

New AxiTwin 100 compact fan

Ventilation power for electronics cooling in cutting-edge technologies

Ever more powerful electronics are required in data centers, communications technology, and other industrial applications in order to process increasingly large flows of data. At the same time, more packing density and computing power are required in increasingly compact spaces: electronics cooling is increasingly becoming a challenge. Present axial compact fans are now often reaching the limits of their capacities, since aerodynamic resistance increases as devices become more and more compact. The new AxiTwin 100 compact fan has no problem meeting these requirements.

With the AxiTwin 100, ebm-papst has adopted a new approach and designed a fan with a two-stage contra-rotating system. With an edge dimension of just 10 cm, it ensures reliable heat dissipation, enables air performances of well over 500 m³ per hour at a maximum static pressure increase of 1,300 Pa, opening up new frontiers in electronics cooling.

Contra-rotating rotors with an innovative flange

The compact fan consists of two rotors connected by a patented flange. It has a newly developed flow geometry thanks to its two consecutive rows of blades. The first rotor is primarily responsible for air flow, while the second ensures pressure increase. A major advantage of the contra-rotating fan principle is the reduction of the speed component of the air flow in the circumferential direction. The comparatively small surfaces of the blades increase efficiency. The innovative flange links the stages of the two fans vibrationally in such a way that each stage attenuates the vibrations of the other. Its aluminum composition guarantees a high level of rigidity while also ensuring good heat dissipation.

GreenTech EC motors as the driving force

The two integrated three-phase motors each have a motor power of up to 180 W. The energy-efficient EC drives operate with a high level of efficiency in partial and full-load operation and are also designed for continuous operation. The newly developed 300-W electronics are installed in the corners of the housing for even better heat dissipation. Standardized signal inputs such as PWM input or analog control input, as well as tach/alarm output signals, can be integrated individually as required.

Cooling the cloud

The AxiTwin 100 comes into its own in applications with a high demand for cooling with a low amount of installation space available. The high-performance compact fan is used in many cutting-edge technologies. With an edge dimension of 10 cm and a depth of 9 cm, four of these fans can be integrated into a 19" rack and used for cooling in blade servers. Other fields of application include cooling high-performance super computers, such as those used for block chain technologies.

Pascal Schöpf
Trade press coordinator
Phone: +49 7938 81-7006
Fax: +49 7938 81-97006
pascal.schoepf@de.ebmpapst.com

Corinna Schittenhelm
Trade press coordinator
Phone: +49 7938 81-8125
Fax: +49 7938 81-98125
Corinna.Schittenhelm@de.ebmpapst.com

June 21, 2022 - Page 1 of 2

Press office contact
ebm-papst Group
Phone +49 7938 81-7105

twitter.com/ebmpapst_news
facebook.com/ebmpapstFANS
youtube.com/ebmpapstDE
www.ebmpapst.com

New AxiTwin 100 compact fan

Ventilation power for electronics cooling in cutting-edge technologies



Image: AxiTwin 100 – The new power fan for high-performance electronics from ebm-papst.

Photo ebm-papst
Characters approx. 2,800, including headings and sub-headings
Tags EC technology, AxiTwin 100, contra-rotating system, compact fan, energy efficiency, EC drives, GreenTech
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.

Pascal Schöpf
Trade press coordinator
Phone: +49 7938 81-7006
Fax: +49 7938 81-97006
pascal.schoepf@de.ebmpapst.com

Corinna Schittenhelm
Trade press coordinator
Phone: +49 7938 81-8125
Fax: +49 7938 81-98125
Corinna.Schittenhelm@de.ebmpapst.com

June 21, 2022 - Page 2 of 2

Press office contact
ebm-papst Group
Phone +49 7938 81-7105

twitter.com/ebmpapst_news
facebook.com/ebmpapstFANS
youtube.com/ebmpapstDE
www.ebmpapst.com