



Success Story

Emch+Berger ImmoConsult AG, Zürich (CH)

Good indoor air and individual, hassle-free room control with IoT support.

Optimised energy consumption and permanent energy monitoring thanks to Belimo Cloud.

Emch+Berger ImmoConsult AG is a company of the Emch+Berger Group, which was founded in 1953. Its subsidiaries across Switzerland offer services for planning, consultation and management of real estate.

In late 2020, the company acquired new office space on Seebahnstrasse in Zurich. Thanks to the complete, newly installed ventilation and cooling systems, employees can look forward to a comfortable room climate.

The project was planned by Emch+Berger ImmoConsult AG, and Hiltag AG from Bäretswil was the system integrator.

BUILDING TYPE

Commercial buildings

PROJECT

Renovation

FACILITIES

Electric, ventilation, air conditioning, sanitation (heating: existing radiators)

PRODUCTS

Room sensors, 2-way characterised control valves with IoT rotary actuators, condensation sensors, IoT-enabled electronic differential pressure valve EDPV (pilot series model)

BELIMO[®]

Optimum solution for zones with easy Ethernet installation.

Belimo IoT-enabled HVAC components were used in this project. The installation was solved by a simple standard Ethernet cabling that connects the actuators to the network. This solution enables the components to be connected with the building automation system through a single transfer point.

Internet of Things (IoT) was an important part of project planning and implementation. Marco Spenger, manager on the part of Emch+Berger ImmoConsult AG (EBIC) comments: «We wanted to create a modern controller including IoT. In doing so, we realised that the market often talks about IoT, but in the area of standard building automation and control, there's not a lot of experience available in connection with IoT.»

Optimum transparency thanks to the Belimo Cloud.

The actuators of the cooling distribution are not only connected to the internal network, but also simultaneously transmit operational data to the digital twin in the Belimo Cloud. This means that at EBIC, it's now possible to monitor the energy consumption of the chilled ceiling and to double-check consumption against property management invoices.

Furthermore, the used Belimo 2-way characterised control valves guarantee low operational costs. The room sensors of the ventilation control can also be used for the chilled ceilings, where available. «A «heating-cooling» lock has been installed in the Hiltag controller, and the use of the Belimo characterised control valves allows an efficient cooling distribution,» adds Marco Spenger.



The 2-way characterised control valve with IoT rotary actuator which the condensation sensor is directly connected to, enables very easy integration into the controller.



«Belimo sales support was top-tier! Every question was answered as fast as possible.»

Marco Spenger, project manager at Emch+Berger ImmoConsult AG

Belimo room units fit in seamlessly.

The 22RTM-19-1 Belimo room units impress with their aesthetic, timeless design and a depth of only 22mm. They can be integrated seamlessly into existing controllers from third-party manufacturers, as well as into zone control through the Hiltag controller.

«We were absolutely convinced by the design of the Belimo room sensors. Additionally, the device is equipped with reliable MP-bus technology, so it was possible to connect it with existing VAV units on-site,» says Spenger. The integrated NFC interface allows to check the room sensor values with smartphones.

IoT is becoming increasingly important.

For customers, it is essential that the field devices can be seamlessly integrated into control systems. Belimo is applying this knowledge to all of its IoT product lines. Customers own the data from their devices and can freely analyse, use, and even delete the information as they want. This is why Belimo provides an open interface to all authorised users by the customer, free of charge.

Marco Spenger continues: «We wanted to gain experience in including IoT. We have certainly succeeded in this. This was a good pilot project for all involved. It has shown that for future projects it will become more and more important across all involved business areas, including the Information Communications Technology (ICT).»



Thanks to the Belimo Assistant App, the sensor values can be easily read via NFC.



The electronic differential pressure valve EDPV is a control valve that ensures constant inlet pressure in the zones' ring pipes and communicates with the Belimo Cloud as IoT components.



The 22RTM-19-1 room sensor measures CO₂, humidity and temperature. The sensor reacts extremely quickly to temperature changes thanks to its advanced technology.

All inclusive.

Belimo as a global market leader develops innovative solutions for the controlling of heating, ventilation and air-conditioning systems. Actuators, valves and sensors represent our core business.

Always focusing on customer added value, we deliver more than only products. We offer you the complete product range for the regulation and control of HVAC systems from a single source. At the same time, we rely on tested Swiss quality with a five-year warranty. Our worldwide representatives in over 80 countries guarantee short delivery times and comprehensive support through the entire product life. Belimo does indeed include everything.

The "small" Belimo devices have a big impact on comfort, energy efficiency, safety, installation and maintenance.

In short: Small devices, big impact.



5-year warranty



On site around the globe



Complete product range



Tested quality



Short delivery times



Comprehensive support



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