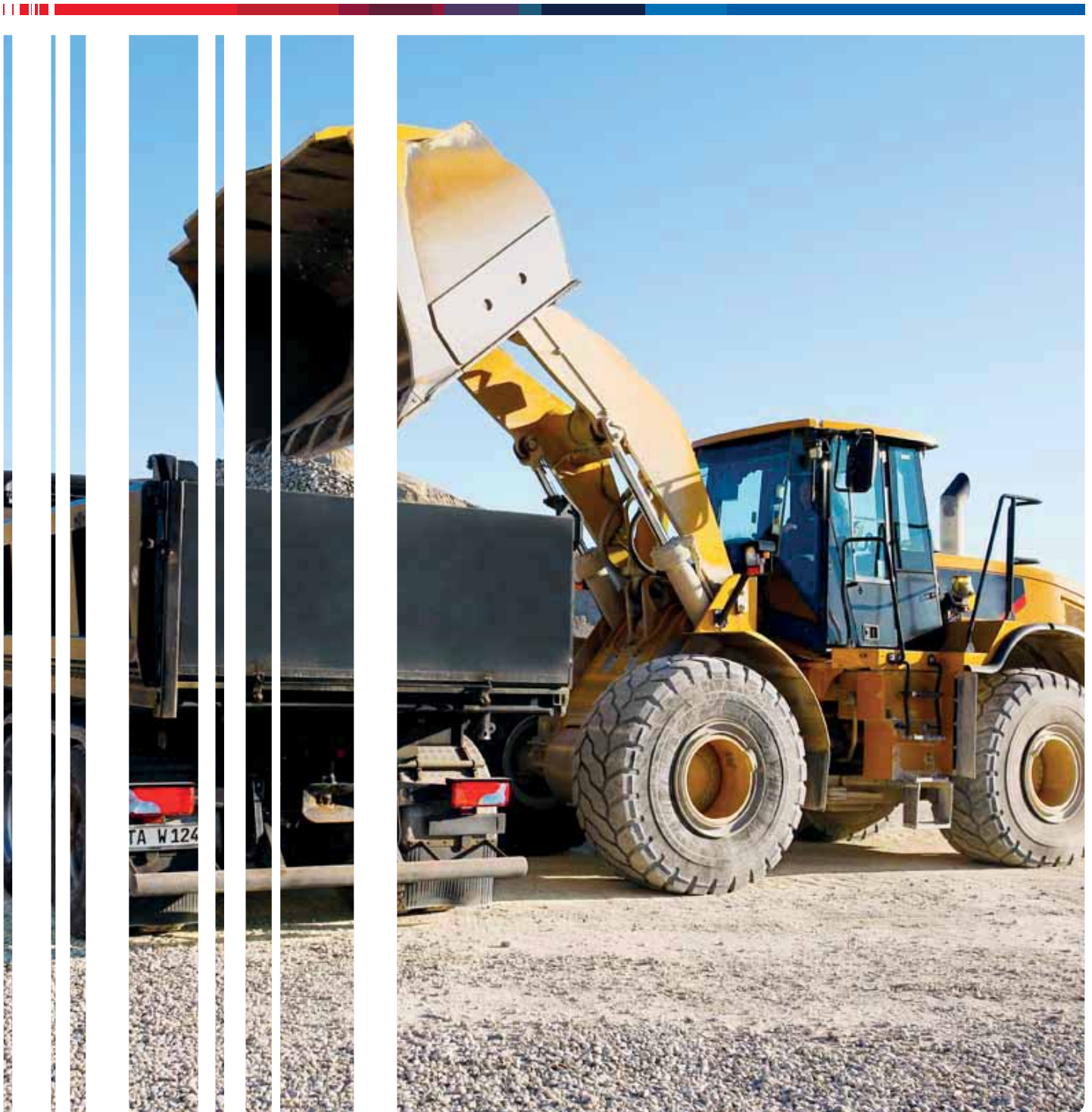


Heavy Duty Catalogue

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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Engineering service	6
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Heating systems

Air heaters 28



Water heaters 42



Accessories for heating systems 64



Air-conditioning systems

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Further information

Webasto subsidiaries and representatives	190
Abbreviations	193



Market Segments
Air Heaters
Water Heaters
Heater Accessories
Air-Conditioning Systems
Further Information

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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All specifications correspond to information available at the time of printing. Deviations in colour and shape of the figures, mistakes and typographical errors are reserved. All specifications for equipment and technical data are based on the criteria of the German market. Changes are reserved.

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Website

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.

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.

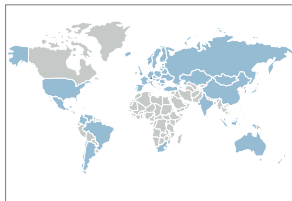
Advantages of the Webasto engineering service:

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

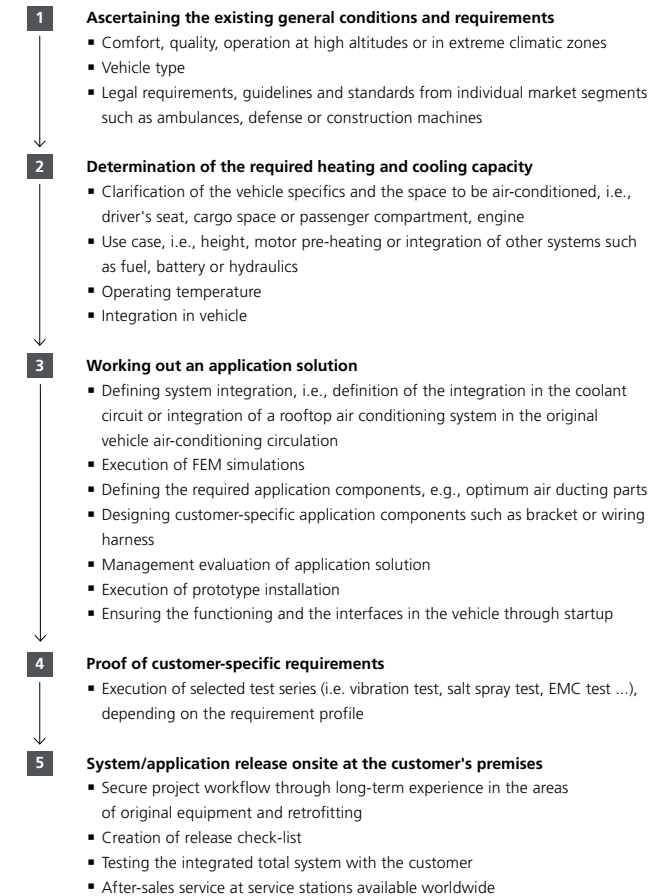


Worldwide service



Testing

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



Market segments



Truck
page 10



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
Air heaters		
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
Water heaters		
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
Air-conditioning systems		
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
Air heaters		
Air Top 2000 ST	2.0	32
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
Water heaters		
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
Air-conditioning systems		
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 city buses to modular 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
Air heaters		
Air Top Evo 3900	3.9	34
Air Top Evo 5500	5.5	36
Air Top System	to 22.0	38
Water heaters		
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 5 230/300/350/400	23.0 - 40.0	60
Air-conditioning systems		
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

Application examples



Heaters



Air-conditioning systems



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.

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

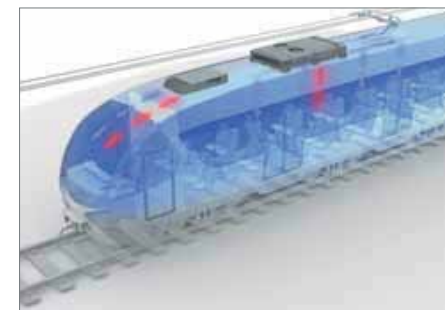
	Heating capacity/ cooling capacity (kW)	Page
Water heaters		
Thermo 230/300/350	23.0 - 35.0	58
Thermo S 230/300/350/400	23.0 - 40.0	60
Air-conditioning systems		
Compact Cooler Rail 4E/2H	4.0	180
Compact Cooler Rail 7E/2H	6.5	180
Compact Cooler Rail 7H	6.5	181
RailCool R 5	5.5	182
RailCool S 236	36.0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

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

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.

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
Air heaters		
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
Water heaters		
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
Air-conditioning systems		
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



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 retrofittable 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
Air heaters		
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
Water heaters		
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
Air-conditioning systems		
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



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.

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
Air heaters		
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
Water heaters		
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
Air-conditioning systems		
Compact Cooler 4E	5.0	176
Compact Cooler 5	5.0	176
Compact Cooler 8	8.5	176
E-Unit	Customer-specific	176
Parking Coolers	Various	184

Application examples



Heaters



Air-conditioning systems



Product portfolio



Heating capacity/cooling capacity (kW)	Truck	Light-duty Vehicles	Bus	Rail	Defense	Off-Highway	Special Vehicles
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HEATING SYSTEMS	Heating cap.							
Air heaters								
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	■				■		■
Water heaters								
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	■	■					■

PAGE 132

AIR-CONDITIONING SYSTEMS	Cooling cap.							
Cool Top Vario 10 E	1.0	■						
Compact Cooler 4 E	3.5			■			■	■
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			■				



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

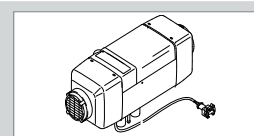


Application of an air heating system

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.

PAGE 64

Heater



Select the suitable air heater from our extensive product program.



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

PAGE 32



Air Top Evo 3900

PAGE 34



Air Top Evo 5500

PAGE 36



Air Top System

PAGE 38



HL90

PAGE 40



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)	E1 00 0216	
	ECE R10 (EMC)	--	
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
Standard delivery scope		
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

Crane cabins delivery scope		
SOD Air Top 2000 ST Diesel 24 V Basic cabin kit	Including assembly kit and rotary switch. 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

Installation kit – contains standard mounting material for installation		
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

System accessories – can be used with the heater, please order separately		
Heater control rotary switch		828198
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	
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
Standard delivery scope ■ Extended function options through Multi Comfort MC 04/05 heater control ■ Customised application adjustment e.g., connection of an external temperature sensor (rpm = 0)		
SOD Air Top Evo 3900 Petrol 12 V Basic	Heater, dosing pump, product documentation	90192008
SOD Air Top Evo 3900 Diesel 12 V Basic		90191988
SOD Air Top Evo 3900 Diesel 24 V Basic		90191998

Automatic delivery scope ■ Integrated Autoboot function ■ Automatic heating capacity control for high altitudes up to 2,200 m above sea level ■ Extended function options through Multi Comfort MC 04/05 heater control ■ Customised application adjustment e.g., connection of an external temperature sensor (rpm = 0) ■ Diesel SOD can be extended to Air Top System (see page 38)		
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		90192648
SOD Air Top Evo 3900 Diesel 24 V Automatic		9019265A

Installation kit – contains standard mounting material for installation		
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

System accessories – can be used with the heater, please order separately	
Heater control rotary switch	828198
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	13132108

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	
Variants		Petrol	Diesel
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
Standard delivery scope ■ Extended function options through Multi Comfort MC 04/05 heater control ■ Customised application adjustment e.g., connection of an external temperature sensor (rpm = 0)		
SOD Air Top Evo 5500 Petrol 12 V Basic	Heater, dosing pump, product documentation	90192068
SOD Air Top Evo 5500 Diesel 12 V Basic		90192048
SOD Air Top Evo 5500 Diesel 24 V Basic		90192058

Automatic delivery scope ■ Integrated autoboot function ■ Automatic heating capacity control for high altitudes up to 2,200 m above sea level ■ Extended function options through Multi Comfort MC 04/05 heater control ■ Customised application adaptation, e.g. connection of an external temperature sensor (RPM = 0) ■ Diesel SOD can be extended to Air Top system (see page 38)		
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

Ambulance delivery scope ■ Heater is adapted to meet the requirements of EN 1789 (ambulances) ■ Diverse functions integrated automatically (Autoboot, heat capacity regulation at altitudes of up to 2,200 m) ■ No further function extension possible through heater control Multi Comfort MC 04/05		
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

