

Commercial Vehicles
Heating, Air Conditioning Systems and Parking Coolers, Roof Systems

# A perfect climate on and off the road





#### Webasto – the most convincing name for air conditioning and heating.

Readers of "lastauto omnibus", "transaktuell" and "FERNFAHRER" have voted us the best brand in the category air conditioning/heating for the fourth time in succession. We will continue to wow them in future!

# The perfect climate for all seasons!

Webasto comfort systems for all transporters and commercial vehicles.



# Webasto – the worldwide brand for a perfect, individualised climate.

Webasto is one of the world's leading manufacturers offering fully integrated heating and cooling concepts for use in small to large transporters, trucks and commercial vehicles. Ideally matched products ensure comfort, a "feel good" climate and profitability in your commercial vehicle in any season.

Whether in collaboration with well-known vehicle manufacturers or as retrofit solutions: Webasto's professional expertise and over 100 years of experience are trusted by millions of delighted customers. Webasto offers you state-of-the-art, sophisticated technologies so you can rely on Webasto expertise for commercial vehicles too.

#### Safety - tried and tested.

Since the company's foundation, the areas of research and development have been of crucial importance to Webasto. With high investments and over 800 staff in this innovative field, Webasto is a leader within the sector. In order to qualify for serial production, Webasto temperature management products have to stand up to international inspection requirements and long-term exposure testing. Extreme conditions are simulated in the Webasto climate chamber with temperatures ranging from + 80° C to - 40° C.







# Webasto comfort products – an overview.



## Comfortable and economical: The parking heater system for engine, cab and cargo.

Regardless of weather and no matter what the destination: trucks are on the road virtually every day of the year. And whether during travel, short rests or when sleeping at night, it is always important that the driver's working place feels pleasantly warm and comfortable. It is also important to keep the temperature in the cargo space constant when transporting goods that react sensitively to frost or temperature fluctuations. Webasto offers perfectly matched solutions here too.



## For a perfect working atmosphere from start to finish: air conditioning and parking cooling systems.

On hot days, temperatures can rise unbearably in a driver's cab. The heat affects the body and can quickly lead to a loss of concentration. Webasto air conditioning systems improve the room climate quickly and reliably. The cab is quickly cooled down to the desired temperature in a matter of minutes and this is then kept constant. The Webasto parking air conditioning and cooling systems cool when no engine is running, thus reducing fuel consumption and wear.



#### Impressive sense of space: Webasto roof systems

With a Webasto roof system you enjoy a new dimension of freedom through more light and fresh air in the cab.







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#### Comfort at work – with a Webasto cab and cargo space heater.

Being on tour in transporters and trucks means full concentration and a constant physical strain for over 8 hours at a stretch. Fitting a Webasto parking heater means the driver can enjoy individually controlled heat – even during longer breaks. Webasto also offers optimum solutions for transporting goods that are sensitive frost and temperature.

# The right "feel good" warmth for every truck.

Webasto parking heaters see you through the cold season.



# Webasto air heater systems at a glance:



#### Webasto Air Top Evo 3900/550

Powerful, compact and silent, for extreme working conditions and the highest demands. Continuously variable temperature regulation and TRS function as a standard.

#### **Advantages of Webasto air heater systems:**

- Heat the driver's cab with short warm-up times
- Constant, individually controlled temperature
- Low fuel consumption
- Space-saving design
- Environment-friendly through energy saving mode
- Automatic altitude mode for use in mountains

#### Webasto Air Top 2000 ST

The smallest air heater unit. With ceramic technology and optimum economic efficiency for top heating power – continuously variable temperature regulation and TRS function as a standard.

#### Air heater systems for the cargo compartment:

- Easy installation
- Low power consumption
- Suitable for permanent heating

#### Control units for air heaters:



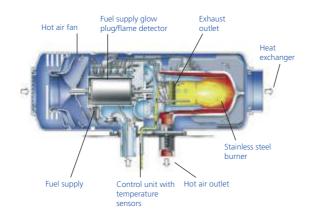
Air Top standard operating unit: Consistently clearly arranged.



Combi-timer: Convenient and individual.



Air Top Evo MC05: New design and multi functional.



#### **Technical specifications for air heater systems:**

Unit	Voltage (V)	Heat flow (kW) Part load Full load		Fuel ( Part load		Fuel	El. power consumption (W) Part load Full load		Dimensions L x B x H (mm)	Weight (kg)	Driver's cab heating	Cargo compartment heating
Air Top 2000 ST	12/24	0.9 –	2.0	0.12 – 0.24 diesel 14 – 29		311 x 120 x 121	2.6	х	х			
Air Top 2000 ST	12	1.0 –	2.0	0.14 -	- 0.27	petrol	14 – 29		311 x 120 x 121	2.6	х	х
Air Top Evo 3900	12/24	1.5 – 3.5 (3.9)*		0.19 - 0.44 (0.49)*		diesel	15 – 3	6 (45)*	423 x 148 x 162	5.9	Х	Х
Air Top Evo 5500	12/24	1.5 – 5.0	(5.5)*	0.19 – 0.6	3 (0.69)*	diesel	15 – 90 (116)*		423 x 148 x 162	5.9	Х	х
HL 90	12/24	6.5	9.0	0.86	1.2	diesel	80 (12 V)	110 (12 V)	650 x 235 x 260	13.3		х
							94 (24 V)	160 (24 V)	(without controll unit)			

<sup>\*</sup>Quick heat-up in conjunction with the Air Top Evo MC05 control unit

# Webasto water heater systems at a glance:



Webasto Thermo 50
The inexpensive option for heating the driver's cab, pre-heating the engine or providing additional warmth during travel



Webasto Thermo 90 ST High, continuously variable heating output, compact and service-friendly with integrated control unit and low noise level and power consumption.



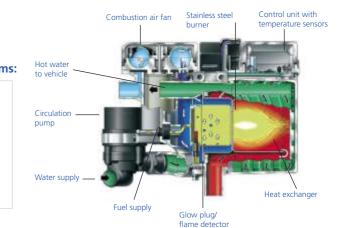
Webasto DBW 2010/DBW 2016
The robust water heater system has been in reliable use for years: it has a swivel burner and two power settlings in one size.

#### Advantages of Webasto water heater systems:

- Heating of the driver's cab
- Pre-heating of the engine and reduction of wear
- Simple installation
- Constant, individually controlled temperature
- Low fuel consumption

#### Water heaters for the cargo space:

- Precise temperature control
- Ideal for transporting liquids
- Even distribution of heat



### Control units for all 12 volt air and water heater systems:



Telestart T100 HTM: Modern and innovative.



Telestart T91: Small and handy.



Thermo Call: Call for a perfect climate.

#### Technical specifications for water heater systems:

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Unit	Voltage (V)		ow (kW) Full load	Fuel ( Part load	,	Fuel	Fuel El. power consumption (W) Part load Full load		Dimensions L x B x H (mm)	Weight (kg)	Driver's cab heating	Cargo compartmen heating
Thermo 50	24	2.2	5.0	0.28	0.63	diesel	34	50	237 x 106 x 193	3.2	х	х
Thermo Top C	12	2.6	5.2	0.29	0.59	diesel	22	32	214 x 106 x 168	3.2	х	х
Thermo 90 ST	12/24	1.8 – 7.6 continuously (9,1)*		0.19 – 0.9		diesel	37 – 83 (90)*		352 x 131 x 232	4.8	х	х
Thermo 90 ST	12	2.0 – 7.6 continuously		0.25 – 1.0		petrol	37 – 83		352 x 131 x 232	4.8	Х	х
DBW 2010	12/24	11.6		1.	.5	diesel	60 (without o	circulation punp)	584 x 205 x 228	14.5	х	х
DBW 2016	12/24	16.0		2.0		diesel	90 (without circulation punp)		584 x 205 x 228	14.5	х	х
Thermo 230	24	23.0		3.0		diesel	65 (without circulation punp)		610 x 246 x 220	19.0		х
Thermo 300	24	30.0		3.	3.9 diesel 110 (		110 (without circulation punp		610 x 246 x 220	19.0		Х
Thermo 350	24	35	5.0	4.	.4	diesel	diesel 140 (without circulation punp)		610 x 246 x 220	19.0		х

<sup>\*</sup>Booster level

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#### An optimum cool climate with no engine running – Webasto parking air conditioning systems offer both.

Overnight stops, breaks and traffic jams in hot weather no longer mean a strain on the driver, engine and environment. Lower engine wear and fuel savings quickly pay off.

