



MD10A-24

G-30-56

Modulating Damper Actuator  
Damper Actuator 10 Nm (90 in-lb)

6 February 2006

MD10A-24 damper actuators for operating air control dampers in ventilation and air-conditioning systems for building services installations

- For air control dampers up to approx. 2 m<sup>2</sup> (2.4 yard<sup>2</sup>)
- Torque 10 Nm (90 in-lb)
- Nominal voltage AC/DC 24 V
- Control: Modulating 0 – 10 V
- Position feedback: 2 – 10 V

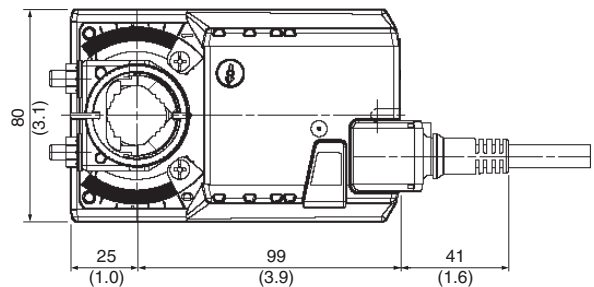
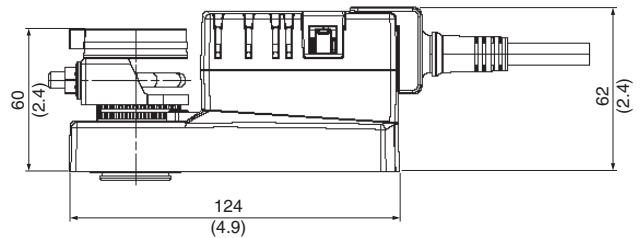


**TECHNICAL SPECIFICATION**

Part number ..... 875-1019-000  
 Power supply ..... 24 V AC  $\pm$ 20%, 50–60 Hz,  
 24 V DC  $\pm$ 20%  
 Power consumption:  
 In operation ..... 2 W @ nominal torque  
 At rest ..... 0.4 W  
 For wire sizing ..... 4 VA  
 Connection cable ..... 1 m (3.3 ft), 4x0.75 mm<sup>2</sup> (AWG 18)  
 Control signal X ..... 0–10 V DC  
 Input resistance ..... 100 k Ohm  
 Operating range ..... 2–10 V DC (for set angle of rotation)  
 Synchronisation tolerance .....  $\pm$ 5%  
 Position feedback Y ..... 2–10 V DC (max. 1 mA)  
 Direction of rotation ..... Reversible with switch 0 / 1  
 at switch position 0  $\curvearrowright$  resp. 1  $\curvearrowleft$   
 Angle of rotation ..... max. 95°  
 (adjustable by mechanical stops)  
 Torque ..... min. 10 Nm (90 in-lb) @ nominal voltage  
 Running time ..... 150 s  
 Position indication ..... mechanical  
 Manual override ..... Gearing latch disengaged  
 with pushbutton, self-resetting, manual locking  
 Standards conformity:  
 EMC, emission ..... SS EN 50081-1  
 EMC, immunity ..... SS EN 50082-1  
 Protection class ..... III Safety extra-low voltage

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 ..... Approx 0.8 kg (1.8 lb.)

Dimensions in mm (inches)



Damper spindle	Length mm (in.)	Ø mm (in.)
Clamp on top	min. 40 (1.57)	8 ... 26.7 (0.31 ... 1.04)
Clamp on bottom*	min. 20 (0.78)	8 ... 20 (0.31 ... 0.78)

\* Option (Accessory K-MD10)

## FUNCTION

### Mode of operation

The actuator is controlled by means of a standard control signal DC 2-10 V. It opens to the position dictated by this signal. The measuring voltage Y allows the damper position (0 ... 100%) to be electrically indicated and serves as a follow-up control signal for other actuators.

### 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

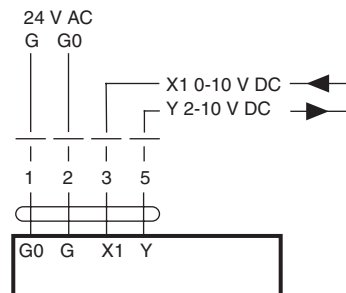


Connection via safety isolating transformer.

Measuring voltage Y for position indication or as master-slave signal.

Parallel connection of several actuators is possible. Power consumption must be observed.

MD20A-24



## 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.
- 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 cable 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.