

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 m<sup>2</sup>
- Torque 5 Nm
- Nominal voltage AC/DC 24 V
- Control: Open-close or 3-point
- Integrated feedback potentiometer


**Technical data**

<b>Electrical data</b>	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	1 W @ nominal torque
		At rest	0.2 W
		For wire sizing	2 VA
	Feedback potentiometer	5 kΩ ±5% 1 W	
	Connection	Motor	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
		Feedback potentiometer	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
<b>Functional data</b>	Torque (nominal torque)	Min. 5 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	
	<b>Safety</b>	Protection class	III Safety extra-low voltage
Degree of protection		IP54 in any mounting position	
EMC		CE according to 89/336/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	
<b>Dimensions / Weight</b>	Dimensions	See «Dimensions» on page 2	
	Weight	Approx. 600 g	

**Safety notes**


- The damper actuator is not allowed to be used outside the specified field of application, especially in aircraft.
- 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.
- Position feedback** Position feedback with integrated feedback potentiometer 0 ... 100%.

**Accessories**

	Description	Data sheet
Electrical accessories	Auxiliary switch S..A..	T2 - S..A..
	Feedback potentiometer P..A..	T2 - P..A..
Mechanical accessories	Shaft extension AV6-20	T2 - Z-LM..A..

**Electrical installation**

**Wiring diagrams**

**Notes**

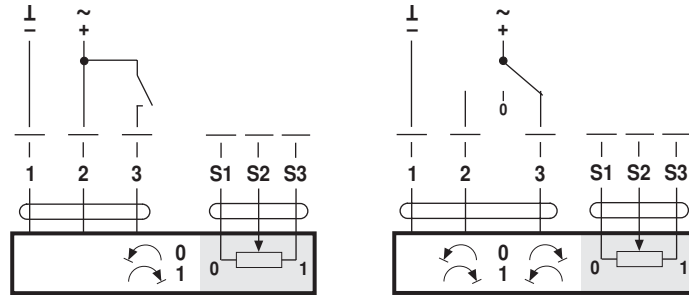
- Connection via safety isolating transformer.
- Other actuators can be connected in parallel.

Please note the performance data.