Installation kit – contains standard mounting material for installation		
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
System accessories – can be used with the heater, please order separately	
Heater control rotary switch	828198
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

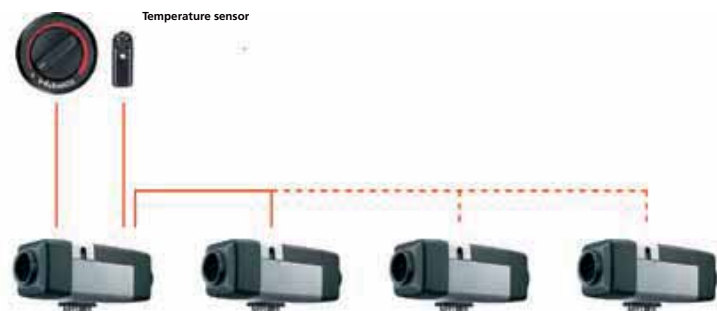


Modular and expandable

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

Heater control



Master	Slave	Slave	Slave	Heating capacity (kW)
Air Top Evo 3900	Air Top Evo 3900	-	-	7.8
Air Top Evo 5500	Air Top Evo 5500	-	-	11.0
Air Top Evo 5500	Air Top Evo 5500	Air Top Evo 5500	-	16.5
Air Top Evo 5500	Air Top Evo 5500	Air Top Evo 5500	Air Top Evo 5500	22.0

Name	Delivery scope contains	Order number
Master delivery scope ■ Integrated Autoboot function ■ Automatic heating capacity control for high altitudes up to 2,200 m above sea level ■ Extended function options through Multi Comfort MC 04/05 heater control		
SOD Air Top Evo 3900 Diesel 12 V Automatic	Heater, dosing pump, wiring harness, air intake and exhaust system, installation material, product documentation	9019264B
SOD Air Top Evo 3900 Diesel 24 V Automatic		9019265A
SOD Air Top Evo 5500 Diesel 12 V Automatic		9019267B
SOD Air Top Evo 5500 Diesel 24 V Automatic		9019268A

Slave delivery scope ■ 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

System accessories – can be used with the heater, please order separately		
Heater control rotary switch		82819B
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.

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
Standard delivery scope		
SOD HL 90 Diesel 24 V Standard	Heater, wiring harness, dosing pump, covers, air intake and exhaust system	38622C
System accessories – can be used with the heater, please order separately		
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

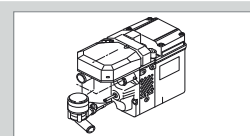


Application of a water heating system

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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Heater



Select a suitable water heater from our extensive product programme.



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)	E1 00 0258			
	ECE R10 (EMC)	E1 03 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			
U4847 circulating pump					
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
Standard delivery scope		
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

Standard installation kit		
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

System accessories – can be used with the heater, please order separately		
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 CO₂-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	
Variants		Petrol	Diesel
ECE approval number	ECE R122 (Heating)	-	
	ECE R10 (EMC)	-	
Heating capacity (kW)	Partial load/full load	2.5/5.2	
Fuel consumption (l/h)	Partial load/full load	0.45/0.93	0.36/0.73
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	
U4847 circulating pump			
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
Delivery scope		
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.

System accessories – can be used with the heater, please order separately		
Heater control digital timer 1533 12 V	Kits containing heater control 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

Accessories	
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



Name	Delivery scope contains	Order number
Standard delivery scope		
SOD Thermo Pro 50 Eco 24V Standard	Heater, DP42 dosing pump, circulating pump, product documentation	9026553A

Standard installation kit		
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.

System accessories – can be used with the heater, please order separately		
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.

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) (with U4847 econ)	Partial load/full load	30 - 48
Fuel		Diesel EN 590, Arctic Diesel, PME EN 14214 up to 30%, Heating Oil (EL), F34, F54, F63
Operating temperature range (°C)		-40 to +80
Dimensions L x W x H (mm)		218 x 91 x 147
Weight (kg)		2.1
U4847 circulating pump		
Volume flow (l/h)		500
Nominal power consumption (W)		3.6 - 13.9
Dimensions L x W x H (mm)		96 x 75 x 80
Weight (kg)		0.28

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 CO₂ 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)	E1 00 0217	
	ECE R10 (EMC)	E1 03 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 U4846)	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	
U4846 circulating pump			
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
Standard delivery scope		
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 Diesel 12 V Standard		9007622A
SOD Thermo 90 ST Diesel 24 V Standard		9007623A

System accessories – can be used with the heater, please order separately		
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)	E1 00 0320
	ECE R10 (EMC)	E1 03 6196
Heating capacity (kW)	Partial load - Full load/Boost	1.8 - 7.6/9.1
Fuel consumption (l/h)	Partial load - Full load/Boost	0.2 - 0.9/1.1
Nominal voltage (V)		12/24
Nominal power consumption (W) (with circulating pump) (without circulating pump)	Partial load - Full load	37 - 83
	Boost	90
	Boost	61
Fuel		Diesel EN 590, Arctic Diesel, up to 100% PME 14214 heating oil (EL) F34, F58, F63
Operating temperature range (°C)		-40 to +85
Storage temperature (°C)		-40 to +120
Dimensions L x W x H (mm)		352 x 131 x 224
Weight (kg)		4.8
U4840 circulating pump		
Nominal power consumption (W)		29
Volume flow (l/h)		700
Dimensions L x Ø (mm)		140 x 48 x 48
Weight (kg)		0.36



Name	Delivery scope contains	Order number
Delivery scope		
SOD Thermo Pro 90 Diesel 12 V Basic	Heater, DP42 metering pump, circulating pump, product documentation	9023075A
SOD Thermo Pro 90 Diesel 24 V Basic		9023076A

Installation kit		
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

Installationkit (including fuel line 3 mm for extended length >5 m)		
Standard Kit Thermo Pro 90, 12 V for dealers Long Line Fuel Kit	Harness including fuses, Fuel Lines with T-part, Exhaust System, Exhaust Silencer, Exhaust Silencer, Water Pipe, Holding Plate for Heater including several Mounting Material	9028639A
Standard Kit Thermo Pro 90, 24 V for dealers Long Line Fuel Kit		9028640A

System accessories – can be used with the heater, please order separately		
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		DBW 2010	DBW 2016
Variants		Diesel	Diesel
ECE approval number	ECE R122 (Heating)	E1 00 0006	E1 00 00001
	ECE R10 (EMC)	E1 04 1087	E1 04 1087
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)	Control range	60	90
(with U4810 circulating pump)		85	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	
U4846 circulating pump			
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	
Aquavent 5000 (U4814) circulating pump			
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
Standard delivery scope		
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

System accessories – can be used with the heater, please order separately		
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

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

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 (Eisenbahnbundesamt) 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		
Aquavent 5000 (U4814) circulating pump				
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		
Aquavent 5000S (U4854) circulating pump				
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		
Aquavent 6000SC (U4856) circulating pump				
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
Heater		
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

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 SC (U4856)	
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)	0226*00	0227*00	0228*00	0225*00
	ECE R10 (EMC)	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			
Aquavent 5000 (U4814)					
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			
Aquavent 5000 (U4854)					
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			
Aquavent 6000SC (U4856)					
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
Heater		
HT Thermo S 230.004 Standard	Heater without accessories	SPH11112786B
HT Thermo S 300.002 Standard		SPH11111233B
HT Thermo S 350.022 Standard		SPH11113228B
HT Thermo S 400.003 Standard		SPH11113263B

Standard delivery scope		
SOD HT Thermo S 230.004 Standard	Heater plus fuel filter, exhaust deflection	SPH11112787B
SOD HT Thermo S 300.002 Standard		SPH11111294B
SOD HT Thermo S 350.022 Standard		SPH11113095B
SOD HT Thermo S 400.003 Standard		SPH11113264B

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)	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

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:

	Heating system solution		Bulk Head Heater
Type	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, Aquaavent 5000 (U4846) circulating pump	77054898
Heating system solution	Delivery scope	Delivery scope contains	Order number
	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 Aquaavent 5000 (U4846) circulating pump	77057000A
Bulk Head heater Plug & Heat KM 23			
	Diesel 24 V	Complete system including heater control Aquaavent 5000 (U4814) circulating pump	3391780A

System accessories – can be used with the heater, please order separately

Thermostat	79000652
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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.

				Order number		Heater control					
Model	From model year	Heater model	Fuel	Delivery scope, heater	Installation kit						
						Rotary switch	Digital timer	Combi timer	T91	T100HTM	Thermo Call/ Thermo Call app*
Citroën											
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		–	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
Fiat											
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						
Ford											
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
Mercedes											
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
Nissan											
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
Opel											
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

				Order number		Heater control					
Model	From model year	Heater model	Fuel	Delivery scope, heater	Installation kit						
						Rotary switch	Digital timer	Combi timer	T91	T100HTM	Thermo Call/Thermo Call app
Opel											
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
Peugeot											
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

				Order number		Heater control					
Model	From model year	Heater model	Fuel	Delivery scope, heater	Installation kit						
						Rotary switch	Digital timer	Combi timer	T91	T100HTM	Thermo Call/Thermo Call app*
Renault											
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	13126232A + 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	1311194A + 70813B	1311194A + 70813B	7100350B
VW											
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.

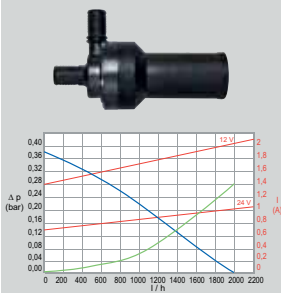
Accessories

Circulating pumps

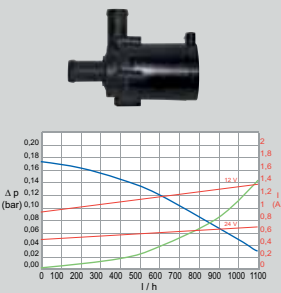
Product overview and technical data

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
U4840	12/24	29	700	134 x 53 x 90	20	0.4
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

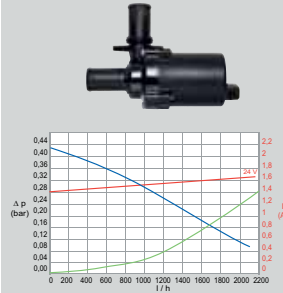
U4846



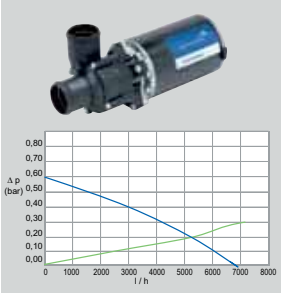
U4847



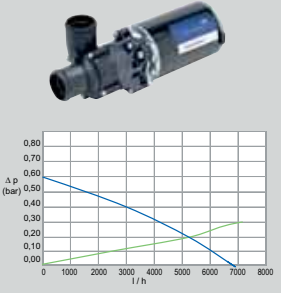
U4840



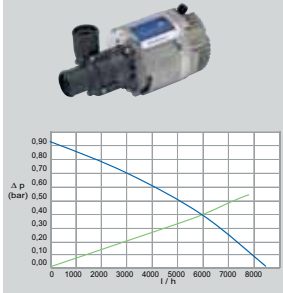
Aquavent 5000



Aquavent 5000 S



Aquavent 6000 SC



Volume flow with water at 20 °C

Flow resistance when pump is not running

Power consumption

Accessories

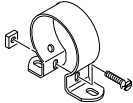
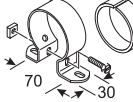
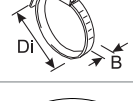
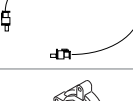
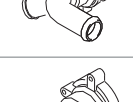
Circulating pumps



