

Spring-return actuator for adjusting dampers with safety functions (e.g. frost and smoke control, hygiene, etc.) in technical building installation

- Damper size up to approx. 0.5 m<sup>2</sup>
  - Nominal torque 2.5 Nm
  - Nominal voltage AC 230 V
  - Control open-close
- With integrated auxiliary switch


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85 V ... 265 V
	Power consumption in operation	2.5 W
	Power consumption in rest position	1.5 W
	Power consumption for wire sizing	5 VA
	Switching capacity auxiliary switch	3 (0.5) A, AC 250 V (II protective insulated)
	Connection supply / control	Cable 1 m, 2 x 0.75 mm <sup>2</sup>
	Connection auxiliary switch	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
<b>Functional data</b>	Torque motor	Min. 2.5 Nm
	Torque spring-return	Min. 2.5 Nm
	Direction of rotation motor	Can be selected by mounting L / R
	Direction of rotation spring-return	Can be selected by mounting L / R
	Angle of rotation	Max. 95°
	Running time motor	75 s / 90°
	Running time emergency control function	<25 s / 90°
	Sound power level motor max.	50 dB (A)
	Spindle driver	Universal spindle clamp 6...12 mm
	Position indication	Mechanical
	Service life	Min. 60,000 security settings
	<b>Safety</b>	Protection class IEC/EN
Degree of protection IEC/EN		IP42
EMC		CE in accordance with 2004/108/EC
Low-voltage directive		CE in accordance with 2006/95/EC
Certification IEC/EN		Certified to: IEC/EN 60730-1 and IEC/EN 60730-2-14
Principle of operation		Type 1.AA.B
Overvoltage category		III
Control pollution degree		3
Ambient temperature		-30°C ... 50°C
Non-operating temperature		-40°C ... 80°C
Ambient humidity	95% r.h., non-condensing	
Maintenance	Maintenance-free	
<b>Weight</b>	Weight approx.	0.65 kg

**Safety notes**


- The actuator is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with 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.
- The cable must not be removed from the device.

## Safety notes

- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## Product features

- Principle 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.
- Direct mounting** Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with a universal mounting bracket 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.
- Flexible signalization** Flexible signalization with adjustable auxiliary switch (0 ... 100%).

