

# With You on Every Journey: The Greatest Comfort and Safety

Innovative Solutions for Buses, Mini and Midibuses





Car



Truck



Light Vehicles



Bus



Rail



Off-Highway



Defense



Special Vehicles

# The Appropriate Solution for Every Challenge

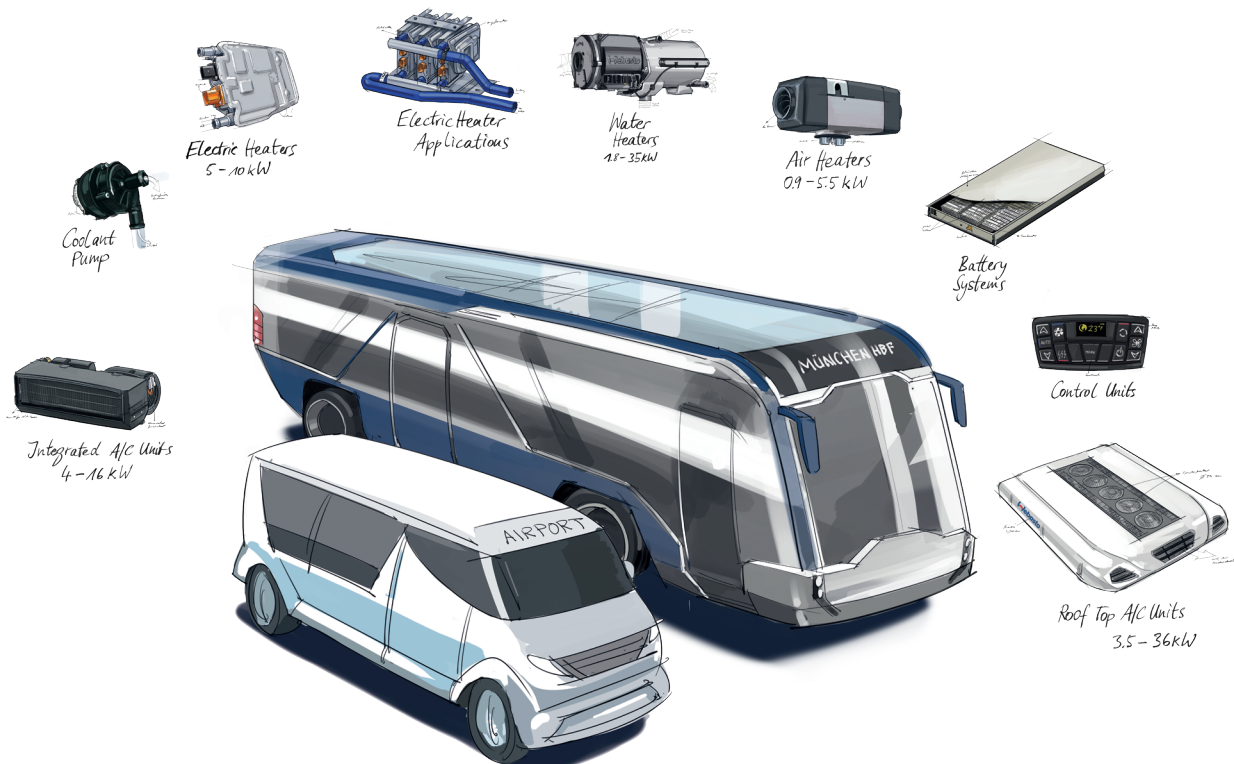
Webasto is your reliable solution provider when it comes to conventional and electric heating and cooling systems for your bus. All of the required components come from a single source and are matched so that they complement each other perfectly. We provide assistance and advice with any queries and challenges you may have in the area of heating and cooling: our technicians and our technical hotline are always available to support you with help and advice.

