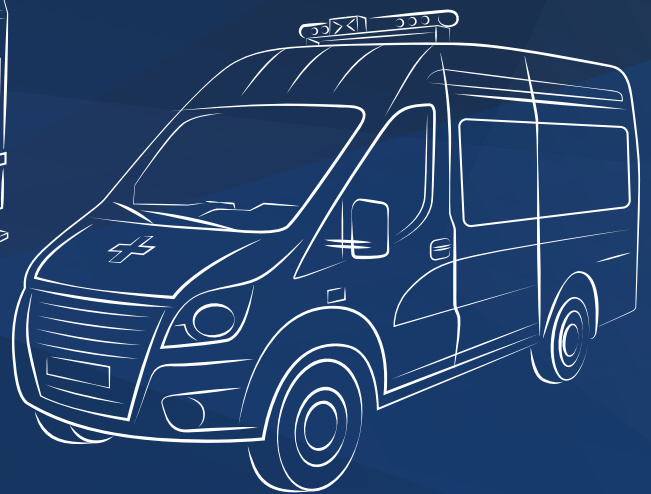
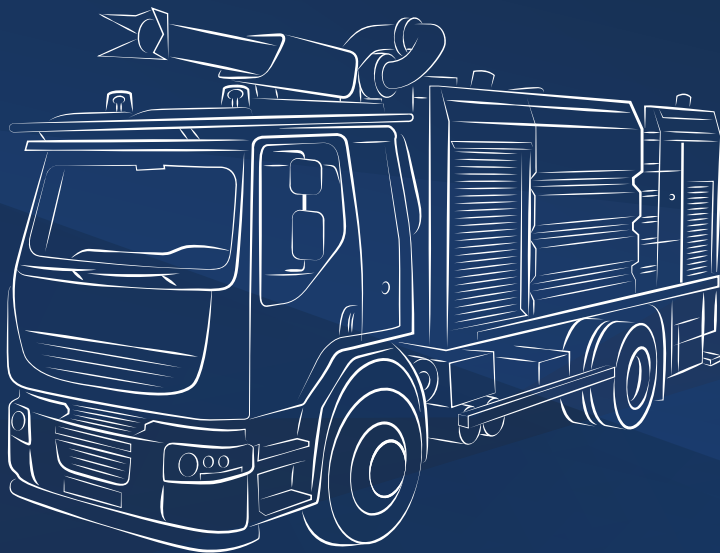


Climate and battery solutions for every specialty vehicle

More comfort and safety in deployment





The right solution for every challenge

Webasto is your reliable partner for fuel and electric powered heating as well as air conditioning solutions and battery systems for specialty vehicles. We offer you all the components you need from a single source, perfectly matched to each other. We also support you with all questions and challenges in the areas of heating, cooling and electrification.

Fuel powered solutions

- Comfort for driver, passengers and patients thanks to pleasant temperatures
- Low noise and emissions
- Meets the most stringent environmental standards
- High-quality, extremely reliable components
- Heating and air-conditioning all year around – even under harshest weather conditions
- Customized solutions for every application

