

Technical data sheet

225S-024T-05-S2

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in HVAC installations.

- Torque Motor **5 Nm**
- Nominal Voltage **24 VAC/DC**
- Control **2/3 Point**
- Connection **2x freely adjustable**
- Auxiliary switch S2
- Damper size **up to approx. 1 m²**
- Damper coupling **Clamp**
 ◇ 8-12 mm / Ø 8-16 mm



Technical data

Nominal voltage	Nominal voltage	24 VAC/DC
	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
	Position feedback	-
	Auxiliary switch	2x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0°...95°
	Connection Motor	screw terminals, on cable 0,5...1,5mm ²
	Connection Auxiliary switch	screw terminals, on cable 0,5...1,5mm ²
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	> 5 Nm
	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 stop min 20°
	Running time Motor	20...35 s / 90°
	Sound power level Motor	< 35 dB(A)
	Damper coupling	clamp ◇ 8-12 mm / Ø 8-16 mm

Technical data

Functional data	Position indication	mechanical with pointer
	Service life	> 60'000 cycles (0° - 95° - 0°)
Safety	Protection class	III (low voltage safety current)
	Degree of protection	IP 52 (Cable port downwards)
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	-30°...+50°
	Storage temperature	-30°...+80°
	Ambient humidity	5...95% r.F., non- condensating (EN 60730-1)
Dimensions/ Weight	Maintenance	maintenance free
	Dimensions	145 x 65 x 61 mm
	Weight	ca. 530 g

Operating mode / Properties

Operating mode

2- point.

Through connecting the power supply to 1+2 and the direction of rotation switch on position "R" moves the actuator to position 1. Is also 1+2+3 connected to the power supply the actuator is moving to position 0.

3- point.

Through connecting the power supply to 1+2 and the direction of rotation switch on position "R" moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also 1+3 connected to the power supply the actuator is moving in direction 0.

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

Signaling

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

Direct mounting

Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

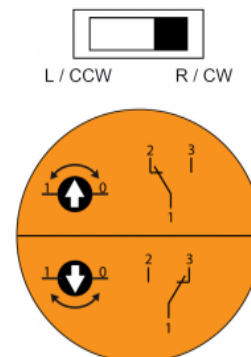
Manual override

Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

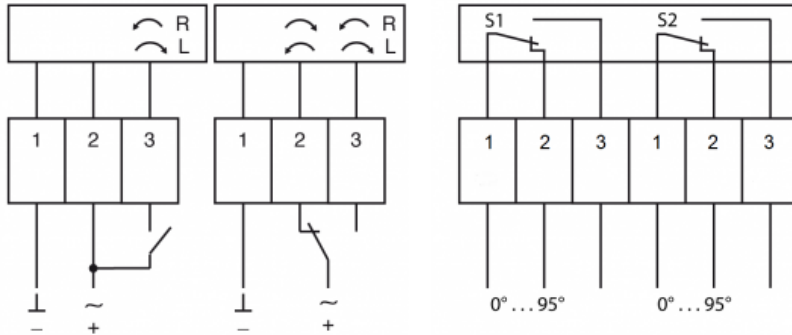
Rotary direction switch

R/CW= clockwise

L/ CCW= counter clockwise



Connection / Safety remarks


Safety remarks

- Connect via safety isolation transformer
- The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
- In 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.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
- The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing

