

# Heavy Duty Catalogue

2013/2014





**Webasto Heavy Duty presents you with a total range of efficient solutions relating to the subject of heating, cooling, ventilation for trucks, transport vehicles, buses, rail, special and defense vehicles.**

Continuous investment in research, development, product and customer service is the reason why Webasto has been developing and producing successful products for the automotive and commercial vehicles industry worldwide for 75 years. Today, Webasto is one of world's 100 largest suppliers to the automotive industry. Webasto also transfers this know-how to other markets, such as the rail or construction machine vehicles markets.

One of our strengths is customised customer engineering. We develop a suitable application solution with you that reaches farther than our standard offer.

The nearest Webasto branch office or Webasto subsidiary can never be far away thanks to our worldwide presence as automotive and commercial vehicle supplier in more than 43 countries.

Your Webasto Heavy Duty Team

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## Important information and useful information sources

### Technical notes

#### 1. Important note for heaters in vehicles used to transport dangerous goods:

The requirements of ADR 2005 (GGVSE = Regulation on carriage of dangerous goods by road and rail) must be fulfilled in addition to the German Road Traffic Regulations (StVZO) for the installation of heaters in vehicles used to transport dangerous goods. These requirements are fulfilled by the heaters mentioned in the Heaters price list – Air Top 2000 ST, Air Top Evo 3900, Air Top Evo 5500 and Thermo 90 ST– if the ADR-specific instructions of the installation instructions are observed during installation. The heaters may be installed in EX/II and EX/III vehicles only to heat the driver's cabin or the engine.

#### 2. Important note for the installation of rooftop Compact

Air-Conditioning Systems: rooftop compact systems can change the strength properties of vehicle cabins. EN ISO 3471 (Roll-over protective structures) as well as EN ISO 3499 (Falling-object protective structures) must be considered, especially in case of earth-moving machines.

Individual products might not be available in all countries.

### General notes

Our general sales and delivery terms will apply exclusively to all deliveries. You will receive our products through our sales partners.

You should visit a technical workshop in order to ensure correct installation of the products.

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### Website

[www.webasto.com](http://www.webasto.com)

- Extensive information about all market segments and products
- Data sheets for download
- Videos and animations
- Installation graphics
- Updated version of the product catalog

### Personal contact partner on site

You will find the appropriate contact partner in your proximity via our Dealer Locator at [www.webasto.com](http://www.webasto.com).

Addresses and contact information of our subsidiaries worldwide can be found **from page 190 onwards**.

We offer the following services:

- Quotation creation
- Delivery information
- Technical consulting
- Hotline

### Dealer portal

<http://dealers.webasto.com>.

- Access via protected login
- Documentation of all products for downloading
- Installation instructions
- Web-based training
- Access to technical data and applications
- Assistance in correct product selection (Heavy Duty Capacity Calculator)

### Marketing material

All advertising material is available for download on our media server at

<http://media.webasto.com>.

- Documentation of all products for downloading
- Brochures
- Data sheets
- Videos
- Installation graphics
- Advertisement templates



## Engineering service for customer-specific application solutions

In addition to a large selection of standard products, Webasto Heavy Duty offers you an engineering service for system solutions that have been developed and created especially according to customer requests.

Irrespective of whether your requirements differ from the standard in areas like installation position, operating temperature, operation at high altitudes, interface connection or the installation situation in the vehicle – we can work out an optimum solution for you. In this context, you can fall back on our long-term experience in the areas of original equipment as well as retrofitting. You profit from our high process and quality level, and our know-how in system integration, mechatronics and software development.

### We can advise you in all the project phases – From the initial idea to after sales service.

#### 1. Planning

Get in touch in the early planning phase. Together we will define how the desired system solution is to be procured, with all interactions, interfaces and the components that are necessary for the operation of your Webasto heating or air-conditioning systems. This way we ensure that your system solution is coordinated optimally to the target vehicle.

#### 2. Implementation

We test your system solution extensively before production and series-production readiness. For example, we offer you tests on the A/C, acoustics and rain chamber as well as vibration tests and tests in endurance run systems. Production of your solution will take place according to the specifications of the automobile or railway standards.

#### 3. Maintenance and service

Even in after-sales service, you will profit from our peak services. A worldwide network of subsidiaries, representations and contract dealers guarantees a competent contact partner in the vicinity at all times.

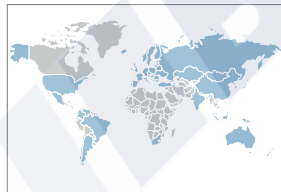
### Advantages of the Webasto engineering service:

Secure project workflow through long-term experience in the areas of original equipment and retrofitting

- High process and quality level in all project phases
- Utilisation of the mechatronics expertise of Webasto
- High software quality through programming of control software internally at Webasto



Planning with customers



Worldwide service



Testing

A possible process for the development of a customer-specific system solution, with all preconditions and requirements, is given below:

- 1 Ascertaining the existing general conditions and requirements**
  - Comfort, quality, operation at high altitudes or in extreme climatic zones
  - Vehicle type
  - Legal requirements, guidelines and standards from individual market segments such as ambulances, defense or construction machines
- 2 Determination of the required heating and cooling capacity**
  - Clarification of the vehicle specifics and the space to be air-conditioned, i.e., driver's seat, cargo space or passenger compartment, engine
  - Use case, i.e., height, motor pre-heating or integration of other systems such as fuel, battery or hydraulics
  - Operating temperature
  - Integration in vehicle
- 3 Working out an application solution**
  - Defining system integration, i.e., definition of the integration in the coolant circuit or integration of a rooftop air conditioning system in the original vehicle air-conditioning circulation
  - Execution of FEM simulations
  - Defining the required application components, e.g., optimum air ducting parts
  - Designing customer-specific application components such as bracket or wiring harness
  - Management evaluation of application solution
  - Execution of prototype installation
  - Ensuring the functioning and the interfaces in the vehicle through startup
- 4 Proof of customer-specific requirements**
  - Execution of selected test series (i.e. vibration test, salt spray test, EMC test ...), depending on the requirement profile
- 5 System/application release onsite at the customer's premises**
  - Secure project workflow through long-term experience in the areas of original equipment and retrofitting
  - Creation of release check-list
  - Testing the integrated total system with the customer
  - After-sales service at service stations available worldwide

# Market segments



Market Segments



Truck  
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Light-duty Vehicles  
page 12



Bus  
page 14



Rail  
page 16



Defense  
page 18



Off-Highway  
page 20



Special Vehicles  
page 22



## Truck

Trucks are mobile workplaces that must include the appropriate comfort. Pleasant temperatures will prevail in the driver's cabin with Webasto solutions. They form one of the preconditions for concentrated working and relaxed pauses.

Webasto parking heaters ensure the correct temperature in the driver's cabin and the cargo space even in snow and ice. Water heaters heat up the engine beforehand and avoid cold starts which make the engines susceptible to damage. Engine idle times during pauses, traffic congestion and waiting times during loading and unloading are also reduced through the use of a parking heater. You will profit from reduced fuel consumption

and therefore, lower operating costs. Moreover, reduced engine idle run times contribute to environmental conservation.

Even at high outdoor temperatures, Webasto air-conditioning solutions guarantee comfort in the mobile workplace. Parking cooler solutions maintain optimum temperature in the cabin even when the engine is switched off.

### Your advantages from Webasto solutions for trucks:

- Engine and environment-friendly pre-heating and heating
- Efficient parking cooler solutions increase comfort and economy
- Fuel, and thereby operating cost, reduction by decreasing of engine idle times

	Heating capacity/ cooling capacity (kW)	Page
<b>Air heaters</b>		
Air Top 2000 ST	2.0	32
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
Air Top System	to 22.0	38
HL 90	9.0	40
<b>Water heaters</b>		
Thermo Pro 50 Eco	5.0	50
Thermo 90 ST	9.0	52
Thermo Pro 90	9.0	54
DBW 2010/2016	10.0 - 16.0	56
<b>Air-conditioning systems</b>		
Compact Cooler 5	5.0	174
Cool Top Vario 10 E	1.0	184
Parking Cooler	Various	184

### Application examples



Heaters



Air-conditioning systems



## Light-duty Vehicles

Light-duty vehicles must be ready for operation under all weather conditions.

Besides comfort for the driver and the persons being transported, Webasto solutions can also provide plus points with safety and operating costs.

No limits are set on the use of the heating systems: from engine heating through pre- and additional heating of driver cabins right up to the heating of cargo spaces and passenger compartments, everything is possible. Furthermore, engine idle run times during waiting periods, traffic congestion, pauses during loading and unloading can be avoided with parking heaters. The reduced fuel consumption and wear and tear lower your operating costs. Webasto offers vehicle-specific installation sets for quick, safe and easy installation in current vehicle models.

Webasto air-conditioning systems ensure an optimum climate during the journey even at very high outdoor temperatures or while stationary. In addition to the standard assortment, Webasto offers customised application solutions for all demands.

### Your advantages from Webasto solutions for Light-duty Vehicles:

- Engine and environment-friendly pre-heating and heating
- Vehicle-specific installation sets for common models
- Reduction of operating costs through fuel savings and less wear and tear

	Heating capacity/ cooling capacity (kW)	Page
<b>Air heaters</b>		
Air Top 2000 ST	2.0	32
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
<b>Water heaters</b>		
Thermo Top Evo	5.0	46
Thermo Top C	5.0	48
Thermo Pro 50 Eco	5.0	50
Thermo 90 ST	9.0	52
Thermo Pro 90	9.0	54
<b>Air-conditioning systems</b>		
Compact Cooler 5 Lite	5.0	174
Compact Cooler 5	5.0	174
Compact Cooler 8	8.5	174
E-Unit	Customer-specific	174
Parking Cooler	Various	184

### Application examples



Heaters



Air-conditioning systems



## Bus

With its broad range of heaters and air-conditioning systems, Webasto offers maximum comfort for bus drivers and passengers.

Thus, Webasto parking heater systems ensure optimum temperatures from the start. With engine pre-heating, you can avoid cold starts that are damaging to the environment and prone to wear and tear. Thanks to the efficient reduction of engine load, the guaranteed reliability and maximum service and maintenance friendliness, bus manufacturers of the entire world rely on Webasto.

Tailor-made air-conditioning systems create pleasant temperatures in all bus types – from city bus to luxury tourist bus – in all kinds

of weather and in every climate zone. The product portfolio reaches from the air-conditioning of the driver's seat to compact air-conditioning solutions for use all over the world. You receive a total solution under one roof. Whatever solution you may choose: you can rest assured that Webasto uses only environment-friendly refrigerants.

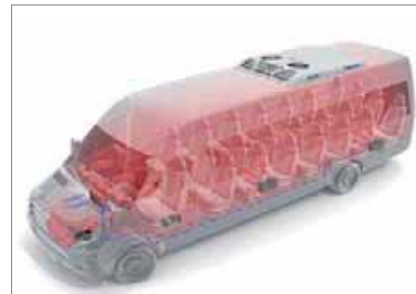
### Your advantages from Webasto solutions for buses:

- Feel-good climate in all seats
- Cost-efficiency through reduction of fuel consumption and wear and tear
- Engine-saving and environment-friendly heating

	Heating capacity/ cooling capacity (kW)	Page
<b>Air heaters</b>		
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
Air Top System	to 22.0	38
<b>Water heaters</b>		
Thermo 90 ST	9.0	52
Thermo Pro 90	9.0	54
DBW 2010/2016	10.0 - 16.0	56
Thermo 230/300/350	23.0 - 35.0	58
Thermo S 230/300/350/400	23.0 - 40.0	60
<b>Air-conditioning systems</b>		
Compact Cooler 5	3.5	174
Compact Cooler 8	8.5	174
E-Unit	Customer-specific	174
Parking Cooler	Various	184
Bus A/C systems	Various	188

Market Segments

### Application examples



Heaters



Air-conditioning systems





### Your advantages from Webasto solutions for rail vehicles:

- Feel-good climate around all seats in passenger coaches and driver's cab
- Cost-efficiency through pre-heating of diesel engine and fuel
- Environment protection through the use of sustainable materials
- Modular platform system permits non-standard customer solutions

	Heating capacity/cooling capacity (kW)	Page
<b>Water heaters</b>		
Thermo 230/300/350	23.0 - 35.0	58
Thermo S 230/300/350/400	23.0 - 40.0	60
<b>Air-conditioning systems</b>		
Compact Cooler Rail 4E/2H	4.0	180
Compact Cooler Rail 7E/2H	6.5	180
Compact Cooler Rail 7H	6.5	181
RailCool R 5	5.5	182
RailCool S 236	36.0	183

\*Platform-based passenger rooftop air-conditioning systems on request

Market Segments

## Rail

Comfort, efficiency, sustainability and energy saving are the salient features of Webasto air-conditioning solutions for rail vehicles. Passengers expect a pleasant climate in the compartment. Drivers require constant climatic conditions in the the driver's seat to help their concentration, whatever the outdoor temperature.

Webasto offers an air-conditioning solution suitable for nearly all rail vehicle types. Thanks to the modular platform principle, the systems can be adapted quickly and cost-efficiently to individual requirements.

Moreover, Webasto has proven water heaters that pre-heat diesel-driven engines to start temperatures and therefore guarantee the operational readiness of locomotives and coaches at high cost-efficiency.

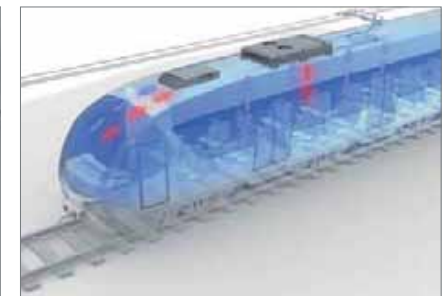
Our solutions protect the environment through the use of sustainable materials.

Whatever requirements you may have for heating and air-conditioning systems, our Engineering Department will develop the optimum customised solution for you. Get in touch with us.

### Application examples



Heaters



Air-conditioning systems



### Your advantages from Webasto solutions for defense:

- Operational readiness of vehicles and equipment in all weather conditions and in every climate zone
- Efficient parking heating systems avoid expensive engine idle run times
- Cost savings through reduction of fuel consumption and wear and tear

	Heating capacity/ cooling capacity (kW)	Page
<b>Air heaters</b>		
Air Top 2000 ST	2.0	32
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
Air Top System	to 22.0	38
HL 90	9.0	40
<b>Water heaters</b>		
Thermo Pro 50 Eco	5.0	50
Thermo 90 ST	9.0	52
Thermo Pro 90	9.0	54
DBW 2010/2016	10.0 - 16.0	56
Thermo 230/300/350	23.0 - 35.0	58
Thermo S 230/300/350/400	23.0 - 40.0	60
<b>Air-conditioning systems</b>		
Breeze Split	5.5	186
Iglo Compact	4.5	186
KMWP 9 Compact	9.0	186
KMWP 18 Compact	18.0	186

\*Tailor-made vehicle air-conditioning systems on request

### Application examples



Heaters



Air-conditioning systems

## Defense

Operational readiness under unfavourable conditions or even extreme climatic conditions is a main requirement for defense vehicles – irrespective of the model and size of the vehicle. Webasto offers individually adjusted, as well as standardised and certified solutions.

With different heaters for heating driver cabins, cargo areas and engines, vehicles and electronic equipment remain ready for operation even under extremely cold conditions with the engine switched off. Vision stays clear due to complete de-icing and dehumidification. Engine pre-heating prevents wax deposits or humidity in the diesel fuel or hydraulic fluids.

Webasto air-conditioning systems – now also for containers and box superstructure – enable use in tropical weather conditions, because they ensure optimum temperatures for crew and equipment. We offer easy-to-install retrofitting air-conditioning systems as well as tailor-made products according to customer requests.



## Off-Highway

A pre-heated engine increases the operational readiness of construction and agricultural machines and ensures higher utilisation throughout the year. Optimum working temperatures in the driver's cabin increase the comfort and therefore the concentration capacity of the driver.

Webasto offers heaters and equipment which produce a safe working climate even at extremely low outdoor temperatures. Engine idle run time can be avoided through the use of a parking heater for pre-heating and heating; wear and tear can also be reduced considerably. Hydraulic fluids remain at the optimum start temperature.

The robust and retrofitable air-conditioning systems from Webasto create pleasant working conditions through optimum temperatures and therefore, more safety.

The Webasto Heavy Duty Engineering develops customised air-conditioning systems for you. Please contact us.

### Your advantages from Webasto solutions for Construction and Off-Highway Machinery:

- Increased operational readiness of the vehicles through parking heaters and air-conditioning
- Fuel savings through reduced engine idle run times and engine pre-heating
- More driver safety through improved working conditions

	Heating capacity/ cooling capacity (kW)	Page
<b>Air heaters</b>		
Air Top 2000 ST	2.0	32
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
Air Top System	to 22.0	38
<b>Water heaters</b>		
Thermo Top C	5.0	48
Thermo Pro 50 Eco	5.0	50
Thermo 90 ST	9.0	52
Thermo Pro 90	9.0	54
DBW 2010/2016	10.0 - 16.0	56
Thermo 230/300/350	23.0 - 35.0	58
Thermo S 230/300/350/400	23.0 - 40.0	60
<b>Air-conditioning systems</b>		
Compact Cooler 4E	3.5	174
Compact Cooler 5	5.0	174
Compact Cooler 8	8.5	174
E-Unit	Customer-specific	174
Parking Coolers	Various	184

\*Tailor-made air-conditioning systems on request

### Application examples



Heaters



Air-conditioning systems



### Your advantages from Webasto solutions for Special Vehicles:

- Operational readiness of the vehicles in any weather
- Engine and environment-friendly pre-heating and heating
- Efficient stationary heating and cooler solutions avoid expensive engine idle run times
- More comfort and safety in the work place

	Heating capacity/ cooling capacity (kW)	Page
<b>Air heaters</b>		
Air Top 2000 ST	2.0	32
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
Air Top System	to 22.0	38
HL 90	9.0	40
<b>Water heaters</b>		
Thermo Top C	5.0	48
Thermo Pro 50 Eco	5.0	50
Thermo 90 ST	9.0	52
Thermo Pro 90	9.0	54
DBW 2010/2016	10.0 - 16.0	56
Thermo 230/300/350	23.0	58
Thermo S 230/300/350/400	23.0	60
<b>Air-conditioning systems</b>		
Compact Cooler 4E	5.0	176
Compact Cooler 5 Lite	5.0	176
Compact Cooler 5	5.0	176
Compact Cooler 8	8.5	176
E-Unit	Customer-specific	176
Parking Coolers	Various	184

Market Segments

## Special Vehicles

Special vehicles may be very individualistic and different, but Webasto offers heating and air-conditioning systems for nearly every requirement. They ensure appropriate comfort and increased operational readiness in ambulances, fire brigade and police vehicles even under unfavourable climatic conditions.

Webasto water heaters are integrated in the engine circuit and can bring the engines to the optimum temperatures even before the start. Idle run times are reduced and fuel saved through the independent functioning. The easy-to-install air heaters keep the load and passenger areas at constant temperatures even during waiting times.

Retrofittable Webasto air-conditioning systems create optimum conditions for drivers, passengers and resources and can be easily integrated in the on-board air-conditioning system.

### Application examples



Heaters



Air-conditioning systems



# Product portfolio



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Heating capacity/cooling capacity (kW)	Truck	Light-duty Vehicles	Bus	Rail	Defense	Off-Highway	Special Vehicles
<b>HEATING SYSTEMS</b>							
<b>Air heaters</b>							
Air Top 2000 ST	2.0	■	■			■	■
Air Top Evo 3900	3.9	■	■			■	■
Air Top Evo 5500	5.5	■	■			■	■
Air Top System	to 22.0	■	■			■	■
HL 90	9.0	■				■	■

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<b>Water heaters</b>							
Thermo Top Evo	5.0		■				■
Thermo Top C	5.0		■				■
Thermo Pro 50 Eco	5.0	■	■			■	■
Thermo 90 ST	9.0	■	■			■	■
Thermo Pro 90	9.0	■	■			■	■
DBW 2010/2016	10.0 - 16.0	■	■			■	■
Thermo 230/300/350	23.0 - 35.0			■	■	■	■
Thermo S 230/300/350/400	23.0 - 40.0			■	■	■	■
Cargo space heating	Various	■	■				■

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AIR-CONDITIONING SYSTEMS	Cooling cap.	Truck	Light-duty Vehicles	Bus	Rail	Defense	Off-Highway	Special Vehicles
Cool Top Vario 10 E	1.0	■						
Compact Cooler 4 E	3.5			■			■	■
Compact Cooler 5 Lite	5.0		■					■
Compact Cooler 5	5.0	■	■				■	■
Compact Cooler 8	8.5		■	■			■	■
E-Unit	Custom. spec.		■	■			■	■
Compact Cooler Rail 4E/2H	4.0				■			
Compact Cooler Rail 7E/2H	4.0							
Compact Cooler 7	6.5				■			
RailCool R 5	5.5				■			
RailCool S 236	36.0				■			
Breeze Split	5.5					■		
Iglo Compact	4.5					■		
KMWP 9 Compact	9.0					■		
KMWP 18 Compact	18.0					■		
Air-conditioning systems	Various	■	■	■			■	■
Bus A/C systems	Various			■				

Market Segments



## Heating systems

The parking heater product portfolio of Webasto is based on two parking heater types: air and water heaters with different functional and heating capacity ranges.

Different models are available, depending on customer preference. The burner technology developed by Webasto guarantees that the fuel consumption of all heaters is very low.

We would be glad to advise you at the start of the project to enable you to select the correct switches for a cost-effective and meaningful solution in the early project phase. Please, contact your Webasto sales officer.



### Air heating system suitable for:

- Cabin heating with customised air supply
- Cargo space and storage area heating



### Water heating system suitable for:

- Engine pre-heating
- Cabin heating through vehicle fan
- Cargo space heating
- Residual heat utilisation

## Advantages of air heating systems at a glance

### Reduction of operating costs

- Fuel savings through reduction of engine idle run times
- Reduced and predictable maintenance costs through the Diagnosis functionality

### More safety and better comfort

- Comfortably heated cabins with low operational noise promote recovery during idle periods
- Better view through thawed and mist-free windows at the start of the drive
- Constant temperature in the passenger compartment through intelligent temperature management
- Precise and continuously adjustable temperature control

### A worthwhile investment

- Supports high operational readiness and availability of the commercial vehicle
- Low procurement and installation costs
- High-value product available on a long-term basis
- Function and cost-optimised installation kit for different vehicles and application areas
- Optimum coordination of space and application requirement through customised application solutions

### Environment-friendly operation

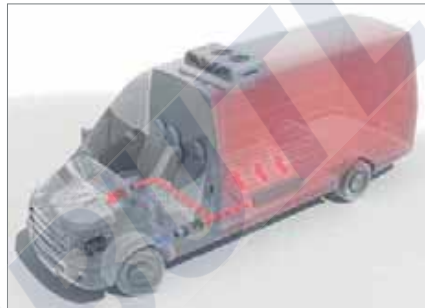
- Reduction of engine idle run times during pauses and idle periods
- Efficient combustion technology leads to low energy consumption

### Increased operational readiness

- High operational readiness even at extremely low temperature
- Application range at high altitudes too

### Flexible solutions for cabin and cargo heating

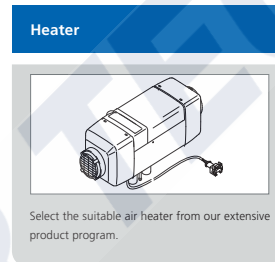
- Cabin and cargo heating available in original equipment or retrofitting
- Complete system suitable also for sensitive cargo
- System solutions for heating of different cargo space sizes
- Vehicle-specific application solutions



## Application of an air heating system

Webasto air heating systems can be ordered in diverse delivery scopes. You may need additional application material depending on the requirements for use and the installation location. You can find these in our extensive accessories programme.

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### Air intake and exhaust system

The installation kit contains a standard system. Depending on the installation location and the length of the exhaust pipe, you will require additionally a condensed-water drain and insulation for the exhaust pipe.

### Fuel supply

A connection must be made with the fuel tank. A dosing pump is part of the basic delivery scope.

### Electric connection

The installation kit contains the wiring harness.

### Air distribution

Assemble your air distribution system from the additional hoses, distributors and air outlets to achieve optimum heat distribution in the vehicle.

### Installation material

The installation kit contains standard installation material. Extra parts are required depending on the installation location.

### Heater control

You can select from diverse models of simple rotary switches for regulating heating capacity to function extension, such as ventilation and altitude-level adjustment.

### Product documentation

You will receive installation and operating instructions with our heaters. Further information (such as spare part lists) is available on our dealer portal.

## Application examples

Examples of air heating systems

### Light-duty Vehicles



- Cabin and vehicle seating
- Air Top 2000 ST
- 1.5 - 2.0 kW heating capacity
- Simple hot air delivery (circulation air)

### Special Vehicles/Truck



- Cabin heating
- Air Top Evo 3900
- 1.5 - 3.9 kW heating capacity
- Quick heating with Plus function
- Complex hot air delivery (fresh and circulating air)
- Cold and moderate climate zones

## Product Overview

Air heaters

### Air Top 2000 ST

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### Air Top Evo 3900

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### Air Top Evo 5500

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### Air Top System

PAGE 38



### HL90

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The "Heavy Duty Capacity Calculator", our calculating tool, is provided on the dealer portal for your support (see page 5). Our technical workshops and personal contact partners at the local subsidiaries would be glad to answer any further questions about design and installation.



## Air heaters

### Air Top 2000 ST



#### The simple and cost-effective solution

The compact air heater Air Top 2000 ST convinces through its versatile use options and its low fuel consumption. Thanks to its compact design, it can be installed in no time. The installation can be done outside or inside the vehicle. The heater heats the air quickly and without any noise in the vehicle interior and cargo space, and keeps the individually desired working temperature constant. The user can select between circulating air and fresh air mode. Due to its maintenance and service-friendly design and low fuel consumption, the Air Top 2000 ST can be maintained cost-effectively.

- 2 kW heating capacity
- Quick heating times, uniform and gentle heating process
- Robust heater with compact dimensions and low fuel consumption
- Maintenance and service-friendly, can be diagnosed
- Developed under observation of the latest OEM requirements and automobile standards
- Quality assurance according to ISO TS16949
- Suitable for vehicles used to transport dangerous goods (ADR)

#### Technical specifications:

Heater		Air Top 2000 ST	
Variants		Petrol	Diesel
ECE approval number	ECE R-122 (Heating) ECE R10 (EMC)	E1 00 0216 --	
EC approval mark	(Heating) (EMC)	e1*2001/56*2006/119*0022*__ e1*72/245*2009/19*1085*__	
Heating capacity (kW)	Control range	1.0 - 2.0	0.9 - 2.0
Fuel consumption (l/h)	Control range		0.15 - 0.3 l/h
Nominal voltage (V)		12	12/24
Nominal power consumption (W)	Control range		14 - 29
Hot air volume flow (m³/h)	against 0.5 mbar		93
Fuel		Petrol EN 228	Diesel EN 590 PME EN 14214 Heating oil EL
Operating temperature range (°C)			-40 to +40
Dimensions L x W x H (mm)			311 x 120 x 121
Weight (kg)			2.6

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
SOD Air Top 2000 ST Petrol 12 V Basic	Heater, dosing pump, product documentation	9022048A
SOD Air Top 2000 ST Diesel 12 V Basic		9022047A
SOD Air Top 2000 ST Diesel 24 V Basic		9022049A
<b>Crane cabins delivery scope</b>		
SOD Air Top 2000 ST Diesel 24 V Basic cabin kit	Heater, dosing pump, wiring harness, air intake and exhaust system, fuel extractor. Note: possibly an additional tank is necessary which must be ordered separately.	1317661A
<b>Installation kit – contains standard mounting material for installation</b>		
Installation kit, Air Top 2000 ST	Wiring harness, air intake and exhaust system, fuel extractor, installation material	9022050A
Installation kit, Air Top 2000 ST with tank extracting device	Wiring harness, air intake and exhaust system, tank extracting device, installation material	9024201A
<b>Standard kit for crane cabins</b>		
SOD Air Top 2000 ST Diesel 24 V cabin kit	Heater, dosing pump, wiring harness, air intake and exhaust system, fuel extractor Note: possibly an additional tank is necessary. Separate ordering is required.	1317661A
<b>System accessories – can be used with the heater, please order separately</b>		
Heater control rotary switch		82819B
Heater control digital timer 1531 12 V		88206A
Heater control digital timer 1531 24 V		88205A

Further accessories can be found from page 64 onwards.

## Air heaters

### Air Top Evo 3900



#### Evolution with more power and versatility

The heavy-duty Webasto air heater Air Top Evo 3900 is the first choice for cost-effective heating of driver cabins, cargo spaces or vehicle interiors. With a maximum capacity of 3.9 kW, it offers maximum possible comfort through its gentle and uniform heating process during the short heating times. In addition to temperature pre-selection with control thermostat or digital timer, the multi-comfort MC heater control provides a total of five functions. These include saving battery power during frequent use, short heating times at low outdoor temperature or adjustment of heating operation to the low air pressure at high altitudes.

- Max. heating capacity of 3.9 kW
- Performance-oriented, short heating times, uniform and gentle heating process
- Developed under observation of the latest OEM requirements and automobile standards
- Quality assurance according to ISO TS16949
- Maintenance and service-friendly, can be diagnosed
- Suitable for vehicles used to transport dangerous goods (ADR)
- Suitable for high altitudes of up to 2,200 m above sea level

#### Technical specifications:

Heater		Air Top Evo 3900	
Variants		Petrol	Diesel
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	E1 00 0255 E1 10R 03 5529	
EC approval mark	(Heating) (EMC)	e1*2001/56*2006/119*0255*__ e1*72/245*2006/96*5529*__	
Heating capacity (kW)	Control range/Plus*	1.7 - 3.5/3.9	1.5 - 3.5/3.9
Fuel consumption (l/h)	Control range/Plus	0.24 - 0.49/0.55	0.19 - 0.44/0.49
Nominal voltage (V)		12	12/24
Nominal power consumption (W)	Control range/Plus	15 - 40/55	
Hot air volume flow (m³/h)	Control range/Plus against 0.5 mbar	132/139	
Fuel		Petrol EN 228	Diesel EN 590 PME EN 14214 Heating oil EL
Operating temperature range (°C)		-40 to +40	
Dimensions L x W x H (mm)		423 x 148 x 162	
Weight (kg)		5.9	

\*Increased heating capacity \*Plus\* possible with heater control Multi Comfort MC 04/05 (max. 60 min).

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
<ul style="list-style-type: none"> <li>▪ Extended function options through Multi Comfort MC 04/05 heater control</li> <li>▪ Customised application adjustment e.g., connection of an external temperature sensor (rpm = 0)</li> </ul>		
SOD Air Top Evo 3900 Petrol 12 V Basic	Heater, dosing pump, product documentation	9019200B
SOD Air Top Evo 3900 Diesel 12 V Basic		9019198B
SOD Air Top Evo 3900 Diesel 24 V Basic		9019199B

<b>Automatic delivery scope</b>		
<ul style="list-style-type: none"> <li>▪ Integrated Autoboot function</li> <li>▪ Automatic heating capacity control for high altitudes up to 2,200 m above sea level</li> <li>▪ Extended function options through Multi Comfort MC 04/05 heater control</li> <li>▪ Customised application adjustment e.g., connection of an external temperature sensor (rpm = 0)</li> <li>▪ Diesel SOD can be extended to Air Top System (see page 38)</li> </ul>		
SOD Air Top Evo 3900 Petrol 12 V Automatic	Heater, wiring harness, air intake and exhaust system, air intake silencer, installation material, product documentation dosing pump	9019263A
SOD Air Top Evo 3900 Diesel 12 V Automatic		9019264B
SOD Air Top Evo 3900 Diesel 24 V Automatic		9019265A

<b>Installation kit – contains standard mounting material for installation</b>		
Installation kit Air Top Evo 3900/5500	Wiring harness, air intake and exhaust system, fuel extractor, installation material	9019428A
Installation kit Air Top Evo 3900/5500 with tank extracting device	Wiring harness, air intake and exhaust system, tank extracting device, installation material	9024202A

<b>System accessories – can be used with the heater, please order separately</b>		
Heater control rotary switch		82819B
Heater control digital timer 1531 12 V		88206A
Heater control digital timer 1531 24 V		88205A
Heater control Multi Comfort MC05 – eco-heating, comfort heating, plus heating, ventilation, altitude adjustment		1313212A
Heater control Multi Comfort MC04 – eco-heating, comfort heating, plus heating, ventilation		1313210B

Further accessories can be found from page 64 onwards.

#### Function extension with Multi Comfort MC 04/05



- Eco power saving mode:** Battery-saving and environment-friendly heating with economical 70 % of heating capacity
- Comfort heating:** Standard heating at desired temperature
- Plus mode for rapid heating:** Maximum heating capacity for reaching the desired temperature in even less time; limited heating time 60 min. (Air Top Evo 3900) or 30 min. (Air Top Evo 5500)
- Ventilation:** Delivers fresh air and supports quick, effective working of the air-conditioning system
- Altitude mode:** Optimum combustion conditions at altitudes up to 2,200 m above sea level

# Air heaters

## Air Top Evo 5500



### Evolution with more power and versatility

The heavy-duty Webasto air heater Air Top Evo 5500 is the first choice for cost-effective heating of cargo spaces or vehicle interiors. With a maximum capacity of 5.5 kW, it offers maximum possible comfort through its gentle and uniform heating process during the short heating times. In addition to temperature pre-selection with control thermostat or digital timer, the multi-comfort MC heater control provides a total of five functions. These include saving battery power during frequent use, short heating times at low outdoor temperature or adjustment of heating operation to the low air pressure at high altitudes.

- Max. heating capacity of 5.5 kW
- Performance-oriented, short heating times, uniform and gentle heating process
- Compact dimensions – quick and easy installation
- Developed under observation of the latest OEM requirements and automobile standards
- Quality assurance according to ISO TS16949
- Maintenance and service-friendly, can be diagnosed
- Suitable for high altitudes of up to 2,200 m above sea

### Technical specifications:

Heater		Air Top Evo 5500	
		Petrol	Diesel
Variants			
ECE approval number	ECE R122 (Heating)	E1 00 0256	
	ECE R10 (EMC)	E1 10R 03 5529	
EC approval mark	(Heating)	e1*2001/56*2006/119*0256*__	
	(EMC)	e1*72/245*2006/96*5529*__	
Heating capacity (kW)	Control range/Plus*	1.7 - 5.0/5.5	1.5 - 5.0/5.5
Fuel consumption (l/h)	Control range/Plus	0.24 - 0.69/0.76	0.19 - 0.63/0.69
Nominal voltage (V)		12	12/24
Nominal power consumption (W)	Control range/Plus	15 - 95/130	
Hot air volume flow (m³/h)	Control range/Plus against 0.5 mbar	200/220	
Fuel		Petrol EN 228	Diesel EN 590 PME EN 14214 Heating oil EL
Operating temperature range (°C)		-40 to +40	
Dimensions L x W x H (mm)		423 x 148 x 162	
Weight (kg)		5.9	

\*Increased heating capacity \*Plus\* possible with heater control Multi Comfort MC 04/05 (max. 30 min).