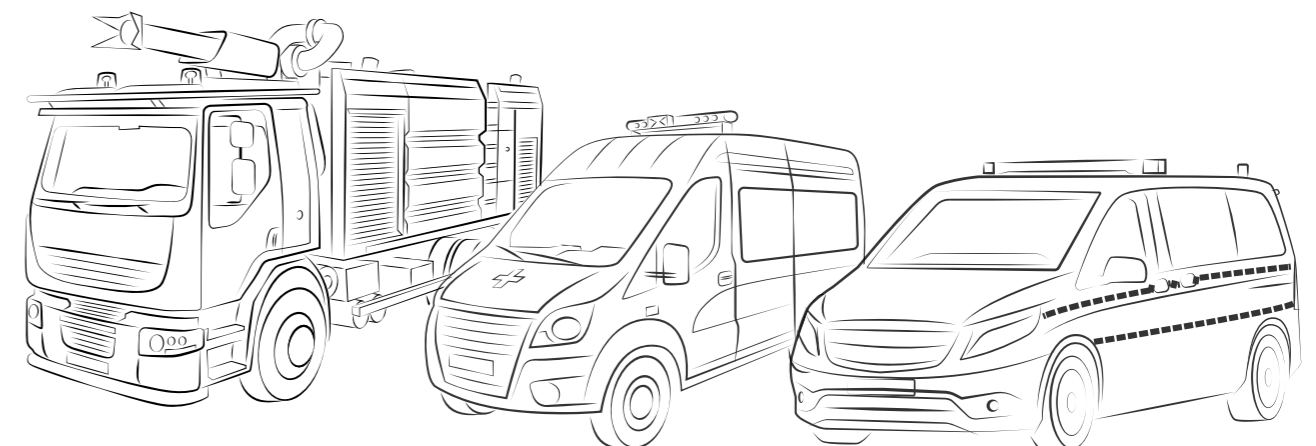
Electric powered solutions

- Very broad product portfolio that includes traction battery systems, fully integrated and Plug&Play thermo management solutions as well as electric heating solutions
- The highest automotive standards and efficiency thanks to innovative technologies
- Customized solutions for every application
- Reliable and certified safety



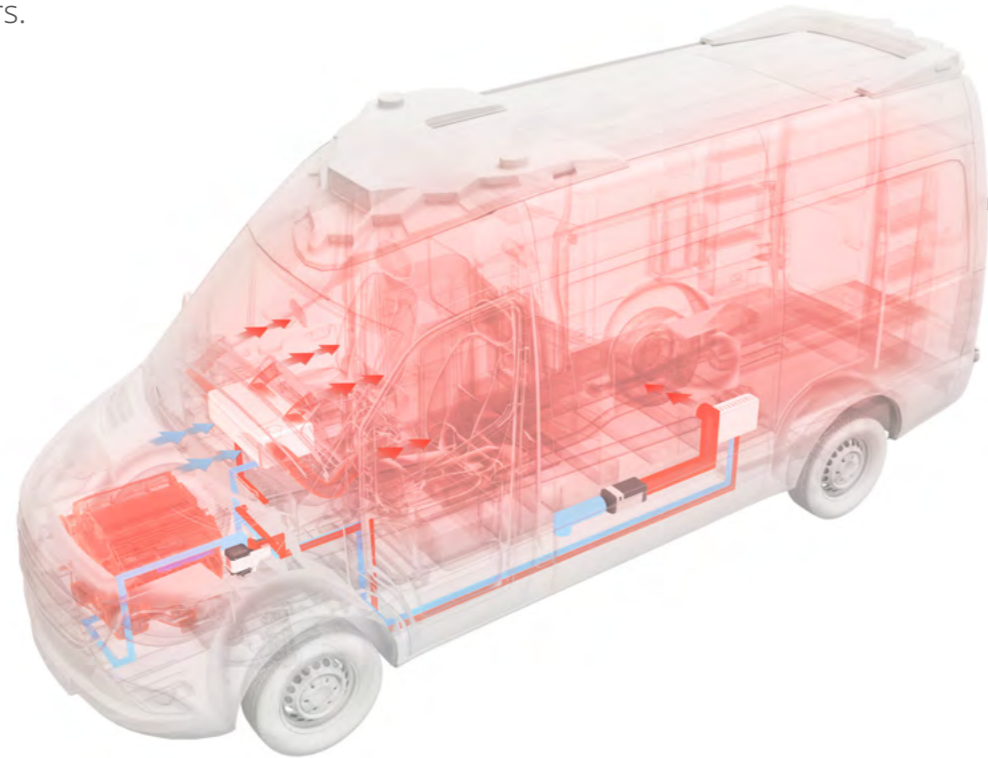
Partnership and service in every aspect

We are more than just a product supplier. We will be there for you and offer you the perfect heating, cooling or electrification solution tailored to your needs. We continue to support you even after your vehicles have been commissioned.



Fuel powered heating solutions

For fuel powered specialty vehicles, the Webasto range includes air heaters, water heaters and heat exchangers.



Water heaters

Deliver comfort, reduce wear on the engine, protect the environment

Winter operations in ice, snow and frosty temperatures always put vehicles to the test. With a water heater from Webasto, you have already mastered some of them. Because thanks to a parking heater function, the engine is preheated even at the lowest temperatures and ready for use immediately. Cold starts are avoided and fuel consumption, wear and tear and emission values are reduced. So you can drive with a clear conscience - and a clear view. The system consisting of motor, heat exchanger and fan keeps the interior at a pleasant temperature.

