

Damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 1 m²
- Nominal torque 5 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- With integrated auxiliary switch


Technical data

| | | | |
|--|-------------------------------------|---|-------------------------|
| Electrical data | Nominal voltage | AC 230 V | |
| | Nominal voltage frequency | 50/60 Hz | |
| | Nominal voltage range | AC 85...264 V | |
| | Power consumption in operation | 1.5 W | |
| | Power consumption in rest position | 0.5 W | |
| | Power consumption for wire sizing | 3.5 VA | |
| | Auxiliary switch | 1 x SPDT, 0...100% | |
| | Switching capacity auxiliary switch | 1 mA...3 (0.5 inductive) A, AC 250 V | |
| | Connection supply / control | Cable 1 m, 3 x 0.75 mm ² | |
| | Connection auxiliary switch | Cable 1 m, 3 x 0.75 mm ² | |
| | Parallel operation | Yes (note the performance data) | |
| Functional data | Torque motor | Min. 5 Nm | |
| | Direction of motion motor | Selectable with switch 0 (ccw rotation) / 1 (cw rotation) | |
| | Manual override | Gear disengagement with push-button, can be locked | |
| | Angle of rotation | Max. 95° | |
| | Angle of rotation note | can be limited on both sides with adjustable mechanical end stops | |
| | Running time motor | 150 s / 90° | |
| | Sound power level motor | 35 dB(A) | |
| | Spindle driver | Universal spindle clamp 6...20 mm | |
| | Position indication | Mechanically, pluggable | |
| | Safety | Protection class IEC/EN | II Protective insulated |
| | | Protection class UL | II Protective insulated |
| Protection class auxiliary switch IEC/EN | | II Protective insulated | |
| Degree of protection IEC/EN | | IP54 | |
| Degree of protection NEMA/UL | | NEMA 2, UL Enclosure Type 2 | |
| EMC | | CE according to 2004/108/EC | |
| Low voltage directive | | CE according to 2006/95/EC | |
| Certification IEC/EN | | IEC/EN 60730-1 and IEC/EN 60730-2-14 | |
| Certification UL | | cULus according to UL 60730-1A, UL 60730-2-14 and CAN/CSA E60730-1:02 | |
| Mode of operation | | Type 1.B | |
| Rated impulse voltage supply / control | | 2.5 kV | |
| Rated impulse voltage auxiliary switch | | 2.5 kV | |
| Control pollution degree | | 3 | |
| Ambient temperature | | -30...50°C | |
| Non-operating temperature | -40...80°C | | |
| Ambient humidity | 95% r.h., non-condensing | | |
| Maintenance | Maintenance-free | | |
| Weight | Weight approx. | 0.59 kg | |

Safety notes


- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.

Safety notes

- Outdoor application: only possible in case that no (sea)water, snow, ice, insolation or aggressive gases interfere directly with the actuator and that is ensured that the ambient conditions remain at any time within the thresholds according to the data sheet.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- Cables must not be removed from the device.
- To calculate the torque required, the specifications supplied by the damper manufacturers concerning the cross-section, the design, the installation site and the ventilation conditions must be observed.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

| | |
|-------------------------------------|--|
| Simple direct mounting | Simple direct mounting on the damper spindle with an universal spindle clamp, supplied with an anti-rotation device to prevent the actuator from rotating. |
| Manual override | Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked). |
| High functional reliability | The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached. |
| Adjustable angle of rotation | Adjustable angle of rotation with mechanical end stops. |
| Flexible signalization | With adjustable auxiliary switch (0 ... 100%) |

