

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- For air dampers up to approx. 0.4 m<sup>2</sup>
- Torque 2 Nm
- Nominal voltage AC/DC 24 V
- Control: Open-close or 3-point
- Damper rotation: Form-fit 8 mm


**Type overview**

Type	Direction of rotation
CM24-F-L	counter-clockwise (ccw)
CM24-F-R	clockwise (cw)

**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 24 V, 50/60 Hz / DC 24 V	
	Nominal voltage range	AC/DC 19.2 ... 28.8 V	
	Power consumption	In operation 0.5 W @ nominal torque At rest 0.2 W For wire sizing 1 VA	
	Connection	Cable 1 m, 3 x 0.75 mm <sup>2</sup>	
<b>Functional data</b>	Torque (nominal torque)	Min. 2 Nm @ nominal voltage	
	Direction of rotation	See «Type overview»	
	Manual override	Gear disengagement with magnet	
	Angle of rotation	Without limit Endless With limit Fixed 315°↔ or 0 ... 287.5°↔ with mechanical end stops, can be adjusted in 2.5°↔ increments	
	Running time	75 s / 90°↔	
	Sound power level	Max. 35 dB (A)	
	Damper rotation	Form-fit 8 mm	
	Position indicator	Mechanical, pluggable (with integrated magnet for gear disengagement)	
	<b>Safety</b>	Protection class	III Safety extra-low voltage / UL Class 2 Supply
		Degree of protection	IP54 in any mounting position NEMA2, UL Enclosure Type 2
<b>EMC</b>	Certification	CE according to 2004/108/EC cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14	
	Mode of operation	Type 1 (EN 60730-1)	
	Rated impulse voltage	0.8 kV (EN 60730-1)	
	Control pollution degree	3 (EN 60730-1)	
	Ambient temperature	-30 ... +50°C	
	Non-operating temperature	-40 ... +80°C	
	Ambient humidity	95% r.H., non-condensating (EN 60730-1)	
	Maintenance	Maintenance-free	
	<b>Dimensions / Weight</b>	Dimensions	See «Dimensions» on page 2
		Weight	Approx. 185 g

**Safety notes**


- The actuator is not allowed to be used outside the specified field of application, especially in aircraft or any other form of air transport.
- Assembly must be carried out by trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- 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.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross section, design, installation site), and the air flow conditions must be observed.

**Safety notes**

(Continue)

- 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**

- Simple direct mounting** The hollow spindle of the actuator is mounted directly on the damper spindle (8 mm) with a positive-fit connection. The actuator is then secured with the anti-rotation strap supplied, to prevent it from rotating.
- Manual override** Manual override with magnet possible (the gear is disengaged as long as the magnet adheres to the symbol ©. The magnet for gear disengagement is integrated in the position indicator.
- Adjustable angle of rotation** Adjustable angle of rotation with mechanical end stops.
- High functional reliability** The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

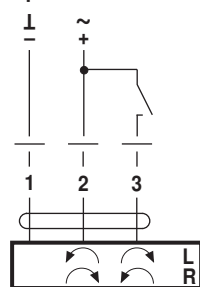
**Electrical installation**

**Wiring diagrams**

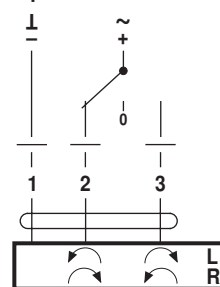
**Note**

- Connect via safety isolation transformer.
- Other actuators can be connected in parallel. Please note the performance data.

**Open-close control**

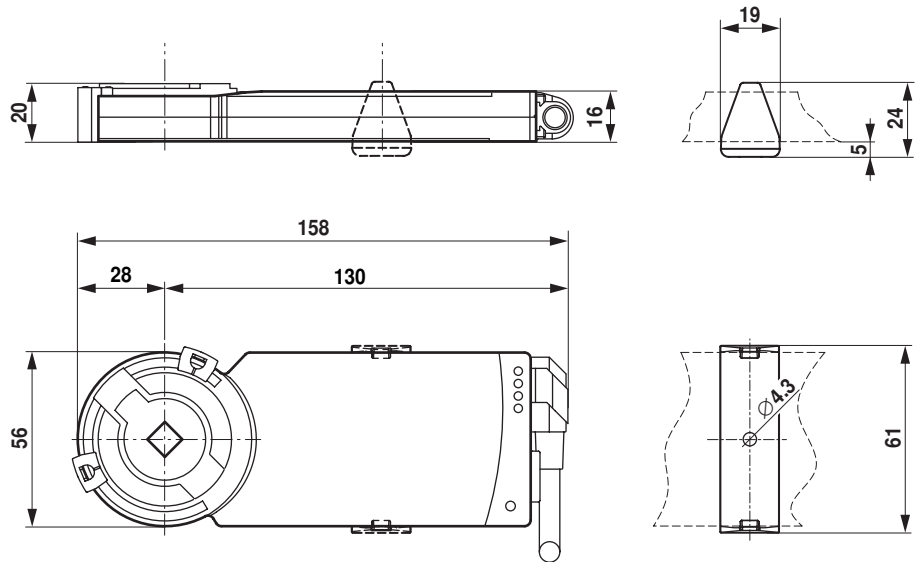


**3-point control**



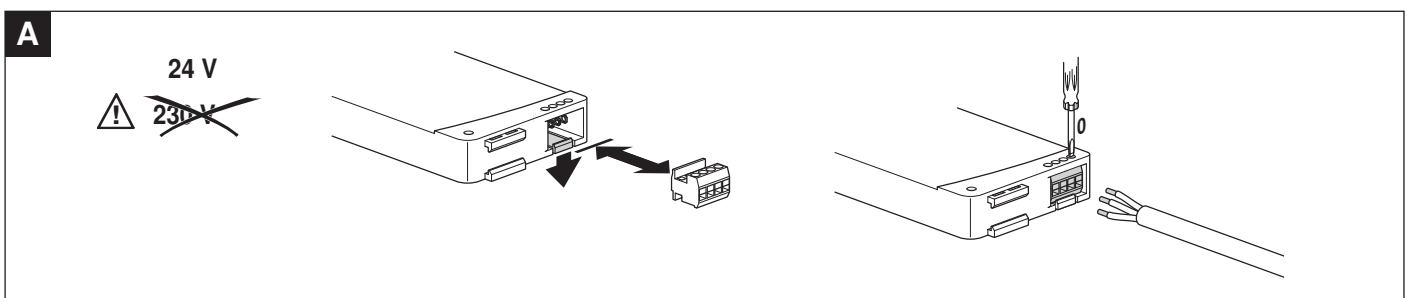
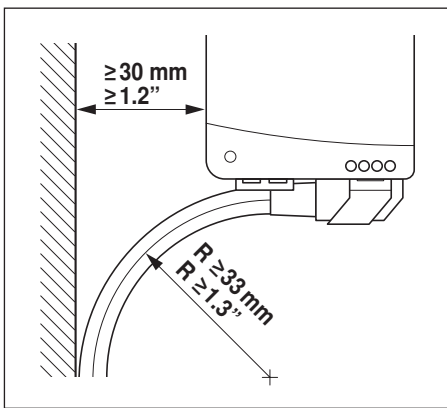
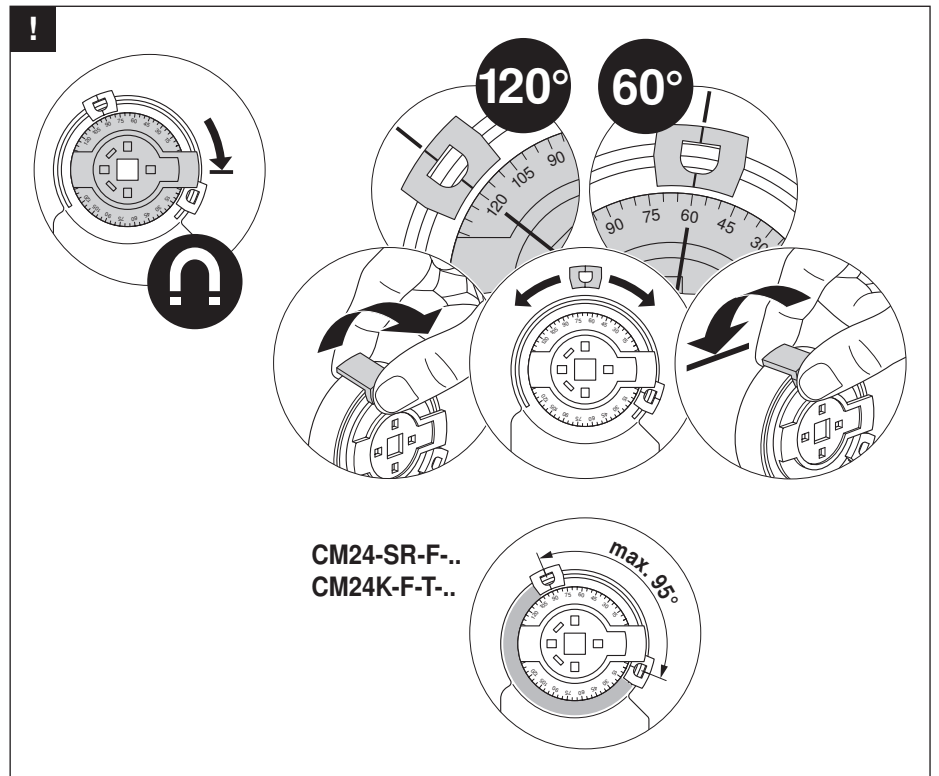
