

## Technical data sheet

### 225-024T-05-P5 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
- Feedback potentiometer P5 = 5 kΩ
- Damper size up to approx. 1 m<sup>2</sup>
- Shaft coupling clamp  
◇ 8-12 mm / Ø 8-16 mm



#### Technical data

<b>Electrical data</b>	Nominal voltage	24 VAC/DC, 50/60 Hz
	Nominal voltage range	19...29 VAC/DC
	Power consumption motor (motion)	1,5 W
	Power consumption standby (end position)	1,0 W
	Wire sizing	2,5 VA
	Control	2-/3-point
	Feedback signal	potentiometer P5 = 5 kΩ
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection motor	screw terminals, 3-pin 0,5...1,5 mm <sup>2</sup>
	Connection feedback potentiometer	screw terminals, 3-pin 0,5...1,5 mm <sup>2</sup>
	Connection auxiliary switch	-
	Connection GUAC	-
<b>Functional data</b>	Torque	5 Nm

## Technical data

<b>Functional data</b>	Damper size	up to approx. 1 m <sup>2</sup>
	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 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°)
<b>Safety</b>	Protection class	III (safety extra-low voltage)
	Degree of protection	IP 52 (cable port 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	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. Is 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. Is 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

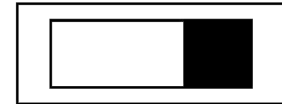
Manual override with self-resetting pushbutton possible (the gear is disengaged as long as the button is pressed).

### Mode switch

DIP switch under the case cover

R / CW: rotary direction right / clockwise

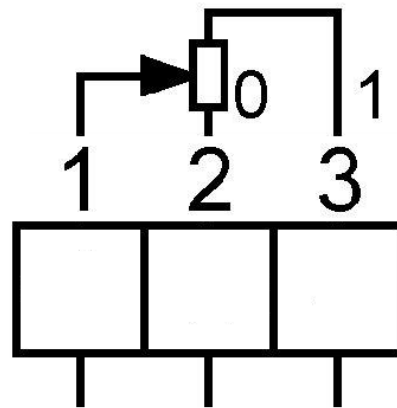
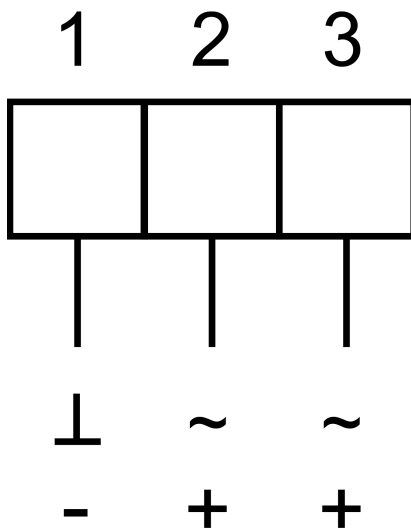
L / CWW: rotary direction left / counter clockwise



L / CCW

R / CW

## 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.
- 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

