

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/DC 24 V
- Control: modulating DC 0 ... 10 V, position feedback DC 2 ... 10 V



Technische Daten

| | | |
|---------------------|---------------------------------------|---|
| Electrical data | 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 0.4 W For wire sizing 2 VA |
| | Connection | Cable 1 m, 4 x 0.75 mm ² |
| 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 |
| | Position accuracy | ±5% |
| | Direction of rotation | Reversible with switch 0 / 1 |
| | Direction of rotation at Y = 0 V | at switch position 0 ↺ resp. 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 | 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 | |
| Dimensions / Weight | Dimensions | See «Dimensions» on page 2 |
| | Weight | Approx. 500 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.
- The cable 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

| | |
|-------------------------------------|--|
| 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 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. |


Accessories

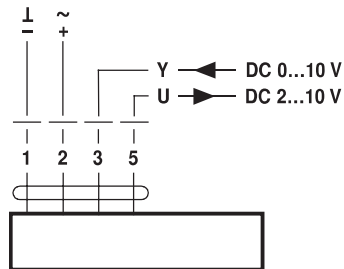
| | Description | Data sheet |
|-------------------------------|-----------------------------------|----------------|
| Electrical accessories | Auxiliary switch S..A.. | T2 - S..A.. |
| | Feedback potentiometer P.A.. | T2 - P.A.. |
| | Range controller SBG24 | T2 - SBG24 |
| | Positioner SG..24 | T2 - SG..24 |
| | Digital position indication ZAD24 | T2 - ZAD24 |
| Mechanical accessories | Shaft extension AV6-20 | T2 - Z-LM..A.. |

