Webasto
Feel the Drive

Standklimaanlage
Parking Cooler
Climatiseur de toit autonome
Condizionatore da parcheggio
Aire Acondicionado autónomo
Standairco
Klimatyzacja postojowa
Nezávislá klimatizácia

Bedienungsanweisung
Operating Instructions
Notice d'utilisation
Istruzioni per l'uso
Instrucciones de funcionamiento
Bedieningshandleiding
Instrukcja obsługi
Návod na obsluhu

Cool Top Vario 10 E

GB

Table of Contents

1 General information

1.1 Contents and purpose

The operating instructions contain important information for the operation and maintenance of the Cool Top Vario 10 E Parking Cooler.

1.2 Meaning of signal words

In these instructions the signal words **DANGER**, **CAUTION**, **NOTE** and **ENVIRONMENTAL NOTE** have the following meaning:

DANGER
Danger to life and limb.

CAUTION
Danger of damage.

NOTE
This heading is used to point out a special feature or aspect.

ENVIRONMENTAL NOTE
Information on environmental protection.

1.3 Description of parking cooler

The Cool Top Vario 10 E parking cooler cools the passenger compartment of the lorry driver's cab according to the recirculating air principle: Warm air is sucked in from the passenger compartment, cooled by the heat exchanger of the parking cooler and routed back into the passenger compartment. The operation of the parking cooler does not result in any fresh air being fed in.

To prevent the vehicle battery from being too heavily drained by the operation of the parking cooler, the parking cooler is equipped with a battery protection function. The voltage value at which the battery protection function switches off the parking cooler can be set.

The parking cooler can be operated both directly on the control panel of the parking cooler and with the remote control.

