# **BELIMO**

#### Rotary actuator for zone valves

- Torque motor 1 Nm
- Nominal voltage AC 100...240 V
- Control Open/close, 3-point
- Snap-assembly of the actuator
- Flow setting variable
- Running time motor 35 s



#### **Technical data**

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Nominal voltage	AC 100240 V	
Nominal voltage frequency	50/60 Hz	
Nominal voltage range	AC 85264 V	
Power consumption in operation	1 W	
Power consumption in rest position	0.7 W	
Power consumption for wire sizing	2 VA	
Connection supply / control	Cable 1 m, 3 x 0.75 mm <sup>2</sup>	
Parallel operation	Yes (note the performance data)	

#### **Functional data**

1 Nm	
with actuator (clicked out)	
35 s / 90°	
43 dB(A)	
Yes	
see product features	

#### Safety data

Protection class IEC/EN	II, reinforced insulation	
Degree of protection IEC/EN	IP40	
EMC	CE according to 2014/30/EU	
Low voltage directive	CE according to 2014/35/EU	
Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14	
Mode of operation	Type 1	
Rated impulse voltage supply / control	2.5 kV	
Pollution degree	2	
Ambient temperature	540°C	
Storage temperature	-4080°C	
Ambient humidity	Max. 95% RH, non-condensing	
Servicing	maintenance-free	
Weight	0.22 ka	

#### Weight

/eight	
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#### Safety notes



- This device has been designed for use in stationary heating, ventilation and air-conditioning
  systems and must not be used outside the specified field of application, especially 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 device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- · Caution: Power supply voltage!
- 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.
- Cables must not be removed from the device.
- 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

Tool-free snap assembly.

The actuator can be plugged on the valve by hand (Caution! Just vertical movements). Pins must match the holes on the flange.

The mounting orientation in relation to the valve can be selected in 180° increments. (Possible two times)

Manual override

Click out the actuator and rotate the valve stem with the help of the actuator.

Adjustable angle of rotation

The angle of rotation of the actuator can be changed by clip in 2.5° increments. This is used to set the maximum flow rate of the valve.

High functional reliability

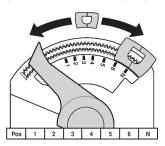
The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

Flow setting

Adjustable kv-values (C2..Q-.., C4..Q-..) / V'max-values (C2..QP(T)-..) are given in the respective zone valve data sheets.

2-way valve: Remove end stop clip and place at desired position.

3-way valve: Remove end stop clip (change-over application).



#### Accessories

Mechanical accessories

Description	Туре
End stop clip, Multipack 20 pcs.	Z-ESCM
Spindle extension CQ	ZCQ-E
Housing cover CQ, Colour: RAL-white	ZCQ-W

#### **Electrical installation**



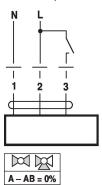
Caution: Power supply voltage!

Parallel connection of other actuators possible. Observe the performance data.

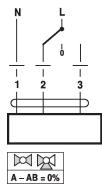


#### Wiring diagrams

AC 230 V, open/close



AC 230 V, 3-point



#### Cable colours:

1 = blue

2 = brown

3 = white

## Dimensions

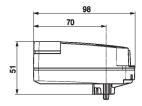
#### **Dimensional drawings**

Cable colours:

1 = blue

2 = brown

3 = white





### **Further documentation**

- The complete product range for water applications
- Data sheet for zone valves
- Installation instructions for zone valves and actuators
- General notes for project planning