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
<ul style="list-style-type: none"> <li>▪ Extended function options through Multi Comfort MC 04/05 heater control</li> <li>▪ Customised application adjustment e.g., connection of an external temperature sensor (rpm = 0)</li> </ul>		
SOD Air Top Evo 5500 Petrol 12 V Basic	Heater, dosing pump, product documentation	9019206B
SOD Air Top Evo 5500 Diesel 12 V Basic		9019204B
SOD Air Top Evo 5500 Diesel 24 V Basic		9019205B

<b>Automatic delivery scope</b>		
<ul style="list-style-type: none"> <li>▪ Integrated autobost function</li> <li>▪ Automatic heating capacity control for high altitudes up to 2,200 m above sea level</li> <li>▪ Extended function options through Multi Comfort MC 04/05 heater control</li> <li>▪ Customised application adaptation, e.g. connection of an external temperature sensor (RPM = 0)</li> <li>▪ Diesel SOD can be extended to Air Top system (see page 38)</li> </ul>		
SOD Air Top Evo 5500 Petrol 12 V Automatic	Heater, dosing pump, wiring harness, exhaust system, air intake silencer, installation material, product documentation	9019266A
SOD Air Top Evo 5500 Diesel 12 V Automatic		9019267B
SOD Air Top Evo 5500 Diesel 24 V Automatic		9019268A

<b>Ambulance delivery scope</b>		
<ul style="list-style-type: none"> <li>▪ Heater is adapted to meet the requirements of EN 1789 (ambulances)</li> <li>▪ Diverse functions integrated automatically (Autobost, heat capacity regulation at altitudes of up to 2,200 m)</li> <li>▪ No further function extension possible through heater control Multi Comfort MC 04/05</li> </ul>		
SOD Air Top Evo 5500 Petrol 12 V Basic Ambulance	Heater, dosing pump, wiring harness, installation material, product documentation	9019271A
SOD Air Top Evo 5500 Diesel 12 V Basic Ambulance		9019272B
SOD Air Top Evo 5500 Diesel 12 V Ambulance for sprinter	Full installation kit incl. heater, wiring harness, bracket, heater control for installation in vehicle	9020614A

<b>Installation kit – contains standard mounting material for installation</b>		
Installation kit Air Top Evo 3900/5500	Wiring harness, air intake and exhaust system, fuel extractor, installation material	9019428A
Installation kit Air Top Evo 3900/5500 with tank extracting device	Wiring harness, air intake and exhaust system, tank extracting device, installation material	9024202A

Name	Order number
<b>System accessories – can be used with the heater, please order separately</b>	
Heater control rotary switch	82819B
Heater control digital timer 1531 12 V	88206A
Heater control digital timer 1531 24 V	88205A
Heater control Multi Comfort MC05 – 5 functions (eco-heating, comfort heating, plus heating, ventilation, altitude adjustment)	1313212A
Heater control Multi Comfort MC04 – 4 functions (eco-heating, comfort heating, plus heating, ventilation)	1313210B

Further accessories can be found from page 64 onwards.

# Air heating system

## Air Top System



### Modular and expandable

The performance-oriented models Air Top Evo 3900 and Air Top Evo 5500 ensure economic heating of the cargo spaces even at very low outdoor temperatures and at high altitudes. Thanks to the modular concept, up to four heaters can be operated in one system. In this context, Device 1 functions as the master heater and the other devices as slave heaters. Mutual communication between the devices takes place through a serial bus system. The combination of several heaters allows the system to be adjusted individually to the application. Only the required heaters are activated when the heat demand is low.

- Modular, individually expandable solution
- Scalable heating capacity from 7.8 to 22 kW
- Easy installation through configuration automation
- A master heater controls all the slave heaters
- Only one heater control and only one temperature sensor are required

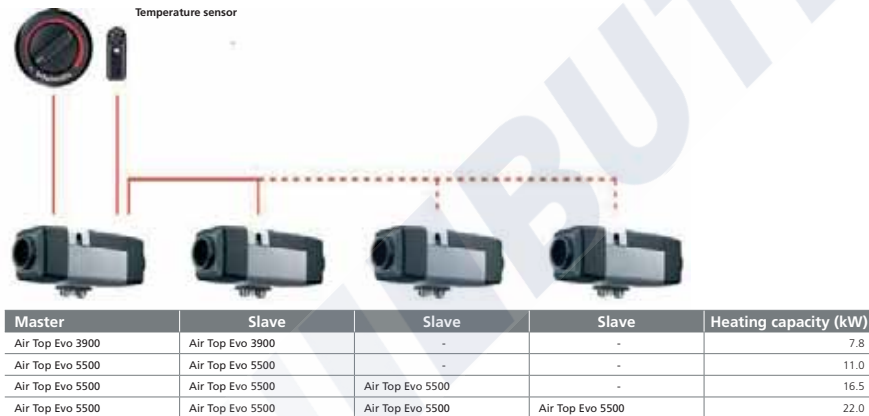
Name	Delivery scope contains	Order number
<b>Master delivery scope</b>		
<ul style="list-style-type: none"> <li>■ Integrated Autoboot function</li> <li>■ Automatic heating capacity control for high altitudes up to 2,200 m above sea level</li> <li>■ Extended function options through Multi Comfort MC 04/05 heater control</li> </ul>		
SOD Air Top Evo 3900 Diesel 12 V Automatic	Heater, dosing pump, wiring harness, air intake and exhaust system, installation material, product documentation	90192648
SOD Air Top Evo 3900 Diesel 24 V Automatic		9019265A
SOD Air Top Evo 5500 Diesel 12 V Automatic		90192678
SOD Air Top Evo 5500 Diesel 24 V Automatic		9019268A

<b>Slave delivery scope</b>		
■ Supplements the master delivery scope – to build a system		
SOD Air Top Evo 3900 Diesel 12 V Automatic Slave	Heater, dosing pump, wiring harness, slave, air intake and exhaust system, installation material, product documentation	1314412A
SOD Air Top Evo 3900 Diesel 24 V Automatic Slave		1314413A
SOD Air Top Evo 5500 Diesel 24 V Automatic Slave		1314344A
SOD Air Top Evo 5500 Diesel 12 V Automatic Slave		1314345A

<b>System accessories – can be used with the heater, please order separately</b>	
Heater control rotary switch	828198
Heater control Multi Comfort MC05 - 5 functions: Eco heating, comfort heating, plus heating, ventilation, altitude adjustment	1313212A
Heater control Multi Comfort MC04 - 4 functions: Eco heating, comfort heating, plus heating, ventilation	1313210B
External temperature sensor, 2.5 m cable length	9014694A

Further accessories can be found from page 64 onwards.

### Heater control



## Air heaters

HL 90



### Simple and robust

The air heater HL 90 is a robust, reliable solution for rapid heating of passenger compartments, containers and tents. In vehicles, it can also be used to heat cargo spaces and to defrost the vehicle windows. The HL 90 can be used to transport cold-sensitive goods safely to the destination. The air heater convinces with its compact design, its maintenance-friendliness and its high performance which also enables the cost-effective heating of large spaces.

- 9 kW heating capacity
- Short heating times through high air throughput
- Efficient solution for heating big driver cabins
- Easy to install and maintain
- Compact, space-saving design

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
SOD HL 90 Diesel 24 V Standard	Heater, wiring harness, dosing pump, covers, air intake and exhaust system	38622C
<b>System accessories – can be used with the heater, please order separately</b>		
Heater control switch with function indicator - full 24 V		109999
Heater control digital timer 1531 24 V		88195A

Further accessories can be found from page 64 onwards.

### Technical specifications:

Heater		HL 90
Variants		Diesel
EC approval mark	(Heating)	e1*2001/56*2004/78*0017* __
	(EMC)	e1*72/245*2006/96*1086* __
Heating capacity (kW)	Partial load/full load	6.5/9.0
Fuel consumption (l/h)	Partial load/full load	0.84 - 1.2
Nominal voltage (V)		24
Nominal power consumption (W)	Partial load/full load	94/160
Hot air volume flow (m³/h)	against 0.5 mbar	280
Fuel		Diesel EN 590
Operating temperature range (°C)		-40 to +40
Dimensions L x W x H (mm)		650 x 235 x 260
Dimensions of control unit with bracket L x W x H (mm)		97 x 102 x 36
Weight with control unit (kg)		13.3

## Advantages of water heating systems at a glance

### Reduction of operating costs

- Fuel savings through reduction of engine idle run times
- Low fuel consumption through efficient combustion technology
- Reduced and predictable maintenance expenditure through the Diagnosis functionality

### More safety and better comfort

- Comfortably heated cabins promote recovery during idle periods
- Better view through thawed and mist-free windows at the start of the journey
- Monitoring of cabin temperature during short idle times through residual heat function
- Sliding heating control

### A worthwhile investment

- Supports high operational readiness and availability of the vehicle
- Low procurement and installation costs
- High-value product available on a long-term basis
- Function and cost-optimised installation kits for different vehicles and application areas
- Full system solutions for cargo space heating
- Combined engine and cabin heating with one product technology

### Environment-friendly operation

- Environment-friendly exhaust gas values from the start through engine pre-heating
- Avoidance of engine idle run times during breaks and idle periods
- Use of engine heat to bridge short idle times without exhaust gas emission

### Increased operational readiness

- High operational readiness and safe engine start even at extremely low temperatures
- Range of use from arctic environment to high altitudes

### Flexible solutions for engine and cabin pre-heating

- Engine and cabin pre-heating available in original equipment or retrofitting
- Engine-independent additional heating, for large cabins as well
- Vehicle-specific application solutions for parking and auxiliary heating
- New function through engine heat utilisation for cabin heating

### Cargo space heating to protect cold-sensitive goods

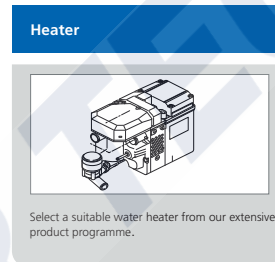
- System solutions for heating different cargo space sizes
- Complete system suitable also for sensitive load



## Application of a water heating system

Webasto water heating systems can be ordered in diverse delivery scopes. You may need additional application material depending on the requirements for use and the installation location. You can find this in our extensive accessories programme.

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### Air intake and exhaust system

The installation kit contains a standard system. Depending on the installation location and the length of the exhaust pipe, you will require additionally a condensed-water drain and insulation for the exhaust pipe.

### Fuel supply

A connection must be made with the fuel tank. A dosing pump is part of the basic delivery scope.

### Electric connection

The installation kit contains the wiring harness.

### Installation material

The installation kit contains standard installation material. Extra parts may be required, depending on the installation location.

### Product documentation

You will receive installation and operating instructions with our heaters. Further information (such as spare part lists) is available on our dealer portal.

### Circulating pumps

Select the suitable circulating pump from our range of accessories. A standard pump is included in our basic delivery scope for Thermo Pro 50 Eco, Thermo 90 ST and Thermo Pro 90.

### Heater control

You may choose from various models, from simple rotary selectors for regulating heating capacity to function extensions, such as ventilation and altitude adjustment.

## Application examples

Examples of water heater systems

### Light-duty Vehicles



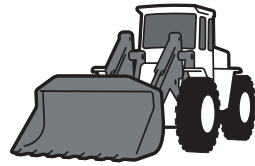
- Cabin and driver's seat heating
- Cabin heating only
- Thermo Top Evo
- Additional operation or engine pre-heating
- 2.2 - 5.0 kW heating capacity
- Moderate climate zones

### Special Vehicles/Truck



- Cabins and/or engine preheating
- Thermo Pro 90
- 1.8 - 7.6 kW (Boost phase 9.1 kW) heating capacity
- Rapid heating
- Cold/moderate climate zones
- Altitude suitability up to 3,500 m above sea level
- Power control

### Truck/Off-Highway/ Defense (Large Engines)



- Cabins and engine preheating
- Thermo Pro 90
- 1.8 - 7.6 kW (Boost phase 9.1 kW) heating capacity
- Rapid heating
- Cold/Arctic climate zones

## Product overview

Water heater

### Thermo Top Evo

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### Thermo Top C

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### Thermo Pro 50 Eco

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### Thermo 90 ST

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### Thermo Pro 90

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### Thermo 230/300/350

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### Thermo S 230/300/350/400

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### Cargo Space Heating

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The "Heavy Duty Capacity Calculator", our calculating tool, is provided on the dealer portal for your support (see page 5). Our technical workshops and the local Webasto subsidiaries would be glad to answer any further questions about design and installation.

## Water heaters

### Thermo Top Evo



#### Quicker and Safer Start in Winter

The vehicle is ready to start quickly and safely with the Thermo Top Evo. Iced window panes are thawed in no time and the driver cabin is heated quickly. In the cargo space of small transporters, the heater rapidly sets the optimum temperature for the transport of cold-sensitive goods. The optimum heat capacity is available even at low outdoor temperatures. The compact design of the Thermo Top Evo enables easy installation even in vehicle models with limited installation space. The light structure helps in keeping the vehicle weight low and also in reducing the emission of pollutants.

- **Faster de-icing than in conventional solutions**
- **Optimum heating capacity even at low outdoor temperatures**
- **Rapid heating of driver cabin and cargo space of small transporters**
- **Suitable for retrofitting in vehicle models with limited installation space**

#### Technical specifications:

Heater	Thermo Top Evo 5		Thermo Top Evo 5+		
	Variants	Diesel	Petrol	Diesel	Petrol
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	E1 00 0258 E1 03 5627			
EC approval mark	(Heating) (EMC)	e1*2001/56*2006/119*0258*__ e1*72/245*2006/96*5627*__			
Heating capacity (kW)	Partial load/full load	2.5/4.0	2.8/5.0	2.5/5.0	2.8/5.0
Fuel consumption (l/h) in a 20 min. heating phase*		0.27			
Nominal voltage (V)		12			
Nominal power consumption (W) without circulating pump	Partial load/full load	12/32	15/32	12/32	15/32
Fuel		Diesel EN 590	Petrol EN 228	Diesel EN 590	Petrol EN 228
Operating temperature range (°C)		-40 to +80	-40 to +60	-40 to +80	-40 to +60
Dimensions L x W x H (mm)		218 x 91 x 147			
Weight of heater (kg)		2.1			
<b>U4847 circulating pump</b>					
Volume flow (l/h)		500			
Dimensions L x W x H (mm)		96 x 75 x 80			
Weight		0.3			

\*Approx. 20 - 40 % of the mentioned fuel consumption is compensated by the low consumption of the pre-heated engine.

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
SOD Thermo Top Evo 5 Petrol	Heater, U4847 circulating pump, DP42 dosing pump, standard wiring harness with relay and fuses, product documentation	1314811A
SOD Thermo Top Evo 5 Diesel		1314815A
SOD Thermo Top Evo 5+ Petrol		1314810A
SOD Thermo Top Evo 5+ Diesel		1314814A

<b>Standard installation kit</b>		
Standard kit Thermo Top Evo Trade	Water connection, installation material, device holder, connection, fan control, exhaust system with silencer, air intake system with silencer	1314818A

Vehicle-specific installation kits for light-duty vehicles can be found in "Vehicle-specific installation kits for light-duty vehicles" on page 66

<b>System accessories – can be used with the heater, please order separately</b>		
Heater control digital timer 1533 12 V	Heater control kits with wiring harness, connection and installation material, product documentation	1301122C
Heater control Telestart T91 12 V, black		1314635A
Heater control Telestart T100 HTM 12 V, black		1314637A

Further accessories can be found from page 64 onwards.



## Water heaters

### Thermo Top C



#### Protects engine and saves fuel

The compact Thermo Top C water heater pre-heats the engine to the starting temperature. This considerably reduces the load on the engine caused by a cold start and thus increases the life span and operational readiness of the engine. Additionally, the parking heater Thermo Top C protects the environment, as avoiding engine idle run times reduces fuel consumption as well as CO<sub>2</sub>-emission. Ice and mist-free windows ensure safety right from the start thanks to a clear view.

- Engine and passenger compartment pre-heating of 12-V vehicles with original equipment or retrofitting
- Safer engine start even at low temperatures
- Fuel savings by avoiding engine idle run times during short idle times

#### Technical specifications:

Heater	Thermo Top C	
	Petrol	Diesel
Variants		
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	-
EC approval mark	(Heating) (EMC)	e1*2001/56*2006/119*0002* __ e1*72/245*2009/19*1232* __
Heating capacity (kW)	Partial load/full load	2.2/5.2
Fuel consumption (l/h)	Partial load/full load	0.45/0.93
Nominal voltage (V)		12
Nominal power consumption with circulating pump (W)	Partial load/full load	32/42
Fuel	Petrol EN 228	Diesel EN 590 PME-mixture, with <50% PME share
Operating temperature range (°C)		-40 to +60
Dimensions L x W x H (mm)		214 x 106 x 168
Weight (kg)		2.9
<b>U4847 circulating pump</b>		
Volume flow (l/h)		450
Dimensions L x W x H (mm)		95 x 61 x 61
Weight (kg)		0.3

Name	Delivery scope contains	Order number
<b>Delivery scope</b>		
SOD Thermo Top C Basic Petrol 12 V	Heater, dosing pump, U4847 circulating pump, wiring harness with fuse holder, tank extracting device, exhaust system with exhaust silencer, heater bracket and extensive installation material, product documentation	9003167C
SOD Thermo Top C Basic Diesel 12 V		9003168C

Vehicle-specific installation kits for light-duty vehicles can be found in "Vehicle-specific installation kits" on page 66.

<b>System accessories – can be used with the heater, please order separately</b>		
Heater control digital timer 1533 12 V	Kits containing heater control with wiring harness, connection and installation material, product documentation	1301122C
Heater control Telearstart T91 12 V, black		1314635A
Heater control Telearstart T100 HTM 12 V, black		1314637A

<b>Accessories</b>	
Wiring harness upgrade kit	89160C
Replacement wiring harness for auxiliary heater, length = about 3,600 mm	89159B
Thermo switch holder	9023145A
Thermostat switch 10°	9023146A
Thermostat switch 2°	9023147A
4847 econ circulating pump	93009B
U4847 econ adapter cable on Bosch connector L=155mm	9017681B
Rubber-coated clip 48mm dia. (bag of 5)	9023387A
Rubber-coated clip 48mm dia. (bag of 5)	91743D
Adapter cable for circulating pump without connector connection	91743D

Further accessories can be found from page 64 onwards.

## Water heaters

### Thermo Pro 50 Eco



### Light and powerful

The Thermo Pro 50 Eco links flexibility, functionality and product quality in a new, innovative product line. The compact dimensions and low weight even enable installation in narrow construction spaces. Technologically updated, this device further offers significant new features. The Thermo Pro 50 Eco can be used under extremely cold conditions, as well as at high altitudes, without special settings and allows for multiple fields of application.

- Heating mode with 2.5 to 5 kW heating capacity irrespective of the motor
- Weighing only 2.1 kg it is the lightest heater in its class
- High product quality with a life cycle of more than 3000 hours
- Economical as well as having low-emission due to high efficiency level
- New features such as altitudelevel adjustment, residual heat utilisation and Arctic start

### Technical specifications:

Heater	Thermo Pro 50 Eco	
Variants	Diesel	
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	E1 00 0334 E1 04 6271
Heating capacity (kW)	Partial load/full load	2.5 - 5.0
Fuel consumption (l/h)	Partial load/full load	0.3 - 0.6
Nominal voltage (V)		24
Nominal power consumption (W)	Partial load/full load	28 - 46
Fuel		Diesel EN590, PME EN14214 up to 30% Arctic Diesel, Heating Oil (EL), F34
Operating temperature range (°C)		-40 to +80
Dimensions L x W x H (mm)		218 x 91 x 144
Weight (kg)		2.1
<b>U4847 circulating pump</b>		
Volume flow (l/h)		500
Dimensions L x W x H (mm)		96 x 75 x 80
Nominal power consumption (W)		3.6 - 13.9
Weight (kg)		0.28

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
SOD Thermo Pro 50 Eco 24V Standard	Heater, DP42 dosing pump, circulating pump, product documentation	9026553A
<b>Standard installation kit</b>		
Standard kit Thermo Pro 50 Eco	Wiring harness with fuse holder tank extracting device with fuel line, exhaust system with exhaust silencer, air intake silencer, water hoses heater bracket and extensive installation material for the universal installation	9026722A
Vehicle-specific installation kits for light-duty vehicles can be found in "Vehicle-specific installation kits" on page 66.		
<b>System accessories – can be used with the heater, please order separately</b>		
Heater control switch with function indicator - 24 V		109999
Heater control digital timer 1531 24 V		88195A

Further accessories can be found from page 64 onwards.

## Water heaters

### Thermo 90 ST



#### Longer engine lifespan and simultaneous fuel saving

The multiple use and performance-oriented water heater Thermo 90 ST pre-heats the driver and sleeping cabins to a comfortable temperature and takes the engine in medium-to-large vehicles to the optimum start temperature. Cold-starts are avoided this way – for a longer engine lifespan. During breaks, the Thermo 90 ST water heater ensures heat retention in the cabin even when the engine is switched off. Reduced engine idle run times contribute to significant lowering of fuel consumption and the associated costs, as well as CO<sub>2</sub> emission.

- Engine pre-heating and passenger compartment heating in medium-to-large vehicles
- Developed under observation of the latest OEM requirements and automobile standards
- Original equipment or subsequent installation possible
- Delivery scope adjusted individually to the corresponding vehicle type
- High operational readiness of vehicles even at low temperatures
- Fuel savings through reduction of engine idle run times

#### Technical specifications:

Heater	Thermo 90 ST		
	Variants	Petrol	Diesel
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	E1 00 0217 --	
EC approval mark	(Heating) (EMC)	e1*2001/56*2006/119*0019*_ e1*72/245*2006/28*4881*_ _	
Heating capacity (kW)	Partial load - Full load/ Boost	2.0 - 7.6	1.8 - 7.6/9.1
Fuel consumption (l/h)	Partial load - Full load/ Boost	0.33 - 1.33	0.23 - 1.1/1.3
Nominal voltage (V)		12	12/24
Nominal power consumption (W) (with circulating pump)	Partial load - Full load/ Boost	37 - 83	37 - 83/90
Fuel		Petrol EN 228 ROZ 91/95/98	Diesel EN 590 Arctic Diesel Heating oil (EL)
Operating temperature range (°C)		-40 to +80	
Dimensions L x W x H (mm)		355 x 133 x 232	
Weight (kg)		4.8	
<b>U4846 circulating pump</b>			
Volume flow (l/h)		700	
Dimensions L x W x H (mm)		180 x 74 x 112 (incl. connections)	
Weight (kg)		0.7	

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
SOD Thermo 90 ST Petrol 12 V Standard	Heater, DP30 dosing pump, 4846 circulating pump, Wiring harness with fuse holder, tank extracting device with fuel line, exhaust system with exhaust silencer, air intake silencer, water hoses, heater bracket and extensive installation material, product documentation	9007621A
SOD Thermo 90 ST Petrol 12 V Standard		9007622A
SOD Thermo 90 ST Petrol 24 V Standard		9007623A
<b>System accessories – can be used with the heater, please order separately</b>		
Heater control switch with function indicator - 12 V		109995
Heater control switch with function indicator - 24 V		109999
Heater control digital timer 1531 12 V		88204A
Heater control digital timer 1531 24 V		88195A

Further accessories can be found from page 64 onwards.

## Water heaters

### Thermo Pro 90



#### Performance-oriented and robust

The engine-independent Thermo Pro 90 water heater is designed for use in large commercial and special vehicles and in minibuses. It pre-heats the vehicle engine very fast to the optimum start temperature. In the start phase, it reduces fuel consumption as well as emission of pollutants. The heater ensures pleasant temperatures even during resting periods. The PME-suitable Thermo Pro 90 can be connected in vehicle bus systems such as high-speed CAN or LIN. Solutions are available for original equipment as well as for retrofitting.

- Robust, performance-oriented heater with 1.8 to 9.1 kW heating capacity
- Environment-friendly, PME-suitable, efficient combustion technology with high efficiency level
- Fastest heating times even under arctic conditions
- Highest product quality with long service life
- Standard automatic altitude adjustment up to 3,500 m above sea level

#### Technical specifications:

Heater	Thermo Pro 90	
Variants	Diesel	
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	E1 00 0320 E1 03 6196
EC approval mark	(Heating) (EMC)	-- --
Heating capacity (kW)	Partial load - Full load/Boost	1.8 - 7.6/9.1
Fuel consumption (l/h)	Partial load - Full load/Boost	0.18 - 1.08/1.3
Nominal voltage (V)		12/24
Nominal power consumption (W) (with circulating pump) (without circulating pump)	Partial load - Full load Boost Boost	20 - 83 90 61
Fuel		Diesel EN 590 up to 100% PME 14214 Arctic Diesel, heating oil (EL) F34, F58, F63
Operating temperature range (°C) Storage temperature (°C)		-40 to +85 -40 to +120
Dimensions L x W x H (mm)		352 x 131 x 188
Weight (kg)		4.8
<b>U4846 circulating pump</b>		
Volume flow (l/h)		700
Dimensions L x Ø (mm)		180 x 74 x 112 (incl. connections)
Weight (kg)		0.7

Name	Delivery scope contains	Order number
<b>Delivery scope</b>		
SOD Thermo Pro 90 Diesel 12 V Basic	Heater, DP42 metering pump, circulating pump, product documentation	9023077A
SOD Thermo Pro 90 Diesel 24 V Basic		9023078A
<b>Installation kit</b>		
Standard kit Thermo Pro 90 12 V Trade	Wiring harness with fuse holder, tank extracting device with fuel line, exhaust system with exhaust silencer, air intake silencer, water hoses, heater bracket and extensive installation material	9024620A
Standard kit Thermo Pro 90 24 V Trade		9024621A
<b>System accessories – can be used with the heater, please order separately</b>		
Heater control switch with function indicator - 12 V		109990
Heater control switch with function indicator - 24 V		109995
Heater control digital timer 1531 12 V		88204A
Heater control digital timer 1531 24 V		88195A

Further accessories can be found from page 64 onwards.

## Water heaters

DBW 2010/2016



### Engine and environment-friendly and cost-efficient

In the heavy duty performance class up to 16 kW, the DBW Series offers the optimum preconditions for heating driver cabins and large volume cargo spaces with its robust structure and technology. In medium-to-large engine vehicle types, engine and driver cabin can be heated simultaneously. Cost reduction through low fuel consumption and avoidance of engine idle run times increases the economic usage of vehicles and contributes towards relieving the environment. The long lifespan of the heater and its components as well as the very low maintenance and repair expenditure ensure maximum utilisation and operating time of the vehicle. Webasto offers installation solutions that are adapted to the relevant vehicle models.

- Safe operational readiness through low maintenance and repair expenditure
- Quick operational readiness through safe engine start even at low temperatures
- Fuel savings through reduction of engine idle run times
- Original equipment or subsequent installation possible
- Standard delivery scope available

### Technical specifications:

Heater	Variants	DBW 2010		DBW 2016	
		Diesel		Diesel	
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)		--		--
EC approval mark	(Heating) (EMC)	e1*2001/56*2006/119*0006*__ e1*72/245*2009/19*1087*__		e1*2001/56*2006/119*0001*__ e1*72/245*2006/96*4086*__	
Heating capacity (kW)	Control range	11.6		16.0	
Fuel consumption (l/h)	Control range	1.57		1.8	
Nominal voltage (V)			12/24		
Nominal power consumption (W) (without circulating pump) (with U4810 circulating pump)	Control range	60 85		90 115	
Fuel			Diesel EN 590 Heating oil (EL)		
Operating temperature range (°C)			-40 to +80		
Dimensions L x W x H (mm)			564 x 205 x 228		
Weight (kg)			14.5		
<b>U4846 circulating pump</b>					
Volume flow (l/h)	against 0.15 bar		700		
Dimensions L x W x H (mm)			180 x 74 x 112 (incl. connections)		
Weight (kg)			0.7		
<b>Aquavent 5000 (U4814) circulating pump</b>					
Volume flow (l/h)	against 0.2 bar		5,200		
Dimensions L x W x H (mm)			221 x 100 x 105		
Weight (kg)			2.1		

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
SOD DBW 2010 Diesel 12 V Standard	Heater, heater control switch with function indicator and accessories, fuel filter, standard wiring harness with fuse holder, product documentation	9023677A
SOD DBW 2010 Diesel 24 V Standard		9023678A
SOD DBW 2016 Diesel 12 V Standard		9012936A
SOD DBW 2016 Diesel 24 V Standard		9012935A

<b>System accessories – can be used with the heater, please order separately</b>		
Heater control switch with function indicator - 12 V		109995
Heater control switch with function indicator - 24 V		109999
U4846 circulating pump 12 V		35897A
U4846 circulating pump 24 V		35919A

<b>Aquavent 5000 (U4814)</b>		
Aquavent 5000 (U4814) circulating pump 12 V (AMP)		SPH43149B
Aquavent 5000 (U4814) circulating pump 24 V (AMP)		SPH11115055A

<b>Aquavent 5000 S (U4854)</b>		
Aquavent 5000 S (U4854) circulating pump (AMP 6.2)		SPH1301681A
Aquavent 5000 S (U4854) circulating pump (MB)		SPH1302710A
Aquavent 5000 S (U4854) circulating pump (G+H 2.8)		SPH1302711A

Further accessories can be found from page 64 onwards.

## Water heaters

### Thermo 230/300/350



#### Immediate start even at low temperatures

The high-efficiency water heaters take engines of high performance class to the operating temperature before the start. They establish a comfortable temperature level in the passenger compartments of public and tourist buses in a short time, while the engine is still at rest. In railcars or locomotives, the engines are pre-heated before the start. In addition to operational readiness, the water heaters also ensure a longer life span of the engine. The auxiliary heating function during driving ensures a comfortable passenger compartment temperature even at very low outdoor temperatures. Besides the legal requirements, the water heaters also comply with the high standards of the bus manufacturers. A special performance-oriented system with certification by the Federal Railway Office (Eisenbahn Bundesamt) is available for application in the rail sector.

- Operational readiness even at very low outdoor temperatures
- Comfortable passenger compartment temperature through auxiliary heating during driving
- Pre-configured full system with low installation expenditure
- Optional fuel pre-heating
- Reduction of idle or failure times of the vehicle through integrated diagnosis function

#### Technical specifications:

Heater		Thermo 230	Thermo 300	Thermo 350
Variants		Diesel	Diesel	Diesel
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	-- e1*2001/56*2004/78*0007*_	-- e1*2001/56*2004/78*0008*_	-- e1*2001/56*2004/78*0009*_
Heating capacity (kW)	Control range	23.0	30.0	35.0
Fuel consumption (l/h)	Control range	3.49	4.65	5.23
Nominal voltage (V)			24 (20 - 28)	
Nominal power consumption (W) (without circulating pump)	Control range	65	110	140
Fuel			Diesel EN 590/ Heating oil (EL)	
Operating temperature range (°C)			-40 to +80	
Dimensions L x W x H (mm)			610 x 246 x 220	
Weight (kg)			19	
<b>Aquavent 5000 (U4814) circulating pump</b>				
Volume flow (l/h)	against 0.2 bar		5,200	
Dimensions L x W x H (mm)			229 x 100 x 105	
Weight (kg)			2.1	
<b>Aquavent 5000S (U4854) circulating pump</b>				
Volume flow (l/h)	against 0.2 bar		5,200	
Dimensions L x W x H (mm)			249 x 100 x 105	
Weight (kg)			2.2	
<b>Aquavent 6000SC (U4856) circulating pump</b>				
Volume flow (l/h)	against 0.4 bar		6,000	
Dimensions L x W x H (mm)			229 x 100 x 115	
Weight (kg)			2.5	

Name	Delivery scope contains	Order number
<b>Heater</b>		
HT Thermo 230 24 V	Heater without accessories	85782C
HT Thermo 300 24 V		84069C
HT Thermo 350 24 V		85783C

Delivery scope		
SOD Thermo 230 24 V	Heater plus fuel filter, water hoses, exhaust deflection	85312B
SOD Thermo 300 24 V		85313C
SOD Thermo 350 24 V		85314C

Delivery scope rail compact with accessories		
SOD Thermo 230 Rail Compact 24 V	Heater, fuel filter, pre-installed circulating pump	SPH2710842C
SOD Thermo 300 Rail Compact 24 V		SPH27836C
SOD Thermo 350 Rail Compact 24 V		SPH2710698D

System accessories – can be used with the heater, please order separately		
Heater control switch with function indicator - 24 V		109999
Retrofitting of heating cartridge		86711B

<b>Aquavent 5000 (U4814)</b>		
Aquavent 5000 (U4814) circulating pump 12 V (AMP)		SPH43149B
Aquavent 5000 (U4814) circulating pump 24 V (AMP)		SPH11115055A
<b>Aquavent 5000 S (U4854)</b>		
Aquavent 5000 S (U4854) circulating pump (AMP 6.2)		SPH1301681A
Aquavent 5000 S (U4854) circulating pump (MB)		SPH1302710A
Aquavent 5000 S (U4854) circulating pump (G+H 2.8)		SPH1302711A
<b>Aquavent 6000 SC (U4856)</b>		
Aquavent 6000 SC (U4856) circulating pump (AMP 6.3) with stand		1311280B
Aquavent 6000 SC (U4856.01) circulating pump (AMP 6.3)		SPH11117298A
Aquavent 6000 SC (U4856.04) circulating pump (G+H 2.8)		SPH11117201A
Aquavent 6000 SC (U4856.06) circulating pump (PACKARD)		SPH11117203A
Aquavent 6000 SC (U4856.08) circulating pump (AMP DC)		SPH11117205A

Further accessories can be found from page 64 onwards.

## Water heaters

Thermo S 230/300/350/400



### Immediate start even at low temperatures

The high-efficiency water heaters of the Thermo-S series bring high performance engines to the operating temperature before the start. They establish a comfortable temperature level in the passenger compartments of public or tourist buses after long rest periods without the engine running. Besides operational readiness, engine heating also ensures a higher life-expectancy for the engine.

The auxiliary heating function during driving ensures a comfortable passenger compartment temperature even at very low outdoor temperatures. Besides the legal requirements, the water heaters also comply with the high standards of the bus manufacturers.

