



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

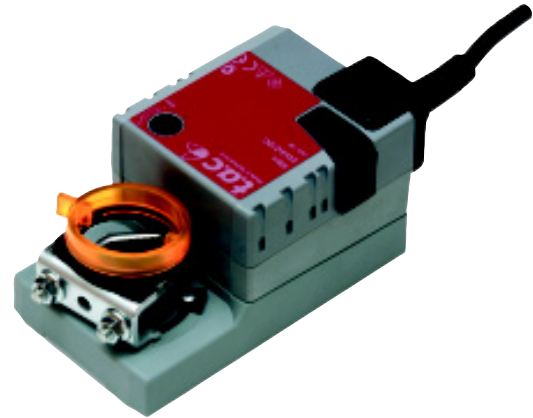
G-30-41

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

6 February 2006

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



**TECHNICAL SPECIFICATION**

**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 –60% to +15%, 50–60 Hz

**Power consumption:**

<b>In operation:</b>	MD5B-24(-S) .....	1 W @ nominal torque
	MD5B-230(-S) .....	1.5 W @ nominal torque
<b>At rest:</b>	MD5B-24(-S) .....	0.2 W
	MD5B-230(-S) .....	0.4 W
<b>For wire sizing:</b>	MD5B-24(-S) .....	1.5 VA
	MD5B-230(-S) .....	3.5 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, emission .....	SS EN 50081-1
EMC, immunity .....	SS EN 50082-1
LVD Safety; MD5B-230(-S) .....	SS EN 60335-1

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

**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)

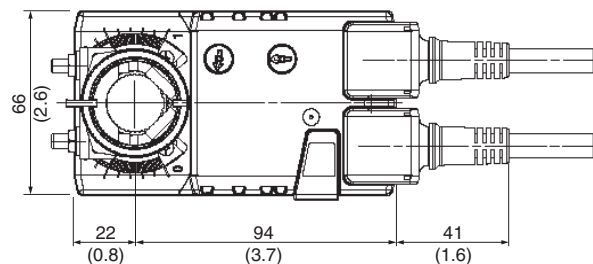
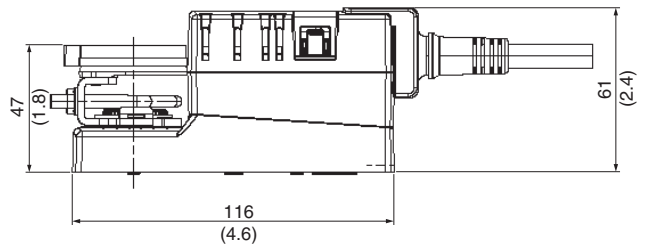
**Sound power level** ..... max. 35 dB (A)

**Maintenance** ..... Maintenance-free

**Weight:**

MD5B-24(-S) .....	Approx 0.6 kg (1.3 lb.)
MD5B-230(-S) .....	Approx 0.4kg (0.9 lb.)

**Dimensions in mm (inches)**



## 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).

### High functional reliability

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

### Adjustable angle of rotation

Adjustable angle of rotation with mechanical end stops.


### Flexible signalization

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

## WIRING


### MD5B-230(-S)

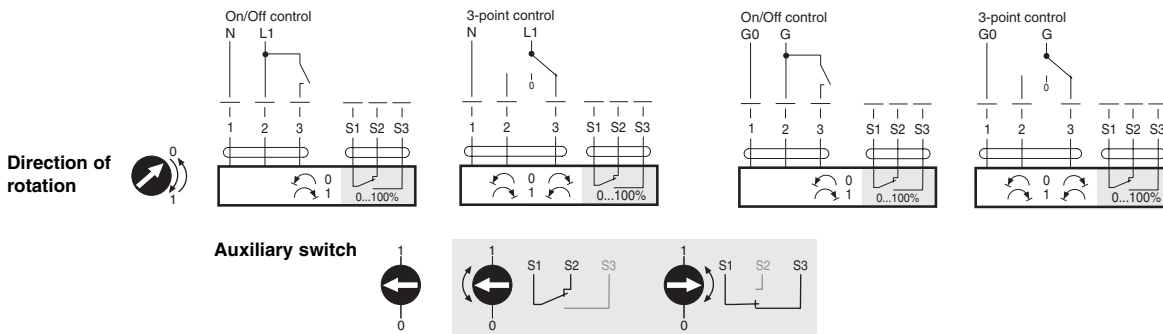
#### Note

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

### MD5B-24(-S)

#### 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.