-1021-000
- MD20B-24 875-1025-000

Power supply:

- MD20B-24 24 V AC ±20%, 50–60 Hz,
24 V DC ±20%
- MD20B-230 230 V AC –60% to +15%, 50–60 Hz

Power consumption:

- In operation:**
- MD20B-24 2 W @ nominal torque
 - MD20B-230 2.5 W @ nominal torque

At rest:

- MD20B-24 0.2 W
- MD20B-230 0.6 W

For wire sizing:

- MD20B-24 4 VA
- MD20B-230 6 VA

Connection cable 1 m (3.3 ft), 3x0.75 mm² (AWG 18)
Angle of rotation max. 95°

(adjustable by mechanical stops)

Torque min. 20 Nm (180 in-lb) @ nominal voltage
Running time 150 s
Direction of rotation Reversible with switch
Position indication mechanical

Standards conformity:

- EMC, emission SS EN 50081-1
- EMC, immunity SS EN 50082-1
- LVD Safety; MD20B-230 SS EN 60335-1

Protection class:

- MD20B-24 III Safety extra-low voltage
- MD20B-230 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)

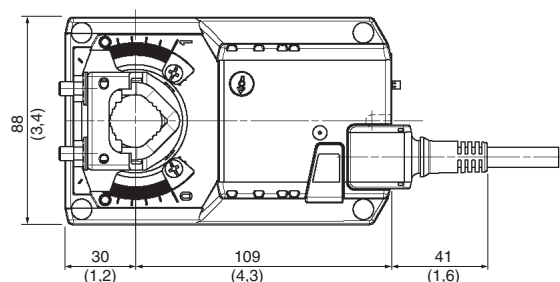
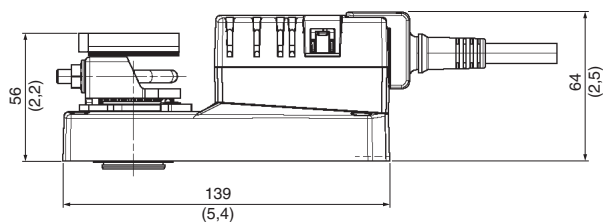
Sound power level max. 45 dB (A)

Maintenance Maintenance-free

Weight:

- MD20B-24 Approx 1 kg (2.2 lb.)
- MD20B-230 Approx 1,05 kg (2.3 lb.)

Dimensions in mm (inches)



Damper spindle	Length mm (in.)	Ø mm (in.)
Clamp on top	min. 42 (1.65)	10 ... 20 (0.39 ... 0.78)
Clamp on bottom	min. 20 (0.78)	10 ... 20 (0.39 ... 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.

WIRING


MD20B-230

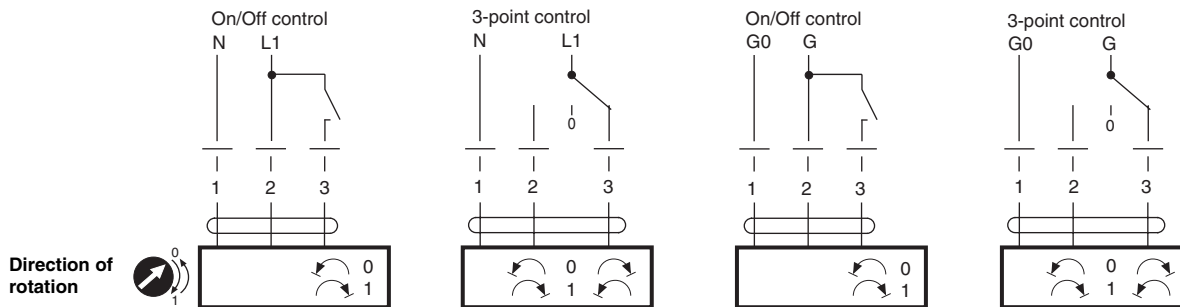
Note

- Caution: 230 V voltage! 
- Other actuators can be connected in parallel. Please note the performance data.

MD20B-24

Note

- Connection via safety isolating transformer. 
- Other actuators can be connected in parallel. Please note the performance data.



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.