1.4 Delivery scope

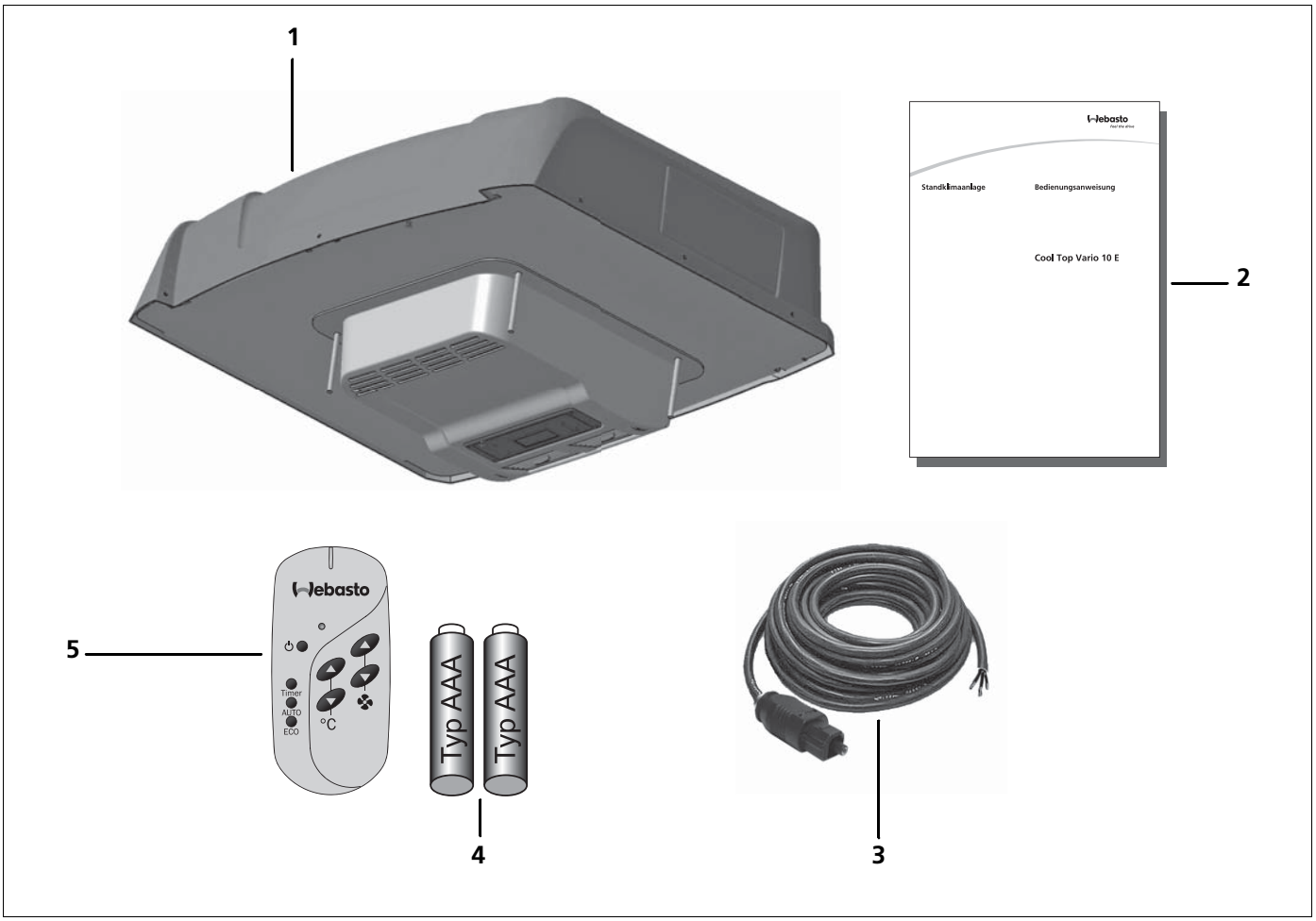

Fig. 1

Item	Designation	Quantity
1	Parking cooler	1
2	Operating instructions	1
3	Power supply cable, 5 m	1
4	Type AAA battery	2
5	Remote control	1

A vehicle-specific installation kit is required for the installation of the parking cooler in the lorry. This consists of the interior trim, the fastening materials and the installation instructions.

2 Safety

2.1 General safety precautions

DANGER
Please read these operating instructions carefully before putting the parking cooler into operation. In particular, be sure to observe the following general safety precautions and the special safety precautions in the individual chapters.

The parking cooler may only be installed by persons who are authorised to carry out work on the electrical system or on the body of lorries.

Do not walk on the vehicle roof.

Do not make any technical changes to the parking cooler. The parking cooler may only be opened, repaired or serviced by instructed service personnel.

Do not operate the parking cooler if it is damaged externally.

Only wash vehicle equipped with the Cool Top Vario 10 E parking cooler if the upper washing brush has been switched off. Make sure that the parking cooler is switched off while washing the vehicle.

Make sure that the parking cooler is switched off before the driver's cab (e.g. maintenance work on the vehicle) is tilted.

If the Cool Top Vario 10 E parking cooler is tilted by more than 30° out of the normal position, (for example, during installation or when the driver's cab has been tilted), a waiting time of at least two hours must be complied with before switching it on. Otherwise, a malfunction can occur.

The parking cooler may only be used for the purpose described in Section 2.3, "Proper use".

Make sure that no flammable materials are located closer than 50 cm to the air outlet opening during operation.

Make sure that no flammable gases, liquids or other objects can get into the parking cooler.

If the parking cooler catches on fire, use a powder or foam extinguisher (not water).

Please note that following installation, the vehicle height may have changed and a corresponding change in the vehicle registration papers may be required.

ENVIRONMENTAL NOTE
Also observe the information on disposal.

2.2 Exclusion of liability

Webasto shall assume no liability for damage due to the following points:

- Use for any purpose other than those described in the operating instructions.
- Changes to the parking cooler without the explicit approval of Webasto.
- Damage to the parking cooler by external influences.

2.3 Proper use

DANGER
In case of improper use of the parking cooler, there is a danger of injuries or damage.

