# The demand for computing power is constantly increasing and the electronics used require permanent cooling. Around 20 percent of the energy consumption in data centers is related to cooling. Efficient cooling systems are an important way to reduce data centers’ energy consumption. With the AxiEco 200, ebm-papst has designed a compact fan especially for use in applications requiring pressure. This makes the fan particularly suitable for electronics cooling challenges in data centers.

**Optimized impeller geometry**

In line with the latest aerodynamic findings, the fan was designed with a special impeller without a tip gap, which reduces turbulence. The impeller, integrated diffusor ring and hub form a compact unit. The eliminated tip gap between the blades and the housing ensures that the blade tips are not overflowed. This increases efficiency while there is up to 5 dB(A) less noise than with existing fans. Aerodynamic optimization ensures minimized inflow turbulence and improved air flow. The housing made of aluminum withstands adverse ambient conditions and guarantees a long service life in the temperature range from - 20°C to 60°C.

**Powerful motor technology – high air flow**

The AxiEco 200 is driven by a three-phase GreenTech DC motor concept. Equipped with high-performance electronics of up to 500 W, the powerful combination reaches up to 7,000 rpm. Optimized heat management enables targeted dissipation of the motor heat that this creates. Cooling openings actively support motor cooling. The aluminum flange provides additional heat dissipation. With an air flow of up to 1,800 m3/h, the compact fan achieves around nine percent greater air performance than existing fans of the same size.

**Fast system maintenance**

Due to the high availability requirements, IT equipment is usually maintained during operation. If a single fan or module with several fans is taken out of service for this purpose, this can lead to a problematic situation in which air from the remaining fans flows through the fan taken out of operation via external means. This external driving of the fan happens at several thousand revolutions per minute in the opposite direction of rotation. Thanks to its high-torque motor and high-performance electronics, the AxiEco 200 still guarantees a trouble-free restart. This enables fast and efficient system maintenance, including fan replacement while the system is running.

Smart features, such as FanCheck, temperature sensor, control input (PWM or analog) and humidity protection ensure greater operational reliability and increased service life. Various approvals (including VDE, UL/CSA, CCC, CE, EAC, UKCA) enable global use in data centers, telecommunications, mobility, industry, smart home and indoor farming.

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Image: Specially designed for use in applications requiring pressure, the compact AxiEco 200 is particularly suitable for the challenges posed by data centers.

# Photo ebm-papst

# Characters approx. 2,800, including headings and sub-headings

# Tags EC technology, AxiEco 200, compact fan, compact power, energy efficiency, EC drives, GreenTech

# Link <https://www.ebmpapst.com/axieco200>

**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 2021/22, the “hidden champion” generated revenues of € 2.288 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.