

# MD40A-24



## Modulating Damper Actuator Action 40 Nm (360 in-lb)

MD40A-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. 8 m<sup>2</sup> (9.6 yard<sup>2</sup>)
- Torque 40 Nm (360 in-lb)
- Nominal voltage AC/DC 24 V
- Control: Modulating 0 – 10 V
- Position feedback: 2 – 10 V

### SPECIFICATIONS

Part number . . . . . 875-1039-000  
 Power supply . . . . . 24 V AC ±20%, 50–60 Hz,  
 24 V DC ±20%

#### Power consumption

In operation . . . . . 4 W @ nominal torque  
 At rest . . . . . 2 W  
 For wire sizing . . . . . 6.5 VA  
 Connection cable . . . . . 1 m (3.3 ft), 4×0.75 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 . . . . . ±5%  
 Position feedback Y . . . . . 2–10 V DC (max. 1 mA)  
 Direction of rotation . . . Reversible with switch 0 / 1  
 at switch position 0 ↺ resp. 1 ↻  
 Angle of rotation . . . . . max. 95°  
 (adjustable by mechanical stops)

Torque . . min. 40 Nm (360 in-lb) @ nominal voltage  
 Running time . . . . . 150 s  
 Position indication . . . . . mechanical  
 Manual override . . . . Gearing latch disengaged with  
 pushbutton, self-resetting, manual locking

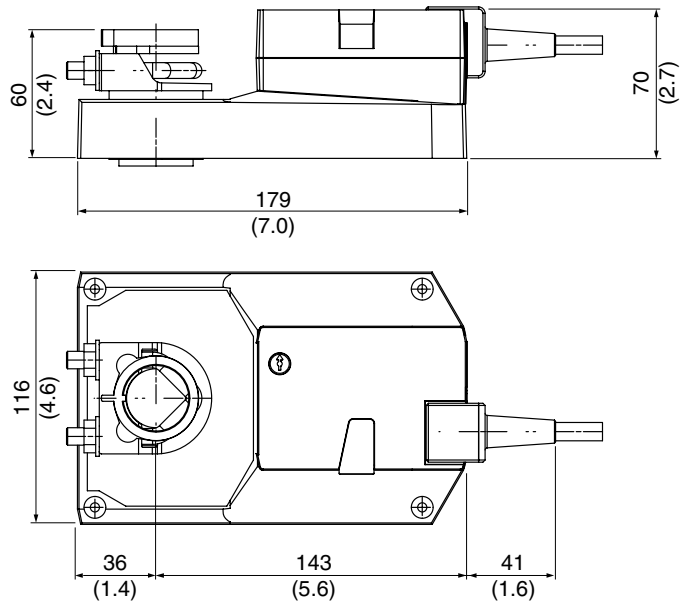
#### Standards conformity

EMC . . . . . 2004/108/EC  
 LVD . . . . . 2006/95/EC (230 V only)  
 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. 45 dB (A)  
 Maintenance . . . . . Maintenance-free  
 Weight . . . . . Approx 1,7 kg (3.8 lb.)

### DIMENSIONS mm (in)



Damper spindle (in.)	Length mm (in.)	Ø mm
Clamp on top	min. 52 (2.05)	12 ... 26.7 (0.47 ... 1.05)
Clamp on bottom	min. 20 (0.78)	12 ... 26.7 (0.47 ... 1.05)

## 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.

## 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.**

## WIRING

