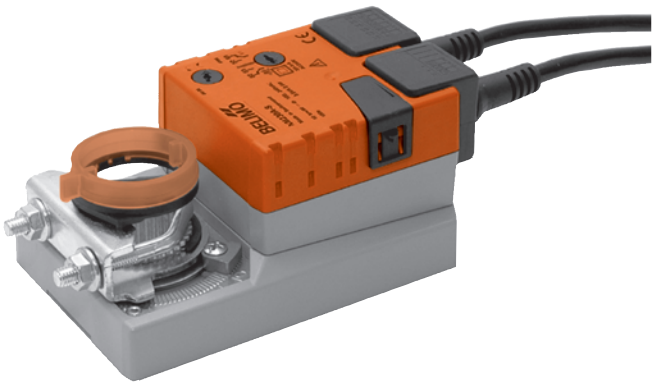
BELIMO

Technical data sheet Damper actuator NM230A-S

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

- **For air control dampers up to approx. 2 m²**
- **Torque 10 Nm**
- **Nominal voltage AC 100 ... 240 V**
- **Control: Open-close or 3-point**
- **Integrated auxiliary switch**



Technical data

Electrical data	Nominal voltage		AC 100 ... 240 V, 50/60 Hz
	Nominal voltage range		AC 85 ... 265 V
	Power consumption	In operation	2.5 W @ nominal torque
		At rest	0.6 W
		For wire sizing	6 VA
	Auxiliary switch		1 x SPDT, 1 mA ... 3 (0.5) A, AC 250 V ⧈ (0 ... 100% adjustable)
	Connection	Motor	Cable 1 m, 3 x 0.75 mm²
		Auxiliary switch	Cable 1 m, 3 x 0.75 mm²
Functional data	Torque (nominal torque)		Min. 10 Nm @ nominal voltage
	Direction of rotation		Reversible with switch 0 ↶ or 1 ↷
	Manual override		Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation		Max. 95°∢, limited on both sides by means of adjustable, mechanical end stops
	Running time		150 s
	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 Low voltage directive		CE according to 89/336/EEC CE according to 73/23/EEC
	Mode of operation		Type 1 (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. 850 g

Safety notes

⚠

- **The damper actuator is not allowed to be used outside the specified field of application, especially not 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.**
- **The cables must not be removed from the device.**
- **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

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 self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed).

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.

Flexible signalization Flexible signalization with adjustable auxiliary switch (0 ... 100%).

Accessories

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

Electrical installation

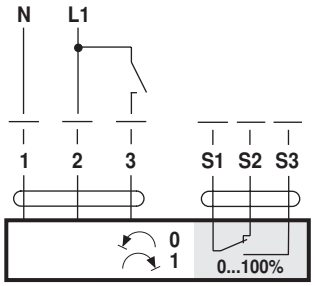
Wiring diagrams

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

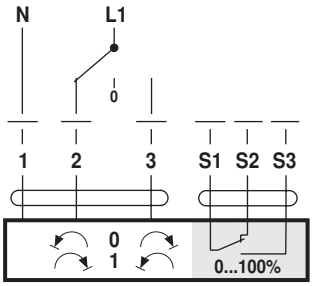
Direction of rotation

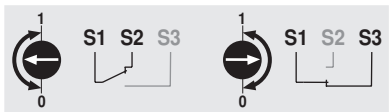
Auxiliary switch

Open-close control



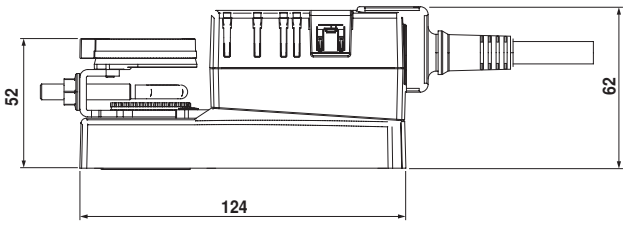
3-point control

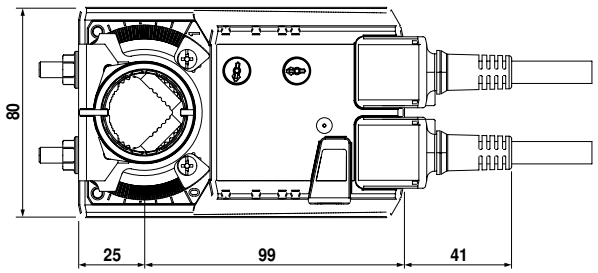




Dimensions [mm]

Dimensional drawings





Damper spindle	Length	⊙I◇
Clamp on top	min. 40	8 ... 26.7
Clamp on bottom *	min. 20	8 ... 20

* Option (Accessory K-NA)

