GRUNER
Schalten und Bewegen

Technical data sheet

315C-024-04/RE12

Rotary actuator

Description

Rotary actuator for adjusting dampers in HVAC installations

- **Running time** **150 s / 90°**
- **Torque** **4 Nm**
- **Nominal voltage** **24 VAC/DC**
- **Control** **continuous control 2...10 VDC**
- **Damper size** **up to approx. 0,8 m²**
- **Shaft coupling** **clamp ◊ 8-12 mm / Ø 8-12 mm**

Technical data

Electrical data		
	Nominal voltage	24 VAC/DC, 50/60 Hz
	Nominal voltage range	19...29 VAC/DC
	Power consumption motor (motion)	1,0 W
	Power consumption standby (end position)	0,8 W
	Wire sizing	1,6 VA
	Control	continuous control 2...10 VDC / Ri > 50 kΩ 4...20 mA / Rext. = 500 Ω
	Feedback signal	2…10 VDC / max. 5 mA
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection motor	cable 1000 mm, 4 x 0,75 mm²
	Connection feedback potentiometer	-
	Connection auxiliary switch	-
	Connection GUAC	-
Functional data		
	Torque	> 4 Nm
	Damper size	up to approx. 0,8 m²
	Synchronised speed	±5%
	Direction of rotation	by mounting selectable
	Manual override	Gearing latch disengaged with rotary switch, self-resetting
	Angle of rotation	0°...max. 310° with mechanical end stops adjusted in 2,5° increments
	Running time	< 150 s / 90°

Technical data

Functional data		
	Sound power level	< 30 dB(A)
	Shaft coupling	clamp ◊ 8-12 mm / Ø 8-12 mm
	Position indication	mechanical with pointer
	Service life	> 60 000 cycles (0°...95°...0°)
Safety		
	Protection class	III (safety extra-low voltage)
	Degree of protection	IP 54 (plug port downwards)
	EMC	CE (2014/30/EU)
	LVD	CE (2014/35/EU)
	RoHS	CE (2011/65/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...+50°C
	Ambient humidity	5...95% r.H., non condensing (EN 60730-1)
	Maintenance	maintenance free
Dimensions / Weight		
	Dimensions	160 x 60 x 61 mm
	Weight	300 g

Operating mode / Properties

Operating mode

Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 2...10 VDC, moves the actuator to its specified position. The actual damper position 0...100% is a feedback signal U on GY (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, supplied with an anti-rotation strap to prevent the actuator from rotating.

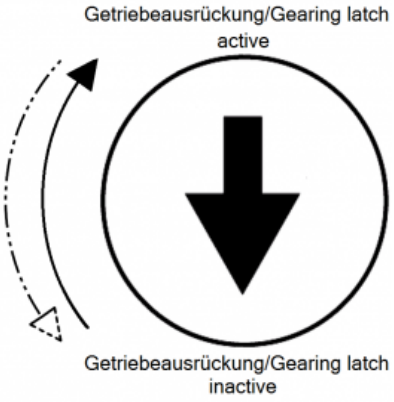
Manual override

Manual override is possible with the self-resetting rotary switch (the gearing latch remains disengaged as long as the rotary switch is activated).

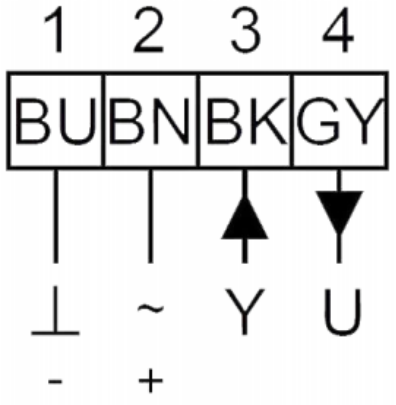
Adaption drive

-Actuator power off
-Setting the mechanical end stops
-Actuator power on
-Adaption to enable
-Actuator drive to position 0
-Actuator drive to position 1
-Adaption to disable if desired reached angular range or drive to endstop
-“Y” refers to the measured angular range

