**Digitalization doesn't even stop for transport technology and provides more on-board power electronics that have to be cooled. Whether you're transporting people or goods: Reliability, noise and safety are top priorities. Compact fans from ebm-papst meet these requirements in compliance with all the necessary standards.**

Compact size combined with simultaneous performance, demands with regard to convenience, efficiency and environmental performance place high demands on fans for use in vehicles - whether with combustion engines, fuel cells or electric drive technology. Added to this are railway-specific requirements and compliance with standards such as functionality in the event of shocks and vibrations, noise reduction, EMC compatibility and IP protection.

**Wide range of applications**

As the size of installed power electronics is increasing, the demand for effective but compact cooling is also increasing. That's why compact fans from ebm-papst are used in a wide variety of applications: To cool converters, control cabinets or electronics, for ventilation and exhaust in toilets and for high-performance brake cooling. Trucks, train and construction machinery drivers also benefit from being able to perfectly control the air conditioning in their cabs, making their everyday working lives easier.

**Special fans meet special requirements**

The proximity to people means that the fans used need not only be powerful and compact, but also quiet in operation. The axial compact fans from ebm-papst are ideally suited to these requirements in the respective application-specific environment. They are available in sizes from 25-225 mm and deliver air performance levels of up to 1,000 m³/h - free air.

**Fire protection and EMC compatibility for railway applications**

Standards for additional safety apply particularly in railway engineering. For example, EN 44545 fire protection in railway vehicles and EN 50121-3-2 place special requirements on the electromagnetic compatibility of the installed components. The compact fans from ebm-papst are also designed according to "EN 50533: 2011 features of the three-phase vehicle electrical system architecture, class 1."



Fig. 1: The compact fan 6314 N meets the requirements in railway technology and is used for cooling converters and brakes, for example.

# Photo ebm-papst

# Characters approx. 2,200, including headings and sub-headings

# Tags compact fan, railway technology, transportation, cooling

# Link www.ebmpapst.com/de/de/branchen/transporttechnik.html

**About ebm-papst**

The ebm-papst Group, a family-owned company in Mulfingen, Germany, is the world market leader in fans and drives. Founded in 1963, the technology leader with its core competences motor technology, electronics and aerodynamics, has set international market standards ever since. With over 20,000 products, ebm-papst offers customized, energy-efficient and intelligent solutions for virtually any ventilation and drive technology requirements.

In fiscal year 2019/20, the hidden champion achieved a turnover of 2.188 billion euros and employed almost 15,000 people in 29 production sites (e.g. in Germany, China and the US) as well as in 48 sales locations. With their fan and drive solutions, ebm-papst defines and sets the benchmark in practically all industries, such as ventilation, air-conditioning and refrigeration, heating, automotive, IT, mechanical engineering, catering and household appliances, intralogistics and medical engineering.