

## Johnson Controls accelerates growth in European heat pump market with the launch of two new products

2 years ago



[Johnson Controls](#) has announced the launch of two next-generation industrial heat pumps, YMAE and YCPB, within its [YORK](#) portfolio. These technologies allow Johnson Controls to build on its leading position in the heating industry as Europe transitions away from boilers and fossil energy, aligning with the [EU Heat Pump Action Plan](#).

“With heating and cooling contributing to a significant portion of carbon emissions from buildings, sustainable solutions like heat pumps can be key in combating climate change,” said Deepak Ramesh Bhat, product director for Chillers & Heat Pumps, EMEA and India, Johnson Controls. “Heat pumps are recognised as an efficient, sustainable, and increasingly affordable solution – for both heating and cooling – and can be critical in supporting Europe’s transition toward a cleaner, greener and more resilient and secure energy future. The introduction of these two new products reinforces Johnson Controls’ commitment to this goal.”

The YMAE and YCPB are Air Sourced Heat Pumps designed for light commercial operations such as small shopping centres, hospitals, hotels, office buildings and schools, catering to different capacity requirements. Both products use R454B low GWP refrigerant, an eco-friendly refrigerant which has already proved its efficiency within Johnson Controls’ YORK product range, and which anticipates the latest European regulations on F-gases in some heat pumps and air conditioners from as early as 2027.

YMAE – Air-to-Water Inverter Scroll Heat Pump (45-300 kW)

YMAE is a new-generation platform of the award-winning Amichi series. It is designed to feature state-of-the-art heat pump technologies to deliver best-in-class energy efficiency and a wider operation range to match the toughest European climate conditions.

YMAE is optimised with the combination of an inverter scroll compressor, EC fans and a York Smart control system to adjust capacity output to changes in building load. It boasts increased seasonal efficiencies up to 4.06 (heating) and 4.72 (cooling) that far exceed stringent regulatory requirements and current industry levels. In addition, the Enhanced Vapor Inject (EVI) system is designed to enable YMAE to function at ambient temperatures down to -25 °C and up to 60 °C hot water – surpassing traditional heat pumps which can achieve -15 °C and 55 °C at best.

The first 130kW will be available in the second quarter of 2024, followed by other model capacity in multiple phases.

YCPB – Large Packaged Air-to-Water Scroll Heat Pump (300-700 kW)

The YCPB unit is specifically designed for low ambient heating solutions thanks to vapour and liquid injection large scroll compressors. It is intended to offer the same extended operating envelope as YMAE (down to -25 °C ambient temperature, up to 60 °C hot water), while ensuring heating capacity, efficiency, and hot water temperature at low ambient.

The YCPB range is designed in two versions, the standard 2-pipe, and the innovative 4-pipe version for simultaneous heating and cooling applications. Both versions offer market-leading SCOP high efficiencies. YCPB units will be available in Europe from the third quarter of 2024.

Johnson Controls has a long-standing history in the heat pump field with more than 50 years of experience using sustainable refrigerants at various temperature operating ranges. The company was the first to market with eco-friendly heat pumps in 1982 and today offers the most extensive portfolio of technology and refrigerants in Europe.

For more information about Johnson Controls and its HVAC products, please visit [https://www.johnsoncontrols.com/en\\_sg/buildings\\_legacy-back-up/air-conditioning-systems](https://www.johnsoncontrols.com/en_sg/buildings_legacy-back-up/air-conditioning-systems)