## Conventional solutions

- Comfort for passengers and driver thanks to pleasant temperatures
- Low noise and emissions
- Meets the most stringent environmental standards
- Timer can be set for seven days in advance via the control unit
- High-quality, extremely reliable components
- Heats throughout the day – from morning to evening – even under the coldest winter temperatures

## Electric solutions

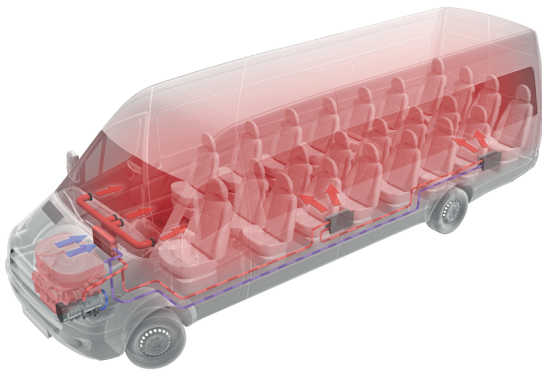
- Very comprehensive product portfolio that includes batteries, battery systems and equipment for heating the passenger compartment
- The highest quality and efficiency thanks to innovative technologies
- Solutions that are tailored to your needs
- Reliable and certified safety



# Water and Air Heating, Air Conditioning and More: Conventional Solutions, of Course from Webasto

## Delivers Comfort, Reduces Wear on the Engine, Protects the Environment: the Water Heater

Especially in winter, with frosty outside temperatures and snow, the Webasto water heater is a valuable addition: it pre-heats your bus, deices the windows and makes sure the vehicle is ready for service immediately. The high-performance parking heater means that the internal temperature is not affected when your passengers embark or disembark. It ensures continuous warmth, even in high-altitude mountainous areas.



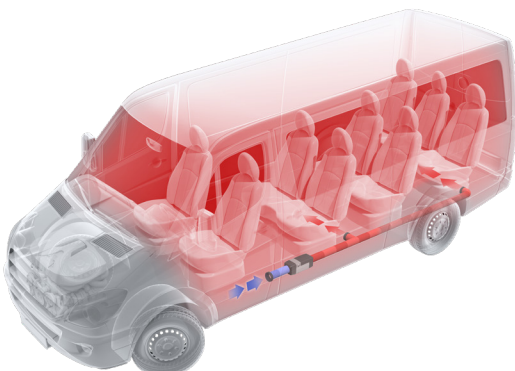
### Your Benefits:

- 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
- Uniform level of comfort, even in high-altitude mountainous areas

Heat output from 9,0 kW to 15 kW

## Ensures Rapid Heating and a Pleasant Interior Climate: the Air Heater

An Air heater raises your passenger compartment to a pleasant temperature and heat is available almost as soon as the unit is turned on. Whether during particularly cold weather or even in high-altitude mountainous areas: your air heater ensures rapid and continuous heat with low electricity and fuel consumption.



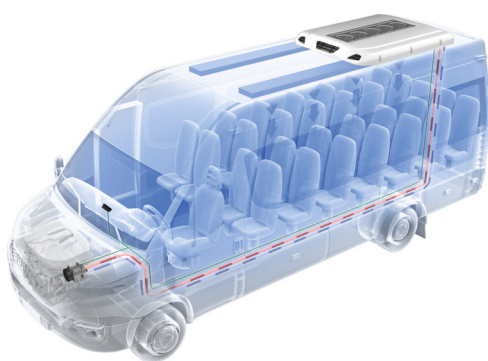
### Your Benefits:

- Maximum performance – minimum consumption
- Low acquisition and installation costs
- Short warm-up times
- Individual configuration of air distribution
- Recirculated or fresh air operation
- Continuous operation
- Ventilation function reduces trapped heat in summer

Heat output from 2,0 to 5,5 kW

### Simple Installation, Maximum Comfort: your Rooftop Air-Conditioner

With the Webasto rooftop air-conditioning solutions you always have the ideal comfort level in your bus: even at high speeds you and your passengers are always supplied with fresh and, if desired, warm air. Moreover, your rooftop air-conditioning system is very economical in terms of energy consumption and is also simple to maintain. Optionally, it can also be painted to match the color of the vehicle.



