

Technical data sheet

UL-225-024T-045 Rotary actuator

Description

Rotary actuator for adjusting dampers in HVAC installations

- Running time 60...120 s / 90°
- Torque 45 in-lb [5 Nm]
- Nominal voltage 24 VAC/DC
- Control 2-/3-point
- Damper size up to approx. 10,8 ft² [1 m²]
- Shaft coupling clamp
 ◊ 0,31-0,47 in [8-12 mm]
 Ø 0,31-0,63 in [8-16 mm]



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Electrical data	Nominal voltage	24 VAC/DC, 50/60 Hz
	Nominal voltage range	19...29 VAC/DC
	Power consumption motor (motion)	1,5 W
	Power consumption standby (end position)	1,0 W
	Wire sizing	2,5 VA
	Control	2-/3-point
	Feedback signal	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection motor	screw terminals, 3-pin AWG 22-14 [0,5...1,5 mm ²]
	Connection feedback potentiometer	-
	Connection auxiliary switch	-
	Connection GUAC	-
Functional data	Torque	45 in-lbs [5 Nm]

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Functional data	Damper size	up to approx. 10,8 ft ² [1 m ²]
	Synchronised speed	-
	Direction of rotation	selected by switch
	Manual override	gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°...max. 95° can be limited with adjustable mechanical end stops
	Running time	60...120 s / 90° (load-dependent)
	Sound power level	< 45 dB(A)
	Shaft coupling	clamp \varnothing 0,31-0,47 in [8-12 mm] \varnothing 0,31-0,63 in [8-16 mm]
	Position indication	mechanical with pointer
	Service life	> 60 000 cycles (0°...95°...0°)
Safety	Protection class	III (safety extra-low voltage - class 2)
	Degree of protection	NEMA 2 (cable port downwards)
	UL	UL 60730-1 UL 60730-2-14
	Mode of operation	Typ 1 (UL 60730-2-14)
	Rated impulse voltage	0,8 kV (UL 60730-1)
	Control pollution degree	3 (UL 60730-1)
	Ambient temperature normal operation	-22°F...+122°F [-30°C...+50°C]
	Storage temperature	-22°F...+176°F [-30°C...+80°C]
Ambient humidity	5...95% r.H., non condensing (UL 60730-1)	
Maintenance	maintenance-free	
Dimensions / Weight	Dimensions	5,7 x 2,8 x 2,4 in [145 x 70 x 61 mm]
	Weight	1,0 lbs [450 g]

Functionality / Properties

Operating mode

2 point:
Connect power supply to terminal 1+2, actuator drives to position 1. Is also terminal 3 connected to the power supply, actuator drives to position 0.

3 point:
Connect power supply to terminal 1+2, actuator drives to position 1. Is terminal 1+3 connected to the power supply, actuator drives to position 0.

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

Direct mounting

Simple direct mounting on the damper shaft with a clamp, protection against rotating with enclosed anti-rotation lock or rather at intended attachment points.

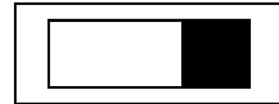
Manual override

Manual override with self-resetting pushbutton possible (the gear is disengaged as long as the button is pressed).

Mode switch

DIP switch under the case cover

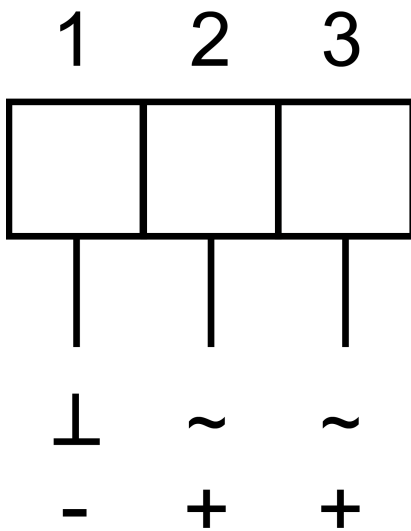
R / CW: rotary direction right / clockwise
L / CW: rotary direction left / counter clockwise



L / CCW

R / CW

Connector / Security Note



Safety remarks

- Connect via safety isolation transformer!
- The device is not allowed to be used outside the specified field of application, especially in airplanes.
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- The device may only be opened at the manufacturer's site.
- The device is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- When calculating the required torque, the specifications supplied by the damper manufacturer's (cross-section, design, installation site), and the air flow conditions must be observed.

Technical Drawing