The Cool Top Vario 10 E parking cooler is intended for cooling lorry driver's cabs while parked. As a result, the environmentally harmful running of the engine to operate the vehicle air-conditioning system can be avoided.

The parking cooler can also be used during driving, however does not replace the vehicle air-conditioning system.

The parking cooler can be used independently of the operation of the vehicle air-conditioning system.

Optimum climate control and energy utilisation are achieved when the driver's cab is pre-cooled with the vehicle air-conditioning system before using the parking cooler.

Operate the Cool Top Vario 10 E approx. 5 minutes together with the vehicle air-conditioning system before using it while parked to dissipate stored heat.

2.4 Improper use

The parking cooler is not suitable for use in agricultural machines or construction machines.

3 Operation

3.1 Control panel

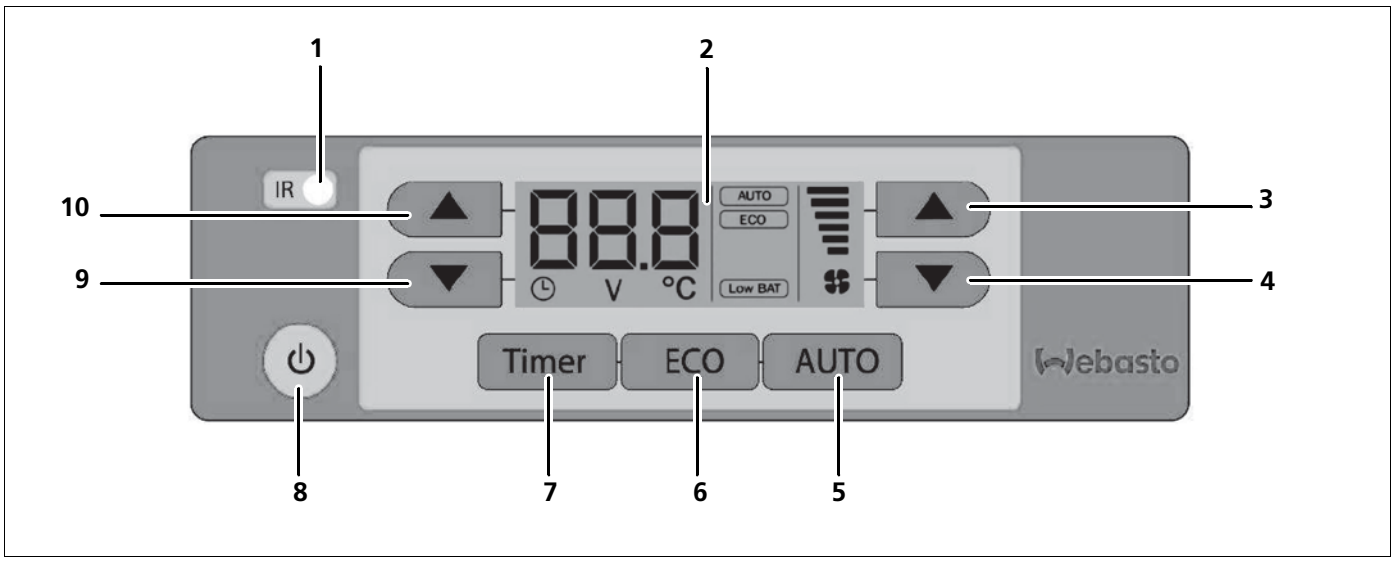

Fig. 2

Item	Designation
1	Infrared receiver for remote control
2	Display
3	Fan **+** button
4	Fan **-** button
5	Automatic mode for optimum operation (time and energy)
6	ECO setting: compressor speed up to 3,000 rpm Without ECO setting: compressor speed up to 4,000 rpm
7	Automatic switch-off
8	On/Off button
9	Temperature **-** button
10	Temperature **+** button

