









For the best conditions.



We have the right solution for you.

Webasto provides individual heating and cooling solutions for railed vehicles in all climate zones on the planet. Our modular products allow you to combine them in almost any way that

you please, and can all be scaled to suit your requirements. Allow us to create a heating and cooling system tailored to suit your needs. For the best possible comfort of your passengers.

		Diesel railcar and electric railcar	Subways	Passenger coaches	Special vehicles and locomotives	Streetcars	Double-decker rail cars
 Thermo 230/300/350 Water heating	Heating systems	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
		 DBW 2010/2016 Water heating system	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
 Railcool M Roof-top system Passenger compartment	Cooling solutions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
		 Railcool R Roof-top system Driver's cabin	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
 Railcool X Roof-integrated system Passenger compartment			<input checked="" type="checkbox"/>				
 Railcool S Split system Passenger compartment/ driver's cabin				<input checked="" type="checkbox"/>			
 Railcool T Roof-top system Passenger compartment						<input checked="" type="checkbox"/>	
 Railcool A Roof-top system Passenger compartment/ driver's cabin						<input checked="" type="checkbox"/>	
 Railcool D Roof-integrated system Passenger compartment							<input checked="" type="checkbox"/>

Webasto Thermo & Comfort SE
 P.O. Box 1410
 82199 Gilching
 Germany

www.webasto.com

Comfortable Conditions. Everywhere and at all Times.

With efficient heating and cooling controls from the one source



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Make way!

Efficient heating and cooling whatever the external temperature.

Book your ticket for an efficient, and above all energy-saving, heating and air-conditioning system in your Diesel Multiple Unit. The innovative systems from Webasto guarantee comfortable internal conditions for your passengers – whether it is -40°C with a freezing frost or brutal +45°C heat outside.

Even before operation begins, the diesel-powered heating systems bring your train engines up to the ideal operating temperature. And they do so far more efficiently than conventional electric heating systems. During the journey, the intelligent control unit perfectly regulates the heating or cooling components. As such, you can be sure to have the most efficient air-conditioning system to provide your passengers with the most pleasant conditions, all the time.



Your benefits.

Heating and cooling from the one source

Webasto is the first and only provider of engine independent heating systems and railway-specific cooling solutions from one source. Through its takeover of the cooling specialists Diavia, Webasto now has twice the expertise when it comes to air-conditioning systems. For summer and winter.

Maximum comfort. Whatever the weather

Tailor-made heating and cooling solutions offer your passengers the most comfortable travel conditions, and ensure that your train drivers can enjoy the best working conditions, whatever the weather outside.

Optimising the temperature management system

Our systems' intelligent control unit regulates the individual components with complete independence. The required processes are regulated based on the external temperature and the internal temperature in the carriages.

Excellent energy-efficiency and energy savings

The diesel-powered Webasto heating systems work far more efficiently than electrical solutions when it comes to the frost and preheating modes. The prioritised usage of engine waste heat and the situative use of our own air-conditioning devices further reduce energy consumption.

One central control unit

The central control unit regulates all affiliated heating and cooling components, and utilises the most efficient operating modes for the respective temperatures.

Integrated diagnostics and maintenance software

The comprehensive Webasto diagnostics and maintenance tool gives you a quick and easy overview of the operation of your heating and cooling systems. You can initiate maintenance procedures at the touch of a button.

Always the right setting.

An overview of our heating and cooling systems' different operating modes:

Frost protection

In the case of minus temperatures, the carriage interior is kept at a constant +7°C and, as such, free from frost; even outside of operating hours. This prevents the pipes from freezing. The CO₂ footprint is up to 50% better than with electric heating.

Preheating

This mode preheats the carriages and the driver's cabin prior to operation from +7°C to a pleasant +21°C without use of an external power supply*. The energy-saving preheating starts automatically at a time calculated by the control unit.

Preheating the engine

A preheated engine starts more reliably, consumes significantly less energy and is subjected to significantly less wear and tear. Your train engine is, therefore, preheated to a temperature of +60°C prior to operation, without use of an external power supply*.

Automatic operation

The hybrid heating system ensures a great heat output during operation. Once the ideal engine temperature has been achieved, the waste heat from the engine is fed into the heating system to reduce the energy consumption. Various air-conditioning units are engaged as and when required.

Passenger operation

Fresh air is automatically fed into the carriage in line with the German railway standard **. The fact that ventilation is controlled in line with usage, and engine waste heat is prioritised*** means that additional energy savings can be achieved.