- Operational readiness even at very low outdoor temperatures
- Comfortable passenger compartment temperature from start and during driving
- Pre-configured full system with low installation expenditure
- Reduction of idle or failure times of the vehicle through integrated diagnosis function
- Optional fuel pre-heating

### Technical specifications:

Heater		Thermo S 230	Thermo S 300	Thermo S 350	Thermo S 400
Variants		Diesel	Diesel	Diesel	Diesel
ECE approval number	ECE R122 (Heating) ECE R10 (EMC)	0226*00	0227*00	0228*00	0225*00
			5266*00		
Heating capacity (kW)	Control range	23.0	30.0	35.0	40.0
Fuel consumption (l/h)	Control range	3.0	3.6	4.3	4.9
Nominal voltage (V)			24		
Nominal power consumption (W) (without circulating pump)	Control range	65	90	120	180
Fuel			Diesel EN 590 Heating oil (EL)		
Operating temperature range (°C)			-40 to +80		
Dimensions L x W x H (mm)			610 x 246 x 220		
Weight (kg)			19		
<b>Aquavent 5000 (U4814)</b>					
Volume flow (l/h)	against 0.2 bar		5,200		
Dimensions L x W x H (mm)			221 x 100 x 105		
Weight (kg)			2.1		
<b>Aquavent 5000 (U4854)</b>					
Volume flow (l/h)	against 0.2 bar		5,200		
Dimensions L x W x H (mm)			173 x 81 x 77		
Weight (kg)			2.2		
<b>Aquavent 6000SC (U4856)</b>					
Volume flow (l/h)	against 0.4 bar		6,000		
Dimensions L x W x H (mm)			229 x 115 x 110		
Weight (kg)			2.55		

Name	Delivery scope contains	Order number
<b>Heater</b>		
HT Thermo S 230.004 Standard	Heater without accessories	SPH111127868
HT Thermo S 300.002 Standard		SPH111112338
HT Thermo S 350.022 Standard		SPH111132288
HT Thermo S 400.003 Standard		SPH111132638

Standard delivery scope		
SOD HT Thermo S 230.004 Standard	Heater plus fuel filter, exhaust deflection	SPH111127878
SOD HT Thermo S 300.002 Standard		SPH111112948
SOD HT Thermo S 350.022 Standard		SPH111130958
SOD HT Thermo S 400.003 Standard		SPH111132648

System accessories – can be used with the heater, please order separately		
Heater control switch with function indicator - 24 V		109999

Aquavent 5000 (U4814)		
Aquavent 5000 (U4814) circulating pump 12 V (AMP)		SPH43149B
Aquavent 5000 (U4814) circulating pump 24 V (AMP)		SPH11115055A

Aquavent 5000 S (U4854)		
Aquavent 5000 S (U4854) circulating pump (AMP 6.2)		SPH1301681A
Aquavent 5000 S (U4854) circulating pump (MB)		SPH1302710A
Aquavent 5000 S (U4854) circulating pump (G+H 2.8)		SPH1302711A

Aquavent 6000 S (U4855)		
Aquavent 6000 S (U4855) circulating pump (AMP 6.3) with stand		1315175B
Aquavent 6000 S (U4855.01) circulating pump (AMP 6.3)		SPH2710185A
Aquavent 6000 S (U4855.04) circulating pump (G+H)		SPH2710188A
Aquavent 6000 S (U4855.06) circulating pump (PACKARD)		SPH2710189A
Aquavent 6000 S (U4855.08) circulating pump (AMP DC)		SPH2710191A

Aquavent 6000 SC (U4856)		
Aquavent 6000 SC (U4856) circulating pump (AMP 6.3) with stand		1311280B
Aquavent 6000 SC (U4856.01) circulating pump (AMP 6.3)		SPH1111298A
Aquavent 6000 SC (U4856.04) circulating pump (G+H 2.8)		SPH1111201A
Aquavent 6000 SC (U4856.06) circulating pump (PACKARD)		SPH1111203A
Aquavent 6000 SC (U4856.08) circulating pump (AMP DC)		SPH1111205A

Further accessories can be found from page 64 onwards.

## Cargo space heating



### Plug & Heat KM 23

#### High-Performance Heating Solution for Trailers

The new high-performance Plug & Heat KM 23 bulk head heater ensures optimum heating of the trailer loading area. With this unit you can transport cold-sensitive goods at the desired temperature, and thus ensure the quality of the goods. The fully pre-installed heater set is based on a Webasto water heater with 23 kW capacity and includes a heater control with thermostat and eco-switch. The set is available as an optional extra with a 230-V connection and converter, so that the trailer can be heated over long periods independently of the battery.

- Optimum temperature for cold-sensitive goods
- Low purchase price
- Economic fuel consumption, low maintenance costs
- Low weight due to light-weight design
- Easy operation through heater control with thermostat and eco switch

### Thermo 90 ST, DBW 2010/2016

#### Soothing Heat for Sensitive Cargo



The water heating system solutions based on the Thermo 90 ST or DBW 2010/2016 prove themselves at high air capacity through the combination of a moderate air blow-out temperature and good humidity. Sensitive cargo like plants, flowers and animals are warmed optimally. The system consists of a stainless steel floor plate with pre-installed Webasto water heater, a heat exchanger with fan and a water expansion tank. The DBW 2016 can be fitted with different heat exchanger models.

- Moderate air blow-out temperature protects the cargo
- Large air capacity, ideal for heating large cargo spaces
- Two independently adjustable room temperatures in DBW 2010/DBW 2016
- Easy installation due to pre-assembled components

#### Technical specifications:

Type	Heating system solution		Bulk Head Heater
	Thermo 90 ST	DBW 2010/2016	Plug & Heat KM 23
Heating capacity (kW)	6.5	11.6/16.0*	23.0
Nominal power consumption (W)	203	328/358	Full load 490/Eco level 290
Nominal voltage (V)	12/24	24	24
Hot air volume flow at 0.5 bar counter pressure (m³/h)	250	500	1,100 (free-blowing)
Dimensions L x W x H (mm)	720 x 420 x 340	900 x 530 x 320	1,905 x 1,310 x 365
Weight (kg)	36	45	147 (full unit)

\* The heating system DBW 2016 has a 11.6 kW heat exchanger and connection points for an additional heat exchanger (not included in delivery scope normally). 12 V on request. Further data available under heaters.

Heating system solution	Delivery scope	Delivery scope contains	Order number
	Thermo 90 ST - Diesel 12 V	Heater	77054894A
	Thermo 90 ST - Diesel 24 V	On/Off switch fuel system exhaust system heat exchanger fan installation material DP 30 dosing pump, Aquaivent 5000 (U4846) circulating pump	77054898
	DBW 2010 - Diesel 24 V	Heater	77056500A
	DBW 2016 - Diesel 24 V	On/Off switch fuel system exhaust system heat exchanger 2 x fan installation material Aquaivent 5000 (U4846) circulating pump	77057000A
	Dieisel 24 V	Complete system including heater control Aquaivent 5000 (U4814) circulating pump	3391780A
<b>System accessories – can be used with the heater, please order separately</b>			
Thermostat			79000652

Further accessories can be found from page 64 onwards.






# Heater accessories

## Overview of heating system accessories

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## Vehicle-specific installation kits for Light-duty Vehicles

Detailed Webasto installation instructions are available for each of the vehicle-specific installation kits listed below. All the articles required with their respective order numbers are listed in that document. The installation process itself is described in detail and according to the various working steps. Speak to one of our specialised workshops or to your Webasto country representative.

Model	From model year	Heater model	Fuel	Order number		Heater control					
				Delivery scope, heater	Installation kit						
<b>Citroën</b>											
Nemo	2008	Thermo Top C	diesel, petrol	diesel: 9003168C petrol: 003167C	1313749C	–	1301122C	–	1314635A	1314637A	7100350B
Berlingo	2008	Thermo Top C	diesel	9003168C	AC: 1313672C ACC: 1313673C	–	1301122C	–	1314635A	1314637A	7100350B
Berlingo	2008	Thermo Top C	petrol	9003167C	AC: 1313670D ACC: 1313671D	–	1301122C	–	1314635A	1314637A	7100350B
Jumpy	2007	Thermo Top C	diesel	9003168C	AC: 1313563A ACC: 1313585B	–	1301122C	–	1314635A	1314637A	7100350B
Jumpy	2007	Auxiliary heater	diesel	–	Upgrade kit: AC: 1313104B ACC: 1313103C	–	1301122C	–	1314635A	1314637A	7100350B
Jumper	2006	Thermo Top C	diesel	9003168C	1311342D + ACC: 1314416A	–	1301122C	–	1314635A	1314637A	7100350B
Jumper	2009	Air Top 2000 ST	diesel	9022047A + 9022050A	1315904A	82819B	–	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
<b>Fiat</b>											
Fiorino	2008	Thermo Top C	diesel, petrol	diesel: 9003168C petrol: 9003167C	1313749C	not possible	1301122C	–	1314635A	1314637A	7100350B
Doblo	2007	Thermo Top C	diesel, petrol	diesel: 9003168C petrol: 9003167C	1300633D	not possible	1301122C	–	1314635A	1314637A	7100350B
Doblo	2010	Thermo Top Evo 5	diesel	1314815A	1315993B	not possible	1301122C	–	1314635A	1314637A	7100350B
Scudo	2007	Thermo Top C	diesel (RHK - 88 kW)	9003168C	AC: 1313563A ACC: 1313585B	not possible	1301122C	–	1314635A	1314637A	7100350B
Scudo	2007	Auxiliary heater	diesel (9HU, RHK, RHR)	–	Upgrade kit: AC: 1313104B ACC: 1313103C	not possible	1301122C	–	1314635A	1314637A	7100350B
Ducato	2006	Thermo Top C	diesel	9003168C	1311342D + ACC: 1314416A	not possible	1301122C	–	1314635A	1314637A	7100350B
Ducato	2006	Air Top 2000 ST	diesel	9022047A + 9022050A	1315904A	82819B	9010385A	–	1314635A + 1311194A	1314637A + 1311194A	7100350B

\* Thermo Call app can only be used in conjunction with Thermo Call. The app must be purchased separately.

## Vehicle-specific installation kits for Light-duty Vehicles

Model	From model year	Heater model	Fuel	Order number		Heater control					
				Delivery scope, heater	Installation kit						
<b>Ford</b>											
Connect	2003	Thermo Top C	diesel, petrol	diesel: 9003168C petrol: 9003167C	1312556A	not possible	1301122C	–	1314635A	1314637A	7100350B
Transit	2007	Thermo Top C	diesel, petrol	diesel: 9003168C petrol: 9003167C	1311724A	not possible	1301122C	–	1314635A	1314637A	7100350B
Transit	2007	Air Top 2000 ST	diesel	9022047A + 9022050A	1311683B	82819B	–	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
Transit	2008	Thermo Top C	diesel	9003168C	1314798A	not possible	1301122C	–	1314635A	1314637A	7100350B
<b>Mercedes</b>											
Vito	2009	Air Top 2000 ST	diesel	9022047A	1315777A	82819B	–	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
Sprinter	2009	Air Top 2000 ST	diesel	9022047A	1315775A	82819B	–	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
Sprinter	2009	Air Top Evo 3900	petrol	9019198B	1315776A	82819B	–	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
<b>Nissan</b>											
Primastar	2007	Thermo Top C	diesel	9003168C	1303346B	not possible	1301122C	–	1314635A	1314637A	7100350B
Primastar	2007	Air Top 2000 ST	diesel	9022047A + 9022050A	1312232A	82819B	–	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
Interstar	2007	Thermo Top C	diesel	9003168C	1303350A	not possible	1301122C	–	1314635A	1314637A	7100350B
Interstar	2007	Air Top Evo 3900	diesel	9019198B + 9019428A	without partition wall: 1312622C with partition wall: 1311959C	82819B	–	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
<b>Opel</b>											
Vivaro	2007	Thermo Top C	diesel	83344D	9002568H	–	1301122C	–	1314635A	1311328A (mit Opel-Logo)	7100350B
Vivaro	2001 Interior installation	Air Top 2000 ST	diesel	1311064A	1312245A + with partition wall: 1312246A	82819B	–	contained in kit	1314635A + 1311194A	1311328A (mit Opel-Logo)	7100350B

\* Thermo Call app can only be used in conjunction with Thermo Call. The app must be purchased separately.

## Vehicle-specific installation kits for Light-duty Vehicles

Model	From model year	Heater model	Fuel	Order number		Heater control					
				Delivery scope, heater	Installation kit						
<b>Opel</b>											
Vivaro	2001 Underfloor installation for passengers	Air Top 2000 ST	diesel	1311064A	1311322B	82819B	-	contained in kit	1314635A + 1311194A	1311328A (with Opel logo)	7100350B
Movano	2004	Thermo Top C	diesel	83344D	9009282D	-	1301122C	-	1314635A	1303704C (with Opel logo)	7100350B
Movano	2007	Air Top Evo 3900	diesel	1311388B	1311389C	82819B	-	contained in SOD	1314635A + 1311194A + 70813B	1311328A (with Opel logo)	7100350B
Movano	2009	Thermo Top Evo 5	diesel	1314815A	1316166A	-	1301122C	-	1314635A	1303704C (with Opel logo)	7100350B
Movano	2010	Air Top Evo 3900	diesel	9019198B	1316147A (with partition wall)	82819B	-	9010385A	1314635A + 1311194A + 70813B	1311328A (with Opel logo)	7100350B
<b>Peugeot</b>											
Bipper	2008	Thermo Top C	diesel, petrol	diesel: 9003168C petrol: 9003167C	1313749C	not possible	1301122C	-	1314635A	1314637A	7100350B
Partner	2008	Thermo Top C	diesel	9003168C	AC: 1313672C ACC: 1313673C	not possible	1301122C	-	1314635A	1314637A	7100350B
Partner	2008	Thermo Top C	petrol	9003167C	AC: 1313670D ACC: 1313671D	not possible	1301122C	-	1314635A	1314637A	7100350B
Expert	2007	Thermo Top C	diesel	9003168C	AC: 1313563A ACC: 1313585B	nicht möglich	1301122C	-	1314635A	1314637A	7100350B
Expert	2007	Zuheizer	diesel	-	Upgrade kit: AC: 1313104B ACC: 1313103C	not possible	1301122C	-	1314635A	1314637A	7100350B
Boxer	2006	Thermo Top C	diesel	9003168C	1311342D + ACC: 1314416A	not possible	1301122C	-	1314635A	1314637A	7100350B
Boxer	2009	Air Top 2000 ST	diesel	9022047A + 9022050A	1315904A	82819B	-	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B

\* Thermo Call app can only be used in conjunction with Thermo Call. The app must be purchased separately.

## Vehicle-specific installation kits for Light-duty Vehicles

Model	From model year	Heater model	Fuel	Order number		Heater control					
				Delivery scope, heater	Installation kit						
<b>Renault</b>											
Kangoo	2008	Thermo Top C	diesel	9003168C	1313682B	not possible	1301122C	-	1314635A	1314637A	7100350B
Kangoo	2008	Thermo Top C	petrol	9003167C	1313591B	not possible	1301122C	-	1314635A	1314637A	7100350B
Trafic	2007	Thermo Top C	diesel	9003168C	1303346B	not possible	1301122C	-	1314635A	1314637A	7100350B
Trafic	2007	Air Top 2000 ST	diesel	9022047A + 9022050A	1312232A + 1312231B	82819B	-	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
Master	2007	Thermo Top C	diesel	9003168C	1303350A	-	1301122C	-	1314635A	1314637A	7100350B
Master	2007	Air Top Evo 3900	diesel	9019198B + 9019428A	without partition wall: 1312622C with partition wall: 1311959C	82819B	-	9010385A	1314635A + 1311194A + 70813B	1314637A + 1311194A + 70813B	7100350B
Master	2009	Thermo Top Evo 5	diesel	1314815A	1316166A	-	1301122C	-	1314635A	1314637A	7100350B
Master	2010	Air Top Evo 3900	diesel	9019198B + 9019428A	1316147A with partition wall:	82819B	-	9010385A	1314635A + 1311194A + 70813B	1314637A + 1311194A + 70813B	7100350B
<b>VW</b>											
T5	2004	auxiliary heater	diesel	-	Aufrüstkit AC: 9012103D ACC: 9012104D	not possible	1301122C	-	1314635A	1314637A	7100350B
T5	2003	Thermo Top C	diesel	9003168C	9014130A + mit AC: 9014133A	not possible	1301122C	-	1314635A	1314637A	7100350B
T5	2010	Thermo Top C	diesel	9003168C	1315558A	not possible	1301122C	-	1314635A	1314637A	7100350B
T5	2003	Air Top 2000 ST	diesel, petrol	diesel: 9022047A petrol: 9022048A + 9022050A	9014156A + or model without auxiliary heater: 1300823C	82819B	-	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
Crafter	2009	Air Top 2000 ST	diesel	9022047A	1315777A	82819B	-	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B
Crafter	2009	Air Top Evo 3900	diesel	9019198B	1315776A	82819B	-	9010385A	1314635A + 1311194A	1314637A + 1311194A	7100350B

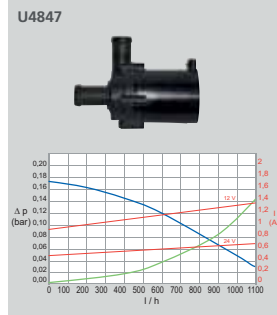
\* Thermo Call app can only be used in conjunction with Thermo Call. The app must be purchased separately.

## Accessories

### Circulating pumps

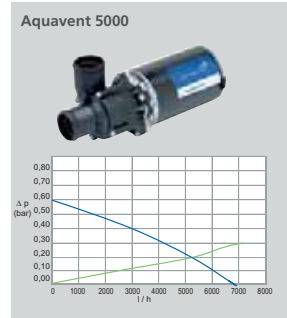
#### Product overview and technical data

Model	Nominal voltage (V)	Max. nominal power consumption (W)	Volume flow (l/h)	Dimensions L x W x H (mm)	Ø coolant connection (mm)	Weight (kg)
U4846	12/24	28	700	180 x 74 x 112	20	0.70
U4847	12/24	28	500	96 x 75 x 80	20	0.30
Aquavent 5000/U4814	12/24	104	5,200	221 x 100 x 105	38	2.10
Aquavent 5000 S/U4854	24	104	5,200	249 x 100 x 105	38	2.20
Aquavent 6000 SC/U4856	24	210	6,000	229 x 115 x 110	38	2.55



Volume flow with water at 20 °C

Flow resistance when pump is not running



## Accessories

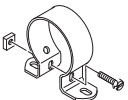
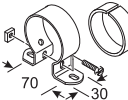

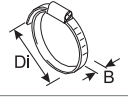
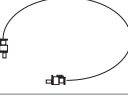
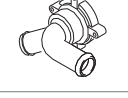

### Circulating pumps



	Order number
<b>U4847</b>	
U4847 circulating pump 12 V 130° connection piece	9002514B
U4847 circulating pump 24 V axial connection piece	98237A
<b>U4846</b>	
U4846 circulating pump 12 V complete kit	35936A
U4846 circulating pump 24 V complete kit	35938A
<b>Aquavent 5000 (U4814)</b>	
Aquavent 5000 (U4814) circulating pump 12 V (AMP)	SPH43149B
Aquavent 5000 (U4814) circulating pump 24 V (AMP)	SPH1115055A
<b>Aquavent 5000 S (U4854)</b>	
Aquavent 5000 S (U4854) circulating pump (AMP 6.2)	SPH1301681A
Aquavent 5000 S (U4854) circulating pump (MB)	SPH1302710A
Aquavent 5000 S (U4854) circulating pump (G+H 2.8)	SPH1302711A
<b>Aquavent 6000 S (U4855)</b>	
Aquavent 6000 S (U4855) circulating pump (AMP 6.3) with stand	1315175B
Aquavent 6000 S (U4855.01) circulating pump (AMP 6.3)	SPH2710185A
Aquavent 6000 S (U4855.04) circulating pump (G+H)	SPH2710188A
Aquavent 6000 S (U4855.06) circulating pump (PACKARD)	SPH2710189A
Aquavent 6000 S (U4855.08) circulating pump (AMP DC)	SPH2710191A
<b>Aquavent 6000 SC (U4856)</b>	
Aquavent 6000 SC (U4856) circulating pump (AMP 6.3) with stand	1311280B
Aquavent 6000 SC (U4856.01) circulating pump (AMP 6.3)	SPH1117298A
Aquavent 6000 SC (U4856.04) circulating pump (G+H 2.8)	SPH1117201A
Aquavent 6000 SC (U4856.06) circulating pump (PACKARD)	SPH1117203A
Aquavent 6000 SC (U4856.08) circulating pump (AMP DC)	SPH1117205A



## Accessories

### Circulating pumps

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 Mounting bracket (base) Di = 60 mm, for U4810, with bolt and nut				■			454311
 Mounting bracket (base) Di = 50 mm, for U4846, with bolt, nut and sleeve for reducing diameter				■			83358A
 Stand For U4814/U4854 and Aquavent 5000/5000 S For U4855/U4856 and Aquavent 6000 S/6000 SC					■		37269A 233641
 Hose clamp Di = 60 - 80; B = 12 for U4814/U4854 and Aquavent 5000/5000 S Di = 98 - 120; B = 14.3 for U4855/U4856 and Aquavent 6000 S/6000 SC					■		1310877A 67373A
 Cable for Econ circulating pump U4847 L = 240 mm L = 400 mm L = 475 mm L = 1,500 mm		■	■	■	■		9023389A 1314285A 9023388A 1314286A
 Pump cover Hose connections grouped together 193°, connecting piece diameter 20 mm. With sealing and bolts		■	■				93011C
 Axial inflow, connecting piece diameter 20 mm, with sealing and bolts		■	■				93012C






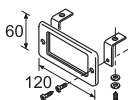
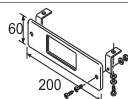
## Accessories

### Heater controls

	Air Top 2000 ST	Air Top Evo 3900/5500	Thermo Top C	HL 90	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 Air Top Evo MC 04/05 heater controls 12/24 V-Version – Can be used only in combination with Air Top Evo heaters  – Multi-mode operation for adapting to its customised heating capacity requirement  <b>Eco Power saving mode:</b> Battery-saving and environment-friendly heating with economical 70 % of heating capacity  <b>Comfort heating:</b> Standard heating at desired temperature  <b>Plus mode for rapid heating:</b> Maximum heating capacity for reaching the desired temperature in an even shorter period; limited heating time 60 min. (Air Top Evo 3900) or 30 min. (Air Top Evo 5500)  <b>Ventilation:</b> Delivers fresh air and supports quick, effective working of the air-conditioning system  <b>Altitude mode:</b> Optimum combustion conditions at altitudes up to 2,200 m above sea level		■								1313212A 5 functions  1313210B 4 functions, no altitude mode
 Heater control digital timer 1531, air 12 V 24 V – Three programmable activation times, 7 days – Visible: L = 120 mm, H = 82 mm		■								88206A 88205A
 Heater control rotary switch Heater control rotary switch An additional adapter wiring harness for Air Top Evo heaters is required – Dimensions: cutout: L = 74 mm, H = 55 mm – Visible: L = 120 mm, H = 82 mm		■								82819B 1313908A
 Panel without ventilation switch Panel without ventilation switch		■								82422B
 Panel with ventilation switch Panel with ventilation switch Adapter wiring harness for ventilation is required for Air Top Evo 3900/5500		■								92240A 1313908A

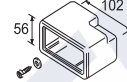
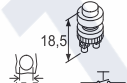
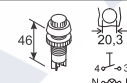
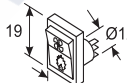
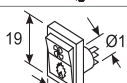
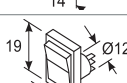

## Accessories

### Heater controls

	Air Top 2000 ST	Air Top Evo 3900/5500	Thermo Top C	HL 90	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010/2016	Thermo 230/300/350	Order number
										
<b>Heater control digital timer 1531, water</b>										
12 V										88204A
24 V										88195A
– Customised alarm function, three programmable activation times, 7 days – Installation dimensions including connector (L x W x H) 84 x 40 x 51 mm – Continuous heating possible For DBW 2010/2016 and Thermo 230/300/350, only in connection with relay										
										
<b>Heater control electronic room thermostat</b>										
For 10 to 30 V vehicle fan										34875A
– Installation dimensions (L x W x H): 89 x 44 x 42 mm – Only in connection with relay										
										
<b>Heater control digital timer 1533</b>										
12 V, heating time up to 1 h, 3 different programmable activation times										1301122C
										
<b>Heater control switch with function indicator</b>										
12 V, 15 A front glass, green, 6.3 mm										109995
24 V, 7.5 A front glass, green, 6.3 mm										109999
										
<b>Signboard</b>										
For 109995 and 109999										116389
										
<b>Installation frame</b>										
For combination timer, digital timer and electronic room thermostat										474630
										
<b>Installation frame</b>										
For combination timer, digital timer and electronic room thermostat										476404

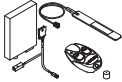







## Accessories

### Heater controls

	Air Top 2000 ST	Air Top Evo 3900/5500	Thermo Top C	HL 90	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010/2016	Thermo 230/300/350	Order number
										
<b>Housing (built-in set)</b>										
For combination timer, digital timer and electronic room thermostat										475866
										
<b>Push button</b>										
										375004
										
<b>Push button switch with light</b>										
Pushbutton switch with green 12 V light										15733A
										
<b>Switch</b>										
Summer/winter changeover contact										84587A
										
<b>Switch</b>										
Fan/heater changeover contact										84586A
										
<b>Switch</b>										
Changeover contact without imprint										84142A
										
<b>Switch</b>										
Changeover contact for Thermo Top C 300 motor caravan With adapter wiring harness										9011485B








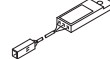
## Accessories

### Heater controls

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <b>Telestart T 91 radio remote control</b> With 1 hand-held transmitter, battery, receiver, adhesive window antenna and Y-adapter for upgrading an already present digital timer – Range 1,000 m – Feedback signal – The smallest radio remote control in the world				■	■					1314635A
 <b>T 91 transmitter</b> With battery				■	■					1314636A
 <b>Battery for T 91 transmitter</b>				■	■					9014840A
 <b>Battery compartment cover for T 91 transmitter</b>				■	■					9016157A
 <b>T 91 receiver</b>				■	■					9013799A
 <b>Adhesive window antenna</b> For T 80/T 91/T 100 HTM				■	■					9013619B
 <b>Y-adapter wiring harness</b> For T 91				■	■					67089A
 <b>Cable set for ventilation option</b>				■						9001558A

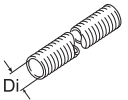

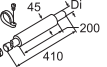




## Accessories

### Heater controls

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <b>Telestart T 100 HTM radio remote control</b> With 1 hand-held transmitter, battery, receiver, adhesive window antenna, ESV adapter and HTM temperature transmitter – Automatic heating time calculation – Range 1,000 m Display with indication of current temperature				■	■					1314637A
 <b>T 100 HTM transmitter</b> With battery				■	■					1314638A
 <b>Battery for T 100 HTM transmitter</b>				■	■					9011356B
 <b>Battery compartment cover for T 100 HTM transmitter</b>				■	■					9016158A
 <b>T 100 HTM receiver</b>				■	■					9010123B
 <b>Adhesive window antenna</b> For T 80/T 91/T 100 HTM				■	■					9013619B
 <b>T 100 HTM ESV adapter</b> Adapter for receiver, sensor and digital timer				■	■					9010951A
 <b>Temperature sensor for T 100 HTM</b>				■	■					9023181A





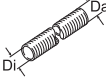
## Accessories

### Combustion air system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <p><b>Flexible tube</b></p> <p>Di = 18; APGA-A L = 1,000 mm</p> <p>Di = 22; PAK (per m)</p> <p>Di = 25; PAK (per m)</p> <p>Di = 30; PAK (per m)</p> <p>Di = 30.5; KAK (per m)</p> <p><b>APGA-A:</b> Aluminium, paper, glass fabric with aluminium lamination</p> <p><b>PAK:</b> Paper, aluminium, plastic – black, without logo</p> <p><b>KAK:</b> Plastic, aluminium, plastic</p>										
										19733C
										466115
										91562A
										357901
										21446A
 <p><b>Hose EN 73411-1+2</b></p> <p>Di = 18; L = 2,000 mm, material: PER-EPDM</p>										1314856A
 <p><b>Intake silencer, mounting set</b></p> <p>Di = 22 with mounting parts</p>										1313514A
 <p><b>Intake silencer</b></p> <p>Di = 22; L = 800 PAK</p> <p>Di = 25; L = 650 PAK/PAKL with protective cap</p> <p>Di = 30; L = 1,160 PAK/PAKL</p>										83174A
										90416D
										22931B
 <p>Di = 23 ... Da = 52; plastic</p> <p>With mounting socket and installation manual</p>										98141A
 <p><b>Intake silencer, mounting set</b></p>										9025956A
 <p><b>Protective cap</b></p> <p>Di = 27 plastic</p> <p>Di = 36 plastic</p> <p>Di = 39 plastic</p>										29516B
										29517A
										29519A

## Accessories

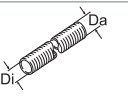
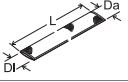


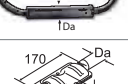



### Combustion air system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <p><b>Elbow for combustion air</b></p> <p>Di = 22; plastic</p> <p>Di = 25; plastic</p>										65000A
										91563A
 <p><b>Hose clamp; corrosion resistant steel</b></p> <p>Di = 20... 27; spanner opening 7, cross recess</p> <p>Di = 28... 35; spanner opening 7, slot</p>										1303080A
										9014771A
 <p><b>Hose clamp; corrosion resistant steel</b></p> <p>Di = 40... 47; spanner opening 8, cross recess</p> <p>Di = 48... 55; spanner opening 8, slot</p> <p>Di = 70 ... 90</p> <p>Di = 32 ... 39; spanner opening 8, slot</p> <p>Screw thread, steel</p>										67370A
										67371A
										92659A
										67369A
 <p><b>Pipe clamp</b></p> <p>Di = 25; stainless steel (bag of 10)</p> <p>Di = 29; corrosion resistant steel</p> <p>Di = 33; stainless steel</p>										9023007A
										362891
										499021
 <p><b>Inox flexible tube</b></p> <p>Di = 30, Da = 34, per meter</p>										141488



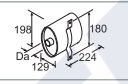
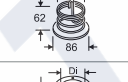
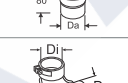
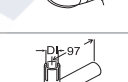
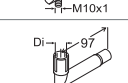

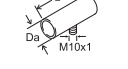

## Accessories

### Exhaust system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number	
	<b>Flexible exhaust pipe (Inox), 2-layer</b>										
	Di = 22, Da = 26 (per m); stainless steel										9021447A
	Di = 22, Da = 26 1,000 mm stainless steel										1315481A
	Di = 24, Da = 27.8 (per m); stainless steel										90394A
	Di = 38, Da = 42 (per m); stainless steel										353221
Di = 70, Da = 75 (per m); stainless steel										479721	
	<b>Heat protection hose</b>										
	Di = 72, Da = 120; L = 1,250 mm; fibreglass										9016230A
	Di = 72, Da = 120; L = 1,700 mm; fibreglass										9016231A
Di = 72, Da = 120; L = 1,850 mm; fibreglass										1313978A	
	<b>Flexible heat protection tube</b>										
	Di = 28, Da = 32 (per m) aluminium/fibreglass										21543A
Di = 43, Da = 45 (per m) aluminium/fibreglass										20463B	
	<b>Flexible heat protection tube</b>										
Di = 28, Da = 38, L = 324 fibreglass										64568A	
	<b>Exhaust silencer</b>										
	Di = 24, Da = 54; L = 1,800 mm; fibreglass										9014067A
Di = 38, Da = 54; L = 1,000 mm; fibreglass										92642A	
gas-proof, extra low noise											
	<b>Exhaust silencer</b>										
	Da = 22; corrosion resistant steel, powder-coated										20844E
	Da = 22; stainless steel										86450C
	Da = 24; corrosion resistant steel, powder-coated										90378C
Da = 38; corrosion resistant steel										19562E	
	Da = 22; stainless steel, M6 fixing thread										9001800D
	<b>Insulation for exhaust silencer</b>										
L = 120; D = 108; for exhaust silencer 20844E and 86450C										31371A	

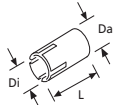
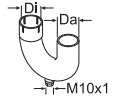


## Accessories

### Exhaust system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number	
	<b>Exhaust silencer</b>										
	Da = 38 Stainless steel with bracket										9012440A
	<b>Exhaust deflection</b>										
Stainless steel										84970A	
	<b>Exhaust pipe</b>										
Di = 70, Da = 70										97386A	
	<b>Exhaust elbow</b>										
Di = 71; Da = 67; 90°										465380	
	Di = 24 stainless steel, with condensed water drain										91564B
	Di = 24 stainless steel, without condensed water drain										92643A
	Di = 22 aluminium										28472C
	<b>Connecting pipe</b>										
	Da = 24; L = 50; stainless steel										92264A
	Da = 24; L = 65; with condensed water drain, stainless steel										92164A
Da = 38; L = 65; with condensed water drain, stainless steel										92644A	







## Accessories

### Exhaust system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <p><b>Exhaust reducer sleeve</b> Di = 22, Da = 24; L = 40; stainless steel</p>										92641A
 <p><b>Exhaust elbow</b> Di = 38, Da = 38; 180°; stainless steel with condensed water drain</p>										370169
 <p><b>Condensed water drain</b> For 91564A and 92164A Bag For installation in flexible tube Stainless steel</p>										92621A
<p>Without figure</p> <p><b>Thermo exhaust, bag</b> Bag with basic parts for Thermo Top Evo</p>										1314853B
 <p><b>Pipe clamp</b> Di = 39 ... 42; corrosion resistant steel Di = 24 ... 27; corrosion resistant steel Di = 30...Da = 33; corrosion resistant steel Di = 33...Da = 36; corrosion resistant steel Di = 30...Da = 33; stainless steel</p>										9002255B 1312409A 9011844B 9003647B 9024062A

## Accessories

### Exhaust system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <p><b>Pipe clamp</b> Di = 24 ... 26; stainless steel Di = 26 ... 28; stainless steel</p>										70910C 91383B
 <p><b>Pipe clamp</b> Di = 25; stainless steel (10 x) Di = 28; galvanised steel Di = 42; stainless steel Di = 42; stainless steel, for fixing screw M6</p>										9023007A 91384A 126830 90433A
 <p><b>Insulation tie</b> B = 60; L = 1 m; fibreglass B = 60; L = 50 m; fibreglass</p>										9015393A 9015392A
 <p><b>Stainless steel protective cap, edge protection</b> Di = 26.3 Di = 28.3 Di = 42.3</p>										24048A 90411A 24046A
 <p><b>Exhaust gas pass-through with insulation</b> Da = 22; stainless steel for mounting and insulation of the exhaust pipe when the override protection is made of plastic.</p>										9000383A
 <p><b>Spacer for exhaust pipe</b> Da = 47.6; B = 20.6</p>										1316131A

