

Technical data sheet

**328CS-024-15B**  
**Rotary actuator**

Description

Rotary actuator for adjusting dampers in HVAC installations

- Running time 3...5 s / 90°
- Torque 15 Nm
- Nominal voltage 24 VAC/DC
- Control continuous control (0)2...10 VDC
- Damper size up to approx. 3 m<sup>2</sup>
- Shaft 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)	18,0 W
	Power consumption standby (end position)	1,0 W
	Wire sizing	22,0 VA
	Control	continuous control (0)2...10 VDC / Ri > (100 kΩ) 50 kΩ resolution 40 mV (0)4...20 mA / Rext. = 500 Ω resolution 0,08 mA
	Feedback signal	(0)2...10 VDC, max. 5 mA
	Auxiliary switch	-
	Contact load	-
	Switching point	-
Connection motor	cable 1000 mm, 4 x 0,75 mm <sup>2</sup> (halogen free)	
Connection feedback potentiometer	-	
Connection auxiliary switch	-	

## Technical data

<b>Electrical data</b>	Connection GUAC	-	
<b>Functional data</b>	Torque	15 Nm	
	Damper size	up to approx. 3 m <sup>2</sup>	
	Synchronized 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	3...5 s / 90° (load-dependent)	
	Sound power level	< 55 dB(A)	
	Shaft coupling	clamp ∅ 8-15 mm / ∅ 8-20 mm	
	Position indication	mechanical with pointer	
	Service life	> 100 000 cycles (0°...95°...0°) > 1 500 000 partial cycles (max. ±5°)	
	<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	172 x 65 x 87 mm	
	Weight	700 g	

## Functionality / Properties

### 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. A supply of direct current (VDC) is preferred.

### 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).

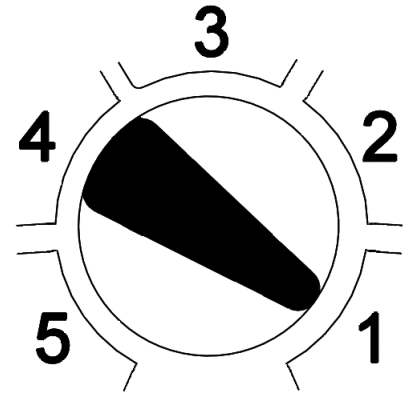
### Mode switch

Mode switch with five positions at the housing:

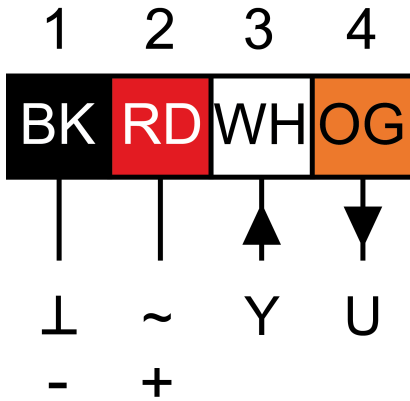
- 1: rotary direction right 2-10 VDC
- 2: rotary direction right 0-10 VDC
- 3: adaption
- 4: rotary direction left 0-10 VDC
- 5: rotary direction left 2-10 VDC

### 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
- "Y" refers to the measured angular range



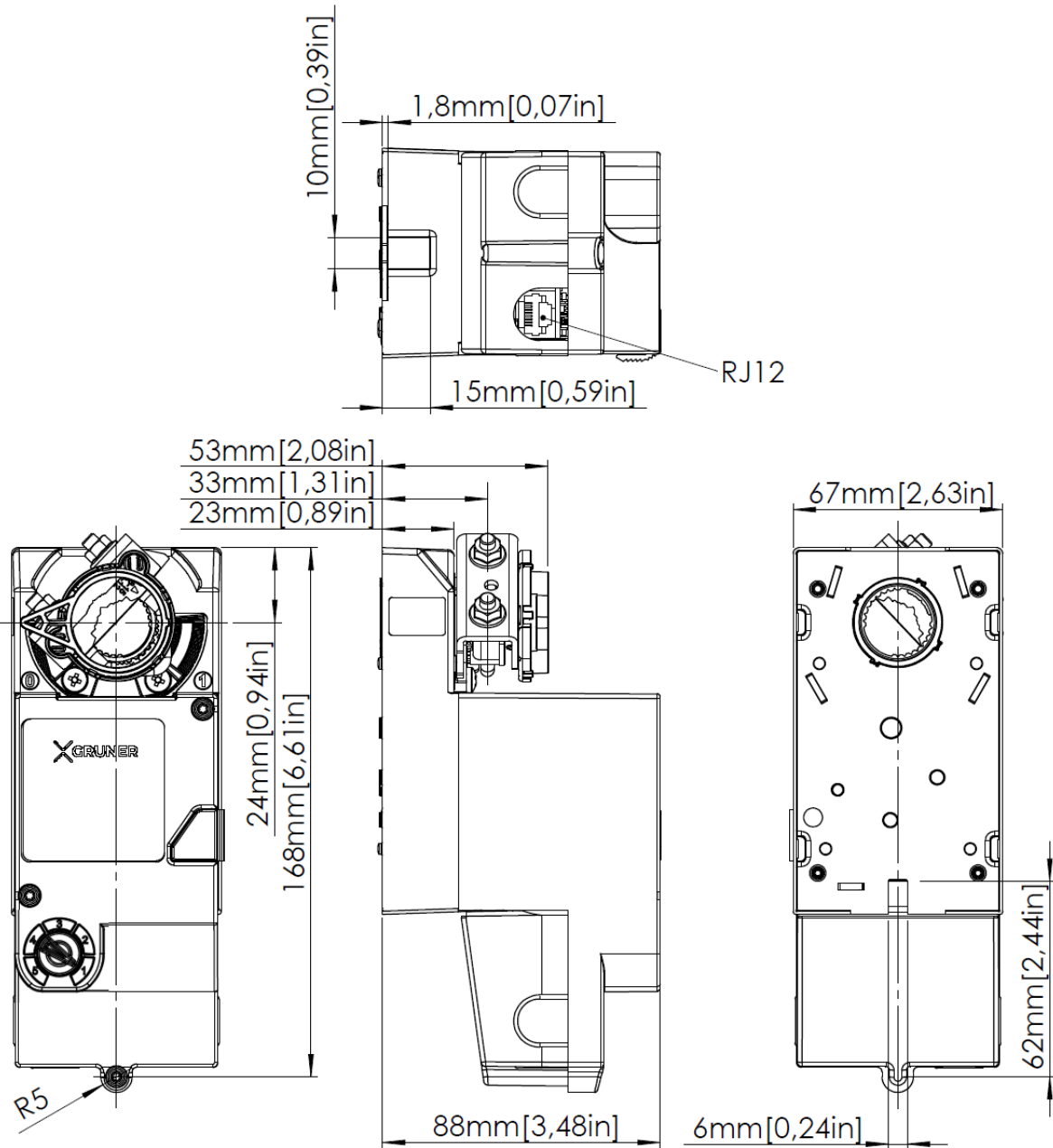
### Connector / Security Note



### 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



Montage / Mounting