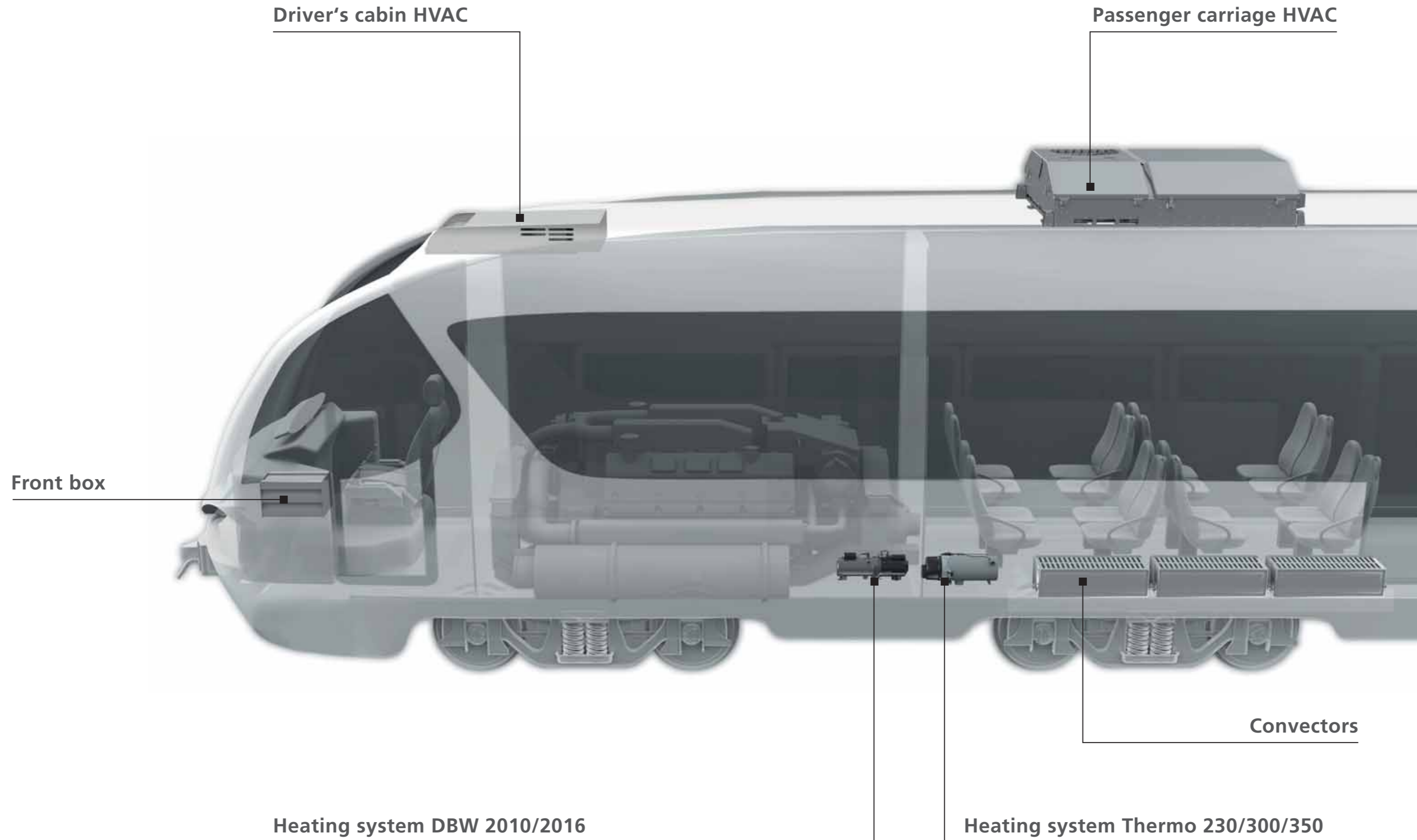
Pre-cooling and ventilating

In the case of external temperatures exceeding +21°C, the air-conditioning systems are engaged prior to start of operation to ventilate the interior. Maximum cooling is achieved once the engine is switched on and when the cooling water engine reaches its operating temperature of 80°C.

