

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 100 ... 240 V
- Control: Open-close or 3-point
- Integrated auxiliary switch


**Technical data**

|                            |                           |  |
|----------------------------|---------------------------|--|
| <b>Electrical data</b>     | Nominal voltage           | AC 100 ... 240 V, 50/60 Hz   |
|                            | Nominal voltage range     | AC 85 ... 265 V  |
|                            | Power consumption         | In operation 1.5 W @ nominal torque<br>At rest 0.4 W<br>For wire sizing 4 VA               |
|                            | Auxiliary switch          | 1 x SPDT, 1 mA ... 3 (0.5) A, AC 250 V <input type="checkbox"/><br>(0 ... 100% adjustable) |
| <b>Connection</b>          | Motor                     | Cable 1 m, 3 x 0.75 mm <sup>2</sup>  |
|                            | Auxiliary switch          | 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          | II Totally insulated <input type="checkbox"/>  |
|                            | 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)   |
|                            | 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 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 | Shaft extension AV6-20        | T2 - Z-LM..A.. |

**Electrical installation**

**Wiring diagrams**

**Note**

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



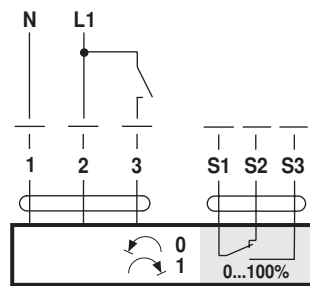
Direction of rotation



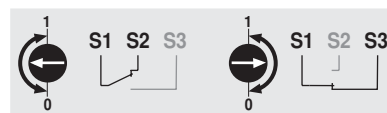
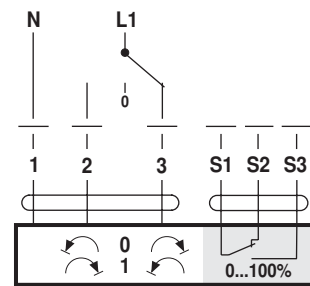
Auxiliary switch



