**Under the motto “Leading air technology into the next era”, ebm-papst will be presenting its latest developments for ventilation, air conditioning, refrigeration and heat pump technology at Stand 341 in Hall 4A at Chillventa in Nuremberg (October 8 to 10, 2024).**

**Digital solutions generate added value**

One particular focus is on digital solutions and their data-based added value, focusing three digital services: Demand-Controlled Ventilation (DCV), Vibration Analysis and Heat Exchanger Clogging Detection. Demand-Controlled Ventilation concerns the smart, demand-controlled operation of EC fans. This means they can be adapted to the ambient air quality or the actual air volume required. Vibration Analysis focuses on diagnosing undesirable vibrations in fans to increase operational reliability. Heat Exchanger Clogging Detection involves detecting soiling and the predictive cleaning of heat exchangers to prevent unplanned downtime.

**Quiet fans and inverter electronics**

With the AxiTone and AxiEco Plug-in axial fans, ebm-papst has developed powerful and, above all, quiet fans for air-water heat pumps that are also suitable for applications involving flammable refrigerants. As part of the heat pump safety concept, the Mulfingen-based company also supplies suitable compact fans, which ventilate the housing in the event of a leak in the refrigerant circuit, thus preventing the formation of a potentially flammable atmosphere. Moreover, the fans’ new inverter electronics significantly reduce noise and simultaneously increase efficiency.

**New compressor platform – high performance in a small installation space**

ebm-papst is expanding its existing product portfolio with HighSpeed turbo compressors for various air and gas mixtures. All components, from the drive motor to the compressor impeller and the newly developed oil-free high-speed bearings, are coordinated to suit the specific application. Designed as a compact platform solution, individual compressors with an output of 1 to 45 kW can be assembled quickly to process different refrigerants, air and other gas mixtures in oil-free operation, e.g. in heat pumps or refrigeration engineering.

**Active PFC for centrifugal and axial fans**

Where high-performance cooling is required, e.g. in server rooms, use is often made of FanGrids to provide the necessary cooling capacity. However, the parallel operation of multiple EC fans can very quickly lead to the permissible harmonic limit values being exceeded. For this purpose, ebm-papst has come up with a solution where the harmonic filter is already integrated: namely, active PFC (power factor correction). These three-phase electronics with active PFC are used in the RadiCal and RadiPac EC centrifugal fan ranges and in EC axial fans such as AxiBlade. This makes it possible to reduce current peaks by up to 50%, resulting in savings on infrastructure components.

**ebm-papst with expert presentation at Chillventa**

With a view to future efficiency requirements and EU targets, fans are playing an increasingly important role. In a presentation entitled “Ready for the future – the fan for the future”, expert Patrick Stern will introduce the efficient and pressure-resistant AxiEco axial fans as a future-oriented solution, as well as their properties and advantages in a typical refrigeration application. These fans are characterized primarily by their high pressure resistance, and aerodynamic optimizations have made it possible to significantly reduce noise levels.

**Title:** “Ready for the future – the fan for the future”  
**Speaker:** Patrick Stern, Product Manager Axial Fans

**Language:** English

**Date and time:** Tuesday, October 8, 2024, 10:40 to 11:00 a.m.

**Location:** Refrigeration technology technical forum, Hall 7A, Stand 7A-638

More product solutions for various air conditioning and refrigeration technology applications will be on display at the stand. Various functional models will provide visitors with greater insights. You can register for a free trade show ticket at [www.ebmpapst.com/chillventa](http://www.ebmpapst.com/chillventa)



Image 1: Digital solutions generate added value and are the focus at

Chillventa.



Image 2: AxiEco Plug-in (left) and AxiTone (right) are particularly quiet

when used in heat pumps.

# Photos ebm-papst

# Characters approx. 4.200, including headings and sub-headings

# Tags Digital Solutions, AxiTone, AxiEco Plug-In, Heat Pumps, Active PFC, AxiBlade, RadiCal, RadiPac

# Link [www.ebmpapst.com/chillventa](http://www.ebmpapst.com/chillventa)

**About ebm-papst**

The ebm-papst Group, a family-run company headquartered in Mulfingen, Germany, is the world’s leading manufacturer of fans and motors. Since it was founded in 1963, the technological leader has set international industry standards with its core competencies in motor technology, electronics, digitalization, and aerodynamics. ebm-papst offers sustainable, intelligent, and tailor-made solutions for virtually every requirement in ventilation and heating technology.

In the 2023/24 financial year, the Group generated turnover of EUR 2.408 billion. It employs just under 14,000 people at 30 production sites (including in Germany, China, and the U.S.) and in 50 sales offices worldwide. ebm-papst sets the benchmark in almost all sectors, such as ventilation, air conditioning and refrigeration technology, heating technology, information technology, mechanical engineering, intralogistics, and medical technology.