	Order number
U4847	
U4847 circulating pump 12 V 130° connection piece	90025148
U4847 circulating pump 24 V axial connection piece	98237A
U4840	
U4840 circulating pump 12 V	9021592A
U4840 circulating pump 24 V	9021593A
U4846	
U4846 circulating pump 12 V complete kit	35936A
U4846 circulating pump 24 V complete kit	35938A
Aquavent 5000 (U4814)	
Aquavent 5000 (U4814) circulating pump 12 V (AMP)	SPH431498
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	13151758
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	13112808
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
U4840 Kits with Adapter harners	
U4840 circulating pump, 12 V, U4810-458414;458422	9024184A
U4840 circulating pump, 24 V, U4810-458414;458422	9024185A
U4840 circulating pump, 24 V, U4810-467782	9024189A
U4840 circulating pump, 24 V, U4810-458414;458422	9024187A
U4840 circulating pump, 24 V, U4810-126660	9024188A

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						■	37269A
	For U4855/U4856 and Aquavent 6000 S/6000 SC						■	233641
	Hose clamp							
	Di = 60 - 80; B = 12 for U4814/U4854 and Aquavent 5000/5000 S						■	1310877A
	Di = 98 - 120; B = 14.3 for U4855/U4856 and Aquavent 6000 S/6000 SC						■	67373A
	Cable for Econ circulating pump U4847							
	L = 240 mm	■	■					9023389A
	L = 400 mm	■	■					1314285A
	L = 475 mm	■	■					9023388A
	L = 1,500 mm	■	■					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

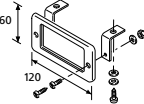
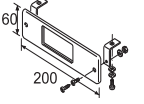
Accessories

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 ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Air Top Evo MC 04/05 heater controls										
	12/24 V-Version		■								1313212A
	– Can be used only in combination with Air Top Evo heaters										5 functions
	– Multi-mode operation for adapting to its customised heating capacity requirement		■								1313210B
     	Eco Power saving mode: Battery-saving and environment-friendly heating with economical 70 % of heating capacity										4 functions, no altitude mode
	Comfort heating: Standard heating at desired temperature										
	Plus mode for rapid heating: 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)										
	Ventilation: Delivers fresh air and supports quick, effective working of the air-conditioning system										
	Heater control digital timer 1531, air										
	12 V	■	■								88206A
	24 V	■	■								88205A
	– Three programmable activation times, 7 days										
	– Visible: L = 120 mm, H = 82 mm										
	Heater control rotary switch										
	Heater control rotary switch		■	■							82819B
	An additional adapter wiring harness for Air Top Evo heaters is required			■							1313908A
	– Dimensions: cutout: L = 74 mm, H = 55 mm										
	– Visible: L = 120 mm, H = 82 mm										
	Panel without ventilation switch										
	Panel without ventilation switch	■	■								82422B
	Panel with ventilation switch										
	Panel with ventilation switch		■	■							92240A
	Adapter wiring harness for ventilation is required for Air Top Evo 3900/5500		■								1313908A

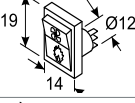
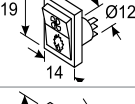
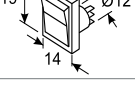
Accessories

Heater controls

		Air Top 2000 ST	Air Top Evo 3500/5500	Thermo Top C	HL 90	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Heater control digital timer 1531, water										
	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										
	Heater control electronic room thermostat										
	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										
	Heater control digital timer 1533										
	12 V, heating time up to 1 h, 3 different programmable activation times			■		■					1301122C
	Heater control switch with function indicator										
	12 V, 15 A front glass, green, 6.3 mm				■	■	■	■	■	■	109995
	24 V, 7.5 A front glass, green, 6.3 mm				■	■	■	■	■	■	109999
	Signboard										
	For 109995 and 109999		■	■	■	■	■	■	■	■	116389
	Installation frame										
	For combination timer, digital timer and electronic room thermostat		■	■		■	■	■	■	■	474630
	Installation frame										
	For combination timer, digital timer and electronic room thermostat		■	■		■	■	■	■	■	476404

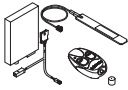
Accessories

Heater controls

		Air Top 2000 ST	Air Top Evo 3500/5500	Thermo Top C	HL 90	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Housing (built-in set)										
	For combination timer, digital timer and electronic room thermostat	■	■		■		■	■	■	■	475866
	Switch										
	Summer/winter changeover contact			■							84587A
	Switch										
	Fan/heater changeover contact	■									84586A
	Switch										
	Changeover contact without imprint	■	■	■	■	■	■	■	■	■	84142A

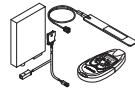
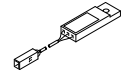
Accessories

Heater controls

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Pro 50 Eco	Thermo 90 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Telestart T 91 radio remote control 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
	T 91 transmitter With battery				■	■				1314636A
	Battery for T 91 transmitter				■	■				9014840A
	Battery compartment cover for T 91 transmitter				■	■				9024567A
	T 91 receiver				■	■				9013799A
	Adhesive window antenna For T 80/T 91/T 100 HTM				■	■				90136198
	Y-adapter wiring harness For T 91				■	■				67089A
	Cable set for ventilation option				■					9001558A

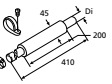
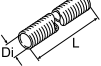
Accessories

Heater controls

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Pro 50 Eco	Thermo 90 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Telestart T 100 HTM radio remote control 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
	T 100 HTM transmitter With battery				■	■				1314638A
	Battery for T 100 HTM transmitter				■	■				9011356B
	Battery compartment cover for T 100 HTM transmitter				■	■				9016158A
	T 100 HTM receiver				■	■				90101238
	Adhesive window antenna For T 80/T 91/T 100 HTM				■	■				90136198
	T 100 HTM ESV adapter Adapter for receiver, sensor and digital timer				■	■				9010951A
	Temperature sensor for T 100 HTM				■	■				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
 APGA-A: Aluminium, paper, glass fabric with aluminium lamination PAK: Paper, aluminium, plastic – black, without logo KAK: Plastic, aluminium, plastic	Flexible tube										
	Di = 18; APGA-A L = 1,000 mm										19733C
	Di = 22; PAK (per m)	■									46611S
	Di = 25; PAK (per m)		■								91562A
	Di = 30; PAK (per m)			■				■			357901
	Di = 30.5; KAK (per m)			■				■			21446A
	Hose EN 73411-1+2										
	Di = 18; L = 2,000 mm, material: PER-EPDM				■	■	■				1314856A
	Intake silencer, mounting set										
	Di = 22 with mounting parts	■									1313514A
	Intake silencer										
	Di = 22; L = 800 PAK	■									83174A
	Di = 25; L = 650 PAK/PAKL with protective cap		■								90416D
	Di = 30; L = 1,160 PAK/PAKL			■			■				229318
	Intake silencer, mounting set										
			■								9025956A
	Protective cap										
	Di = 27 plastic	■									295168
	Di = 36 plastic		■								29517A
	Di = 39 plastic			■			■				29519A
	Elbow for combustion air										
	Di = 22; plastic	■									65000A
	Di = 25; plastic		■								91563A

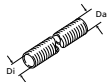
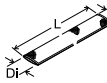
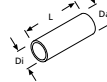
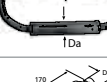
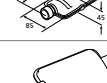
Accessories

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
	Hose clamp; corrosion resistant steel										
	Di = 20... 27; spanner opening 7, cross recess	■				■					1303080A
	Di = 28... 35; spanner opening 7, slot		■	■				■			9014771A
	Hose clamp; corrosion resistant steel										
	Di = 40... 47; spanner opening 8, cross recess	■	■	■	■	■	■	■	■	■	67370A
	Di = 48... 55; spanner opening 8, slot	■	■	■	■	■	■	■	■	■	67371A
	Di = 70 ... 90 Screw thread, steel	■	■	■	■	■	■	■	■	■	92659A
	Pipe clamp										
	Di = 25; stainless steel (bag of 10)	■				■	■				9023007A
	Di = 29; corrosion resistant steel		■								362891
	Di = 33; stainless steel			■				■			499021
	Inox flexible tube										
	Di = 30, Da = 34, per meter							■			141488

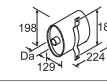
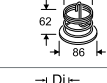
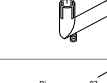
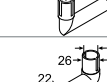
Accessories

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 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Flexible exhaust pipe (inox), 2-layer										
	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
	Heat protection hose										
	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
	Flexible heat protection tube										
	Di = 28, Da = 32 (per m) aluminium/fibreglass	■			■	■					21543A
	Flexible heat protection tube										
	Di = 43, Da = 45 (per m) aluminium/fibreglass		■	■				■	■		204638
	Flexible heat protection tube										
	Di = 28, Da = 38, L = 324 fibreglass	■			■	■	■				64568A
	Exhaust silencer										
	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										
	Exhaust silencer										
	Da = 22; corrosion resistant steel, powder-coated	■			■	■	■				20844E
	Da = 22; stainless steel	■			■	■	■				86450C
	Da = 24; corrosion resistant steel, powder-coated		■								90378C
	Exhaust silencer										
	Da = 38; corrosion resistant steel			■				■	■		19562E
	Exhaust silencer										
	Da = 22; stainless steel, M6 fixing thread	■			■	■	■				9001800D
	Insulation for exhaust silencer										
	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 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Exhaust silencer										
	Da = 38 Stainless steel with bracket			■				■	■		9012440B
	Exhaust deflection										
	Stainless steel									■	84970A
	Exhaust elbow										
	Di = 71; Da = 67; 90°									■	465380
	Exhaust elbow										
	Di = 24 stainless steel, with condensed water drain		■								91564B
	Exhaust elbow										
	Di = 24 stainless steel, without condensed water drain		■								92643A
	Exhaust elbow										
	Di = 22 aluminium	■			■	■	■				28472C
	Connecting pipe										
	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 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Exhaust reducer sleeve										
	Di = 22, Da = 24; L = 40; stainless steel	■			■	■	■				92641A
	Exhaust elbow										
	Di = 38, Da = 38; 180°; stainless steel with condensed water drain			■				■	■		370169
	Condensed water drain										
	For 91564A and 92164A Bag For installation in flexible tube Stainless steel	■	■	■	■	■	■	■	■		92621A
	Pipe clamp										
	Di = 39 ... 42; corrosion resistant steel			■				■	■		90022558
	Di = 24 ... 27; corrosion resistant steel	■			■	■	■				1312409A
	Di = 30 ... Da = 33; corrosion resistant steel		■					■			90118448
	Di = 30 ... Da = 33; stainless steel		■					■			9024062A

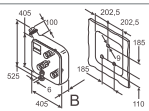
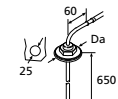
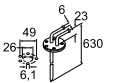
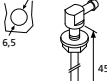
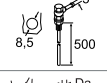
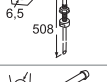
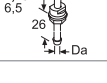
Accessories

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 5/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Pipe clamp										
	Di = 24 ... 26; stainless steel	■			■	■	■				70910C
	Di = 26 ... 28; stainless steel		■								91383B
	Pipe clamp										
	Di = 25; stainless steel (10 x)	■			■	■	■				9023007A
	Di = 28; galvanised steel		■								91384A
	Di = 42; stainless steel			■				■	■		126830
	Insulation tie										
	Di = 42; stainless steel, for fixing screw M6							■	■		90433A
	Insulation tie										
	B = 60; L = 1 m; fibreglass	■	■	■	■	■	■	■	■	■	9015393A
	B = 60; L = 50 m; fibreglass	■	■	■	■	■	■	■	■	■	9015392A
	Stainless steel protective cap, edge protection										
	Di = 26.3	■			■	■	■				24048A
	Di = 28.3		■								90411A
	Di = 42.3			■				■	■		24046A
	Spacer for exhaust pipe										
	Da = 47.6; B = 20.6	■			■	■	■				1316131A

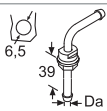
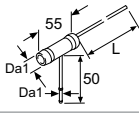
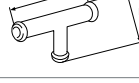
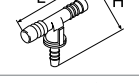
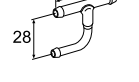
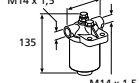
Accessories

