

Direct Coupled Damper Actuators—Non-Spring Return

ML6161; ML7161

Non-Spring Return Direct Coupled Damper Actuators, 35 lb-in



ML6161A,B

ML6161C,D

ML7161

Used to control dampers in HVAC applications and for mounting on ball valves; suitable for use with modulating (2-10 Vdc) thermostats or building automation controls.

- Control for air damper applications with up to 10 sq.ft. assuming 3.5 in-lb per sq.ft. of damper area, velocity independent
- Superior A/C synchronous submotor for consistent timing and actuator longevity
- Eliminate need for limit switches or mechanical stops by providing magnetic coupling
- All models include manual declutch lever, and bag assembly with two minimum position setscrews
- Mount directly on 3/8 inch or 1/2 inch square or round damper shaft
- Selectable 45, 60, and 90 stroke in either clockwise or counterclockwise direction

Actuator Type: Damper

Rotational Stroke: 90 degrees

Fail Safe Mode: Non-Spring Return

Torque Rating: 35 lb-in. (4 Nm)

External Auxiliary Switches Available: Yes, 201052B

Number of Internal Auxiliary Switch: 0

Electrical Connections: Screw terminals

Environmental Rating: NEMA1

Frequency: 50 Hz; 60 Hz

Manual operation: Declutch mechanism

Mounting: Direct Coupled

Maximum Noise Rating, Driving (dBA @ 1m): 45

Rotation to Open: By wiring

Rotational Stroke Adjustment: Mechanically limited at 45 or 60 degrees in cw or ccw directions

Compatible Damper Shafts: 3/8 to 1/2 in. square or round (10 to 13 mm square/round)

Shaft Adapter Type: Aluminum Hub, two set screws

Supply Voltage: 24 Vac \pm 20%

Materials: Steel plate and Plenum rated plastic

Operating Humidity Range (% RH): 5 to 95% RH, non-condensing

Ambient Temperature Range: 20 F to 125 F (-18 C to +50 C)

Storage Temperature Range: 20 F to 130 F (-18 C to +54 C)

Weight: 1.5 lb (0.68 kg)

Includes: 4074ENY Bag Assembly

Approvals

CE: 89/336/ECC, 73/23/EEC

C-Tick: N314

Underwriters Laboratories, Inc: UL873, Plenum Rated

Canadian Underwriters Laboratories, Inc: cUL C22.2 No. 24-93

	Product Number	Control Signal	Feedback	Timing (seconds)		Power Consumption, Driving	Supply Voltage	Input Impedance	Comments
				Maximum Driving @ 60 Hz	Nominal Driving @ 60 Hz				
*	ML6161A2009/U	On/Off; SPDT; Floating	With accessory	—	90 sec	1.8 VA	24 Vac \pm 20%	—	—
—	ML6161A2017/U	On/Off; SPDT; Floating	With accessory	—	420 sec	1.8 VA	24 Vac \pm 20%	—	—
*	ML6161A2025/U	On/Off; SPDT; Floating	With accessory	—	180 sec	1.8 VA	24 Vac \pm 20%	—	—
*	ML6161B2024/U	On/Off; SPDT; Floating	—	—	90 sec	1.8 VA	24 Vac \pm 20%	—	—
*	ML6161B2032/U	On/Off; SPDT; Floating	—	—	420 sec	1.8 VA	24 Vac \pm 20%	—	—
*	ML6161B2073/U	On/Off; SPDT; Floating	—	—	180 sec	1.8 VA	24 Vac \pm 20%	—	—
	ML6161C2007/U	On/Off; SPDT; Floating	With accessory	—	90 sec	1.8 VA	24 Vac \pm 20%	—	Includes two 5/8 x 7/8 in. double knock-out conduit openings
	ML6161D2006/U	On/Off; SPDT; Floating	—	—	90 sec	1.8 VA	24 Vac \pm 20%	—	Includes two 5/8 x 7/8 in. double knock-out conduit openings
	ML7161A2008/U	4-20 mA; 2-10 Vdc	—	—	90 sec	5.4 VA	24 Vac \pm 20%	45K ohm (2-10 Vdc signal), 536 ohm (4-20 mA signal)	—

* TRADELINE models • SUPER TRADELINE models