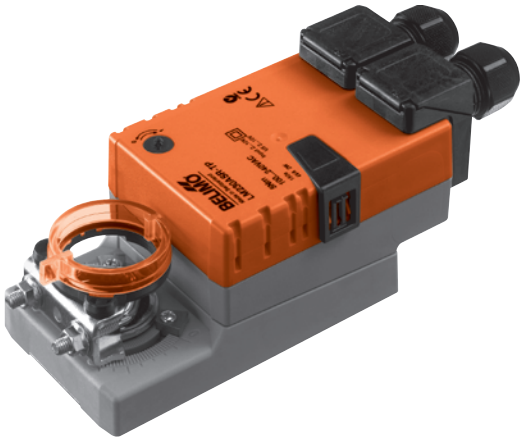
Technical data sheet Damper actuator LM230ASR-TP

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

- **For air control dampers up to approx. 1 m²**
- **Torque 5 Nm**
- **Nominal voltage AC 100 ... 240 V**
- **Control: modulating DC 0 ... 10 V, position feedback DC 2 ... 10 V**



Technical data

Electrical data	Nominal voltage		AC 100 ... 240 V, 50/60 Hz
	Nominal voltage range		AC 85 ... 265 V
	Power consumption	In operation	1.8 W @ nominal torque
		At rest	1 W
		For wire sizing	4 VA
	Connection	Power supply	Terminals 4 mm² (Cable Ø 6 ... 8 mm, two-core)
		Signals	Terminals 4 mm² (Cable Ø 6 ... 8 mm, four-core)
Functional data	Torque (nominal torque)		Min. 5 Nm @ nominal voltage
	Control	Control signal Y	DC 0 ... 10 V, typical input impedance 100 kΩ
		Working range	DC 2 ... 10 V
	Position feedback (Measuring voltage)		DC 2 ... 10 V, max. 1 mA
	Auxiliary supply		DC 24 V ±30%, max. 10 mA
	Position accuracy		±5%
	Direction of rotation		Reversible with switch
	Direction of rotation at Y = 0 V		At switch position ↶ resp. ↷
	Manual override		Gearing latch disengaged with pushbutton, detentable
	Angle of rotation		Max. 95°∢, limited on both sides by means of adjustable, mechanical end stops
	Running time		150 s / 90°∢
	Sound power level		Max. 35 dB (A)
	Position indication		Mechanical, pluggable
Safety	Protection class		**II** Totally insulated ⧈
	Degree of protection		IP54 in any mounting position
	EMC		CE according to 89/336/EEC
	Low voltage directive		CE according to 73/23/EEC
	Mode of operation		Type 1 (to EN 60730-1)
	Rated impulse voltage		4 kV (to EN 60730-1)
	Control Pollution Degree		3 (to EN 60730-1)
	Ambient temperature range		–30 ... +50°C
	Non-operating temperature		–40 ... +80°C
	Ambient humidity range		95% r.H., non-condensating (EN 60730-1)
	Maintenance		Maintenance-free
Dimensions / Weight	Dimensions		See «Dimensions» on page 2
	Weight		Approx. 700 g

Safety notes

⚠

- **The damper actuator is not allowed to be used outside the specified field of application, especially in aircraft or any other form of air transport.**
- **Caution: Power supply voltage !**
- **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.**

Safety notes *(Continued)*

- **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 features

Mode of operation The actuator is controlled by means of a standard control signal DC 0 ... 10 V. It opens to the position dictated by this signal. The measuring voltage U allows the damper position (0 ... 100%) to be electrically indicated and serves as a follow-up control signal for other actuators.

Simple direct mounting Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override Manual operation is possible with the pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed or detented).

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.

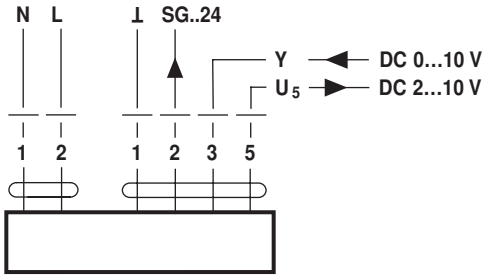
Accessories

	Description	Data sheet
Electrical accessories	Auxiliary switch S..A..	T2 - S..A..
	Feedback potentiometer P..A..	T2 - P..A..
	Positioner SG..24	T2 - SG..24
Mechanical accessories	Various accessories (clamps, shaft extensions etc.)	T2 - Z-LM..A..