Fuel system

		Air Top 2000 ST	Air Top Evo 3900/1500	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
	Fuel tank										
	12 litre; B = 100; plastic	■	■	■	■	■	■	■			9024224A
	Installation kit for 12-litre tank										9025761A
	24 litre; B = 200; plastic	■	■	■	■	■	■	■			9001307C
	Use only as extra tank for heaters with single wire system. Complies with legal provisions.										
	Fuel standpipe (bag)										
	Da = 5.5; only for installation in metal fuel tank	■	■	■	■	■	■	■			35320A
	Tank extracting device with return pipe										
	Da = 6 With sealing, only for installation in metal fuel tank							■	■		394157
	Fuel standpipe										
	Da = 5; M6 thread For plastic fuel tank; for tank armature mounting; also suitable for installation in metal fuel tank, bag of clamps	■	■	■	■	■	■	■			1300823C
	Da = 5; M8 thread Installation only in metal fuel tank	■	■	■	■	■	■	■			98605C
	Da = 5; M6 thread For plastic fuel tank, for tank armature mounting; also metal	■	■	■	■	■	■	■			1300494D
	Da = 5; short connection piece For plastic tanks (with longitudinal expansion), For tank armature mounting	■	■	■	■	■	■	■			1301553A

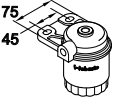
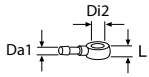
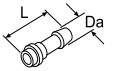
Accessories

Fuel system

		Air Top 2000 ST	Air Top Evo 3900/1500	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
	Tank extracting device										
	Da = 5; long connection piece For plastic tanks (with longitudinal expansion), for tank armature mounting. Bag of installation parts.	■	■	■	■	■	■	■			9008021A
	Tank extracting device (for installation in tank ventilation duct)										
	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
	Fuel extractor T-piece, copper										
	6 x 5 x 6; L = 50; H = 26	■	■	■	■	■	■	■			211532
	8 x 5 x 8; L = 50; H = 28	■	■	■	■	■	■	■			211540
	Fuel extractor T-piece, corrosion resistant metal										
	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
	Fuel extractor T-piece, corrosion resistant metal										
	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
	Fuel extractor T-piece, corrosion resistant metal with parallel outflow										
	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
	Fuel filter										
	With removable filter							■	■		140708
	Connection parts (bag)							■	■		219495

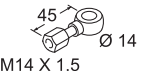
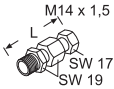
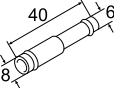
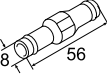
Accessories

Fuel system

		Air Top 2000 ST	Air Top Evo 3900/15500	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
	Full fuel filter without heat adapter For diesel, biodiesel and heating oil A = 1,461 cm² n = 3.5 µm							■	■		9010929A
	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
	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							■	■		289574 289566 277312 85785A
	Sealing cone Da = 6 For 140708, 88028C							■	■		219495
	Hose sealing cone Da = 5; L = 30 Da = 6; L = 30 Da = 8; L = 32							■	■		247030 247049 247057
	Union nut M 14 x 1.5/SW 19							■	■		1310760A

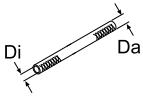
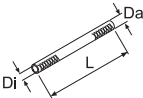
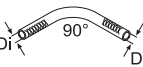
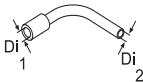
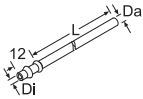
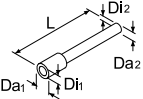
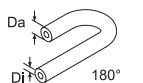
Accessories

Fuel system

		Air Top 2000 ST	Air Top Evo 3900/15500	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
	Ring connection piece For use with maintenance ball cock							■	■		89615A
	Non-return valve M14 x 1.5; SW 17/19; L = 52 0.2 bar For diesel and RME							■	■		65063C
	Fuel filter Da = 5; plastic, transparent	■	■	■	■	■	■	■			487171
	Reducer 8 x 6 brass							■	■		19593A
	Connecting pipe 8 x 8 plastic PME-resistant							■	■		90013348
	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

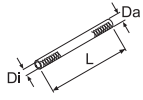
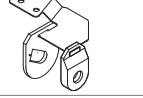
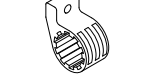
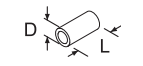
Accessories

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 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Fuel hose										
	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
	PME-resistant fuel hose										
	Di = 4.5; Da = 10.5; (per m)	■	■	■	■	■	■	■			857708
	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
	Fuel hose										
	Di1 = 7.5; Di2 = 4.5;	■	■	■	■	■	■	■			67365A
	Di1 = 4.5; Di2 = 3.5 PME-resistant	■	■	■	■	■	■	■			652018
	Standpipe										
	Di = 3.0; Da = 6.0; L = 322 plastic; Suitable for fuel hose 67365A	■	■	■	■	■	■	■			67366A
	PME-resistant fuel hose										
	Di1 = 4.5; Di2 = 3.5; L = 50	■	■	■	■	■	■	■			651908
	PME-resistant moulded hose										
	Di = 4.5; Da = 10.5	■	■	■	■	■	■	■			104709

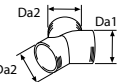
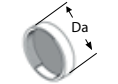
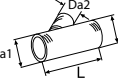
Accessories

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
	Fuel hose kit, PME-resistant										
	Di = 4.5; Da = 10; L = 50 5 x hose, 10 x hose clamp	■	■	■	■	■	■	■			72116A
	Bag dosing pump mounting suspension										
	Only for dosing pump 2/and DP30 For mounting on original vehicle stud bolt (Mercedes)	■	■	■	■	■	■	■			92296A
	Dosing pump mounting										
	Bag of 3. Full rubber, very soft suspension. Observe installation position as shown.	■	■	■	■	■	■	■			9023386A
	Supporting sleeve (to reinforce plastic lines)										
	D = 6 mm; L = 15	■	■	■	■	■	■	■			65142A
	D = 7 mm; L = 36	■	■	■	■	■	■	■			675848
	D = 8 mm; L = 15	■	■	■	■	■	■	■			9004951A
	Dosing pump silencer mini jacket										
	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
	Fuel line kit, corrosion resistant metal L = 5000 mm										
	With screw fittings, hoses and clamps, EN ISO 7840	■	■	■	■	■	■	■			669588
	Fuel connection hose										
	Di = 5 mm; L = 50 EN ISO 7840	■	■	■	■	■	■	■			64891A
	Fuel line of stainless steel										
	Di = 1.5; Da = 5; L = 5,000 mm EN ISO 7840	■	■	■	■	■	■	■			64892A

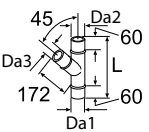
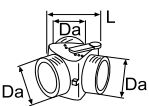
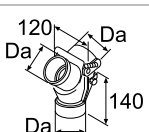
Accessories

Heating air system

Distributor		Air Top 2000 ST			Order number
		Air Top Evo 3900/5500	HL 90		
	Y-piece				
	Da = 55; plastic, black	■	■	■	429627
	Da = 80; plastic, black		■	■	100548
	Y-piece				
	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
	90° T-piece				
	Da = 60; L = 110; plastic, black	■	■	■	9009266C
	Da = 90; L = 110; plastic, black		■	■	9009265C
	90° T-piece with thread				
	Da = 60; plastic, black	■	■	■	90092688
	End cap				
	Da = 60; plastic, black	■	■	■	9009319D
	Da = 90; plastic, black		■	■	9009271D
	45° branch piece				
	Da1 = 60; Da2 = 60; L = 145; plastic, black	■	■	■	90092648
	Da1 = 90; Da2 = 60; L = 146; plastic, black		■	■	90092638

Accessories

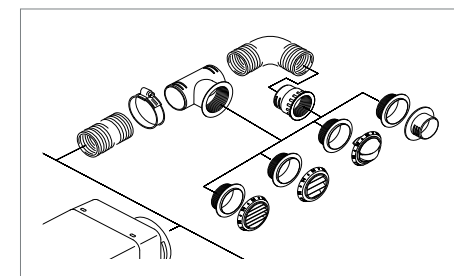
Heating air system

		Air Top 2000 ST			Order number
		Air Top Evo 3900/5500	HL 90		
	Branch piece				
	Da1 = 80; Da2 = 80; Da 3 = 80; L = 370; corrosion resistant steel		■	■	252786
	Distributor with bowden controlled butterfly valve				
	Da = 55; L = 95; plastic, black	■	■	■	101374
	Da = 80; L = 124; plastic, black		■	■	100567
	Flap valve				
	Da = 100; plastic		■		252514

Webasto hot air distribution (HADS):

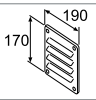
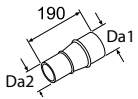
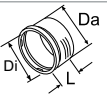
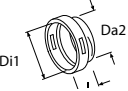
- High temperature resistance of -40°C to +140°C
- Fibreglass-reinforced plastic PA 6 GF30
- Very easy to install, no tools or bolts required
- Numerous combination options, suitable for all fields of application

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



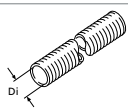
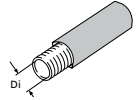
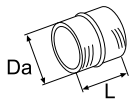
Accessories

Heating air system

		Air Top 2000 ST	Air Top Evo 3900/5900	HL 90	Order number
	Air supply grid				
	H = 170; L = 190; aluminium	■	■	■	128228
	Grid for intake and outlet openings of heaters				
	Di = 60; plastic, black	■			67492A
	Di = 90; plastic, black		■		89141A
	Protective grid for the intake side of heaters				
	Di = 60; rubber	■			84937A
	Air grid (protection against permeation)				
	Di1 = 80; Da2 = 112; chrome-plated steel			■	252441
	Di1 = 100; Da2 = 135; chrome-plated steel			■	252468
	Reducer for air hose				
	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
	Reducer				
	Da1 = 80; Da2 = 60; corrosion resistant steel			■	252565
	Connection for intake through tube				
	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
	Adapter (on heater)				
	Di1 = 60; Da2 = 75; L = 40; plastic, black	■			82378A
	Di1 = 90; Da2 = 80; L = 40; plastic, black		■		891118

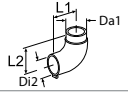
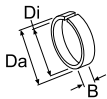
Accessories

Heating air system

		Air Top 2000 ST	Air Top Evo 3900/5900	HL 90	Order number
	Flexible tube				
	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)	■	■	■	13118918
	Di = 60; APK, black, logo (25 m roll)		■	■	13118928
	Di = 80; APK, black, logo (25 m roll)		■	■	13118938
	Di = 90; APK, black, logo (25 m roll)		■	■	13118948
	Di = 60; PAHK (per m)	■	■	■	858668
	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)	■	■	■	13118968
	Di = 60; PAKP, grey, logo (25 m roll)		■	■	13118988
	Di = 80; PAKP, grey, logo (25 m roll)		■	■	13119008
	Di = 90; PAKP, grey, logo (25 m roll)		■	■	13119028
	Di = 100; PAK, black (per m)			■	398527
	Di = 55; AA (per m)	■	■	■	428035
	Di = 80; AA (per m)		■	■	254517
	Paper – high tensile aluminium – plastic				
	Insulated hoses				
	Di = 90; PAK, L = 12 m roll With 10 mm "Armaflex" EPDM insulation		■	■	9021082C
	Double connection piece (tube connection)				
	Da = 60; L = 50; plastic, black	■	■	■	9009258C
	Da = 80; L = 75; plastic, black		■	■	495646
	Da = 90; L = 50; plastic, black		■	■	9009259C

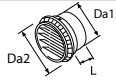
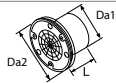
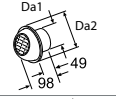
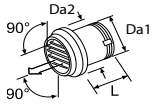
Accessories

