BELIMO

Technical data sheet CM24-..

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 m²**
- **Torque 2 Nm**
- **Nominal voltage AC/DC 24 V**
- **Control: Open-close or 3-point**



Type overview

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

Technical data

Electrical data	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 mm²
Functional data	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)
	Position indicator		Mechanical, pluggable (with integrated magnet for gear disengagement)
Safety	Protection class		**III** Safety extra-low voltage / UL Class 2 Supply
	Degree of protection		IP54 in any mounting position NEMA2, UL Enclosure Type 2
	EMC		CE according to 2004/108/EC
	Certification		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
Dimensions / Weight	Dimensions		See «Dimensions» on page 2
	Weight		Approx. 220 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

Simple direct mounting on the damper spindle with a universal spindle clamp (∅ 6 ... 12.7 mm). 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.

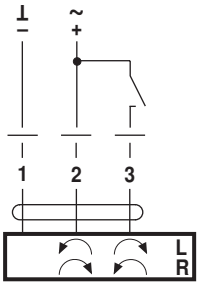
Electrical installation

Wiring diagrams

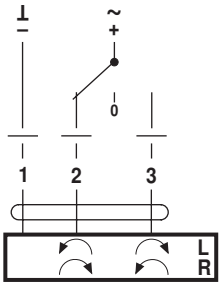
Note

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

Open-close control

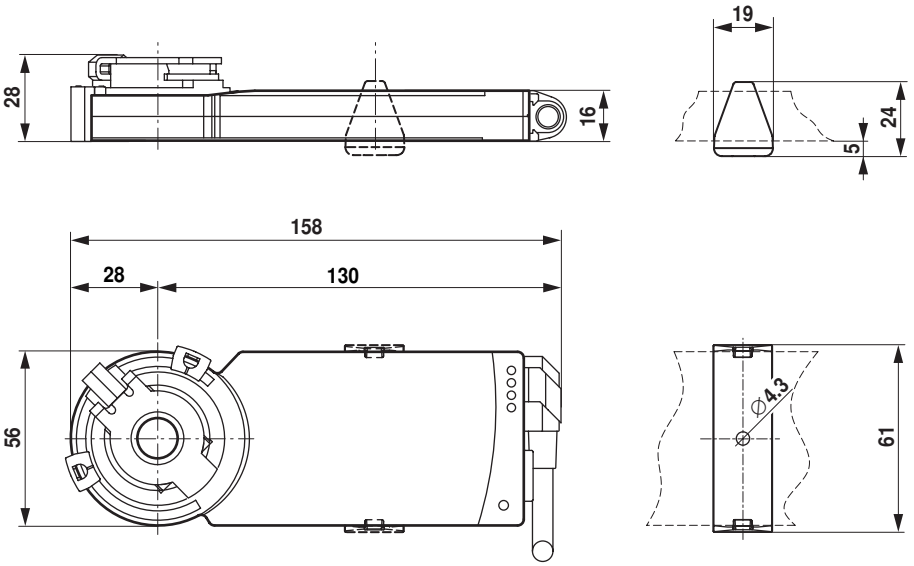


3-point control



Dimensions [mm]

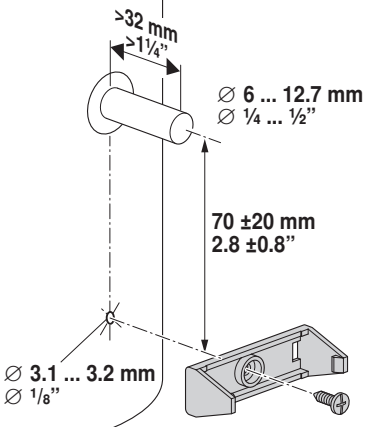
Dimensional drawings



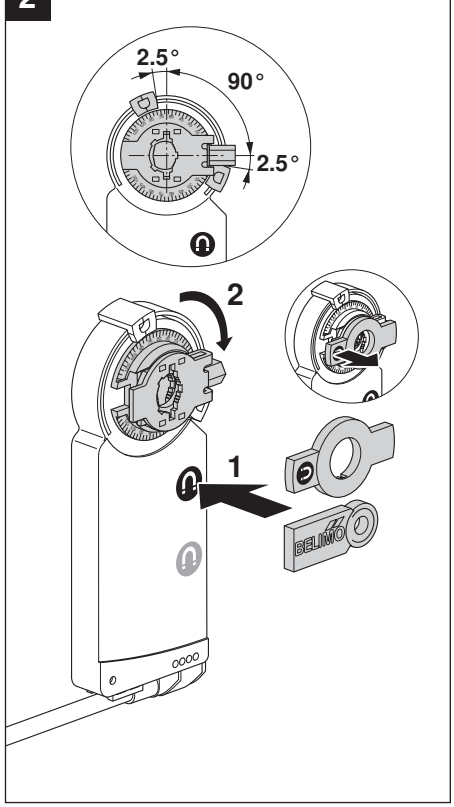
Damper spindle	Length	
	≥32	6 ... 12.7

70670-00002.F

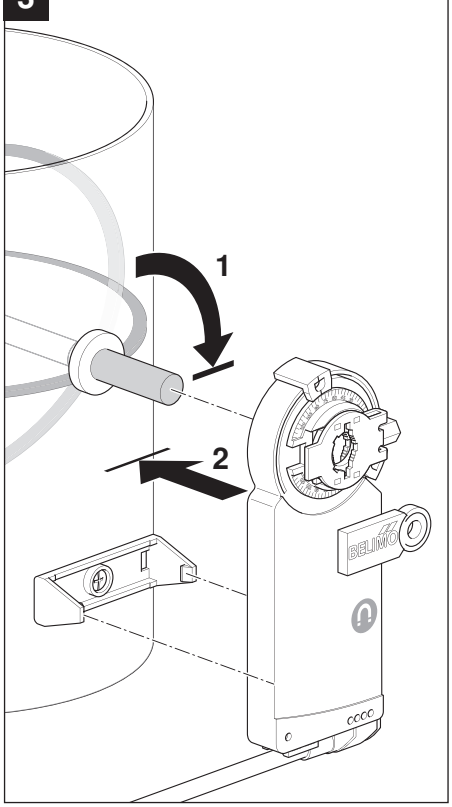
1



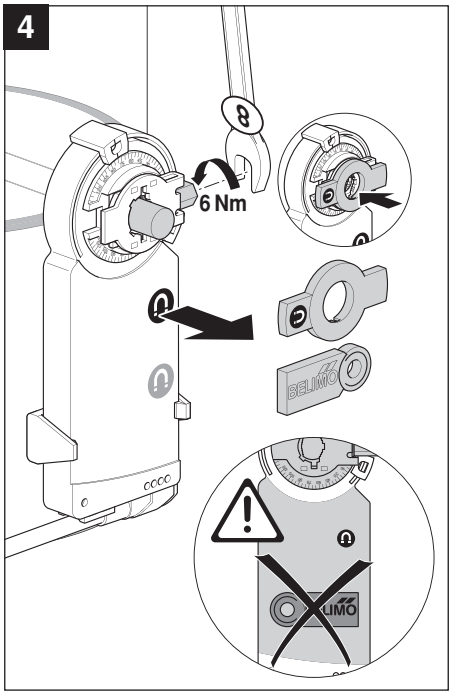
2

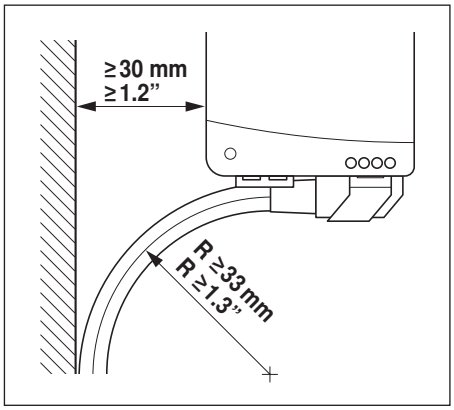


3

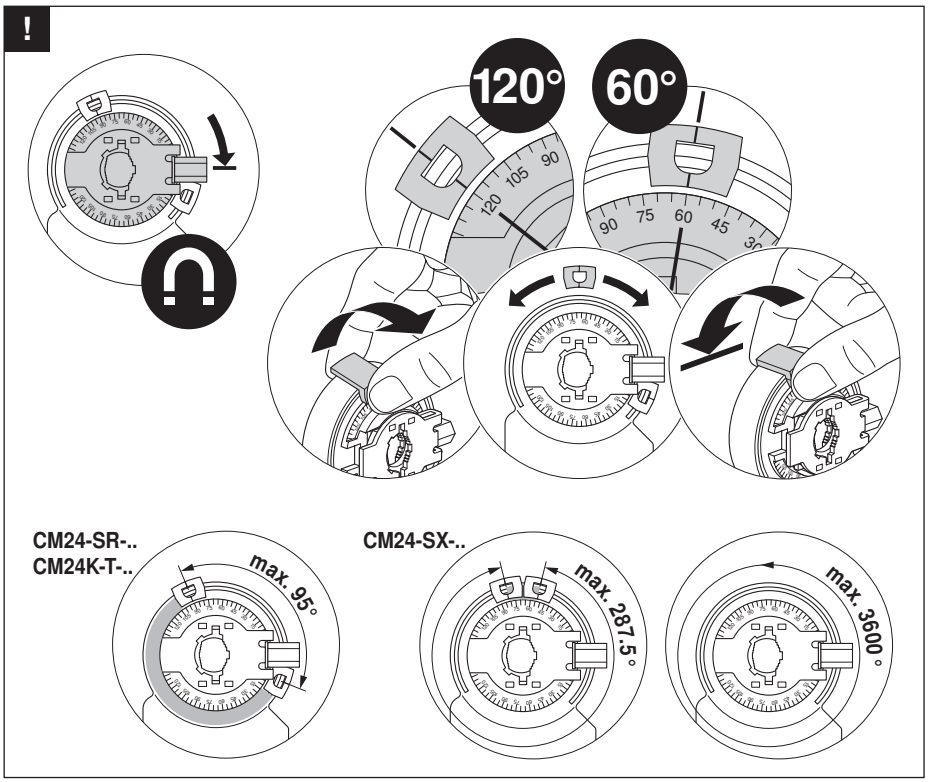


4

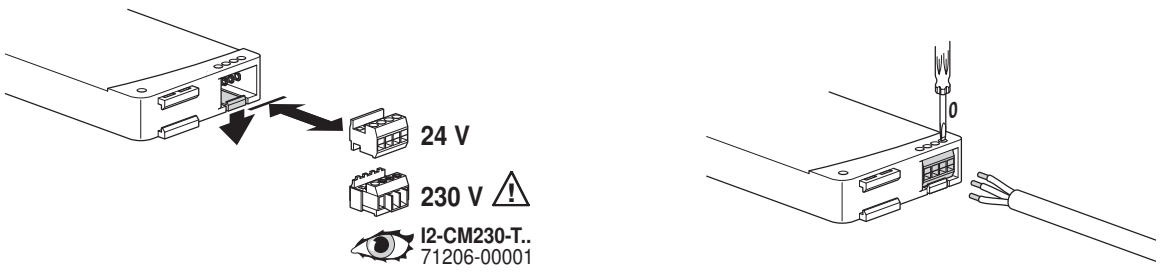


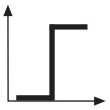


!

