# Buildings account for around 35 percent of Germany's energy consumption. In building technology, energy requirements – for new buildings and renovations – are growing and so too is the demand for decentralized residential ventilation systems. These ensure the necessary air exchange without simply dissipating the heated air in the room. With the new reversible AxiRev 126 compact fan, ebm-papst has developed an energy-efficient and quiet solution for push-pull applications.

# New buildings – as well as buildings that have already been modernized – are increasingly being insulated for energy efficiency and are hermetically sealed for this purpose. Push-pull systems are a practical solution to use air exchange to prevent damage to the building’s structure or damage to health from poor air quality.

# Heat recovery using push-pull application

# Push-pull ventilation units convey the "consumed" ambient air outside for a defined period of time (push). The fan installed in the ventilation unit then changes its direction of rotation, i.e. it reverses (pull). During the process, an integrated heat accumulator absorbs the heat energy from the exhaust air. In the pull phase, this is transferred to the fresh outside air. This means that it can flow into buildings preheated. So that health requirements are also fulfilled, a filter clears the dust and pollen from the air coming in from outside. Depending on the application, two devices per room or zone ensure balanced ventilation.

# Steep characteristic curve, energy-efficient and quiet

# The new AxiRev 126 from ebm-papst, which has been specially developed for decentralized residential ventilation, has a unique design: The blade design is almost symmetrical and ensures that the characteristic curve and so too the volume of air conveyed in both directions of rotation are almost identical. This patented blade design with striking blade tips and the openings at the blade ends minimizes the noises induced by tip gap vortices, which reduces the noise emissions. Thanks to the integrated EC motor, the fan operates at a high efficiency level even in partial-load operation. Users benefit from an efficiency increase of up to 7 percent and a noise level that is up to 5 dB(A) lower than the previous model. The maximum air flow is 132 m3/h. The steep characteristic curve of the AxiRev 126 also ensures that the residential ventilation unit can operate efficiently even at high wind forces outdoors.

# Suitable for retrofits

The AxiRev 126 has a very compact diameter of 126 mm, as its name suggests, and a height of 26 mm. Depending on the application, the speed can be continuously adjusted between 500 and 4200 rpm. It is supplied as a complete system with plug-and-play capability and is also suitable for retrofitting existing residential ventilation units, as the footprint and dimensions correspond to the tried-and-tested dimensions of the previous model.

**Presentation on event platform**

Interested parties can learn about all the advantages of the axial compact fan, and why its patented aerodynamic design and new low-noise motor technology make it the new standard for residential ventilation, at the popular FanTalk online seminar series on July 14, 2022, at 8:00 a.m. or 4:30 p.m. Registration is possible at the following link:

[www.ebmpapst.events/FanTalk\_AxiRev/en/register](http://www.ebmpapst.events/FanTalk_AxiRev/en/register)

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Photo: New fan with reversal of direction of rotation. The reverse fan is specially developed for push-pull applications.

# Photo ebm-papst

# Characters approx. 2,900, including headings and sub-headings

# Tags EC technology, AxiRev, reverse fan, decentralized residential ventilation, push-pull system, efficiency, retrofit, IAQ

# Link <https://www.ebmpapst.com/compactpower>

**About ebm-papst**

The ebm-papst Group, a family-run company headquartered in Mulfingen/Germany, is the world’s leading manufacturer of fans and drives. Since the technology company was founded in 1963, it has continuously set the global industry standard with its core competences in motor technology, electronics, digitization and aerodynamics. With over 20,000 products in its portfolio, ebm-papst provides the best energy-efficient, intelligent solution for virtually every ventilation or drive-engineering task.

In fiscal year 2020/21, the “hidden champion” generated revenues of € 2.129 billion. The group employs roughly 15,000 people at 29 production sites (in Germany, China and the USA, to name but a few) and in 51 sales offices worldwide. ebm-papst sets the benchmark with their fan and drive solutions which are used in almost all industries, such as ventilation, air conditioning and refrigeration, heating, automotive, information technology, mechanical engineering, household appliances, intralogistics and medical engineering.