System solutions for individual room comfort

Room temperature controller CR24
Individual comfort with Belimo actuators and single room controllers for air, water and combined systems

The new room temperature controllers CR24:
The easy way to provide room comfort

More comfort – less consumption. An optimum room temperature promotes the users’ health, comfort and ability to work. The output of room heaters, variable volume control and ventilation systems as well as chilled ceilings etc. must be adjustable – regardless of the installed technology – to the external conditions and the requirements of individual rooms. This is made possible by modern single room controllers such as the new CR24 from Belimo.

Suitable system solutions from a single source. The technology and functionality of the new CR24 series room temperature controllers are perfectly adapted to the Belimo actuators for motorized air and water control devices, that have been proven a million times over. As part of an overall system, they help to implement economically optimized stand-alone solutions for individually controlling the room climate and reducing energy consumption.
**Optimized functionality for easy handling**

A variety of uses. Thanks to their flexible design, the CR24 controllers can be used practically anywhere – with VAV units, radiators, air heaters/coolers, heated/chilled ceilings or combined systems. Depending on the requirements, the CR24 range supports applications with up to three output frequencies. The required functions and setpoints can be easily adjusted with a screwdriver and entered on the label.

Innovative service functions. Optimized features make it easier to put the CR24 controllers into service. The control circuit of the entire unit is checked with a special test function – independently of the current room temperature. Integrated sockets make it possible to connect the Belimo PC-Tool for the field devices: Adjustment and control work can therefore be carried out via a laptop, and trend recordings and commissioning certificates can be automatically generated.
Cost savings in planning, installation and operation

**Planning/Engineering**

For specifications, planning and engineering, Belimo provides complete application descriptions with a connection diagram, input and output assignment, pictorial schematic, functional description and diagram as well as adjustment and options.

The documents serve as installation instructions for electricians and system technicians as well as the complete plant documentation for the project handover.

**Ordering/Installation**

There are three basic types available, with one to three output sequences.

For larger projects, the room controllers CR24 can be ordered in a modular form:
- Wall socket for assembly and connection
- Protected p.c.b. unit with different functions and cover with or without user interface (if desired, in different colors).

Covers and rotary knobs are also available individually so that they can be replaced or the color adapted if necessary.

**Commissioning**

The open design of the CR24 controllers simplifies the project-specific commissioning of a controller that is already in operation. Various test functions are available for this purpose, such as:
- The function test with integrated voltage display makes it possible to test the 24 V supply without a measuring instrument.
- In commissioning mode, the available control sequences are run through. In this way, the control devices can be tested dynamically – i.e. independently of the room temperature – directly from the easily accessible room controller.
- The direct access to the terminals simplifies the testing of the control and voltage levels.

**Testing and maintenance via the Belimo PC-Tool**

The CR24 controllers are equipped with sockets for connecting the Belimo tools for VAV controllers and actuators with Multi-Function Technology (MFT). The PC-Tool makes it possible to adjust the setting of the control devices via a laptop, directly from the room controller, record trend data etc. Time-consuming searching in the intermediate ceiling for the respective control devices and complicated opening/closing of ceilings etc. are eliminated.

**Operation**

The simple operating concept allows users to adjust the room temperature according to their requirements.

The functionality and room comfort can be increased by integrating additional sensors, motion detectors, window switches etc.

A demand driven room solution also makes it possible to reduce the energy consumption.

**Further information**

[www.belimo.ch](http://www.belimo.ch)
Simple operation with a clear design

**User-friendly in every situation.** The CR24 controllers can be easily operated by any room user. The status (MAX/ECO/AUTO) is selected with the mode selector by pushing the button; setpoints are corrected using the gradual control rotary knob. The versatile control functions run – without burdening the users – in the background. For rooms that are open to the public (public buildings, schools etc.) versions without a user interface are available.

**Interior design-friendly.** Room temperature sensors are visible elements and thus part of the interior design. The CR24 controllers have a modern, functional design. For large series, the color of the covers can also be adapted to the room design upon request. Surface and flush-mounted connections can be implemented with the same housing. This allows the controllers to be integrated in the room environment to be discrete and pleasing to the eye.
Innovation, Quality and Consultancy:
A partnership for motorizing HVAC actuators

Contact the following for further information: