

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 m<sup>2</sup>
- Torque 10 Nm
- Nominal voltage AC/DC 24 V
- Control: Open-close or 3-point



## 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	
Electrical data	Power consumption	In operation	1.5 W @ nominal torque
		At rest	0.2 W
	For wire sizing	4 VA	
Electrical data	Connection	Terminals 4 mm <sup>2</sup> (Cable Ø 6 ... 8 mm, three-core)	
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, 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	III Safety extra-low voltage
Degree of protection		IP54 in any mounting position	
EMC		CE according 89/336/EEC	
Mode of operation		Type 1 (to EN 60730-1)	
Rated impulse voltage		0.8 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 (to EN 60730-1)	
Maintenance		Maintenance-free	
Dimensions / Weight	Dimensions	See «Dimensions» on page 2	
	Weight	Approx. 750 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.
- 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 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 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
<b>Electrical accessories</b>	Auxiliary switch S..A..	T2 - S..A..
	Feedback potentiometer P..A..	T2 - P..A..
<b>Mechanical accessories</b>	Various accessories (clamps, shaft extensions etc.)	T2 - Z-NM..A..

**Electrical installation**

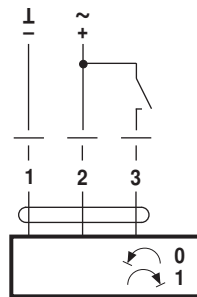
**Wiring diagrams**

**Notes**

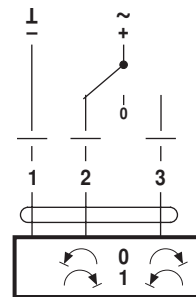
- Connection via safety isolating transformer.
- Other actuators can be connected in parallel. Please note the performance data.



**Open-close control**



**3-point control**

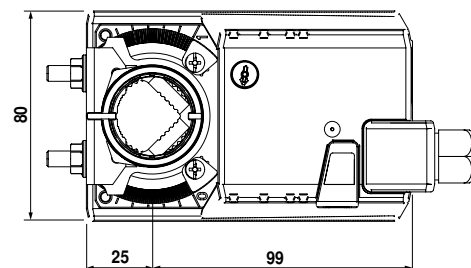
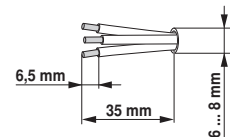
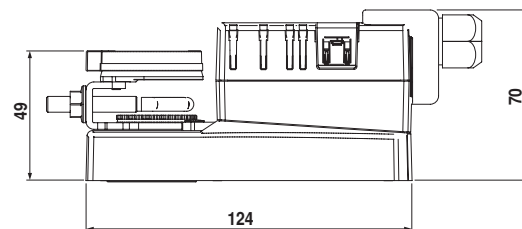