## Electrical installation

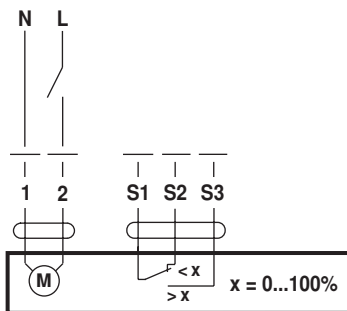


### Notes

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

## Wiring diagrams

### AC 100 ... 240 V, open-close

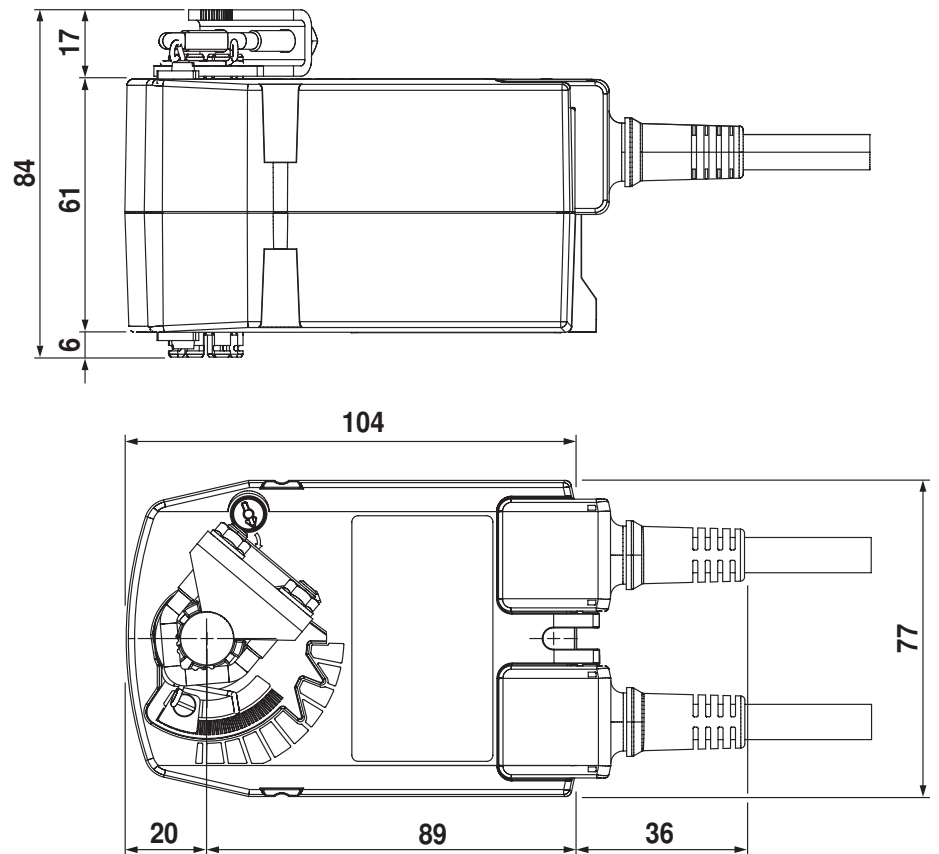