Key facts at a glance:

- Immediate operational readiness thanks to a pre-heated vehicle
- Longer engine life because cold starts are avoided
- Use of engine heat to bridge short idle periods with no exhaust emissions
- Compatible when using paraffinic fuels e.g. HVO or GTL



Thermo Top Evo 5 Heavy Duty / RV Classic



Thermo Pro 50 Eco



Thermo Pro 90
9.1 kW



Thermo Top Pro 120/150
12.0 - 15.0 kW

Air heaters

Ensure rapid heating and a pleasant interior climate

An Air Top heater raises your passenger compartment to a pleasant temperature and heat is available almost immediately after the unit is switched on. Whether during particularly cold weather or even in high-altitude mountain regions your air heater ensures rapid and continuous heat with low electricity and fuel consumption.

Key facts at a glance:

- Maximum performance - minimum consumption
- Low installation costs
- Short warm-up times
- Individual configuration of air distribution
- Recirculated or fresh air operation
- Continuous operation
- The ventilation function reduces the heat accumulated in the interior in summer
- Compatible when using paraffinic fuels e.g. HVO or GTL



Air Top 2000 STC
2.0 kW



Air Top Evo 40/55
4.0 - 5.5 kW

Integrated heat exchangers

Maximum flexibility between comfort and ease of installation

The HTX integrated heat exchangers delivers powerful heating and constant air flow within your vehicle. The series has been designed with focus on easy integration and thus offers versatile installation capabilities, such as in the dashboard or in the body.



HTX S



HTX S HD



HTX M



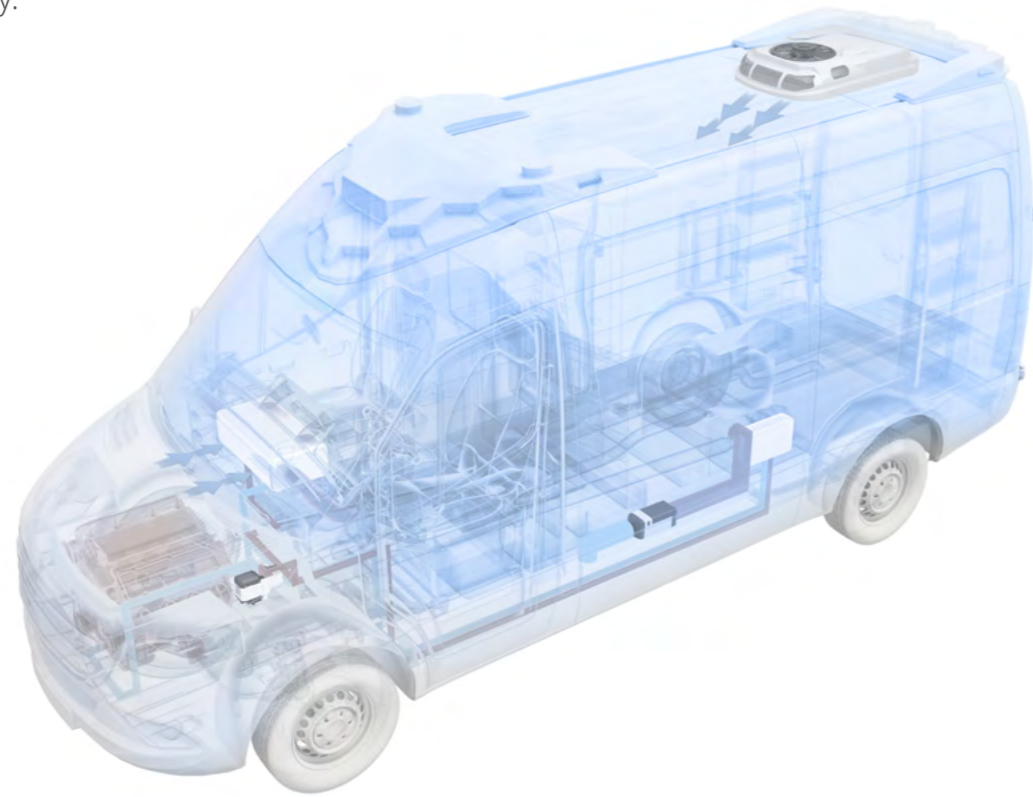
HTX M HD

Key facts at a glance:

- Wide portfolio with heating capacity from 3.3 - 6.6 kW
- Versatile installation options in the dashboard or in the body
- Durable, highest quality components from proven series production
- No maintenance needed
- Versatility through optimum combination of high performance and low volume

Engine driven cooling solutions

Webasto offers a comprehensive range of integrated air conditioning systems as well as rooftop air conditioning systems for specialty vehicles that impress with their comfort and reliability.