# Choose your ideal long-distance ambience.

Keeping a cool head – with Webasto air conditioning and parking alc systems.



## Webasto parking air conditioning systems:

## A perfect climate 24 hours a day – with a parking air conditioning system.

A pleasantly cool atmosphere in the driver's cab during overnight stops, breaks or waiting times. Windows can be kept closed, meaning greater safety, particularly at night. At the same time the parking air conditioning system helps improve the economic efficiency reducing the engine's idling times also reduces the fuel consumption and wear.

#### **Accusphere II**

With an innovative cold storage solution developed by Webasto such as Accusphere I and II, you enjoy an optimum climate both during breaks and while driving. Depending on the unit, the parking air conditioning system can run for many hours without engine operation since the cold storage unit automatically recharges during travel so as to be able to provide pleasantly cool temperatures during break times.

#### Advantages of Webasto parking air conditioning systems:

- A pleasantly cool cab before you even set off with no running engine
- The driver feels better during breaks and waiting times
- Avoids idling engines and thus reduces wear
- Fuel savings
- Quiet operation for optimum sleeping comfort, even at high outside temperatures
- Draught-free ventilation for a healthy climate
- Reduced CO<sub>2</sub> emissions





**Accusphere II**This cold storage solution makes every break pleasantly refreshing.

#### Technical specifications of parking air conditioning systems:

Model	Storage capacity	System weight	Construction space volume	Rated voltage	Power consumption	Blower levels	Charg fast	e time normal	Operati night max.	5
Accusphere I – OE solution	approx. 3 kWh	approx. 90 kg	approx. 220 l	24 V	1.5 - 3.5 A	3	appr. 2.5 h	appr. 3.5h	approx. 8 h	approx. 3 h
Accusphere II – AM solution	approx. 5 kWh	approx. 150 kg	approx. 428 l	12 V	3.5 -10 A	cont. variable	approx	. 4-6 h	approx	c.10 h

The figures quoted are understood to include the normal tolerance of approx. 10 %. Subject to changes

## Webasto parking air conditioning unit Park & Cool:

The new electric parking a/c system from Webasto with tried and trusted compressor technology is the ideal solution for retrofitting in almost all commercial vehicles.

#### Webasto Park & Cool

The roof split parking a/c unit provides constant cooling when parked. Also as a backwall split unit for simple retrofitting.

#### **Advantages of Park & Cool:**

- Constant cooling when parked without a running engine
- Easy retrofit installation
- Aerodynamic design
- Reduced engine idling times, wear and fuel savings



Park & Cool roof split unit



#### Technical specifications of Park & Cool:

iecinical specifications of Fark & Cool.		
	Park & Cool RS 1000 Roof Split Unit*	Park & Cool BS 1000 Backwall Split Unit*
Cooling capacity [W] Boost / Standard	950 / 650	950 / 650
[BTU/h] Boost / Standard	3245 / 2220	3245 / 2220
Current drain [A] Boost / Standard	14 / 7	14/7
Nominal voltage [V]	24	24
Dimensions external condenser unit L x W x H [mm]	766 x 533 x 205	510 x 187 x 694
Dimensions internal evaporator unit L x W x H [mm]	660 x 120 x 285	660 x 120 x 285
Weight external condenser unit [kg]	21	22
Weigth internal evaporator unit [kg]	5	5
Refrigerant	R134a	R134a

\*Available from spring 2009

#### A pleasantly cool climate when parked or during travel with a Webasto parking cooling or air conditioning system.

The driver's cab quickly becomes a mobile sauna at high outdoor temperatures and in bright sunshine. Sweating, overheating and a drop in concentration can best be avoided with an air conditioning or parking air conditioning system from Webasto.

# A cool climate – when stationary and during travel.

Summer heat loses its sting with Webasto air conditioning and parking cooling systems.



