

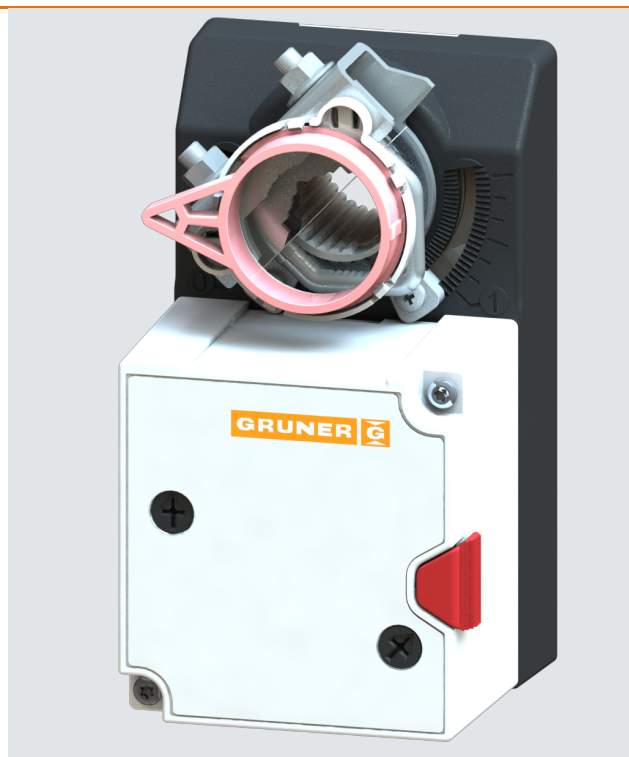
Technical data sheet

# 227S-024-10E-S1 Rotary actuator

Description

Rotary actuator for adjusting dampers in HVAC installations

- Running time 20 s / 90°
- Torque 10 Nm
- Nominal voltage 24 VAC/DC
- Control 2-/3-point
- Auxiliary switch 1x freely adjustable
- Damper size up to approx. 2 m<sup>2</sup>
- Damper coupling clamp  
◇ 8-15 mm / Ø 8-20 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)	6,0 W
	Power consumption standby (end position)	1,5 W
	Wire sizing	11,0 VA
	Control	2-/3-point
	Feedback signal	-
	Auxiliary switch	1x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0...95°
	Connection motor	cable 1000 mm, 3 x 0,75 mm <sup>2</sup> (halogen free)
	Connection feedback potentiometer	-
	Connection auxiliary switch	cable 1000 mm, 3 x 0,75 mm <sup>2</sup> (halogen free)
	Connection GUAC	-
<b>Functional data</b>	Torque	10 Nm

## Technical data

<b>Functional data</b>	Damper size	up to approx. 2 m <sup>2</sup>
	Synchronised speed	±5%
	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 after changing the angle of rotation, a adaptation drive must be made
	Running time	20 s / 90°
	Sound power level	< 45 dB(A)
	Shaft coupling	clamp $\diamond$ 8-15 mm / $\varnothing$ 8-20 mm
	Position indication	mechanical with pointer
	Service life	> 100 000 cycles (0°...95°...0°)
<b>Safety</b>	Protection class	III (safety extra-low voltage)
	Degree of protection	IP 54 (cable 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	117 x 67 x 66 mm
	Weight	450 g

## Functionality / Properties

### Operating mode

2 point:  
Connect power supply to wire 1+2, actuator drives to position 1. Is also wire 3 connected to the power supply, actuator drives to position 0.

3 point:  
Connect power supply to wire 1+2, actuator drives to position 1. Is wire 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 integrated auxiliary switch is freely adjustable in the angle of 0 - 95°. There is activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

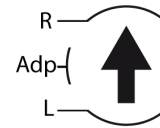
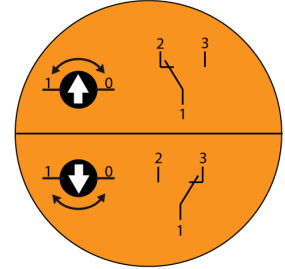
### Mode switch

Mode switch with three positions at the housing:

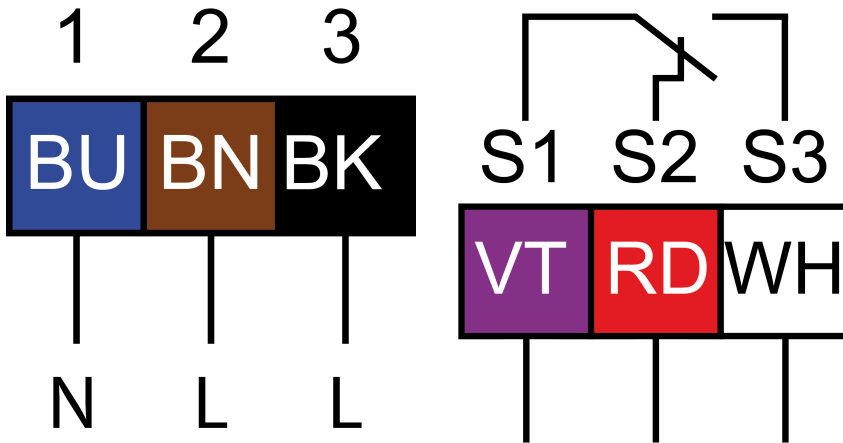
R: rotary direction right / clockwise  
Adp: adaption  
L: rotary direction / counter clockwise

### Adaption drive

- Actuator power off
- Setting the mechanical end stops
- Actuator power on
- Adaption enable
- Actuator drive to position 0
- Actuator drive to position 1
- Adaption disable, if desired angular range reached or rather if actuator reached endstop



### Connector / Security Note



### Safety remarks

- Caution: power supply voltage!
- 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