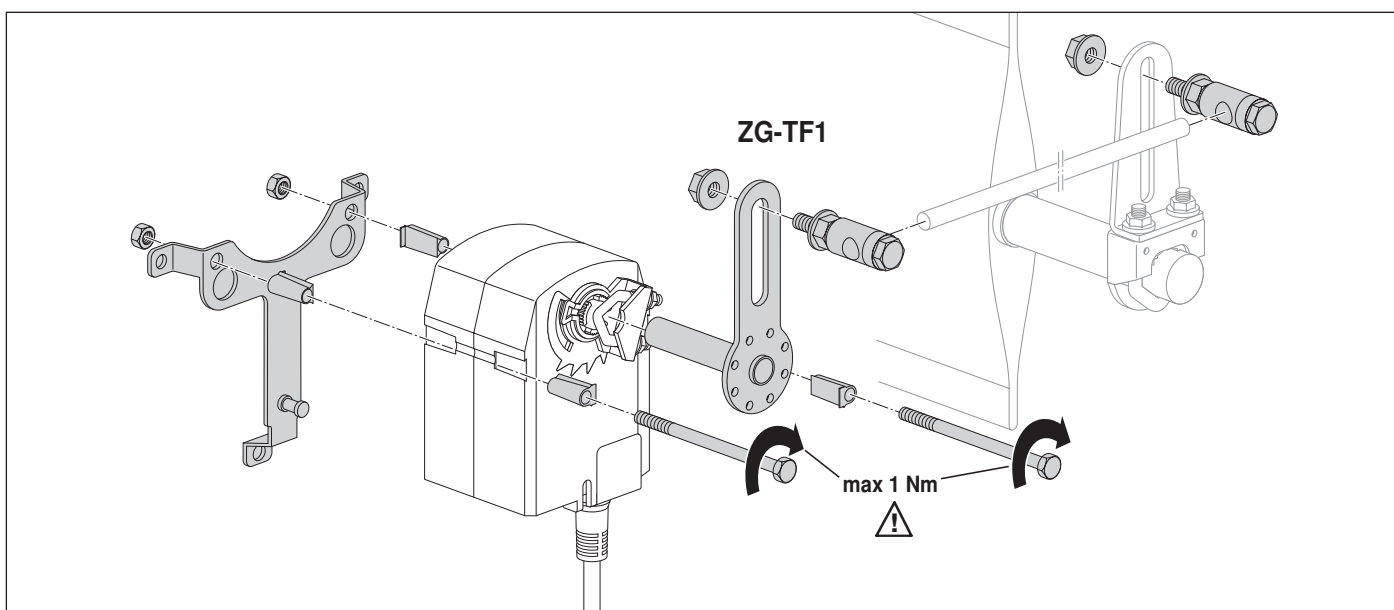
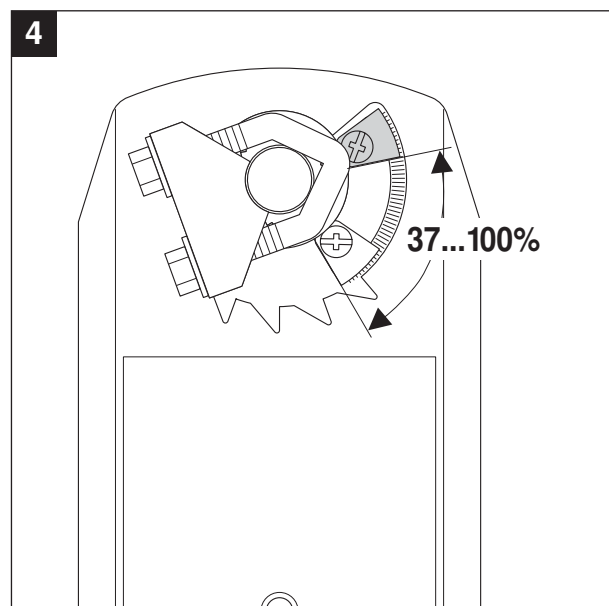
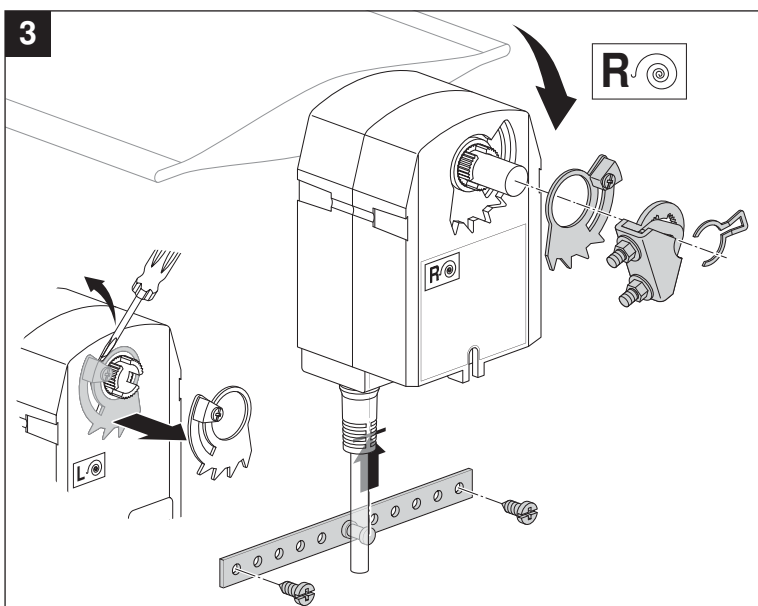
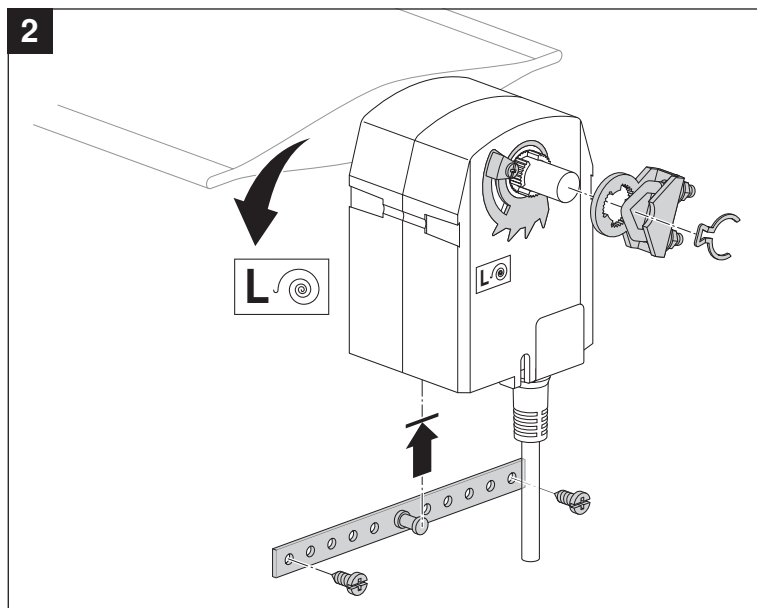
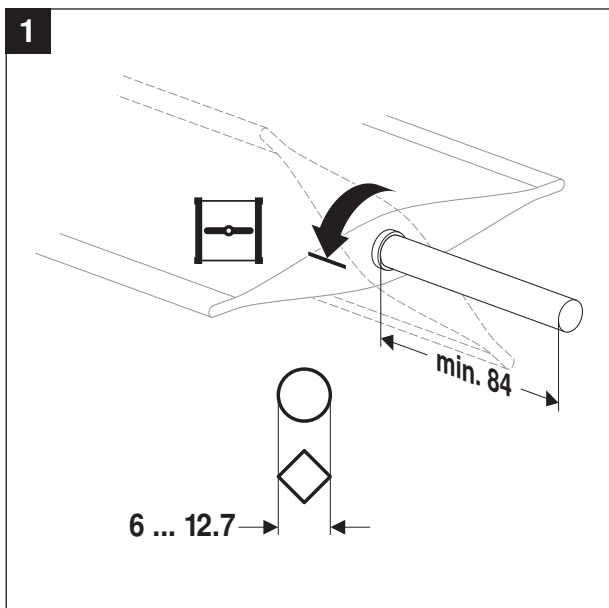
### Cable colours:

