

227-230-16I(-S1) Rotary Actuator

Description

Rotary actuator for adjusting dampers in HVAC installations.

- Running time 100 s / 90°
- Torque 16 Nm
- Nominal voltage 230 VAC/DC
- Control 2-/3-point
- Damper size up to approx. 3 m²
- Damper coupling clamp
∅ 8-15 mm / Ø 8-20 mm



Technical data

Electrical data

| | |
|---|--|
| Nominal voltage | 230 VAC/DC, 50/60Hz |
| Nominal voltage range | 85...265 VAC/DC |
| Power consumption motor (motion) | 3.0 W |
| Power consumption standby (end position) | 1.5 W |
| Wire sizing | 5.5 VA |
| Control | 2-/3-point |
| Connection motor | cable 1000 mm, 3 x 0.75 mm ² (halogen free) |
| Connection feedback potentiometer | - |
| Connection GUAC | - |
| Feedback signal | - |
| 227-230-16I-S1 | |
| Auxiliary switch | - 1 x SPDT (ag) |
| Contact load | - 5 (2.5) A, 250 VAC |
| Switching point | - 0...95° |
| Connection auxiliary switch | cable 1000 mm, 3 x 0.75 mm ² (halogen free) |

Functional data

| | |
|------------------------------|---|
| Torque | 16 Nm |
| Damper size | up to approx. 3 m ² |
| 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 |
| Running Time | 100 s / 90° |
| Sound power level | < 35 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°) |

Safety

| | |
|---|--|
| Protection class | II (double insulation) |
| 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 auxiliary switch | 4 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 | 117 x 67 x 67 mm |
| Weight | 350 g |
| Weight (S1) | 510 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 push button possible (the gear is disengaged as long as the button is pressed).

Mode switch

Mode switch with two positions at the housing

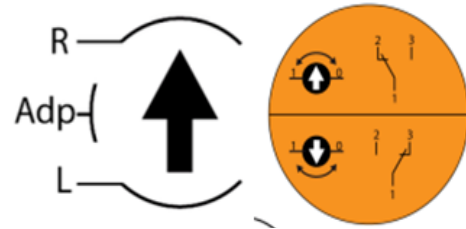
R: rotary direction right / clockwise

Adp : adaption

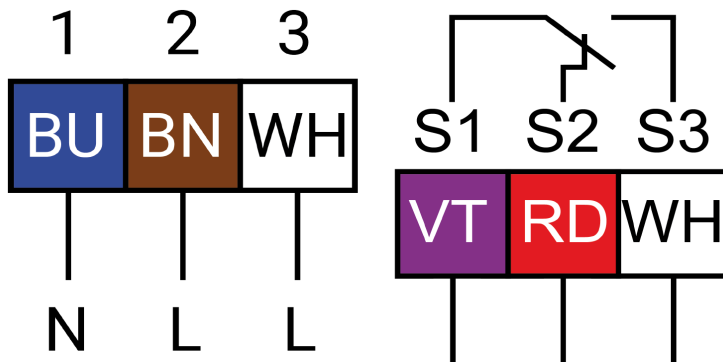
L: rotary direction / counter clockwise

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 an gular range reached or rather if actuator reached end stop.



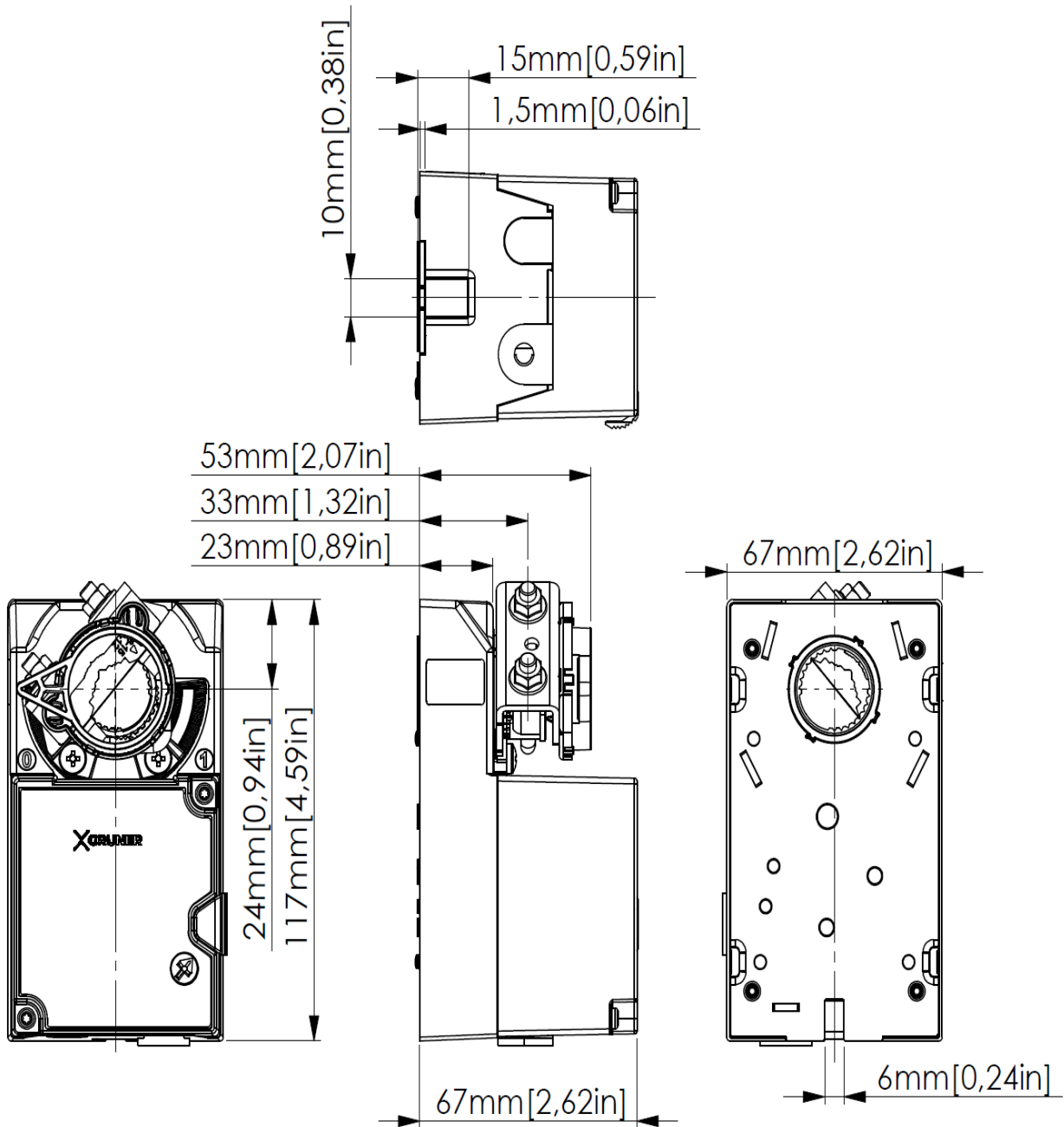
Connector / Security Note



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 (crosssection, design, installation site), and the air flow conditions must be observed.

Technical Drawing



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