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BELIMO

CM24 damper actuator

CM24-L
CM24-R

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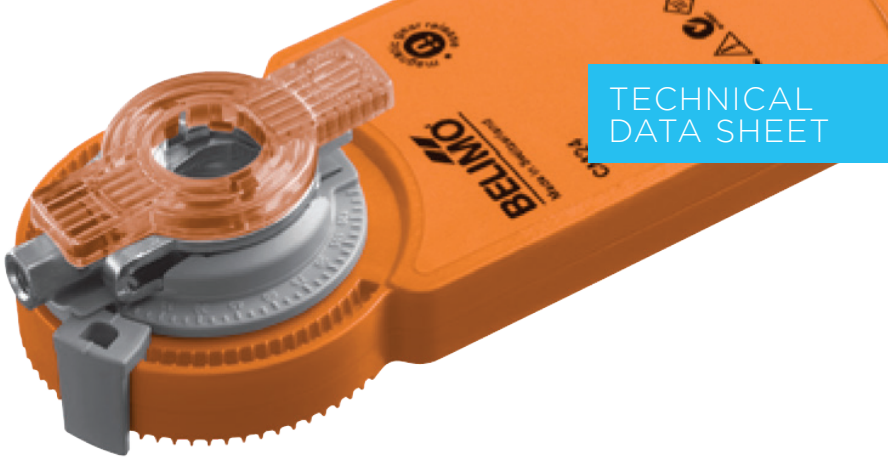
TECHNICAL DATA SHEET



BELIMO

CM24 DAMPER ACTUATOR

Overview

Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations for air dampers up to approx. 1m². Torque 5 Nm. Nominal voltage AC/DC 24V. Control: modulating DC 0 ... 10 V, position feedback DC 2 ... 10 V

CM24-L
Counter-Clockwise (CCW)

CM24-R
Clockwise (CW)

