

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/DC 24 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/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 19.2...28.8 V
	Power consumption in operation	1 W
	Power consumption in rest position	0.5 W
	Power consumption for wire sizing	2.5 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	III Safety extra-low voltage
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/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	0.8 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.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- 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**

- 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>Electrical accessories</b>	Positioner for wall mounting, range 0...100%	CRP24-B1
<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

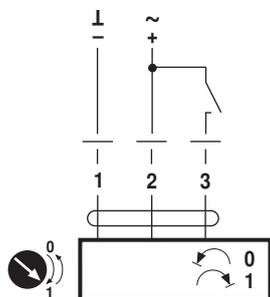
**Electrical installation**

**Notes**

- Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.

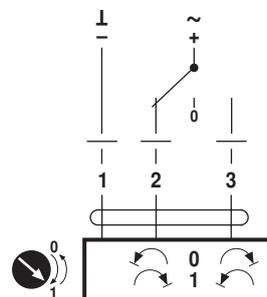
**Wiring diagrams**

AC/DC 24 V, open-close



**Cable colours:**  
 1 = black  
 2 = red  
 3 = white

AC/DC 24 V, 3-point



**Cable colours:**  
 1 = black  
 2 = red  
 3 = white

**Dimensions [mm]**

**Spindle length**

	Min. 20
	-

**Clamping range**

	8
	12

**Dimensional drawings**