Heating air system

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Order number
	Reducer of adapter inside tube				
	Di = 90; Da = 80; plastic, black	■	■		9009270B
	Di = 90; Da = 60; plastic, black	■	■		9011011C
	90° elbow				
	Da = 90; plastic, black	■	■		9009260C
	90° bend				
	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
	Wall fitting				
	Da = 60; plastic, black	■	■	■	9009249C
	Da = 90; plastic, black	■	■	■	9009250C
	Adapter ring				
	Di = 55; Da = 60; B = 17; plastic, black	■	■	■	92971A
	Di = 70; Da = 80; B = 17; plastic, black; for 429570 and 92966A	■	■	■	366153
	Closable air outlet; bag containing a wall fitting				
	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
	90° air outlet; bag containing a wall fitting				
	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

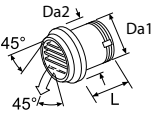
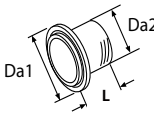
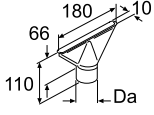
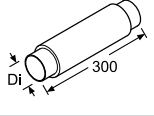
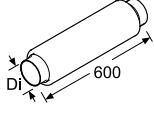
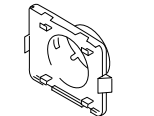
Accessories

Heating air system

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Order number
	45° air outlet; bag containing a wall fitting				
	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
	Air outlet				
	Da1 = 90; Da2 = 120; L = 65; 45°; plastic, black, rotatable	■	■	■	91569C
	Air outlet, rotatable				
	Da1 = 60; Da2 = 92; L = 65 also for heating air inlet; plastic, black	■	■	■	87389A
	Union nut for air outlet				
	Da = 60; L = 30; plastic, black	■	■	■	398551
	Da = 90; L = 30; plastic, black	■	■	■	264091
	Closable air outlet				
	Da1 = 55; Da2 = 100; L = 65; plastic, black	■	■	■	1311639A
	Da1 = 70; Da2 = 100; L = 65; plastic, black – use only for bypass!	■	■	■	92966A
	Air outlet (insertion grid)				
	Da1 = 55; Da2 = 87; L = 65; 90°; plastic, black	■	■	■	101625
	Da1 = 80; Da2 = 110; L = 65; 90°; plastic, black	■	■	■	107976

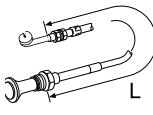
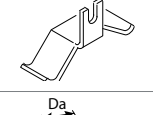
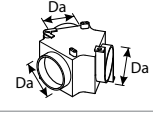
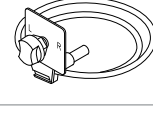
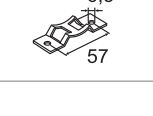
Accessories

Heating air system

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Order number
	Air outlet, rotatable				
	Da1 = 55; Da2 = 87; L = 65; 45°; plastic, black	■	■		107836
	Da1 = 80; Da2 = 110; L = 65; 45°; plastic, black		■	■	107984
	Wall mounting				
	Da1 = 87; Da2 = 55; L = 72.5; plastic, black	■	■		492884
	Da1 = 110; Da2 = 80; L = 72.5; plastic, black		■	■	495425
	Defroster vent				
	Da = 55; corrosion resistant steel	■	■	■	492299
	Intake silencer for heating air inlet		■		1313512A
	Di = 80; L = 300 Plastic – aluminium – plastic				
	Heat silencer for heating air inlet		■		67789A
	Di = 90; L = 600 Aluminium – plastic				
	Heating air inlet and outlet D 60				
	Transfer piece from heater to D 60; plastic, black	■			29848F

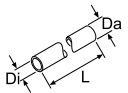
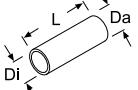
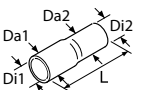
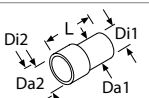
Accessories

Heating air system

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Order number
	Bowden cable				
	L = 850 mm	■	■		107812
	L = 1,500 mm for 252514, 101374, 100567		■	■	108932
	Clamp; corrosion resistant steel				
	for 107812, 108932	■	■	■	109006
	Distributor with butterfly valve				
	Da = 60; plastic, black	■	■		9009642A
	Da = 90; plastic, black		■		9009641A
	Control device for distributor with butterfly valve				
	Bowden cable, 2 m long for 9009641A (90 mm), 9009642A (60 mm)	■	■	■	9008255A
	Console; corrosion resistant steel				
	Of 107812, 108932	■	■	■	1310915A

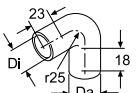
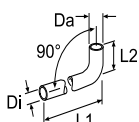
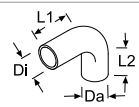
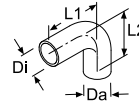
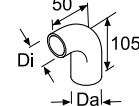
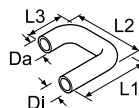
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Hose							
	Di = 15, Da = 22; L = 2,400	■	■	■	■	■	■	406074
	Di = 18, Da = 27; L = 2,000	■	■	■	■	■	■	369136
	Di = 20, Da = 27; L = 380	■	■	■	■	■	■	984148
	Di = 38, Da = 50; L = 82						■	19621A
	Hose; silicone							
	Di = 38, Da = 47; L = 82						■	89242A
	Di = 38, Da = 47; L = 110						■	65082A
	Reducer							
	Di1 = 20; Di2 = 18; Da1 = 27; Da2 = 25 L = 60	■	■	■	■	■	■	647888
	Reducer; silicone							
	Di1 = 28; Di2 = 38; Da1 = 37; Da2 = 47; L = 100						■	90916A

Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	90° moulded hose							
	Di = 18, Da = 25	■	■	■	■	■	■	431397
	Hose with 90° bend							
	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	■	■	■	■	■	■	90045708
	Di = 20, Da = 27; L1 = 130, L2 = 56.5	■	■	■	■	■	■	65696C
	90° moulded hose; silicone							
	Di = 38; Da = 47; L1 = 70; L2 = 105						■	91916A
	Di = 38; Da = 47; L1 = 80; L2 = 90						■	87817A
	90° moulded hose; silicone							
	Di = 38; Da = 47; L1 = 70; L2 = 105						■	91916A
	Di = 38; Da = 47; L1 = 80; L2 = 90						■	87817A
	90° moulded hose; silicone							
	Di = 15; Da = 25	■	■	■	■	■	■	672258
	Moulded hose 2 x 90°							
	Di = 20, Da = 27 L1 = 190; L2 = 120; L3 = 70	■	■	■	■	■	■	656978

Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S ; 5T	DBW 2010 ; 2016	Thermo 230 ; 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° Di = 20; Da = 27; L1 = 59; L2 = 54	■	■	■	■	■	■	64999A
	180° moulded hose							
	180°; Di = 20; Da = 27	■	■	■	■	■	■	90022928
	180° moulded hose							
	Di = 20; Da = 27	■	■	■	■	■	■	9007778A

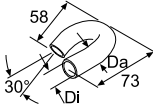
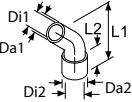
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S ; 5T	DBW 2010 ; 2016	Thermo 230 ; 300 ; 350	Order number
	180° moulded hose							
	Di = 18, Da = 25; L1 = 18, L2 = 18; r = 25 Di = 20; Da = 27; L1 = 88; L2 = 64; r = 23,5	■	■	■	■	■	■	403474 29938A
	Hose with 180° bend							
	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	■	■	■	■	■	■	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	■	■	■	■	■	■	90038108 90034008 656978
	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
	Moulded hose							
	Di = 18; Da = 25; r = 30; L1 = 95; L2 = 25; L3 = 20	■	■	■	■	■	■	84958A

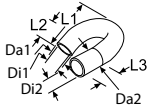
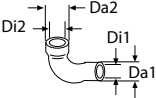
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Di = 18; Da = 25	■	■	■	■			431400
	Moulded hose with reducer Di1 = 18; Da1 = 25; Di2 = 15; Da2 = 22; L1 = 62; L2 = 31.5	■	■	■	■	■		65581A

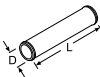
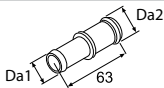
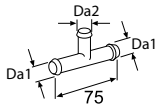
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 S; 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Di1 = 20; Da1 = 28; Di2 = 20; Da2 = 28; r = 70; L1 = 110; L2 = 60; L3 = 65; 180°	■	■	■	■	■		67058A
	Di1 = 15; Da1 = 22; Di2 = 18; Da2 = 25	■	■	■	■	■		403482

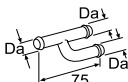
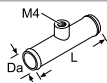
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Connecting pipe; brass							
	Da = 15; L = 75;	■	■	■	■			131650
	Connecting pipe; plastic, black							
	Da1 = 17; Da2 = 20	■	■	■	■			647388
	Da1 = 18; Da2 = 22	■	■	■	■			66932A
	Da1 = 20; Da2 = 22	■	■	■	■			19867B
	Aluminium	■	■	■	■			67822B
	T-piece							
	Da1 = 15; Da2 = 18; corrosion resistant steel	■	■	■	■			138207
	Da1 = 18; Da2 = 15; corrosion resistant steel	■	■	■	■			138215
	Da1 = 18; Da2 = 18; plastic, black	■	■	■	■			1315657B
	Da1 = 20; Da2 = 10; corrosion resistant steel	■	■	■	■			9006023A
	Da1 = 20; Da2 = 15; corrosion resistant steel	■	■	■	■			138223
	Da1 = 20; Da2 = 20; brass	■	■	■	■			21081A

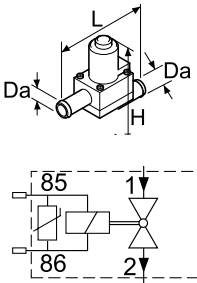
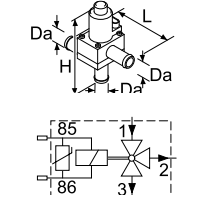
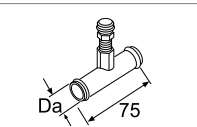
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Connecting piece							
	Da = 18; corrosion resistant steel	■	■	■	■			123858
	Pipe socket, thermostat							
	Da = 38; L = 100, with M2.2 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
	Intake filter							
	Da = 38						■	665328
	for 2/2-way water filter							

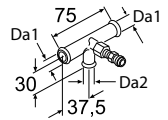
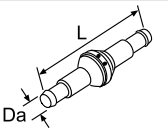
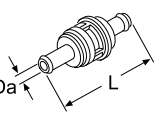
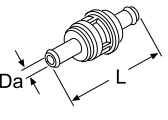
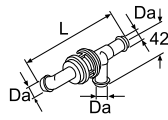
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	Solenoid valve							
	12 V, Da = 20; H = 90; L = 106 Plastic housing, opened without power	■	■	■	■	■		492701
	Solenoid valve							
	Da = 18; H = 101; L = 84 For 12 V, 3 / 2-way; plastic housing Opened without power; bag containing electrical installation parts	■	■	■	■	■		9014606A
	Bleeder valve							
	Da = 15; corrosion resistant steel Di = 18; corrosion resistant steel	■	■	■	■	■		112392 105848

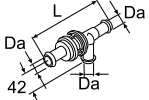
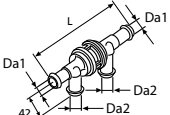
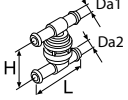
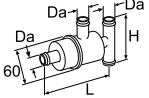
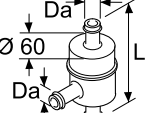
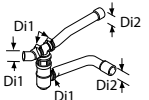
Accessories