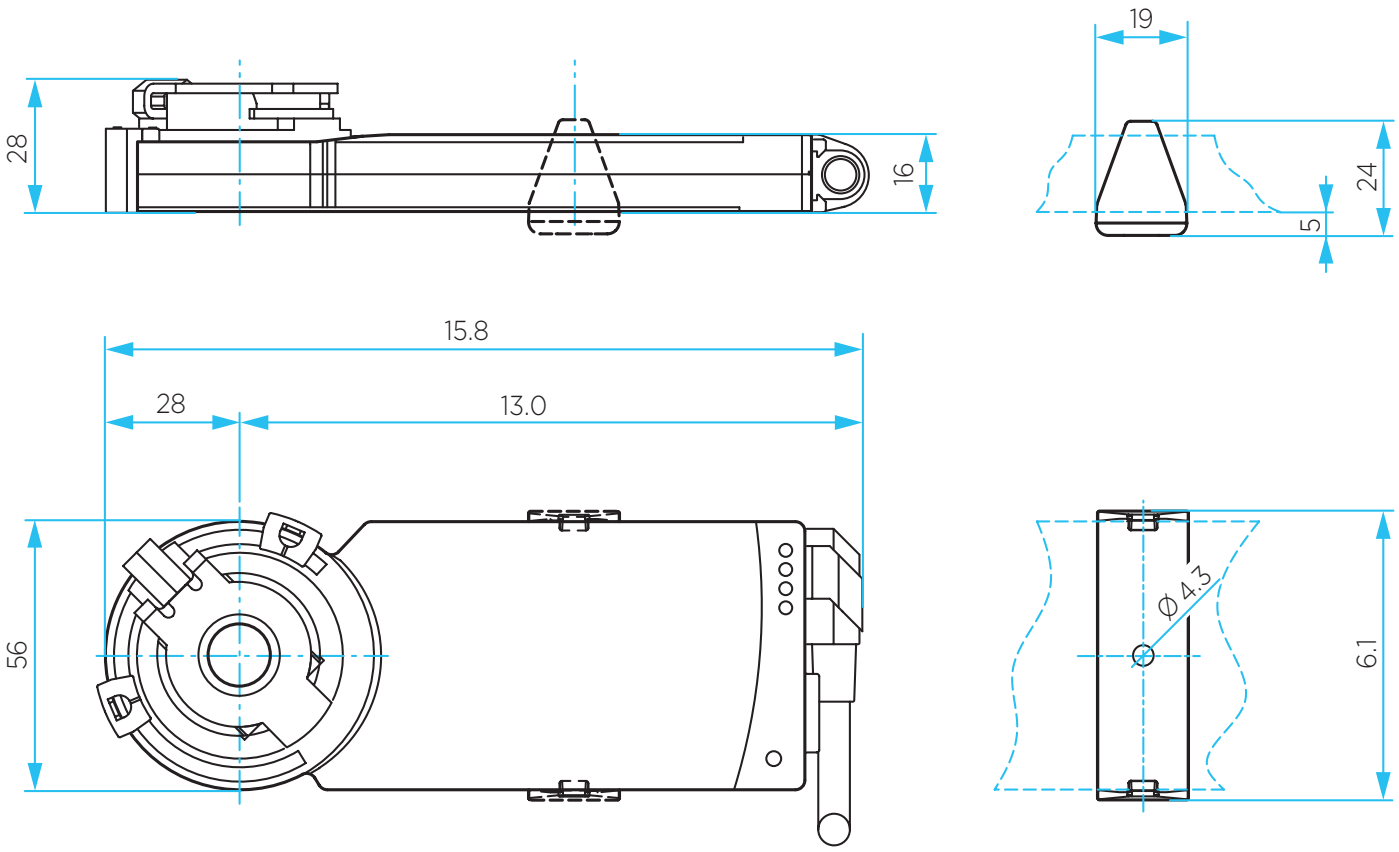
Technical Data

Technical Data		
Electrical Data	**Nominal Voltage**	AC 24V, 50/60Hz / DC 24V
	Nominal Voltage Range	AC/DC 19.2 ... 28.8V
	Power Consumption - In Operation - At Rest - For Wire Sizing	0.5W @ nominal torque 0.2W 1VA
	Connection	Cable 1m, 3 x 0.75mm²
Functional Data	**Torque (Nominal Torque)**	Min. 2 Nm @ nominal voltage
	Manual Override	Gear disengagement with magnet
	Angle of Rotation - Without Limit - With Limit	Endless 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
	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 **Product Specifications** on page 3
	Weight	Approx. 220g

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.
- 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.

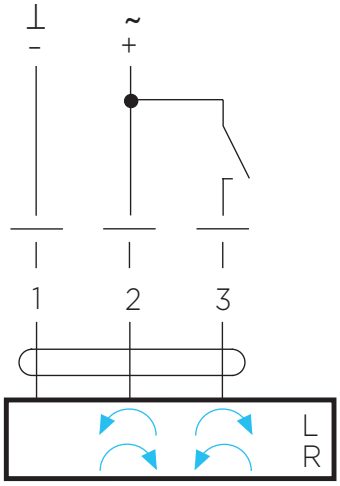
Product Specifications



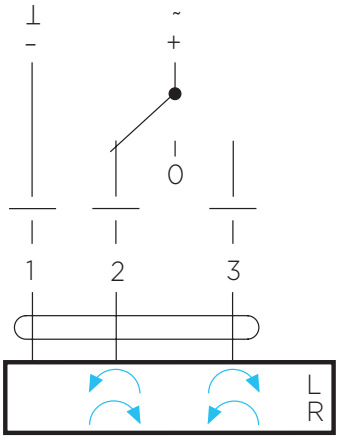
Damper Spindle	
Length	min. 37
◯I◇	6 ... 20

Product Specifications	
Simple Direct Mounting	Simple direct mounting on the damper spindle with a universal spindle clamp (⌀ 6 ... 12.7mm). 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



