

### Inside the Box: Managing ventilation and air-conditioning technology

top seller used in rooftop A/C units, computer room A/C units and other applications, ebm-papst's RadiPac EC centrifugal fan assembly incorporates all components required for your ventilation needs. Boasting up to 14,700 CFM at 4 in. wg, this high performance series is available in drive capacities of up to 12 kW and sizes 250 mm to 1250 mm in impeller outer diameter. As a standard, all fans with rated input exceeding 500 Watts can be controlled by MODBUS and 0-10 VDC.

"Pac" in RadiPac is short for "packaged" where all required functions are on board and packed into one fan. The RadiPac impeller, motor and electronics system are all optimally adjusted to one another, leading to an overall efficiency of more than 60%. The external rotor design GreenTech EC motor contributes significantly to the unit's efficiency, without the use of rareearth magnets.

#### Installation - simple and safe

Together, the electronics and motor form one unit - this doesn't just save space, but

also ensures easy installation. An integrated electronics system for commutation and control replaces an external frequency converter. Its motor and corresponding electronics are perfectly adjusted to one another. Additional electronic filters and shielded cables are unnecessary. Results: elimination of cost-intensive adjustments before commissioning, or for grounding and shielding measures. In ventilation and airconditioning technology, plug-and-play is that simple!





#### RadiPac for compact solutions in air handling units (AHU)

The high-performance impeller is mounted directly on the external rotor motor. This saves space and allows the entire rotating unit to be dynamically balanced. Compared to conventional fans with AC or PM motors. RadiPac provides ebmpapst's GreenTech EC fan with unrivalled compactness. The GreenTech EC fan is installed quickly and carries all features on board for a clear advantage over conventional fans that require additional devices.

With the aerodynamic shape of their fan blades and an EC motor integrated directly inside the impeller, RadiPac centrifugal fans are efficient and compact units. The power electronics integrated into the GreenTech EC motors permit demand-oriented speed control. According to motor type, RadiPac is compatible with all common supply voltages; either with single-phase AC of 200 V to 277 V or with three-phase AC supply of 380 V to 480 V. Air performance and efficiency are not affected by the supply frequency.

This means that the same fan type can be operated on different power systems without any required retrofitting.

The mounting position of the fans is variable by means of the "mounting spider" – installation is possible with a horizontal or vertical motor shaft position. The 630 to 1250 mm sizes are intended for horizontal installation, where vibration elements for isolation from the environment can be installed on the base frame.

Because the centrifugal fans are also available with corrosion-resistant and special hygienic coating, use in hospitals or natatoriums is also possible without altering its design or conditioning.

## CONTACT INFORMATION:

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