Heating water system

		Thermo Top C	Thermo Top Evo	Thermo Pro 50 Eco	Thermo 90 5T	DBW 2010; 2016	Thermo 230; 300; 350	Order number
	T-piece with bleeder valve							
	Da1 = 18, Da2 = 15; corrosion resistant steel	■	■	■	■	■		488534
	Non-return valve							
	Da = 18; L = 90; brass/steel, coated, with leakage hole Da = 20; L = 120; plastic, black, without leakage hole	■	■	■	■	■		453137 15685A
	Non-return valve							
	Da = 15; L = 104; plastic, black, with leakage hole	■	■	■	■	■		12781A
	Non-return valve							
	Da = 15; L = 104; plastic, black, without leakage hole	■	■	■	■	■		12754A
	Da = 18; L = 90; plastic, black, without leakage hole	■	■	■	■	■		109557
	Non-return valve							
	Da = 18; L = 104; plastic, black, without leakage hole	■	■	■	■	■		121476

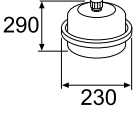
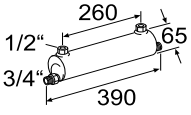
Accessories

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
	Da = 18; L = 104; plastic, black, without leakage hole	■	■	■	■	■	■	127858
	Non-return valve							
	Da1 = 18; Da2 = 18; L = 146; H = 42; plastic, black, with leakage hole	■	■	■	■	■	■	12780A
	Da1 = 20; Da2 = 20; L = 162; H = 42; brass/steel, coated, with leakage hole	■	■	■	■	■	■	19873A
	Da1 = 18; Da2 = 18; L = 146; H = 42; plastic, black, without leakage hole	■	■	■	■	■	■	12751A
	Da1 = 18; Da2 = 18; L = 82; H = 82; plastic, black, without leakage hole	■	■	■	■	■	■	115472
	Thermostat							
	Da = 18; H = 70; L = 108; brass/steel, coated, without leakage hole	■	■	■	■	■	■	15394A
	Da = 20; H = 70; L = 108; brass/steel, coated, without leakage hole	■	■	■	■	■	■	19872A
	100 ... 160 L/h/0.003 Nm; opens at 59 ±2/-1 °C.							
	Da = 20; L = 112; brass/steel, coated, without leakage hole Opens at 70°±2°	■	■	■	■	■	■	98992A
	Combination valve Di1 = 18; Di2 = 22 Thermostat >40° opening, without water hoses	■	■	■	■	■	■	37915A

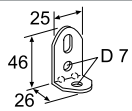
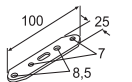
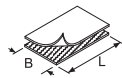
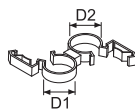
Accessories

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
	Pressure expansion tank 8 litre, pre-pressure; volume of total system: 157 litre maximum	■	■	■	■	■	■	351725
	Instant water heater with insulation shell max. 23.3 KW; max. 10 bar; 2 kg; copper with brass pipe fitting	■	■	■	■	■	■	434043

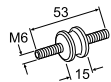
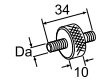
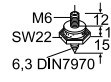
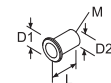
Accessories

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
	Airtop box installation set For attaching Webasto air heaters to commercial vehicle superstructures to heat the cargo space, the plastic cover provides protection against environmental influences.										90059428
	Metal construction box, Air Top 2000 Series With air outlet, air inlet adapter, mounting material	■									86032A
	Signboard Signboard "Switch off heater before refuelling" Self-adhesive.	■	■	■	■	■	■	■	■	■	1314523A
	Angle bracket Galvanised steel Stainless steel	■	■	■	■	■	■	■	■	■	242780 90008028
	Perforated bracket Galvanised steel Stainless steel	■	■	■	■	■	■	■	■	■	242888 90008018
	Cable tie L = 400; B = 7.6; bag of 10	■	■	■	■	■	■	■	■	■	9007917A
	Dual lock fastening (velcro tape) B = 25; L = 50; plastic, black B = 25; L = 100; plastic, black	■	■	■	■	■	■	■	■	■	9009555A 9009556A
	Hose and cable tie 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

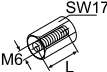
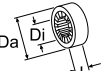
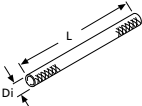
Accessories

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
	Silent block	■	■	■	■	■	■	■	■	■	9014765A
	Silent block Da = M6 bag of 5 Da = M8	■	■	■	■	■	■	■	■	■	9023020A 155008
	Silent block With self-tapping screw. Bag of 8	■	■	■	■	■	■	■	■	■	9024084A
	Rivet nut M6 D1 = 13; D2 = 9; L = 14.5 Aluminium, bag of 20	■	■	■	■	■	■	■	■	■	9011635A
	EJOT stud bolt L = 15.5; M6 bag of 10 L = 30.5; M6 bag of 10				■	■	■	■	■	■	9006446A 9009025A
	EJOT PT bolt L = 22; SW = 10; Da = 6; bag of 10				■	■	■	■	■	■	9011669A
	Plastic nut, black, without threads Da = 16; L = 10; SW = 10 for bolts with a nominal diameter up to 4.8 mm Bag of 20	■	■	■	■	■	■	■	■	■	9011649A
	Pin lock Da = 12.5; L = 0.25, for M6 threads Bag of 10	■	■	■	■	■	■	■	■	■	9011659A
	Cable grommet Da = 23; Di = 14	■	■	■	■	■	■	■	■	■	174807

Accessories

Installation parts

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Pro 50 Eco	Thermo 90 S / ST	DBW 2010/2016	Thermo 230 /300 /350	Order number
	Cable and hose fixing clip									
	For sliding onto a sheet metal fold	■	■	■	■	■	■	■	■	88895C
	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	■	■	■	■	■	■	■	■	410896
	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
	Heat shrink hose									
	Di = 38/19; L = 100	■	■	■	■	■	■	■	■	65899A
	Di = 38/19; L = 250	■	■	■	■	■	■	■	■	70891A
	Di = 38/19; L = per m	■	■	■	■	■	■	■	■	92101A

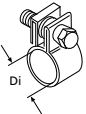
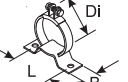
Accessories

Installation parts

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

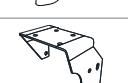
Accessories

Installation parts

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Pro 50 Eco	Thermo 90 S / ST	DBW 2010/2016	Thermo 230 / 300 / 350	Order number
	Cailleau hose clamp, stainless steel									
	Di = 8 ... 9, bag of 10	■	■	■	■	■	■	■	■	9011660A
	Di = 9.5 ... 11, bag of 10	■	■	■	■	■	■	■	■	9011661A
	Di = 10 ... 12.5, bag of 10	■	■	■	■	■	■	■	■	9011656A
	Hose clip with hexagon head									
	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
	Hose clamp with SW77 hexagon head and cross recess									
	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
	Hose clamp, stainless steel									
	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
	Spring clip, type B									
	Di = 25 light grey; bag of 10	■	■	■	■	■	■	■	■	9009019A
	Di = 27 dark grey; bag of 10	■	■	■	■	■	■	■	■	9009018A
	Di = 30 black; bag of 10	■	■	■	■	■	■	■	■	9009026A
	Spring clip, type E2 (space saving), black									
	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
	Fastening clip									
	Di = 86; L = 111; B = 25	■	■	■	■	■	■	■	■	253685

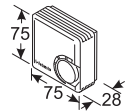
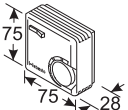
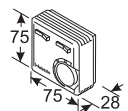
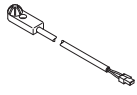
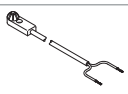
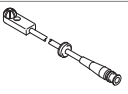
Accessories

Installation parts

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

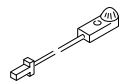
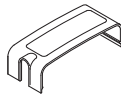
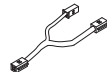
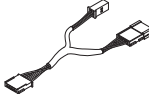
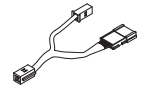
Accessories

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
	Room thermostat										
	Mechanical with relays (changer) for vehicle fan			■	■	■	■	■			25011C
	With On/Off switch, changer			■			■	■	■		70947A
	With On/Off switch, changer			■							70948A
											
	Temperature sensor, external										
	L = 5 m for Air Top 2000 ST Marine heater	■									90050048
	L = 2.5 m	■									9014694A
	L = 5 m		■								93205A
	L = 20 m		■								926498

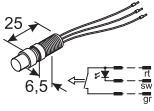
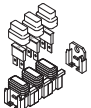
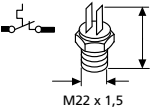
Accessories

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
	Room thermostat, sensor										
	For 34875A electronic room thermostat	■	■	■							82356A
	Cover with hole										
	For air Top 2000 ST if an external temperature sensor is used	■									297188
	Y-adapter, wiring harness										
	Retrofitting of Thermo Call in existing Teletart				■						9001505A
	Y-adapter, wiring harness										
	Connection of Teletart digital timer 1533 and W-bus receiver				■						90103258
	Y-adapter										
	Teletart T 70/digital timer 1533 (W-bus)				■						9007267A

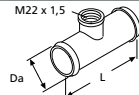
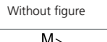
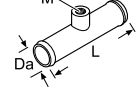
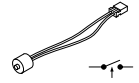
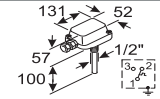
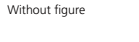
Accessories

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	DBW 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
	MTA fuse holder										
	1 A, black	■	■	■	■	■	■	■	■	■	66439A
	5 A, beige	■	■	■	■	■	■	■	■	■	67290A
	20 A, yellow	■	■	■	■	■	■	■	■	■	66443A
	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

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
	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										
	Thermo switch holder										
					■						9023145A
	Pipe socket										
	Da = 18, M4, L = 65, steel, corrosion resistant With thread for thermostat				■	■	■	■	■	■	1310365A
	Thermostat for pipe socket										
	NO contact, 40 °C				■	■	■	■	■	■	109867
	Regulating thermostat										
	Adjustable from 15 - 95°C. With half-inch thread.								■	■	9007198A
	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	DBW 20/10/2016	Thermo 230 / 300 / 350	Order number
	Double flat spring contact										
	0.5 - 1.5	■	■	■	■	■	■	■	■	■	9011645A
	2.0 - 3.0	■	■	■	■	■	■	■	■	■	9011647A
	4.0 - 6.0	■	■	■	■	■	■	■	■	■	9009029B
	For MTA fuse holder. Bag of 10										
	Blade-type fuse SAE J1284										
	1 A, black	■	■	■	■	■	■	■	■	■	9023140A
	7.5 A, brown, 20 pieces	■	■	■	■	■	■	■	■	■	9024083A
	15 A, blue	■	■	■	■	■	■	■	■	■	9023139A
	20 A, yellow	■	■	■	■	■	■	■	■	■	9023141A
	25 A, white	■	■	■	■	■	■	■	■	■	9023142A
	Single wire seal										
	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
	2.8mm blade-type plug.										
	For 0.5-1.0 mm². Bag, each with 2 blade-type plugs and single wire seal	■	■	■	■	■	■	■	■	■	9011628A
	2.8mm flat spring contact										
	For 1.5-2.5 mm²; bag each with 10 blade-type plugs and single wire seal	■	■	■	■	■	■	■	■	■	9011664A
	Socket contact, Micro Quadlok system										
	For 0.75 mm². Bag of 10	■	■	■	■	■	■	■	■	■	9011666A
	Micro-timer contact										
	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	DBW 20/10/2016	Thermo 230 / 300 / 350	Order number
	Connector sleeve housing										
	2.8 mm. Bag of 5, 2-pin, waterproof.	■	■	■	■	■	■	■	■	■	9011632B
	Connector sleeve housing										
	2-pin, 2.8 mm, waterproof, bag of 5. For dosing pump e.g.	■	■	■	■	■	■	■	■	■	9011633A
	Junior Power Timer										
	0.5 - 1.0 mm²; bag of 10. Also for 2.8 mm blade-type plug	■	■	■	■	■	■	■	■	■	9011634B
	Relay (changer) with fastening strap										
	12 V, 30/50A. With connector sleeve housing and blade-type plug receptacle. Plastic housing.	■	■	■	■	■	■	■	■	■	9023375A
	Relay (changer)										
	12 V, 30/50 A, plastic housing	■	■	■	■	■	■	■	■	■	9016500A
	12 V, 20/40 A, plastic housing	■	■	■	■	■	■	■	■	■	9005553A
	Relay (changer, built-in diode)										
	12 V, 20/30 A, 6.3 mm, with separate fastening strap. Plastic housing.	■	■	■	■	■	■	■	■	■	98525A