## Webasto parking cooling system NiteCool:



#### **Technical specifications for NiteCool TCC-100:**

	NiteCool TCC-100	NiteCool TCC-100
Voltage (V)	12	24
Electrical power consumption (W) min. – max.	15–150	15–150
Cooling capacity depending on environmental conditions (W)	600–1600	600–1600
Volumetric flow, evaporator fan (m³/h)	850*	850*
Dimensions L x W x H (mm)	728 x 895 x 125	728 x 895 x 125
Roof hatch, roof cut-out section L x W (mm)	338–480 x 395–550	338-480 x 395-550
Weight (kg)	19**	19**
Water tank, dimensions L x W x H (mm)	435 x 160 x 550	435 x 160 x 550
Water tank, weight (kg)	2.0 / 27.5***	2.0 / 27.5***

<sup>\*</sup> free blowing \*\*not including water, tank and cable harness \*\*\* tank empty / tank full

# Webasto air conditioning systems Compact Cooler:

#### Webasto Compact Cooler

Webasto roof top air conditioning systems convince not just through their excellent value for money but also their very simple installation.

#### **Advantages of Compact Cooler:**

- Compact design (flat, lightweight, robust)
- Constant, individual temperature by means of thermostat
- Low power consumption
- Convincing value for money
- CFC-free
- Extensive range of compressors and further accessories

#### **Control units for Compact Cooler:**





Compact Cooler control units: discreet and versatile.

#### Technical specifications for the Compact Cooler:

Unit	Voltage (V)	Vaporiser fan (kW)	3-level. Volumetric rate, freely blowing (m3/h)	Cooling agent (CFC-free)	Heat output (kw) optional	Dimensions L x W x H (mm)	Weight (kg)
Compact Cooler 4E	24	3.5	550	R134a	-	1110 x 774 x 215	55.0
Compact Cooler 5	12/24	5.0	550	R134a	_	750 x 760 x 165	26.5
Compact Cooler 8	12/24	8.5	1300	R134a	7.5	1025 x 970 x 197	40.0

# More safety through an optimum climate in the driver's cab.

Hot spots, cool minds – with Webasto air conditioning and roof systems.



# Webasto compressor air conditioning system:

Both a dry, desert climate and tropical conditions place extreme demands on the equipment and crews of military vehicles. Webasto air conditioning systems create the ideal conditions for perfect work, even at temperatures over 50° C.

#### **DFS – Desert Frost Seven**

Webasto collaborates with the world's biggest supplier of all-terrain military trucks and has specially developed this robust compressor air conditioning system. The system is integrated in the roof module of the vehicle and is ideal for use in extreme conditions by military personnel. The Desert Frost Seven conforms to current military standards for electromagnetic compatibility.



## Webasto roof systems:

#### The Webasto TruckTop

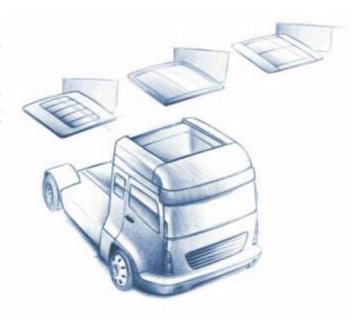
The Webasto TruckTop can be used to increased fresh air supply during travel and to allow additional daylight to flood into the driver's cab so as to give a pleasant sensation of space. Simply press a button and improve the climate in the cab.

#### **Modular roof concepts**

As an OE supplier, Webasto works with leading truck manufacturers to develop roof module concepts. The goal is to improve the feeling of space in the driver's cab through more light and air. The extensive choice of roof solutions allows each manufacturer complete flexibility in roof section design, providing a wide variety of new functions.

Webasto has developed entirely new modular concepts using consistent lightweight designs. This allows truck customers to choose from a wide range of options and possible combinations – without having to dig deep into purchase budgets. The truck manufacturer also gains in versatility and process speed with Webasto roof modules since they integrate exterior components such as spoilers, aerials, lighting and interior components such as roof hatches, louvre-type roofs, interior trim panels and cable looms. There is no end to the possibilities!





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# Webasto is there for you – throughout the world.



Webasto is represented in over 40 countries and works with around 5,000 installation and service partners. This is especially important for long-distance truck drivers: it is the only way you can be sure to find a specialist to help virtually anywhere you go. Vehicle manufacturers who have worked with us for many years are aware of this too. Trucks and com-

mercial vehicles are fitted with Webasto products as part of their original equipment. Ask whether your desired model has a Webasto on board when you purchase your vehicle. And if you already own commercial vehicles, the expert staff of our service partners will be happy to give you advice on individualised retrofit solutions.

Webasto heating and air conditioning systems – your reliable companions for successful business connections all over the world.

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