*Actuator will do adaption drive by each restart



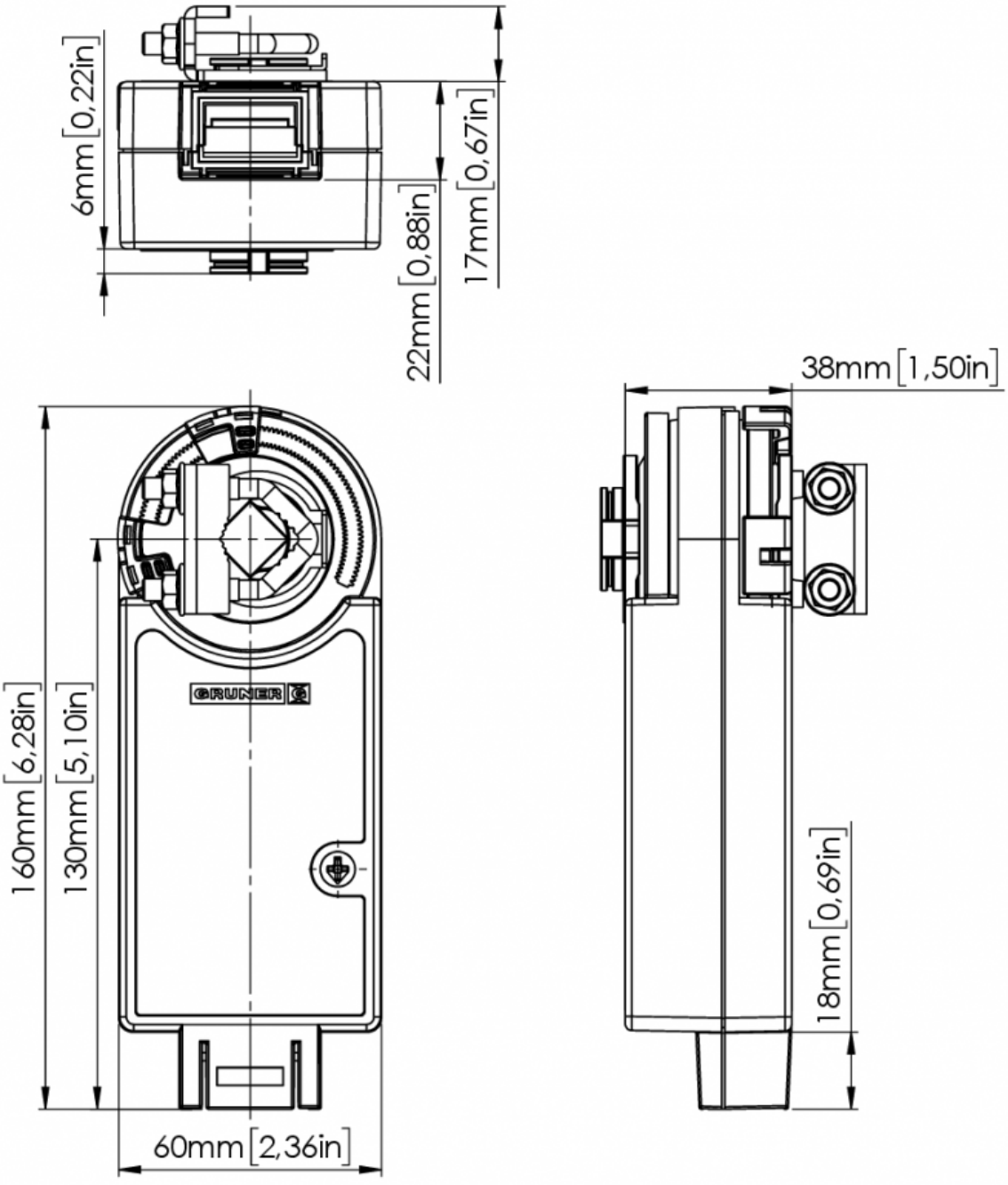
Connection / Safety remarks



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



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