**In refrigeration systems, fans are often operated with high duty cycles, which offers significant potential for energy savings. That is why EC motors and EC fans with their high efficiency levels has become new standards in this area.**

**New iQx motor for greater efficiency**

The use of EC motors in supermarkets has become standard practice in recent years. ebm-papst offers a wide range of products for this application, which has now been expanded to include the new iQx EC motor for global use. The previous NiQ motors are now being replaced by this efficient and universally applicable iQx. The range of applications in supermarkets includes bottle coolers, refrigerators, refrigerated display cabinets, refrigeration/freezer islands, and condensing units.

The new iQx is mechanically compatible with existing split pole and previous EC motors, operates with a high efficiency of up to 68%, and enables easy 1:1 replacement thanks to identical installation dimensions. Retrofitting older refrigerated cabinets in particular can be worthwhile in terms of the energy savings that can be achieved. Depending on the ambient conditions, the iQx motor has a service life of more than 40,000 hours.

The compact motor is available both as an OEM component and as a plug-and-play complete system with matching axial impellers in diameters of 172, 200, 230, and 254 mm, in which the individual components are perfectly matched to each other. Compared to standard metal impellers, the aerodynamic design contributes to a noise reduction of up to 8 dB(A) and further energy savings of 6% can be achieved.

**Suitable for natural refrigerants**

Another issue with refrigerated display cases is the refrigerant used. Since January 1, 2015, Regulation (EU) 517/2014, also known as the F-Gas Regulation, has been in force. The switch to systems that comply with EN 60335-2-89 and the F-Gas Regulation offers considerable ecological and economic advantages, particularly in the food retail sector. The EN 60335-2-89 standard regulates the safety of electric refrigeration appliances for commercial use. It is particularly relevant for the use of flammable refrigerants such as R290 (propane). The iQx from ebm-papst complies with the European standard EN 60335-2-89 (household appliance standard – special requirements for commercial refrigerators and freezers) as standard and represents a safe, environmentally conscious, and sustainable cooling solution in this area.

**Worldwide use**

The iQx motor from ebm-papst meets all standard market approvals (UL, CSA, VDE, CCC) and, with its wide voltage input range of 100-240 VAC, 50/60 Hz, can be used worldwide in a wide variety of supermarket applications. In addition, it has protection class IP65 and is therefore also suitable for demanding, humid or dusty environments.

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Image 1: The new iQx is available both as an OEM component and as a plug-and-play complete system with matching axial impellers in diameters of 172, 200, 230, and 254 mm.

# Photo 1 ebm-papst

# Characters approx. 3,000, including headings and sub-headings

# Tags EC technology, supermarket, iQx, EC motor, refrigerators, efficiency, ATEX

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

**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. ebm-papst sets the benchmark in almost all sectors, such as ventilation, air conditioning and refrigeration technology, heating technology, information technology, mechanical engineering, and medical technology.

In the 2024/25 financial year, the ebm-papst Group generated a turnover of 2.1 billion euros. It employs just around 13,500 people at 30 production sites, including in Germany, China, and the U.S., as well as 50 sales offices worldwide.