GRUNER
SWITCH TO INNOVATIONS

Technical data sheet

227CSZ-024-05E-V/ST06/RE20
Rotary actuator for GUAC controller

Description

Rotary actuator for adjusting dampers in combination with a GUAC controller for pressure and volumetric flow control in HVAC installations

- Running time 20 s / 90°
- Torque 5 Nm
- Nominal voltage 24 VAC/DC
- Control 6 ± 4 VDC (GUAC)
- Damper size up to approx. 1 m²
- Shaft coupling clamp
  ◊ 8-15 mm / Ø 8-20 mm

Technical data

Electrical data	Nominal voltage	24 VAC/DC, 50/60 Hz
	Nominal voltage range	19...29 VAC/DC
	Power consumption motor (motion)	3,5 W
	Power consumption standby (end position)	1,0 W
	Wire sizing	5,5 VA
	Control	6 ± 4 VDC (GUAC)
	Feedback signal	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection motor	-
	Connection feedback potentiometer	-
	Connection auxiliary switch	-
	Connection GUAC	cable 1000 mm with Lumberg connector
Functional data	Torque	5 Nm

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Technical data

Functional data	Damper size	up to approx. 1 m²
	Synchronized speed	±5%
	Direction of rotation	adjustable via GUAC
	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	20 s / 90°
	Sound power level	< 35 dB(A)
	Shaft coupling	clamp ◊ 8-15 mm / Ø 8-20 mm
	Position indication	mechanical with pointer
	Service life	> 100 000 cycles (0°...95°...0°) > 1 500 000 partial cycles (max. ±5°)
Safety	Protection class	III (safety extra-low voltage)
	Degree of protection	IP 54 (cable downwards)
	Cable mounting type	
	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 (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
Dimensions / Weight	Dimensions	149 x 67 x 66 mm
	Weight	400 g

Functionality / Properties

Operating mode

Connect power supply to wire 1+2 and a reference signal Y to wire 3 in range of 6 ± 4 VDC (GUAC), actuator drives to its specified position.

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

Direct mounting

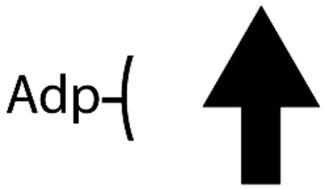
Simple direct mounting on the damper shaft with a clamp, protection against rotating with enclosed anti-rotation lock or rather at intended attachment points.

Manual override

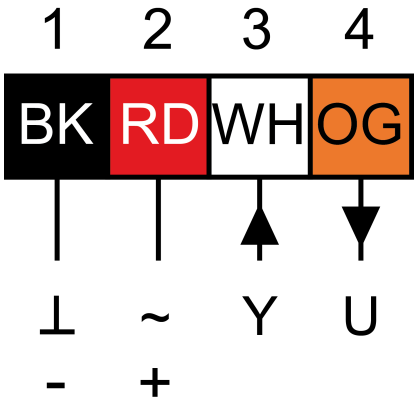
Manual override with self-resetting pushbutton possible (the gear is disengaged as long as the button is pressed).

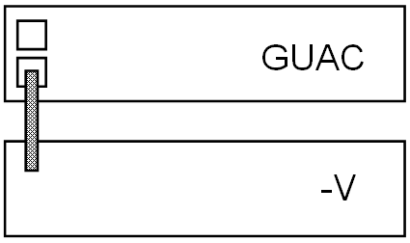
Adaption drive

- 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

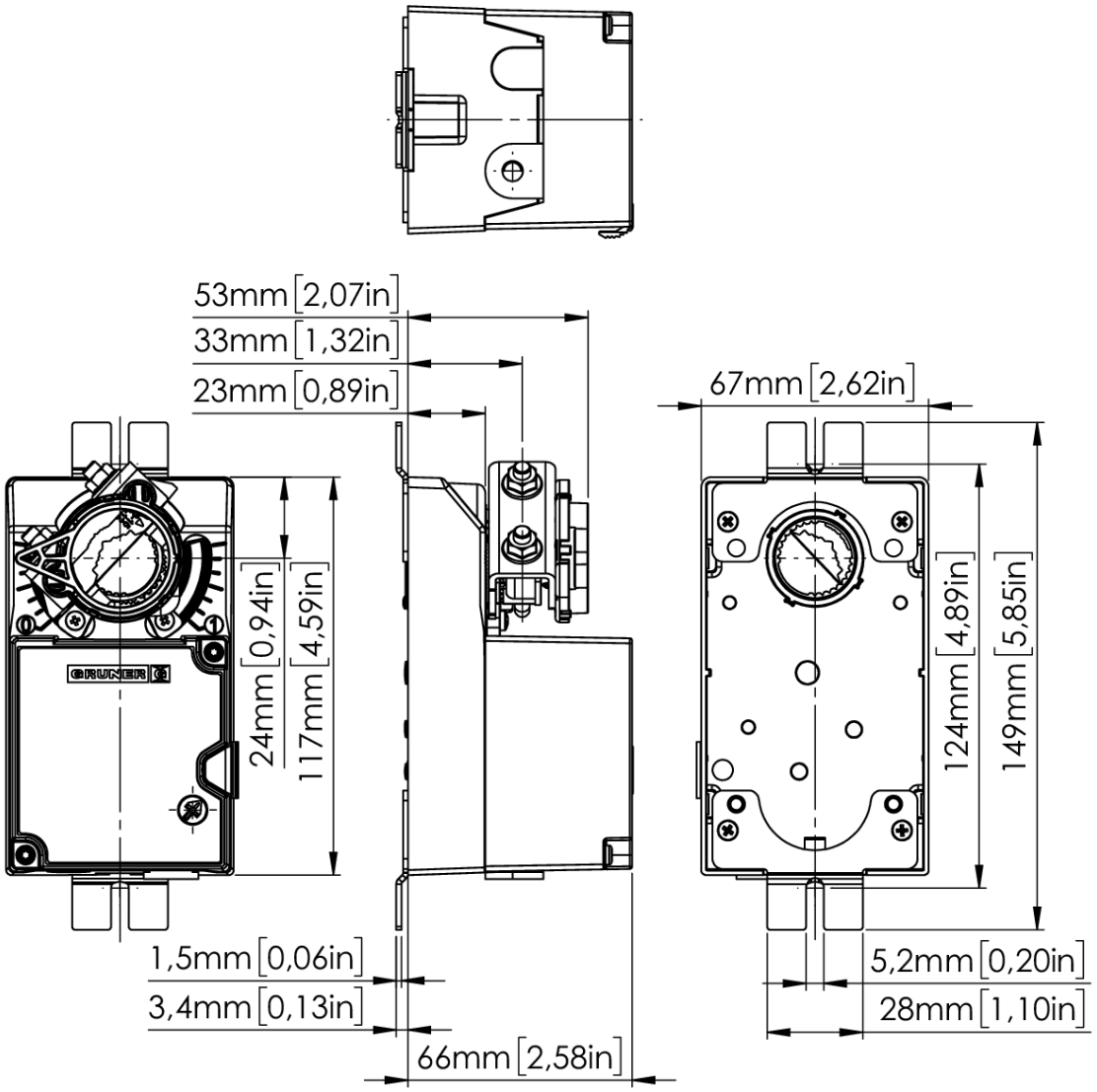




Safety remarks

- 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.
- 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



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