## Accessories

### Fuel system

	Air Top 2000 ST	Air Top Evo 3000/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number	
	<b>Fuel tank</b>										
	12 litre; B = 100; plastic										9024224A
	Installation kit for 12-litre tank										9025761A
	24 litre; B = 200; plastic Use only as extra tank for heaters with single wire system. Complies with legal provisions.										9001307C
	<b>Fuel standpipe (bag)</b>										
	Da = 5.5; only for installation in metal fuel tank										35320A
	<b>Tank extracting device with return pipe</b>										
	Da = 6 With sealing, only for installation in metal fuel tank										394157
	<b>Fuel standpipe</b>										
	Da = 5; M6 thread For plastic fuel tank; for tank armature mounting; also suitable for installation in metal fuel tank, bag of clamps										1300823C
	<b>Fuel standpipe</b>										
	Da = 5; M8 thread Installation only in metal fuel tank										98605C
	<b>Fuel standpipe</b>										
	Da = 5; M6 thread For plastic fuel tank, for tank armature mounting; also metal										1300494D
	<b>Short connection piece</b>										
	Da = 5; short connection piece For plastic tanks (with longitudinal expansion), For tank armature mounting										1301553A


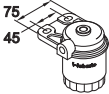

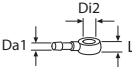

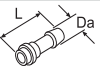


## Accessories

### Fuel system

	Air Top 2000 ST	Air Top Evo 3000/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number	
	<b>Tank extracting device</b>										
	Da = 5; long connection piece For plastic tanks (with longitudinal expansion), for tank armature mounting. Bag of installation parts.										9008021A
	<b>Tank extracting device (for installation in tank ventilation duct)</b>										
	Da1 = 15, Da1 = 5.0; L = 500 mm										1315205A
	Da1 = 18, Da1 = 5.0; L = 730 mm										1315204A
Da1 = 20, Da1 = 5.0; L = 750 mm										1315203A	
	<b>Fuel extractor T-piece, copper</b>										
	6 x 5 x 6; L = 50; H = 26										211532
	8 x 5 x 8; L = 50; H = 28										211540
	8 x 6 x 8; L = 50; H = 28										137952
12 x 6 x 12; L = 50; H = 35										293741	
	<b>Fuel extractor T-piece, plastic</b>										
	6 x 5 x 6; L = 50; H = 36										66944A
	8 x 5 x 8; for PME L = 50; H = 38, with hoses and clamps										31277B
	10 x 5 x 10; L = 50; H = 39										66946A
12 x 5 x 12; L = 50; H = 40										98052A	
	<b>Fuel extractor T-piece, corrosion resistant metal</b>										
	5 x 5 x 5; L = 50; H = 36.5										9023478A
	6 x 5 x 6; L = 50; H = 36.5										1310349B
	8 x 5 x 8; L = 50; H = 36.5										1310350B
	10 x 5 x 10; L = 50; H = 36.5										1310351B
12 x 5 x 12; L = 50; H = 36.5										1310352B	
	<b>Fuel extractor T-piece, corrosion resistant metal with parallel outflow</b>										
	6 x 5 x 6; L = 50; H = 28										1310367B
	8 x 5 x 8; L = 50; H = 28										1310368B
	10 x 5 x 10; L = 50; H = 28										1310369B
	12 x 5 x 12; L = 50; H = 28										1310370B
	<b>Fuel cock</b>										
	Maintenance ball cock, operating pressure maximum 2 bar										88028C
	<b>Fuel filter</b>										
	With removable filter										140708
Connection parts (bag)										219495	




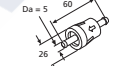
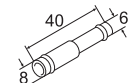
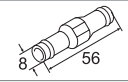
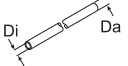
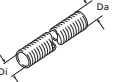
## Accessories

### Fuel system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number		
 Removable filter Spare part for fuel filter, A = 690 cm², n = 3-5 µm							■	■		97457A		
 75 45 Full fuel filter without heat adapter For diesel, biodiesel and heating oil A = 1,461 cm² n = 3.5 µm							■	■		9010929A		
 M L M 10 x 1 hollow screw ; L = 25							■	■		1310712A		
Without figure Bag containing connection parts for fuel filter For 140708, 93075A, 9001819A, 9002975B, 9001818B							■	■		219495		
 Di2 Da1 L Ring hose piece Da1 = 5; Di2 = 10; L = 10 Da1 = 5; Di2 = 12; L = 10 Da1 = 6; Di2 = 10; L = 10 Da1 = 6; Di2 = 14; L = 14							■	■	89574	289566	277312	85785A
 Da Sealing cone Da = 6 For 140708, 88028C							■	■		217824		
 L Da Hose sealing cone Da = 5; L = 30 Da = 6; L = 30 Da = 8; L = 32							■	■	247030	247049	247057	
 SW Union nut M 14 x 1,5/SW 19							■	■		1310760A		
 D Sealing ring D = 12 x 17; copper D = 14 x 18; copper Bag of 12							■	■		9024081A	9024082A	

## Accessories

### Fuel system

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number		
 12 SW SW 1 Intermediate piece M14 x 1.5							■	■		87681B		
 45 Ø 14 M14 X 1,5 Ring connection piece For use with maintenance ball cock							■	■		89615A		
 M14 x 1,5 L SW 17 SW 19 Non-return valve M14 x 1.5; SW 17/19; L = 52 0.2 bar For diesel and RME							■	■		65063C		
 Da = 5 60 26 Fuel filter Da = 5; plastic, transparent							■	■		487171		
 40 8 6 Reducer 8 x 6 brass							■	■		19593A		
 8 56 Connecting pipe 8 x 8 plastic PME-resistant							■	■		9001334B		
 Di Da Mecanyl hose, transparent Di = 2 Da = 5 (per m) Di = 2 Da = 5; L = 3,000 mm Di = 2 Da = 5; L = 5,000 mm Di = 2 Da = 5; L = 7,000 mm							■	■	483931	492353	20688A	483958
 Di Da Flexible tube for heat protection Di = 14.5, Da = 16.5 (per m) glass fabric with aluminium lamination Di = 28, Da = 32 (per m) glass fabric with aluminium lamination Heat protection hose for fuel lines							■	■	15570A	21543A		

## Accessories

### Fuel system

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	<b>Fuel hose</b>										
	Di = 4.5; Da = 9.0; (per m) for tube Di = 5.0										379611
	Di = 5.0; Da = 10.0; (per m) for tube Di = 6.0										370177
	Di = 6.0; Da = 11.0; (per m)										465364
	Di = 8.0; Da = 13.0; (per m)										322237
Di = 14.0; Da = 21.0; (per m)										320161	
	<b>PME-resistant fuel hose</b>										
	Di = 4.5; Da = 10.5; (per m)										85770B
	Di = 6.0; Da = 12; 2,000 mm										66636A
	Di = 7.5; Da = 13.5; 2,000 mm										9001336B
	Di = 7.5; Da = 13.5; L = 70 (bag of 20)										9023322A
Di = 4.5; Da = 10.5; L = 50 (bag of 10)										9023450A	
	Di = 4.5; Da = 10.5; (bag of 10)										9023160A
	Di = 4.5; Da = 10.5; (bag of 10) PME-resistant										9023384A
	<b>Fuel hose</b>										
	Di1 = 7.5; Di2 = 4.5;										67365A
Di1 = 4.5; Di2 = 3.5 PME-resistant											65201B
	<b>Standpipe</b>										
	Di = 3.0; Da = 6.0; L = 322 plastic; Suitable for fuel hose 67365A										67366A
	<b>PME-resistant fuel hose</b>										
	Di1 = 4.5; Di2 = 3.5; L = 50										65190B
	<b>RME-resistant moulded hose</b>										
	Di = 4.5; Da = 10.5										104709
	<b>Fuel hose kit, PME-resistant</b>										
	Di = 4.5; Da = 10; L = 50 5 x hose, 10 x hose clamp										72116A

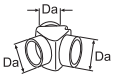
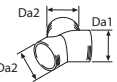
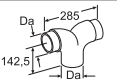
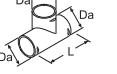
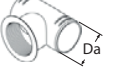

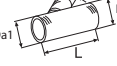
## Accessories

### Fuel system

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	<b>Bag dosing pump mounting suspension</b>										
	Only for dosing pump 2 and DP30 For mounting on original vehicle stud bolt (Mercedes)										92296A
	<b>Dosing pump mounting</b>										
	Bag of 3. Full rubber, very soft suspension. Observe installation position as shown.										9023386A
	Bag of 10										9007921A
	<b>Supporting sleeve (to reinforce plastic lines)</b>										
	D = 6 mm; L = 15										65142A
	D = 7 mm; L = 36										67584B
D = 8 mm; L = 15											9004951A
	<b>Dosing pump silencer mini jacket</b>										
	Protective device for the dosing pump silencer according to ISO 7840, required for protection of the dosing pump silencer during installation of the fuel delivery system in the engine room.										1311330A
	<b>Fuel line kit, corrosion resistant metal L = 5000 mm</b>										
	With screw fittings, hoses and clamps, EN ISO 7840										66958B
	<b>Fuel connection hose</b>										
	Di = 5 mm; L = 50 EN ISO 7840										64891A
	<b>Fuel line of stainless steel</b>										
	Di = 1.5; Da = 5; L = 5,000 mm EN ISO 7840										64892A

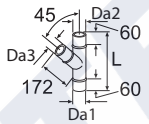
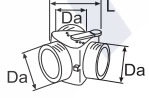
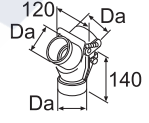
## Accessories

Heating air system

Distributor		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Order number
	<b>Y-piece</b>				
	Da = 55; plastic, black	■	■	■	429627
	Da = 80; plastic, black	■	■	■	100548
	<b>Y-piece</b>				
	Da1 = 80; Da2 = 55; plastic, black - Use only for bypass!	■	■	■	495689
	Da1 = 60; Da2 = 60; plastic, black	■	■	■	13121248
	Da1 = 90; Da2 = 80; plastic, black	■	■	■	91000A
	Da1 = 90; Da2 = 90; plastic, black	■	■	■	9009261D
	Da1 = 80; Da2 = 60; plastic, black	■	■	■	9009262B
	<b>90° T-piece</b>				
	Da = 100; galvanised steel		■		129232
	<b>90° T-piece</b>				
	Da = 60; L = 110; plastic, black	■	■	■	9009266C
	Da = 90; L = 110; plastic, black	■	■	■	9009265C
	<b>90° T-piece with thread</b>				
	Da = 60; plastic, black	■	■	■	90092688
	<b>End cap</b>				
	Da = 60; plastic, black	■	■	■	9009319D
	Da = 90; plastic, black	■	■	■	9009271D
	<b>45° branch piece</b>				
	Da1 = 60; Da2 = 60; L = 145; plastic, black	■	■	■	90092648
	Da1 = 90; Da2 = 60; L = 146; plastic, black	■	■	■	90092638

## Accessories

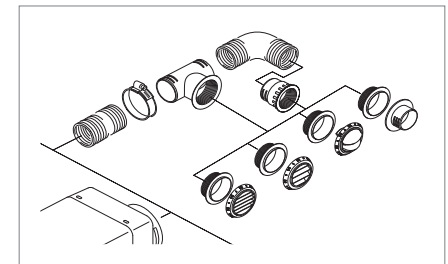
Heating air system

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Order number
	<b>Branch piece</b>				
	Da1 = 80; Da2 = 60; Da 3 = 60; L = 350 - use only for bypass!	■	■	■	252727
	Da1 = 80; Da2 = 80; Da 3 = 60; L = 350; corrosion resistant steel	■	■	■	252778
	Da1 = 80; Da2 = 80; Da 3 = 80; L = 370; corrosion resistant steel	■	■	■	252786
	Da1 = 100; Da2 = 100; Da 3 = 80; L = 320; corrosion resistant steel	■	■	■	252824
	<b>Distributor with bowden controlled butterfly valve</b>				
	Da = 55; L = 95; plastic, black	■	■	■	101374
	Da = 80; L = 124; plastic, black	■	■	■	100567
	<b>Flap valve</b>				
	Da = 100; plastic		■		252514

### Webasto hot air distribution (HADS):






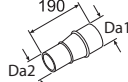


- High temperature resistance of -40 °C to +140 °C
- Fibreglass-reinforced plastic PA 6 GF30
- Very easy to install, no tools or bolts required
- Numerous combination options, suitable for all fields of application

Webasto delivers perfectly fitting, high-value components that can be installed easily and flexibly.



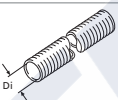
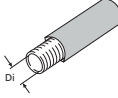

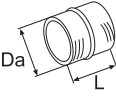
## Accessories

### Heating air system

		Air Top 2000 ST	Air Top Evo 3900/9500	HL 90	Order number
	<b>Air supply grid</b>				
	H = 170; L = 190; aluminium	■	■	■	128228
	<b>Grid for intake and outlet openings of heaters</b>				
	Di = 60; plastic, black	■			67492A
	Di = 90; plastic, black		■		89141A
	<b>Protective grid for the intake side of heaters</b>				
	Di = 60; rubber	■			84937A
	<b>Air grid (protection against permeation)</b>				
	Di1 = 80; Da2 = 112; chrome-plated steel		■		252441
	Di1 = 100; Da2 = 135; chrome-plated steel			■	252468
	<b>Reducer for air hose</b>				
	Da1 = 60; Da2 = 55; L = 35; plastic, black	■			29852A
	Da1 = 90; Da2 = 80; L = 45; plastic, black		■	■	89075A
	Da1 = 80; Da2 = 55; L = 82; plastic, black		■		495654
	<b>Reducer</b>				
	Da1 = 80; Da2 = 60; corrosion resistant steel		■		252565
	Da1 = 100; Da2 = 80; corrosion resistant steel - use only for bypass!			■	252581
	<b>Connection for intake through tube</b>				
	Da = 55; Di = 55; L = 20; plastic, black	■			82315A
	Da = 55; Di = 60; L = 32; plastic, black		■		101377
	Da = 80; Di = 82; L = 42; plastic, black			■	101381
	<b>Adapter (on heater)</b>				
	Di1 = 60; Da2 = 75; L = 40; plastic, black		■		82378A
	Di1 = 90; Da2 = 80; L = 40; plastic, black			■	89111B



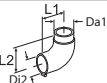
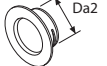
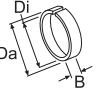


## Accessories

### Heating air system

		Air Top 2000 ST	Air Top Evo 3900/9500	HL 90	Order number
	<b>Flexible tube</b>				
	Di = 55; APK, black, logo (per m)	■	■		1311862A
	Di = 60; APK, black, logo (per m)	■	■		1311884A
	Di = 80; APK, black, logo (per m)		■		1311885A
	Di = 90; APK, black, logo (per m)			■	1311886A
	Di = 55; APK, black, logo (25 m roll)		■		1311891B
	Di = 60; APK, black, logo (25 m roll)		■		1311892B
	Di = 80; APK, black, logo (25 m roll)			■	1311893B
	Di = 90; APK, black, logo (25 m roll)			■	1311894B
	Di = 60; Da = 75; APP/APK (1,750 mm)*			■	9002178B
	Di = 60; PAHK (per m)	■	■		85866B
	Di = 55; PAKP, grey, logo (per m)	■			1311895A
	Di = 60; PAKP, grey, logo (per m)		■		1311897A
	Di = 80; PAKP, grey, logo (per m)			■	1311899A
	Di = 90; PAKP, grey, logo (per m)			■	1311901A
	Di = 55; PAKP, grey, logo (25 m roll)		■		1311896B
	Di = 60; PAKP, grey, logo (25 m roll)		■		1311898B
	Di = 80; PAKP, grey, logo (25 m roll)			■	1311900B
	Di = 90; PAKP, grey, logo (25 m roll)			■	1311902B
	Di = 100; PAK, black (per m)			■	398527
	Di = 100; AA, silver (per m)			■	254533
	Di = 55; AA (per m)		■		428035
	Di = 80; AA (per m)			■	254517
	*2 tubes for underfloor installations, insulated				
	<b>Insulated hoses</b>				
	Di = 80; PAK, L = 12 m roll With 10 mm "Armaflex" EPDM insulation		■		9021059C
	Di = 90; PAK, L = 12 m roll With 10 mm "Armaflex" EPDM insulation			■	9021082C
	<b>Air inlet adapter</b>				
	Da = 55; L = 43.5; plastic, black For extending heating air intake pipe. Is to be installed in the heater in combination with 29848F heating air inlet and outlet.		■		31290B
	<b>Double connection piece (tube connection)</b>				
	Da = 60; L = 50; plastic, black		■	■	9009258C
	Da = 80; L = 75; plastic, black			■	495646
	Da = 90; L = 50; plastic, black			■	9009259C


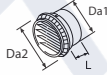




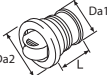
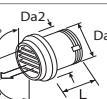
## Accessories

### Heating air system

		Air Top 2000 ST	Air Top Evo 3900/9500	HL 90	Order number
	<b>Reducer of adapter inside tube</b>				
	Di = 90; Da = 80; plastic, black				90092708
	Di = 90; Da = 60; plastic, black				9011011C
	<b>90° elbow</b>				
	Da = 90; plastic, black				9009260C
	<b>90° bend</b>				
	Da1 = 79; Di2 = 80,5; L1 = 115; L2 = 120; corrosion resistant steel				128503
	Da1 = 99; Di2 = 102,5; L1 = 142; L2 = 142; corrosion resistant steel				128643
	<b>Wall fitting</b>				
	Da = 60; plastic, black				9009249C
	Da = 90; plastic, black				9009250C
	<b>Adapter ring</b>				
	Di = 55; Da = 60; B = 17; plastic, black				92971A
	Di = 70; Da = 80; B = 17; plastic, black; for 429570 and 92966A				366153
	<b>Closable air outlet; bag containing a wall fitting</b>				
	Da = 60; plastic, black				9012300A
	Da = 60; plastic white				9012301A
	Da = 60; plastic, grey				9012302A
	Da = 90; plastic, black				9012291A
	Da = 90; plastic, white				9012292A
	<b>90° air outlet bag containing a wall fitting</b>				
	Da = 60; plastic, black				9012297A
	Da = 60; plastic, white				9012298A
	Da = 60; plastic, grey				9012299A
	Da = 90; plastic, black				9012288A
	Da = 90; plastic, white				9012290A
	Da = 90; plastic, grey				9012289A

## Accessories

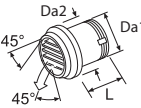
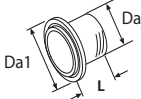
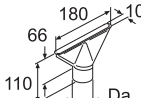
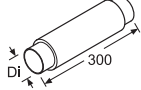
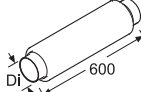
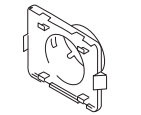
### Heating air system

		Air Top 2000 ST	Air Top Evo 3900/9500	HL 90	Order number
	<b>45° air outlet; bag containing a wall fitting</b>				
	Da = 60; plastic, black				9012294A
	Da = 60; plastic, white				9012295A
	Da = 60; plastic, grey				9012296A
	Da = 90; plastic, black				9012285A
	Da = 90; plastic, white				9012286A
	Da = 90; plastic, grey				9012287A
	<b>Air outlet</b>				
	Da1 = 90; Da2 = 120; L = 65; 45°; plastic, black, rotatable				91569C
					
	Da1 = 60; Da2 = 92; L = 65 also for heating air inlet; plastic, black				87389A
					
	Da1 = 100; L = 74; corrosion resistant steel, black				130621
	<b>Air outlet, rotatable</b>				
	Da1 = 60; Da2 = 92; plastic, black				398551
	Da1 = 80; Da2 = 120; plastic, black				264091
	<b>Union nut for air outlet</b>				
	Da = 60; L = 30; plastic, black				9009239B
	Da = 90; L = 30; plastic, black				9009240B
	<b>Closable air outlet</b>				
	Da1 = 55; Da2 = 100; L = 65; plastic, black				1311639A
	Da1 = 70; Da2 = 100; L = 65; plastic, black – use only for bypass!				92966A
	<b>Air outlet (insertion grid)</b>				
	Da1 = 55; Da2 = 87; L = 65; 90°; plastic, black				101625
	Da1 = 80; Da2 = 110; L = 65; 90°; plastic, black				107976



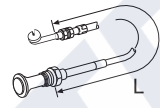

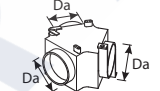
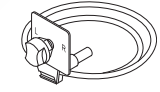
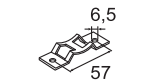
## Accessories

### Heating air system

	Air Top 2000 ST	Air Top Evo 3900/9500	HL 90	Order number
	<b>Air outlet, rotatable</b>			
	Da1 = 55; Da2 = 87; L = 65; 45°; plastic, black	■	■	107836
	Da1 = 80; Da2 = 110; L = 65; 45°; plastic, black	■	■	107984
	<b>Wall mounting</b>			
	Da1 = 87; Da2 = 55; L = 72.5; plastic, black	■	■	492884
	Da1 = 110; Da2 = 80; L = 72.5; plastic, black	■	■	495425
	<b>Defroster vent</b>			
	Da = 55; corrosion resistant steel	■	■	492299
	<b>Intake silencer for heating air inlet</b>			
	Di = 80; L = 300 Plastic - aluminium - plastic	■		1313512A
	<b>Heat silencer for heating air inlet</b>			
	Di = 90; L = 600 Aluminium - plastic	■		67789A
	<b>Heating air inlet and outlet D 60</b>			
	Transfer piece from heater to D 60; plastic, black	■		29848F

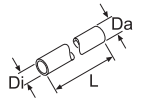
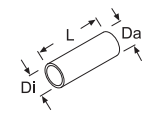
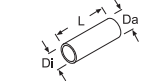
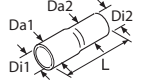

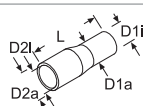
## Accessories

### Heating air system

	Air Top 2000 ST	Air Top Evo 3900/9500	HL 90	Order number
	<b>Bowden cable</b>			
	L = 850 mm	■	■	107812
	L = 1,500 mm for 252514, 101374, 100567	■	■	108932
	<b>Clamp; corrosion resistant steel</b>			
	for 107812, 108932	■	■	109006
	<b>Distributor with butterfly valve</b>			
	Da = 60; plastic, black	■	■	9009642A
	Da = 90; plastic, black	■		9009641A
	<b>Control device for distributor with butterfly valve</b>			
	Bowden cable, 2 m long for 9009641A (90 mm), 9009642A (60 mm)	■	■	9008255A
	<b>Console; corrosion resistant steel</b>			
	Of 107812, 108932	■	■	1310915A

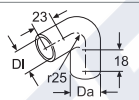
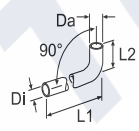
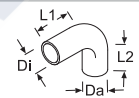
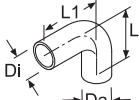
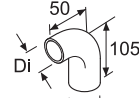
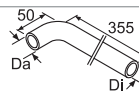
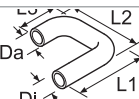
## Accessories

Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo Z30; 300; 350	Order number
	<b>Hose</b>						
	Di = 15, Da = 22; L = 2,400						406074
	Di = 18, Da = 25; L = 58						65187B
	Di = 18, Da = 27; L = 2,000						369136
	Di = 20, Da = 27; L = 380						98414B
	Di = 38, Da = 50; L = 82						19621A
	Di = 38, Da = 50; L = 130						84082A
	<b>Hose; silicone</b>						
	Di = 38, Da = 47; L = 65						87820A
	Di = 38, Da = 47; L = 82						89242A
	Di = 38, Da = 47; L = 110						65082A
	Di = 38, Da = 47; L = 130						9006271A
	<b>Hose; silicone</b>						
	Di = 28, Da = 37; L = 180						65216A
	<b>Reducer</b>						
	Di1 = 20; Di2 = 18; Da1 = 27; Da2 = 25 L = 60						64788B
	Di1 = 25; Di2 = 20; Da1 = 33; Da2 = 28 L = 60						89168A
	<b>Reducer; silicone</b>						
	Di1 = 28; Di2 = 38; Da1 = 37; Da2 = 47; L = 100						90916A
	<b>Reducer; silicone</b>						
	Di1 = 32; Di2 = 38; Da1 = 41; Da2 = 47; L = 70						92561A

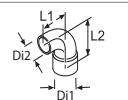
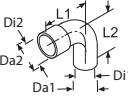
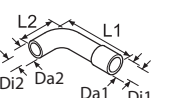
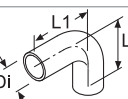

## Accessories

Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo Z30; 300; 350	Order number
	<b>90° moulded hose</b>						
	Di = 18; Da = 25						431397
	<b>Hose with 90° bend</b>						
	Di = 15, Da = 22; L1 = 1,020, L2 = 50						248371
	Di = 18, Da = 25; L1 = 125, L2 = 90						9001322A
	Di = 18, Da = 25; L1 = 500, L2 = 47.5						98453A
	Di = 18, Da = 27; L1 = 1,020, L2 = 50						436259
	Di = 20, Da = 27; L1 = 70, L2 = 56.5						9004570B
	Di = 20, Da = 27; L1 = 130, L2 = 56.5						65696C
	Di = 20, Da = 27; L1 = 187, L2 = 46.5						98450A
	Di = 20, Da = 27; L1 = 360, L2 = 46.5						98451B
	Di = 20, Da = 27; L1 = 615, L2 = 56.5						9003479B
	<b>90° moulded hose; silicone</b>						
	Di = 38; Da = 47; L1 = 70; L2 = 90						91917A
	Di = 38; Da = 47; L1 = 70; L2 = 105						91916A
	Di = 38; Da = 47; L1 = 80; L2 = 90						87817A
	<b>90° moulded hose; silicone</b>						
	Di = 38; Da = 47; L1 = 70; L2 = 105						91916A
	Di = 38; Da = 47; L1 = 80; L2 = 90						87817A
	<b>90° moulded hose; silicone</b>						
	Di = 15; Da = 25						67225B
	<b>Hose with 90° bend; silicone</b>						
	Di = 15; Da = 25; silicone						97002A
	<b>Moulded hose 2 x 90°</b>						
	Di = 20; Da = 27 L1 = 135; L2 = 120; L3 = 70						98452A
	Di = 20; Da = 27 L1 = 190; L2 = 120; L3 = 70						65697B

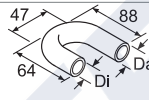
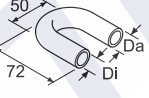
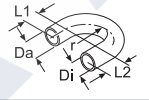
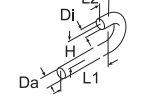
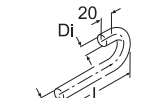
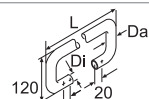
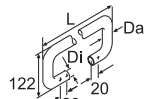
## Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo Z30; 300; 350	Order number
	90° moulded hose with reducer; silicone Di1 = 38; Di2 = 32; L1 = 90; L2 = 70; Da = 47 Reducer elbow							9002086A
	90° moulded hose with reducer; silicone Di1 = 38; Di2 = 35; Da1 = 47; Da2 = 44; L1 = 80; L2 = 80 Reducer elbow							65217A
	90° moulded hose with reducer 90° Di1 = 20; Da1 = 27; Di2 = 18; Da2 = 25 L1 = 151; L2 = 55 90° Di1 = 20; Da1 = 27; Di2 = 18; Da2 = 25 L1 = 70; L2 = 70	■	■	■	■	■	■	9007982A 65578B
	90° moulded hose with reducer 90° Di = 20; Da = 27; L1 = 59; L2 = 54	■	■	■	■	■	■	64999A
	Moulded hose 2 x 90° with reducer Di1 = 20; Di2 = 15; Da1 = 27; Da2 = 22 L1 = 55; L2 = 20; L3 = 55; L4 = 65; 180°	■	■	■	■	■	■	89116A

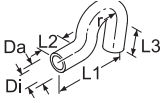


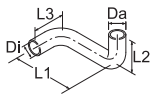
## Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo Z30; 300; 350	Order number
	180° moulded hose 180°; Di = 20; Da = 27	■	■	■	■	■	■	9002292B
	180° moulded hose Di = 20; Da = 27	■	■	■	■	■	■	900778A
	180° moulded hose Di = 18; Da = 25; L1 = 18; L2 = 18; r = 25 Di = 20; Da = 27; L1 = 88; L2 = 64; r = 23,5	■	■	■	■	■	■	40347A 29938A
	Hose with 180° bend Di = 15; Da = 22; L1 = 50; L2 = 20; H = 75 Di = 15; Da = 25; L1 = 580; L2 = 17; H = 75 Di = 18; Da = 25; L1 = 580; Di = 18; Da = 25; L1 = 1100; L2 = 17; H = 75 Di = 20; Da = 29; L1 = 89; L2 = 20; H = 98	■	■	■	■	■	■	1313783A 249416 436267 29420A 84926A
	Hose with 180° bend Di = 18; Da = 25; L = 110 Di = 20; Da = 27; L = 70 Di = 20; Da = 27; L = 190	■	■	■	■	■	■	9003810B 9003400B 65697B
	Hose with 4 x 90° bend Di = 18; Da = 25; L = 2,200 mm Di = 18; Da = 25; L = 3,000 mm Di = 20; Da = 27; L = 2,200 mm	■	■	■	■	■	■	472433 105698 126840
	Hose with 4 x 90° bend Di = 20; Da = 29; L = 2,230; Wall thickness = 4.5 mm; specially for trucks	■	■	■	■	■	■	33894A

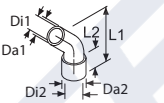
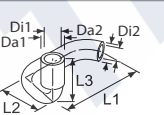
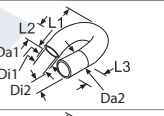
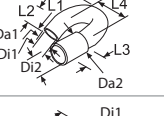
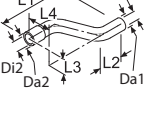
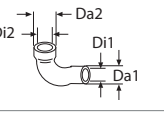
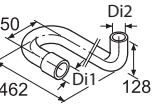
## Accessories

Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
 <p>Moulded hose Di = 18; Da = 25; r = 30; L1 = 95; L2 = 25; L3 = 20</p>	■	■	■	■	■	■	84958A
 <p>Di = 18; Da = 25; r = 30; L1 = 140; H = 70; L2 = 20; L3 = 25</p>	■	■	■	■	■	■	88383A
 <p>Di = 18; Da = 25</p>	■	■	■	■	■	■	431400
 <p>Moulded hose; silicone Di = 38; Da = 45; L1 = 150; L2 = 65; L3 = 84</p>					■		9007397A

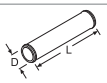
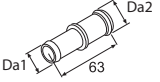
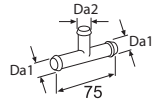
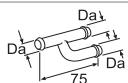
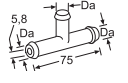
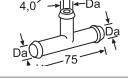


## Accessories

Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
 <p>Moulded hose with reducer Di1 = 18; Da1 = 25; Di2 = 15; Da2 = 22; L1 = 62; L2 = 31.5</p>	■	■	■	■	■	■	65581A
 <p>Di1 = 20; Da1 = 27; Di2 = 18; Da2 = 25; L1 = 70; L2 = 30; L3 = 40</p>	■	■	■	■	■	■	63640A
 <p>Di1 = 20; Da1 = 28; Di2 = 20; Da2 = 28; r = 70; L1 = 110; L2 = 60; L3 = 65; 180° Di1 = 20; Da1 = 27; Di2 = 15; Da2 = 22; r = 50; L1 = 170; L2 = 20; L3 = 30; 180°</p>	■	■	■	■	■	■	67058A 89962C
 <p>Di1 = 15; Da1 = 22; Di2 = 20; Da2 = 27; L1 = 95; L2 = 30; L3 = 45; L4 = 40; 180°</p>	■	■	■	■	■	■	89117A
 <p>Di1 = 18; Da1 = 25; Di2 = 20; Da2 = 27; L1 = 175; L2 = 54; L3 = 25; L4 = 58;</p>	■	■	■	■	■	■	92242A
 <p>Di1 = 15; Da1 = 22; Di2 = 18; Da2 = 25</p>	■	■	■	■	■	■	403482
 <p>Di1 = 20; Di2 = 15; Da1 = 27; Da2 = 22 180°; 90°</p>	■	■	■	■	■	■	9007981A

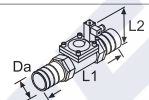
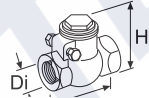
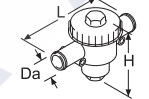

## Accessories

### Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Connecting pipe; brass							
	Da = 15; L = 75;							131650
	Da = 38 x 1.5; L = 150							97029A
	Connecting pipe; plastic, black							
	Da1 = 17; Da2 = 20							647388
	Da1 = 18; Da2 = 22							66932A
	Da1 = 20; Da2 = 22							198678
	Aluminium							678228
	T-piece							
	Da1 = 15; Da2 = 18; corrosion resistant steel							138207
	Da1 = 18; Da2 = 15; corrosion resistant steel							138215
	Da1 = 18; Da2 = 18; plastic, black							13156578
	Da1 = 20; Da2 = 8; corrosion resistant steel							647698
	Da1 = 20; Da2 = 10; corrosion resistant steel							9006023A
	Da1 = 20; Da2 = 15; corrosion resistant steel							138223
	Da1 = 20; Da2 = 20; brass							21081A
	Connecting piece							
	Da = 18; corrosion resistant steel							123858
	T-piece with throttle							
	Da = 20; corrosion resistant steel							9000545A
	T-piece with throttle							
	Da = 18; corrosion resistant steel							88593A
	Pipe socket, thermostat							
	Da = 19; L = 100, with M22 x 1.5 thread; corrosion resistant steel							369632
	Da = 38; L = 100, with M22 x 1.5 thread; corrosion resistant steel							138169
	D = 15, L = 65, with M4 thread; corrosion resistant steel							119064
	D = 18, L = 65, with M4 thread; corrosion resistant steel							1310365
	Manual shut-off valve							
	Da = 38; L1 = 165; L2 = 85 Brass housing, chrome-plated							90736A

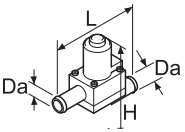
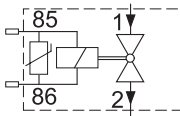
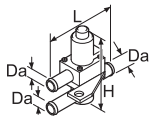
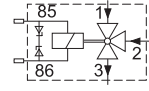
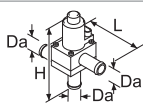
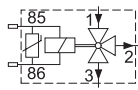
## Accessories

### Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Solenoid valve							
	Da = 32; L1 = 187; L2 = 95 for 24 V, 2/2-way Housing and BRS screw-in connecting piece							93207A
	Non-return valve							
	Di = 1"; L = 75; H = 74 With leakage hole, bronze							210412
	Shut-off valve with filter							
	Da = 38; H = 131 2/2-way water filter, plastic shell							91800C
	Intake filter							
	Da = 38 for 2/2-way water filter							665328

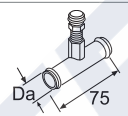
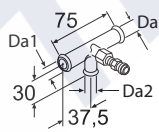
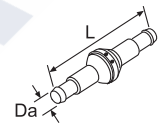
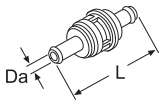
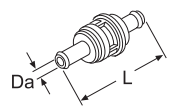
## Accessories

### Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
 	■	■	■	■	■	■	492701
<b>Solenoid valve</b>							
12 V, Da = 20; H = 90; L = 106 Plastic housing, opened without power							
 	■	■	■	■	■	■	19819A
<b>Solenoid valve</b>							
12 V, Da = 18; H = 149; L = 111 3/2-way; plastic housing, opened without power							
 	■	■	■	■	■	■	9014606A
<b>Solenoid valve</b>							
Da = 18; H = 101; L = 84 For 12 V, 3 / 2-way; plastic housing Opened without power; bag containing electrical installation parts							

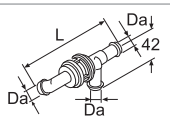
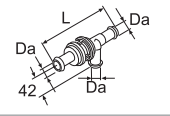
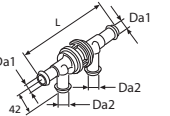
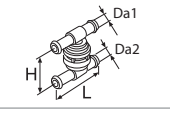
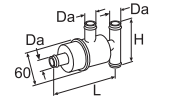
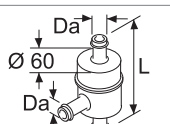
## Accessories

### Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	■	■	■	■	■	■	112392
<b>Bleeder valve</b>							
Da = 15; corrosion resistant steel							
Da = 18; corrosion resistant steel							
Da = 20; corrosion resistant steel							
	■	■	■	■	■	■	488526
<b>T-piece with bleeder valve</b>							
Da1 = 15, Da2 = 15; corrosion resistant steel							
Da1 = 18, Da2 = 15; corrosion resistant steel							
	■	■	■	■	■	■	453137
<b>Non-return valve</b>							
Da = 18; L = 90; brass/steel, coated, with leakage hole							
Da = 20; L = 120; plastic, black, without leakage hole							
	■	■	■	■	■	■	12781A
<b>Non-return valve</b>							
Da = 15; L = 104; plastic, black, with leakage hole							
	■	■	■	■	■	■	12754A
<b>Non-return valve</b>							
Da = 15; L = 104; plastic, black, without leakage hole							
Da = 18; L = 90; plastic, black, without leakage hole							
Da = 18; L = 100; plastic, black, without leakage hole							

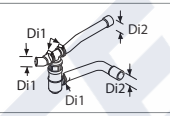
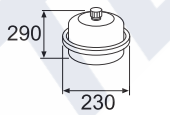
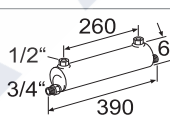
## Accessories

Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
 <p>Non-return valve Da = 18; L = 104; plastic, black, without leakage hole</p>	■	■	■	■	■	■	121476
 <p>Da = 18; L = 104; plastic, black, without leakage hole</p>	■	■	■	■	■	■	127858
 <p>Non-return valve Da1 = 18; Da2 = 18; L = 146; H = 42; plastic, black, with leakage hole Da1 = 20; Da2 = 20; L = 162; H = 42; brass/steel, coated, with leakage hole Da1 = 18; Da2 = 18; L = 146; H = 42; plastic, black, without leakage hole Da1 = 22; Da2 = 20; L = 162; H = 46; plastic, black, with leakage hole</p>	■	■	■	■	■	■	12780A 19873A 12751A 87072A
 <p>Da1 = 18; Da2 = 18; L = 82; H = 82; plastic, black, without leakage hole</p>	■	■	■	■	■	■	115472
 <p>Thermostat Da = 18; H = 70; L = 108; brass/steel, coated, without leakage hole Da = 20; H = 70; L = 108; brass/steel, coated, without leakage hole 100 ... 160 L/h/0.003 Nm; opens at 59 ±2/-1 °C.</p>	■	■	■	■	■	■	15394A 19872A
 <p>Da = 20; L = 112; brass/steel, coated, without leakage hole Opens at 70°±2°</p>	■	■	■	■	■	■	98992A





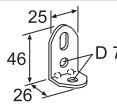
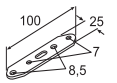

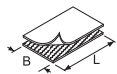
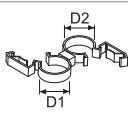
## Accessories

Heating water system

	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010; 2016	Thermo 230; 300; 350	Order number
 <p>Combination valve Di1 = 18; Di2 = 22 Thermostat &gt;40° opening, without water hoses</p>	■	■	■	■	■	■	37915A
 <p>Pressure expansion tank 8 litre, pre-pressure; volume of total system: 157 litre maximum</p>	■	■	■	■	■	■	351725
 <p>Instant water heater with insulation shell max. 23.3 KW; max. 10 bar; 2 kg; copper with brass pipe fitting max. 23.3 KW; max. 10 bar; 2 kg; without pipe fitting</p>	■	■	■	■	■	■	434043 434035

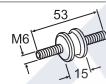
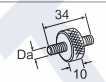
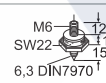

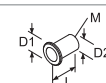




## Accessories

### Installation parts

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <b>Airtop box installation set</b> For attaching Webasto air heaters to commercial vehicle superstructures to heat the cargo space, the plastic cover provides protection against environmental influences.										90059428
 <b>Metal construction box, Air Top 2000 Series</b> With air outlet, air inlet adapter, mounting material	■									86032A
 <b>Signboard (for TRS)</b> Cellophane transfer figure	■	■	■	■	■	■	■	■	■	317616
 <b>Signboard</b> Signboard "Switch off heater before refuelling" Self-adhesive.	■	■	■	■	■	■	■	■	■	1314523A
 <b>Angle bracket</b> Galvanised steel Stainless steel	■	■	■	■	■	■	■	■	■	242780 90008028
 <b>Perforated bracket</b> Galvanised steel Stainless steel	■	■	■	■	■	■	■	■	■	242888 90008018
 <b>Cable tie</b> L = 400; B = 7.6; bag of 10	■	■	■	■	■	■	■	■	■	9007917A
 <b>Dual lock fastening (velcro tape)</b> B = 25; L = 50; plastic, black B = 25; L = 100; plastic, black	■	■	■	■	■	■	■	■	■	9009555A 9009556A
 <b>Hose and cable tie</b> D1 = 27; D2 = 27 can be locked; bag of 5 D1 = 7.2 - 7.5; D2 = 22 - 24 bag of 15 D1 = 10 - 12; D2 = 19 - 24.5 bag of 5 D1 = 22 - 24; D2 = 22 - 24 bag of 5 D1 = 25 - 28; D2 = 21.5 - 24 bag of 5 D1 = 37 - 41; D2 = 21.5 - 24 bag of 5	■	■	■	■	■	■	■	■	■	9010997A 9010998A 9010999A 9011000A 9011001A 9011002A

## Accessories









### Installation parts

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <b>Silent block</b>	■	■	■	■	■	■	■	■	■	9014765A
 <b>Silent block</b> Da = M6 bag of 5 Da = M8	■	■	■	■	■	■	■	■	■	9023020A 15500B
 <b>Silent block</b> With self-tapping screw. Bag of 8	■	■	■	■	■	■	■	■	■	9024084A
 <b>Rivet nut M8</b> Hex shaped, steel. Bag of 5	■	■	■	■	■	■	■	■	■	9009017A
 <b>Rivet nut M6</b> D1 = 13; D2 = 9; L = 14.5 Aluminium, bag of 20	■	■	■	■	■	■	■	■	■	9011635A
 <b>EJOT stud bolt</b> L = 15.5; M6 bag of 10 L = 30.5; M6 bag of 10				■	■					9006446A 9009025A
 <b>EJOT PT bolt</b> L = 22; SW = 10; Da = 6; bag of 10				■	■					9011669A
 <b>Plastic nut, black, without threads</b> Da = 16; L = 10; SW = 10 for bolts with a nominal diameter up to 4.8 mm Bag of 20	■	■	■	■	■	■	■	■	■	9011649A
 <b>Pin lock</b> Da = 12.5; L = 0.25, for M6 threads Bag of 10	■	■	■	■	■	■	■	■	■	9011659A








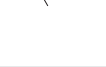
## Accessories

### Installation parts

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 Cable grommet Da = 40; Di = 20; L = 24	■	■	■	■	■	■	■	■	■	9008254A
 Membrane grommet Da = 18; Di = 11	■	■	■	■	■	■	■	■	■	113952
 Cable grommet Da = 23; Di = 14	■	■	■	■	■	■	■	■	■	174807
 Cable and hose fixing clip For sliding onto a sheet metal fold	■	■	■	■	■	■	■	■	■	88895C
 SW17 Spacer nut, corrosion resistant steel	■	■	■	■	■	■	■	■	■	M6; L = 20 1310148A M6; L = 30 1310149A M6; L = 40 1310150A M8; L = 15 28897B
 Rubber ring (rub protection)	■	■	■	■	■	■	■	■	■	Di = 13.5 Da = 31; L = 15 410895 Di = 20.5 Da = 40; L = 20 1312785A Di = 25.5 Da = 45; L = 20 1312780A
 Aluminium shim	■	■	■	■	■	■	■	■	■	Di = 7/Da = 18; L = 8 1314712A Di = 8/Da = 20; L = 5 1314706A Di = 8/Da = 20; L = 8 1314711A Di = 8/Da = 20; L = 10 1314705A Di = 8/Da = 20; L = 15 1314710A Di = 8/Da = 20; L = 20 1314707A Di = 8/Da = 20; L = 30 1314708A Di = 8/Da = 20; L = 40 1314709A Di = 9/Da = 25; L = 14 1314713A
 Braided protection hose (rub protection for polyester coolant hoses)	■	■	■	■	■	■	■	■	■	Di = 26 - 30; L = 1,500 mm 1301317B Di = 26 - 30; L = 2,000 mm 9014361B Di = 26 - 30; (per m) 1313232B



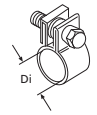




## Accessories

### Installation parts

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 Heat shrink hose Di = 38/19; L = 100 Di = 38/19; L = 250 Di = 38/19; L = per m	■	■	■	■	■	■	■	■	■	65899A 70891A 92101A
 Edge protection with wire coil for plate thickness 1-4 mm; L = 500 for plate thickness 1-4 mm; L = 700	■	■	■	■	■	■	■	■	■	87184B 1315351B
 Pipe clamp Di = 12.5; corrosion resistant steel Di = 18; corrosion resistant steel Di = 25; chrome steel (bag of 10) Di = 33; chrome steel Di = 42; chrome steel Di = 42; stainless steel, for fixing bolt M6 Di = 52; chrome steel	■	■	■	■	■	■	■	■	■	316199 374199 9023007A 499021 126830 90433A 9002762B
 Pipe clamp Di = 5; chrome steel, rubber coated pipe clamp Di = 25; corrosion resistant steel Di = 29; corrosion resistant steel Di = 34; for automobile, corrosion resistant steel Di = 34; for truck, corrosion resistant steel Di = 48; stainless steel (bag of 5) Di = 15; stainless steel Di = 35; galvanised steel, corrosion resistant steel, bag of 5	■	■	■	■	■	■	■	■	■	9002439A 242950 362891 242942 476188 9023387A 63538A 9022835A
 Pipe clamp, stainless steel Di = 24 ... 26 Di = 26 ... 28	■	■	■	■	■	■	■	■	■	70910C 91383B
 Pipe clamp Di = 39 ... 42; corrosion resistant steel Di = 24 ... 27; corrosion resistant steel Di = 30 ... Da = 33; corrosion resistant steel Di = 33 ... Da = 36; corrosion resistant steel Di = 30 ... Da = 33; stainless steel	■	■	■	■	■	■	■	■	■	9002255B 1312409A 9011844B 9003647B 9024062A

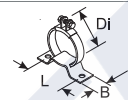
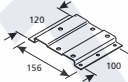







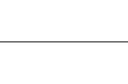
## Accessories

### Installation parts

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S /ST	DBW 2010/2016	Thermo 230 /300 /350	Order number
	<b>1-ear hose clamp</b>										
	Di = 5.2 ... 6.2, corrosion resistant steel; bag of 10, 1-ear clamp	■	■	■	■	■	■	■	■	■	9011638A
	Di = 6.2 ... 7.5, corrosion resistant steel; bag of 5, 1-ear clamp	■	■	■	■	■	■	■	■	■	9011639A
	<b>Cailleau hose clamp, stainless steel</b>										
	Di = 8 ... 9, bag of 10	■	■	■	■	■	■	■	■	■	9011660A
	Di = 9.5 ... 11, bag of 10	■	■	■	■	■	■	■	■	■	9011661A
	Di = 10 ... 12.5, bag of 10	■	■	■	■	■	■	■	■	■	9011656A
	<b>Hose clip with hexagon head</b>										
	Di = 8, corrosion resistant steel	■	■	■	■	■	■	■	■	■	1310761A
	Di = 9, corrosion resistant steel	■	■	■	■	■	■	■	■	■	1310771A
	Di = 10, corrosion resistant steel (bag of 50)	■	■	■	■	■	■	■	■	■	9023037A
	Di = 12, corrosion resistant steel	■	■	■	■	■	■	■	■	■	1310763A
	Di = 14, corrosion resistant steel	■	■	■	■	■	■	■	■	■	1310762A
	Di = 14, stainless steel	■	■	■	■	■	■	■	■	■	1312775A
	<b>Hose clamp with SW7 hexagon head and cross recess</b>										
	Di = 16 ... 24, corrosion resistant steel	■	■	■	■	■	■	■	■	■	1312025A
	Di = 16 ... 27, corrosion resistant steel	■	■	■	■	■	■	■	■	■	1303080A
	Di = 28 ... 35, corrosion resistant steel	■	■	■	■	■	■	■	■	■	9014771A
	Di = 32 ... 50, corrosion resistant steel	■	■	■	■	■	■	■	■	■	1312026A
	<b>Hose clamp, stainless steel</b>										
	Di = 27 ... 35, chrome steel	■	■	■	■	■	■	■	■	■	67859A
	Di = 40 ... 47, chrome steel	■	■	■	■	■	■	■	■	■	67370A
	Di = 48 ... 55, chrome steel	■	■	■	■	■	■	■	■	■	67371A
	Di = 70 ... 90, chrome steel	■	■	■	■	■	■	■	■	■	92659A
	Di = 72 ... 79, chrome steel	■	■	■	■	■	■	■	■	■	67372A
	Di = 80 ... 87, chrome steel	■	■	■	■	■	■	■	■	■	67475A
Di = 80 ... 100, chrome steel	■	■	■	■	■	■	■	■	■	1313201A	
	Di = 98 ... 120, chrome steel	■	■	■	■	■	■	■	■	■	67373A
	<b>Spring clip, type B</b>										
	Di = 25 light grey, bag of 10	■	■	■	■	■	■	■	■	■	9009019A
	Di = 27 dark grey, bag of 10	■	■	■	■	■	■	■	■	■	9009018A
	Di = 30 black, bag of 10	■	■	■	■	■	■	■	■	■	9009026A
	<b>Spring clip, type E2 (space saving), black</b>										
	Di = 22, bag of 10	■	■	■	■	■	■	■	■	■	9011662A
	Di = 25, bag of 10	■	■	■	■	■	■	■	■	■	9009022A
	Di = 27, bag of 10	■	■	■	■	■	■	■	■	■	9009023A
	Di = 28 with stop piece, bag of 10	■	■	■	■	■	■	■	■	■	9014607A

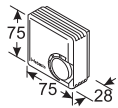
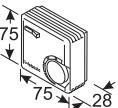
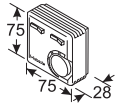
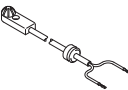
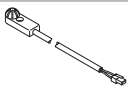
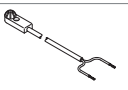
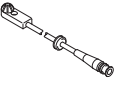
## Accessories

### Installation parts

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S /ST	DBW 2010/2016	Thermo 230 /300 /350	Order number
	<b>Fastening clip</b>										
	Di = 86; L = 111; B = 25	■	■	■	■	■	■	■	■	■	253685
	<b>Heater bracket</b>										
	Stainless steel						■				9009203A
	<b>Heater bracket</b>										
	Stainless steel	■	■								92223C
	<b>Retaining plate</b>										
	Stainless steel reinforcing plate when mounting on thin-walled body panels.	■	■	■							1311119A
	<b>Bracket, Thermo Top Evo</b>										
	For horizontal installation					■					1313999A
	<b>Bracket, Thermo Top Evo</b>										
	For vertical installation					■					1313986A
	<b>Standard bracket</b>										
						■					1314948A
	<b>Bracket, Thermo Top Evo</b>										
	Bracket for water connection piece (bag)					■					1314851A
	<b>Bracket, Thermo Top C universal</b>										
	Enables additional installation variants				■	■					9023158A
	<b>Dosing pump mounting</b>										
	Bag of 3	■	■	■	■	■	■	■	■	■	9023386A
	Bag of 10	■	■	■	■	■	■	■	■	■	9007921A
	For reducing the noise of the dosing pump										

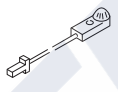
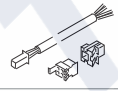
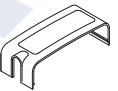
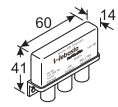
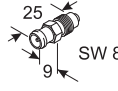
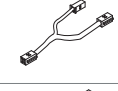

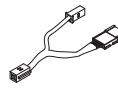
## Accessories

### Electrical accessories

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
	<b>Room thermostat</b> Mechanical with relays (changer) for vehicle fan				■	■	■	■	■		25011C
	With On/Off switch, changer			■			■	■	■		70947A
	With On/Off switch, changer			■							70948A
	<b>Temperature sensor, external</b> L = approx. 5 m (bag)		■								9005008A
	L = 5 m for Air Top 2000 ST Marine heater		■								9005004B
	L = 2.5 m		■								9014694A
	L = 5 m L = 20 m		■								93205A 92649B

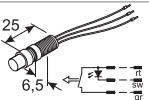


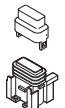


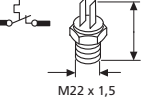

## Accessories

### Electrical accessories

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
	<b>Room thermostat, sensor</b> For 34875A electronic room thermostat	■	■	■							82356A
	<b>Extension wiring harness, room thermostat</b> L = approx. 3,000 mm	■	■	■							31916C
Without figure	<b>Coding connector</b> For 34875A electronic room thermostat	■	■	■				■	■	■	35158A
	<b>Cover with hole</b> For air Top 2000 ST if an external temperature sensor is used	■									29718B
	<b>GSM Telestart switch</b> D-network, FME screw fitting			■							66607A
	<b>Antenna coupling</b> FME/EIS1 click adapter. For 66607A. Order 2x.			■							9000396A
	<b>Y-adapter, wiring harness</b> Retrofitting of Thermo Call in existing Telestart				■						9001505A
	<b>Y-adapter, wiring harness</b> Connection of Telestart digital timer 1533 and W-bus receiver				■						9010325B
	<b>Y-adapter</b> Telestart T 70/digital timer 1533 (W-bus)				■						9007267A

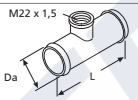

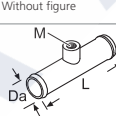
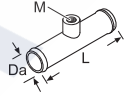
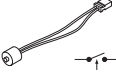
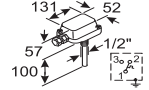

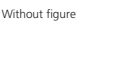
## Accessories

### Electrical accessories

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
 Pushbutton, white For TC 1.1/TC 2; with fastening material				■						9004278A
 Light (operation indicator), with cable LED 12 V, red	■	■	■	■	■	■	■	■	■	9010633A
 LED 12 V, yellow	■	■	■	■	■	■	■	■	■	9013101A
 MTA fuse holder 1 A, black	■	■	■	■	■	■	■	■	■	66439A
5 A, beige	■	■	■	■	■	■	■	■	■	67290A
7.5 A, brown	■	■	■	■	■	■	■	■	■	66440A
10 A, red	■	■	■	■	■	■	■	■	■	66441A
15 A, blue	■	■	■	■	■	■	■	■	■	66442A
20 A, yellow	■	■	■	■	■	■	■	■	■	66443A
25 A, white	■	■	■	■	■	■	■	■	■	66444A
30 A, green	■	■	■	■	■	■	■	■	■	66445A
For blade-type fuses, waterproof. 6.3 mm blade-type plug connection, SAE J1284										
 Socket for MTA fuse holder With bolts.	■	■	■	■	■	■	■	■	■	66446A
 Replacement kit containing MTA fuse holder without fuses For blade-type fuses. Replacement for 15711B/14878A. 6.3 mm blade-type plug connection, SAE J1284	■	■	■	■	■	■	■	■	■	9008710C
 Thermostat (control thermostat) 35 - 42°C; L = 38; 6.3 mm blade-type plug connection, NC contact							■	■		408298
62 - 70°C; L = 39.5; 6.3 mm blade-type plug connection, NC contact							■	■		261130
71 - 76°C; L = 39.6; 6.3 mm blade-type plug connection, NC contact							■	■		43292A
73 - 78°C; L = 39.6; 6.3 mm blade-type plug connection, NC contact							■	■		43308A
83 - 88°C; L = 39.6; 6.3 mm blade-type plug connection, NC contact							■	■		89558A
83 - 98°C; L = 39.6; 6.3 mm blade-type plug connection, NC contact							■	■		35824A
 Sealing ring 22 x 27, copper							■	■		217336










## Accessories

### Electrical accessories

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
 M22 x 1,5 Pipe socket Da = 38 L = 100										138169
Da = 19 L = 100				■	■	■	■			369632
 Thermo switch 2 °C					■					9023147A
10 °C					■					9023146A
NO contact; auxiliary heating function of parking heater at low outdoor temperature										
 Without figure Thermo switch holder				■						9023145A
 M Pipe socket Da = 15, M4, L = 65, steel, corrosion resistant					■	■	■	■	■	119064
Da = 18, M4, L = 65, steel, corrosion resistant					■	■	■	■	■	1310365A
With thread for thermostat										
 Thermostat for pipe socket NO contact, 40 °C					■	■	■	■		109867
 131 52 Regulating thermostat Adjustable from 15 - 95°C. With half-inch thread.								■	■	9007198A
 51 Fuse holder with fuse Maximum 16 A, red					■	■	■	■	■	250848
 Without figure Extra fuse with connector (bag) For blade-type fuses, waterproof. 6.3 mm blade-type plug connection, SAE J1284					■	■	■	■	■	1301682A






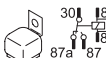

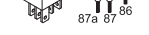
## Accessories

### Electrical accessories

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
	<b>Double flat spring contact</b>										
	0.5 - 1.5	■	■	■	■	■	■	■	■	■	9011645A
	2.0 - 3.0	■	■	■	■	■	■	■	■	■	9011647A
	4.0 - 6.0 For MTA fuse holder. Bag of 10	■	■	■	■	■	■	■	■	■	9009028B
	<b>Blade-type fuse SAE J1284</b>										
	1 A, black	■	■	■	■	■	■	■	■	■	9023140A
	7.5 A, brown, 20 pieces	■	■	■	■	■	■	■	■	■	9024083A
	15 A, blue	■	■	■	■	■	■	■	■	■	9023139A
	20 A, yellow	■	■	■	■	■	■	■	■	■	9023141A
25 A, white	■	■	■	■	■	■	■	■	■	9023142A	
	<b>Single wire seal</b>										
	0.35 - 1.0, blue, bag of 20	■	■	■	■	■	■	■	■	■	9011626A
	0.5 - 0.75, green, bag of 20	■	■	■	■	■	■	■	■	■	9011955A
	1.5 - 2.5, white, bag of 10	■	■	■	■	■	■	■	■	■	9011627A
	2.5, red, bag of 20 for MTA fuse carrier	■	■	■	■	■	■	■	■	■	9011631A
	0.5 - 1.5, white, bag of 5	■	■	■	■	■	■	■	■	■	9009028A
2.0 - 4.0, yellow, bag of 5	■	■	■	■	■	■	■	■	■	9009027A	
	<b>2.8mm blade-type plug connection</b>										
	0.35 - 1.0, blue, bag of 20	■	■	■	■	■	■	■	■	■	9011626A
	<b>2.8mm blade-type plug</b>										
	For 0.5-1.0 mm <sup>2</sup> . Bag, each with 2 blade-type plugs and single wire seal	■	■	■	■	■	■	■	■	■	9011628A
	<b>2.8mm flat spring contact</b>										
	For 1.5-2.5 mm <sup>2</sup> ; bag each with 10 blade-type plugs and single wire seal	■	■	■	■	■	■	■	■	■	9011664A
	<b>Flat spring contact</b>										
	For 4-6 mm <sup>2</sup> . Bag, each with 10 blade-type plugs and single wire seal	■	■	■	■	■	■	■	■	■	9011969A
	<b>Socket contact, Micro Quadlok system</b>										
	For 0.75 mm <sup>2</sup> . Bag of 10	■	■	■	■	■	■	■	■	■	9011666A
	<b>Micro-timer contact</b>										
	Bag of 10	■	■	■	■	■	■	■	■	■	9011644A








## Accessories

### Electrical accessories

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
	<b>Connector sleeve housing</b>										
	2.8 mm. Bag of 5, 2-pin, waterproof.	■	■	■	■	■	■	■	■	■	9011632B
	<b>Connector sleeve housing</b>										
	2-pin, 2.8 mm, waterproof, bag of 5. For dosing pump e.g.	■	■	■	■	■	■	■	■	■	9011633A
	<b>Junior Power Timer</b>										
	0.5 - 1.0 mm <sup>2</sup> ; bag of 10. Also for 2.8 mm blade-type plug	■	■	■	■	■	■	■	■	■	9011634B
	<b>Relay (changer) with fastening strap</b>										
	12 V, 30/50A. With connector sleeve housing and blade-type plug receptacle. Plastic housing.	■	■	■	■	■	■	■	■	■	9023375A
	<b>Relay (changer)</b>										
	24 V, 10/20 A, metal housing	■	■	■	■	■	■	■	■	■	248401
	12 V, 30/50 A, plastic housing	■	■	■	■	■	■	■	■	■	9016500A
	12 V, 20/40 A, plastic housing	■	■	■	■	■	■	■	■	■	9005553A
	<b>Relay (changer, built-in diode)</b>										
	24 V, 10/20 A, metal housing, built-in diode	■	■	■	■	■	■	■	■	■	340987
	<b>Relay (changer, built-in diode)</b>										
	12 V, 20/30 A, 6.3 mm, with separate fastening strap. Plastic housing.	■	■	■	■	■	■	■	■	■	98525A
	<b>Electronic relay, plastic housing</b>										
	12 V, 25 A, 6.3 mm/5 mm	■	■	■	■	■	■	■	■	■	98560A







## Accessories

### Electrical accessories

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S /ST	DBW 2010/2016	Thermo 230 /300 /350	Order number
 Relay socket for standard relays 5-pin.	■	■	■	■	■	■	■	■	■	216542
 Relay socket with fastening strap for standard relays	■	■	■	■	■	■	■	■	■	255572
 Relay socket for electronic relay	■	■	■	■	■	■	■	■	■	66466A
 IPCU module 400 Hz				■	■	■	■	■	■	90116748
Without figure IPCU kit to control the vehicle fan Consisting of IPCU module, wiring harness and wiring harness adapter				■	■	■	■	■	■	9013645A
 Connector sleeve housing 6.3 mm for 210536 and 424560	■	■	■	■	■	■	■	■	■	178713
6.3 mm 6-pin, for 178837	■	■	■	■	■	■	■	■	■	178780
 Blade-type plug housing 6.3 mm 6-pin, for 178780	■	■	■	■	■	■	■	■	■	178837
 Connector sleeve housing 6.3 mm 8-pin, for 342777	■	■	■	■	■	■	■	■	■	178764






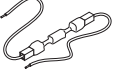
## Accessories

### Electrical accessories

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S /ST	DBW 2010/2016	Thermo 230 /300 /350	Order number
 Blade-type plug housing 6.3 mm 8-pin, of 178764	■	■	■	■	■	■	■	■	■	342777
 Connector sleeve housing Mounting housing, 1-pin, connection, of 178799	■	■	■	■	■	■	■	■	■	178705
 Mounting housing, 2-pin, for 6.3 mm blade-type plug connection	■	■	■	■	■	■	■	■	■	178721
 6.3 mm blade-type plug housing 2-pin (plug housing)	■	■	■	■	■	■	■	■	■	178802
 Blade-type plug housing 4-pin (plug housing)	■	■	■	■	■	■	■	■	■	178810
 Repair bag with Thermo Top C wiring harness Complete, for 2- and 6-pin connector of heater. Consisting of: 6-pin socket housing. Socket contact. Flat spring contact. Single wire sealing.				■	■					9011968A




## Accessories

### Electrical accessories

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
	<b>Blade-type plug housing</b> 2-pin, waterproof	■	■	■	■	■	■	■	■	■	82168A
	<b>3x wire connector</b> 6.3 mm, Bag of 5	■	■	■	■	■	■	■	■	■	9011959A
	<b>Wiring harness</b> for fan control				■	■	■	■			9013174B
	Adapter wiring harness for programming with PC diagnosis kit				■	■	■	■			9011069A
	<b>Diode capsule</b> Maximum 1 A Maximum 3 A 6.3 mm connector	■	■	■	■	■	■	■	■	■	210536 424560
	<b>Blocking diode</b> 3 A connector included	■	■	■	■	■	■	■	■	■	1313644A

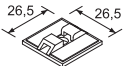
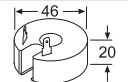
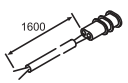
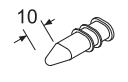

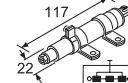
## Accessories

### Electrical accessories

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
	<b>6.3 mm blade-type plug receptacle</b> 0.5 - 2.5 mm <sup>2</sup> 1.0 - 2.5 mm <sup>2</sup> 1.5 - 2.5 mm <sup>2</sup> for 178713 4.0 - 6.0 mm <sup>2</sup> Bag of 10	■	■	■	■	■	■	■	■	■	9011641A 9011652A 176613 9014955A
	<b>6.3 mm blade-type plug</b> 0.5 - 1.0 mm <sup>2</sup> 0.8 - 2.5 mm <sup>2</sup> 4.0 - 6.0 mm <sup>2</sup> Bag of 10 For 178799, 178802, 178810, 178837, 342777	■	■	■	■	■	■	■	■	■	9011636A 9011640A 9014955A
	<b>Connector, insulated</b> 0.5 - 1.0 mm <sup>2</sup> 1.5 - 2.5 mm <sup>2</sup> 3.0 - 6.0 mm <sup>2</sup> Bag of 10	■	■	■	■	■	■	■	■	■	9011667A 9011668A 9006456A


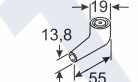
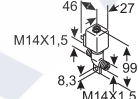
## Accessories

### Electrical accessories

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
 <p><b>Mounting socket</b> For fastening electrical wires with cable tie. 4.8 mm wide, bag of 10.</p>										909030A
 <p><b>Resistance kit</b> 0.9 Ohm; 40 W. Bag of connectors and mounting parts</p>										97981A
 <p><b>Adapter cable</b> For circulating pump</p>										91743D
 <p><b>Adapter</b> In case circulating pump is not applicable, with resistance</p>										64025A
 <p><b>Wiring harness extension</b> Extension for standard wiring harness of Thermo Top C</p>										67744A
 <p><b>Interference suppression filter</b></p>										47659S

## Accessories

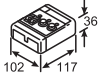

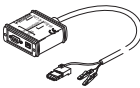
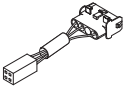
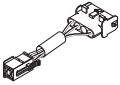

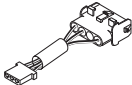
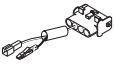
### Electrical accessories

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S / ST	DEW 2010/2016	Thermo 230/300/350	Order number
 <p><b>Claw cable lug</b> Di = 5 mm; 0.5 - 1.0 mm<sup>2</sup>; bag of 50 Di = 5 mm; 1.5 - 2.5 mm<sup>2</sup>; bag of 50 Di = 5 mm; 2.5 - 6.0 mm<sup>2</sup>; bag of 10 Di = 5 mm; 1.5 - 2.5 mm<sup>2</sup>; bag of 20 Di = 5 mm; 2.5 - 6.0 mm<sup>2</sup>; bag of 20</p>										9011657A 9011621A 9011654A 9011653A 9011622A
 <p><b>Interference suppression connector</b></p>										176478
 <p><b>Solenoid valve (for fuel)</b> 24 V; 5 W; M 14 x 1.5 blade-type plug connection, 6.3 mm</p>										465674



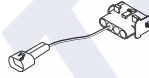
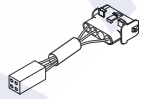
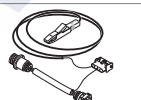
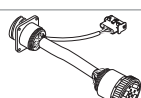
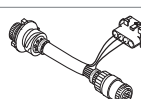
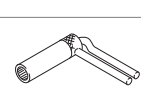


## Accessories

### Testing devices

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 102 117 36							■			440280
							■			116274
	■	■	■	■	■	■	■	■	■	9009064E
	■			■						1301783B
					■					83661B
						■				92556B
										21333B
		■								92566B






## Accessories

### Testing devices

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
										
Without figure										
		■								9013346A
		■								92555B
		■								1301783B
								■		88336D
								■		92637A
								■		66265A
								■		66971A