Integrated air-conditioning systems

Optimum climate for your specialty vehicles

The integrated air-conditioning systems from Webasto are very versatile and ensure a pleasant climate for rescue workers and patients. They can be installed in the dashboard, the side panel, under the roof lining of the vehicle or vertically in the rear wall, making them particularly flexible. Various models also have a heating function and thus offer complete air conditioning.

Key facts at a glance:

- Standardized systems
- Wide product portfolio with cooling capacity from 4.0 - 16.0 kW
- Optimum integration thanks to versatile installation options
- High efficiency through intelligent control modalities
- High-quality and reliable components
- Very low maintenance requirements



Oakland
4.0 kW



Newport
16.0 kW

Rooftop air-conditioning systems

Simple installation, maximum comfort

With the rooftop air-conditioning systems from Webasto, you always have maximum comfort in the vehicle. Even at high speeds, emergency crews and patients are always supplied with cold and, if required, warm air. Webasto roof-mounted air conditioning systems are also very low-maintenance. They can be optionally matched to the color of the vehicle.

Key facts at a glance:

- Standardized systems
- Wide portfolio with cooling capacity from 3.5 - 22.0 kW
- Compact construction and aerodynamic design
- High level of energy efficiency
- Maximum comfort thanks to a constant supply of cold air
- Functions such as fresh air* or heating functions** of individual models increase the comfort of the vehicle
- Quick and easy installation with low maintenance requirements



Cool Top 110 - 140 RT-C
11.0 - 14.0 kW



Portofino

* The Cool Top 110 - 140 RT-C- has a fresh air function as well as a recirculation function.
** The Portofino model offers an optional heating function.

Perfect control for your Webasto heating and cooling systems

Experience maximum comfort and control with advanced heating and cooling controls and the right operating options for every requirement.

Central control system Cronus

The Cronus control element from Webasto networks and controls all of a vehicle's heating and cooling units centrally in a single system. It also serves as an interface to central electrical systems, so that information can be exchanged bidirectionally. The emergency services pre-select a target temperature on the central control panel and the control system automatically sets the heating and cooling units, compressors and heat exchangers to the optimum temperature automatically. This also regulates the preconditioning of the vehicles when they are waiting in the rescue station for their deployment.



Control systems Cronus

Key facts at a glance:

- Central intelligence for controlling a complete heating and cooling solution
- Integration in vehicle CAN
- Vehicle-specific applications possible
- Plug&Play applications available
- Matching variants available with additional options such as protection class IP67

Control elements for heating systems

Rotary switch

Stepless control of air heaters

With the rotary control, controlling Webasto air heaters in specialty vehicles is child's play. Thanks to the stepless adjustment, the temperature can be adjusted immediately and precisely as required.

Key facts at a glance:

- Compatible with all Webasto air heaters
- Stepless adjustment of the heat supply with one turn
- The operating display with flashing code provides information about the status of the heater
- Compatible with 12 V and 24 V systems



Rotary switch

ThermoConnect

Smart heating control

Webasto ThermoConnect transforms mobile devices such as smartphones or tablets into a clever control system for the parking heater and offers additional comfort and monitoring functions. With the associated app, air and water heaters in specialty vehicles can be operated and pre-programmed regardless of location.



ThermoConnect app

Key facts at a glance:

- Compact housing with integrated antennas
- Simple Plug&Play principle with just only one plug connector
- eSIM preinstalled and activated
- Signal transmission through data connection 2G/ 4G
- Fits to every heater type
- Convenient control of heaters almost anywhere in the world through ThermoConnect app or browser
- Smart geolocation features
- Several vehicles can be controlled in one App
- Alexa voice control

MultiControl

Intuitive dashboard control panel for air and water heaters

MultiControl controls Webasto air and water heaters in every specialty vehicle. The heater starts directly at the push of a button or can be pre-programmed.

Key facts at a glance:

- Quick heating comfort level selection for Air Top Evo series
- 7-day timer function
- Ventilation function to equalize summer heat in the vehicle
- Status indication via multicolored LED
- "Instant start" button function for quick heater or ventilation launch



MultiControl

Control elements for cooling systems

Temperature rotary switch

Compact rotary switch for operating integrated air conditioning systems

With this popular temperature rotary switch, integrated air-conditioning systems and integrated heat exchangers can be operated intuitively. It is suitable for 12 V and 24 V systems.



