

Rotary actuator fail-safe for adjusting dampers in technical building installations

- Air damper size up to approx. 0.5 m<sup>2</sup>
- Torque motor 2.5 Nm
- Nominal voltage AC/DC 24 V
- Control Open/close


**Technical data**

<b>Electrical data</b>	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
	Power consumption in operation	2.5 W
	Power consumption in rest position	1.5 W
	Power consumption for wire sizing	5 VA
	Connection supply / control	Cable 1 m, 2 x 0.75 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
<b>Functional data</b>	Torque motor	2.5 Nm
	Torque fail-safe	2.5 Nm
	Direction of motion motor	selectable by mounting L/R
	Direction of motion fail-safe	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 fail-safe	<25 s / 90°
	Sound power level, motor	50 dB(A)
	Mechanical interface	Universal shaft clamp 6...12.7 mm
	Position indication	Mechanical
	Service life	Min. 60'000 fail-safe positions
<b>Safety data</b>	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Degree of protection IEC/EN	IP42
	EMC	CE according to 2014/30/EU
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Type of action	Type 1.AA
	Overvoltage category	III
	Rated impulse voltage supply / control	0.8 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
	<b>Weight</b>	Weight

**Safety notes**


- This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation or aggressive gases interfere directly with the device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- 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**

<b>Mode of operation</b>	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.
<b>Simple direct mounting</b>	Simple direct mounting on the damper shaft with a universal shaft clamp, supplied with an anti-rotation device to prevent the actuator from rotating.
<b>Adjustable angle of rotation</b>	Adjustable angle of rotation with mechanical end stops.
<b>High functional reliability</b>	The actuator is overload protected and automatically stops when the end stop is reached.

**Accessories**

Mechanical accessories	Description	Type
	Actuator arm	AH-TF
	Shaft extension 170 mm Ø10 mm for damper shaft Ø 6...16 mm	AV6-20
	Ball joint suitable for damper crank arm KH8 / KH10, Multipack 10 pcs.	KG10A
	Ball joint suitable for damper crank arm KH8, Multipack 10 pcs.	KG8
	Damper crank arm Slot width 8.2 mm, clamping range Ø10...18 mm	KH8
	Screw fastening kit	SB-TF
	Angle of rotation limiter, with end stop	ZDB-TF
	Form fit adapter 8x8 mm	ZF8-TF
	Mounting kit for linkage operation for flat and side installation	ZG-TF1
	Anti-rotation mechanism 180 mm, Multipack 20 pcs.	Z-ARS180

**Electrical installation**

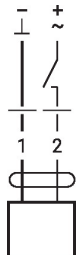

**Supply from isolating transformer.**  
**Parallel connection of other actuators possible. Observe the performance data.**

**Wire colours:**

- 1 = black
- 2 = red

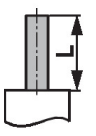
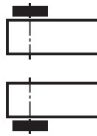
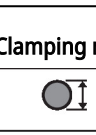

**Wiring diagrams**

AC/DC 24 V, open/close





Dimensions

Spindle length

		Min. 84
		Min. 20

Clamping range

	
6...12.7	6...12.7