**Open-close control**

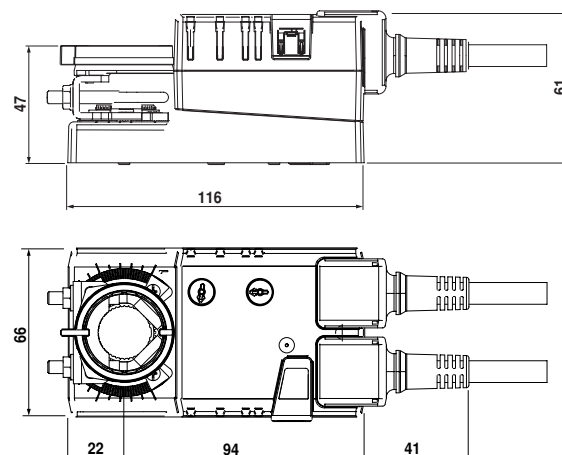


**3-point control**

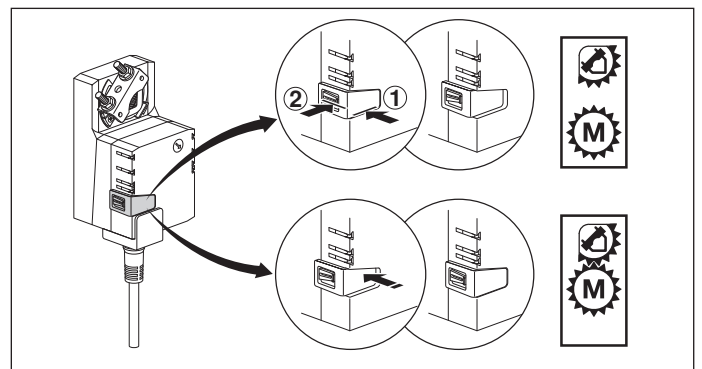
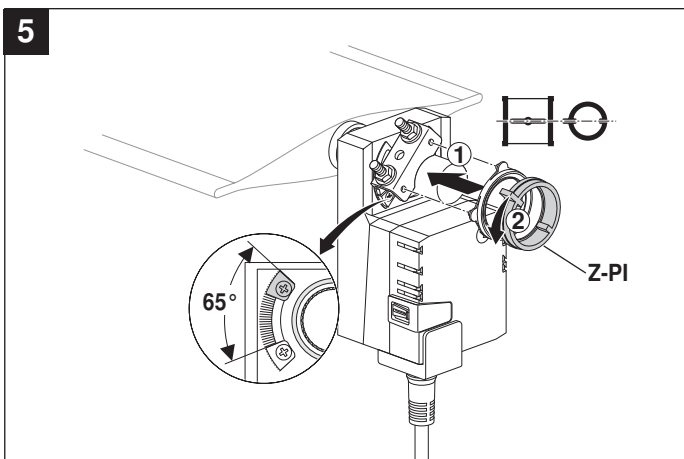
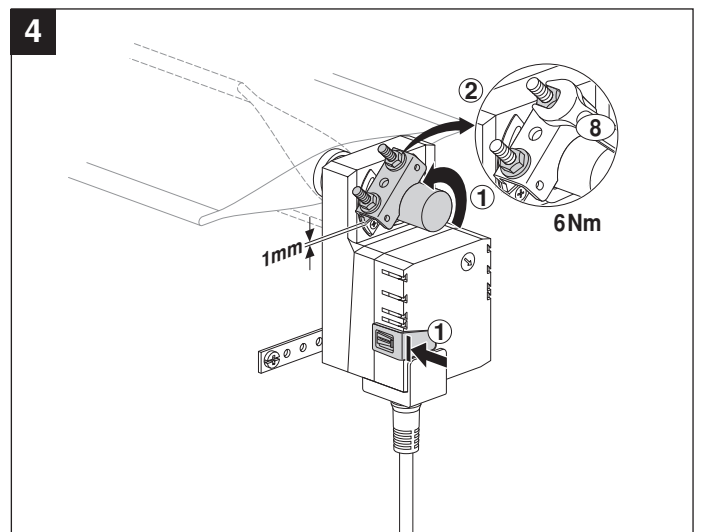
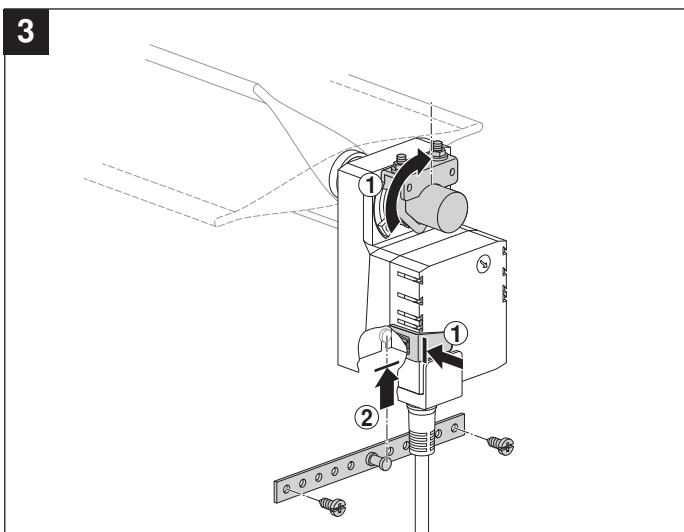
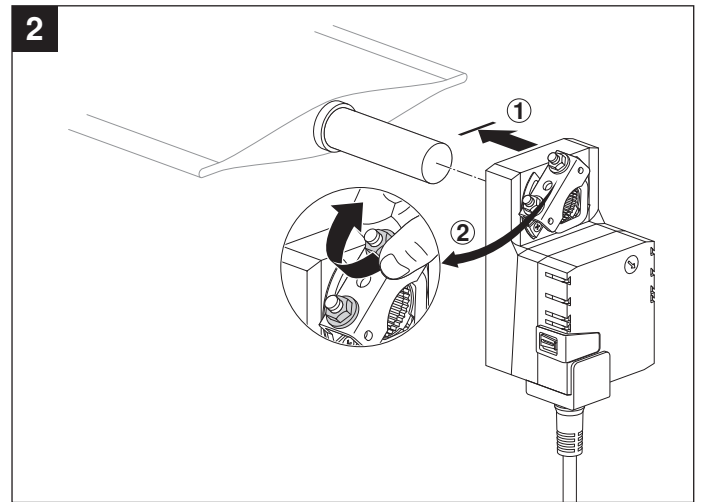
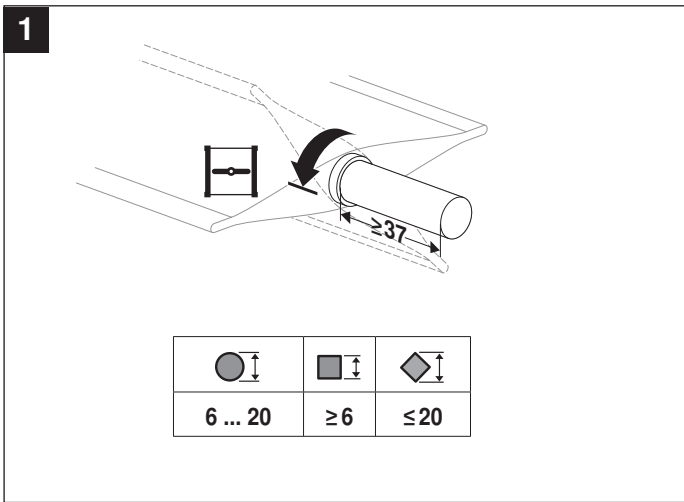