**Open-close control**

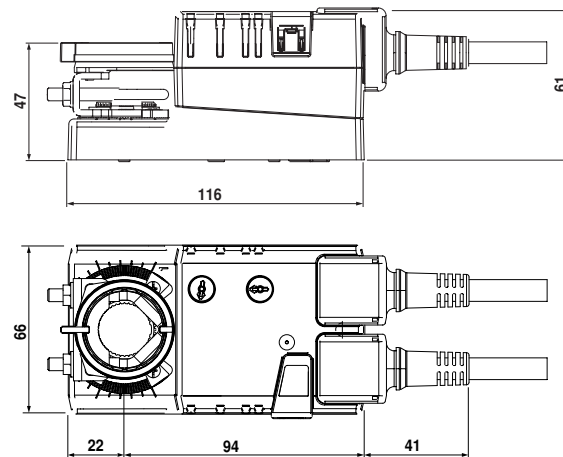
**3-point control**

Direction of rotation

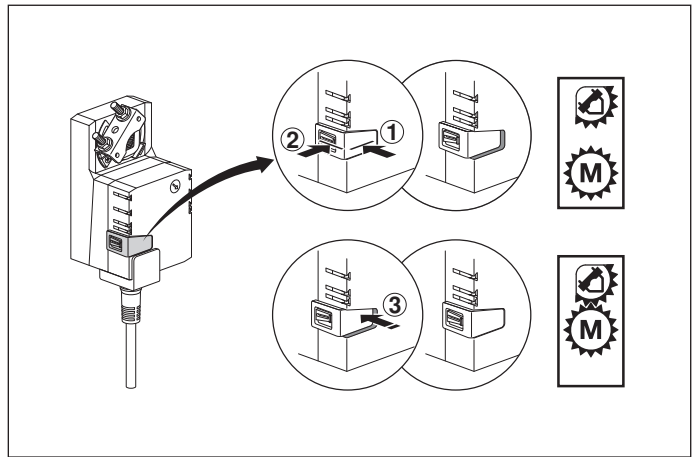
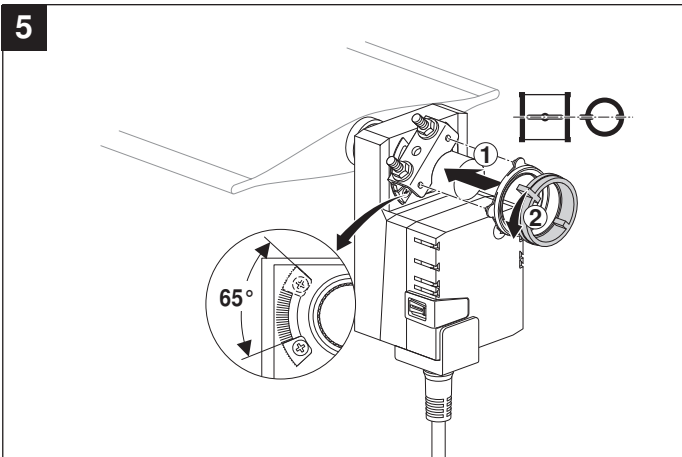
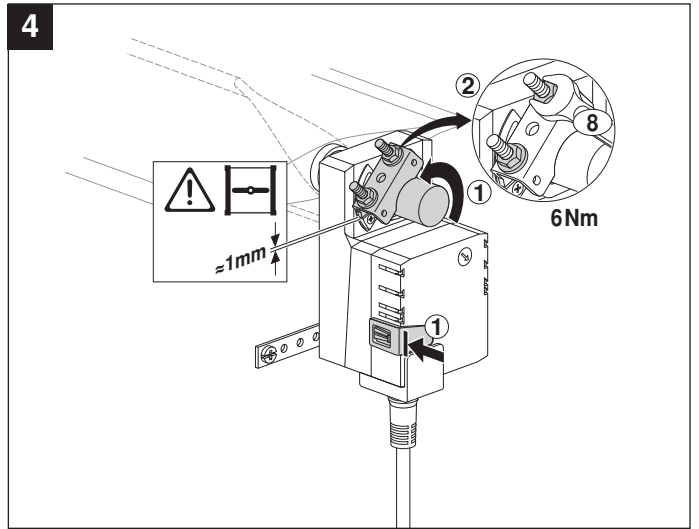
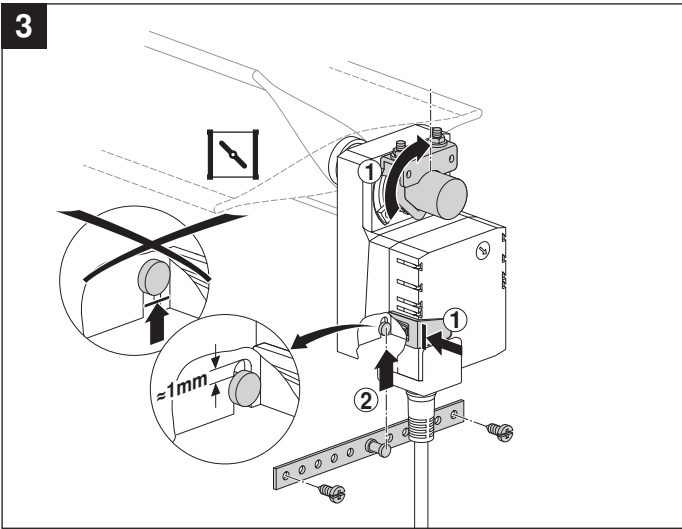
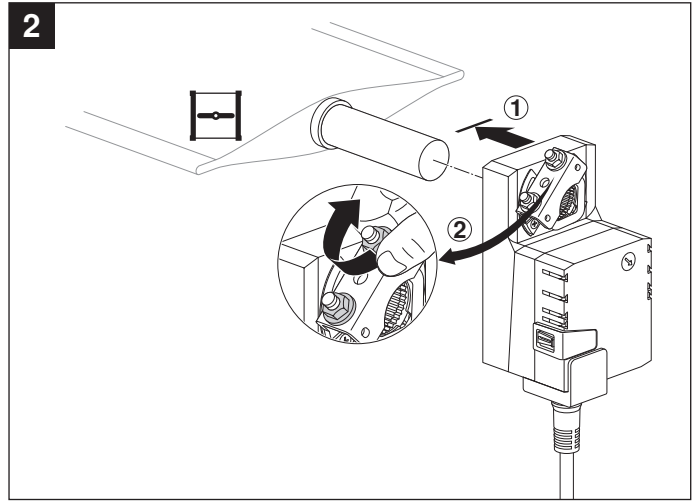
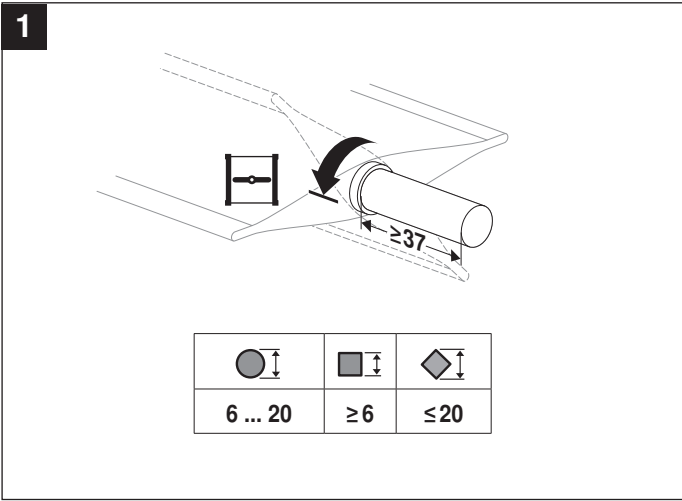