3.2 Remote control

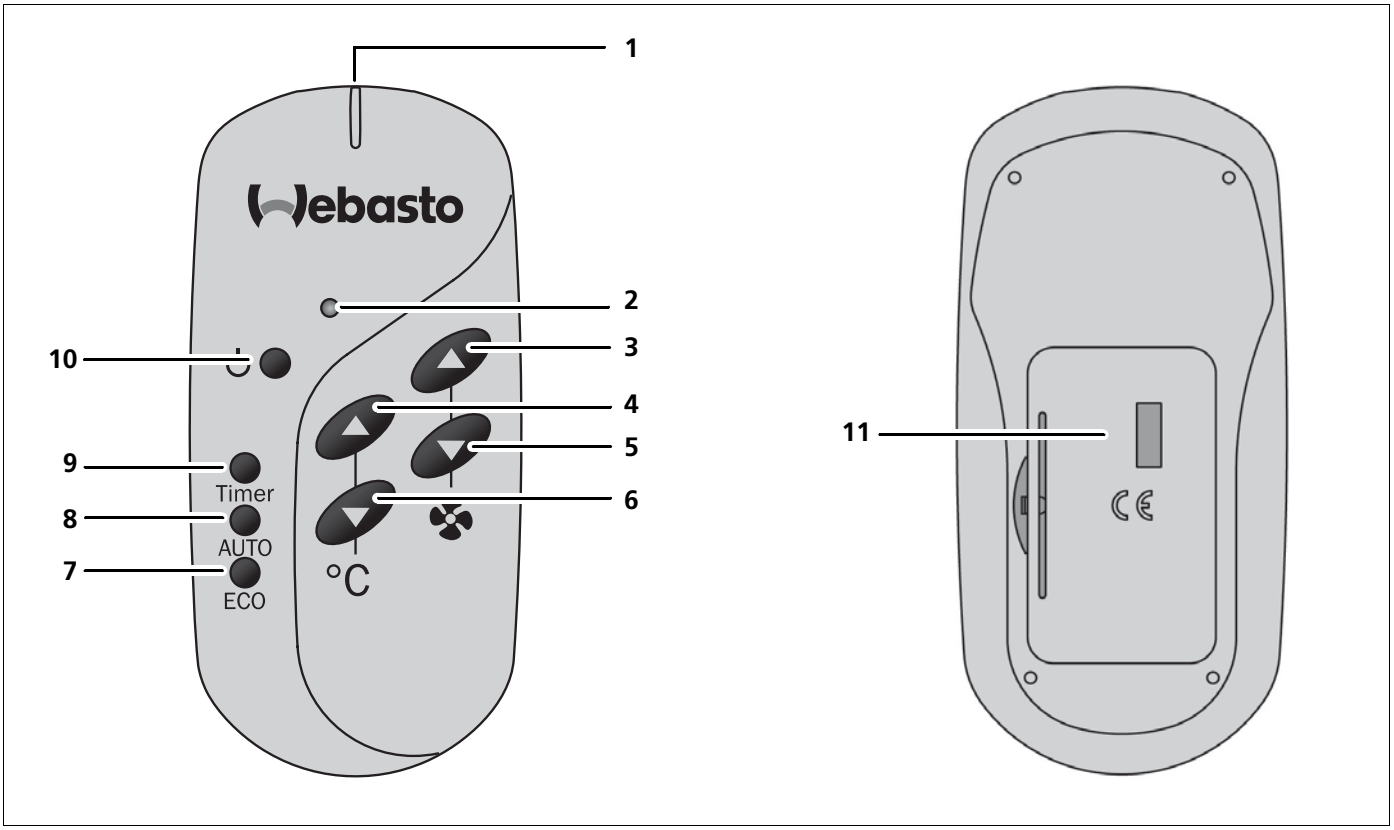

Fig. 3

Item	Designation
1	Infrared transmitter
2	Indicator LED
3	Fan **+** button
4	Temperature **+** button
5	Fan **-** button
6	Temperature **-** button
7	ECO setting: compressor speed up to 3,000 rpm Without ECO setting: compressor speed up to 4,000 rpm
8	Automatic mode for optimum operation (time and energy)
9	Timer operation/automatic switch-off
10	On/Off button
11	Battery compartment for 2 type AAA batteries (back)

3.3 Operate parking cooler

3.3.1 Switch on parking cooler

- Press the On/Off button on the control panel. In the stand-by mode, switch-on can also be carried out with the On/Off button on the remote control.