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

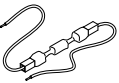
Accessories

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
	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
											

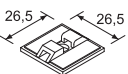
Accessories

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
	Blade-type plug housing										
	2-pin, waterproof	■	■	■	■	■	■	■	■	■	82168A
	3x wire connector										
	6.3 mm. Bag of 5	■	■	■	■	■	■	■	■	■	9011959A
	Wiring harness										
	Adapter wiring harness for programming with PC diagnosis kit				■	■	■	■			9011069A
	Diode capsule										
	Maximum 1 A	■	■	■	■	■	■	■	■	■	210536
	Maximum 3 A	■	■	■	■	■	■	■	■	■	424560
	Blocking diode										
	3 A connector included	■	■	■	■	■	■	■	■	■	1313644A

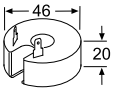
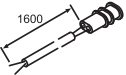
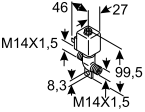
Accessories

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
	6.3 mm blade-type plug receptacle										
	0.5 - 2.5 mm ²	■	■	■	■	■	■	■	■	■	9011641A
	1.0 - 2.5 mm ²	■	■	■	■	■	■	■	■	■	9011652A
	1.5 - 2.5 mm ² for 178713	■	■	■	■	■	■	■	■	■	176613
	6.3 mm blade-type plug										
	0.5 - 1.0 mm ²	■	■	■	■	■	■	■	■	■	9011636A
	0.8 - 2.5 mm ²	■	■	■	■	■	■	■	■	■	9011640A
	4.0 - 6.0 mm ²	■	■	■	■	■	■	■	■	■	9014955A
	Bag of 10 For 178799, 178802, 178810, 178837, 342777										
	Connector, insulated										
	0.5 - 1.0 mm ²	■	■	■	■	■	■	■	■	■	9011667A
	1.5 - 2.5 mm ²	■	■	■	■	■	■	■	■	■	9011668A
	Mounting socket										
	For fastening electrical wires with cable tie. 4.8 mm wide, bag of 10.	■	■	■	■	■	■	■	■	■	9009030A

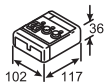
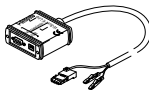
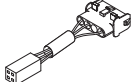
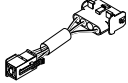
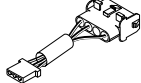
Accessories

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
	Resistance kit										
	0.9 Ohm; 40 W. Bag of connectors and mounting parts				■	■	■	■	■		97981A
	Adapter cable					■					
	For circulating pump										91743D
	Adapter					■					
	In case circulating pump is not applicable, with resistance										64025A
	Wiring harness extension					■	■				
	Extension for standard wiring harness of Thermo Top C										67744A
	Interference suppression connector								■		
											176478
	Solenoid valve (for fuel)						■		■	■	
	24 V; 5 W; M 14 x 1.5 blade-type plug connection, 6.3 mm										465674

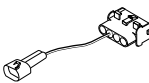
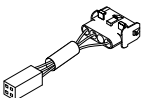
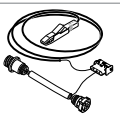
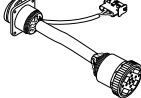
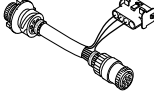
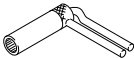
Accessories

Testing devices

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	Testing device									
	12 V/24V; with control unit						■			440280
	Adapter wiring harness									
	With control unit 1563/64						■			116274
	PC diagnostic kit (USB)									
	For Windows operating system. USB and serial interface.	■	■	■	■	■	■	■		9009064E
	PC Diagnosis adapter cable									
	Also for upgrade kit (1533 timer or Teletart)	■			■	■				13017838
	Adapter wiring harness, Thermo 90					■				836618
	Adapter wiring harness DW80					■				925568
	Adapter wiring harness DW80									213338
	Also for Air Top 2000 S		■							925668

Accessories

Testing devices

		Air Top 2000 ST	Air Top Evo 3900/5500	HL 90	Thermo Top C	Thermo Pro 50 Eco	Thermo 90 S/ST	DBW 2010/2016	Thermo 230/300/350	Order number
	PC Diagnosis adapter cable									
	For Air Top 2000 ST	■								925558
	PC Diagnosis adapter cable									
	For Air Top Evo	■								13017838
	PC Diagnosis adapter cable									
	For Thermo 230/300/350							■		883360
	PC Diagnosis adapter cable									
	For Thermo 230/300/350 (Van Hool)							■		92637A
	PC Diagnosis adapter cable									
	For Thermo 230/300/350 (MB/Citaro)							■		66265A
	Nozzle wrench									
	For atomising nozzle						■			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
	Gauge										
	For ignition electrodes							■			310646
	Flat drawing tool										
	Auxiliary installation tool for bead levelling	■	■								82229A
	Dismantling tool										
	For connector, Thermo 90/S/ST							■			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	Isoflex LDS 18 special grease										
	45 g for transmission and ball bearings	■	■	■	■	■	■	■	■	■	143820
	Sealing varnish, red										
	20 ml for bolts and nuts	■	■	■	■	■	■	■	■	■	154245
Without figure	Protective wax (transparent)										
	600 ml for corrosion protection	■	■	■	■	■	■	■	■	■	111329
	Special contact spray										
Without figure	250 ml for electric connections	■	■	■	■	■	■	■	■	■	101322
	Silicone type 1209 sealing compound										
	30 ml	■	■	■	■	■	■	■	■	■	23730A
	310 ml	■	■	■	■	■	■	■	■	■	21113A
	Loctite 5398 adhesive sealing compound										
	310 ml bottle	■	■	■	■	■	■	■	■	■	9023149A



Air-conditioning systems

Advantages of air-conditioning systems at a glance

Versatile air-conditioning systems for retrofitting

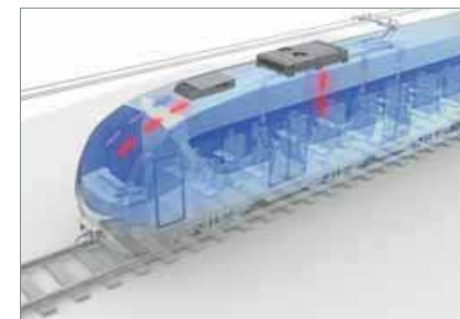
Webasto offers an extensive product portfolio of versatile and robust air-conditioning solutions for nearly every application and every vehicle. For the Heavy Duty sector there are rooftop compact air-conditioning systems, split-systems or integratable evaporator units on offer. The program is rounded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

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



NEW

Webasto Diavia transport refrigeration

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Battery operate solutions
Direct drive solutions
Integrated solutions



NEW

Compact Cooler

PAGE 174

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



Compact Cooler Rail

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



Parking Cooler

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Cool Top Vario 10 E



Container Cooling

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Breeze Split
Iglo Compact
KMWP 9 Compact
KMWP 18 Compact



Other

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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

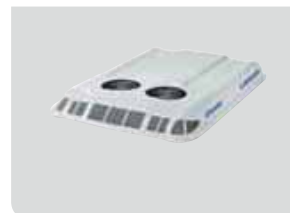
- Big range of spare parts such as fittings, hoses, installation kits support the integration of the air-conditioning solution in the vehicle (see special Spare part catalogue)

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 10 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



Portofino



Minsk



San Marino / Rimini



Turin

Technical specifications:

Air-conditioning unit	Portofino	Minsk	San Marino	Rimini	Turin
Cooling capacity (kW)	4.0	5.0 ⁽²⁾	6.2	6.2	8.4
Heating performance (kW)	5.0 ⁽¹⁾	–	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
Standard delivery scope		
Portofino 12 V	Air-conditioning system, product documentation Heating option with order number 6228160A	62U003FF081EB
Portofino 24 V		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	A/C 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 ⁽¹⁾	–	20.0 ⁽¹⁾	20.0 ⁽¹⁾
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 (m³/h)	1,200	1,100	2,100/2,500 ⁽²⁾	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
Standard delivery scope		
Panama 12 V	Air-conditioning system, product documentation. Heating option with order number 6228175A. Air recycle option with order number 6230086A	62U003FF114EC
Panama 24 V		62U003FF115EC
Smirne 12 V	Air-conditioning system, product documentation	62U003FF072ED
Smirne 24 V		62U003FF073ED
Madrid 12 V	Air-conditioning system, product documentation, Version 2.100 m³/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 m³/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

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

Standard air ducts		
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

Standard control elements		
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



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 ⁽¹⁾	–	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
Standard delivery scope		
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



Glasgow/Oslo



Zurich



Praga



Paris/Monaco



Toledo

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
Standard delivery scope		
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	Air-conditioning system with heating function, product documentation	62U003CF079EA
Toledo 24 V		62U003CF089EA

Standard compressor

SP 15 12 V	Delphi Compressor SP15, displacement 154 cc	620152008
SP 15 24 V		620152048

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	62U003AA1152A 62U003AA1114A 62U003AA047A – 62U003AA051A
Air duct		62U003AA053A 62U003AA058A 62U003AA060A 62U003AA062A 62U003AA094A

Standard control elements

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



Technical specifications:

Air-conditioning unit	Riga	Kiev	Moscow	Monterrey	Newport
Cooling capacity (kW)	12.0 ⁽¹⁾			14.0 ⁽²⁾	14.0 ⁽³⁾
	14.0 ⁽²⁾	13.4	13.4	16.0 ⁽⁴⁾	16.0 ⁽⁴⁾
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
Standard delivery scope		
Riga 12 V	Air-conditioning system, product documentation 2 tons expansion valve, 3 vents front distribution	62U003FF065EC
Riga 24 V		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 3 tons expansion valve, 3 vents front distribution	62U003FF132EA
Riga 24 V		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	62U003069EB
Monterrey 24 V		62U003070EB
Monterrey 12 V	Air-conditioning system with heating function, product documentation, expansion valve 3 tons	62U003075EB
Monterrey 24 V		62U003076EB
Newport 12 V	Air-conditioning system, product documentation expansion valve 2 tons	62U003FF104EC
Newport 24 V		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	62U003AA1105A 62U003AA1107A 62U003AA1109A 62U003AA1116A 62U003AA1117A
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	Stoccolma	Houston	Toronto	Nevada	Phoenix	Cyprus
Heating performance (kW)	3.8	3.8	6.5	7.0 2.4 ⁽¹⁾	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
Standard delivery scope		
Sydney 12 V	Heating system, product documentation	62U003CC0488
Sydney 24 V		62U003CC0498
Stoccolma 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	62U003CC0198
Phoenix 24 V		62U003CC0208
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

Rooftop 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	62U00025433C
						12	62U00025455B
						24	62U00025457B
	5,5	570 x 370 x 150	HTC condenser	7	8	12	62U000253158
	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

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						62U00025460A
	6,5	480 x 110 x 350		12	3,7		62U00025453A
	12	725 x 105 x 450					62U00025426B
	14	606 x 160 x 350		27	6		62U00025459A
	12						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
Modular 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

Modular 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/New- port	62U003AA120A
	Air distributor, grey	1075 x 145 x 148	Kiev/Moscow/Monterrey/New- port	62U003AA116A
	Adapter for Moscow/Kiev black	865 x 115 x 88	Kiev/Moscow/Monterrey/New- port	62U003AA121A
	Adapter for Moscow/Kiev grey	865 x 115 x 88	Kiev/Moscow/Monterrey/New- port	62U003AA117A
	Adapter, 550 mm, black	775 x 550 x 100	Smirne	62U003AA086A
	Adapter, 550 mm, grey	775 x 550 x 100	Smirne	62U003AA087A
Modular 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	Order Number
	TARIFA, black	330 x 330 x 120	Tarifa	62U003AA122A
	TARIFA, grey	330 x 330 x 120	Tarifa	62U003AA113A

Diavia

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	62U003AA138B
	Front panel with louvers, without controls, grey	429 x 381 x 50	Minsk/Portofino	62U003AA139B
	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

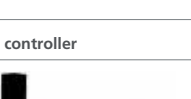
	Adjustment	Dimensions L x H (mm)	Order number
	AC and heater switch with air speed control 12 V	100 x 50	62A031065A
	AC and heater switch with air speed control 24 V	100 x 50	62A031067A
	AC and heater switch with air speed control 12 V	50 x 100	62A031069A
	AC and heater switch with air speed control 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
Delphi SP 15	Description	Order number
	Consists of 10 pistons and has 154 cc displacement 8.5 kW @ 2,500 RPM-V-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
Delphi SP 20	Description	Order number
	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
Valeo TM31	Description	Order number
	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 m³ 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 m³
- High efficiency systems that are easy to install
- Optional with stand-by function

Direct drive units

- "Tonale" and "Stelvio" for compartments up to 18 m³
- High performance systems that are easy to install
- Optional with stand-by function

Integrated direct drive units

- "Pordoi" for compartments up to 18 m³
- 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 feel 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)

Evaporator



Condenser



Compressor and compressor kits



Stand-by unit



Accessories and installation kits



Battery operated solutions

Diavia



Compact mobile refrigeration solutions for light commercial vehicles transporting perishable goods. Optimized solutions for up to 5 m³ 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 m³. Exceptionally fast and easy installation.

