ebm-papst at the 2019 Busworld

Quiet as a Whisper: Air Conditioning in Buses

Busworld Europe is the largest international trade show around buses. This year, the trade show will take place from October 18-23 – for the first time, in Brussels. In hall 5, stand 529, ebm-papst is presenting its latest fans and blowers for bus air conditioning and motor cooling.

In buses, various fans from ebm-papst come into play. For bus air conditioning, axial fans and centrifugal blowers are required and robust axial fans are ideal for motor cooling.

Centrifugal blowers for bus air conditioning
The electronics in the new K3G097 dual-flow centrifugal blower have a dust-proof design in degree of protection Ip6k9k. They can even withstand contact with a high-pressure cleaner. This degree of protection is important if the bus is on the road in high-humidity regions, since heavier condensation can build up on the condenser in these environments. The protection is enabled by an electronics housing that was specially designed for such requirements.

Very quiet air conditioning
In future-oriented, battery-operated, and therefore very quiet electric buses, the air conditioning must be just as quiet. The recently improved W3G300 axial fan has revised features that make it ideal for such buses. The focus of the aerodynamic optimization process was on the impeller and the interplay between the impeller and the integrated guide vane system. It achieved lower noise emission by up to 2.5 dB (A), enabling whisper-quiet air conditioning in buses. Significantly improved efficiency reduced the electrical power consumption by more than another 20%. This also contributes to reducing the vehicle’s total energy consumption. The new axial fan is also voltage-stable, meaning that the air conditioner always delivers the same cooling capacity regardless of whether or not the bus’s motor is running. The fan’s excellent electromagnetic compatibility ensures interference-free operation of the infotainment systems on board the bus.

Both fans for bus air conditioning will be available in 24 V DC designs as of January 2020.

Axial fans for motor cooling
Extremely robust axial fans are used to cool bus motors. They are particularly resistant to deposits. Special aerodynamically formed blades prevent grime from building up on the fan. The impeller also enables higher speeds, thus creating extra cooling capacity reserves.
ebm-papst at the 2019 Busworld

Quiet as a Whisper: Air Conditioning in Buses

Fig. 1: The recently improved W3G300 axial fan from ebm-papst for air conditioning in buses.

Fig. 2: The new axial fans from ebm-papst are used in bus air conditioning. The air conditioner is located on the roof.

Photos: ebm-papst
Characters: Approx. 2,400, including headings and sub-headings
Tags: fans, bus air conditioning, motor cooling, Busworld, blower
Link: https://www.ebmpapst.com
ebm-papst at the 2019 Busworld

Quiet as a Whisper: Air Conditioning in Buses

About ebm-papst
The ebm-papst Group, a family-run company headquartered in Mulfingen, Germany, is the world’s leading manufacturer of fans and motors. Since the technology company was founded in 1963, it has continuously set the global industry standard. With over 20,000 products in its range, ebm-papst provides the best energy-efficient, intelligent solution for virtually every ventilation or drive engineering task.

In fiscal year 2018/19, industry leader ebm-papst generated revenues of 2.18 billion euros. It employs over 15,000 people at 28 production sites (e.g. in Germany, China and the US) and in 48 sales offices worldwide. Fans and motors from the world market leader are used in most industries, including ventilation, air conditioning and refrigeration, household appliances, heating, automotive and drive engineering.