Direction of rotation



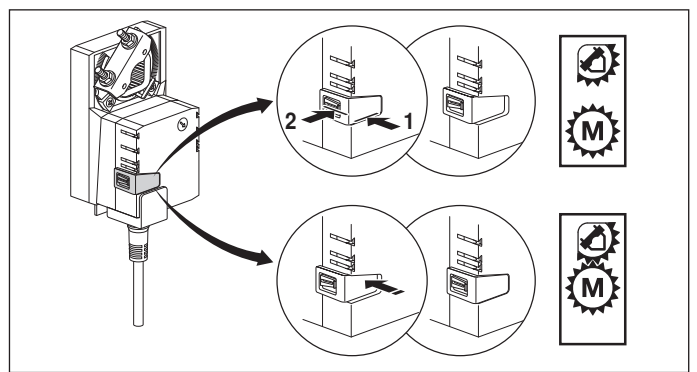
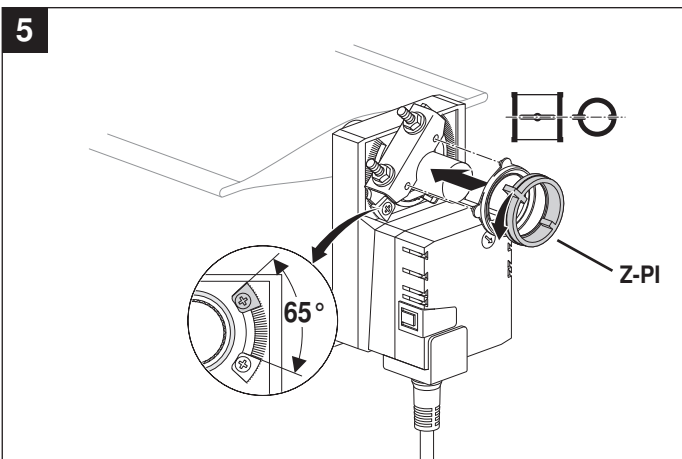
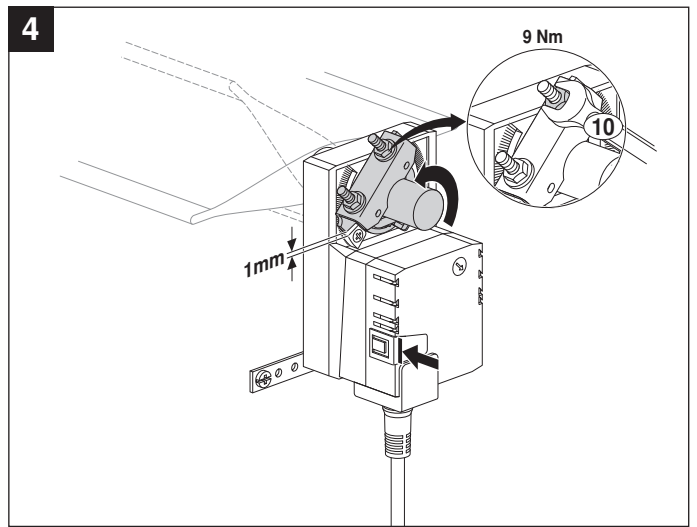
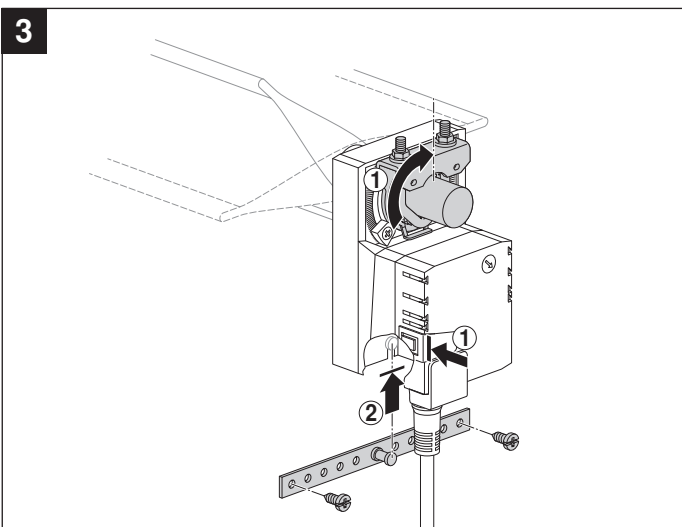
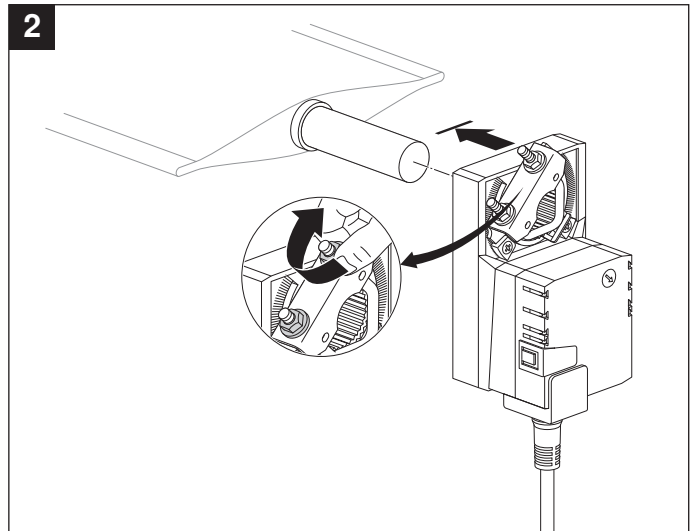
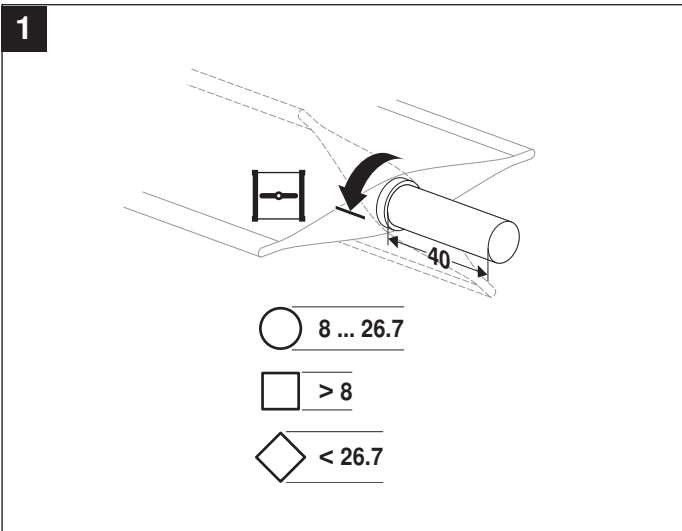
**Dimensions [mm]**

