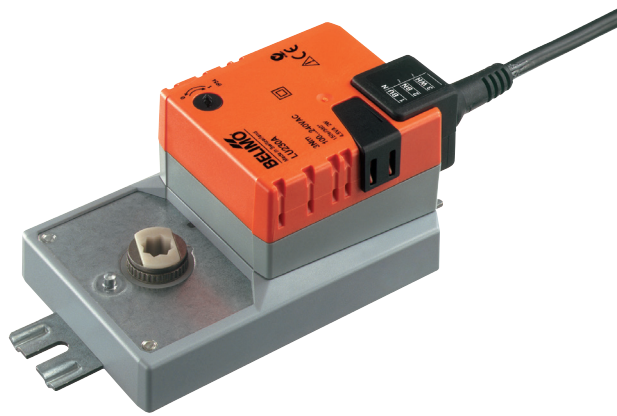


Full-rotation actuator for adjusting dampers and disks in technical building installations

- Air damper size up to approx. 0.6 m<sup>2</sup>
- Nominal torque 3 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- Spindle driver Form fit 12 mm or 8 mm (with insert)


**Technical data**

|                           |  |   |
|---------------------------|--|---|
| <b>Electrical data</b>    | Nominal voltage                        | AC 230 V  |
|                           | Nominal voltage frequency              | 50/60 Hz  |
|                           | Nominal voltage range                  | AC 85...265 V   |
|                           | Power consumption in operation         | 2 W   |
|                           | Power consumption in rest position     | 1 W   |
|                           | Power consumption for wire sizing      | 4 VA  |
|                           | Connection supply / control            | Cable 1 m, 3 x 0.75 mm <sup>2</sup>                                   |
|                           | Parallel operation                     | Yes (note the performance data)                                       |
| <b>Functional data</b>    | Torque motor                           | Min. 3 Nm   |
|                           | Direction of motion motor              | Selectable with switch 0 (ccw rotation) / 1 (cw rotation)             |
|                           | Manual override                        | Gear disengagement with push-button, can be locked                    |
|                           | Angle of rotation                      | ∞   |
|                           | Angle of rotation note                 | Endless (adjustable 0...330° with angle of rotation limiter ZDB-LU)   |
|                           | Running time motor                     | 150 s / 360°  |
|                           | Sound power level motor                | 45 dB(A)  |
|                           | Spindle driver                         | Form fit 12 mm or 8 mm (with insert)                                  |
| <b>Safety</b>             | Protection class IEC/EN                | II Protective insulated   |
|                           | Protection class UL                    | II Protective insulated   |
|                           | Degree of protection IEC/EN            | IP54  |
|                           | Degree of protection NEMA/UL           | NEMA 2, UL Enclosure Type 2   |
|                           | EMC                                    | CE according to 2004/108/EC   |
|                           | Low voltage directive                  | CE according to 2006/95/EC  |
|                           | Certification IEC/EN                   | IEC/EN 60730-1 and IEC/EN 60730-2-14                                  |
|                           | Certification UL                       | cULus according to UL 60730-1A, UL 60730-2-14 and CAN/CSA E60730-1:02 |
|                           | Mode of operation                      | Type 1  |
|                           | Rated impulse voltage supply / control | 4 kV  |
|                           | Control pollution degree               | 3   |
|                           | Ambient temperature                    | -30...50 °C   |
| Non-operating temperature | -40...80 °C                            |   |
| Ambient humidity          | 95% r.h., non-condensing               |   |
| Maintenance               | Maintenance-free                       |   |
| <b>Weight</b>             | Weight                                 | 0.63 kg   |

**Safety notes**


- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea)water, snow, ice, insolation or aggressive gases interfere directly with the actuator and that is ensured that the ambient conditions remain at any time within the thresholds according to the data sheet.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

**Safety notes**

- 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.
- Mechanical interfaces which are not expressly provided by Belimo for this actuator must not be attached.
- Cables must not be removed from the device.
- To calculate the torque required, the specifications supplied by the damper manufacturers concerning the cross-section, the design, the installation site and the ventilation conditions must be observed.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

**Product features**

- Simple direct mounting** Form-fit direct mounting on a 12 mm or 8 mm damper spindle (with insert). The actuator can also be optionally equipped with a 10 mm form fit or an 8...12 mm clamp (see «Accessories»).
- Manual override** Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).
- High functional reliability** The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
- Adjustable angle of rotation** The angle of rotation of the full-rotation actuator can be adjusted in 10° increments between 0 and 330° with angle of rotation limiter ZDB-LU.

**Accessories**

|                               | Description  | Type     |
|-------------------------------|--|----------|
| <b>Mechanical accessories</b> | Spindle clamp LU.. for clamping range 8...12 mm          | K-LU     |
|                               | Angle of rotation limitation LU.., with scaling 0...330° | ZDB-LU   |
|                               | Form fit insert 10x10 mm, for LU..                       | ZF10-LUA |

**Electrical installation**

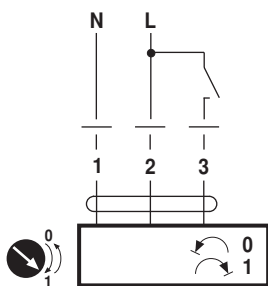


**Notes**

- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.

**Wiring diagrams**

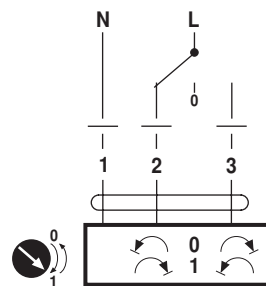
AC 230 V, open-close



**Cable colours:**

- 1 = blue
- 2 = brown
- 3 = white

AC 230 V, 3-point



**Cable colours:**

- 1 = blue
- 2 = brown
- 3 = white

**Dimensions [mm]**

**Spindle length**

|  |         |
|--|---------|
|  | Min. 20 |
|  | -       |

**Clamping range**

|  |    |
|--|----|
|  | 8  |
|  | 12 |

**Dimensional drawings**