Electrical installation

Wiring diagrams

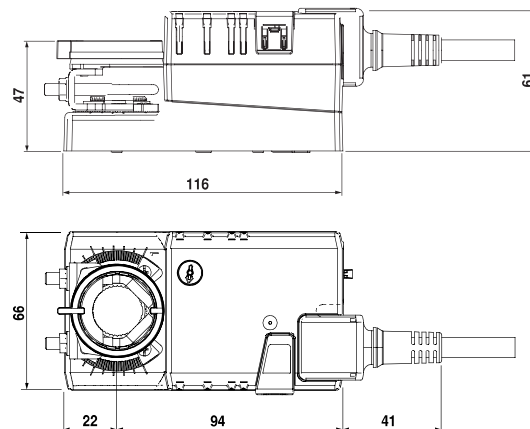
Notes


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



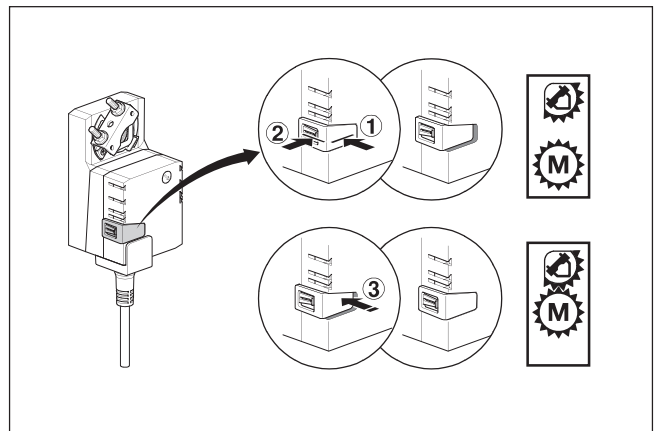
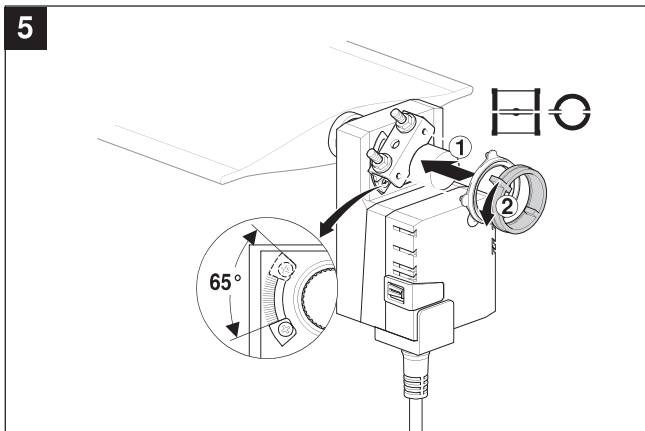
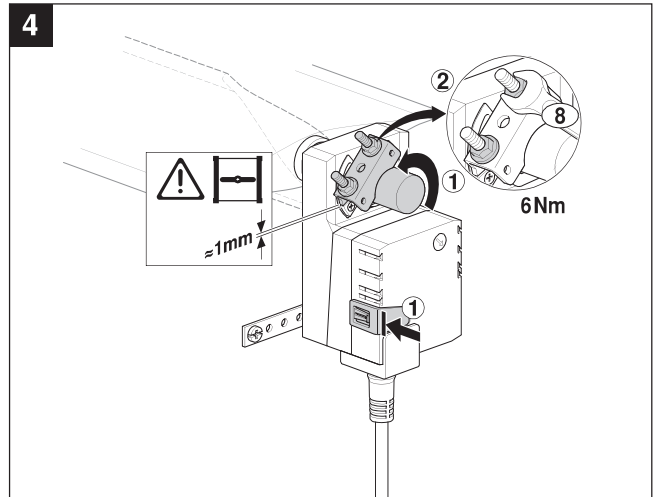
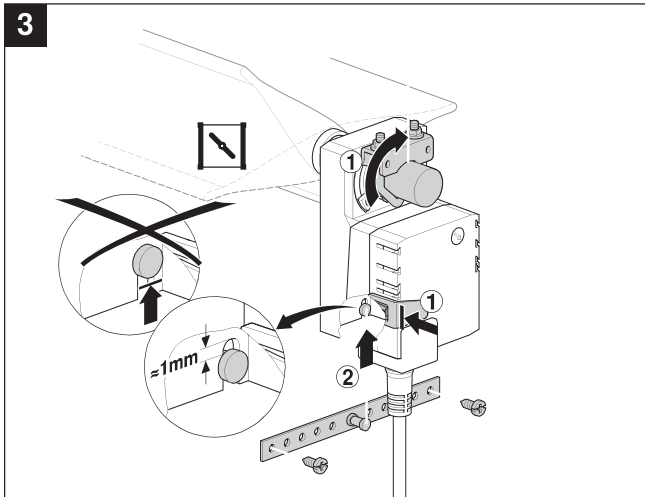
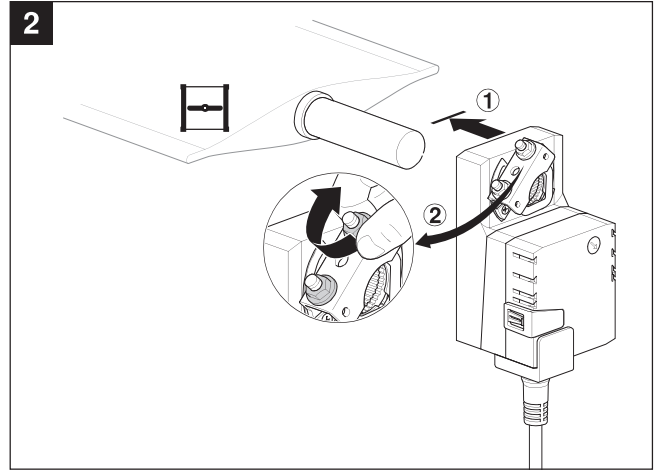
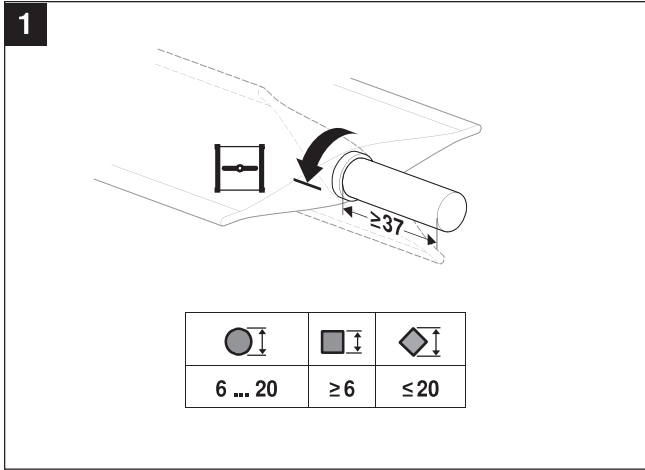
Dimensions [mm]

