

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

- For air dampers up to approx. 0.4 m<sup>2</sup>
- Torque 2 Nm
- Nominal voltage AC 100 ... 240 V
- Control: Open-close or 3-point



### Type overview

| Type    | Direction of rotation   |
|---------|-------------------------|
| CM230-L | counter-clockwise (ccw) |
| CM230-R | clockwise (cw)          |

### 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 1 W<br>For wire sizing 3 VA                                                      |
|                            | Connection                              | Cable 1 m, 3 x 0.75 mm <sup>2</sup>                                                                                             |
| <b>Functional data</b>     | Torque (nominal torque)                 | Min. 2 Nm @ nominal voltage                                                                                                     |
|                            | Direction of rotation                   | See «Type overview»                                                                                                             |
|                            | Manual override                         | Gear disengagement with magnet                                                                                                  |
|                            | Angle of rotation                       | Without limit Endless<br>With limit Fixed 315°↔ or 0 ... 287.5°↔ with mechanical end stops, can be adjusted in 2.5°↔ increments |
|                            | Running time                            | 75 s / 90°↔                                                                                                                     |
|                            | Sound power level                       | Max. 35 dB (A)                                                                                                                  |
|                            | Position indicator                      | Mechanical, pluggable<br>(with integrated magnet for gear disengagement)                                                        |
| <b>Safety</b>              | Protection class                        | II totally insulated <input type="checkbox"/>                                                                                   |
|                            | Degree of protection                    | IP54 in any mounting position<br>NEMA2, UL Enclosure Type 2                                                                     |
|                            | EMC                                     | CE according to 2004/108/EC                                                                                                     |
|                            | Low voltage directive                   | CE according to 2006/95/EC                                                                                                      |
|                            | Certification                           | cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02<br>Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14   |
|                            | Mode of operation                       | Type 1 (EN 60730-1)                                                                                                             |
|                            | Rated impulse voltage                   | 2.5 kV (EN 60730-1)                                                                                                             |
|                            | Control pollution degree                | 3 (EN 60730-1)                                                                                                                  |
|                            | Ambient temperature                     | -30 ... +50 °C                                                                                                                  |
|                            | Non-operating temperature               | -40 ... +80 °C                                                                                                                  |
| Ambient humidity           | 95% r.H., non-condensating (EN 60730-1) |                                                                                                                                 |
| Maintenance                | Maintenance-free                        |                                                                                                                                 |
| <b>Dimensions / Weight</b> | Dimensions                              | See «Dimensions» on page 2                                                                                                      |
|                            | Weight                                  | Approx. 220 g                                                                                                                   |

### Safety notes



- The actuator is not allowed to be used outside the specified field of application, especially 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.

**Safety notes**

(Continue)

- 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 ( $\varnothing$  6 ... 12.7 mm). The actuator is then secured with the anti-rotation strap supplied, to prevent it from rotating.
- Manual override** Manual override with magnet possible (the gear is disengaged as long as the magnet adheres to the symbol ⊕). The magnet for gear disengagement is integrated in the position indicator.
- 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.

**Electrical installation**

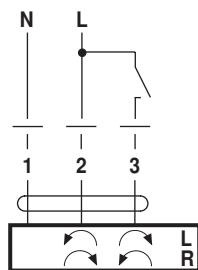
**Wiring diagrams**

**Notes**

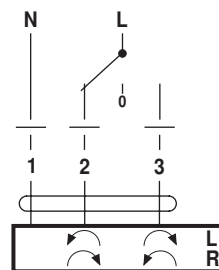
- Caution: Power supply voltage !
- Other actuators can be connected in parallel. Please note the performance data.



