

## Belimo Energy Manifold for heating and cooling applications

The combination of stainless steel manifolds and the proven Belimo ball valves not only offers quality and reliability at the highest level. Coupled with a wide range of motorisation solutions, completely new possibilities are available in the planning of surface heating and cooling. In addition, clogged and leaking valves are now a thing of the past.

- Suitable for heating and cooling applications
- Proven ball valve technology for optimised control characteristics
- Durable and maintenance-free actuator technology
- Quick and easy installation
- Suitable for all common manifold cabinets



## Energy manifold with great added value.

### Order, unpack, connect

With our energy distributor, we not only ensure optimum control behaviour, but with our actuator-valve combination, we are breaking new ground in the application field of surface heating and cooling. On request, we deliver our components pre-assembled, with the correct cable length, a matching plug and the desired parametrisation – for quick installation and commissioning on site.

## Low energy consumption

In the past, manifolds were equipped with electro-thermal linear globe valve actuators. These actuators had to be permanently energised to perform their function in temperature control mode. Thanks to the use of a Belimo ball valve with rotary actuator, the energy requirement can be reduced to a minimum.

Even without the actuator attached, the position of the ball does not change. This means that no holding torque is necessary to maintain the valve position. Once the set position has been reached, the power consumption can therefore be reduced drastically (to 0.2 W), resulting in a significant reduction in ongoing operating costs. Throughout the entire life cycle, this means considerable energy and cost saving potential.

#### THE FOLLOWING ADVANTAGES ARE OFFERED:

- Low energy consumption
- No energy loss at zero load (absolute tightness)
- No sticking, maintenance-free, operation reliability
- High control stability and reduced oscillating tendency
- Simple and fast assembly
- Customised solutions
- Integration into building management system possible



## **Absolute tightness**

The tight-closing valve of the Belimo Energy Manifold reliably prevents internal leakage in the closed supply and thus unwanted energy loss at zero load. By using the Belimo energy manifold with ball valve technology, less energy is consumed and operating costs can be significantly reduced.

The unique design of the characterised valve prevents contamination deposits. This ensures reliable distribution of the cooling or heating energy even after longer standstill periods.



## Simple and quick mounting

The manifold can be mounted quickly and easily with a click system without any tools.

Our actuators can also be mounted on the characterised control valves without tools using the click system. On request, the actuators are already equipped with plugs and connected directly to the Belimo connection box.



## **Communicative actuator technology**

Connectivity has always been an important feature of our products. Our actuators support all common building automation communication protocols.



## **Application-specific configuration**

These days, challenges in planning and on the construction site are difficult to solve using standard products, which is why customer-specific solutions are becoming increasingly important. With our modular Belimo Energy Manifold, we can cover a wide range of requirements, saving you time and money.



# **Energy manifold** at a glance.

#### **Manifolds**

Туре	Number of zones	Flow meter	Connection
EM-ECQ-02F	2		
EM-ECQ-03F	3	-	
EM-ECQ-04F	4	-	
EM-ECQ-05F	5	-	
EM-ECQ-06F	6	05 l/min	G 1" ISO 228 G 3/4" Euro cone
EM-ECQ-07F	7		
EM-ECQ-08F	8		
EM-ECQ-09F	9	-	
EM-ECQ-10F	10	-	
EM-ECQ-11F	11	-	
EM-ECQ-12F	12	-	

#### **Actuators**

Туре	Open/close	Modulating	Fail-safe	Commu-   nicative	Nominal voltage
CQ230A	•				230 V
CQ24A	•				24 V
CQ24A-SR		•			24 V
CQ24A-MPL		•		•	24 V
CQ24A-BAC		•		•	24 V
CQK24A	•		•		24 V
CQK230A	•		•		230 V
CQK24A-SR		•	•		24 V
CQK24A-MPL		•	•	•	24 V

#### **Distribution box**

Туре	Dimensions [mm] (width x height x depth)
Z-EM-C600	600 x 842 x 110 mm
Z-EM-C750	750 x 842 x 110 mm
Z-EM-C900	900 x 842 x 110 mm
Z-EM-C1050	1050 x 842 x 110 mm
Z-EM-C1200	1200 x 842 x 110 mm

### **Accessories**

Designation	Туре	Number of zones	Alignment	Suitable for TEM*
Connection box (electr.)	Z-EM-CB230T	26	-	
	EXT-TT-1A	_	90°	
Connectors	EXT-TT-1B	-	straight	
	EXT-TT-1C	-	90°	•
	EXT-TT-1D	-	straight	•

<sup>\*</sup>Thermal Energy Meter