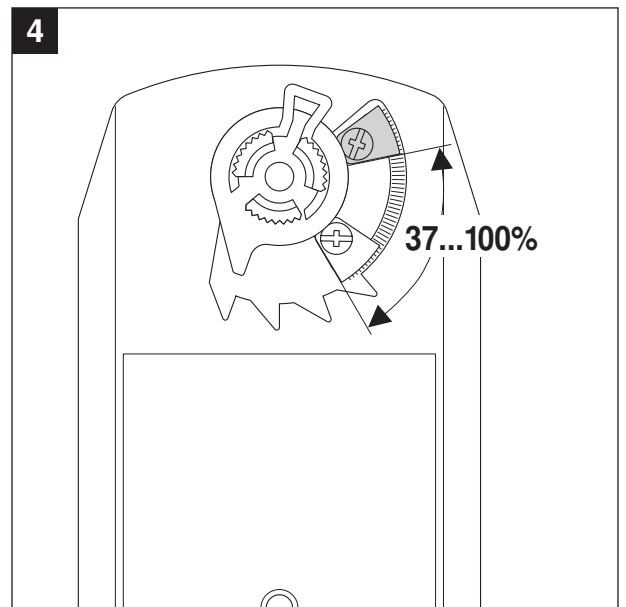
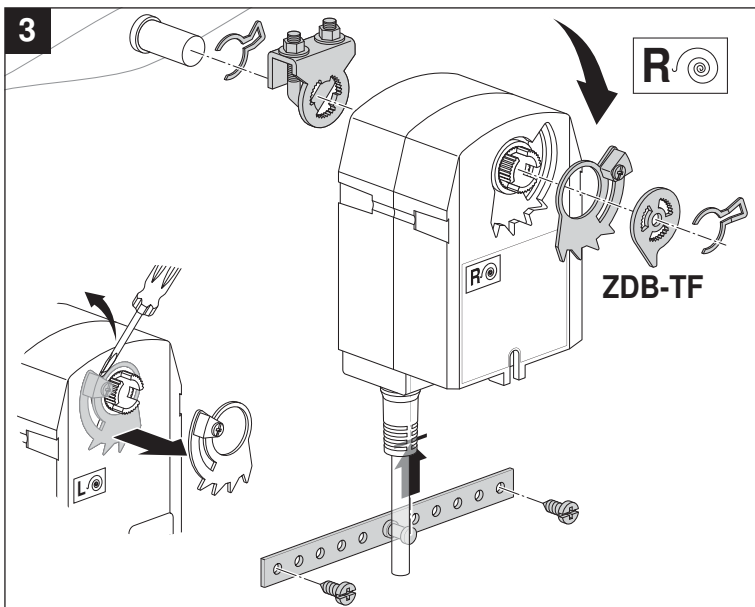
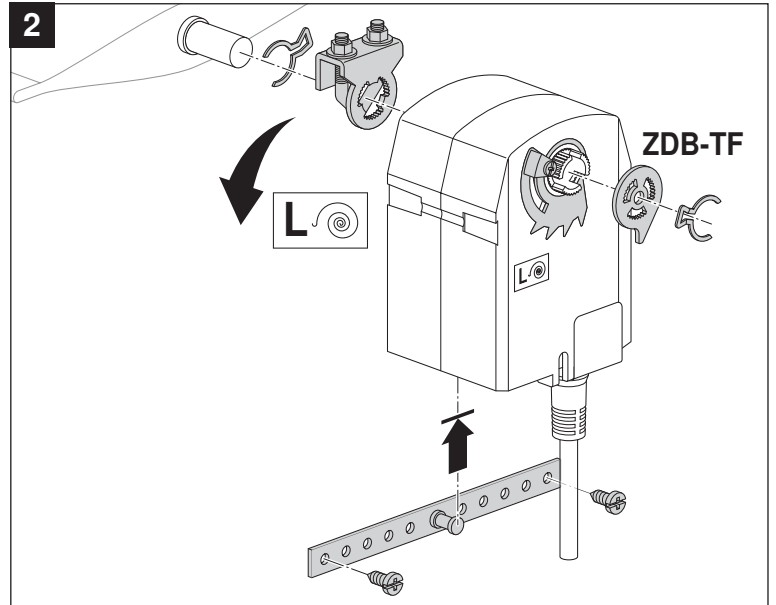
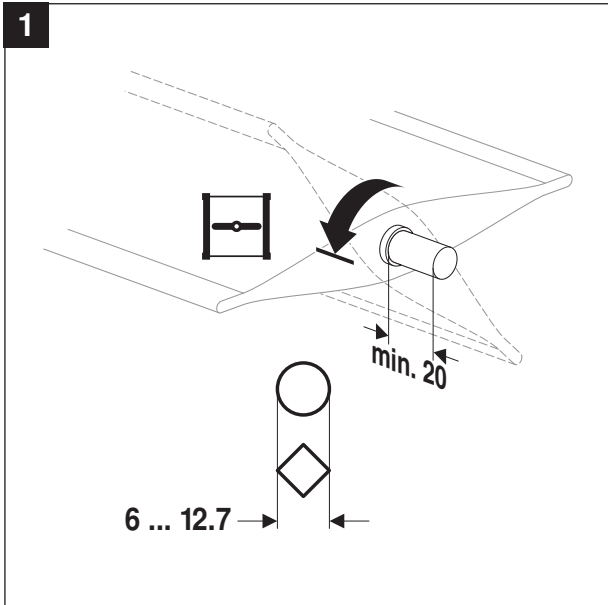
- 1 = blue
- 2 = brown
- S1 = violet
- S2 = red
- S3 = white