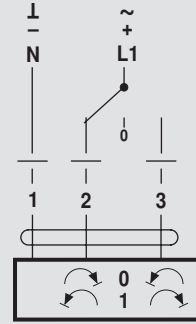
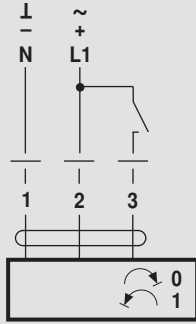
**Dimensional drawings**



Damper spindle	Length	●	■	◆
Clamp on top	>40	8 ... 26.7	>8	<26.7
Clamp on bottom *	>20	8 ... 20	>8	<20

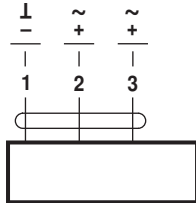
\* Option (Accessory K-NA)



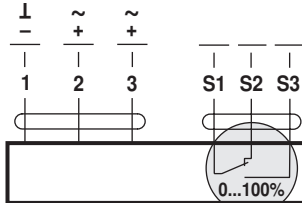


AC 24 V / DC 24 V

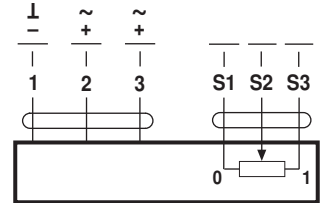
DC 48 ... 110 V  
(NM72A..)



NM24A..  
NM72A..

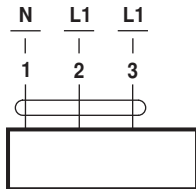


NM24A-S..

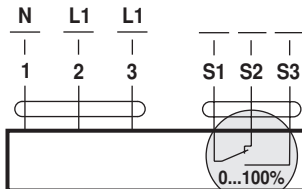


NM24AP5..

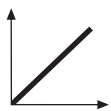
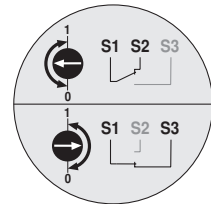
AC 100 ... 240 V



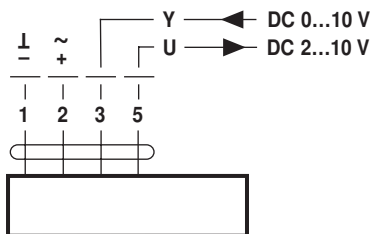
NM230A..



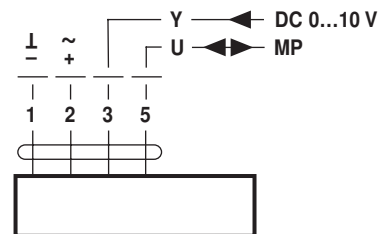
NM230A-S..



AC 24 V / DC 24 V

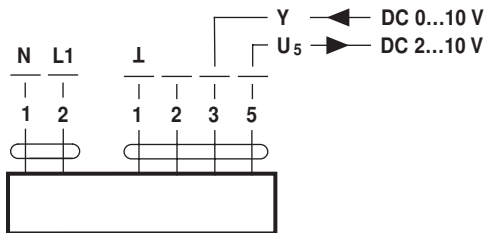


NM24A-SR..  
NM24A-MF..



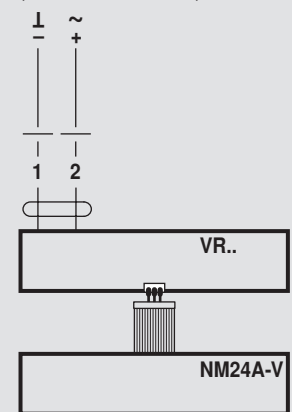
NM24A-MP..

DC 48 ... 110 V  
(NM72A-SR..)



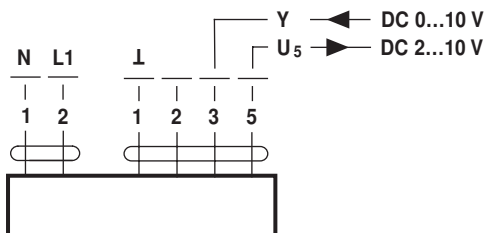
NM72A-SR..

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



NM230A-V / VR..

AC 100 ... 240 V



NM230A-SR..