Electrical installation

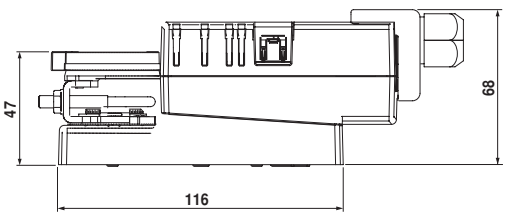
Wiring diagram

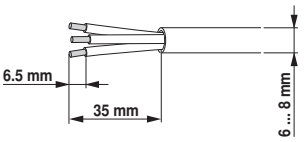
Notes
- Caution: Power supply voltage !
- Other actuators can be connected in parallel. Please note the performance data.

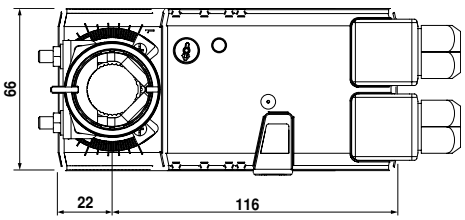


Dimensions [mm]

Dimensional drawings



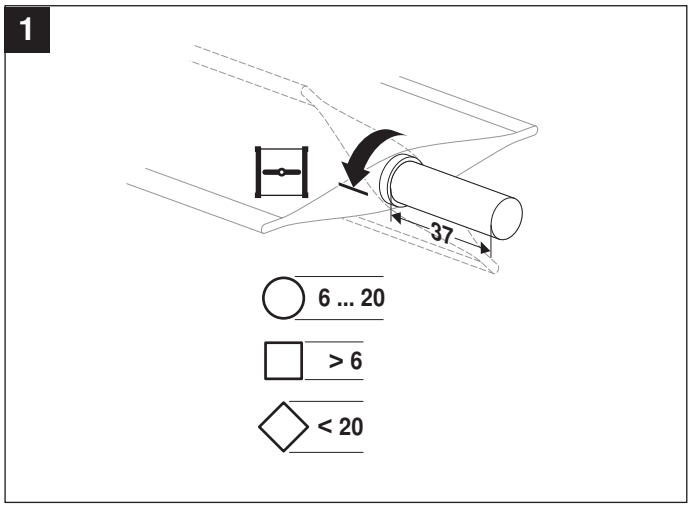




Damper spindle	Length			
	>37	6 ... 20	>6	<20

70214-00001.C

1



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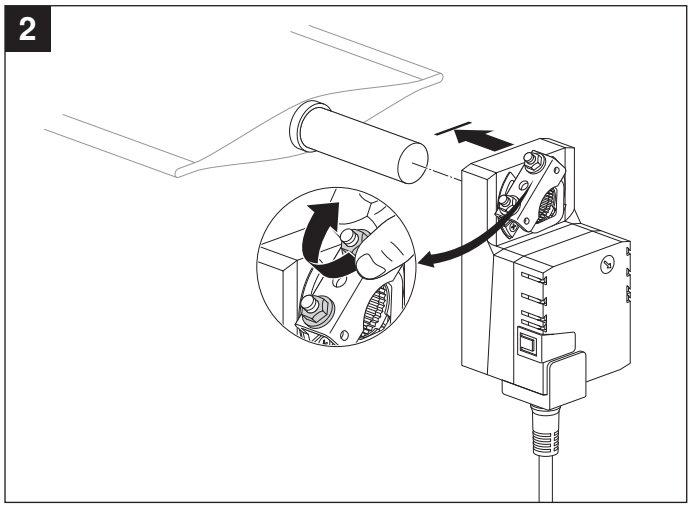