**Open-close control**

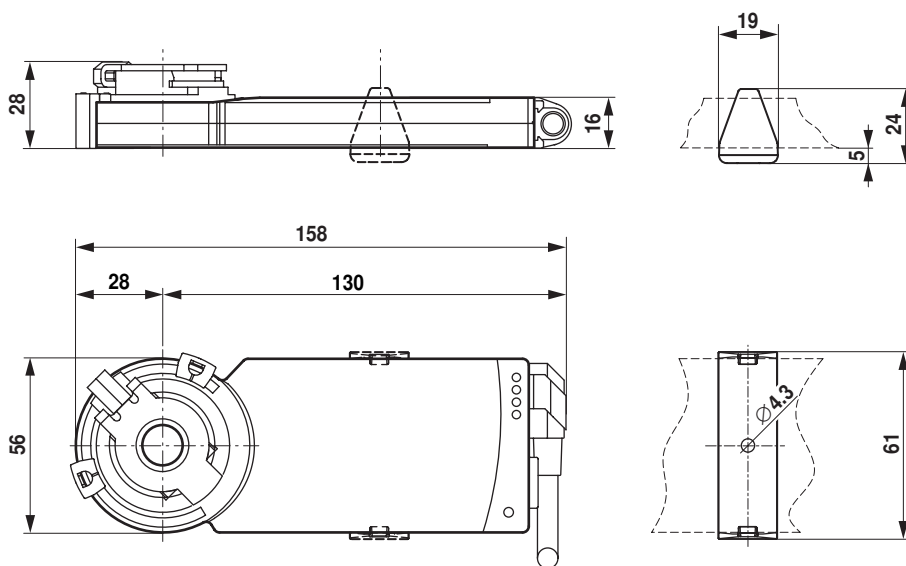



**3-point control**



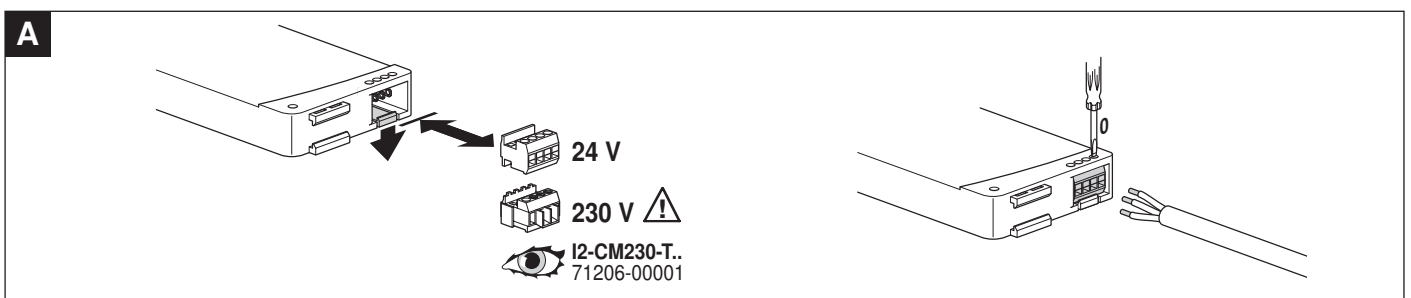
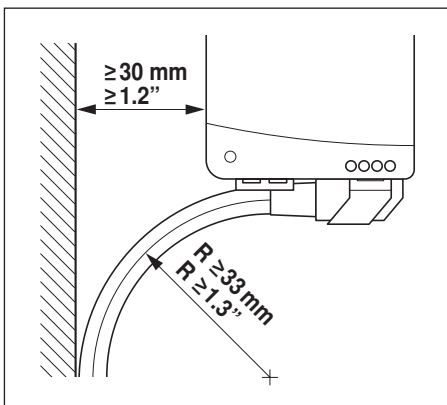
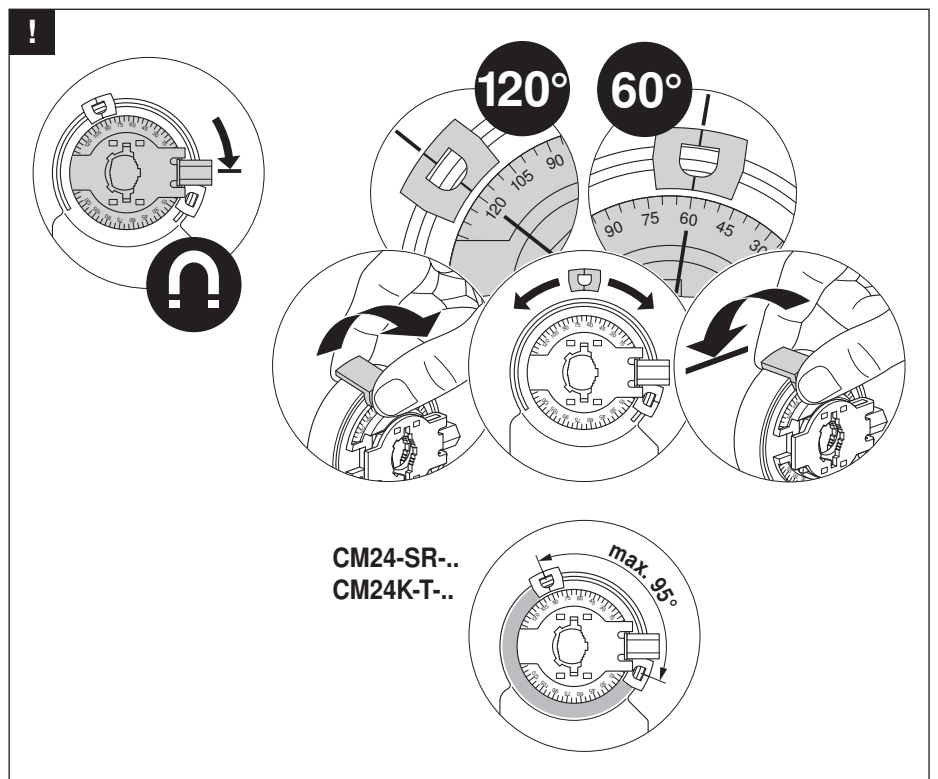