⇨ The last target temperature set and the last air volume set are indicated on the display.

⇨ The parking cooler begins to operate. The compressor is connected when needed.

3.3.2 Set temperature

The desired temperature (= target temperature) can be set within the range between 18 °C and 28 °C in 1 °C steps:

- For a higher temperature, press the Temperature **+** button on the control panel or on the remote control.
- For a lower temperature, press the Temperature – button on the control panel or on the remote control.

⇨ The desired target temperature is shown on the display.
The parking cooler cools until the desired temperature is reached.

3.3.3 Set air volume

The desired air volume can be set in six levels:

- For a higher air volume, press the Fan **+** button on the control panel or on the remote control.
- For a lower air volume, press the Fan – button on the control panel or on the remote control.

⇨ The selected level is indicated in the display with a corresponding number of bars.

The fan cannot be switched off with the Fan **+** or Fan **–** buttons. To switch off the fan, change into the stand-by mode or switch off the parking cooler.

3.3.4 Set air distribution (air outlet)

The air distribution can be adjusted with the two air outlets in three types of distribution. In addition, the emitted air can be closed at each air outlet.

Fig. 4

CAUTION
The air outlets may not both be closed at the same time. Otherwise, the cooling air cannot be carried away and malfunctions can occur.

0	Air outlet closed
	Comfort mode: large-area, uniform distribution of cooled air
	Conventional mode: large-area, concentrated distribution of cooled air
	Spot mode: concentrated, focused distribution of cooled air

3.3.5 Set operating mode

Timer

Pressing the **Timer** button sets the time after which the parking cooler switches off automatically.

The time set is shown on the display.

A maximum running time of four hours can be set.

With a running time from 0.5 hours up to 2 hours, the running time is set in 0.5-hour steps.

With a running time from 2.5 hours up to 4 hours, the running time is set in 1-hour steps.

AUTO

Pressing the **AUTO** button optimally controls the set temperature both via the compressor speed and via the fan speed.

An activated AUTO mode is shown on the display.

After 20 minutes of operation in the AUTO mode, the system is automatically switched into the AUTO-ECO mode. This limits the compressor speed to 3,000 rpm.

ECO

Pressing the **ECO** button switches the ECO mode on or off. In the ECO mode the compressor speed is limited to 3,000 rpm.

An activated ECO mode is shown on the display.

The ECO mode can be active in addition to the AUTO mode (AUTO-ECO mode). In the AUTO-ECO mode, the set temperature is optimally controlled both via the compressor speed (maximum of 3.000 rpm) and via the fan speed.

3.3.6 Switch off parking cooler

When the parking cooler is switched off, the last target temperature set and the last air volume set are saved. These values are available again when the parking cooler is switched on again.

- Press the On/Off button on the control panel or on the remote control.

⇨ Briefly pressing the On/Off button: parking cooler switches into the stand-by mode.
The display **Stb** appears. Cooling and fan are now switched off, however can be switched on again with the remote control.

⇨ Pressing the On/Off button for longer than three seconds: Parking cooler switches off.
To switch on again, the On/Off button on the control panel must be pressed.

⇨ The numbers of the temperature display flash: The compressor was switched off by heavy braking or driving in extreme curves. Switching on again is carried out by pressing the On/Off button on the unit or on the remote control.

