GRUNER
SWITCH TO INNOVATIONS

Technical data sheet

UL-225-024T-070
Rotary actuator

Description

Rotary actuator for adjusting dampers in HVAC installations

- Running time 60...120 s / 90°
- Torque 70 in-lb [8 Nm]
- Nominal voltage 24 VAC/DC
- Control 2-/3-point
- Damper size up to approx. 17,2 ft² [1,6 m²]
- Shaft coupling clamp
  ◊ 0,31-0,47 in [8-12 mm]
  Ø 0,31-0,63 in [8-16 mm]

Technical data

Electrical data	Nominal voltage	24 VAC/DC, 50/60 Hz
	Nominal voltage range	19...29 VAC/DC
	Power consumption motor (motion)	2,0 W
	Power consumption standby (end position)	1,0 W
	Wire sizing	3,0 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 mm²]
	Connection feedback potentiometer	-
	Connection auxiliary switch	-
	Connection GUAC	-
Functional data	Torque	70 in-lb [8 Nm]

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Technical data

Functional data	Damper size	up to approx. 17,2 ft² [1,6 m²]
	Synchronized 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 ◊ 0,31-0,47 in [8-12 mm] Ø 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)
	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 supply / control	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.

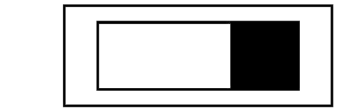
Manual override

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

Mode switch

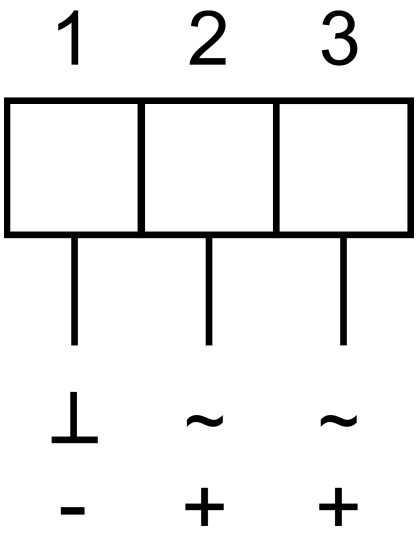
DIP switch under the case cover

R / CW: rotary direction right / clockwise
L / CWW: 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.
- Cables must not be removed from the device.
- The cable of this actuator cannot be replaced. If the cable is damaged, the actuator should be scrapped.
- 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