Dimensions [mm]

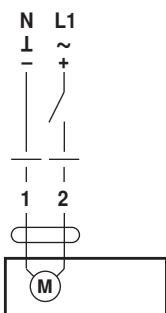
Dimensional drawings



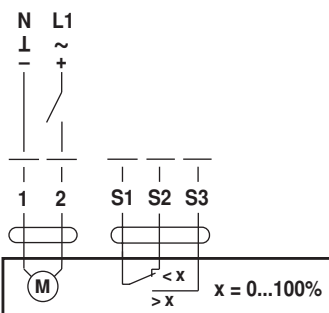




AC 230 V   
 AC 24 V / DC 24 V

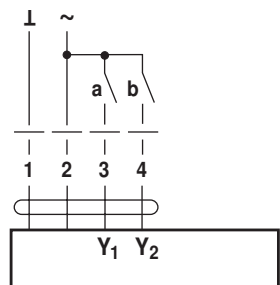


TF230 / TF24



TF230-S / TF24-S

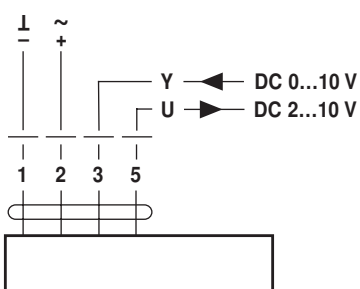
AC 24 V



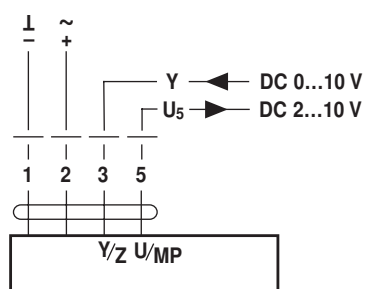
TF24-3



AC 24 V / DC 24 V



TF24-SR



TF24-MFT