

Movement by Perfection



The Royal League in ventilation, control and drive technology



Traction Motor Fans

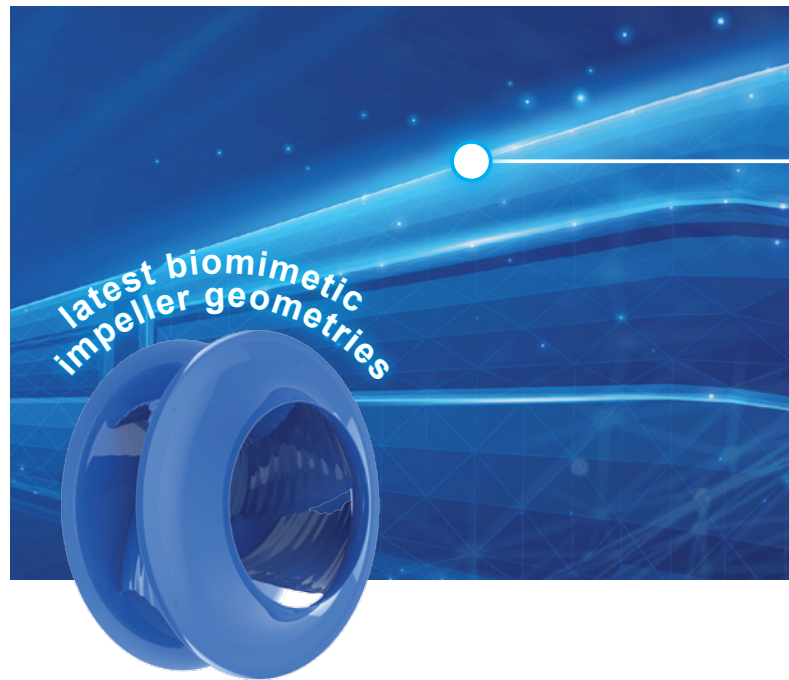
Lightweight, compact and intelligent - like a genius

Traction Motor Fans

Lightweight, compact and intelligent - like a genius

The unrivalled performance of our unique traction motor fans sets new standards in rail technology. Compact, lightweight, easy to control, and highly efficient they offer exceptional energy savings and can be adapted to the specific requirements of each train project. Intelligent high-tech components – inspired by biomimetic design principles – make these traction motor fans true technical pioneers. At their core lies the ultra-lightweight ECblue energy-saving motor, cast from aluminium. This motor features an integrated, smart control system and is IoT-ready, enabling remote monitoring anytime, anywhere.

For optimal airflow, we rely on unique fan geometries developed using the latest biomimetic insights – for example, the ZABluefin-Alu. These modern, highly efficient fan systems ensure reliable cooling of the train drives at all times, contributing to a smooth and comfortable rail experience for operators and passengers alike.



**ULTRA-
LIGHT-
WEIGHT**



IOT READY



**CONTINUOUSLY
VARIABLE CONTROL**

UNRIVALLED



> Ultra-Lightweight

Compact ECblue motors made from die-cast aluminium are exceptionally lightweight, while optimized impeller and substructure designs reduce the overall weight of the innovative fan system by up to 50% – greater efficiency, significantly lower operating costs, and more sustainable rail operations.

> Ultra-Quiet

The unique impellers, inspired by biomimetic insights, deliver exactly the airflow required – thanks to precise control – The result: maximum energy efficiency and exceptionally quiet operation.

> Continuously Variable Control

Independent of the onboard power supply and running at up to 3,800 rpm, the system ensures reliable performance at all times – requiring no additional control and offering complete autonomy for maximum flexibility.

> IoT-ready

Condition-based maintenance with a 360° overview is enabled by integrated sensor technology – including a three-axis acceleration sensor and temperature sensors – allowing early detection of imbalances and timely scheduling of maintenance.

> Optimized life cycle costs (LCC)

The ECblue high-tech motor combines intelligent real-time control with condition-based maintenance to drastically reduce life cycle costs – delivering maximum efficiency, reliable operation, and outstanding performance.