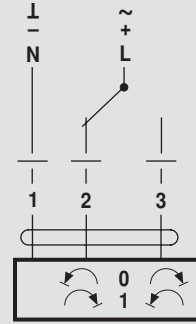
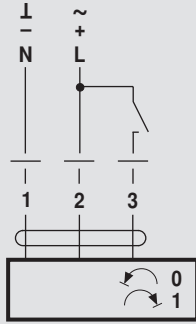
**Dimensions [mm]**

**Dimensional drawings**



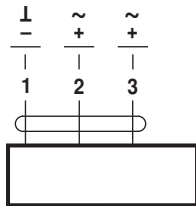
| Damper spindle | Length  | Symbol   |
|----------------|---------|----------|
|                | min. 37 | 6 ... 20 |



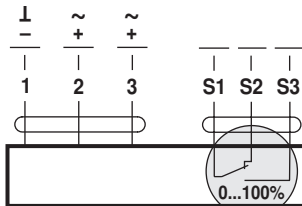


AC 24 V / DC 24 V

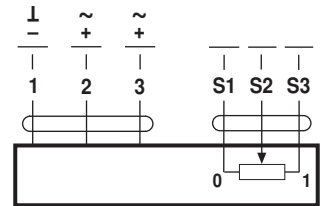
DC 48 ... 110 V  
(LM72A..)



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

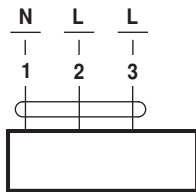


LM24A-S.. TMC24A-S..  
LM72A-S..

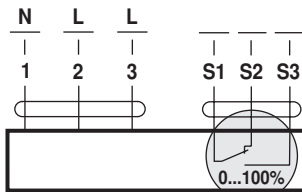


LM24AP5..

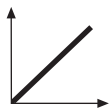
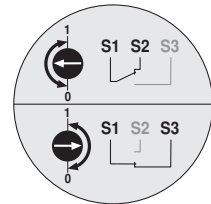
AC 100 ... 240 V



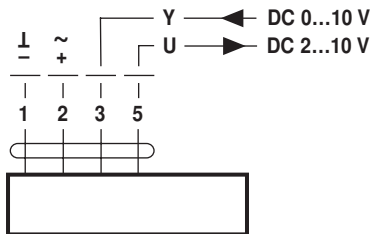
LM230A.. LMC230A..  
TMC230A..



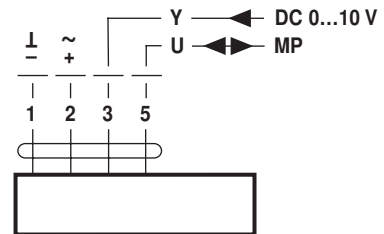
LM230A-S.. TMC230A-S..



AC 24 V / DC 24 V

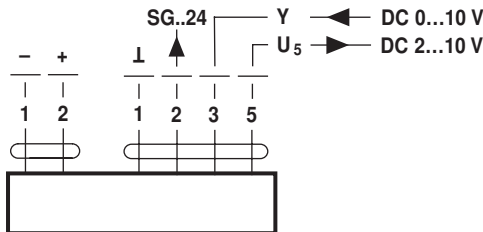


LM24A-SR.. LMC24A-SR..  
LM24A-MF.. TMC24A-SR..



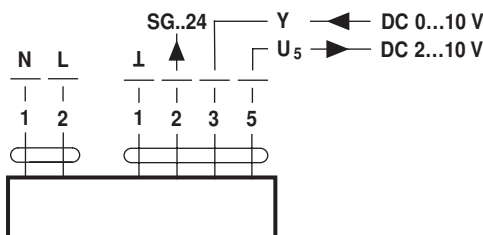
LM24A-MP..

DC 48 ... 110 V  
(LM72A-SR..)



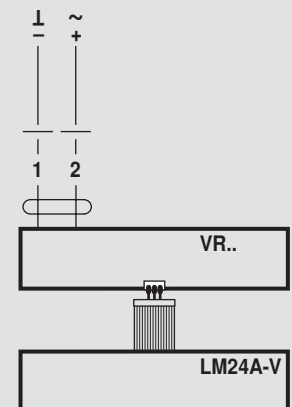
LM72A-SR..

AC 100 ... 240 V



LM230ASR..

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



LM230A-V / VR..