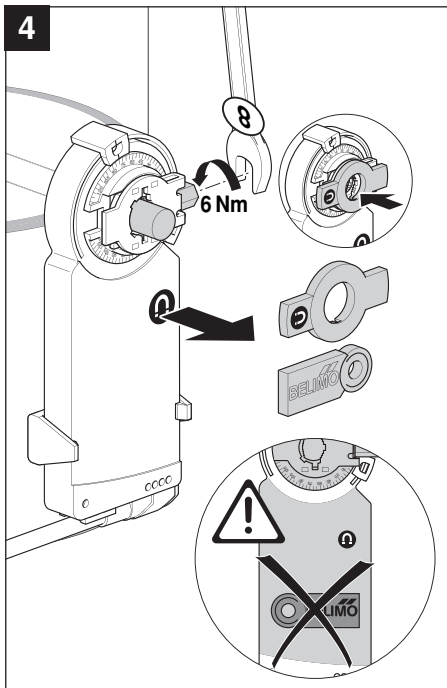
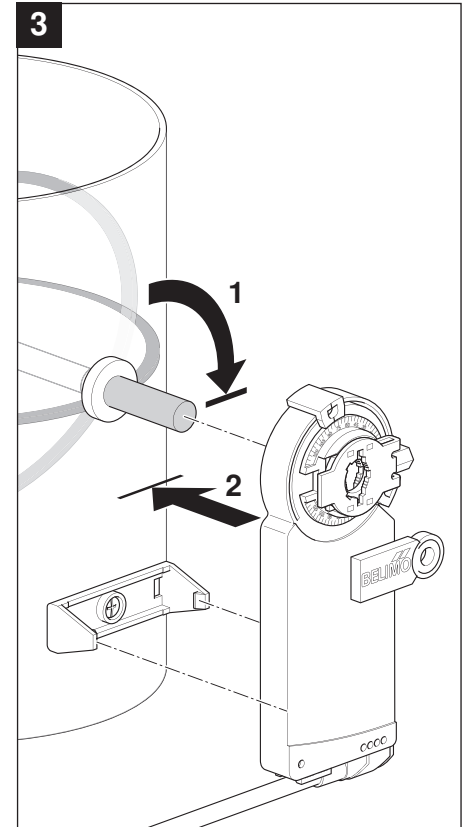
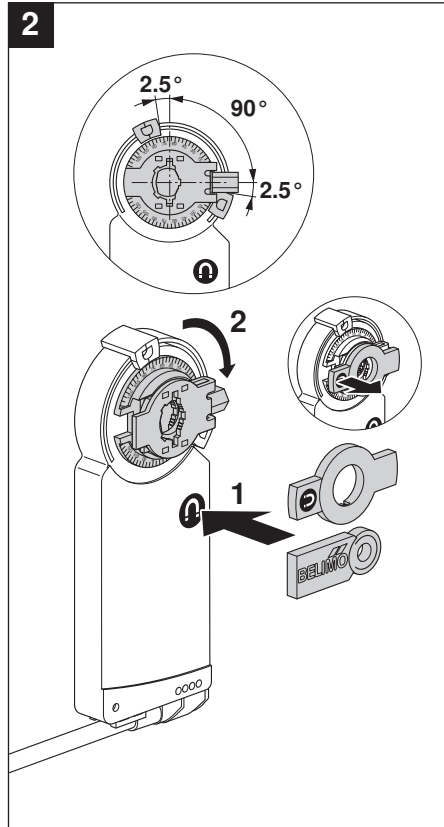
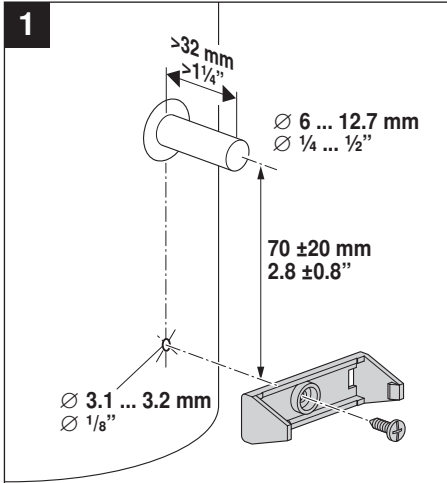
**Dimensions [mm]**