Temperature rotary switch

Key facts at a glance:

- Compatible with 12 V and 24 V systems
- Measuring 50 x 50 x 5 mm, the switch fits into almost any surface
- Compatible with many integrated air-conditioning systems
- The self-explanatory mechanical control panel ensures precise temperature control

Automatic control elements

The automatic control elements from Webasto can be used to effectively control air conditioning systems in various vehicles. They all have a simple display, an internal and an external temperature sensor and the option to choose between fresh and outside air. The control elements are all suitable for a wide range of applications.

Key facts at a glance:

- Internal temperature detection via temperature sensors
- Integrated ice detection
- Compatible with 12 V and 24 V systems*



Automatic control elements

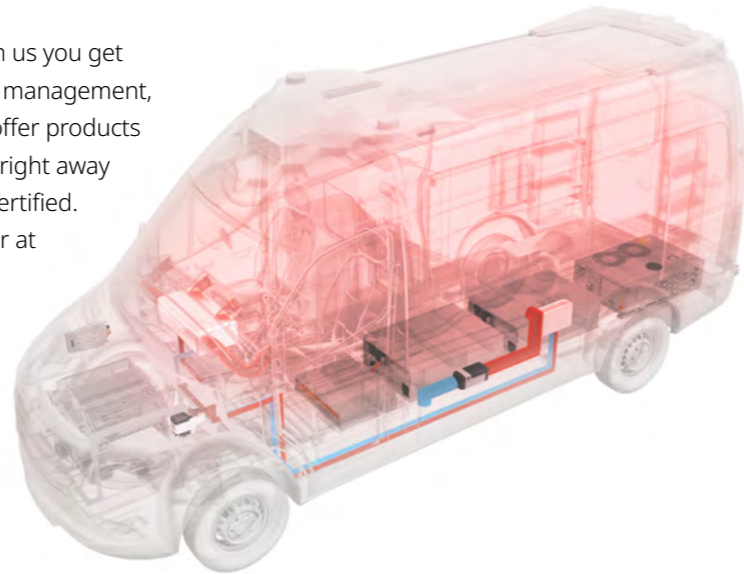
*depending on the configuration



The future of mobility - powered by Webasto

We at Webasto are convinced of the future of electromobility and contribute more than 90 years of expertise in the field of automotive technology to the development of high quality battery systems and thermo management solutions.

Whether for an ambulance, a police car or a fire engine - with us you get everything from a single source: the traction battery, thermo management, High Voltage Heater and a reliable partner at your side. We offer products that are available immediately so you can start your projects right away - all our products have already been extensively tested and certified. Start electrifying your vehicles now with Webasto as a partner at your side.



High Voltage Heater (HVH) Perfect climate for electric specialty vehicles

The electric High Voltage Heater is the ideal heating system for your electric specialty vehicle: This innovative technology from Webasto utilizes an extremely thin heating layer which converts DC electric power into heat with practically no losses. The benefits to you: Extremely rapid warm-up times, high precision, maximum efficiency. The new 800 V Generation with its versions HVH 100 Compact+ and HVH 120 offers various additional features such as LIN and CAN control, 12 V and 24 V LV-supply and active discharge support.

Key facts at a glance:

- Powerful 5/7/10/12 kW heating performance
- Wide voltage range of 400 V (5/7 kW version) and up to 880 V (10/12 kW version) independent of coolant temperature
- Layer technology for extremely fast heat-up
- Highest efficiency through quick and direct heat transfer
- Stepless and exact controllability with no inrush currents
- Reliable safety concept with redundant controls
- Certified for automotive requirements with ECE-R10 and ECE-R122 type approval
- Cyber security in accordance with ISO 21434



HVH 50/70 Gen 1.5
5.0 - 7.0 kW



HVH 100 Compact &
HVH 100 Compact+
10.0 kW



HVH 120
12.0 kW

Electric compressors

The electric compressors are the perfect addition for your electric specialty vehicle. The 400 V version even offers LIN and CAN control.