OPEN-CLOSE CONTROL WIRING DIAGRAM

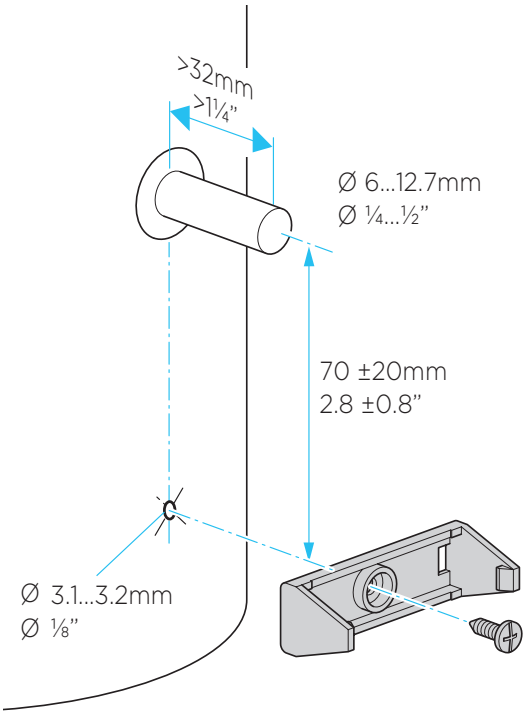


3-POINT CONTROL WIRING DIAGRAM

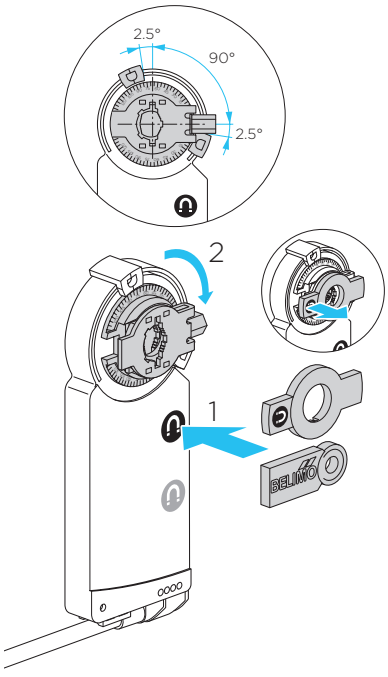
Note -

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

Technical Drawings



DRAWING 1



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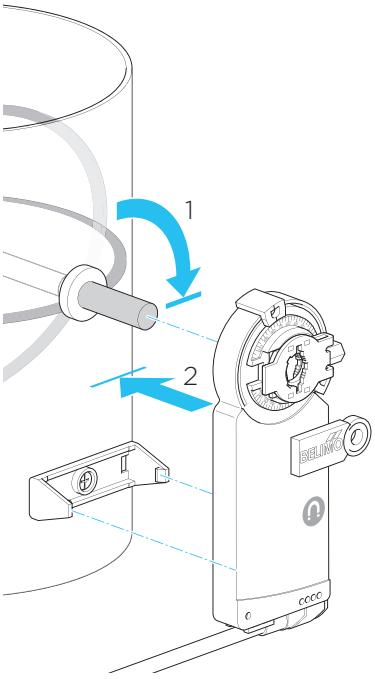

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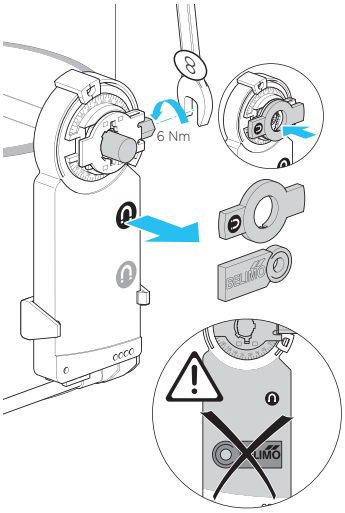