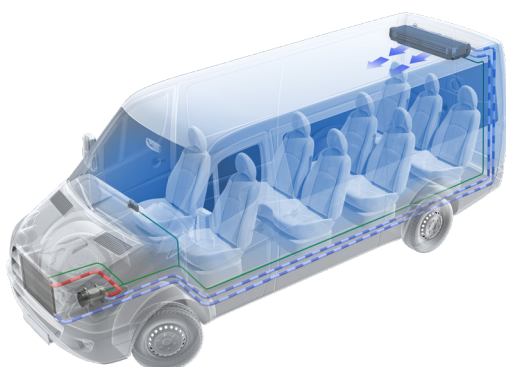
#### Your Benefits:

- Cooling capacity up to 36.0 kW
- Compact construction and aerodynamic design
- High level of energy efficiency
- Maximum comfort thanks to a constant supply of fresh air and optional heating function
- Easy and rapid installation with low maintenance requirements

Cooling capacity from 3,5 to 36,0 kW

### Optimum Climate for Minibuses: integrated Climate Systems from Webasto

The integrated air-conditioning systems are extremely versatile and create a pleasant climate for you and your passengers. They can be installed under the dashboard or beneath the roof, in the vehicle's headliner or vertically in the rear wall, thereby offering a high level of flexibility. To provide a completely integrated climate solution, various models also have a heating function.



#### Your Benefits:

- Cooling capacity up to 16.0 kW
- Optimum integration into the vehicle design thanks to versatile installation options
- High efficiency
- High-quality and reliable components
- Very low maintenance requirements

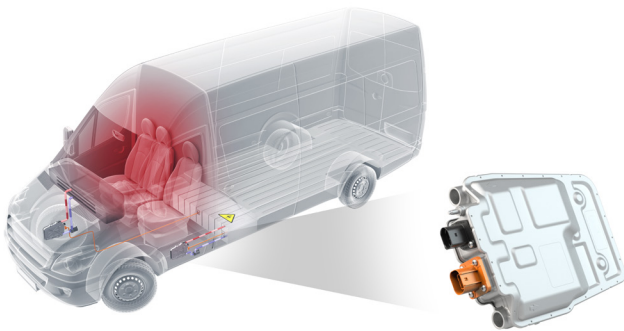
Cooling capacity from 4,0 to 16,0 kW



# Battery Systems and Climate Comfort: Electrical Solutions, of Course from Webasto

## Electric, High-Performance, Fast: the HVH 50/70 and HVH 100 High-Voltage Heaters

The electric high-voltage heater is the ideal heating system for your hybrid or fully electric bus: 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. Good to know: The HVH 100 is the only high-voltage heater on the market that is designed for voltages of up to 870 V as required by many busses.

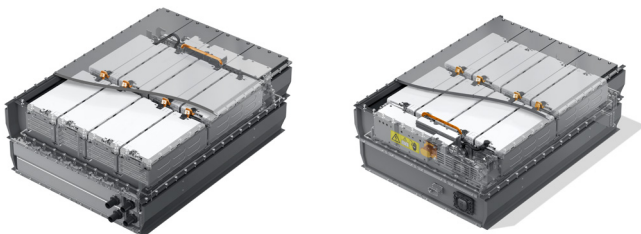


### Your Benefits:

- Powerful and reliable heat output for constant comfort
- Fast and efficient power output for a longer driving experience without wasting energy
- Precisely and infinitely adjustable for optimized performance with very short warm-up and cool-down times
- Reliable and certified safety with various failure protection mechanisms for guaranteed safety
- The heat output can be scaled-up thanks to the modular system
- Easy to integrate thanks to the low installation space requirements

## Individual, Customizable, Cost-Efficient: the Modular Battery System

The modular battery system from Webasto offers efficient e-solutions for all types of buses. The system, which has been developed especially for commercial vehicles, is characterized equally by its high level of cost-effectiveness and its individuality, which is precisely matched to your needs.

