Press Release

Air conditioning promotes concentration and well-being

Compact centrifugal fan for car seat ventilation

Modern car seats are more than just a seat. They provide side support, can be adjusted individually, fulfil safety related tasks and helps the driver to concentrate with the relaxed driver's seat position and air-conditioned cushions. The specialist for automotive applications, ebm-papst from St. Georgen now provides a particularly compact centrifugal fan for car seat climate control with the RL 5X. It can also be used in complex seating systems that offer little installation space. A large pressure increase with low vibration and impact sound excitation lets it perform the daily operation virtually silent. In future seats, the impedances are expected to increase. A centrifugal fan is ideally suited for this purpose. Thanks to the large pressure increase of the RL 5X fan, the necessary airflow for comfortable air-conditioning to the driver is achieved even in the case of tight woven fabrics or functional mats.

Discrete performance

Based on the customer requirements, the fan's pulse width or linear speed control <5 (85 x 80 x 25 mm) sucks the air in the axial direction and delivers it radially to the impeller. This allows an air output of up to 10 l/s and a pressure rise of up to 150 Pa. The vehicle life is on average 15 years and 300,000 km, respectively, which is about 8,000 operating hours which the fan surpasses significantly. The operating voltage range is 9 to 16 VDC in the motor vehicle sector. The three-phase sinusoidal commutated motor fulfils the test specifications according to LV124 and operates in the temperature range from -40 to +85 °C. The operating noise depends on the respective mounting conditions, but usually falls below the noise level of the practical motor vehicle operation.

Image 1: The RL 5X, extra compact centrifugal fan for seat ventilation (source: ebm-papst)

Characters approx. 1,754, with headline and sub-heads
Press Release

Air conditioning promotes concentration and well-being
Compact centrifugal fan for car seat ventilation

About ebm-papst

The ebm-papst Group is the world's leading manufacturer of fans and motors. Since it was founded, the technology company has continuously set global industry standards: from the digital interconnection of electronically controlled EC fans to aerodynamic improvements for fan blades to the use of eco-friendly materials.

In fiscal year 2016/17, the company achieved sales of almost €1.9 billion. ebm-papst employs over 14,000 people at 26 production sites (e.g. in Germany, China and the US) and in 49 sales offices worldwide. Fans and motors from the world market leader are used in many industries, including ventilation, air conditioning and refrigeration, household appliances, heating, automotive and drive engineering.