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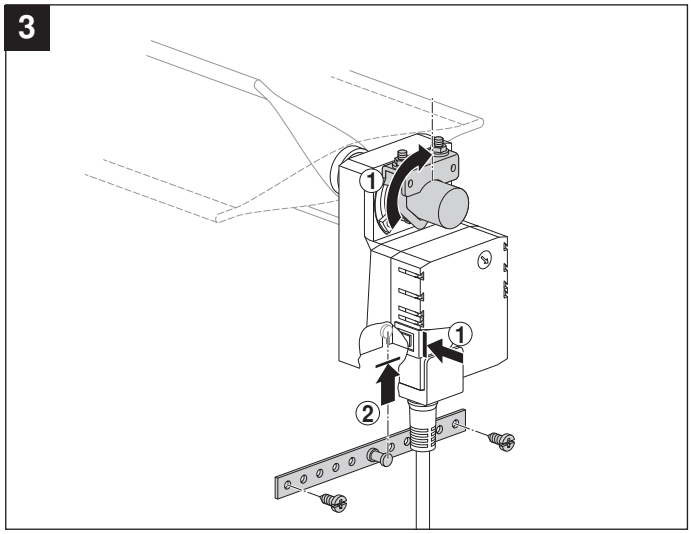

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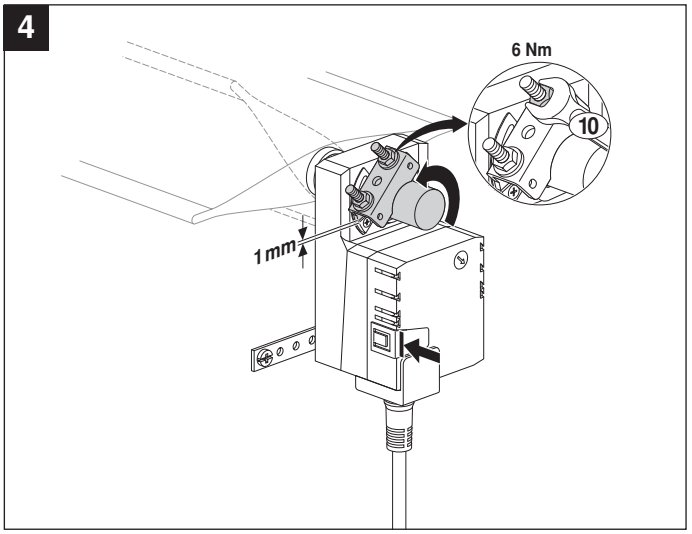

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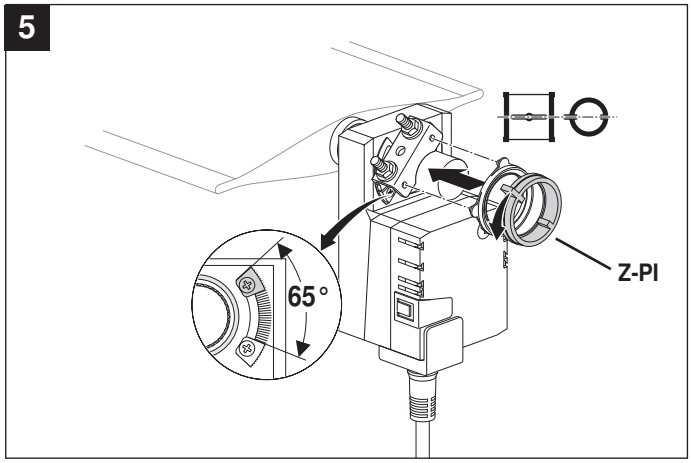
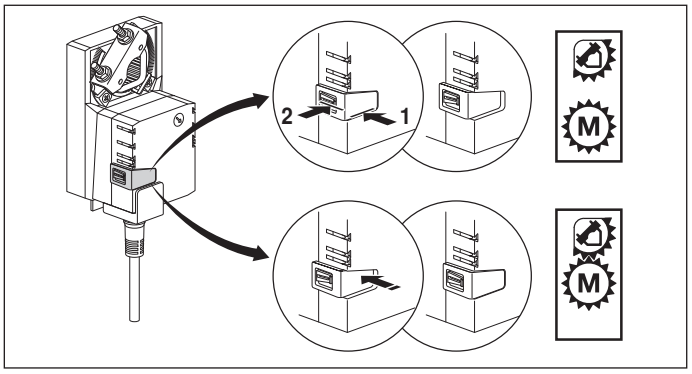
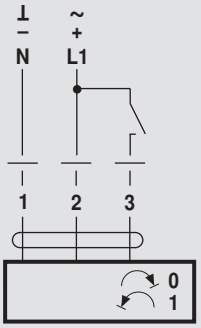
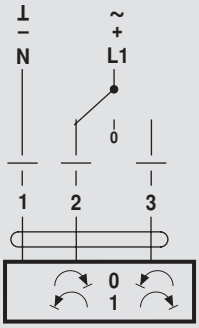
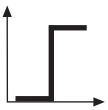




