

Actuator for smoke control dampers 90°

- Torque motor 40 Nm
- Nominal voltage AC/DC 24 V
- Control Open/close
- Mechanical interface Form fit 14x14 mm, continuous hollow shaft



Picture may differ from product

Technical data

| | | |
|-----------------|--|---|
| Electrical data | Nominal voltage | AC/DC 24 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Nominal voltage range | AC 19.2...28.8 V / DC 21.6...28.8 V |
| | Switching thresholds min. ON voltage | AC 19.2 V / DC 21.6 V |
| | Switching thresholds max. OFF voltage | AC 6.5 V / DC 6.5 V |
| | Power consumption in operation | 12 W |
| | Power consumption in rest position | 0.5 W |
| | Power consumption for wire sizing | 18 VA |
| | Inrush current (Imax) | 8.2 A @ 5 ms |
| | Auxiliary switch | 2x SPDT |
| | Switching capacity auxiliary switch | 1 mA...6 A (3 A inductive), DC 5 V...AC 250 V |
| | Switching points auxiliary switch | 3° / 87° |
| | Tolerance | ±2° |
| | Connection supply / control | Cable 1 m, 3x 0.75 mm ² , halogen-free |
| | Connection auxiliary switch | Cable 1 m, 6x 0.75 mm ² , halogen-free |
| Functional data | Torque motor | 40 Nm |
| | Inhibiting torque dynamic | 40 Nm |
| | Inhibiting torque static (voltage-free) | 50 Nm |
| | Direction of motion motor | selectable by mounting L/R |
| | Manual override | with hand crank |
| | Angle of rotation | Max. 100° |
| | Angle of rotation note | Including 5° mechanical overrun at both sides |
| | Running time motor | <60 s / 90° |
| | Sound power level, motor | 62 dB(A) |
| | Mechanical interface | Form fit 14x14 mm, continuous hollow shaft |
| | Position indication | Mechanical, with pointer |
| | Service life | Min. 10'000 cycles |
| Safety data | Protection class IEC/EN | III, Safety Extra-Low Voltage (SELV) |
| | Protection class auxiliary switch IEC/EN | II, reinforced insulation |
| | Degree of protection IEC/EN | IP54 |
| | EMC | CE according to 2014/30/EU |
| | Low voltage directive | CE according to 2014/35/EU |
| | Certification IEC/EN | IEC/EN 60730-1 and IEC/EN 60730-2-14 |
| | Type of action | Type 1.B |
| | Rated impulse voltage supply / control | 0.8 kV |

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|--------------------|--|-----------------------------|
| Safety data | Rated impulse voltage auxiliary switch | 2.5 kV |
| | Pollution degree | 3 |
| | Ambient humidity | Max. 95% RH, non-condensing |
| | Ambient temperature | -30...50°C [-22...122°F] |
| | Storage temperature | -40...80°C [-40...176°F] |
| | Servicing | maintenance-free |
| Weight | Weight | 2.6 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.
- The actuator is adapted to and installed on the smoke control damper by the damper manufacturer. For this reason, the actuator is only supplied direct to safety damper manufacturers. The manufacturer then bears full responsibility for the proper functioning of the damper.
- The two switches integrated in the actuator are to be operated either on mains voltage or on safety extra-low voltage. The combination mains voltage/safety extra-low voltage is not permitted.
- Because of the fact that very high torques are applied to the damper shaft, the use of St50 (as a minimum) is recommended.
- 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.
- 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

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|--------------------------------|--|
| Operating mode | 2-wire open/close control. The actuator is overload-proof and can thus remain energised even at the end stops. |
| Manual override | The hand crank included in the shipment can be used for manual operation of the actuator. |
| Signalling | Two microswitches with fixed settings are installed in the actuator for indicating the damper end positions. It should be noted with this application however that the contacts can no longer be used in the milliampere range after larger currents have been applied to them, even if this has taken place only once. The position of the damper blade can be read off on a mechanical position indicator. |
| Standards / Regulations | The design of the actuator is based on the specific requirements from the European standards: <ul style="list-style-type: none"> • EN 12101-8: Smoke and heat control systems - Part 8: Smoke control dampers • EN 1366-10: Fire resistance tests for service installations - Part 10: Smoke control dampers • EN 13501-4: Fire classification of construction products and building elements - Part 4: Classification using data from fire resistance tests on components of smoke control systems |

Parts included

Hand crank
 Pointer
 Protective bag

Accessories

| Electrical accessories | Description | Type |
|------------------------|---|---------|
| | Cable set with plug 0.5 m for communication and power supply unit | ZST-BS |
| Mechanical accessories | Description | Type |
| | Hand crank 40 mm | ZK1-B |
| | Hand crank 70 mm | ZK2-B |
| | Protective bag with wire, Multipack 100 pcs. | ZSD-B.1 |

Electrical installation



Caution: Mains voltage!

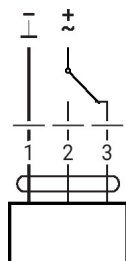
Parallel connection of other actuators possible. Observe the performance data and the switching thresholds.

Combination of mains voltage and safety extra-low voltage not permitted at the two auxiliary switches.

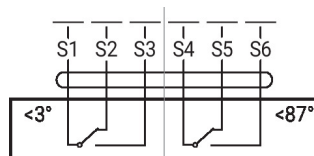
Wire colours:

- 1 = black
- 2 = white
- 3 = white
- S1 = white
- S2 = white
- S3 = white
- S4 = white
- S5 = white
- S6 = white

AC/DC 24 V, open/close



Auxiliary switch



Dimensions