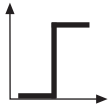
**Dimensional drawings**



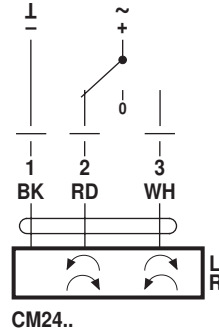
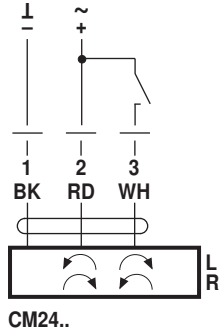
| Damper spindle | Length |  |
|----------------|--------|-------------------------------------------------------------------------------------|
|                | ≥32    | 6 ... 12.7                                                                          |

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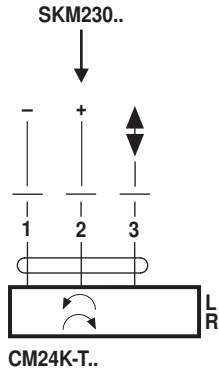




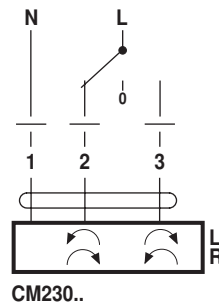
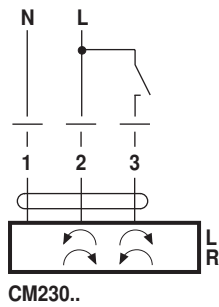
AC 24 V / DC 24 V



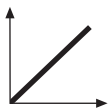
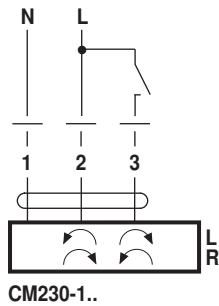
DC 24 V  
(SKM230..)



AC 100 ... 240 V ⚠



AC 230 V ⚠



AC 24 V / DC 24 V