Data sheet T2-NM230A-S • en • v1.4 • 09.2007 • Subject to modifications

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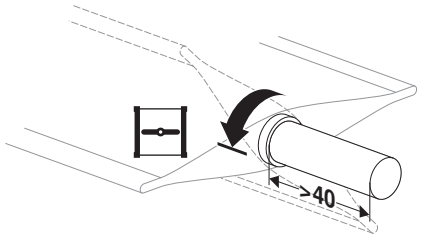

8 ... 26.7	> 8	< 26.7

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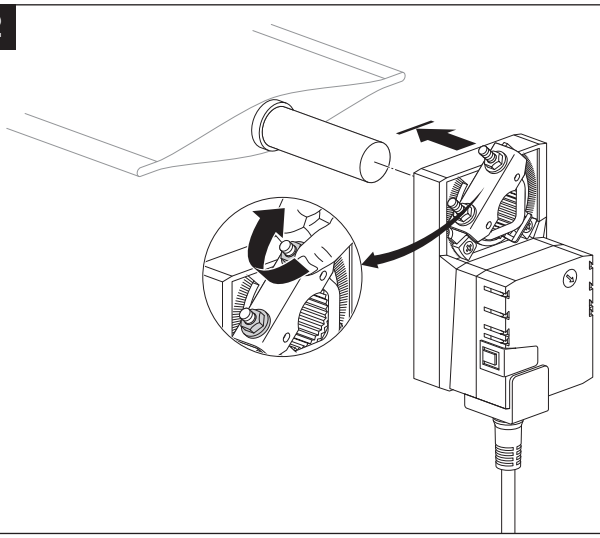

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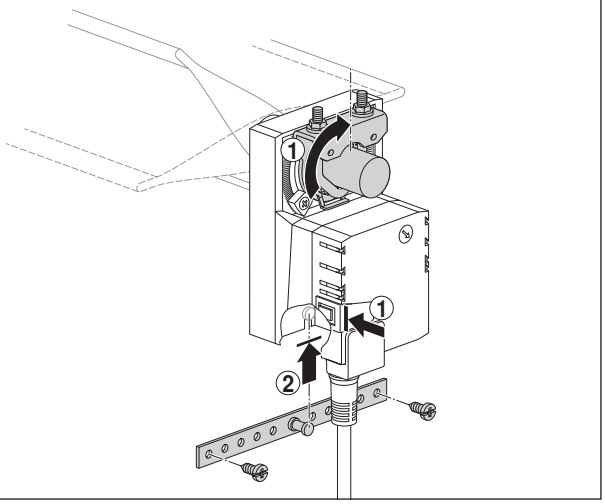

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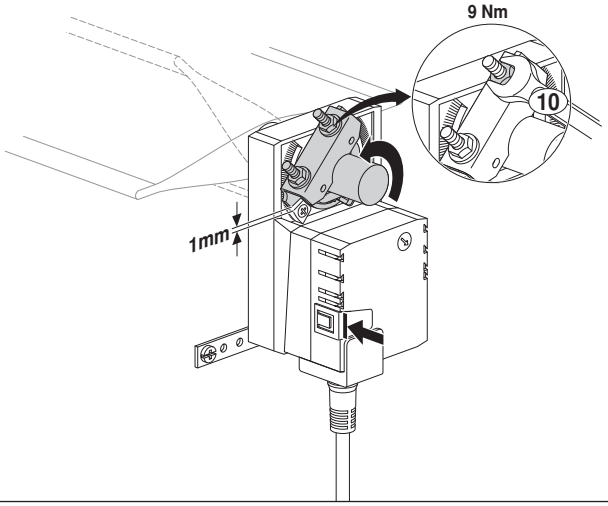

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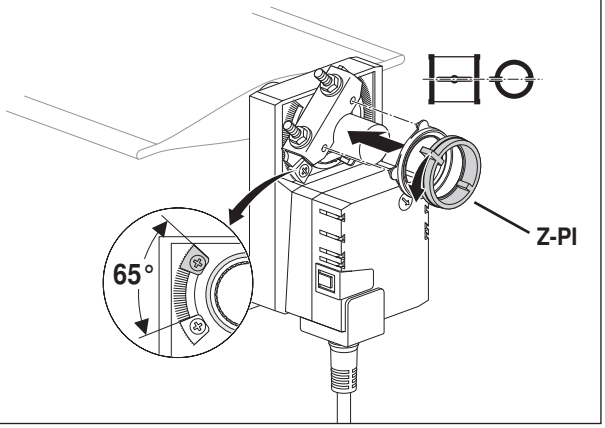
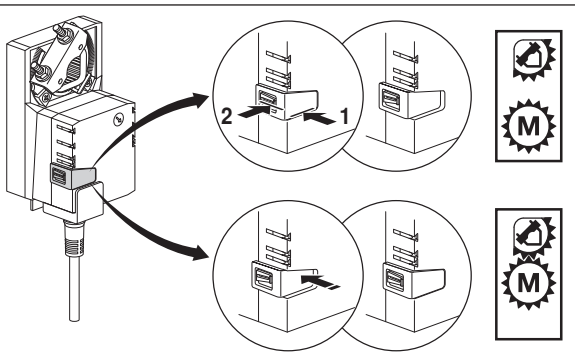
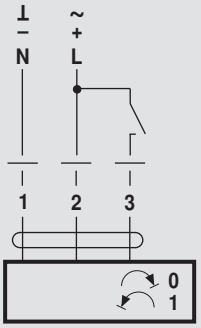
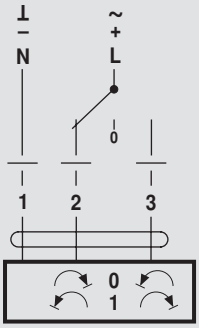
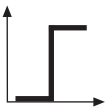




