

# **Technical data sheet**

### Rotary actuator for zone valves

- Torque motor 1 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- · Snap-assembly of the actuator
- Flow setting variable
- only for DN 20 Zone valves C..20Q-.., C..20QFL-..
- · Running time motor 15 s



### **Technical data**

Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 207253 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	Torque motor	1 Nm
	Manual override	with actuator (clicked out)
	Running time motor	15 s / 90°
	Sound power level, motor	55 dB(A)
	Position indication	Yes
	Flow setting	see product features
Safety	Protection class IEC/EN	Il 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
	Control pollution degree	2
	Ambient temperature	540 °C
	Non-operating temperature	-750 °C
	Ambient humidity	Max. 95% r.h., non-condensing
	Maintenance	Maintenance-free
Weight	Weight	{733}

#### Safety notes

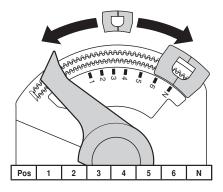


• This device has been designed for use in stationary heating, ventilation and air conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.

- Outdoor application: only possible in case that no (sea)water, snow, ice, insolation
  or aggressive gases interfere directly with the 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.
- 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.

CQD230A-20	Rotary actuator (ZoneTight), Open-close, 3-point, AC 230 V, 1 Nm	BELIMO
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 (C2Q, C4Q) are given in the respectiv sheets.	e zone valve data

2-way valve: Remove end stop clip and place at desired position.3-way valve: Remove end stop clip (change-over application).

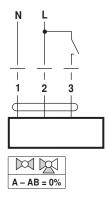


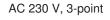
Accessories

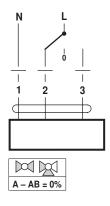
	Description	Туре
Mechanical accessories	Spindle extension CQ, for cooling applications only	ZCQ-E
	Housing cover white	ZCQ-W
Electrical installation		
Notes	<ul> <li>Notes</li> <li>Caution: Power supply voltage!</li> <li>Parallel connection of other actuators possible. Observe the performance data.</li> </ul>	

## Wiring diagrams

AC 230 V, open-close









- 1 = blue2 = brown
- 3 = white

Cable colours:

1 = blue

2 = brown

3 = white

Rotary actuator (ZoneTight), Open-close, 3-point, AC 230 V, 1 Nm



Installation notes		
Maintenance	Ball valves and rotary actuators are maintenance-free. Before any service work on the final controlling device is carried out, it is essential to isolate the rotary actuator from the power supply (by unplugging the electrical cable if necessary). Any pumps in the part of the piping system concerned must also be switched off and the appropriate slide valves closed (allow all components to cool down first if necessary and allways reduce the system pressure to ambient pressure level). The system must not be returned to service until the ball valve and the rotary actuator have been correctly reassembled in accordance with the instructions and the pipeline has been refilled by professionally trained personnel.	
Dimensions [mm]		
	Dimensional drawings	

### **Further documentation**

- Overview Valve-actuator combinations
- Data sheet for zone valves

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· Installation instruction for zone valves and actuators

General notes for project planning

www.belimo.com