

Actuator for smoke control dampers 90°

- · Nominal torque 40 Nm
- Nominal voltage AC/DC 24 V
- · Control Open-close
- Spindle driver Form fit 14x14 mm, continuous hollow shaft



Technical data

EI	ecti	rica	l data

Nominal voltage	AC/DC 24 V
Nominal voltage frequency	50/60 Hz
Nominal voltage range	AC 19.228.8 V / DC 21.628.8 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
Power consumption for wire sizing note	Imax 8.2 A @ 5 ms
Auxiliary switch	2 x SPDT
Switching capacity auxiliary switch	1 mA6 (3) A, DC 5 VAC 250 V
Switching points auxiliary switch	3° / 87°
Tolerance	±2°
Connection supply / control	Cable 1 m, 3 x 0.75 mm ² , halogen-free
Connection auxiliary switch	Cable 1 m, 6 x 0.75 mm ² , halogen-free
Nominal torque	40 Nm
Inhibiting torque dynamic	40 Nm

Functional data

Nominal torque	40 Nm
Inhibiting torque dynamic	40 Nm
Inhibiting torque static (voltage-free)	50 Nm
Direction of rotation motor	Can be selected 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)
Spindle driver	Form fit 14x14 mm, continuous hollow shaft
Position indication	Mechanically, with pointer
Service life	Min. 10,000 cycles
Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
Protection class auxiliary switch IEC/EN	II reinforced insulation

Safety

Service life	Min. 10,000 cycles
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
Mode of operation	Type 1.B
Rated impulse voltage supply / control	0.8 kV
Rated impulse voltage auxiliary switch	2.5 kV
Control pollution degree	3
Ambient temperature	-3050 °C
Non-operating temperature	-4080 °C
Ambient humidity	Max. 95% r.h., non-condensing
Maintenance	Maintenance-free
Weight	2.7 kg

Safety notes



Weight

• 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

- 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 power supply voltage or at safety extra-low voltage. The combination power supply voltage/ safety extra-low voltage is not permitted.
- Because of the fact that very high torques are applied to the damper spindle, 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

Mode of operation

2-wire open-close control. The actuator is overload-proof and can thus remain energised even at the end stops.

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 indication.

Manual operation

The hand crank included in the shipment can be used for manual operation of the actuator.

Standards / regulations

The design of the actuator is based on the specific requirements from the European standards:

- 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

Delivery notes

Incl. Hand crank, Pointer, Protective bag

Electrical installation

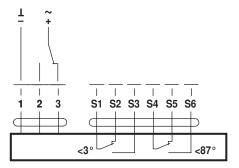


Notes

- · Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data and the switching thresholds.
- Combination of power supply voltage and safety extra-low voltage not permitted at the both auxiliary switches.

Wiring diagrams

AC/DC 24 V, open-close





Dimensions [mm]

Dimensional drawings