3.4 Advanced settings

The advanced settings enable adjustment to special environmental conditions (F1, F2, F3, F4, F5) and service settings (F6, F7, F8).

The service menus (F6, F7, F8) should only be changed by trained service personnel.

The following advanced settings are possible:

- **F1**
  Setting of the switch-off limit for low battery voltage
- **F2**
  Setting of the switch-on limit for low battery voltage
- **F3**
  Setting of the minimum display brightness
- **F4**
  Setting of the maximum display brightness
- **F5**
  Controller offset = temperature difference between target and actual temperature (six 1 °C steps).
- **F6**
  Memory for communication status of parking cooler.
- **F7**
  Memory for operating status of parking cooler.
- **F8**
  Factory settings

To access the Settings menu:

1. Briefly press the On/Off button on the control panel to access the stand-by mode.
2. Press the Temperature **+** and Temperature **–** buttons on the control panel at the same time.
3. The Settings menu is active. **F1** appears on the display.

To change between the settings F1 to F9, press the Temperature **+** or Temperature **–** button on the control panel. Then activate the desired setting by pressing the **Timer** button on the control panel or.

To change the value of the selected setting, press the Fan **+** or Fan **–** button on the control panel.

3.4.1 Setting of the switch-off limit for low battery voltage (F1)

In this setting the voltage value is set at which the parking cooler is automatically switched off as soon as the value is dropped below.

- Setting range: 20.1 to 25.0 V.
- Factory setting: 23.5 V

1. Call setting **F1**.
2. To change the value, press the Fan **+** or Fan **–** button on the control panel.
3. Set the desired value by pressing the **Timer** button on the control panel.

CAUTION
If the parking cooler is switched off due to low battery voltage, the battery must be recharged as soon as possible. If the battery continues to be discharged, the battery voltage may not be sufficient to start the engine.

3.4.2 Setting of the switch-on limit for low battery voltage (F2)

In this setting the voltage value is set at which the parking cooler can be switched on again (after an automatic switch-off due to low battery voltage has taken place).

- The switch-on voltage must be at least 1.5 V over the switch-off voltage.
- Setting range: 21.6 to 26.5 V.
- Factory setting: 25 V.

1. Call setting **F2**.
2. To change the value, press the Fan **+** or Fan **–** button on the control panel.
3. Set the desired value by pressing the **Timer** button on the control panel.

3.4.3 Setting of the minimum display brightness (F3)

The display brightness is automatically adjusted to the ambient brightness. The minimum display brightness can be set.

- Setting range: six levels, however not greater than the maximum brightness (F4).
- Factory setting: Level 2.

1. Call setting **F3**.
2. To change the value, press the Fan **+** or Fan **–** button on the control panel.
3. Set the desired value by pressing the **Timer** button on the control panel.

3.4.4 Setting of the maximum display brightness (F4)

The display brightness is automatically adjusted to the ambient brightness. The maximum display brightness can be set.

- Setting range: six levels, however not less than the minimum brightness (F3).
- Factory setting: Level 6.

1. Call setting **F4**.
2. To change the value, press the Fan **+** or Fan **–** button on the control panel.
3. Set the desired value by pressing the **Timer** button on the control panel.

3.5 Tips for optimum use of the parking cooler

- Keep windows and doors closed when operating the parking cooler.
- Park in shady areas if possible.
- Darken the windows of the driver's cab if possible.
- Keep parking cooler away from other heat sources if possible (e.g. from cooling units of refrigerated trailers).
- Thoroughly ventilate the heated-up passenger compartment of the driver's cab or pre-cool it with the vehicle air-conditioning system before switching on the parking cooler.
- Operate the Cool Top Vario 10 E approx. 5 minutes together with the vehicle air-conditioning system before using it while parked to dissipate stored heat.

4 Service

4.1 Display messages

CAUTION
The parking cooler may only be serviced and opened by a trained, authorised Webasto Service Centre.