## Accessories

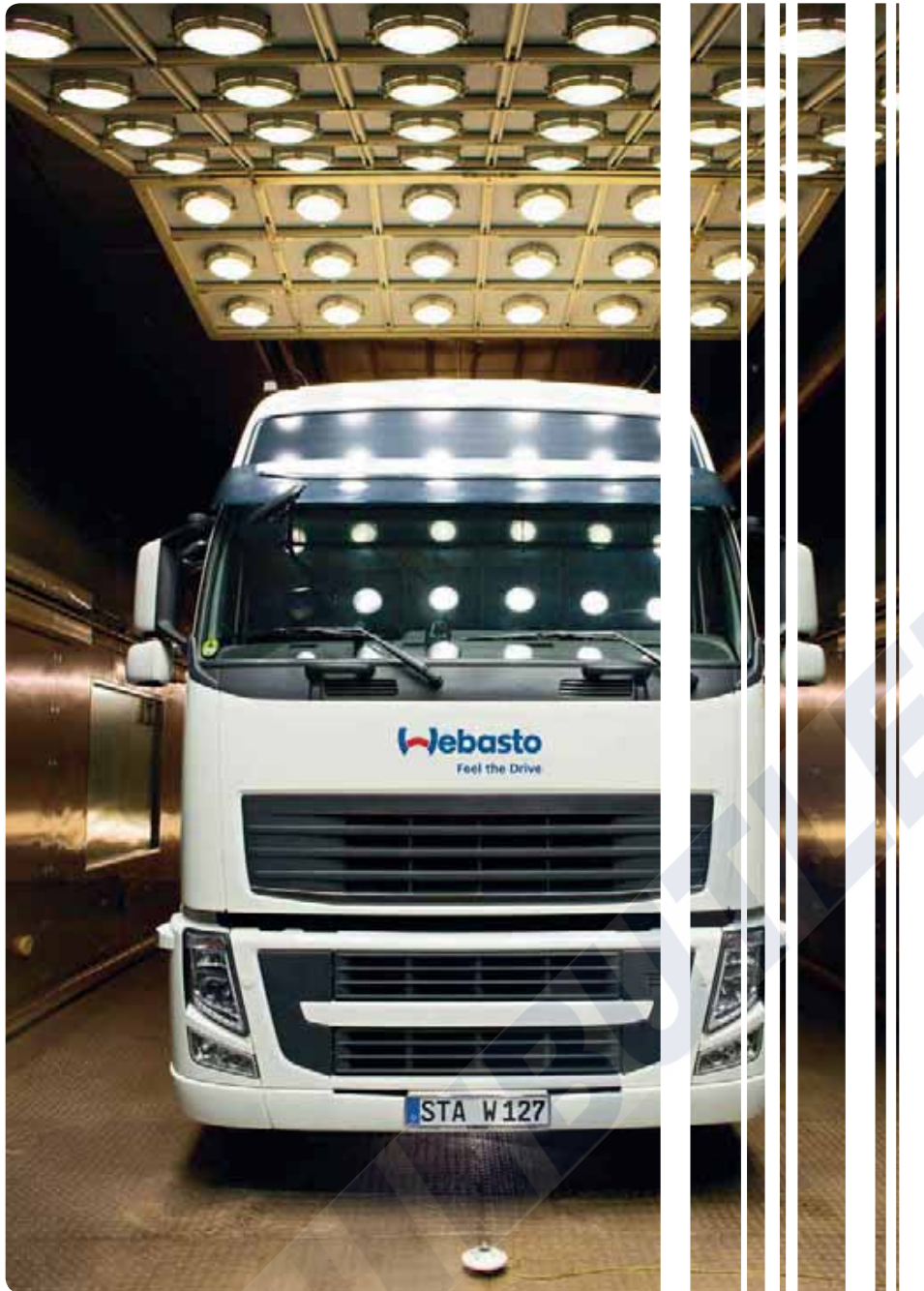
### Special tools

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
 <p><b>Socket wrench</b> For holding the blade wheel with shaft</p>								■		218375
 <p><b>Gauge</b> For ignition electrodes</p>								■		310646
 <p><b>Adjusting device</b> For fuel line</p>			■							86645A
 <p>SW22 <b>Flat drawing tool</b> Auxiliary installation tool for bead levelling</p>		■	■							82229A
 <p><b>Dismantling tool</b> For connector, Thermo 90S/ST</p>							■			84279A

## Accessories

### Special tools

	Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
Without figure	<b>Isoflex LDS 18 special grease</b>									
	1000 g	■	■	■	■	■	■	■	■	143847
	45 g	■	■	■	■	■	■	■	■	143820
	for transmission and ball bearings									
Without figure	<b>Sealing varnish, red</b>									
	20 ml for bolts and nuts	■	■	■	■	■	■	■	■	154245
Without figure	<b>Protective wax (transparent)</b>									
	600 ml for corrosion protection	■	■	■	■	■	■	■	■	111329
	<b>Special contact spray</b>									
Without figure	<b>250 ml for electric connections</b>									
	<b>Silicone type 1209 sealing compound</b>									
	30 ml	■	■	■	■	■	■	■	■	23730A
	310 ml	■	■	■	■	■	■	■	■	21113A
	<b>Loctite 5398 adhesive sealing compound</b>									
310 ml bottle	■	■	■	■	■	■	■	■	■	9023149A



# Air-conditioning systems

## Advantages of air-conditioning systems at a glance

### Versatile air-conditioning systems for retrofitting

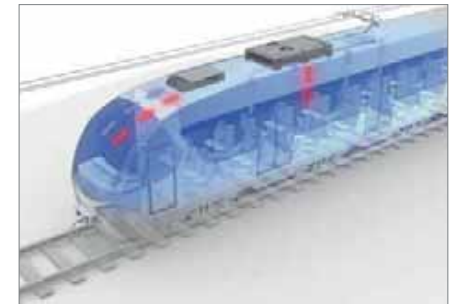
Webasto offers an extensive product portfolio of versatile and robust air-conditioning solutions for nearly every application and every vehicle. For the Heavy Duty sector there are rooftop compact air-conditioning systems, split-systems or integratable evaporator units on offer. The program is rounded off with accessories such as compressors.

The fast and cost-effective retro-fitting solutions ensure an optimum climate in the mobile work place or in the passenger area. An air-conditioned workplace contributes to a better concentration capacity and longer driver endurance. Passengers enjoy increased comfort on hot days.

### Individual air-conditioning systems for every demand

On demand Webasto develops customer-specific solutions to vehicle integration. On the basis of long-term experience in the bodywork and thermal area, we engage in product development as early as during the planning phase of your vehicles and accompany the development and production process up to the finishing phase of your special air-conditioning solution.

Therefore please contact us during the starting phase of a project. We look forward to the challenge.



## Application examples

Examples of air-conditioning systems

### Truck



- Parking cooler for the drivers cabin

### Light-duty Vehicles



- Passenger compartment air-conditioning
- Webasto Diavia or Compact Cooler
- Standard rooftop and integrated systems for different mounting positions
- Variety of accessories for the perfect tailored climate solution
- Automatic climate control available
- Transportation refrigeration systems

### Bus



- Passenger compartment air-conditioning up to 35 seats
- Webasto Diavia or Compact Cooler
- Standard rooftop and integrated systems for different mounting positions
- Optional with heating and fresh air function
- Variety of accessories for the perfect tailored climate solution
- Automatic climate control available

### Rail



- Passenger compartment air-conditioning
- Special customer-specific solution
- Climate zone design according to customer specification
- Fully integrated air-duct system
- Automatic climate control possible

### Off-Highway



- Air-conditioning of the driver's compartment
- Standard Webasto Diavia or customer-specific solution
- Climate zone design according to customer specification
- Automatic climate control possible

The "Heavy Duty Capacity Calculator", our calculating tool, is provided on the dealer portal for your support. Our technical workshops and the local Webasto subsidiaries would be glad to answer any further questions about design and installation.

## Product overview

Air-conditioning

### Webasto Diavia air-conditioning

PAGE 136

- Rooftop air-conditioning system
- Integrated air-conditioning systems
- Integrated heating systems
- Accessories



NEW

### Webasto Diavia transport refrigeration

PAGE 164

- Battery operate solutions
- Direct drive solutions
- Integrated solutions



NEW

### Compact Cooler

PAGE 174

- Compact Cooler 4E
- Compact Cooler 5 Lite
- Compact Cooler 5
- Compact Cooler 8
- E-Unit
- Accessories



### Compact Cooler Rail

PAGE 180

- Compact Cooler Rail 4E/2H
- Compact Cooler Rail 7E/2H
- Compact Cooler 7
- RailCool R 5
- RailCool S 236



### Parking Cooler

PAGE 184

- Cool Top Vario 10 E



### Container Cooling

PAGE 186

- Breeze Split
- Iglo Compact
- KMWP 9 Compact
- KMWP 18 Compact



### Other

PAGE 188

- Bus A/C systems



## Product solutions for air-conditioning

**Diavia**

Webasto Diavia offers a wide range of product solutions for air conditioning in mini- and midi-buses, light commercial vehicles as well as for constructional and agricultural vehicles. Depending on the customer requirements and installation situation you can select the suitable systems. In addition a wide range of accessories completes the air-conditioning solution. Furthermore Webasto Diavia offers systems that can heat as well.

### Tailored solution for perfect comfort

#### Rooftop air conditioning systems

- Wide range of products with cooling performance up to 18 kW
- Optional with heating or fresh air function
- Easy to install

#### Integrated units

- Various solutions for all kind of installation situations in the vehicle such as under dash, under roof, vertical or ceiling mounting
- Air-conditioning, Heating-Ventilation-Air-Conditioning or heating systems

#### Condensers

- Wide portfolio of rooftop and integrated (under floor) condensers

#### Air vents and ducts

- Wide range of air ducts and air vents for all kind of requirements

#### Control units

- Manual, electrical and automatic units to control temperature and ventilation

#### Compressors

- High performance compressors for various applications

#### Spare parts

- Big range of spare parts such as fittings, hoses, installation kits support the integration of the air-conditioning solution in the vehicle (see special Spare part catalogue)

Please fee free to contact the Webasto sales team for further support.

## Product configuration for air-conditioning

How to combine the component for the individual solution

Rooftop air conditioner


+

**Air duct modules**  
 Air vents 

**Compressor kits** 

**Control units** 

**Installation kits and spare parts** 

Integrated air conditioner


+

**Air duct modules**  
 Air vents 

**Condensers** 

**Compressor kits** 

**Control units** 

**Installation kits and spare parts** 

## Rooftop air-conditioning systems

4.0 to 9.9 kW cooling performance

Diavia



### Superior climate in commercial, agricultural & construction vehicles

This series of rooftop air-conditioning systems is ideal for a broad scope of commercial vehicles. The range starts from mini buses seating up to 15 passengers to specialty vehicles such as ambulances and fire engines and in agricultural and construction industry vehicles. Featuring constant airflow provision resulting from the integration of high-efficiency, durable fans and blowers, these systems are not only highly reliable, but renowned for their long service life.

A variety of available accessories for vehicle-specific retrofitting includes control units, air vents and ducts as well as installation kits. The units can be customized right down to painting in vehicle colors.

For perfect climate control, the Portofino and San Marino models also feature a heating function.

- Air-conditioning solutions offering cooling performance ranging from 4.0 to 9.9 kW
- Compact design facilitates installation in a variety of vehicle categories
- High thermodynamic efficiency in terms of overall dimensions
- Durable, top quality components with long service life, from proven series production
- Low fuel consumption thanks to lightweight construction & aerodynamic design
- Easy installation and minimal maintenance requirements



#### Technical specifications:

Air-conditioning unit	Portofino	Minsk	San Marino	Rimini	Turin
Cooling capacity (kW)	4.0	5.0 <sup>(1)</sup>	6.2	6.2	8.4
Heating performance (kW)	5.0 <sup>(1)</sup>	-	8.0	-	-
Refrigerant	R134a				
Nominal voltage (V)	12/24 V				
Max. power consumption (A) at 12 V	20.0	9.0	19.5	20.0	29.5
Max. air flow evaporator blower (m³/h)	400	450	550	550	760
Dimensions L x W x H (mm)	600 x 900 x 190	505 x 460 x 145	605 x 800 x 165	605 x 800 x 165	730 x 830 x 170
Weight (kg)	15.5	6.0	25.0	23.5	29.0

(1) = optional (2) = only evaporator unit

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Portofino 12 V	Air-conditioning system, product documentation	62U003FF081EB
Portofino 24 V	Heating option with order number 6228160A	62U003FF082EB
Minsk 12 V	Evaporator, product documentation	62U003FF083EB
Minsk 24 V		62U003FF124EB
Rimini 12 V	Air-conditioning system, product documentation	62U003FF052EF
Rimini 24 V		62U003FF053EF
San Marino 12 V	Air-conditioning system with heating function, product documentation	62U003CF065EB
San Marino 24 V		62U003CF066EB
Turin 12 V	Air-conditioning system with integrated fittings connection, product documentation	62U003FF047EF
Turin 24 V		62U003FF051EE
Turin 12 V	Air-conditioning system with outside fittings connection, product documentation	62U003FF102EB
Turin 24 V		62U003FF103EB

Standard compressor		
SP 10 12 V	Delphi Compressor SP10, displacement 110 cc	62015155C

Standard air ducts		
Air duct	For Portofino and Minsk without control element, color grey	62U003AA139B
Air duct 12 V	For Portofino and Minsk with control element, color grey	62U003AA155A
Air duct 24 V		62U003AA156A
Air duct	For Rimini, San Marino and Turin without control element, color grey	62U003AA097A
Air duct 12 V	For Rimini, San Marino and Turin with control element, color grey	62U003AA095A
Air duct 24 V		62U003AA096A

Standard control elements		
A/C Control	AC switch with air speed (Applicable for all units except San Marino)	62A03997B

Further accessories can be found from page 152 onwards.

Please feel free to contact us for further information about an individual climate solution including compressor, air vent and duct, control element and mounting kit.

## Rooftop air-conditioning systems

10.0 to 18.0 kW cooling performance

Diavia



### Perfect climate control in small to mid-size buses

This line of roof-mounted air-conditioning systems is perfectly geared to cooling mini and midi-buses of up to 35 seats. Equipped with durable, high-efficiency fans and blowers that provide a constant airflow, these air-conditioning solutions are reliable and enjoy a long service life.

A variety of available accessories and vehicle-specific installation kits include control units, air vents and ducts. The units can also be painted in the colors of the vehicles.

For all-round climate control, Panama, Madrid and Santana models also feature a heating function.

- Air-conditioning solutions provide high performance cooling from 10.0 to 18.0 kW
- Compact design facilitates installation in diverse vehicle categories
- High thermodynamic efficiency as related to overall dimensions
- Durable, highest quality components with long service life, from proven series production
- Air flow can be individually customized with one central channel or two lateral channels
- Options for fresh air or recirculation mode
- Easy installation and minimal maintenance requirements



Smirne



Madrid



Santana L/XL

#### Technical specifications:

Air-conditioning unit	Panama	Smirne	Madrid	Santana L/XL
Cooling capacity (kW)	10.5	11.7	15.5	18.0
Heating performance (kW)	12.0 <sup>(1)</sup>	-	20.0 <sup>(1)</sup>	20.0 <sup>(1)</sup>
Refrigerant				
Nominal voltage (V)				
Max. power consumption (A) at 12 V	56.0	35.0	58.0/90.0(2)	110.0
Max. air flow evaporator blower (m <sup>3</sup> /h)	1,200	1,100	2,100/2,500 <sup>(2)</sup>	4,000
Dimensions L x W x H (mm)	1,100 x 1,400 x 180	930 x 1,045 x 170	1,280 x 1,790 x 185	1,600 (L)/ 1,800 (XL) x 2,150 x 200
Weight (kg)	44.0	33.5	59.0	74.0 (L)/79.0 (XL)

(1) = optional (2) = Version with higher air volume

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Panama 12 V	Air-conditioning system, product documentation. Heating option with order number 6228175A. Air recycle option with order number 6230086A	62U003FF114EC 62U003FF115EC
Panama 24 V		
Smirne 12 V	Air-conditioning system, product documentation	62U003FF072ED 62U003FF073ED
Smirne 24 V		
Madrid 12 V	Air-conditioning system, product documentation, Version 2.100 m <sup>3</sup> /h air flow	62U003FF116EC
Madrid 24 V	Heating option with order number 6228136A	62U003FF117ED
Madrid 12 V	Air-conditioning system, product documentation, Version 2.500 m <sup>3</sup> /h air flow	62U003FF118ED
Madrid 24 V	Heating option with order number 6228136A	62U003FF119EF
Santana L 12 V	Air-conditioning system, product documentation	62U003FF120EF
Santana L 24 V	Air recycle option with order number 6228172A	62U003FF106EC
Santana XL 12 V	Air-conditioning system, product documentation	62U003FF121EC
Santana XL 24 V	Air recycle option with order number 6228172A	62U003FF107EC
Santana XL 24 V	Air-conditioning system with heating and air recycle function, product documentation	62U003CF071EC
<b>Standard compressor</b>		
SP 20 12 V	Delphi Compressor SP20, displacement 210 cc	62015275A
SP 20 24 V		62015277A
<b>Standard air ducts</b>		
Air duct	Modulair 2 (modular system with air ducts and extension modules) for Smirne, grey color	62U003AA087A 62U003AA105A 62U003AA107A 62U003AA109A
Air duct	Modulair 3 (modular system with air ducts and extension modules) for Madrid and Panama, grey color	62U003AA157A - 62U003AA161A
<b>Standard control elements</b>		
A/C Control 12 V	AC switch with air speed control and recirculation switch (Applicable for all units with recirculation and without heating)	62A031063A
A/C Control 24 V		62A031066A

Further accessories can be found from page 152 onwards.

Please feel free to contact us for further information about an individual climate solution including compressor, air vent and duct, control element and mounting kit.

## Integrated air-conditioning systems

4.0 to 5.9 kW cooling performance

Diavia



### Customized climate solutions in commercial, specialty, agricultural & construction vehicles

A line of integrated systems that ensures an ideal climate in a variety of commercial vehicles ranging from mini buses to specialty vehicles such as ambulances and fire engines and in agricultural and construction industry vehicles. These climate control systems allow a customized integration on different vehicle types, either under the dashboard or the roof, installed in the vehicle ceiling or vertically. Offering high-efficiency, high-durability fans and blowers that produce a constant airflow, these air-conditioning solutions are reliable and have an extensive service life.

A variety of available accessories and kits for vehicle-specific installation includes rooftop or under-chassis condensers, control units, air vents and ducts and the right installation kits.

For complete climate control, the Baltimore, Quebec, Michigan and Milano models also feature a heating function.

- Air-conditioning solutions delivering cooling performance of 4.0 to 5.9 kW
- Versatile options for installation positions facilitate optimum integration in various vehicle designs
- High thermodynamic efficiency in terms of unit's overall dimensions
- Durable, highest quality components sourced from proven series production
- Require very low maintenance



Baltimore/Oakland

Osaka

Quebeck

Montreal

Michigan/Wyoming

Milano

#### Technical specifications:

Air-conditioning unit	Baltimore	Oakland	Osaka	Quebeck	Montreal	Michigan	Wyoming	Milano
Cooling capacity (kW)	4.0	4.0	4.6	5.0	5.0	5.5	5.5	5.5
Heating performance (kW)	2.0	–	–	6.7	–	6.3/2.8 <sup>(1)</sup>	–	11.0
Installation position	Under dash or under roof	Under dash or under roof	Vertical	Vertical	Vertical	Ceiling	Ceiling	Under dash or under roof
Refrigerant	R134a							
Nominal voltage (V)	12/24 V							
Max. power consumption (A) at 12 V	7.4	7.4	9.5	9.5	9.5	13.0	12.7	13.0
Max. air flow evaporator blower (m³/h)	450	450	350	450	450	450	450	450
Dimensions L x W x H (mm)	390 x 235 x 125	390 x 235 x 125	410 x 165 x 320	370 x 185 x 330	370 x 160 x 350	590 x 380 x 185	590 x 380 x 185	414 x 328 x 233
Weight (kg)	3.7	3.7	5.5	6.5	5.5	8.7	7.5	6.4

(1) = Electrical unit, only 24 V

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Baltimore 12 V	Air-conditioning system with heating function, product documentation	62U003CF072EA
Baltimore 24 V		62U003CF088EA
Baltimore 12V	As above but for vertical mounting	62U003CF073EA
Oakland 12 V	Air-conditioning system, product documentation	62U003FF084EB
Oakland 24 V		62U003FF085EB
Osaka 12 V	Air-conditioning system, product documentation	62U003FF069EA
Osaka 24 V		62U003FF070EA
Quebeck 12 V	Air-conditioning system with heating function, product documentation, black color	62U003CF026EB
Quebeck 24 V		62U003CF027EB
Quebeck 12 V	As above but without heating regulation and water valve, black color	62U003CF030EB
Quebeck 24 V		62U003CF031EB
Quebeck 12 V	Air-conditioning system with heating function, product documentation, grey color	62U003CF043EC
Quebeck 24 V		62U003CF044EC
Quebeck 12 V	As above but without heating regulation and water valve	62U003CF045EC
Quebeck 24 V		62U003CF046EC
Montreal 12 V	Air-conditioning system, product documentation, black color	62U003FF030EA
Montreal 24 V		62U003FF031EA
Montreal 12 V	As above but without water valve, grey color	62U003FF058EA
Montreal 24 V		62U003FF059EA
Michigan 12 V	Air-conditioning system with heating function, product documentation	62U003CF057EA
Michigan 24 V		62U003CF058EA
Michigan 12 V	As above but with electrical heating function	62U003CF059EA
Wyoming 12 V	Air-conditioning system, product documentation	62U003FF078EA
Wyoming 24 V		62U003FF079EA
Milano 12 V	Air-conditioning system with heating function, product documentation	62U003CF055EB
Milano 24 V		62U003CF056EB

Standard compressor		
SP 10 12 V	Delphi Compressor SP10, displacement 110 cc	62015155C

Standard condensers		
Trieste 12 V	Condenser tube/fin with 6,5 kW	62U00025455B
Trieste 24 V		62U00025457B
Sicilia 12 V	Condenser HTC with 5,0 kW	62U00025060E
Sicilia 24 V		62U00025439A

Standard air ducts		
Air duct	Air ducts for Oakland with different diameters and designs, grey color	62U003AA066A 62U003AA067A 62U003AA068A 62U003AA103A
Air duct	Air ducts for Quebec and Montreal with different diameters and designs, grey color	62U003AA054A 62U003AA055A 62U003AA124A 62U003AA125A

Standard control elements		
A/C Control	AC switch with air speed control (Applicable for all units except Michigan and Wyoming)	62A03997B

Further accessories can be found from page 152 onwards.

Please feel free to contact us for further information about an individual climate solution including compressor, air vent and duct, control element and mounting kit.



## Integrated air-conditioning systems

6.0 to 8.9 kW cooling performance

Diavia



### Optimized climate solutions in commercial vehicles, buses and specialty vehicles

A wide line of integrated systems that ensures the perfect climate for driving or riding in a variety of commercial vehicles. They range from mini buses with up to 10 seats to specialty vehicles such as ambulances and fire engines. As they can be integrated either under the dashboard or the roof, installed in the vehicle ceiling or vertically, these climate control systems allow for the flexibility that the different vehicles may require. These customized air-conditioning solutions are equipped with high-efficiency fans and blowers that deliver a constant airflow and ensure a long service life.

A variety of available accessories and kits for vehicle-specific installation includes rooftop or under-chassis condensers, control units, air vents and ducts and custom installation kits.

For the optimum complete climate solution, the Oslo, Norway, Zurich, Praga, Paris and Toledo have the added benefit of a heating function.

- Air-conditioning solutions delivering cooling performance from 6.0 to 8.9 kW
- Variety of installation position options enables optimum integration in different vehicle designs
- High thermodynamic efficiency in terms of unit's overall dimensions
- Durable, highest quality components sourced from proven series production
- Require very low maintenance



#### Technical specifications:

Air-conditioning unit	Glasgow	Oslo	Norway	Zurich	Praga	Paris	Monaco	Toledo
Cooling capacity (kW)	6.2	6.2	6.3	6.5	7.5	7.7	7.7	8.0
Heating performance (kW)	-	8.5	10.2	7.0	11.0	6.3	-	8.0
Installation position	Under dash or under roof	Under dash or under roof	Vertical	Under dash or under roof	Under dash or under roof	Under dash or under roof	Under dash or under roof	Under dash or under roof
Refrigerant	R134a							
Nominal voltage (V)	12/24 V							
Max. power consumption (A) at 12 V	14.8	15.8	16.0	12.7	13.0	17.6	18.6	10.4
Max. air flow evaporator blower (m³/h)	650	650	650	400	700	634	634	500
Dimensions L x W x H (mm)	400 x 360 x 170	400 x 360 x 170	425 x 225 x 440	470 x 245 x 380	465 x 215 x 550	580 x 340 x 135	580 x 340 x 135	480 x 220 x 370
Weight (kg)	4.7	5.3	10.0	5.0	9.0	5.2	4.7	5.3

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Glasgow 12 V	Air-conditioning system, product documentation	62U003FF054EC
Glasgow 24 V		62U003FF055EC
Oslo 12 V	Air-conditioning system with heating function, product documentation	62U003CF041EC
Oslo 24 V		62U003CF042EC
Norway 12 V	Air-conditioning system with heating function, product documentation, grey color	62U003CF049EB
Norway 24 V		62U003CF050EB
Norway 24 V	As above, with black color	62U003CF021EC
Zurich 12 V	Air-conditioning system with heating function, product documentation	62U003CF081EA
Zurich 24 V		62U003CF084EA
Praga 12 V	Air-conditioning system with heating function, product documentation	62U003CF086EA
Praga 24 V		62U003CF083EA
Paris 12 V	Air-conditioning system with heating function, product documentation	62U003CF077EA
Paris 24 V		62U003CF078EA
Monaco 12 V	Air-conditioning system, product documentation	62U003FF129EA
Monaco 24 V		62U003FF130EA
Toledo 12 V		62U003CF079EA
Toledo 24 V	Air-conditioning system with heating function, product documentation	62U003CF089EA

Standard compressor		
SP 15 12 V	Delphi Compressor SP15, displacement 154 cc	62015200B
SP 15 24 V		62015204B

Standard condensers		
Capri 12 V	Condenser tube/fin with 8,0 kW	62U00025430D
Capri 24 V		62U00025432D
HTC 12 V	Condenser HTC with 7,0 kW	62U00025460A

Standard air ducts		
Air duct	Air ducts for Oslo and Glasgow with different diameters and designs, grey color	62U003AA152A 62U003AA114A 62U003AA047A – 62U003AA051A
Air duct	Modular 1 (modular system with air ducts and extension modules) for Oslo and Glasgow, grey color	62U003AA053A 62U003AA058A 62U003AA060A 62U003AA062A 62U003AA094A

Standard control elements		
A/C Control	AC and air speed control	62A03995A

Further accessories can be found from page 152 onwards.

Please feel free to contact us for further information about an individual climate solution including compressor, air vent and duct, control element and mounting kit.

## Integrated air-conditioning systems

9.0 to 11.9 kW cooling performance

Diavia



### Optimized climate for minibuses seating up to 15 passengers

The integrated air-conditioning systems in this series create a comfortable climate for drivers and passengers of minibuses seating up to 15. They can be installed either under the dashboard or the roof, in the vehicle ceiling or vertically, thus providing great flexibility. With the use of high-efficiency, long-life fans and blowers that produce a constant airflow, these air-conditioning solutions are reliable and have an extensive service life.

Various accessories and kits are available for vehicle-specific installation, including rooftop or under-chassis condensers, control units, air vents and ducts and, of course, the installation kits for the particular vehicle.

For a complete climate solution, the Ibiza, London, Oxford and Las Vegas models feature an additional heating function.

- Air-conditioning solutions delivering cooling performance from 9.0 to 11.9 kW
- Variety of options for installation positions allows optimum integration into vehicle design
- High thermodynamic efficiency in terms of unit's overall dimensions
- Durable, top quality components sourced from tried and tested series production
- Require very low maintenance



Marbella/Ibiza



New Jersey/London



Oxford



Vancouver



Las Vegas

#### Technical specifications:

Air-conditioning unit	Marbella	Ibiza	New Jersey	London	Oxford	Vancouver	Las Vegas
Cooling capacity (kW)	9.0	9.0	9.5	9.5	9.5	9.5	9.6
Heating performance (kW)	–	12.0	–	13.0	13.0	–	7.7
Installation position	Vertical	Vertical	Under dash or under roof	Under dash or under roof	Under dash or under roof	Under dash or under roof	Under dash or under roof
Refrigerant	R134a						
Nominal voltage (V)	12/24 V						
Max. power consumption (A) at 12 V	20.5	21.2	23.0	21.0	17.0	22.0	11.4
Max. air flow evaporator blower (m³/h)	800	800	800	800	800	800	630
Dimensions L x W x H (mm)	640 x 180 x 355	640 x 180 x 355	510 x 400 x 170	550 x 400 x 180	175 x 420 x 560	500 x 365 x 170	570 x 460 x 175
Weight (kg)	8.0	10.0	6.7	7.7	8.0	6.7	4.5

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Marbella 12 V	Air-conditioning system, product documentation	62U003FF096EB
Marbella 24 V		62U003FF097EB
Ibiza 12 V	Air-conditioning system with heating function, product documentation	62U003CF062EB
Ibiza 24 V		62U003CF080EA
London 12 V	Air-conditioning system with heating function, product documentation	62U003CF047EB
London 24 V		62U003CF048EB
Oxford 12 V	Air-conditioning system with heating function, product documentation	62U003CF085EA
Oxford 24 V		62U003CF082EA
Vancouver 12 V	Air-conditioning system with heating function, product documentation	62U003FF060ED
Vancouver 24 V		62U003FF061ED
Las Vegas 12 V	Air-conditioning system with heating function, product documentation	62U003CF074EA
Las Vegas 24 V		62U003CF087EA

Standard compressor		
SP 20 12 V	Delphi Compressor SP20, displacement 210 cc	62015275A
SP 20 24 V		62015277A

Standard condensers		
Capri 12 V	Condenser tube/fin with 10,5 kW	62U00025456B
Capri 24 V		62U00025458B
Napoli 12 V	Condenser HTC with 11,5 kW	62U00025316B
Napoli 24 V		62U00025317B

Standard air ducts		
Air duct	Air duct for Marbella, black color	62U003AA142B
Air duct	Air duct for Ibiza, black color	62U003AA134B
Air duct	Modulair 1 (modular system with air ducts and extension modules) for London and Vancouver, grey color	62U003AA053A 62U003AA058A 62U003AA060A 62U003AA062A 62U003AA094A
Air duct	Air ducts for London and Vancouver with different diameters and designs, grey color	62U003AA152A 62U003AA114A 62U003AA047A – 62U003AA051A

Standard control elements		
A/C Control	AC and air speed control	62A03995A

Further accessories can be found from page 152 onwards.

Please feel free to contact us for further information about an individual climate solution including compressor, air vent and duct, control element and mounting kit.

## Integrated air-conditioning systems

12.0 to 16.0 kW cooling performance

Diavia



### Optimized climate solutions for minibuses seating up to 25 passengers

The integrated air-conditioning systems in this line ensure that drivers and passengers of larger minibuses seating up to 25 persons enjoy a pleasant interior climate. As these systems can be installed suiting the vehicle type and design either under the dashboard or the roof, in the vehicle ceiling or vertically, they allow for great versatility. Built using high-efficiency fans and blowers that produce a constant airflow, these air-conditioning solutions are reliable and enable a long service life.

Various accessories and kits are available for vehicle-specific installation, including rooftop or under-chassis condensers, control units, air vents and ducts and, of course, the installation kits for the particular vehicle.

For a comprehensive climate solution, the Kiev and Monterrey models are also equipped with a heating function.

- Air-conditioning solutions that deliver cooling power of 12.0 to 16.0 kW
- Variety of options for installation positions allows optimum integration into different vehicle designs
- High thermodynamic efficiency as related to the units' overall dimensions
- Very durable, top quality components sourced from proven series production
- Very low maintenance requirements



Riga Kiev / Moscow Monterrey / Newport

#### Technical specifications:

Air-conditioning unit	Riga	Kiev	Moscow	Monterrey	Newport
Cooling capacity (kW)	12.0 <sup>(1)</sup> 14.0 <sup>(2)</sup>	13.4	13.4	14.0 <sup>(3)</sup> 16.0 <sup>(4)</sup>	14.0 <sup>(3)</sup> 16.0 <sup>(4)</sup>
Heating performance (kW)	–	11.5	–	14.6	–
Installation position	Under dash or under roof	Under dash or under roof	Under dash or under roof	Under dash or under roof	Under dash or under roof
Refrigerant	R134a				
Nominal voltage (V)	12/24 V				
Max. power consumption (A) at 12 V	31.0	18.0	19.0	39.0	40.0
Max. air flow evaporator blower (m³/h)	1,350	1,000	1,000	1,300	1,300
Dimensions L x W x H (mm)	1240 x 320 x 175	890 x 380 x 170	856 x 355 x 170	925 x 385 x 180	925 x 385 x 180
Weight (kg)	18.0	12.5	11.5	15.5	14.5

(1) = with 2 moduls (2) = with 3 moduls (3) = expansion valve 2 tons (4) = expansion valve 3 tons

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Riga 12 V	Air-conditioning system, product documentation	62U003FF065EC
Riga 24 V	2 tons expansion valve, 3 vents front distribution	62U003FF068EC
Riga 12 V	As above, 2 vents top, 1 vent front distribution	62U003FF066EC
Riga 12 V	As above, 1 vent top, 2 vents front distribution	62U003FF067EC
Riga 12 V	Air-conditioning system, product documentation	62U003FF132EA
Riga 24 V	3 tons expansion valve, 3 vents front distribution	62U003FF133EA
Kiev 12 V	Air-conditioning system with heating function, product documentation	62U003CF051ED
Kiev 24 V		62U003CF052ED
Moscow 12 V	Air-conditioning system, product documentation	62U003FF064EB
Moscow 24 V		62U003FF071EB
Monterrey 12 V	Air-conditioning system with heating function, product documentation, expansion valve 2 tons	62U003CF069EB
Monterrey 24 V		62U003CF070EB
Monterrey 12 V	As above, expansion valve 3 tons	62U003CF075EB
Monterrey 24 V		62U003CF076EB
Newport 12 V	Air-conditioning system, product documentation	62U003FF104EC
Newport 24 V	expansion valve 2 tons	62U003FF105EC
Newport 12 V	As above, expansion valve 3 tons	62U003FF127EC
Newport 24 V		62U003FF128EC

Standard compressor		
TM 31 24 V	Valeo Compressor TM31, displacement 310 cc	62015265A

Standard condensers		
Valencia 12 V	Condenser tube/fin with 12,5 kW	62U00025437D
Valencia 24 V		62U00025438C
HTC 12 V	Condenser HTC with 12,0 kW	62U00025426B
HTC 24 V	Condenser HTC with 14,0 kW	62U00025459A

Standard air ducts		
Ar duct	Modulair 2 (modular system with air ducts and extension modules) for Kiev, Moscow, Monterrey and Newport, grey color	62U003AA105A 62U003AA107A 62U003AA109A 62U003AA116A 62U003AA117A
Air duct	Air ducts for Kiev, Moscow, Monterrey and Newport with different diameters and designs, grey color	62U003AA025A – 62U003AA030A 62U003AA038A

Standard control elements		
A/C Control	AC and air speed control	62A03995A

Further accessories can be found from page 152 onwards.