Accessories

| | Description | Type |
|-----------------------------------|---|------------|
| Electrical accessories | Auxiliary switch, add-on, 1 x SPDT | S1A |
| | Auxiliary switch, add-on, 2 x SPDT | S2A |
| | Auxiliary switch, add-on, 2 x SPDT, grey | S2A GR |
| | Feedback potentiometer 140 Ohm, add-on | P140A |
| | Feedback potentiometer 140 Ohm, add-on, grey | P140A GR |
| | Feedback potentiometer 200 Ohm, add-on | P200A |
| | Feedback potentiometer 500 Ohm, add-on | P500A |
| | Feedback potentiometer 500 Ohm, add-on, grey | P500A GR |
| | Feedback potentiometer 1 kOhm, add-on | P1000A |
| | Feedback potentiometer 2.8 kOhm, add-on | P2800A |
| | Feedback potentiometer 2.8 kOhm, add-on, grey | P2800A GR |
| | Feedback potentiometer 1 kOhm, add-on, grey | P1000A GR |
| | Feedback potentiometer 5 kOhm, add-on | P5000A |
| | Feedback potentiometer 5 kOhm, add-on, grey | P5000A GR |
| | Feedback potentiometer 10 kOhm, add-on | P10000A |
| | Feedback potentiometer 10 kOhm, add-on, grey | P10000A GR |
| Mechanical accessories | Shaft extension 170 mm, for damper spindles Ø 6...20 mm | AV6-20 |
| | Spindle clamp for LM..A, clamping range 6...20 mm | K-ELA |
| | Spindle clamp for LM..A, clamping range 6...10 mm | K-ELA10 |
| | Spindle clamp for LM..A, clamping range 6...13 mm | K-ELA13 |
| | Spindle clamp for LM..A, clamping range 6...16 mm | K-ELA16 |
| | Universal mounting bracket 180 mm | Z-ARS180 |
| | Form fit insert 10x10 mm, for LM..A | ZF10-LMA |
| | Form fit insert 12x12 mm, for LM..A | ZF12-LMA |
| Form fit insert 8x8 mm, for LM..A | ZF8-LMA | |

Accessories

| Description | Type |
|--|------------|
| Form fit insert 10x10 mm, with angle of rotation limiter and position indication for LM..A | ZFRL10-LMA |
| Form fit insert 12x12 mm, with angle of rotation limiter and position indication for LM..A | ZFRL12-LMA |
| Form fit insert 8x8 mm, with angle of rotation limiter and position indication for LM..A | ZFRL8-LMA |
| Position indication for LM..A, NM..A, SM..A, GM..A | Z-PI |

Electrical installation

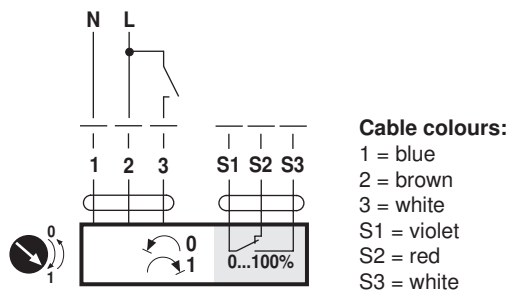


Notes

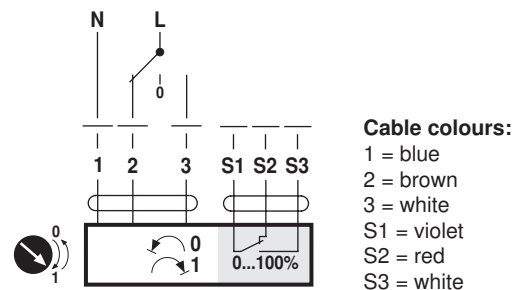
- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.

Wiring diagrams

AC 230 V, open-close

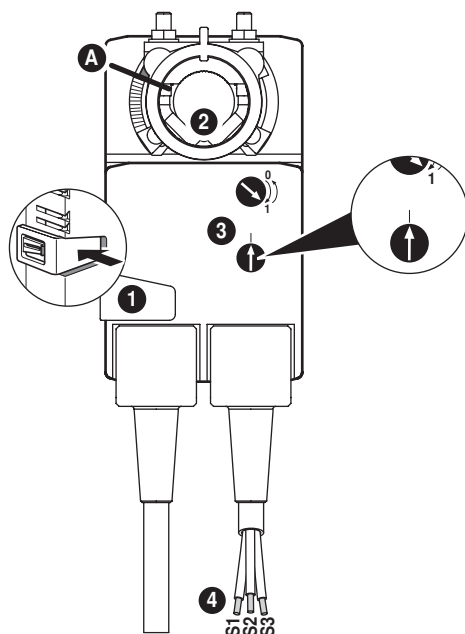


AC 230 V, 3-point



Operating controls and indicators

Auxiliary switch settings



Note

Perform settings on the actuator only in deenergised state.

1 Gear disengagement

Holding button pressed down: Gear is disengaged.
Manual override is possible.

2 Spindle clamp

Turn until edge line **A** displays the desired switching position of the actuator and release button **1**.

3 Auxiliary switch

Turn rotary knob until the arrow points to the vertical line.

4 Cable

Connect continuity tester to S1 + S2 or to S1 + S3.

If the auxiliary switch should switch in the opposite direction, rotate the auxiliary switch by 180°.

Dimensions [mm]

Spindle length

| | |
|--|---------|
| | Min. 37 |
| | - |

Clamping range

| | | |
|--------|----|-----|
| | | |
| 6...20 | ≥6 | ≤20 |

Dimensional drawings