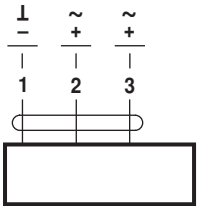




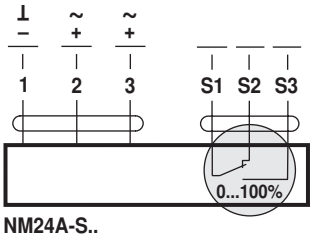


AC 24 V / DC 24 V

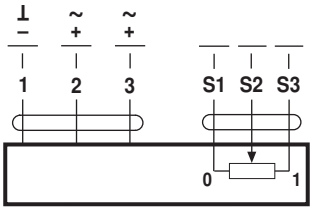
DC 48 ... 110 V ⚠
(NM72A..)



NM24A..
NM72A..

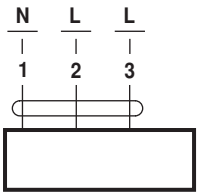


NM24A-S..

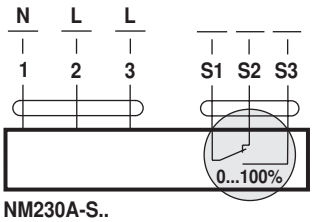


NM24AP5..

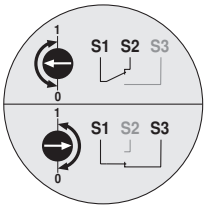
AC 100 ... 240 V ⚠

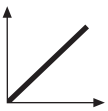


NM230A..

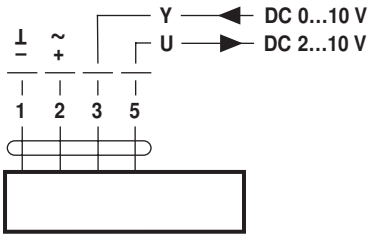


NM230A-S..

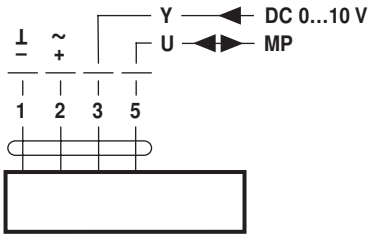




AC 24 V / DC 24 V

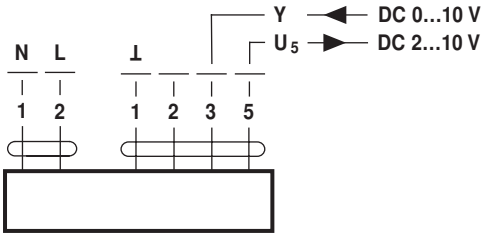


NM24A-SR..
NM24A-MF..



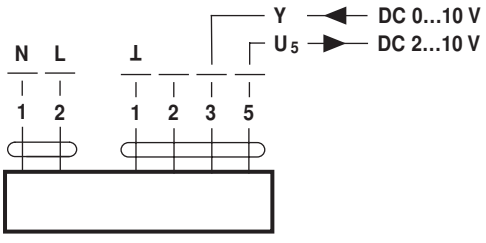
NM24A-MP..

DC 48 ... 110 V ⚠
(NM72A-SR..)



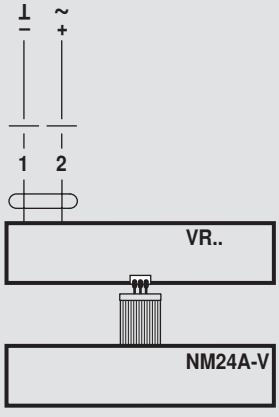
NM72A-SR..

AC 100 ... 240 V ⚠



NM230ASR..

AC 24 V / DC 24 V
(NM24A-V / VR..)



NM230A-V / VR..