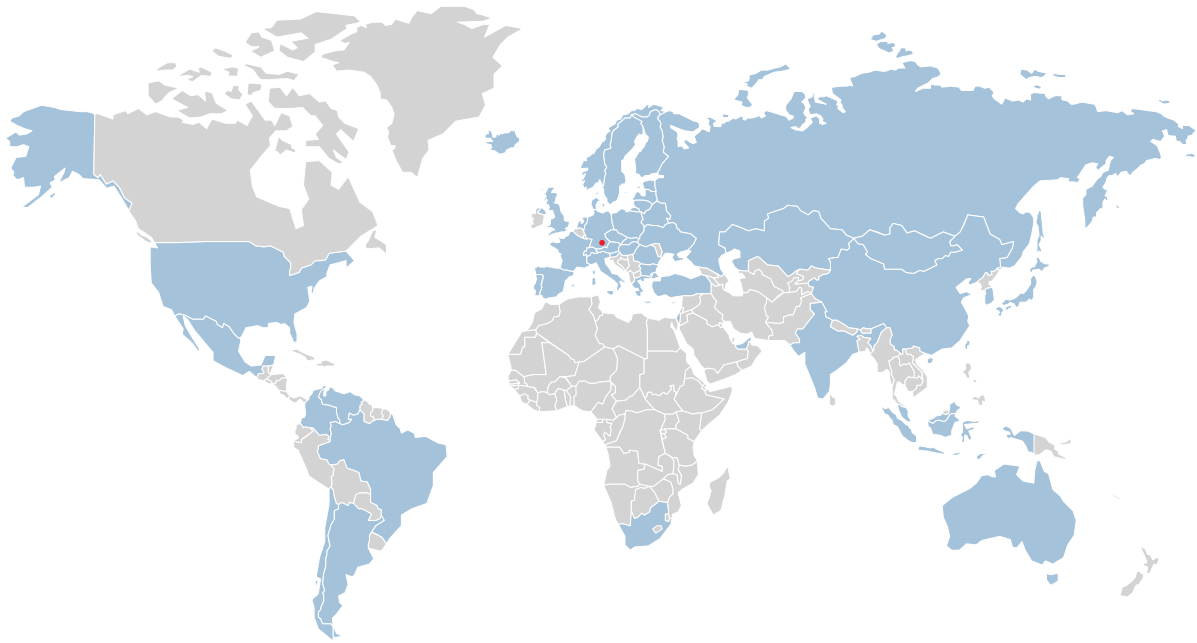


### Your Benefits:

- Modular design facilitates customized configuration
- The modular design principle ensures a shortened product development process
- Easily adaptable to account for technological developments
- Cost-efficient, even for low quantities
- Low operating costs through economies of scale

## The Optimum Climate for All Seasons

Outside, the summer sun is shining on the vehicle, but it remains pleasantly fresh inside. A good climate is a major benefit, ensuring a relaxed journey for both drivers and passengers. Webasto offers customized solutions that are precisely tailored to your needs. We equip electric vehicles with our cooling expertise – from rooftop air-conditioning systems right through to integrated air-conditioning units. Our system and application solutions are perfectly suited for cooling your electric vehicle, thereby facilitating comprehensive thermal management for the driver's position, passenger compartment and battery.



The Webasto Group is a global innovative systems partner to almost all automobile manufacturers and is among the top 100 suppliers in this industry sector. In its core business areas the company develops and produces sunroofs, panorama roofs and convertible roofs as well as thermo systems for all drive types. In addition, with battery systems and charging solutions, Webasto is expanding its product portfolio in the electromobility segment. In 2017 the Webasto Group generated sales of 3.5 billion euro and had around 13,000 employees at more than 50 locations (with over 30 of these being manufacturing plants). The headquarters of the company, founded in 1901, is located in Stockdorf near Munich (Germany). For more information please visit **[www.webasto-comfort.com](http://www.webasto-comfort.com)**

