

Intelligent Valve from Siemens maximizes flexibility and efficiency of HVAC plants

- **Direct integration into Building Operator for control, alarming and energy reporting**
- **Expanded product range now available as 3-port valve**
- **New features such as Delta-T limitation control, make it possible to optimize plants with chillers and reduce consumption**

The self-optimizing and dynamic Intelligent Valve from Siemens Smart Infrastructure has become more versatile, thanks to new features and applications for heating groups and air handling units. The device controls the flow, measures temperature and output and automatically adjusts the valve settings to the heat exchanger. The Intelligent Valve is connected to the cloud and now, for the first time, directly integrated into Building Operator, the Siemens cloud application for the remote monitoring of buildings. This makes it possible to control the Intelligent Valve and adjust its settings anytime and anywhere. For increased flexibility, the product range has been expanded to include 3-port valves, which allow variable-temperature and constant-flow control of the water supply (mixed circuits). New features such as Delta-T (ΔT) limitation control, differential pressure and flow temperature control ensure smooth and energy-efficient HVAC plant operation and enable the Intelligent Valve to be used in even more applications.

WLAN connection for more flexibility

The Intelligent Valve can be commissioned automatically, quickly and safely. The required settings can be downloaded into the Siemens ABT Go app and from there to each valve via wireless LAN. It offers remote access via BACnet-IP using the Siemens ABT Site commissioning tool or via the Internet using the Building Operator app. Thanks to its cloud connection and firmware updates, the Intelligent Valve can

automatically update itself when needed, ensuring its running on the latest version at all times. If the valve registers irregular values, an alarm is triggered in the Building Operator app. In addition, this Siemens cloud app allows users to check the values and create energy reports for documentation purposes.

Efficiency boost during operation

Functionality and usability enhancements make the Intelligent Valve even more efficient. As a 3-port valve, it can now be used in mixed circuits, which offer easy hydronic balancing and require only minimal investments due to the absence of a main pump in the source circuit. A new differential pressure control counteracts pressure fluctuations in zones. In older plants, this allows dynamic hydronic balancing to be upgraded quickly and easily without having to replace all the valves, thus expanding the scope of application of the Intelligent Valve. In new plants, the zones equipped with differential pressure control offer optimized operating conditions for the valves. Using newly-added flow temperature controls and weather-compensated heating circuits, the Intelligent Valve performs automation level tasks and reduces the load on or even eliminates the need for comfort controllers. By reducing the load on comfort controllers, the Intelligent Valve allows more complex plants to be installed at lower investment costs. In situations where comfort controllers are replaced altogether, the Intelligent Valve can perform simple control tasks.

Newly available spacers for the Intelligent Valve ensure improved insulation, for instance, for the flow sensor in cooling applications.

The newly implemented Delta-T (ΔT) limitation control, which is primarily suited for air conditioning units and large fan coil units, offers increased efficiency. This feature limits the temperature difference ΔT across the cooling coil controlled by the Intelligent Valve. As a result, the chiller or the heating pump always operates above the defined ΔT - design, ensuring maximum efficiency and saving electrical energy.

This press release and press pictures are available at <https://sie.ag/2NJaV0p>

For further information on Siemens Smart Infrastructure, please see

www.siemens.com/smart-infrastructure/

For further information on the Acvatix portfolio, please see

www.siemens.com/acvatix and on the intelligent valve

www.siemens.com/intelligentvalve

Contact for journalists

Katharina Sipura

Tel.:+41 796507005; E-Mail: katharina.sipura@siemens.com

Follow us on Twitter:

www.twitter.com/siemens_press and www.twitter.com/SiemensInfra

Siemens Smart Infrastructure (SI) is shaping the market for intelligent, adaptive infrastructure for today and the future. It addresses the pressing challenges of urbanization and climate change by connecting energy systems, buildings and industries. SI provides customers with a comprehensive end-to-end portfolio from a single source – with products, systems, solutions and services from the point of power generation all the way to consumption. With an increasingly digitalized ecosystem, it helps customers thrive and communities progress while contributing toward protecting the planet. SI creates environments that care. Siemens Smart Infrastructure has its global headquarters in Zug, Switzerland, and has around 72,000 employees worldwide.

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. The company is active around the globe, focusing on the areas of intelligent infrastructure for buildings and distributed energy systems, and automation and digitalization in the process and manufacturing industries. Through the separately managed companies Siemens Energy, the global energy business of Siemens, and Siemens Mobility, a leading supplier of smart mobility solutions for rail and road transport, Siemens is shaping the energy systems of today and tomorrow as well as the world market for passenger and freight services. Due to its majority stakes in the publicly listed companies Siemens Healthineers AG and Siemens Gamesa Renewable Energy (as part of Siemens Energy), Siemens is also a world-leading supplier of medical technology and digital healthcare services as well as environmentally friendly solutions for onshore and offshore wind power generation. In fiscal 2019, which ended on September 30, 2019, Siemens generated revenue of €86.8 billion and net income of €5.6 billion. At the end of September 2019, the company had around 385,000 employees worldwide. Further information is available on the Internet www.siemens.com.