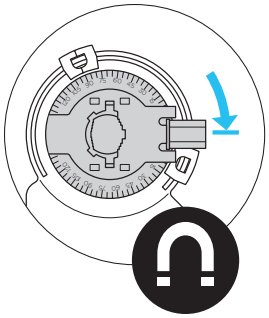

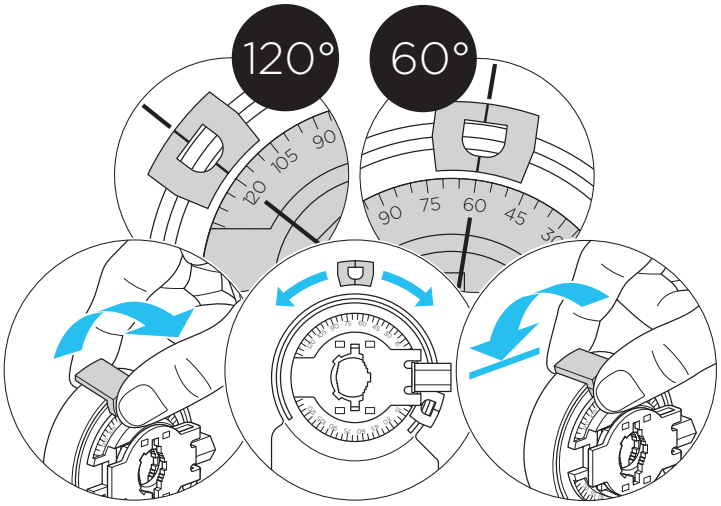

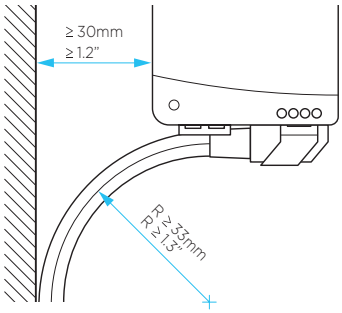

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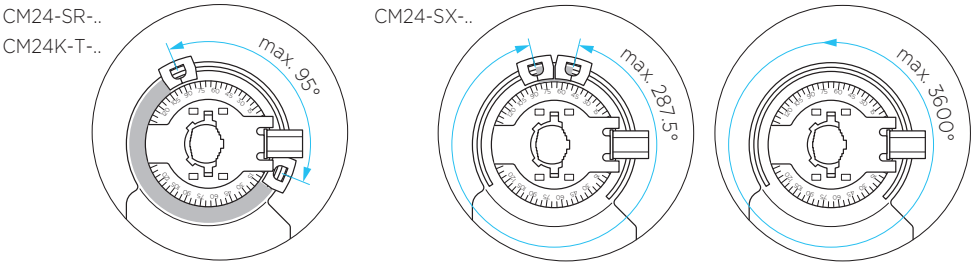
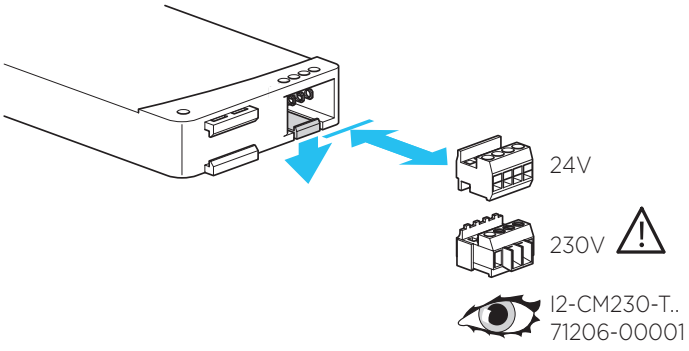
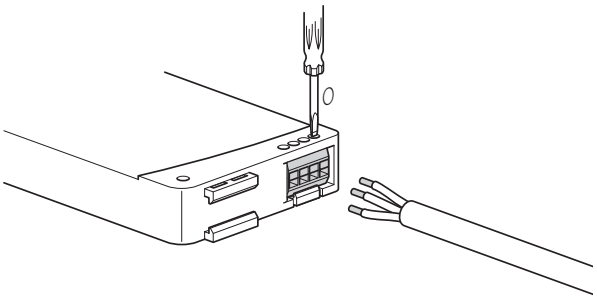
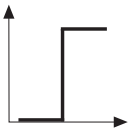


ATTENTION

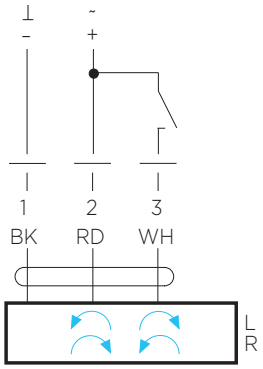




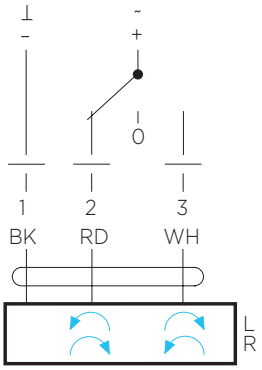
DRAWING A



AC 24 V / DC 24 V

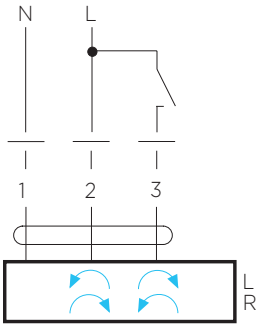


CM24..

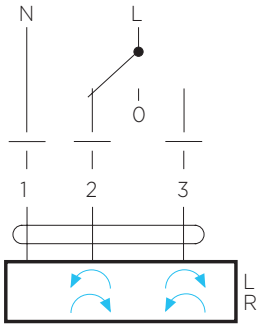


CM24..

AC 100...240 V ⚠

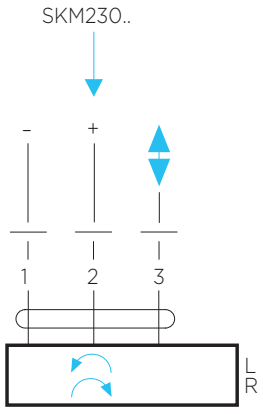


CM230..

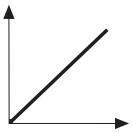


CM230..

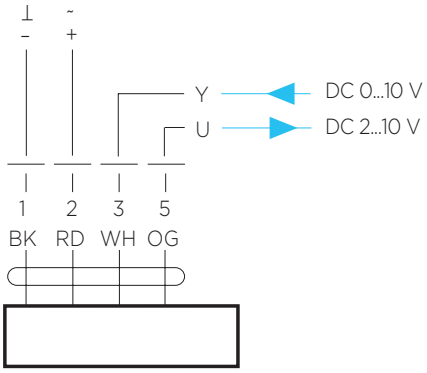
DC 24 V
(SKM230..)



CM24K-T..



AC 24 V / DC 24 V



CM24-SR..
CM24-SX..