



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 m<sup>2</sup> (4.8 yard<sup>2</sup>)
- 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 mm<sup>2</sup> (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)

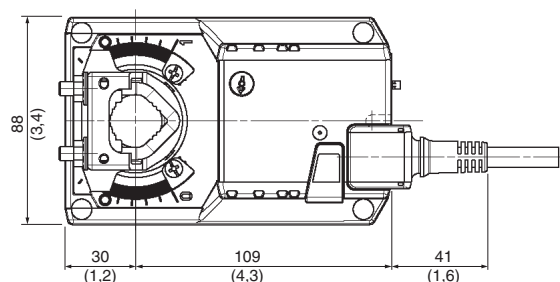
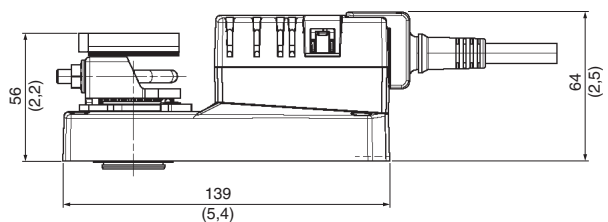
Sound power level ..... max. 45 dB (A)

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

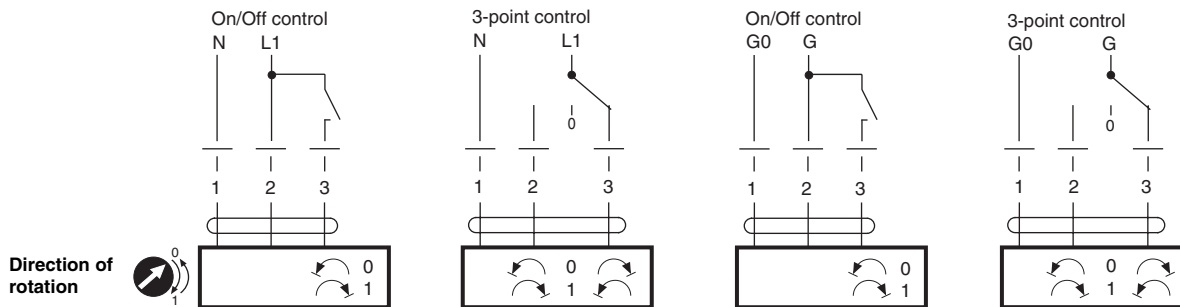
#### Note

- 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.