Please feel free to contact us for further information about an individual climate solution including compressor, air vent and duct, control element and mounting kit.

## Integrated heating systems

3.8 to 13.0 kW heating performance

Diavia



### Comfortable warmth in commercial vehicles & minibuses

The ideal solutions for generating warmth in minibuses and commercial vehicles, this line of integrated heating systems is highly versatile. They can be installed either under the dashboard or under the roof, any of these vehicles. What sets these heating systems apart are the durable, high-efficiency fans and blowers that provide a constant airflow. Thus, these heating solutions are not only reliable, they also enjoy a long service life.

Their versatility is underscored by the variety of available accessories and vehicle-specific installation kits, including control units, air vents and ducts.

- Heating solutions deliver high performance heating from 3.8 to 13.0 kW
- Versatile installation options under dash or roof allow for optimum integration in diverse vehicle designs
- High thermodynamic efficiency as related to the overall dimensions
- Durable, highest quality components from proven series production
- Require little or no maintenance



### Technical specifications:

Heating unit	Sydney	Stocolma	Houston	Toronto	Nevada	Phoenix	Cyprus
Heating performance (kW)	3.8	3.8	6.5	7.0 2.4 <sup>(1)</sup>	7.7	8.6	13.0
Nominal voltage (V)	12/24	12	12/24	12/24	12/24	12/24	12/24
Max. power consumption (A) at 12 V	4.2	3.5	14.0	8.6	12.4	8.4	28.0
Max. air flow evaporator blower (m³/h)	170	170	420	450	630	450	800
Dimensions L x W x H (mm)	260 x 180 x 130	270 x 195 x 330	220 x 230 x 165	590 x 380 x 160	570 x 460 x 175	385 x 235 x 125	545 x 300 x 175
Weight (kg)	1.3	2.5	2.8	4.2	4.0	3.0	4.0

(1) = Electrical unit, only 24 V

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Sydney 12 V	Heating system, product documentation	62U003CC048B
Sydney 24 V		62U003CC049B
Stocolma 12 V	Heating system, product documentation	62U003CC051A
Houston 12 V	Heating system, product documentation	62U003CC017A
Houston 24 V		62U003CC018A
Toronto 12 V	Heating system, product documentation	62U003CC012A
Nevada 12 V	Heating system, product documentation	62U003CC074EA
Nevada 24 V		62U003CC087A
Phoenix 12 V	Heating system, product documentation	62U003CC019B
Phoenix 24 V		62U003CC020B
Cyprus 12 V	Heating system, product documentation	62U003CC052A
Cyprus 24 V		62U003CC053A

Standard water valve		
Valve	Diameter 12 mm	62069749A
Valve	Diameter 16 mm	62069867A

Standard air ducts		
Air duct	Air ducts for Sidney with different diameters and designs, grey color	62U003AA076A 63U003AA078A 62U003AA080A 62U003AA136A
Air duct	Air ducts for Phoenix with different diameters and designs, grey color	62U003AA066A 62U003AA067A 62U003AA068A 62U003AA103A

Standard control elements		
Heat Control unit	Regulation of heating temperature	62067439A

Further accessories can be found from page 152 onwards.






Please feel free to contact us for further information about an individual climate solution including, air vent and duct, control element and mounting kit.

## Accessories

Webasto Diavia under chassis condensers

**Diavia**


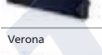


### Product overview and technical data

Model	Performance (KW)	Dimensions L x W x H (mm)	Specification	Power consumption at 12 V (A)	Weight (kg)	Voltage (V)	Order number
	5	575 x 480 x 180	Condenser tube/fin, fin pitch 3,5 mm	13	8	12	62U00025431D
	6,5		Condenser tube/fin, fin pitch 2,5 mm			24	62U00025433D
						12	62U00025455B
						24	62U00025457B
	5,5	570 x 370 x 150	HTC condenser	7	8	12	62U00025315B
	2,8		Condenser tube/fin			24	62U00025327B
						12	62U00025322B
						24	62U00025386B
	8	815 x 600 x 150	Condenser tube/fin, fin pitch 3,5 mm	18	12	12	62U00025430D
	10,5		Condenser tube/fin, fin pitch 2,5 mm			24	62U00025432D
						12	62U00025456A
						24	62U00025458B
	11,5	830 x 485 x 150	HTC condenser	18	12	12	62U00025316B
	6		Condenser tube/fin			24	62U00025317B
						12	62U00025393B
						24	62U00025326B
	12,5	955 x 600 x 150	Condenser tube/fin	27	14	12	62U00025437D
						24	62U00025438C

## Accessories

Webasto Diavia under chassis condensers

### Product overview and technical data

Model	Performance (KW)	Dimensions L x W x H (mm)	Specification	Power consumption at 12 V (A)	Weight (kg)	Voltage (V)	Order number		
	4	690 x 157 x 230	Condenser tube/fin, fin pitch 2.1 mm with fans and receiver dryer	18	11	12	62U00025441A		
						24	62U00025442A		
	5	690 x 157 x 230	Condenser tube/fin, fin pitch 2.1 mm	13	8	12	62U00025060E		
						24	62U00025439A		
	5	690- x 157 x H230	Condenser tube/fin, fin pitch 2.1 mm with fans and receiver dryer	13	9,5	12	62U00025258D		
						24	62U00025440D		
	5	606 x 110 x 350	HTC condenser	18	4,5	12	62U00025427A		
		7				606 x 160 x 350	12	62U00025460A	
		6,5					480 x 110 x 350	12	62U00025453A
		12					725 x 105 x 450	27	62U00025426B
		14					12	62U00025459A	
12	32	7,5	62U00025472A						

## Accessories

### Air ducts

Diavia

Sydney		Dimensions L x W x H (mm)	Suitable for	Order Number
	Front panel, black, diameter louver 45 mm	265 x 48 x 113	Sydney	62U003AA079A
	Front panel, grey, diameter louver 45 mm	265 x 48 x 113	Sydney	62U003AA078A
	Front panel, black, diameter louver 60 mm	265 x 48 x 113	Sydney	62U003AA081A
	Front panel, grey, diameter louver 60 mm	265 x 48 x 113	Sydney	62U003AA080A
	Front panel with louvers, black	265 x 38 x 113	Sydney	62U003AA126A
	Front panel, black	265 x 23 x 113	Sydney	62U003AA077A
	Front panel, grey	265 x 23 x 113	Sydney	62U003AA076A
	Front panel, black, diameter louver 100 mm	265 x 116 x 113	Sydney	62U003AA135A
	Front panel, grey, diameter louver 100 mm	265 x 116 x 113	Sydney	62U003AA136A
Oakland/Phoenix		Dimensions L x W x H (mm)	Suitable for	Order Number
	Front panel 3 ducts 60 mm diameter, black	345 x 68 x 90	Oakland/Phoenix	62U003AA065A
	Front panel 3 ducts 60 mm diameter, grey	345 x 68 x 90	Oakland/Phoenix	62U003AA066A
	Front panel 4 ducts 60 mm diameter, black	345 x 72 x 90	Oakland/Phoenix	62U003AA102A
	Front panel 4 ducts 60 mm diameter, grey, diameter louver 70 mm	345 x 72 x 90	Oakland/Phoenix	62U003AA103A
	Front panel 4 ducts 55 mm diameter, black	345 x 48 x 90	Oakland/Phoenix	62U003AA016A
	Front panel 4 ducts 55 mm diameter, grey	345 x 48 x 90	Oakland/Phoenix	62U003AA067A
	Front panel 4 round louvers 67 mm diameter, black	345 x 38 x 90	Oakland/Phoenix	62U003AA017A
	Front panel 4 round louvers 67 mm diameter, grey	345 x 38 x 90	Oakland/Phoenix	62U003AA068A
	Front panel 1 grille, black	345 x 22 x 90	Oakland/Phoenix	62U003AA018A
	Front panel 1 grille, grey	345 x 22 x 90	Oakland/Phoenix	62U003AA069A
	Front panel 2 rectangular louvers + controls, black	345 x 40 x 90	Oakland/Phoenix	62U003AA128A
	Front panel 2 rectangular louvers + controls, grey	345 x 40 x 90	Oakland/Phoenix	62U003AA129A
	Front panel 3 ducts, black, diameter louver 60 mm	520 x 78 x 90	Oakland/Phoenix	62U003AA070A
	Front panel 3 ducts, grey, diameter louver 60 mm	520 x 78 x 90	Oakland/Phoenix	62U003AA071A
	Front panel external duct, black, diameter louver 45 mm	345 x 60 x 90	Phoenix	62U003AA146A
	Front panel external duct, grey, diameter louver 45 mm	345 x 60 x 90	Phoenix	62U003AA147A

## Accessories

### Air ducts

Oslo/Glasgow/Vancouver/London		Dimensions L x W x H (mm)	Suitable for	Order Number
	Front panel 3 round louvers 60 mm diameter	395 x 58 x 105	Oslo/Glasgow/Vancouver/London	62U003AA151A
	Front panel 3 round louvers 60 mm diameter	395 x 58 x 105	Oslo/Glasgow/Vancouver/London	62U003AA152A
	Front panel 4 ducts, black, diameter louver 60 mm	395 x 58 x 105	Oslo/Glasgow/Vancouver/London	62U003AA019A
	Front panel 4 ducts, grey, diameter louver 60 mm	395 x 58 x 105	Oslo/Glasgow/Vancouver/London	62U003AA049A
	Front panel 4 round louvers, black	395 x 58 x 105	Oslo/Glasgow/Vancouver/London	62U003AA020A
	Front panel 4 round louvers, grey	395 x 58 x 105	Oslo/Glasgow/Vancouver/London	62U003AA050A
	Front panel 3 round louvers + controls, black	395 x 39 x 105	Oslo/Glasgow/Vancouver/London	62U003AA045A
	Front panel 3 round louvers + controls, grey	395 x 39 x 105	Oslo/Glasgow/Vancouver/London	62U003AA048A
	Front panel 3 round louvers + controls, white??	395 x 39 x 105	Oslo/Glasgow/Vancouver/London	62U003AA169A
	Front panel 1 grille, black	395 x 22 x 105	Oslo/Glasgow/Vancouver/London	62U003AA021A
	Front panel 1 grille, grey	395 x 22 x 105	Oslo/Glasgow/Vancouver/London	62U003AA051A
	Front panel 3 round louvers diameter 60 mm, black	656 x 119 x 105	Oslo/Glasgow/Vancouver/London	62U003AA046A
	Front panel 3 round louvers diameter 60 mm, grey	656 x 119 x 105	Oslo/Glasgow/Vancouver/London	62U003AA047A
	Air distributor, black, diameter louver 60 mm	720 x 108 x 128	Tarifa/Oslo/Vancouver/London	62U003AA123A
	Air distributor, grey, diameter louver 60 mm	720 x 108 x 128	Tarifa/Oslo/Vancouver/London	62U003AA114A
	Front panel 2 round louvers 75 mm diameter, black	450 x 105 x 105	Oslo/Glasgow/Vancouver/London	62U003AA165A
	Front panel 4 front and 2 side louvers, black diameter front 50 mm, side 60 mm		Oslo/Glasgow/Vancouver/London	62U003AA166A

## Accessories

### Air ducts

Diavia

Moscow/Kiev/Newport/Monterrey	Dimensions L x W x H (mm)	Suitable for	Order Number
 Front panel w/o frame grey colour with 6 round holes, diameter louver 60 mm	850 x 58 x 85	Moscow/Kiev	62U003AA027A
 Front panel w/o frame grey colour with 6 round louvers	850 x 27 x 85	Moscow/Kiev	62U003AA025A
 Front panel w/o frame grey colour with 5 rectangular louvers	135 x 48	Moscow/Kiev	62U003AA026A
 Front panel with frame grey colour with 6 round holes, diameter louver 60 mm	886 x 69 x 121	Moscow/Kiev	62U003AA030A
 Front panel with frame grey colour with 6 round louvers	886 x 38 x 121	Moscow/Kiev	62U003AA028A
 Front panel with frame grey, with 5 rectangular louvers	886 x 38 x 121	Moscow/Kiev	62U003AA029A
 Front panel with frame black, with 5 rectangular louvers	886 x 38 x 121	Moscow/Kiev	62U003AA031A
 Front panel with back air distribution - grey colour with 6+2 round louvers, diameter louver 60 mm	1035 x 95 x 85	Moscow/Kiev/Tarifa	62U003AA038A
 Front panel for air distribution from original air ducts, diameter louver 120 mm	80 x 147 x 140	Moscow/Kiev/Newport/Monterrey	62U003AA162A
Quebec/Montreal	Dimensions L x W x H (mm)	Suitable for	Order Number
 Front panel Quebec/Montreal, grey	370 x 85 x 145	Quebec/Montreal	62U003AA054A
 Front panel Quebec/Montreal, black	370 x 85 x 145	Quebec/Montreal	62U003AA022A
 Front panel Quebec/Montreal, grey	370 x 54 x 145	Quebec/Montreal	62U003AA055A
 Front panel Quebec/Montreal, black	370 x 54 x 145	Quebec/Montreal	62U003AA023A
 Front panel Quebec/Montreal, grey	370 x 68 x 145	Quebec/Montreal	62U003AA056A
 Front panel Quebec/Montreal, black	370 x 68 x 145	Quebec/Montreal	62U003AA024A
 Front panel Quebec/Montreal 4 hoses 50 mm diameter, grey, diameter louver 50 mm	370 x 90 x 145	Quebec/Montreal	62U003AA124A
 Front panel MONTREAL/QUEBEC 4 hoses 60 mm diameter, grey	370 x 90 x 145	Quebec/Montreal	62U003AA125A

## Accessories

### Air ducts

Marbella	Dimensions L x W x H (mm)	Suitable for	Order Number
 Front panel 4 hoses, diameter louver_60 mm	370 x 105 x 145	Ibiza/Marbella	62U003AA142B
Ibiza	Dimensions L x W x H (mm)	Suitable for	Order Number
 Front panel with flaps		Ibiza/Marbella	62U003AA134B
Modulair 1	Dimensions L x W x H (mm)	Suitable for	Order Number
 Air duct, 247 mm, black	497 x 247 x 50	Rimini/San Marino/Turin/Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA061A
 Air duct, 247 mm, grey	497 x 247 x 50	Rimini/San Marino/Turin/Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA062A
 Air duct, 500 mm, black	497 x 500 x 50	Rimini/San Marino/Turin/Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA059A
 Air duct, 500 mm, grey	497 x 500 x 50	Rimini/San Marino/Turin/Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA060A
 Air duct, 1000 mm, black	497 x 1000 x 50	Rimini/San Marino/Turin/Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA057A
 Air duct, 1000 mm, grey	497 x 1000 x 50	Rimini/San Marino/Turin/Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA058A
 Air distributor, black	730 x 140 x 148	Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA119A
 Air distributor, grey	730 x 140 x 148	Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA115A
 Adapter, black	602 x 506 x 85	Rimini/San Marino/Turin	62U003AA072A
 Adapter, grey	602 x 506 x 85	Rimini/San Marino/Turin	62U003AA073A
 Air duct, 100 mm, black	497 x 100 x 112	Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA052A
 Air duct, 100 mm, grey	497 x 100 x 112	Tarifa/New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA053A
 Evaporator cover, black	680 x 414 x 170	New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA093A
 Evaporator cover, grey	680 x 414 x 170	New Jersey/London/Oslo/Glasgow/Vancouver	62U003AA094A

## Accessories








### Air ducts

Diavia

Modulair 2		Dimensions L x W x H (mm)	Suitable for	Order Number
	Air duct, 255 mm, black	610 x 255 x 55	Smirne/Kiev/Moscow/ Monterrey/Newport	62U003AA104A
	Air duct, 255 mm, grey	610 x 255 x 55	Smirne/Kiev/Moscow/ Monterrey/Newport	62U003AA105A
	Air duct, 500 mm, black	610 x 500 x 55	Smirne/Kiev/Moscow/ Monterrey/Newport	62U003AA106A
	Air duct, 500 mm, grey	610 x 500 x 55	Smirne/Kiev/Moscow/ Monterrey/Newport	62U003AA107A
	Air duct, 1000 mm, black	610 x 1000 x 55	Smirne/Kiev/Moscow/ Monterrey/Newport	62U003AA108A
	Air duct, 1000 mm, grey	610 x 1000 x 55	Smirne/Kiev/Moscow/ Monterrey/Newport	62U003AA109A
	Air distributor	1075 x 145 x 148	Kiev/Moscow/Monterrey/Newport	62U003AA120A
	Air distributor, grey	1075 x 145 x 148	Kiev/Moscow/Monterrey/Newport	62U003AA116A
	Adapter for Moscow/Kiev black	865 x 115 x 88	Kiev/Moscow/Monterrey/Newport	62U003AA121A
	Adapter for Moscow/Kiev grey	865 x 115 x 88	Kiev/Moscow/Monterrey/Newport	62U003AA117A
	Adapter, 550 mm. black	775 x 550 x 100	Smirne	62U003AA086A
	Adapter, 550 mm. grey	775 x 550 x 100	Smirne	62U003AA087A
Modulair 3		Dimensions L x W x H (mm)	Suitable for	Order Number
	Air duct - terminal with grid (x2 pieces), grey	263 x 85 x 86	Panama/Madrid/Santana	62U003AA159A
	Air duct - centrale module 1 mt (x 2 pieces), grey	263 x 1000 x 86	Panama/Madrid/Santana	62U003AA161A
	Air duct - extension 1 mt (x2 pieces), grey	263 x 1000 x 86	Panama/Madrid/Santana	62U003AA157A
	Air duct - extension 0,5 mt (x2 pieces), grey	263 x 500 x 86	Panama/Madrid/Santana	62U003AA158A
	Air duct - closure (x2 pieces), grey	263 x 22 x 86	Panama/Madrid/Santana	62U003AA160A
	TARIFA		Dimensions L x W x H (mm)	Suitable for
	TARIFA, black	330 x 330 x 120	Tarifa	62U003AA122A
	TARIFA, grey	330 x 330 x 120	Tarifa	62U003AA113A

## Accessories

### Air ducts

Minsk/Portofino		Dimensions L x W x H (mm)	Suitable for	Order Number
	Front panel with louvers, without controls, black	429 x 381 x 50	Minsk/Portofino	62U003AA1388
	Front panel with louvers, without controls, grey	429 x 381 x 50	Minsk/Portofino	62U003AA1398
	Front panel with louvers, with controls, black, 12V	429 x 381 x 50	Minsk/Portofino	62U003AA153A
	Front panel with louvers, with controls, black, 22V	429 x 381 x 50	Minsk/Portofino	62U003AA154A
	Front panel with louvers, with controls, grey, 12V	429 x 381 x 50	Minsk/Portofino	62U003AA155A
	Front panel with louvers, with controls, grey, 24V	429 x 381 x 50	Minsk/Portofino	62U003AA156A
Rimini/San Marino/Turin		Dimensions L x W x H (mm)	Suitable for	Order Number
	Front panel with louvers, without controls, black	610 x 498 x 60	Portofino/Rimini/Turin	62U003AA084A
	Front panel with louvers, without controls, grey	610 x 498 x 60	Portofino/Rimini/Turin	62U003AA097A
	Front panel with louvers and controls, 12V, black	610 x 498 x 60	Portofino/Rimini/Turin	62U003AA083A
	Front panel with louvers and controls, 24V, black	610 x 498 x 60	Portofino/Rimini/Turin	62U003AA085A
	Front panel with louvers and controls, 12V, grey	610 x 498 x 60	Portofino/Rimini/Turin	62U003AA095A
	Front panel with louvers and controls, 24V, grey	610 x 498 x 60	Portofino/Rimini/Turin	62U003AA096A
Smirne		Dimensions L x W x H (mm)	Suitable for	Order Number
	Front panel with louvers, without controls, black	800 x 530 x 60	Smirne	62U003AA089A
	Front panel with louvers, without controls, grey	800 x 530 x 60	Smirne	62U003AA100A
	Front panel with louvers and controls, 12V, black	800 x 530 x 60	Smirne	62U003AA088A
	Front panel with louvers and controls, 24V, black	800 x 530 x 60	Smirne	62U003AA090A
	Front panel with louvers and controls, 12V, grey	800 x 530 x 60	Smirne	62U003AA098A
	Front panel with louvers and controls, 24V, grey	800 x 530 x 60	Smirne	62U003AA099A
Madrid		Dimensions L x W x H (mm)	Suitable for	Order Number
	black	615 x 495 x 35	Madrid	62U003AA140A
	grey	615 x 495 x 35	Madrid	62U003AA141A







## Accessories



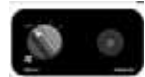

### Control units

**Diavia**



#### Individual switch

	Adjustment	Dimensions L x H (mm)	Order number
	A/C control	50 x 50	62A03999A
	AC switch	50 x 50	62A04000B
	Heating control	50 x 50	62A03998A
	Air speed control	50 x 50	62A04001A

#### Control Panels AC

	Adjustment	Dimensions L x H (mm)	Order number
	AC and air speed control	100 x 50	62A03995A
	AC and air speed control	50 x 100	62A03994A
	AC switch with air speed	100 x 50	62A03997B
	AC switch with air speed	50 x 100	62A03996B





#### Control Panels HVAC

	Adjustment	Dimensions L x H (mm)	Order number
	HVAC control with fan speed	120 x 50	62A03993B
	HVAC control with fan speed	50 x 120	62A03992B









## Accessories

### Control units

#### Control units AC

	Adjustment	Dimensions L x H (mm)	Order number
	AC switch with blower speed control and recirculation switch 12 V	100 x 50	62A031063A
	AC switch with blower speed control and recirculation switch 24 V	100 x 50	62A031066A
	AC switch with blower speed control and recirculation switch 12 V	50 x 100	62A031068A
	AC switch with blower speed control and recirculation switch 24 V	50 x 100	62A031070A

#### Control Units HVAC











	Adjustment	Dimensions L x H (mm)	Order number
	AC and heater switch with air speed control 12 V	100 x 50	62A031065A
	AC and heater switch with air speed control 24 V	100 x 50	62A031067A
	AC and heater switch with air speed control 12 V	50 x 100	62A031069A
	AC and heater switch with air speed control 24 V	50 x 100	62A031071A
	HVAC switch with air speed control and recirculation switch 12 V	145 x 50	62A031003B
	HVAC switch with air speed control and recirculation switch 24 V	145 x 50	62A031073A
	HVAC switch with air speed control and recirculation switch 12 V	50 x 145	62A031002B
	HVAC switch with air speed control and recirculation switch 24 V	50 x 145	62A031072A

## Accessories



### Control units

**Diavia**

#### Control units

Adjustment	Dimensions L x H x W (mm)	Order number
 Manual control unit for temperature control, AC and recirculation switch and air speed control 12 V	120 x 63 x 43	62A04052A
 Manual control unit for temperature control, AC and recirculation switch and air speed control 24 V	120 x 63 x 43	62A04053A
 Manual control unit for temperature control, AC switch and air speed control 12 V	120 x 63 x 43	62A04054A
 Manual control unit for temperature control, AC switch and air speed control 24 V	120 x 63 x 43	62A04055A
 Electronic control unit for temperature control, AC switch and air speed control 12 V	160 x 75 x 54	62A04056A
 Electronic control unit for temperature control and air recirculation switch, AC switch and air speed control 12 V	160 x 75 x 54	62A04057A
 Automatic AC control unit 12 V	83 x 50.5	62A04003A
 Automatic AC control unit 24 V	83 x 50.5	62A04004A
 Automatic HVAC control unit 12 V	83 x 50.5	62A04014A
 Automatic HVAC control unit 24 V	83 x 50.5	62A04006A

#### Heater controller

Adjustment	Order number
 Electrical heater controller with 12 V valve 12 V	620282129A
 Electrical heater controller with 12 V valve 24 V	620282102A

## Accessories

### Compressors

#### Compressors

Delphi SP 10	Description	Order number
	10-cylinder fixed displacement compressor with 110 cc. 7,0 kW @ 2,500 RPM, V-belt, flanged fittings 12 V	62015155C
<b>Delphi SP 15</b>	<b>Description</b>	<b>Order number</b>
	Consists of 10 pistons and has 154 cc displacement 8,5 kW @ 2,500 RPMV-belt, horizontal RLK fitting 12 V	620152008
	Consists of 10 pistons and has 154 cc displacement 8,5 kW @ 2,500 RPM, V-belt, horizontal RLK fitting 24 V	620152048
<b>Delphi SP 20</b>	<b>Description</b>	<b>Order number</b>
	Consists of 10 pistons and has 210 cc displacement. 11,5 kW @ 2,500 RPM, V-belt, flanged fittings 12 V	62015275A
	Consists of 10 pistons and has 210 cc displacement. 11,5 kW @ 2,500 RPM, V-belt, flanged fittings 24 V	62015277A
<b>Valeo TM31</b>	<b>Description</b>	<b>Order number</b>
	Consists of 10 pistons and has 310 cc displacement. 14,0 kW @ 2,500 RPM, V-belt, horizontal RLK fittings 24 V	62015265A

Webasto Diavia provides you a wide range of compressors and compressor mounting kits. Please feel free to contact us for further information about an individual compressor.

## Product solutions for transport refrigeration

**Diavia**

Webasto Diavia offers a wide range of product solutions for transport refrigeration to ship goods at the right temperature and humidity. The product solutions are designed for commercial vehicles with a refrigeration compartment up to 18 m<sup>3</sup> and dedicated for positive temperatures as well as for negative temperatures up to minus 20 °C. Depending on the customer requirements you can select either the suitable standard solution or the tailored integrated solution. In addition a wide range of vehicle specific mounting kits and accessories complete the transport refrigeration solution. Furthermore Webasto Diavia offers stand-by options as well that keeps the system running by an external 220 V AC feed also when the engine is off.

### Solutions for transport refrigeration

#### Battery operated units

- "Rolle" for compartments up to 5 m<sup>3</sup>
- High efficiency systems that are easy to install
- Optional with stand-by function

#### Direct drive units

- "Tonale" and "Stelvio" for compartments up to 18 m<sup>3</sup>
- High performance systems that are easy to install
- Optional with stand-by function

#### Integrated direct drive units

- "Pordoi" for compartments up to 18 m<sup>3</sup>
- All components of the refrigeration systems are integrated within the vehicle
- No affect on the exterior design and aerodynamic aspects of the vehicle
- Optional with stand-by function

Please fee free to contact the Webasto sales team for further support

## Product configuration for transport refrigeration

How to combine the component for the individual solution (Pordoi)

The diagram illustrates the configuration of transport refrigeration components. It features a central blue box labeled "Evaporator" with an image of the evaporator unit. To its right is a plus sign "+". Below the plus sign are five stacked boxes, each containing a component name and an image:

- Condenser**: Image of a black condenser unit.
- Compressor and compressor kits**: Image of a compressor unit.
- Stand-by unit**: Image of a stand-by unit.
- Accessories and installation kits**: Image of various electrical and mechanical accessories.

## Battery operated solutions

## Diavia



### Compact mobile refrigeration solutions for light commercial vehicles transporting perishable goods. Optimized solutions for up to 5 m<sup>3</sup> with highest reliability.

This line of mobile refrigeration solutions ensures that perishables transported across great distances are well taken care of and arrive in perfect condition. Designed for light commercial vehicles with compartments for sensitive goods and originally installed air-conditioning, this version runs with the motor and compressor integrated in the condenser unit. Equipped with our renowned highefficiency, fans and blowers that generate a constant airflow, they offer the reliability and long life that are critical for mobile refrigeration systems.

A variety of accessories and kits are available for vehicle-specific installation and integration, and allow for filling with the refrigerant R404A. An optional feature that is also available is an electric motor that generates 1.1 kW of power for standby operation.

#### Rolle

The battery driven refrigeration system for smaller-scale vehicles and for compartments with up to 5 m<sup>3</sup>. Exceptionally fast and easy installation.

- Customized refrigeration systems for commercial vehicles with load compartments of up to 5 m<sup>3</sup>
- Cooling performance up to 1.2 kW
- Motor and compressor are integrated in the condenser unit
- Important feature: automatic temperature control
- High thermodynamic efficiency in all temperature ranges
- Superior systems with durable, high-quality components from proven series production
- ATP\* homologation applies for all systems

Models:  
Battery-operated: Rolle

\* Accord Transport Perishable

#### Technical specifications:

Refrigeration unit	Rolle 2000	Rolle 2000 HD
Cooling capacity nominal (W) with R404A at 30 °C ambient temperature		
▪ Compartment temperature 0 °C	1.200	1.300
▪ Compartment temperature -20 °C	424	508
Cooling capacity nominal (W) in Stand-by mode at 0 °C	985	1.059
Nominal voltage (V)	12.0	
Max. power consumption (A)		
▪ Engine operation	80	90
▪ Stand-by operation	5	6
Air Flow in m <sup>3</sup> /h	650	
Refrigerant	R404A	
Dimensions L x W x H (mm)		
▪ Condenser unit	806 x 535 x 221	806 x 535 x 221
▪ Evaporator unit	660 x 500 x 157	660 x 500 x 157
Weight (kg)		
▪ Condenser unit	40.0 (55.0 <sup>(1)</sup> )	41.0 (58.0 <sup>(1)</sup> )
▪ Evaporator unit	7.5	7.5

(1) = with Stand-by

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Rolle 2000	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621RLN2K01EG
Rolle 2000 HD	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621RLN2K01SEG
Rolle 2000 Stand-by	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621RLN2K02EE
Rolle 2000 HD Stand-by	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621RLN2K02SEE

Compressor support and compressor is not included.

## Direct drive solutions

Diavia



### Mobile refrigeration solutions for light commercial vehicles transporting perishable goods. Highest performance compact solutions for up to 18 m³.

This line of mobile refrigeration solutions ensures that perishables transported across great distances are well taken care of and arrive in perfect condition. Designed for light commercial vehicles with compartments for sensitive goods, these versions run with the compressor integrated in the vehicle. Equipped with our renowned high-efficiency, durable fans and blowers that generate a constant airflow, they offer the outstanding reliability and long life that are critical for mobile refrigeration systems.

A variety of accessories and kits are available for vehicle-specific installation and integration, and allow for filling with refrigerants R134a and R404A. An optional feature that is also available is an electric motor that generates 1.1 kW of power for standby operation.

#### Tonale & Stelvio

The direct-drive refrigeration system for vehicles with compartments up to 18 m³ with high performance and very low maintenance. The comprehensive solutions cover a broad range of temperatures.

- Customized refrigeration systems for commercial vehicles with load compartments of up to 18 m³
- Cooling performance up to 4.0 kW
- Compressor integrated in the vehicle
- Important feature: automatic temperature control
- High thermodynamic efficiency in all temperature ranges
- Superior systems with durable, high-quality components from proven series production
- ATP\* homologation applies for all systems

Models:  
Direct drive: Tonale, Stelvio

\* Accord Transport Perishable

#### Technical specifications:

Refrigeration unit	Tonale 2000	Tonale 3000	Tonale 4000	Stelvio 2000	Stelvio 3000	Stelvio 4000
Cooling capacity nominal (W) with R404A at 30 °C ambient temperature						
▪ Compartment temperature 0 °C	2,505	2,916	3,930	1,956	2,105	2,650
▪ Compartment temperature -20 °C	1,350	1,590	2,040	1,019	1,240	1,421
Cooling capacity nominal (W) with R134a at 30 °C ambient temperature						
▪ Compartment temperature +5 °C	1,950	2,850	3,550	1,540	2,189	2,730
▪ Compartment temperature 0 °C	1,650	2,400	3,050	1,400	2,000	2,500
Cooling capacity nominal (W) in Stand-by mode at 0 °C	-	-	-	1,469	1,492	1,781
Nominal voltage (V)	12.0			12.0		
Max. power consumption (A)						
▪ Engine operation	21.5	36.0	40.0	21.5	27.0	31.0
▪ Stand-by operation	-	-	-	6.0	7.5	8.5
Air Flow in m³/h	670	1,040	1,534	670	1,040	1,534
Refrigerant	R134a/R404A			R134a/R404A		
Dimensions L x W x H (mm)						
▪ Condenser unit	793 x 445 x 176	1,034 x 515 x 163	1,034 x 515 x 163	806 x 535 x 221	936 x 535 x 224	936 x 535 x 224
▪ Evaporator unit	660 x 500 x 157	900 x 500 x 157	1,000 x 500 x 157	660 x 500 x 157	900 x 500 x 157	1,000 x 500 x 157
Weight (kg)						
▪ Condenser unit	20.0	30.0	30.0	55.0	60.0	60.0
▪ Evaporator unit	7.5	10.5	12.5	7.5	10.5	12.5

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Tonale 2000	Transport refrigeration system for refrigerant R134a incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621TNP2K02ED
Tonale 2000 XV	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621TNN2K01ED
Tonale 3000	Transport refrigeration system for refrigerant R134a incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621TNP3K01EE
Tonale 3000	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621TNN3K01EE
Tonale 4000	Transport refrigeration system for refrigerant R134a incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621TNP4K01EE
Tonale 4000	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, product documentation	621TNN4K01EE
Stelvio 2000	Transport refrigeration system for refrigerant R134a incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621STP2K01ED
Stelvio 2000	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621STN2K01ED
Stelvio 3000	Transport refrigeration system for refrigerant R134a incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621STP3K01ED
Stelvio 3000	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621STN3K01ED
Stelvio 4000	Transport refrigeration system for refrigerant R134a incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621STP4K01ED
Stelvio 4000	Transport refrigeration system for refrigerant R404A incl. condenser, evaporator, installation kit, automatic temperature control unit, stand-by unit, product documentation	621STN4K01ED

Compressor support and compressor is not included.

Please feel free to contact us for further information about an individual transport refrigeration solution

## Integrated solutions

## Diavia



### Mobile refrigeration solutions completely integrated in the vehicle Modular system for optimum combination of components

This line of mobile refrigeration solutions ensures that perishables transported across great distances are well taken care of and arrive in perfect condition. The components of the mobile refrigeration such as evaporator, condenser and compressor as well as a variety of accessories can be combined into individual solutions. This allows for a high degree of flexibility and customization for different applications. Equipped with our renowned high-efficiency fans and blowers that generate a constant airflow, they offer the reliability and long life that are critical for mobile refrigeration systems.

A variety of accessories and kits are available for vehicle-specific installation and integration, and allow for filling with refrigerants R134a and R404A. An optional feature that is also available is an electric motor that generates 1.1 kW of power for standby operation.

#### Pordoi

A modular drive system compatible with all commercial vehicles this fully integrated solution does not affect the exterior design and aerodynamic aspects of the vehicle.