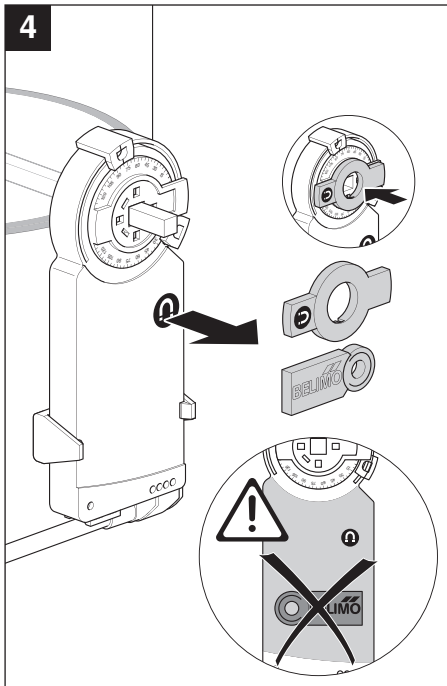
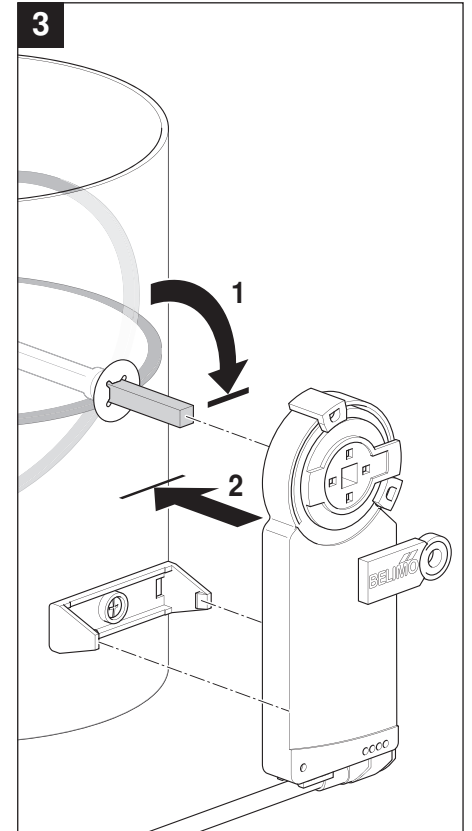
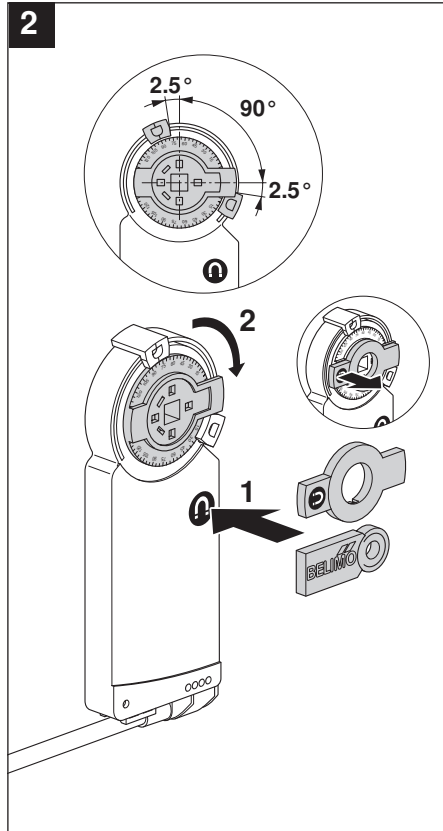
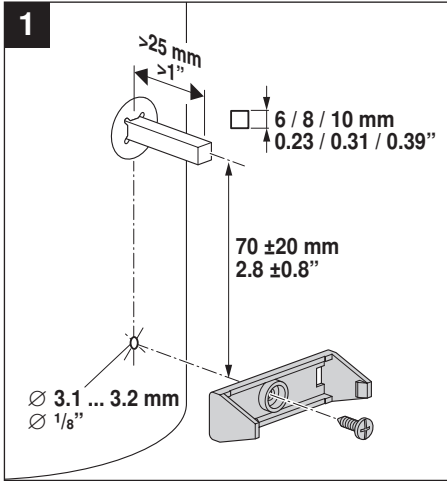
**Dimensions [mm]**