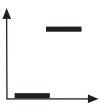
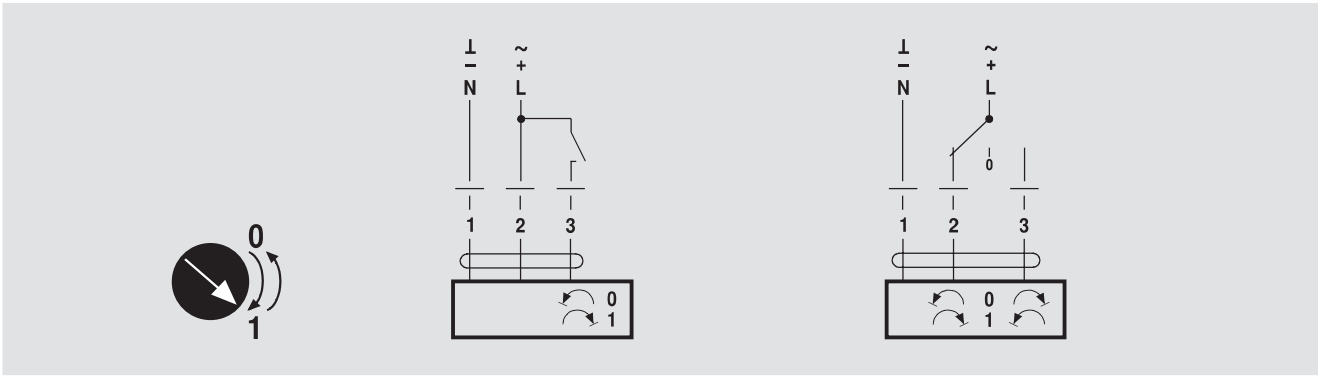
Dimensional drawings



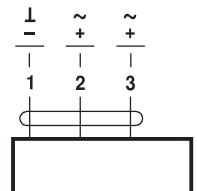
| Damper spindle | Length |  |
|----------------|---------|---|
| | min, 37 | 6 ... 20 |

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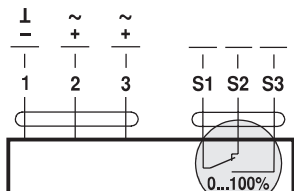




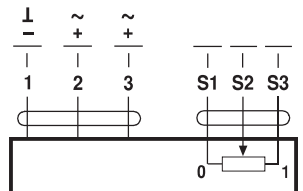
AC 24 V / DC 24 V
DC 48 ... 110 V (LM72A..) ⚠



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

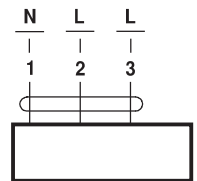


LM24A-S.. TMC24A-S..
LM72A-S..

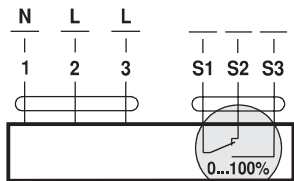


LM24AP5..

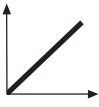
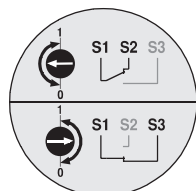
AC 100 ... 240 V ⚠



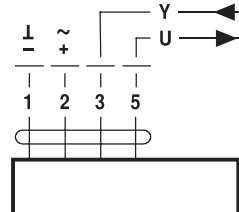
LM230A.. LMC230A..
TMC230A..



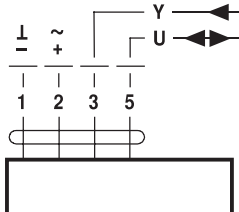
LM230A-S.. TMC230A-S..



AC 24 V / DC 24 V

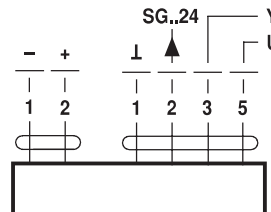


LM24A-SR.. LMC24A-SR..
LM24A-MF.. TMC24A-SR..



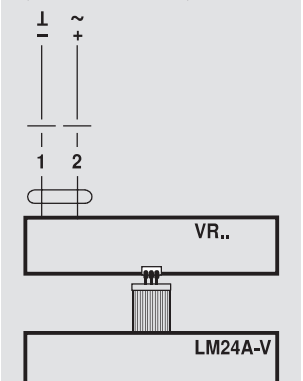
LM24A-MP..

DC 48 ... 110 V (LM72A-SR..) ⚠



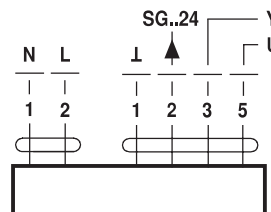
LM72A-SR..

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



LM24A-V / VR..

AC 100 ... 240 V ⚠



LM230ASR.. TMC230ASR..