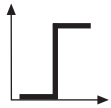
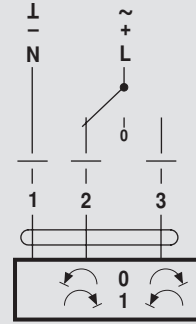
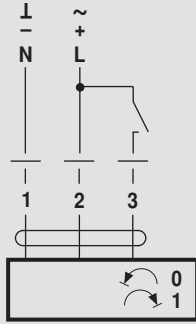
**Dimensions [mm]**

**Dimensional drawings**



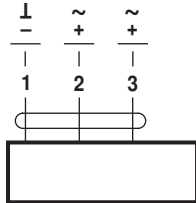
Damper spindle	Length	Symbol
	min. 37	6 ... 20



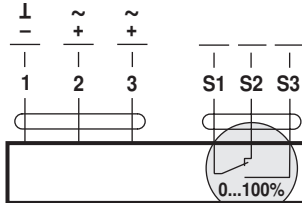


AC 24 V / DC 24 V

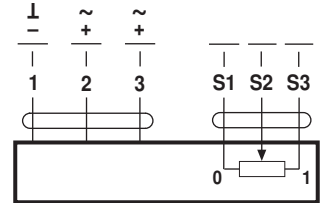
DC 48 ... 110 V  
(LM72A..) ⚠



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

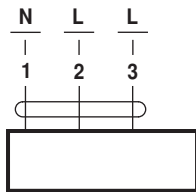


LM24A-S.. TMC24A-S..  
LM72A-S..

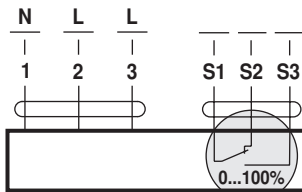


LM24AP5..

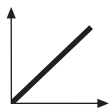
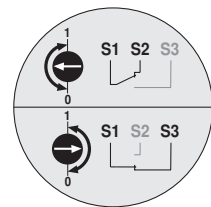
AC 100 ... 240 V ⚠



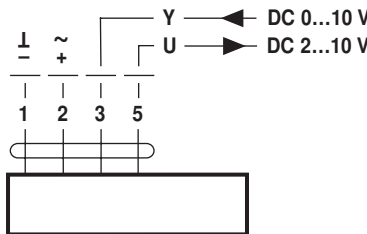
LM230A.. LMC230A..  
TMC230A..



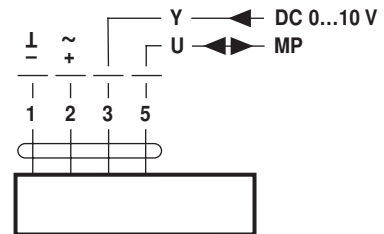
LM230A-S.. TMC230A-S..



AC 24 V / DC 24 V

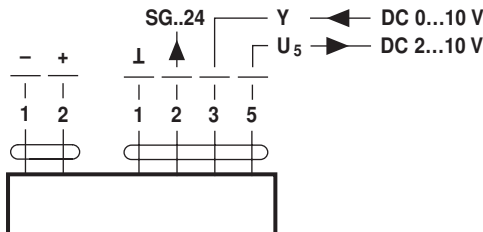


LM24A-SR.. LMC24A-SR..  
LM24A-MF.. TMC24A-SR..



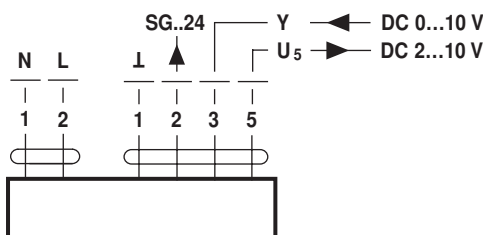
LM24A-MP..

DC 48 ... 110 V  
(LM72A-SR..) ⚠



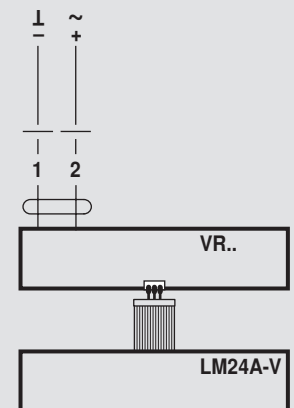
LM72A-SR..

AC 100 ... 240 V ⚠



LM230ASR.. TMC230ASR..

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



LM24A-V / VR..