- Integrated system
- Customized refrigeration systems for commercial vehicles with load compartments of up to 18 m<sup>3</sup>
- Important feature: automatic temperature control
- High thermodynamic efficiency in all temperature ranges
- Superior systems with durable, high-quality components from proven series production
- ATP\* homologation applies for all systems

Models:  
Integrated modular: Pordoi

\* Accord Transport Perishable

#### Technical specifications:

Refrigeration unit	Pordoi 2000	Pordoi 3000	Pordoi 4000
Cooling capacity nominal (W) with R404A at 30 °C ambient temperature			
▪ Compartment temperature 0 °C	2,493	2,799	3,660
▪ Compartment temperature -20 °C	1,206	1,332	1,926
Cooling capacity nominal (W) with R134a at 30 °C ambient temperature			
▪ Compartment temperature +5 °C	1,895	2,750	
▪ Compartment temperature 0 °C	1,565	2,250	3,150
Cooling capacity nominal (W) in Stand-by mode at 0 °C	1,233	1,636	1,858
Nominal voltage (V)		12.0	
Max. power consumption (A)			
▪ Engine operation	(1)	(1)	(1)
▪ Stand-by operation	14	16	16
Air Flow in m <sup>3</sup> /h	670	1,040	1,534
Refrigerant	R134a/R404A		
Dimensions L x W x H (mm)			
▪ Condenser unit	(1)	(1)	(1)
▪ Evaporator unit	660 x 500 x 157	900 x 500 x 157	1,000 x 500 x 157
Weight (kg)			
▪ Condenser unit	(1)	(1)	(1)
▪ Evaporator unit	7.5	10.5	12.5

(1) = depending on the installed application

Name	Delivery scope contains	Order number
<b>Standard delivery scope</b>		
Pordoi 2000	Transport refrigeration system for refrigerant R134a incl. evaporator, automatic temperature control unit, product documentation	62U003FF108EB
Pordoi 2000	Transport refrigeration system for refrigerant R404A incl. evaporator, automatic temperature control unit, product documentation	62U003FF109EB
Pordoi 3000	Transport refrigeration system for refrigerant R134a incl. evaporator, automatic temperature control unit, product documentation	62U003FF110EB
Pordoi 3000	Transport refrigeration system for refrigerant R404A incl. evaporator, automatic temperature control unit, product documentation	62U003FF111EB
Pordoi 4000	Transport refrigeration system for refrigerant R134a incl. evaporator, automatic temperature control unit, product documentation	62U003FF113EB
Pordoi 4000	Transport refrigeration system for refrigerant R404A incl. evaporator, automatic temperature control unit, product documentation	62U003FF112EB

Compressor, compressor support, gas hoses and fittings, condenser, condenser support, RDR, accessories for installation is included.

Standard accessories		
Drain hose defrost kit	Defrost condensation kit for negative temperature systems	62U003AA143A
Low pressure switch off kit	Switches off the compressor when pressure goes below lowest value	62U003AA132A
Oil separator kit	Necessary for all R404A applications and is recommended when Set Point is < 5 °C.	62U003AA044A
Hot gas defrost kit	For stable temperature inside the insulated box by heating or cooling even if the external temperature is lower	62U003AA133A
Liquid line eyes kit	Control the gas inside the system	62U003AA131A

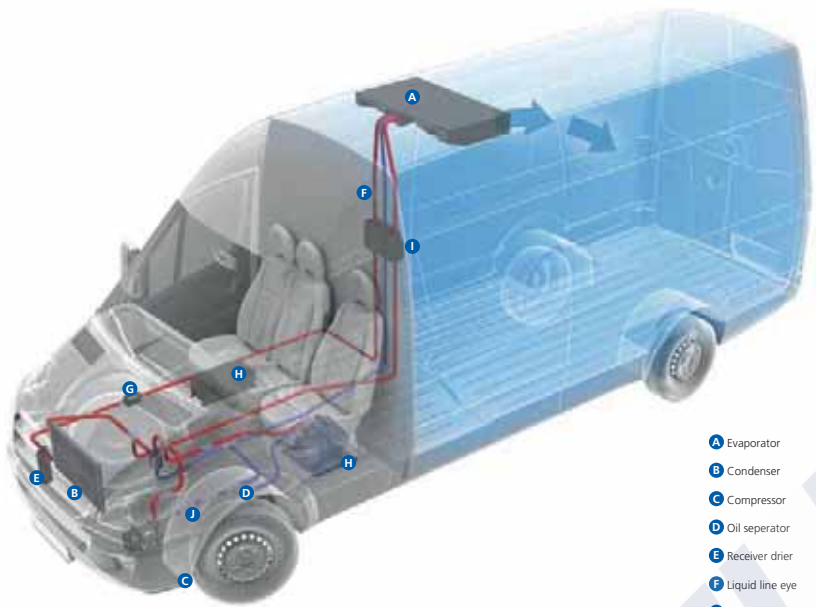
Stand-by option for the operation with external 220 V AC source when the engine is off		
Electrical motor & compressor kit	Kit with electrical motor and compressor with 1500 W refrigerating capacity at 0 °C with R134a and 900 W refrigerating capacity at -20 °C with R404A (Current draw 9.5A) with power supply P51000 with max. 60 A current supplied	62U006S809C

Please feel free to contact us for further information about an individual transport refrigeration solution

## Configuration for Pordoi transport refrigeration

**Diavia**

## Configuration for Pordoi transport refrigeration



- A** Evaporator
- B** Condenser
- C** Compressor
- D** Oil separator
- E** Receiver drier
- F** Liquid line eye
- G** Additional filter drier (R404A)
- H** Stand-by kit
- I** Hot gas defrost kit
- J** Low pressure switch

### Application guide

	>5°C	X	R134a	R134a	C	-	-	C	-	-	FC	C			
	>5°C	✓	R134a	R134a	C	-	-	C	-	-	FC	C			
	0 - 5°C	X	R134a	R134a	FC	-	-	FC	-	-	FC	C			
	0 - 5°C	✓	R134a	R134a	FC	-	-	FC	-	-	FC	C			
	>5°C	X	R134a	R134a	C	N	-	C	-	-	FC	C			
	>5°C	✓	R134a	R134a	C	N	-	C	-	-	FC	C			
	0 - 5°C	X	R134a	R134a	FC	N	-	FC	-	-	FC	C			
	0 - 5°C	✓	R134a	R134a	FC	N	-	FC	-	-	FC	C			
	<0°C	X	R404A	R404A	N	-	FC	-	-	-	FC	C	C		
	<0°C	✓	R404A	R404A	N	N	-	-	-	-	N	C	C		
	<0°C	X	R404A	R404A	N	-	FC	-	-	-	FC	C	C		
	<0°C	✓	R404A	R404A	N	N	-	-	-	-	N	C	C		

C = Recommended    FC = More recommended    N = Mandatory

- Temperature
- Oil Separator Kit
- Hot Gas Defrost
- Positive Temperature Defrost
- Drain Hose Defrost Wire
- Low Pressure Switch
- Sight Glass
- Refrigerant
- Stand-by operation
- Vehicle without original AC
- Vehicle with original AC
- Front condenser fitting
- Under Chassis condenser fitting

## Air-conditioning systems

### Compact Cooler 4E/5 Lite/5/8/E-Unit.



Compact Cooler 4E		■	■	■	■
Compact Cooler 5 Lite		■			■
Compact Cooler 5	■	■		■	■
Compact Cooler 8		■	■	■	■
E-Unit		■	■	■	■

### The optimum retrofitting solution for air-conditioning

The Compact Cooler Series is a space-saving, retrofitable rooftop air-conditioning system for cooling the driver's cab and passenger compartment of all vehicles with cabin volumes up to 10 m<sup>3</sup>.

The Compact Cooler 4E represents an independent solution with integrated electric motor which drives the system's own compressor with the help of a V-belt. Thus, it only needs to be connected to the vehicle battery. The Compact Cooler 5 Lite has been conceived for integration in the primary cooling circuit of the vehicle and it distinguishes itself through its especially compact structure which was realised by avoiding the condenser with fan. Additional compressors are preferably installed in the vehicle for the Compact Cooler 5 and 8. This guarantees full system capacity at all times and operation independently of the primary cooling circuit of the vehicle is also possible. The E-Unit includes the electric motor/compressor unit installed on a robust metal frame with plastic housing. The electric motor drives the compressor over a belt. The Compact Cooler 5, for example, can be switched simultaneously with the E-Unit.

Thanks to the robust structure and the use of the latest technologies, the Compact Coolers fulfil all the usual quality requirements of the vehicle manufacturer and comply to the current EU directives. Essential characteristics of the robust design are the basic metal frame and the existing refrigerant circuit made completely from aluminium. The customer profits from increased life span and reliability as well as from less maintenance expenditure.

#### Technical specifications:

Compact Cooler	4E (electric)	5 Lite	5	8
EC Approval No.(EMC)			e1*72/245*2009/19*1443*__	
Cooling capacity (kW)	3.5	5.0	5.0	8.5
Heating capacity Q80 (kW)	-	-	-	7.5
Refrigerant	R134a, CFC-free			
Nominal voltage (V)	24	12		12/24
Maximum total current consumption (A)	68	13	30	30
Operating temperature range (°C)	max. +45			
Evaporator fan volume flow (m <sup>3</sup> /h)	550 (with air distributor plate)	400 (with air distributor plate)	630 (with air distributor plate)	1,300 (free-blowing)
Dimensions L x W x H (mm)	1,110 x 774 x 215	500 x 760 x 165	750 x 760 x 165	1,025 x 970 x 197
Weight (kg)	52.0	11.5	23	32



### Compact Cooler 4E

- 3.5 kW cooling capacity
- Fully independent, system pre-filled with refrigerants
- Routing not required for refrigerant hoses
- Compressor drive operated by 24-V electric motor
- Available optionally with electronic room thermostat
- Low weight due to all-aluminium refrigerant circuit



### Compact Cooler 5 Lite

- Developed especially for cooling small spaces/cabins (for instance the loading area in ambulances)
- Low power consumption
- Specially tested for ambulances according to EN 1789
- Low maintenance expenditure
- Low weight



### Compact Cooler 5

- 5 kW cooling capacity for compact model
- Available optionally with electronic room thermostat
- Extensive program of compressors and further installation accessories
- Low maintenance expenditure
- Low weight due to all-aluminium cooling circuit



### Compact Cooler 8

- 8.5 kW cooling capacity for compact model
- Available optionally with electronic room thermostat
- Extensive program of compressors and further installation accessories
- Available with fresh air and heating options
- Low weight due to all-aluminium refrigerant circuit





## Air-conditioning systems

### Compact Cooler 4 E/5/5 Lite/8/E-Unit



Order number	Delivery scope	Comment	Voltage		Air distributor plate	Electr. Thermostat	Standard installation kit		Hot part	Fresh air flap
			12 V	24 V			without 6 m hoses	with 6 m hoses		
9023839A	Compact Cooler 4E			■	■	■	■			
9023838A	Compact Cooler 4E			■	■	■	■			
9023837A	Compact Cooler 5 Lite		■		■					
9023843A	Compact Cooler 5		■		■					
9023845A	Compact Cooler 5		■		■	■				
9023841A	Compact Cooler 5		■		■		■			
9023842A	Compact Cooler 5			■	■					
9023844A	Compact Cooler 5			■	■	■				
9023840A	Compact Cooler 5			■	■		■			
9023846A	Compact Cooler 5	With external refrigerant pipes		■	■	■				
9022993B	Compact Cooler 5	without control switch		■						
9023857A	Compact Cooler 8		■			■			■	■
9023856A	Compact Cooler 8		■			■			■	
9023855A	Compact Cooler 8		■						■	
9023853A	Compact Cooler 8		■			■				■
9023851A	Compact Cooler 8		■			■				
9023849A	Compact Cooler 8		■							
9023848A	Compact Cooler 8		■		■			■		
9023854A	Compact Cooler 8			■		■				■
9023852A	Compact Cooler 8			■		■				
9023850A	Compact Cooler 8			■						
9023847A	Compact Cooler 8			■	■			■		
9022638B	Compact Cooler 8			■		■			■	■
9004866A	E-Unit	With electric motor and compressor		■						

Accessories for the system are shown on page 177.

## Accessories

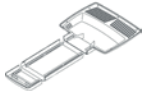

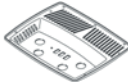

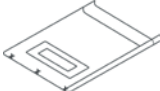
### Installation kits



Image	Description	Compact Cooler 4E			Compact Cooler 5			Compact Cooler 5 Lite			Compact Cooler 8			Order number
		■	■	■	■	■	■	■	■	■	■	■		
	<b>Cable set</b>													
	Cable set for heater control, external 10.80 m				■	■	■						66277A	
	Cable set for heater control, external 13.00 m							■					67043C	
	<b>Circulating air filter</b>													
	Circulating air filter of Compact Cooler				■	■	■						64049A	
	Circulating air filter of Compact Cooler 8							■					64053B	
	<b>Electronic room thermostat</b>													
	24 V for Compact Cooler 5 retrofitting kit							■	■				98900A	
	12 V for Compact Cooler 5 retrofitting kit							■					98899A	
	<b>Compressor bracket</b>													
	Universal compressor bracket							■	■	■			87723C	
	<b>Installation kit</b>													
	Hose routing installation kit, external									■			64519C	
Without figure	Installation kit with 2 x 6 m refrigerant hose									■	■		64497C	
	Installation kit with 2 x 11 m refrigerant hose									■	■		65362C	
	Standard installation kit with a 2 x 6 m refrigerant hose											■	67041E	
	Standard installation kit with a 2 x 11 m refrigerant hose												67042E	
	Installation kit of Compact Cooler 8 with a 2 x 11 m refrigerant hose											■	98700E	
Without figure	<b>Other accessories</b>													
	Roof cutout template Compact Cooler 8											■	98500A	
	12 V, 70 A relay											■	9000458A	
	Receptacle housing for 9-pin relay, white											■	39879B	

## Accessories





### Air ducting system

	Compact Cooler 4E	Compact Cooler 5	Compact Cooler 5 Lite	Compact Cooler 8	Order number
					
<b>Air-duct system kit, Compact Cooler 8</b> 814 mm middle and end piece					98502D
					
<b>Air distributor plate of Compact Cooler 8</b> Assembly					66280B
					
<b>Add-on kit for air-duct extension</b> 569 mm max. 4 extension kits possible					98868D
					
<b>Air-duct end piece of Compact Cooler 8</b> With preparation for illumination					9001288A
					
<b>Add-on kit for air-duct extension</b> 569 mm with preparation for illumination (max. 4 extension kits possible)					9001161A

## Accessories

### Compressor



	Compact Cooler 4E	Compact Cooler 5	Compact Cooler 5 Lite	Compact Cooler 8	Order number
					
<b>Seltec compressor</b>					
TM-13HD horizontal 24 V	■	■			40153B
TM-16HD horizontal 12 V			■		67045A
TM-16HD horizontal 24 V				■	67046A
					
Z1					
TM-13HD vertical 12 V		■	■		80755B
TM-13HD vertical 24 V		■	■		80700B
TM-16HD vertical 24 V				■	64035A
TM-16HD vertical 12 V				■	64040A
					
TM-13HD 8PVK vertical 12 V		■	■		67478A
TM-16HD 8PVK vertical 24 V				■	98561A
TM-16HD 8PVK vertical 12 V				■	98536A
					
TM-13HD 8PVK horizontal 24 V		■	■		88139B
TM-16HD 8PVK horizontal 12 V				■	9000678A
TM-16HD 8PVK horizontal 24 V				■	9000679A

## Air-conditioning systems

### Compact Cooler Rail 4E/2H, 7E/2H



#### Proven and compact

The rooftop air-conditioning system Compact Cooler Rail Versions 4 E, 7 E and 7H with 4 or 6.5 kW cooling capacity ensure an optimum climate in the driver's cabin of locomotives and other rail vehicles. The system is easy to install and particularly suitable for vehicles without an air duct system, by means of the air distributor plate. Subsequent installation is also smooth and without any problem. The Compact Coolers Rail 4 E and 7 E comply with the European railway standards. For a customised offer, please contact our Rail Competence Centre directly.

- With hydrostatic electric drive
- Easy installation and maintenance
- Standard control
- Continuous regulation of evaporator fan air volume
- Compliance with the different European railway standards
- Optimum climate in driver's cabin through 4 or 6.5 kW cooling capacity
- Specially developed for retrofitting

#### Technical specifications:

	Compact Cooler Rail 4E/2H	Compact Cooler Rail 7E/2H
Cooling capacity (kW)*	4.0	6.5
Number of independent cooling circuits	1	
Electrical heating capacity (kW)	2.0	
Extreme operating temperatures (°C)	-20 to 40/-25 to 45	
Power supply (V <sub>ac</sub> )	400 ± 10 % (3ph + 50 Hz)	
Control power supply (V <sub>cc</sub> )	24 (18 - 32)	
Max. electrical power consumption in cooling mode (kW)	3.0	4.1
Max. electrical power consumption in heating mode (kW) with electric heater	2.2	
Max. control power consumption (W)	50	
Starting current (A)	< 50	< 60
Max. air volume flow (m³/h)	600	
Fresh air (m³/h)	0/60	
Noise emission at 7.5 m (dB(A))	ca. 67	
Refrigerant	R134a	
Dimensions L x W x H (mm)	1,400 x 790 x 230	
Weight (kg)	125	130
Order number	6010545A	6010543A

\*Performance data at T<sub>ext</sub> = 40 °C/40 % r. h.; T<sub>ev</sub>, evaporator = 35 °C/50 % r. h. A tolerance of 10 % is valid for the performance data. Other voltages are available on request.

## Air-conditioning systems

### Compact Cooler Rail 7H



#### For extreme conditions

The electric rooftop air conditioning system, Compact Cooler 7 Hydro, provides an optimum climate in driver's cabin cabs of electric trains, diesel railcars and other rail vehicles with its 6.5 kW cooling capacity. The system has been conceived to cool the cabin reliably even under the hardest conditions and climate conditions and also to heat when necessary in the Thermo version. Naturally the Compact Cooler 7 Hydro complies with all the railroad standards. For a customised offer, please contact our Rail Competence Centre.

- Optimum climate in driver's cabin through 6.5 kW cooling capacity
- High energy efficiency and low energy consumption
- Conceived for outside temperatures of up to 50°C
- Compliance with the different European railway standards
- Easy installation and maintenance

#### Technical specifications:

	Compact Cooler Rail 7H
Cooling capacity (kW)*	6.5
Number of independent cooling circuits	1
Extreme operating temperatures (°C)	-20 to 40/-25 to 45
Power supply (V <sub>ac</sub> )	hydrostatic
Control power supply (V <sub>cc</sub> )	24 (18 - 32)
Max. electrical power consumption in cooling mode (kW)	0.5
Max. control power consumption (W)	500
Max. air volume flow (m³/h)	600
Fresh air (m³/h)	0/60
Noise emission at 7.5 m (dB(A))	ca. 67
Refrigerant	R134a
Dimensions L x W x H (mm)	1,400 x 790 x 230
Weight (kg)	110
Order number	6010541A

\*Performance data at T<sub>ext</sub> = 40 °C/40 % r. h.; T<sub>ev</sub>, evaporator = 35 °C/50 % r. h. A tolerance of 10 % is valid for the performance data. Other voltages are available on request.

## Air-conditioning systems

### RailCool R 5



#### Proven and compact

The rooftop air-conditioning system RailCool R 5, with its 5.5 kW cooling capacity, ensures an optimum climate in the driver's cabin of electric trains, diesel railcars and other rail vehicles. By virtue of their design with soldered tubes and hermetically sealed compressor, these systems have long life spans and long maintenance intervals. Thanks to the modular HVAC concept, customer-specific requirements can be implemented quickly and cost-effectively. The pre-filled, compact device runs independently of the vehicle drive and is easy to install. The RailCool R 5 complies with European railway standards. For a customised offer, please contact our Rail Competence Centre directly.

- Especially for original equipment
- Soldered components
- Easy installation and maintenance
- Electronic control system with user friendly interfaces
- Continuous regulation of evaporator fan air volume
- Compliance with the different European railway standards

#### Technical specifications:

	RailCool R 5
Cooling capacity (kW)*	5.5
Number of independent cooling circuits	1
Electrical heating capacity (kW)	4.0
Operating temperature (°C)	-20 to +40/-25 to 45
Power supply (U <sub>ac</sub> )	400 ±10 % (3ph + N 50/60 Hz)
Control power supply (V <sub>cc</sub> )	24 (18 - 32)
Max. electrical power consumption in cooling mode (kW)	3.5
Max. electrical power consumption in heating mode (kW) with electric heater	4.3
Max. control power consumption (W)	140
Starting current (A)	< 50
Max. air volume flow (m³/h)	1,000
Fresh air at 7.5 m (m³/h)	90
Noise emission at 7.5 m (dB(A))	approx. 67
Refrigerant	R407C
Outer dimensions L x W x H (mm)	1,400 x 790 x 290
Weight (kg)	140
Order number	6010538A

\*Performance data at T<sub>ev</sub> = 40 °C/40 % r. h.; T<sub>co</sub> evaporator = 35 °C/50 % r. h. A tolerance of 10 % is valid for the performance data. Other voltages are available on request.

## Air-conditioning systems

### RailCool S 236



#### Compact and adjustable

The split air-conditioning system, RailCool S, ensures perfect air distribution and maximum air-conditioned air supply in driver's cabins of railroad cars. Thanks to its compact, modular structure, the RailCool S can be integrated individually in any design – and is also easy to retrofit. It can also be installed in rail vehicles with extremely limited construction space in the roof area without significant expenditure. The RailCool S represents the most cost-effective solution for the air-conditioning of passenger compartments and it complies with the European standards. For a customised offer, please contact our Rail Competence Centre directly.

- Optimum air distribution in the passenger compartments
- Continuous regulation of evaporator
- Fan air volume
- High reliability through double or quadruple, independent cooling and heating circuits
- Compliance with the different European railway standards
- 36 kW cooling capacity

#### Technical specifications:

	RailCool S 236
Cooling capacity (kW)*	36 (R407C)
Number of independent cooling circuits	2
Electrical heating capacity (kW)	24
Operating temperature (°C)	max. -25 to +45
Power supply (U <sub>ac</sub> )	400 ±10% (3ph + N 50 Hz)
Control power supply (V <sub>cc</sub> )	24 (18 - 32)
Max. electrical power consumption in cooling mode (kW)	24
Max. electrical power consumption in heating mode (kW) with electric heater	26
Max. control power consumption (W)	400
Starting current (A)	< 80
Max. air volume flow (m³/h)	1,500 - 4000
Fresh air at 7.5 m (m³/h)	-
Noise emission (dB(A))	< 67 (at 7.5 m)
Refrigerant	R407C
Outer dimensions of evaporator unit Condenser unit L x W x H (mm)	1,370 x 1,155 x 330 1,540 x 550 x 550
Weight (kg) per evaporator unit per condenser unit	93 225
Order number	6010539A

\*Performance data at T<sub>ev</sub> = 40 °C/40 % r. h.; T<sub>co</sub> evaporator = 35 °C/50 % r. h. A tolerance of 10 % is valid for the performance data. Other voltages are available on request.

## Air-conditioning systems

### Cool Top Vario 10 E



#### The best air-conditioning with the new electric parking cooler for trucks

The powerful rooftop air conditioning system creates a feel-good climate in the driver's cab of the truck. Rested drivers are obviously more concentrated and thus contribute to increased road safety.

The system is pre-filled with refrigerant and is connected to the 24V vehicle battery. The installation in the existing roof hatch is very simple and time-saving. The unique combination of compressor-powered cooling and comfort ventilation sets new standards for the performance and efficiency of air conditioning systems. High-grade components and the best workmanship set a new quality benchmark for parking coolers and guarantee a long service life with a minimum of maintenance.

Engine idle run times are reduced and fuel is saved with the electric parking cooler. The individually adjustable low-voltage deactivation ensures that the engine starts, when used by other consumers as well.

- Top quality and powerful parking cooler with high energy efficiency
- Optimal air distribution due to patented comfort ventilation and quiet operation
- Individually adjustable low voltage deactivation ensures the engine starts.
- Easy operation due to a large control panel with LC display
- Different operational settings can be chosen (automatic, ECO and manual)

#### Heater controls

- Operation via the control panel with large LC display:
- Setting the operating mode: Automatic, Eco and manual operation (temperature and fan speed) as well as duration
- Setting the ventilation (diffuse, Spot and comfort ventilation)



#### Technical specifications:

A/C system	Cool Top Vario 10 E
Cooling capacity in W (in accordance with ISO 5151)	1,000
Refrigerant	R134a (pre-filled)
Nominal voltage in V	24 (operating range from 20 to 30) 20 (Eco mode max. 13)
Max. ambient temperature in °C	+ 45 500
Overall dimensions in mm	860 x 700 x 315
Installation height in mm	197 - 202 (dependant on cabin type)
Required roof cutout in mm	400 x 402
Weight in kg	31

Name	Order number
<b>Air-conditioning system delivery scope</b>	
Air-conditioning system	
Remote control	
Connection cable (5 m)	
Operating instructions	
*Cool Top Vario 10 E* Parking Cooler	BE84031739A
*Cool Top Vario 10 E* Parking Cooler (specifically for IVECO) *	BE84031740A
<b>Vehicle-specific installation kits delivery scope</b>	
Vehicle-specific cover frame	
Mounting rods	
Bolts	
Sealing and installation instructions	
DAF XF 105 Space Cab (SC)	BE84031746A
DAF XF 105 Super Space Cab (SSC)	BE84031747A
MAN TGX (XL & XXL) and TGM & TGL (LX)	BE84031876A
MAN TGA	BE84031876A
MERCEDES-BENZ Actros MP3	BE84031743A
MERCEDES-BENZ Actros MP4	BE84031872A
MERCEDES-BENZ Atego, Axor	BE84031803A
SCANIA R & P-Series	BE84031745A
RENAULT Magnum	BE84031748A
RENAULT Premium	BE84031749A
VOLVO Globetrotter LXL (L2H3)	BE84031804A
IVECO Stralis*	BE84031751A
Universal-Montagesatz	BE84031873A

\*Available from mid 2013

## Air-conditioning systems

### Container cooling



### Ready for operation in hot climate

With the Breeze, Iglo and KMWP systems, Webasto offers solutions for the air-conditioning of box superstructure and containers. The robust systems distinguish themselves through a simple structure, low maintenance and service expenditure. Breeze is a split air-conditioning system which consists of three modules of evaporator, condenser and compressor. Iglo is a compact air-conditioning system for installation on the container wall. A special sliding mechanism enables the stowage of the system in the containers during operation breaks. This mechanism protects the system from damage even during transport. Iglo is also suitable for vehicles with the structure of a container. The Breeze and Iglo controls can also be used optionally to operate a heater. The KMWP systems are available with a cooling capacity of 9 kW. The 18 kW solution offers more safeguards against total system failure due to the operation of two independent cooling systems. KMWP Systems are equipped with a coarse dust filter, which can be extended optionally with an ABC protection filter.

### Breeze split

- 5.5 kW cooling capacity
- Low power consumption
- Light design
- Very little noise production
- Control for the operation of a heater prepared



#### Technical specifications:

	Breeze Split	Iglo Compact	KMWP 9 Compact	KMWP 18 Compact
Cooling capacity (kW)	5.5	4.5	9	18 (2 x 9)
Heating capacity (kW)	-	optional	optional	optional
Refrigerant	R134a, CFC-free			
Nominal voltage (U <sub>n</sub> )	230/400	230	400	
Mode	Circulating air	Circulating air	Circulating air (optional fresh air)	
Maximum total current consumption (A)	4.4	9.8	4.2	8.3
Operating temperature range (°C)	max. +50	max. +55	max. +49	max. +49
Volume flow (m <sup>3</sup> /h)	350	700	1,000	2,000
Dimensions L x W x H (mm)	Evaporator 858 x 455 x 170 Compressor 825 x 513 x 290 Compressor 364 x 257 x 232	755 x 632 x 444	1,440 x 700 x 1030	
Weight (kg)	Evaporator 14 Compressor 26 Compressor 42	81	180	290

Delivery scope	Delivery scope contains	Order number
Breeze Split*	Evaporator for 230 V and 400 V versions	DFC.0601
Breeze Split*	Evaporator for 230 V and 400 V versions	DFC.0602
Breeze Split*	Semi-hermetic compressor Copeland for 230 V version	DFC.0603
Breeze Split*	Semi-hermetic compressor Copeland for 400 V version	DFC.0604
Iglo Compact	Without heating option	DFC.0501
Iglo Compact	With heating option	DFC.0501H
KMWP 9 Compact	Complete system	DFC.090
KMWP 18 Compact	Complete system	DFC.180

\*Fittings and exhaust pipe must be ordered separately.

### Iglo Compact

- 4.5 kW cooling capacity for compact model
- Fully independent, system pre-filled with refrigerants
- Routing not required for refrigerant hoses
- Sliding mechanism for mounting the air-conditioning unit inside the container during transport



### KMWP 9 Compact

- 9 kW cooling capacity for compact model
- Robust metal base frame
- Fully independent, system pre-filled with refrigerants
- Routing not required for refrigerant hoses
- Split version with two modules possible: evaporator module and compressor/condenser module available on request

### KMWP 18 Compact

- 18 kW cooling capacity for compact model
- Robust metal base frame
- Fully independent, system pre-filled with refrigerants
- Routing not required for refrigerant hoses
- Two mutually independent cooling circuits
- Split version with two modules possible: evaporator module and compressor/condenser module available on request



## Air-conditioning systems

### Bus A/C systems



We offer the air-conditioning products from Spheros which expand our product portfolio for buses.

Detailed information about these systems as well as information on the total assortment is available directly from Spheros.  
[www.spheros.de](http://www.spheros.de)

Product	Name	
 Aerosphere Midi	Aerosphere Midi Aerosphere World Aerosphere Tropical	Compact systems on the basis of innovative module design for global use in mini, city, inter-urban and tourist coaches
 CC 200	CC 145 CC 170 CC 200	Rooftop systems for reliable climate comfort in mini and midi buses
 Citysphere	Citysphere	Electrically driven rooftop system with windchill effect for the city buses

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## Abbreviations

### Delivery scopes and technical specifications

SOD	Scope of delivery
HT	Heater
P	Petrol
D	Diesel
PME	Vegetable oil methyl ester = Biodiesel
AC	Manual air-conditioning system
ACC	Automatic air-conditioning system/automatic A/C
HVAC	Vehicle-integrated A/C system (Heating, Ventilating and Air-Conditioning)
EMC	Electromagnetic compatibility
ECE	Economic Commission for Europe
OEM	Original Equipment Manufacturer
CFC	Chlorofluorocarbon
ABC	Atomic, Biological and Chemical dangers
TÜV	German Technical Inspection Association (Technischer Überwachungsverein); Experts' organization
UV	Ultra-Violet radiation
Info	Webasto information
TM	Technical communication
VWZ	Selection times
RME	Rape methyl ester
Pkw	Car
Lkw	Truck

### Measuring units

L	Length (mm)
W	Width (mm)
H	Height (mm)
De	Depth (mm)
D	Diameter (mm)
Di	Inner diameter (mm)
Da	Outer diameter (mm)
kg	Kilogram
m	Meter
mm	Millimetre
h	Hour
Sea level	Height above the sea level
SW	Spanner opening
MW	Wrench size








### Electrical units

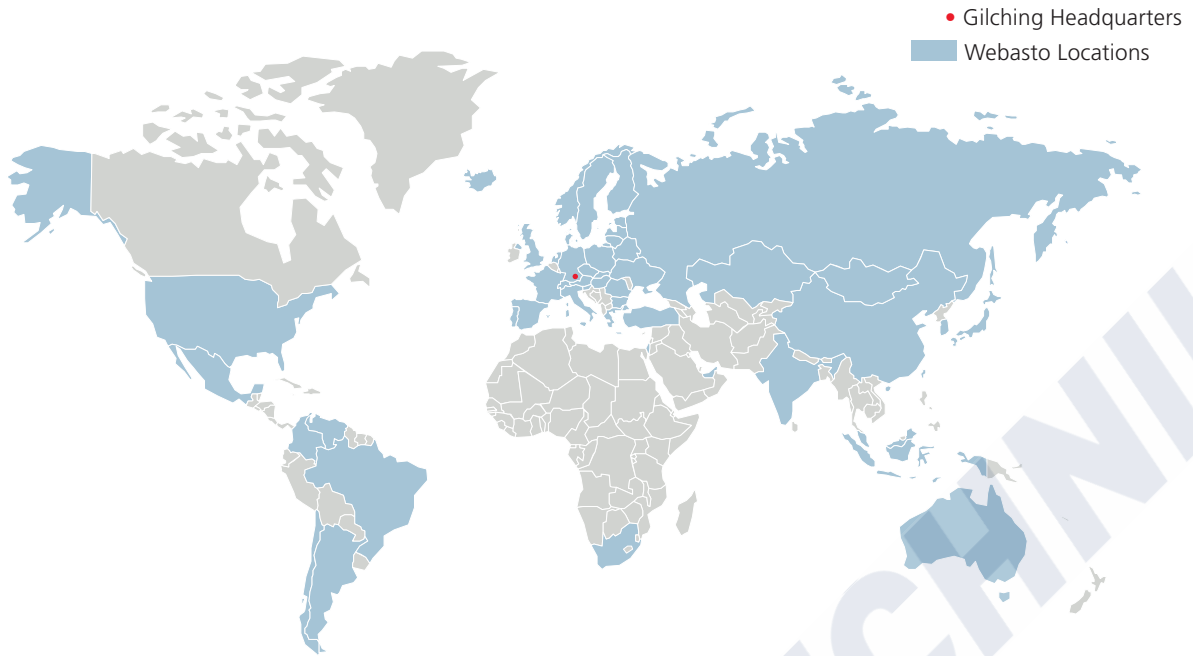
A	Ampere
V	Volt
W	Watt
kW	Kilowatt
rpm	Revolutions per minute (rotations per minute)
dB	decibel
U <sub>AC</sub>	AC voltage
V <sub>DC</sub>	DC voltage

### (Composite) Materials

Al	Aluminium
Cu	Copper
Gf	Glass fiber
Ms	Brass
St	Steel

### Used symbols

 Truck	 Rail	 Off-Highway
 Light-duty Vehicles	 Defense	 Special Vehicles
 Bus		



Webasto has been setting technological standards for more than a century – in original equipment and in retrofitting. As one of the 100 largest automotive suppliers worldwide we produce roof and convertible roof systems as well as heating, cooling and ventilation systems. Our products provide a better driving experiences, more comfort, safety or efficiency enhancements for cars, commercial and special vehicles, recreational vehicles and boats. An outstanding production and dealer network guarantees high quality products, fittings and services worldwide.