CAUTION
For all display messages listed here (see table), the faults may only be eliminated by a Webasto Service Centre.

NOTE
For all display messages listed here (see table), the parking cooler switches off.

Display message	Fault description
E1	Power relay overvoltage
E1	Power relay short circuit to GND
E1	Power relay short circuit +Ub
E1	Capacitor relay overvoltage
E1	Capacitor relay short circuit to GND
E1	Capacitor relay short circuit +Ub
E2	Modbus TimeOut
E4	Battery protection function Ubatt > 32 V
E4	Battery protection function Ubatt < 18 V
E5	Parking cooler tilted too greatly
E6	Internal system error (EEPROM)
E7	Fault in temperature sensor
E8	Overpressure fault

The numbers of the temperature display flash:
The compressor was switched off by heavy braking or driving in extreme curves. Switching on again is carried out by pressing the On/Off button on the unit or on the remote control.

4.2 Treatment of surfaces

The surfaces of the parking cooler can be cleaned with water (maximum of 70 °C) and a common household washing-up liquid.

Do not use cleaning agents which contain chemical solvents or abrasive components.

During cleaning, make sure that no liquid gets into the inside of the parking cooler.

Clean the air intake opening if necessary with a vacuum cleaner.

The outside of the parking cooler can be painted. The surface should be painted with light colours if possible for the optimum efficiency of the parking cooler.

Painting should be carried out with water-soluble paints on an acrylic-water basis, which are suitable for PMMA surfaces. Paints containing solvents may not be used. If necessary, contact the paint manufacturer to clarify suitability. Webasto shall assume no liability for defects resulting from faulty paintwork.

4.3 Warranty Claims

a) The warranty does not cover parts that are subject to normal wear, or improper handling. The repair or replacement of the unit or parts thereof will not result in an extension of the warranty period.
The legal regulations and the general Webasto terms of sale and delivery apply (can be viewed and downloaded at www.webasto.com).

b) In the event you wish to make a claim under the warranty, contact the agent in your country presenting the following
   – Part covered by the warranty
   – The warranty card
   – The warranty claim

5 Environment

ENVIRONMENTAL NOTE
Also observe the official waste disposal regulations.

5.1 Dispose of system packaging

Separate the packaging materials into cardboard and plastic.

Bring the sorted packaging materials to an appropriate recycling centre.

5.2 Dispose of batteries (remote control)

Used batteries are classified as hazardous waste. You can bring used batteries to an official collection point or anywhere new batteries are sold.

5.3 Dispose of old system

The old system contains the refrigerant R134a. This refrigerant is classified as hazardous waste. Dispose of this refrigerant in an environmentally friendly manner.

To dispose of the old system, contact a specialist company for the disposal of hazardous waste or Webasto.

6 Technical Data

Cool Top Vario 10 E Parking Cooler

Refrigerant	R134a (pre-filled)
Power supply (voltage range adjustable)	24,0 V (20.1 to 26.5 V/DC)
Maximum power consumption	13 A (ECO mode), 20 ± 2 A
Maximum cooling capacity	1,000 W
Operating temperature	-30 to +45 °C
Dimensions (Length x Width x Height)	700 x 860 x 315 mm
Maximum installation height (depending on cabinet type)	197 to 200 mm
Weight	31.0 kg
Batteries for remote control	Type AAA (2x)

Im Fall einer mehrsprachigen Version ist Deutsch verbindlich.

In multilingual versions the German language is binding.

Dans le cas d'une version rédigée en plusieurs langues, l'allemand est alors la langue qui fait foi.

Nel caso di una versione plurilingue il tedesco è vincolante.

Este manual esta traducido en varios idiomas, le informamos que sólo la versión en alemán será vinculante.

Bij een meertalige versie is de Duitse versie bindend.

W przypadku wersji kilkujęzycznej wiążący jest tekst w języku niemieckim.

V prípade nesúladu jazykových verzií je záväzná nemecká.

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