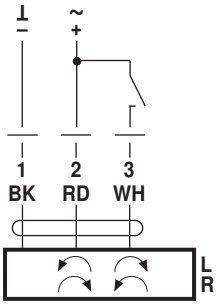


A

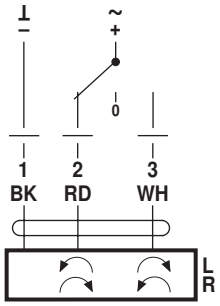




AC 24 V / DC 24 V

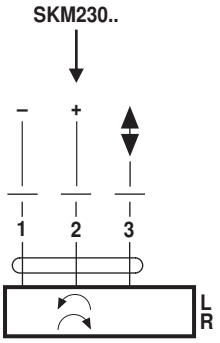


CM24..



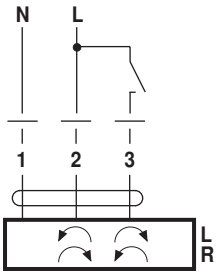
CM24..

DC 24 V
(SKM230..)

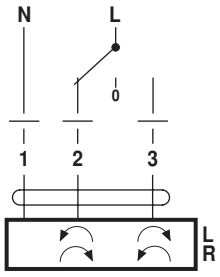


CM24K-T..

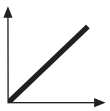
AC 100 ... 240 V ⚠



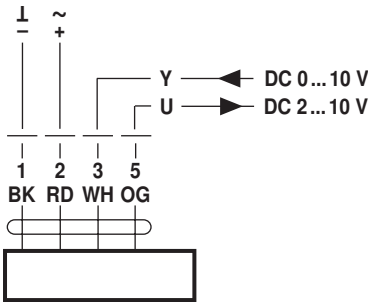
CM230..



CM230..



AC 24 V / DC 24 V



CM24-SR..
CM24-SX..