

Technical data sheet

**225S-024T-05-S2**  
**Rotary actuator**

Description

Rotary actuator for adjusting dampers in HVAC installations

- Running time 20...35 s / 90°
- Torque 5 Nm
- Nominal voltage 24 VAC/DC
- Control 2-/3-point
- Auxiliary switch 2x freely adjustable
- Damper size up to approx. 1 m<sup>2</sup>
- Shaft coupling clamp  
∅ 8-12 mm / Ø 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	3,5 VA
	Control	2-/3-point
	Feedback signal	-
	Auxiliary switch	2x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0°...95°
	Connection motor	screw terminals, 3-pin 0,5...1,5 mm <sup>2</sup>
	Connection feedback potentiometer	-
	Connection auxiliary switch	screw terminals, 6-pin 0,5...1,5 mm <sup>2</sup>
	Connection GUAC	-
Functional data	Torque	5 Nm

## Technical data

<b>Functional data</b>	Damper size	up to approx. 1 m <sup>2</sup>
	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	20...35 s / 90° (load-dependent)
	Sound power level	< 45 dB(A)
	Shaft coupling	clamp $\varnothing$ 8-12 mm / $\varnothing$ 8-16 mm
	Position indication	mechanical with pointer
	Service life	> 60 000 cycles (0°...95°...0°)
<b>Safety</b>	Protection class	III (safety extra-low voltage)
	Degree of protection	IP 52 (cable port downwards)
	Cable mounting type	
	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 (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 (EN 60730-1)
	Maintenance	maintenance free
<b>Dimensions / Weight</b>	Dimensions	145 x 70 x 61 mm
	Weight	500 g

## Functionality / Properties

### Operating mode

2 point:

Connect power supply to terminal 1+2, actuator drives to position 1. If 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. If 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).

### Signaling

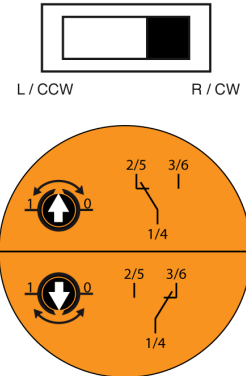
The two integrated auxiliary switches are freely adjustable in the angle of 0 - 95°. There are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

### Mode switch

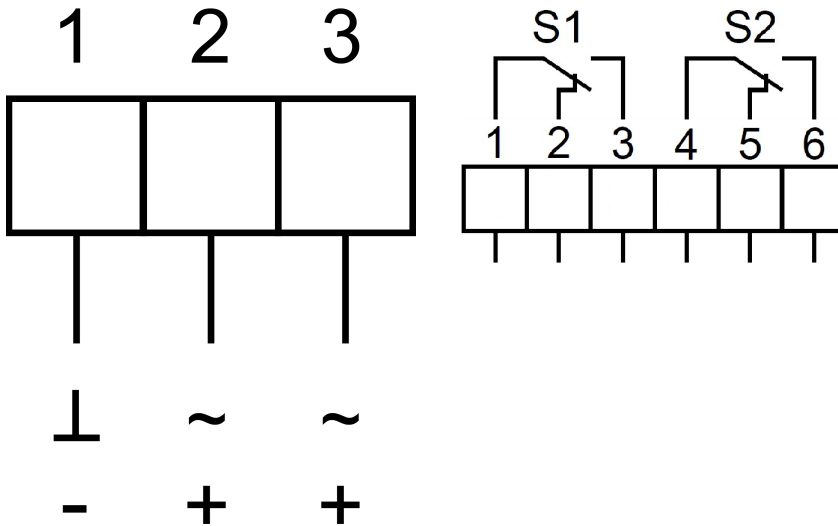
DIP switch under the case cover

R / CW: rotary direction right / clockwise

L / CWW: rotary direction left / counter clockwise



### 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