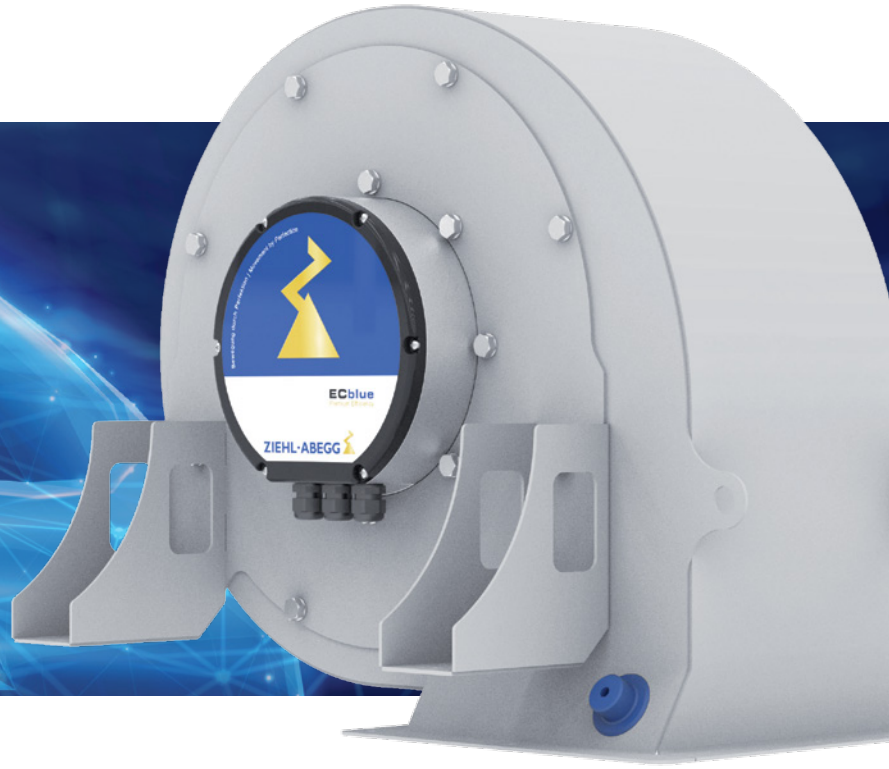
> Scalable

Powerful and reliable: high-tech fans delivering up to 11,000 m³/h airflow and 3,000 Pa pressure – ensuring maximum performance, efficiency, and dependability in demanding rail applications.

INSTALLATION ON THE ROOF
AND UNDERFLOOR

MOTOR POWER UP TO 6 KW

COMPACT ALL-IN-ONE SYSTEM
SIMPLE INSTALLATION



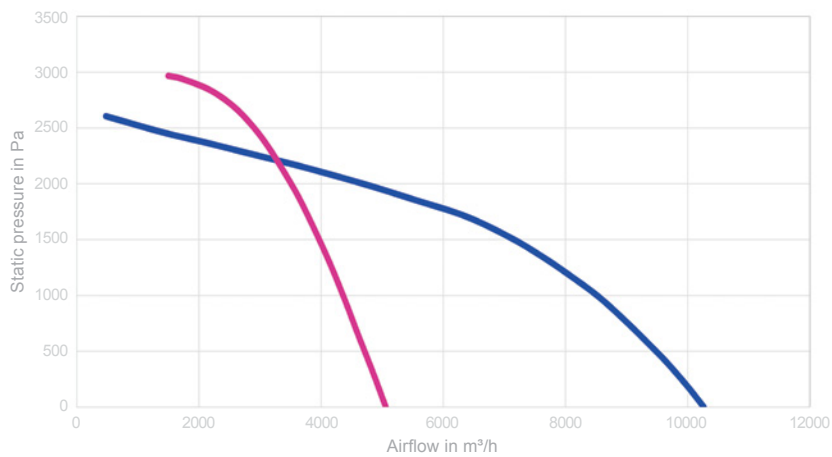
ULTRA-
QUIET



OPTIMIZED LCC



SCALABLE



The new future-ready traction motor cooling system
4–6 kW with high-tech ECblue technology

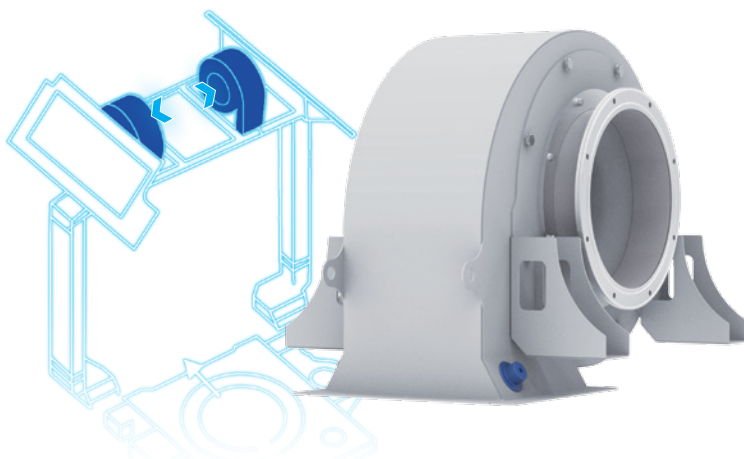
DI56V – axial flow

PR255 – radial flow

— DI56V-GG-1RH5

— PR255.0Z5.GA.MR

PR255.0Z5.GA.MR



DI56V-ZIV.GG.1RH5



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