



ebmpapst

engineering a better life

Best under pressure:
The pressure-resistant AxiEco series.

Victorious in the fight against ice formation, noise and energy losses.

About ebm-papst.

ebm-papst is a leader in ventilation and drive engineering technology and a much sought-after engineering partner in many industries. With around 20,000 different products, we have the perfect solution for practically every requirement. We believe the consistent further development of our highly-efficient GreenTech EC technology provides our customers with the best opportunities for the future in industrial digitization. With GreenIntelligence, ebm-papst already offers intelligent networked complete solutions that are unique anywhere in the world today.

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Six reasons that make us the ideal partner:

Our systems expertise: as experts in advanced motor technology, electronics and aerodynamics, we provide system solutions from a single source.

Our spirit of invention: our 600 engineers and technicians will develop a solution that precisely fits your needs.

Our lead in technology: with our EC technology and GreenIntelligence, we combine the highest energy efficiency with the advantages of IoT and digital networking.

Closeness to our customers: at 49 sales offices worldwide.

Our standard of quality: our quality management is uncompromising, at every step in every process.

Our sustainable approach: we assume responsibility with our energy-saving products, environmentally-friendly processes, and social commitment.

GreenIntelligence. *Making Engineers Happy.*



Why do our customers look so happy? Because when it comes to the Internet of Things and the digital transformation, we provide them with a clear competitive edge with GreenIntelligence for intelligent control and interconnection of fans, drives and systems to make applications more powerful, processes more efficient, businesses more successful and their customers more satisfied. From us you get the technologies that make all this possible, and the services that give you optimum support in all phases.

Our GreenIntelligence promise:

- Connection to higher-level communication points possible
- Control system tailored to the needs of the plant
- Constantly efficient cooling capacity

Liam uses intelligent technologies to optimize his applications and save time and money.



Top form under pressure: *the new AxiEco series.*

Tough ambient conditions prevail in the ventilation, air conditioning and refrigeration sector as well as in mechanical engineering. If you want to cope with them effectively, you need electrically and mechanically robust solutions that also work at a high level of efficiency. AC axial fans that have been widely used up until now will reach their limits in this contentious area by the time the next stage of the ErP comes into force. Or maybe not.

Because, with the strong AxiEco Protect and AxiEco Perform duo, ebm-papst has managed to develop a series that perfectly adapts to the requirements of evaporators, condensers, air heaters, heat pumps and switch cabinet and generator cooling systems, as well as numerous other applications.

Both axial fans in the AxiEco series impress with their robustness, high performance, low noise levels and economical operation in both the EC and AC versions.

Together they are: **BEST UNDER PRESSURE**. In other words, they always show what they are capable of when they are under high pressure. They are especially effective in combating high back pressures in ventilation, air conditioning and refrigeration applications: they are durable, highly efficient and quiet.

What exactly does that mean for individual sectors and applications? Take it from us:

Consistently resists ice formation:
the AxiEco series in refrigeration
technology.



The AxiEco series exhibits one of its great strengths in evaporator applications. If ice forms on the heat exchanger, the axial fan works with high efficiency for longer despite the increasing back pressure. The reason for this is its improved performance, which has a much steeper characteristic curve than usual, resulting in an extended evaporator service life, fewer defrosting cycles and a better overall system efficiency. The AxiEco series innovative design also helps the guard grill to freeze more slowly and the blades do not freeze on.

Conquering new power ranges:
the AxiEco series in ventilation and
air conditioning technology.



Thanks to aerodynamic improvements, the AxiEco Protect's air performance curve is steeper and the AxiEco Perform's air performance curve is even steeper than that of comparable axial fans. The series therefore covers a significantly larger power range and still works at optimum efficiency even when the back pressure is increasing. A great advantage for ventilation and air conditioning is that fewer fans are required to generate the same power. The reason for this is the power density: the AxiEco Perform in particular achieves a very high air performance per area. Despite its powerful performance, it is extremely quiet, which is apt in residential areas, for example.

Top performance in extremely confined
spaces: the AxiEco series in mechanical
engineering.



Thanks to a variety of design details, the AxiEco series is ideally adapted to various areas of application within mechanical engineering. In control cabinet construction, for example, the AxiEco Perform axial fan in particular boasts a significantly higher air performance, enabling manufacturers to reduce the total number of devices used. In all its sizes, the ErP-compliant AxiEco series impresses with its compact design, which can become a decisive competitive advantage considering the confined spaces seen in electronics and compressor cooling systems.

Conquering new power ranges: *the pressure-resistant AxiEco series.*

With the AxiEco Protect and the AxiEco Perform (pictured here in this photo), ebm-papst has developed a powerful series that impresses with significantly increased performance values. The series's air performance curve shows a steep upward trend. In terms of efficiency and pressure stability, no comparable axial fan comes close to it.

Good to know: the guard grill and inlet ring are already integrated into the AxiEco Perform in an easy-to-install plastic housing. This means that the fan is supplied as a complete plug & play solution including CE marking that can be used quickly, flexibly and easily in numerous applications.

Greater air throw thanks to efficient guide blades

The guide blades reduce the swirl in the outflow field of the fan and therefore reduce the dynamic share of losses to a minimum. This significantly increases the air throw compared to conventional axial fans.



Better throughflow thanks to easy-to-install composite housing

The AxiEco Perform housing is optimized according to aerodynamic criteria and has an integrated guard grill and cavities at the housing corners to improve the throughflow.



No freezing on the nozzle due to lack of tip gap

There is no tip gap between the fan housing and the impeller in the AxiEco series. The impeller, integrated diffuser ring and hub form a compact unit and the blade tips pass directly into the integrated diffuser ring. This has several advantages: there is no flow over the blade tips. Instead, it brings increased efficiency and improved noise characteristics. Therefore, the blades can no longer freeze on the fan housing.

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**Are you interested
to find out more?**

Then visit our website at

ebmpapst.com/axieco

There you will find all information about the
AxiEco series.