* In the case of a corresponding design of the overall system (vehicle battery, heating, carriage body)
 ** through the use of CO₂ sensors or calculation of number of passengers
 *** depending on the available waste heat and design of the overall system (vehicle battery, heating, carriage body)

Driver's cabin HVAC

Passenger carriage HVAC

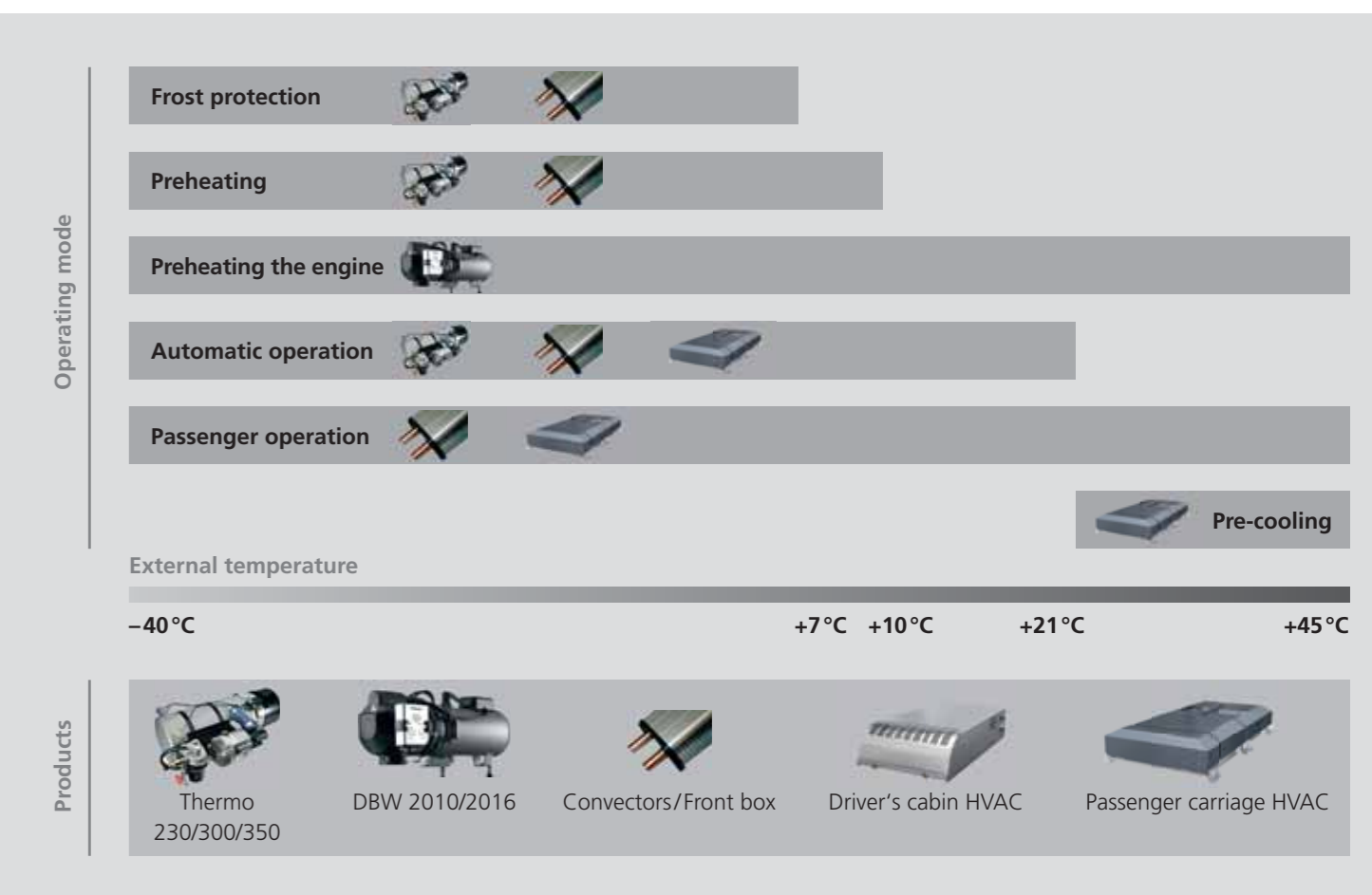


Front box

Heating system DBW 2010/2016

Heating system Thermo 230/300/350

The right answer for every temperature.



Everything under control.

The integrated Webasto diagnostics and maintenance software.

Besides the reliable controlling of all air-conditioning components, our systems also come with an outstanding benefit: Each system from Webasto features high-performance, integrated diagnostics and maintenance software.

You can use it to display all relevant system parameters and even to evaluate the system during operation. It is also possible to save and analyse all status messages provided by the ventilators, compressors, heating units as well as by all components relevant to the system, such as thermostats, pressure regulators etc.

Remote maintenance and auto tests complete the features of the Webasto software. One more advantage for your faultless and scheduled vehicle operation.