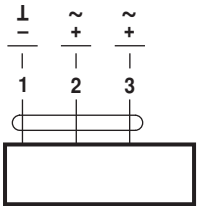




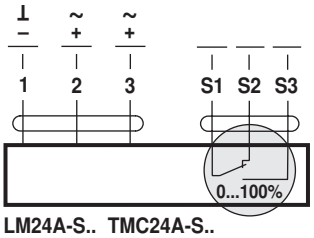


AC 24 V / DC 24 V

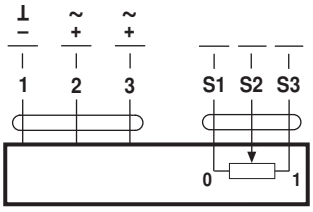
DC 48 ... 110 V ⚠
(LM72A..)



LM24A.. LMC24A..
LM72A.. TMC24A..

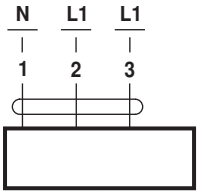


LM24A-S.. TMC24A-S..

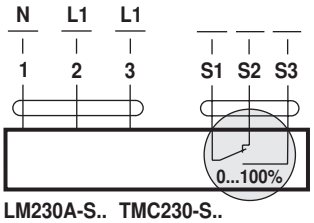


LM24AP5..

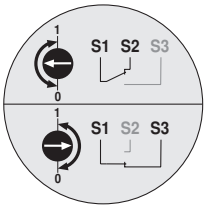
AC 100 ... 240 V ⚠

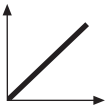


LM230A.. LMC230A..
TMC230A..

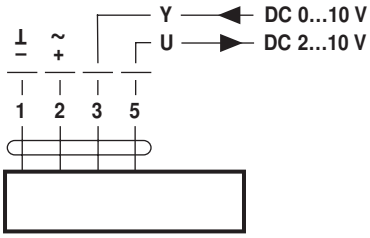


LM230A-S.. TMC230-S..

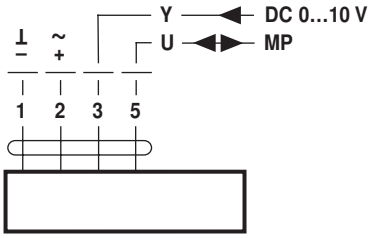




AC 24 V / DC 24 V

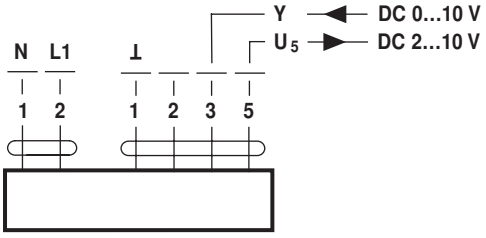


LM24A-SR.. LMC24A-SR..
LM24A-MF.. TMC24A-SR..



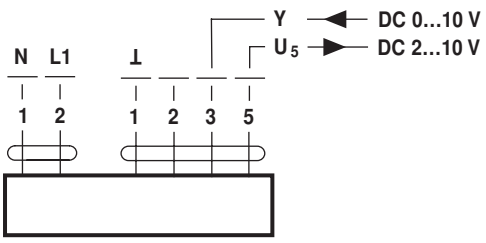
LM24A-MP..

DC 48 ... 110 V ⚠
(LM72A-SR..)



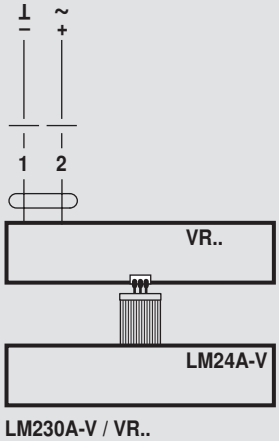
LM72A-SR..

AC 100 ... 240 V ⚠



LM230ASR..

AC 24 V / DC 24 V
(LM24A-V / VR..)



LM230A-V / VR..