

Press release

More power and 75% less consumption with double the service life New generation of AC fans sets benchmarks for cooling units

For a long time, there have been no substantial changes in AC fans that are connected directly to the power supply. By today's standards, their fixed speeds that depend on the power frequency, low efficiency and short service life limit their potential applications in modern cooling units. Now, a new generation of AC fans is setting new standards of excellence. On one hand, significantly lower energy consumption combined with simultaneously higher air performance is one benefit. Others include the almost 100% longer service life and a single connection for all common worldwide AC power systems, which makes them meet the high standards of today's food refrigeration technology. Because all fans have identical dimensions to their predecessor models, they can be replaced or retrofitted easily.

Today's AC fans also provide a wide variety of new possibilities for the design of refrigerators and freezers. For easy conversion, St. Georgen, Germany-based fan specialist, ebm-papst, now offers the new generation of ACmaxx fans in the standard dimensions of 92 x 92 mm, 120 x 120 mm and fans with a diameter of 172 mm. Depending the installation requirements, the system of protection ranges from IP00 to IP54. By customer request, the fans are available with moisture-proof winding or a motor completely potted in plastic. The wide operating voltage range from 85 to 265 VAC allows the same fan to be used worldwide without any drop in output, thus lowering logistics costs. The fans also set new benchmarks in their performance data. For example, the AC4300, with a diameter of 120 mm, features up to 40% higher air performance and about 75% less power consumption. This ensures effective heat dissipation even in difficult conditions, such as dusty cooling vents or high ambient temperatures. The improved motor efficiency lowers the motor temperature. This reduces stress on the bearings, which, in turn, almost doubles the service life—a significant advantage for commercial and household products in the food industry, where reliability counts.

Optional functions like demand-oriented closed loop speed control using internal / external NTC sensors also lower the energy consumption and noise level in the partial load range. This provides "controlled" heat dissipation in applications such as chest freezers and refrigerated counters. An integrated microprocessor also allows independent open loop speed control according to a preset speed profile. Additional options, such as standby operation, night shutoff and peak-load reserve, can be implemented fast and easily. A speed signal output with two or three pulses per revolution and an alarm output provide accurate information about the operating state at all times.

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Image 1: The new ACmaxx fans offer more: output, service life, additional options

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Image 2: ACmaxx in refrigeration units

Text and images/graphics are stored on the accompanying CD-ROM.

ebm-papst St. Georgen will provide paper copies by request.

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