

225-024T-05(-S2) Rotary Actuator

Description

Rotary actuator for adjusting dampers in HVAC installations.

- Running time 60...120 s / 90°
- Torque 5 Nm
- Nominal voltage 24 VAC/DC
- Control 2-/3-point
- Damper size up to approx. 1.0 m²
- Damper coupling clamp
∅ 8-12 mm / Ø 8-16 mm



Technical data

Electrical data

Nominal voltage	24 VAC/DC, 50/60Hz
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	Continuous control (0)2...10 VDC / Ri > (100 kΩ) 50 kΩ (0)4...20 mA
Connection motor	screw terminals, 3-pin 0,5...1,5 mm ²
Connection feedback potentiometer	-
Connection GUAC	-
Feedback signal	-
225-024T-05-S2	
Auxiliary switch	- 2 x SPDT (ag)
Contact load	- 5 (2.5) A, 250 VAC
Switching point	- 0...95°
Connection auxiliary switch	screw terminals, 6-pin 0.5...1.5 mm ² (halogen free)

Functional data

Torque	5 Nm
Damper size	up to approx. 1.0 m ²
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 \diamond 8-12 mm / \varnothing 8-16 mm
Position indication	mechanical with pointer
Service life	> 60 000 cycles (0°...95°...0°)

Safety

Protection class	III (safety extra-low voltage)
Protection class auxiliary switch	II (double insulation)
Degree of protection	IP 52 (cable downwards)
EMC	CE (2014/30/EU)
LVD	CE (2014/35/EU)
RoHS	CE (2011/65/EU - 2015/863/EU - 2017/2102/EU)
Mode of operation	Typ 1 (EN 60730-1)
Rated impulse voltage supply / control	0.8 kV
Rated impulse voltage auxiliary switch	4 kV (EN 60730-1)
Control pollution degree	3 (EN 60730-1)
Ambient temperature normal operation	-30°C...+50°C
Storage temperature	-30°C...+80°C
Ambient humidity	5...95% r.H., non-condensing
Maintenance	Maintenance free

Dimensions/Weight

Dimensions	145 x 70 x 61 mm
Weight	450 g
Weight (S2)	500 g

Functionality / Properties

Operating mode

2 point:

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

3 point:

Connect power supply to wire 1+2, actuator drives to position 1. Is wire 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).

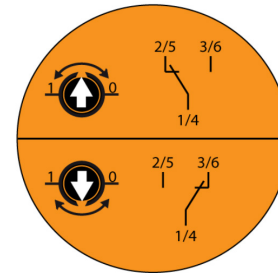
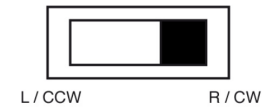
Signaling

The two integrated auxiliary switch is freely adjustable in the angle of 0 - 95°. There is activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

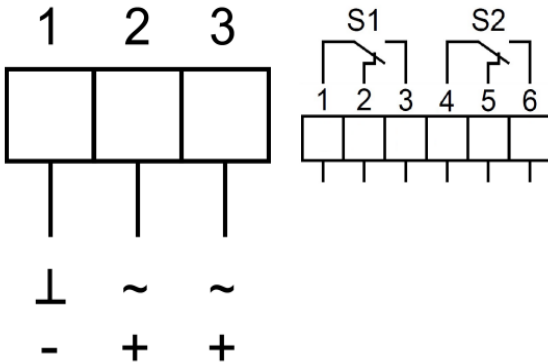
Mode switch

Mode switch with two positions at the housing:

R / CW : rotary rotation right / clockwise
L / CWW : rotary rotation



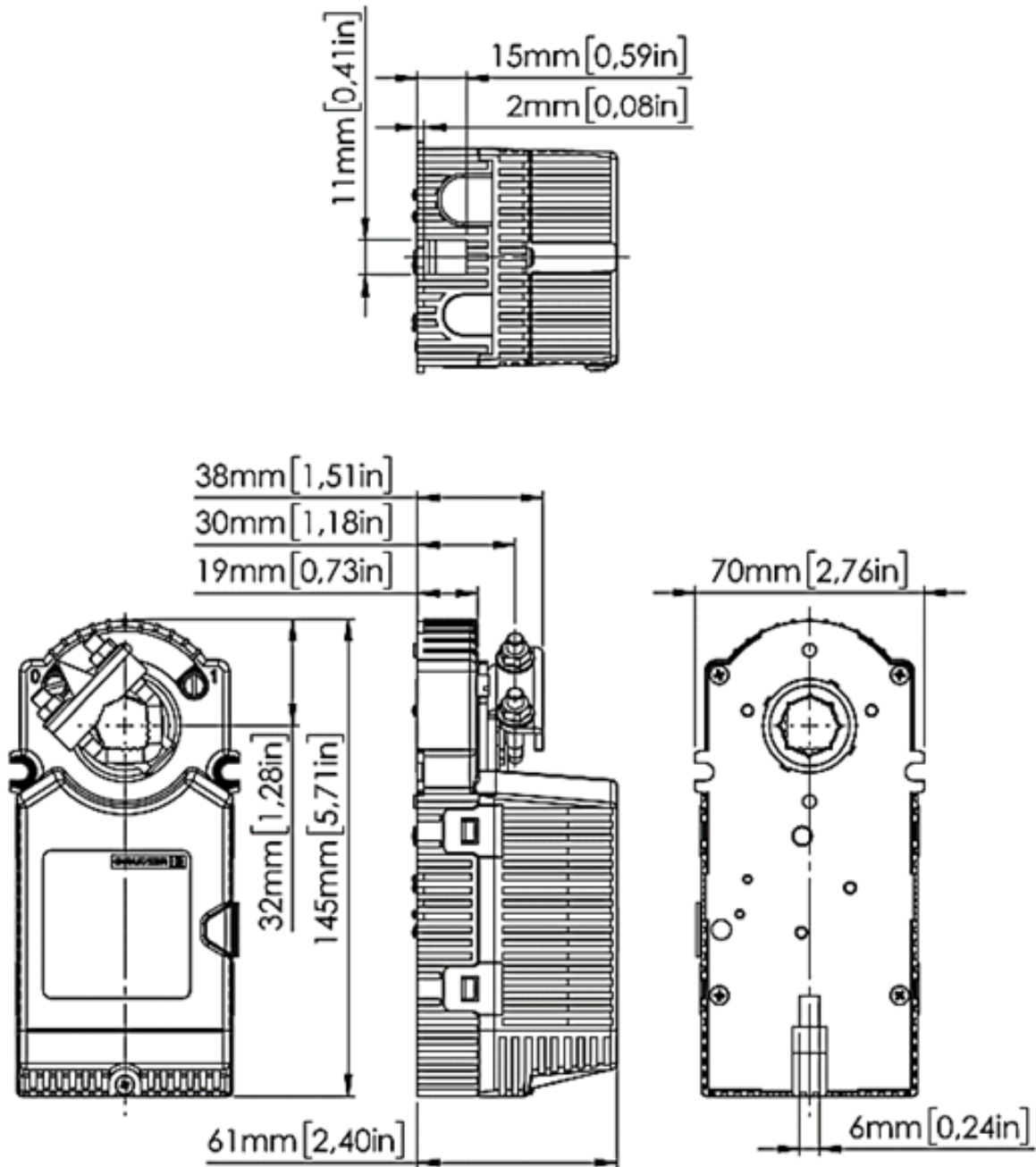
Connector / Security Note



Safety remarks

- Caution: power supply voltage!
- 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



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