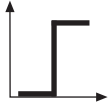
**Dimensional drawings**



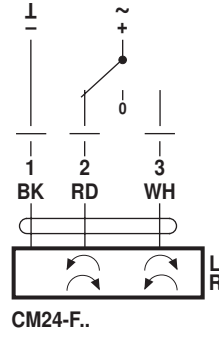
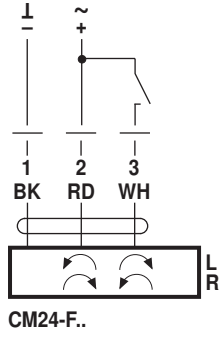
Damper spindle	Length	mm
	≥25	8

70670-00001.E

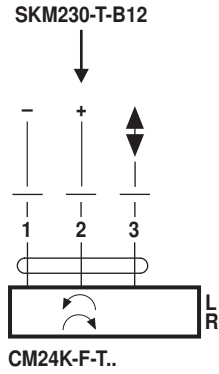




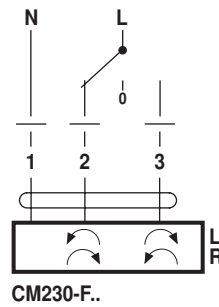
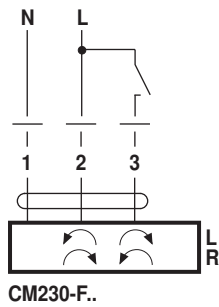
AC 24 V / DC 24 V



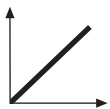
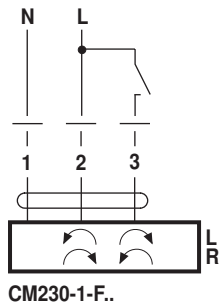
DC 24 V  
(SKM230..)



AC 100 ... 240 V ⚠



AC 230 V ⚠



AC 24 V / DC 24 V

