

Technical data sheet

225C-024T-05
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 continuous control (0)2...10 VDC
- Damper size up to approx. 1 m²
- Shaft coupling clamp
∅ 8-12 mm / Ø 8-16 mm



Technical data

Electrical data	Nominal voltage	24 VAC/DC, 50/60 Hz
	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 (0)4...20 mA
	Feedback signal	(0)2...10 VDC, max. 5 mA
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection motor	screw terminals, 4-pin 0,5...1,5 mm ²
	Connection feedback potentiometer	-
	Connection auxiliary switch	-
	Connection GUAC	-
	Functional data	Torque

Technical data

Functional data	Damper size	up to approx. 1 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 \varnothing 8-12 mm / \varnothing 8-16 mm
	Position indication	mechanical with pointer
	Service life	> 60 000 cycles (0°...95°...0°) > 1 000 000 partial cycles (max. $\pm 5^\circ$)
	Safety	Protection class
Degree of protection		IP 52 (cable port downwards)
Cable mounting type		Type X (EN 60730-1)
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
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
	Weight	490 g

Functionality / Properties

Operating mode

Connect power supply to terminal 1+2 and a reference signal Y to terminal 3 in range of (0)2...10 VDC, actuator drives to its specified position. The actual damper position (0...100%) is a feedback signal U on terminal 4 for example to share with other actuators.

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

Operating mode

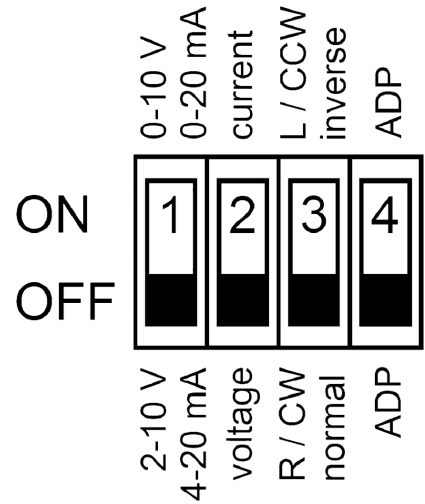
Connect power supply to wire 1+2 and a reference signal Y to wire 3 in range of (0)2...10 VDC, actuator drives to its specified position. The actual damper position (0...100%) is a feedback signal U on wire 4 for example to share with other actuators. The actuator is overload-proof, requires no limit switches and automatically stops, when the end stop is reached.

Direct mounting

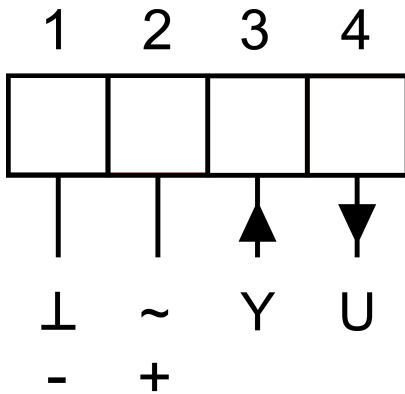
Simple direct mounting on the damper shaft with a clamp, protection against rotating with enclosed anti-rotation lock or rather at intended attachment points.

Manual override

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



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