- Customized refrigeration systems for commercial vehicles with load compartments of up to 5 m³
- 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 m³/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 ⁽¹⁾)	41.0 (58.0 ⁽¹⁾)
▪ Evaporator unit	7.5	7.5

(1) = with Stand-by

Name	Delivery scope contains	Order number
Standard delivery scope		
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.

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

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
Standard delivery scope		
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 refrigerations 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 m³
- 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 ³ /h	670	1,040	1,534
Refrigerant	R134a/R404A		
Dimensions L x W x H (mm)	(1)	(1)	(1)
▪ Condenser unit			
▪ Evaporator unit	660 x 500 x 157	900 x 500 x 157	1,000 x 500 x 157
Weight (kg)	(1)	(1)	(1)
▪ Condenser unit			
▪ Evaporator unit	7.5	10.5	12.5

(1) = depending on the installed application



Name	Delivery scope contains	Order number
Standard delivery scope		
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	62U0065B09C

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

Application guide

										
	>5°C	X		R134a	C	–	C	–	FC	C
	>5°C	✓		R134a	C	–	C	–	FC	C
	0 – 5°C	X		R134a	FC	–	FC	–	FC	C
	0 – 5°C	✓		R134a	FC	–	FC	–	FC	C
	>5°C	X		R134a	C	N	C	–	FC	C
	>5°C	✓		R134a	C	N	C	–	FC	C
	0 – 5°C	X		R134a	FC	N	FC	–	FC	C
	0 – 5°C	✓		R134a	FC	N	FC	–	FC	C
	<0°C	X		R404A	N	FC	–	FC	C	C
	<0°C	✓		R404A	N	N	–	N	C	C
	<0°C	X		R404A	N	FC	–	FC	C	C
	<0°C	✓		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/5/8/E-Unit.



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

The optimum retrofitting solution for air-conditioning

The Compact Cooler Series is a space-saving, retrofittable rooftop air-conditioning system for cooling the driver's cab and passenger compartment of all vehicles with cabin volumes up to 10 m³.

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. 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	8
Cooling capacity (kW)	3.5	5.0	8.5
Heating capacity Q80 (kW)	-	-	7.5
Refrigerant	R134a, CFC-free		
Nominal voltage (V)	24	12/24	
Maximum total current consumption (A)	68	30	30
Operating temperature range (°C)	max. +45		
Evaporator fan volume flow (m³/h)	550 (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	750 x 760 x 165	1,025 x 970 x 197
Weight (kg)	52.0	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

- 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/5/8/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			■	■		■			
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			■		■			■	■
9004866B	E-Unit	With electric motor and compressor		■						

Accessories for the system are shown on page 177.

Accessories

Installation kits



		Compact Cooler 4E	Compact Cooler 5	Compact Cooler 8	Order number
	Cable set				
	Cable set for heater control, external 10.80 m	■	■		66277A
	Cable set for heater control, external 13.00 m		■		67043C
	Circulating air filter				
	Circulating air filter of Compact Cooler	■	■		64049A
	Circulating air filter of Compact Cooler 8		■		64053B
	Electronic room thermostat				
	24 V for Compact Cooler 5 retrofitting kit	■	■		98900A
	12 V for Compact Cooler 5 retrofitting kit		■		98899A
	Compressor bracket				
	Universal compressor bracket		■	■	87723C
	Installation kit				
	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	Other accessories				
	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 8	Order number
	Air-duct system kit, Compact Cooler 8 814 mm middle and end piece				98502D
	Air distributor plate of Compact Cooler 8 Assembly				662808
	Add-on kit for air-duct extension 569 mm max. 4 extension kits possible				98868D
	Air-duct end piece of Compact Cooler 8 With preparation for illumination				9001288A
	Add-on kit for air-duct extension 569 mm with preparation for illumination (max. 4 extension kits possible)				9001161A

Accessories

Compressor



		Compact Cooler 4E	Compact Cooler 5	Compact Cooler 8	Order number
	Valeo compressor TM-13HD horizontal 24 V TM-16HD horizontal 12 V TM-16HD horizontal 24 V		■		40153B 67045A 67046A
	TM-13HD vertical 12 V TM-13HD vertical 24 V TM-16HD vertical 24 V TM-16HD vertical 12 V		■		80755B 80700B 64035A 64040A
	TM-13HD 8PVK vertical 12 V TM-16HD 8PVK vertical 24 V TM-16HD 8PVK vertical 12 V		■	■	67478A 98561A 98536A
	TM-13HD 8PVK horizontal 24 V TM-16HD 8PVK horizontal 12 V TM-16HD 8PVK horizontal 24 V		■	■	88139B 9000678A 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 _{AC})	400 ± 10 % (3ph + 50 Hz)	
Control power supply (V _{DC})	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_{ext} = 40 °C/40 % r. h.; T_{ev} 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 _{AC})	hydrostatic
Control power supply (V _{DC})	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_{ext} = 40 °C/40 % r. h.; T_{ev} 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 (V _{AC})	400 ±10 % (3ph + N 50/60 Hz)
Control power supply (V _{CC})	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_{ext} = 40 °C/40 % r. h.; T_{ev} 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 (V _{AC})	400 ±10% (3ph + N 50 Hz)
Control power supply (V _{CC})	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_{ext} = 40 °C/40 % r. h.; T_{ev} 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 - 200 (dependant on cabin type)
Required roof cutout in mm	200 x 402
Weight in kg	31

Name	Order number
Air-conditioning system delivery scope	
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
Vehicle-specific installation kits delivery scope	
■ Vehicle-specific cover frame ■ Mounting rods ■ Bolts ■ Sealing and installation instructions	
DAF XF 105 (Space Cab) BE84031746A	BE84031746A
MAN TGA (XL, XLS, XXL ⁽¹⁾)	BE84031876A
MAN TGX, TGL, TGM, TGS (XL ⁽²⁾ , XLX ⁽²⁾ , XXL ⁽⁴⁾ , LX (TGS))	BE84031750A
Mercedes-Benz Actros MP4 (CompactSpace, ClassicSpace, StreamSpace, BigSpace)	BE84031872A
Mercedes-Benz Actros MP3 (L-Fahrerhaus, Megaspac ⁽⁴⁾)	BE84031743A
Scania R (CG19L, CP19N, Topline ⁽⁴⁾ , Highline) Scania P (CG19L, CP19N, Highline) Scania G (CG19L, CP19N, Highline)	BE84031745A
Renault Magnum ⁽⁴⁾	BE84031748A
Renault Premium	BE84031749A
Volvo FH/FH 16(3) (Globetrotter XL L2H3) Volvo FM/FMX (Globetrotter XL L2H3)	BE84031804A
Universal installation kit ■ vehicle specific installation frame, ■ mounting bars ■ screws ■ sealing and installation guidelines	
DAF XF 105 (Super Space Cab) ^{(1) (4)}	BE84031873A
DAF CF 65/75/85 DAF LF 45/55 (Sleeper Cab, Space Cab)	BE84031873A
MAN F2000	BE84031873A
Mercedes-Benz Atego, Axor	BE84031873A
Volvo FH, FH 16, FM, FMX (L2H1) Volvo FE (L2H1, L3H1)	BE84031873A
Iveco Stralis ⁽³⁾ Use only in combination with parking cooler BE84031740A	BE84031873A

⁽¹⁾ available from quarter II/2013

⁽²⁾ only without spoiler

⁽³⁾ new FH/FH 16 series (from end 2012) not possible, roof hatch is emergency exit

⁽⁴⁾ only with specific chassis up to 3,800 mm total height

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 _{ac})	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 (m³/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

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 _{AC}	AC voltage
V _{DC}	DC voltage

(Composite) Materials

Al	Aluminium
Cu	Copper
Gf	Glass fiber
Ms	Brass
St	Steel

Used symbols



Truck



Light-duty Vehicles



Bus



Rail



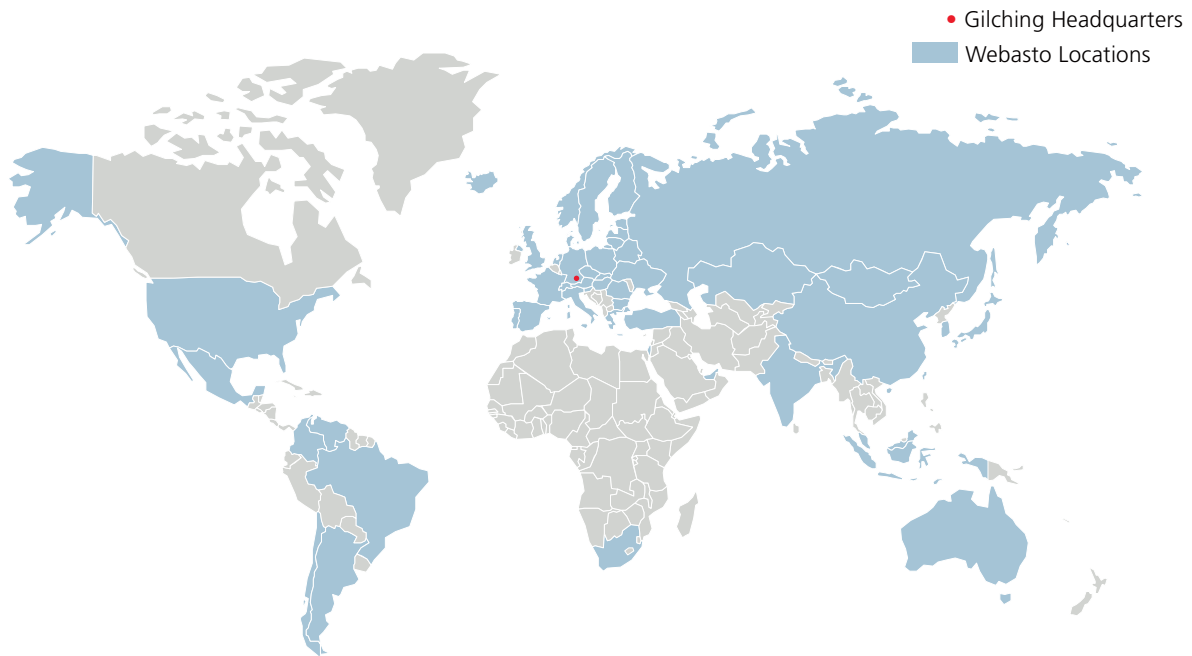
Defense



Off-Highway



Special Vehicles



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.

