

RA23020S11

Spring Return Actuator

Description

Spring Return Actuator for adjusting and regulating Dampers and valves in air conditioning and ventilation.

- Torque Motor 20 Nm
- Torque Spring 20 Nm
- Nominal voltage 230 VAC/DC
- Control 2-Point
- Auxiliary switch 2 x freely adjustable
- Damper size up to approx. 4 m²
- Damper coupling Clamp
◇ 9-18 mm / Ø 9-26 mm



Technical data

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| Electrical data | Nominal voltage | 230 VAC (50/60Hz), 230 VDC |
| | Nominal voltage range | 85...265 VAC |
| | Power consumption Motor (Motion) | 8,5 W |
| | Power consumption Standby (end position) | 2,0 W |
| | Wire sizing | 13,5 VA |
| | Control | 2 Point |
| | Position feedback | - |
| | Auxiliary switch | 2 x SPDT (Ag) |
| | Contact load | 5 (2,5) A, 250 VAC |
| | Switching point | 0°...30° ~ 65°...95° |
| | Connection Motor | Cable 1000 mm, 2 x 0,75 mm ² (halogen free) |
| | Connection Auxiliary switch | Cable 1000 mm, 6 x 0,75 mm ² (halogen free) |
| | Connection GUAC | - |
| Functional data | Torque Motor | >20 Nm |
| | Torque Spring | >20 Nm |
| | Synchronized speed | ±5% |
| | Direction of rotation Motor | selected by mounting |
| | Direction of rotation Spring | Manual operation |
| | Manual override | 0°...max. +95° Can be limited with adjustable mechanical end stop min 35° |
| | Running time Motor | <75 s / 90° |
| | Running time Spring | <20 s / 90° |
| | Sound power level Motor | <45 dB(A) |
| | Sound power level Spring | <65 dB(A) |
| | Damper coupling | Clamp ◇ 9 ... 18 mm / Ø 9 ... 26 mm |
| | Position indication | mechanical with pointer |
| | Service life | >60.000 cycles (0°...+95°...0°) |

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| Safety | Protection class | II (double insulation) |
| | Degree of protection | IP54 |
| | EMC | CE (2004/108/EG) |
| | LVD | CE (2006/95/EG) |
| | RoHS | CE (2011/65/EU) |
| | Mode of operation | Type 1.AA B (EN60730-1) |
| | Rated impulse voltage | 4 kV (EN60730-1) |
| | Control pollution degree | 3 (EN60730-1) |
| | Ambient temperature Normal | -30°C...+50°C |
| | Storage temperature | -30°C...+80°C |
| | Ambient humidity | 5...95% r. h., not condensing (EN 60730-1) |
| Dimensions / Weight | Maintenance | maintenance-free |
| | Dimensions | 193 x 96 x 70 mm |
| | Weight | approx. 2.400 g |

Operating mode / Properties

Operating mode

Through connecting the power supply to BU+BN (1+2), the actuator moves to position 1 while the pre-tensioned spring is wound up the same time. If the power supply is interrupted the actuator is moving back to position 0 by the spring power. The actuator is still maintaining the minimum torque at the damper spindle.

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

Direct mounting

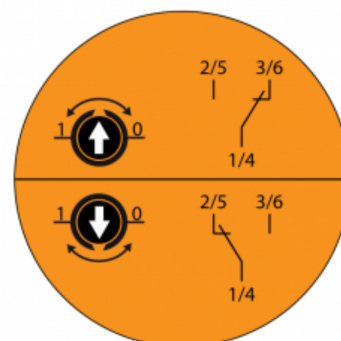
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override

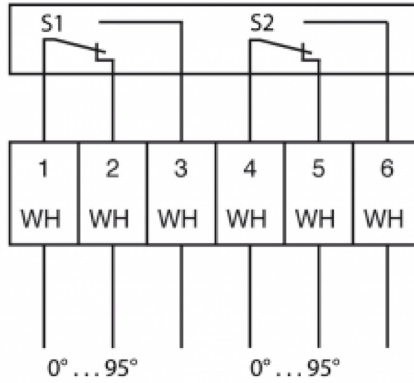
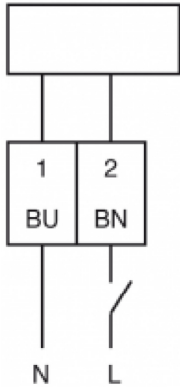
The actuator can be operated only manually while the power supply is off. The supplied lever is to open and lock the damper position. The lock stays until the power supply is put on.

