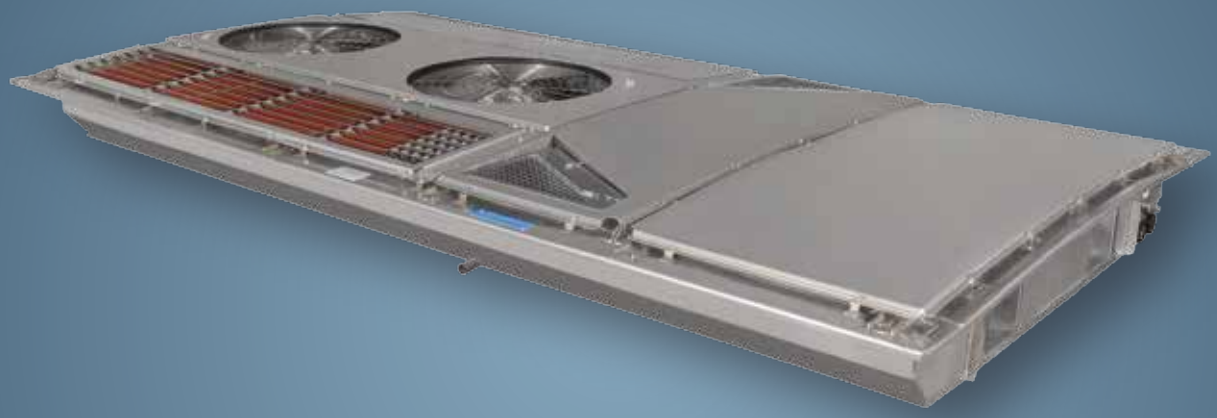

Heating, Ventilation and Air Conditioning Systems

APPLICATIONS

High-Speed Trains | Light Rail Vehicles | Locomotives | Metros | Passenger Coaches | Regional and Commuter Trains | Special Vehicles

SIGMA

merak

HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS (HVAC)

MERAK AND SIGMA AIR CONDITIONING DESIGN, MANUFACTURE, INSTALL AND SUPPORT high quality HVAC systems for all rail applications. Proven in-service throughout the world for more than 50 years, there are now more than 70,000 Merak and Sigma systems in daily operation, many in some of the world's toughest climates.

Merak and Sigma take advantage of their complementary technology and experience to deliver exactly the HVAC solution that any individual customer requires. The companies' global ability and presence enables them to deliver solutions which are locally accessible to the customer.

We do this through our experience in system integration and by working in close cooperation with our customers.

Some of the reasons that have made Merak and Sigma leaders in their field are:

- Local support provided by a global company
- High performance technology for all technical challenges
- Worldwide aftersales and service network

HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

CUSTOMER BENEFITS

LOCAL SUPPORT FROM A GLOBAL COMPANY

- Customized solutions to exactly suit a customer's local requirements
- Technical support provided locally
- Major facilities located in Australia, China, Spain, USA and the UK

HIGH PERFORMANCE TECHNOLOGY FOR ALL TECHNICAL CHALLENGES

- Extreme conditions operation: temperatures from +55 °C down to -45 °C, dust and sand, ice and snow, etc.
- Specific standards and norms: NFF, GOST, EN, ASHRAE, AS, DIN, VDV, etc.
- Efficient energy consumption
- Enhanced technology and upgrades available
- Environmentally friendly design

WORLDWIDE AFTERSALES AND SERVICE NETWORK

- Global support network
- Support available throughout the entire life cycle of the product
- Experienced and highly skilled after sales teams including field technicians
- Overhaul, refurbishment and upgrade services

SCOPE OF SUPPLY

We supply the complete HVAC system for all railway applications. When required, additional elements can be supplied such as:

- Energy saving solutions
- Sand filtration systems
- Pressure wave detection and protection systems
- Auxiliary power inverters, etc

As well as a full range of validation test and analysis like:

- Duct network design
- Computational Fluid Dynamics (CDF) analysis of a duct, system or a complete coach
- Finite Element Modelling (FEM) calculations
- HVAC noise and vibration analysis, etc.

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