

MD5A-24



Modulating Damper Actuator

Product Description

MD5A-24 damper actuators operate as air control dampers in ventilation and air-conditioning systems for building services installations

- For air control dampers up to approx. 1 m² (1.2² yard)
- Torque 5 Nm (45 in-lb)
- Nominal voltage 24 Vac/dc
- Control: Modulating 0...10 V
- Position feedback: 2...10 V

Specifications

Part number	875-1009-000
Power supply	24 V AC ±20%, 50–60 Hz, 24 V DC ±20%
Power consumption	
In operation	1 W @ nominal torque
At rest	0.4 W
For transforming sizing	2 VA
Connection cable	1 m (3.3 ft), 4×0.75 mm ² (AWG 18)
Control signal X	0...10 Vdc
Input resistance	100 k Ohm
Operating range	2...10 Vdc (for set angle of rotation)
Synchronisation tolerance	±5%
Position feedback Y	2...10 Vdc (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. 5 Nm (45 in-lb) @ nominal voltage

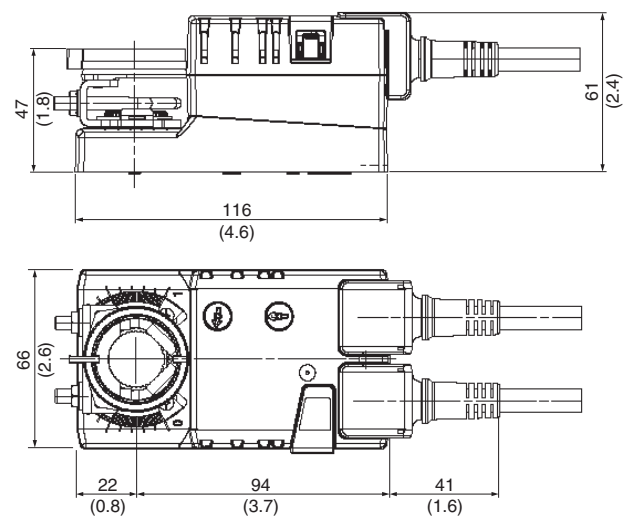



Features

- The actuator is controlled by means of a standard control signal 2...10 Vdc. 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 on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.
- 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 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.

Running time	150 s
Position indication	mechanical
Manual override	Gearing latch disengaged with push-button, 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 0.5 kg (1.3 lb.)

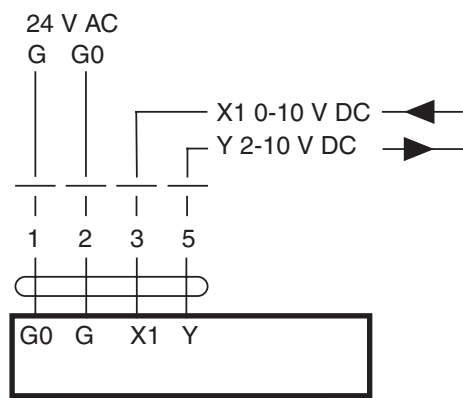
Dimensions mm (in)



	Length mm (in.)	 mm
Damper spindle	min. 37 (1.46)	6 ... 20 (0.20 ... 0.78)

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.



Application Notes

Schneider Electric damper actuators are intended for HVAC use only, and shall not be used in other applications without express written consent.

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.

Accessories

Please refer to data sheet G-30-90 "Accessories Damper Actuators" 0-003-2251.