

Technical data sheet

225CS-024T-05-S2

Continuous control 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** **Continuous control**
 DC 0(2)...10 V
- **Connection** **2x freely adjustable**
 Auxiliary switch S2
- **Damper size** **up to approx. 1 m²**
- **Damper coupling** **Clamp**
 ∅ 8-12 mm / ∅ 8-16 mm


Technical data

Nominal voltage	Nominal voltage	24 VAC/DC
	Nominal voltage range	19...29 VAC/DC
	Power consumption Motor (Motion)	2,5 W
	Power consumption Standby (end position)	1,0 W
	Wire sizing	4,0 VA
	Control	Continuous control 0(2)...10 VDC / (0)4...20 mA / Ri >100 kΩ
	Position feedback	0(2)...10 VDC, max 5 mA
	Auxiliary switch	2 x 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 / ∅ 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)
	Maintenance	maintenance free
	Dimensions/ Weight	Dimensions
Weight		ca. 530 g

Operating mode / Properties

Operating mode

Through connecting the power supply to 1+2 and a reference signal Y to 3 of [0(2)...10VDC], moves the actuator to its specified position. The actual damper position 0...100% is a feedback signal U for example to share the signal with other actuators.

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 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)

Signaling

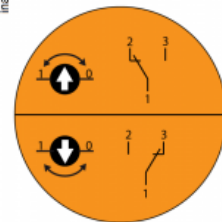
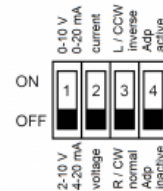
The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

Mode- switch

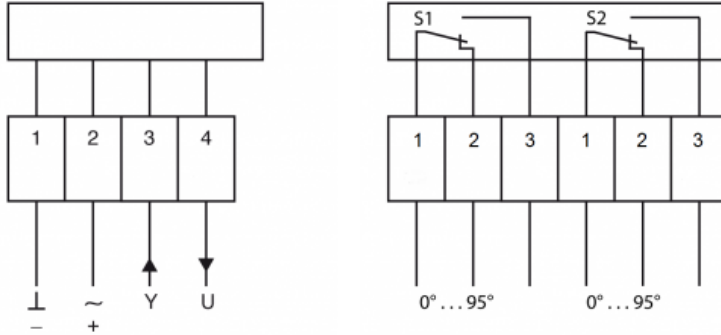
DIP-Switch under the case cover

Adaption drive

- Adaption on angle of rotation < 90°
- Actuator power-off
- Setting the mechanical end stops
- Actuator power-on
- Adaption to enable
- Actuator adaption on angular range
- Adaption to disable
- “Y” refers to the measured angular range



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