Sanden
400V



TCCI
800V

Key facts at a glance:

- Full electric semi hermetic compressor with integrated inverter
- Powerful cooling capacity of up to 8 kW (Sanden) and 8.5 kW (TCCI)
- Available as 400 V and 800 V versions
- Suitable for R134a and R1234yf refrigerant
- Available LIN software control for the 800 V version and LIN and CAN software control for the 400 V version

Modular traction battery system for the electrification of specialty vehicles

The Webasto Standard Battery Pro 40 was developed for the high demands of the commercial vehicle market and offers a robust housing, development to automotive standards, uncompromising quality and efficient thermal management. The modular and scalable system is ideal as a traction battery for specialty vehicles.

Key facts at a glance:

- Robust housing
- Flexible and easy integration (vertical & horizontal)
- Highest safety and quality standards
- Certified for automotive requirements with ECE-R100 and ECE-R10
- Optimization of performance and service life through thermo management
- The efficient Vehicle Interface Box (VIB) or Vehicle Interface Gateway (VIG) combine the functions of power distributor, master BMS and fuses and reduces the integration effort



Standard Battery Pro 40



Vehicle Interface Box
(VIB)



Vehicle Interface Gateway
(VIG)

Battery thermo management Electrical plug & play solution for ideal battery conditioning (eBTM)

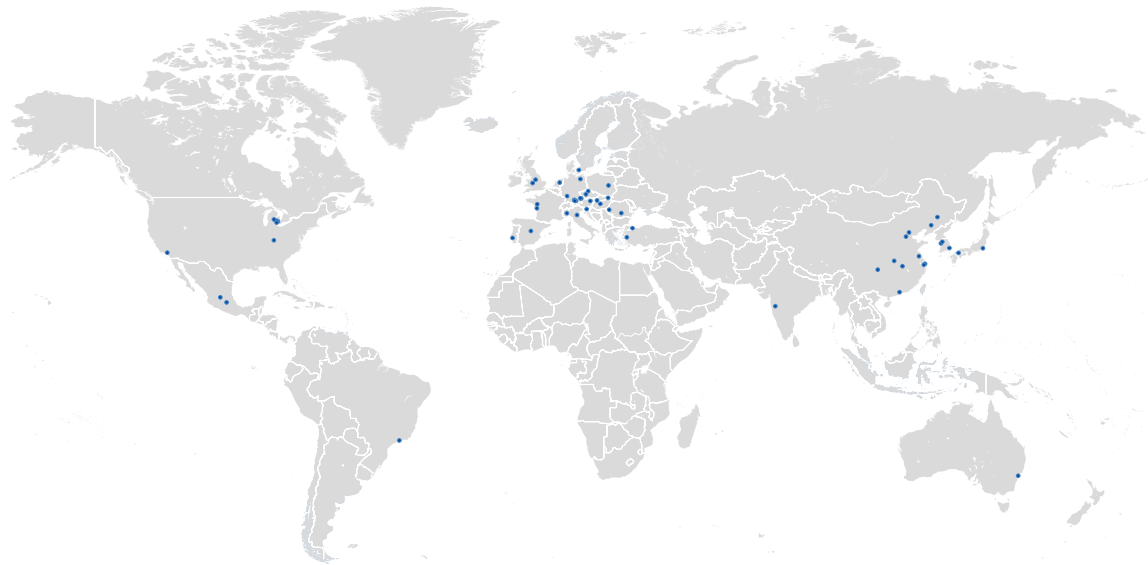
The Webasto eBTM is a universal, stand-alone electrical thermo management system for traction batteries that ensures the optimal function of water-cooled battery packs in electric specialty vehicles.



eBTM
8 kW cooling,
up to 10.0 kW heating

Key facts at a glance:

- Simultaneous conditioning of up to 6 battery packs or 210 kWh battery capacity
- Ensuring ideal battery cell performance over the long term
- Managing heat load during battery discharging and charging phases
- Easy plug & play installation in electric specialty vehicles



● Webasto locations

As a global innovative systems partner to the mobility industry, Webasto is one of the 100 largest suppliers to the automotive sector worldwide. In development, manufacturing and sales, the company focuses on roof systems on the one hand and on vehicle electrification on the other hand. The product range includes, openable and fixed panoramic roofs, electric High Voltage Heater and batteries, as well as thermo management solutions. Among the customers of Webasto are manufacturers of passenger cars, commercial vehicles, and boats, as well as dealers and end customers. In 2022, the Group generated sales of over 4 billion euros and employed about 16,800 people at more than 50 locations. The headquarters of the company, which was founded in 1901, is located in Stockdorf near Munich (Germany). For more information, please visit www.webasto.com



Contact details