

Spring-return actuator with emergency control function for adjusting dampers in technical building installations

- Air damper size up to approx. 0.5 m²
- Nominal torque 2.5 Nm
- Nominal voltage AC 230 V
- Control Open-close
- 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	2.5 W
	Power consumption in rest position	1.5 W
	Power consumption for wire sizing	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, 2 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. 2.5 Nm
	Torque spring return	Min. 2.5 Nm
	Direction of motion motor	Selectable by mounting L / R
	Direction of motion emergency control function	Selectable by mounting L / R
	Manual override	No
	Angle of rotation	Max. 95°
	Angle of rotation note	adjustable starting at 37% in 2.5% steps (with mechanical end stop)
	Running time motor	75 s / 90°
	Running time emergency control position	<25 s / 90°
	Sound power level motor	50 dB(A)
	Spindle driver	Universal spindle clamp 6...12.7 mm
	Position indication	Mechanical
	Service life	Min. 60,000 emergency positions
Safety	Protection class IEC/EN	II Protective insulated
	Protection class auxiliary switch IEC/EN	II Protective insulated
	Degree of protection IEC/EN	IP42
	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
	Mode of operation	Type 1.AA.B
	Overvoltage category	III
	Rated impulse voltage supply / control	4 kV
	Rated impulse voltage auxiliary switch	4 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.	0.78 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.
- 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.
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.
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
Mechanical accessories	Actuator arm TF..	AH-TF
	Shaft extension 170 mm, for damper spindles Ø 6...20 mm	AV6-20
	Straight ball joint with M8, suitable for damper crank arms KH8	KG10A
	Angled ball joint with M8, suitable for damper crank arms KH8	KG8
	Damper crank arm, for damper spindles	KH8
	Screw fastening kit TF..	SB-TF
	Angle of rotation limiter TF..	ZDB-TF
	Form fit adapter GR, 14x14x40 mm	ZF8-TF
	Mounting kit for linkage operation TF..	ZG-TF1

Electrical installation

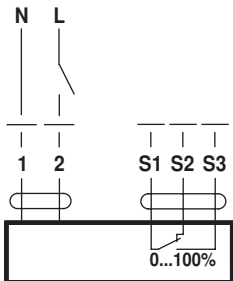


Notes

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

Wiring diagrams

AC 230 V, open-close

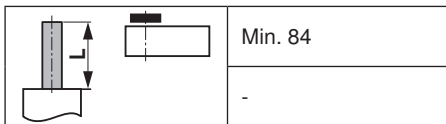


Cable colours:

- 1 = blue
- 2 = brown
- S1 = violet
- S2 = red
- S3 = white

Dimensions [mm]

Spindle length



Clamping range

6...12.7	6...12.7

Dimensional drawings

