

bringing economy and ecology together







ebmpapst

# innovative ebm-papst EC technology

### High-tech for environment and controllers

At ebm-papst we've always been passionate about how quiet we can make our fans. Our continual dedication to advanced engineering, reduction of system operating and maintenance costs, and award-winning EC technology has made ebm-papst the world leader in air moving technology.

#### What is EC?

The heart of our innovative products is the EC technology integrated in the electric motors. EC stands for Electronically Commutated, the innovative commutation without wear-and-tear. EC motors are DC motors with integrated AC to DC conversion. The EC motor compares to the direct current shunt-wound motor but for the fact that the magnetic field is generated by permanent magnets inside the rotor. EC motors give the flexibility of connecting to AC mains with the efficiency and simple speed control of a DC motor.

You are not a technician? No problem! All you need to recognize the advantages this new technology offers is simple mathematics. Compared to conventional standard AC motors, our EC motors need an average of 30% less energy — exceeding even 50% in certain applications!



EC motors and fans can be easily controlled, are maintenance-free, offer outstanding efficiency and have a considerably longer service life. On top of all this, the variable speed range possible in EC technology makes using a multitude of individual models a thing of the past, making your life a lot easier. Still, our R&D activities are not only focused on saving energy. In terms of pressure build-up, air performance and low noise, our products meet the toughest specifications.

EC is eco-friendly: www.eco.ebmpapst.com

# 3 examples of efficient EC technology



#### A3G910 axial fan

Applications: Heat exchanger, i.e. for refrigerated storage rooms, VACR With six (6) fans working in a heat exchanger at an average utilization of 75%, the annual saving potential exceeds 24 MWh. This translates into almost 14.4 t. CO2 and saves approximately \$3537.00 USD!

cost savings in this example:

**29%** compared to conventional fans!



### R3G560 BCMI\*

**Applications:** Roof fans, AHUs, clean rooms

On top of an office building with a floor space of 13,000 sq. ft., there are four (4) roof fan units. At an average degree of utilization of 60%, up to 6.7 MWh can be saved. This translates into almost 4 t CO2 and \$990.00 USD per year!

cost savings in this example:

**21%** compared to conventional fans!



### W1G200 ESM\* axial fan

**Applications:** Condensers, cooling cabinets, refrigerated display cases, freezer

chests, island freezers

In a small supermarket, 40 fans are used in the refrigerated display cases. The lower intrinsic heat of the ESM makes for 30% less operating time. Per year, this results in a saving potential of more than 3.4 MWh and 2 t CO2. Saving approximately \$500.00 USD!

cost savings in this example:

**67%** compared to conventional fans!

<sup>\*</sup>Backward-Curved Motorized Impeller \*\*Energy-Saving Motor

## about ebm-papst Inc.

Locally headquartered in Farmington, Connecticut, ebm-papst Inc. distributes a diverse line of air moving equipment to OEM's for many applications. With offices in major cities throughout North America and Ireland, our highly-skilled and experienced team of professionals is ready to tackle your most difficult air moving challenges and offer solutions that meet your needs. We serve all markets including IT & Telecomm, HVAC, Refrigeration, Gas & Heating, Household Appliances, Industrial, Drive Systems, Automotive & Rail Technology, Medical, and more. You can always count on prompt, courteous service. Customer satisfaction is our number one priority.

## Expert support when and where you need it

Knowledgeable field sales professionals are close by for face-to-face meetings. Dedicated inside sales associates fulfill all your ordering requirements. To find the right air moving solution for your needs, our experienced application engineers are at your service to answer all your product application questions. Our electrical engineering team, with diverse industry and product design backgrounds, provides a full range of services including hardware and software design, analysis and testing, and electronics manufacturing.

#### Quick Facts

- » 250K sq ft facility located in Farmington, CT
- » 20 Regional Offices
- » 350 Employees
- » Complete Air Testing Lab On Site
- » ISO 9001 and 14001 Certification
- » Distribution from Farmington (CT), Toronto, Monterrey (Mexico), and Dublin, Ireland
- » National Distributor Locations



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