Signaling

The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.



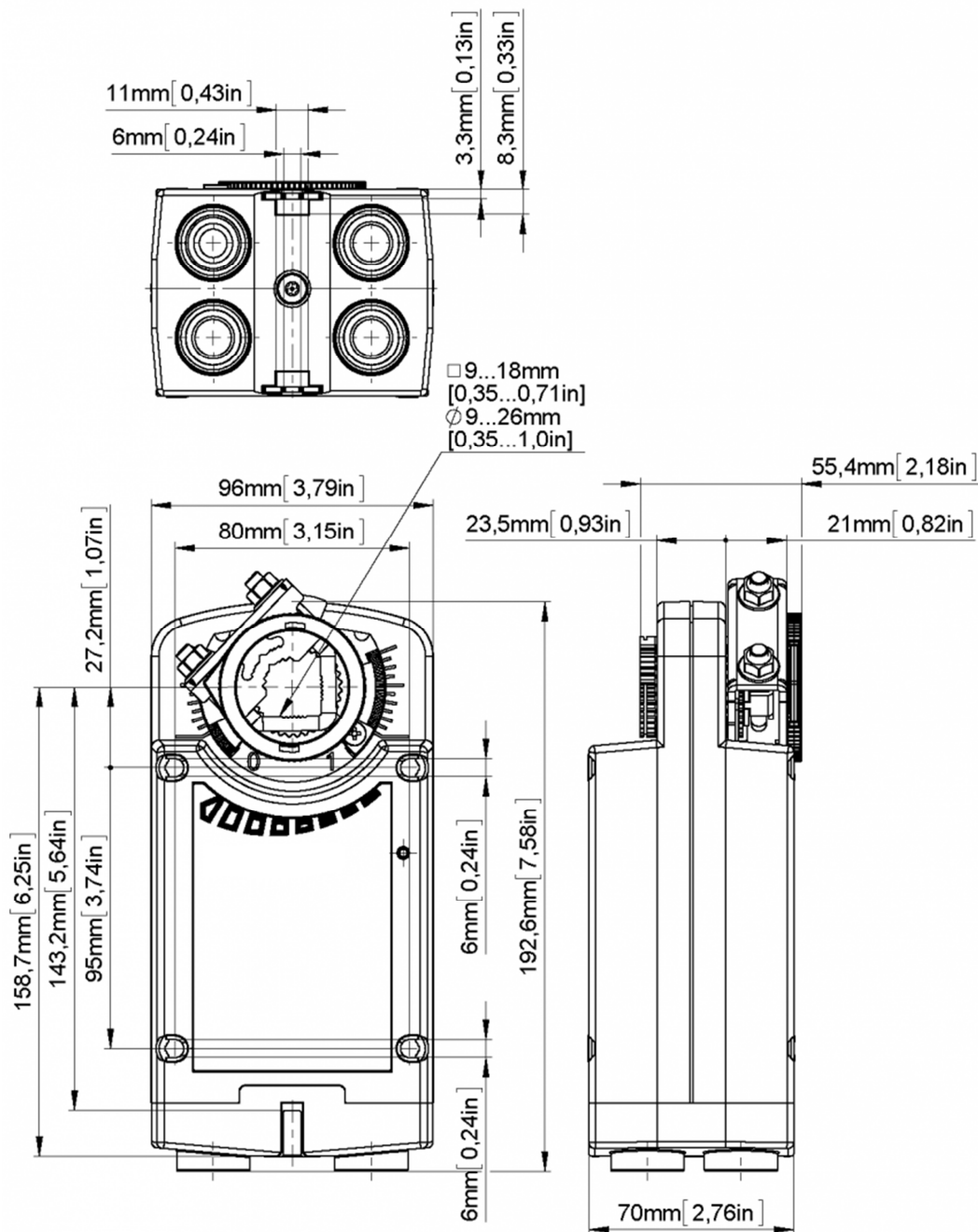
Connection / Safety remarks



Safety remarks

- Attention mains voltage
- The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
- In 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.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
- The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



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