Spring-return actuator for fire and smoke dampers 90° in ventilation and air-conditioning systems
• Nominal torque 15 Nm / 15 Nm
• Nominal voltage AC/DC 24 V
• Control open-close
• Damper rotation form fit 12 mm (10 mm with enclosed adapter)
• Designed for UL555S

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2 V ... 28.8 V / DC 21.6 V ... 28.8 V
	Power consumption in operation	8 W
	Power consumption at rest	2 W
	Power consumption for wire sizing	11 VA
	Power consumption for wire sizing note	Imax 8.3 A @ 5 ms
	Connection supply	Cable 1 m, 2 x 0.75 mm² (halogen-free)
Functional data	Torque motor	Min. 15 Nm
	Torque spring-return	Min. 15 Nm
	Direction of rotation motor	Can be selected by mounting L / R
	Angle of rotation	Max. 95° (incl. 5° initial spring tension)
	Running time motor	<75 s / 90°
	Running time spring-return	<20 s (tamb = 20°C)
	Sound power level motor max.	45 dB (A)
	Sound power level spring-return max.	63 dB (A)
	Damper rotation	Form fit 12 mm (10 mm with enclosed adapter)
	Position indication	Mechanically, with pointer
	Service life	Min. 60,000 safety positions
Safety	Protection class IEC/EN	III Safety extra-low voltage
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP54 in all mounting positions
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2014/30/EU
	Low-voltage directive	CE according to 2014/35/EU
	Certification IEC/EN	Certified according to IEC/EN 60730-1 and IEC/EN 60730-2-14
	Certification UL	cULus according to UL873 and CAN/CSA C22.2 No.24; fulfills the requirements under UL555 and UL555S, if tested in combination with the damper
	Mode of operation	Type 1.AA
	Rated impulse voltage supply / control	0.8 kV
	Control pollution degree	3
	Ambient temperature normal duty	-30°C … 50°C
	Ambient temperature safety duty	The safety position will be attained up to max. 75°C when triggered by a thermal fuse
	Non-operating temperature	-40°C ... 80°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Weight	Weight approx.	2.7 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 and installed on the fire and smoke damper by the damper manufacturer. For this reason, the actuator is only supplied directly to safety damper manufacturers. The manufacturer then bears full responsibility for the proper functioning of the damper.
- 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 The actuator moves the damper to the operating position at the same time as tensioning the return spring. The damper is turned back to the safety position by spring energy when the supply voltage is interrupted.

Manual operation Without power supply, the damper can be operated manually and fixed in any required position. It can be unlocked manually or automatically by applying the supply voltage.

Accessories

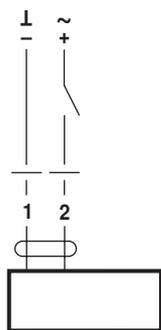|	Description	Data sheet name
Electrical accessories	Auxiliary switch 2 x SPDT	SN2-C7
Mechanical accessories	Adapter with clamp for round spindle 10...20 mm / square 10…16 mm for BF	ZK-BF
	Adapter for form fit 12 mm with round spindle 18 mm, L = 33 mm for BF	ZA18-BF
	Adapter 12/8 mm for BF.. and BLF..	ZA8-BF
	Adapter 12/11 mm for BF.. and BLF..	ZA11-BF
	Bracket for auxiliary switch (SN2-C7) for BF, BR	ZSN-BF

Electrical installation

⚠️
Notes
- Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Note the performance data.

Wiring diagrams

AC/DC 24, open-close

Cable colours:

1 = black
2 = white

Dimensions [mm]

Dimensional drawings