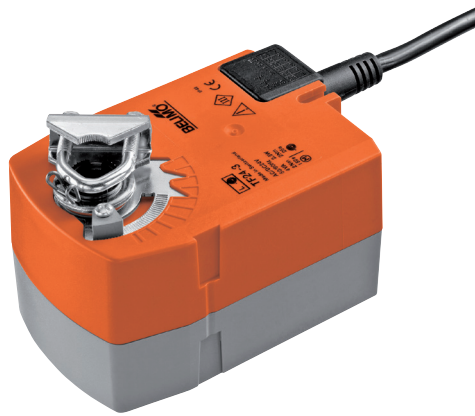


Spring-return actuator with emergency control function for adjusting dampers in technical building installations

- Air damper size up to approx. 0.5 m<sup>2</sup>
- Nominal torque 2.5 Nm
- Nominal voltage AC 24 V
- Control 3-point


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V
	Power consumption in operation	2.5 W
	Power consumption in rest position	1 W
	Power consumption for wire sizing	4 VA
	Connection supply / control	Cable 1 m, 4 x 0.75 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
<b>Functional data</b>	Torque motor	Min. 2.5 Nm
	Torque spring return	Min. 2.5 Nm
	Direction of motion motor	Selectable with switch 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	150 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
<b>Safety</b>	Protection class IEC/EN	III Safety extra-low voltage
	Degree of protection IEC/EN	IP42
	EMC	CE according to 2004/108/EC
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1.AA
	Rated impulse voltage supply / control	0.8 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	
<b>Weight</b>	Weight approx.	0.69 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.
- 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.
- 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.

**Safety notes**

- 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 is activated with a 3-point signal. 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 emergency position by spring force 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.

**Accessories**

	Description	Type
<b>Mechanical accessories</b>	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	

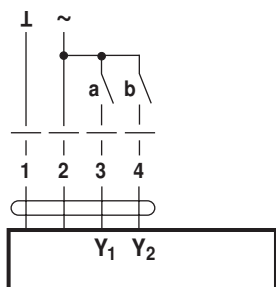
**Electrical installation**

**Notes**

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

**Wiring diagrams**

AC 24 V, 3-point



		L		R	
a (Y1)	b (Y2)				
		stop	stop	stop	stop

Cable colours:  
 1 = black  
 2 = red  
 3 = white  
 4 = white

Dimensions [mm]

Spindle length

	Min. 84
	-

Clamping range

6...12.7	6...12.7

Dimensional drawings

