

# Operation instructions

Electric water heater

eThermo Top Eco 20 P

eThermo Top Eco 30 P



# 1 About this document

## 1.1 Purpose of the document

This operating instructions are part of the product and provides the user with information on the safe operation of the eThermo Top Eco 20 P | 30 P.

## 1.2 Using this document

- ▶ Read these operating instructions before operating the eThermo Top Eco 20 P | 30 P.
- ▶ Keep this operating instruction ready to hand.
- ▶ Hand these operating instructions on to the following owner or user of the eThermo Top Eco 20 P | 30 P.

## 1.3 Use of symbols and highlighting



### **DANGER**

This signal word denotes a hazard with a high degree of risk which, if not avoided, will lead to death or serious injury.



### **WARNING**

This signal word denotes a hazard with a moderate degree of risk which, if not avoided, may lead to minor or moderate injury.




### **CAUTION**

This signal word denotes a hazard with a low degree of risk which, if not avoided, will lead to minor or moderate injury.



### **NOTE**

The note denotes a special technical feature or potential damage to the product.

Text with the symbol ✓ describes an action or requirement for the following necessary action. Text with the symbol ▶ describes a necessary action. Texts with the symbol  refer to separate documents which are enclosed or can be requested from Webasto.



### **NOTE**

The following components must be splash-proof to IP44 for the power grid connection in outdoor areas: Socket outlet with earthing contact, power connector and if necessary timer switch.



## **DANGER**

- To guard against electric shocks, the heater may only be connected when the 230 V socket outlet with earthing contact is protected with an RCD switch (circuit breaker) with a rated residual current of max. 30 mA. If you have any questions, please contact a qualified electrician. The heater may only be connected to power grids that are protected with a minimum current and designed accordingly (10 A for eThermo Top Eco 20 P, 16 A for eThermo Top Eco 30 P). The device should be properly connected to a 230 V/50 Hz socket outlet with earthing contact. This should also be checked against the data on the type label.
- Before each use, check the power cable and 230 V socket outlet with earthing contact for defects. If you find any defects, you must not operate the heater until the defects have been fixed by a Webasto service workshop.
- Before starting up the vehicle, the power cable must be removed from the 230 V socket outlet with earthing contact and from the vehicle. Do not use the power cable to pull the connector out of the 230 V socket outlet with earthing contact; always use the connector itself.
- The power cable must not be connected to the 230 V power grid while coiled.
- The power cable must be protected from damage caused by hot, moving or sharp objects.
- If the 230 V heater supply cables mounted in the vehicle are accidentally overextended, you **MUST** check whether the 230 V heater supply cables, the integrated connector or other parts of the vehicle heating system have been damaged. A damaged heater supply cable **MUST** be replaced by a Webasto service workshop.

## **1.4 Warranty and liability**

Webasto shall not assume liability for defects or damage that are the result of the installation and operating instructions being disregarded.

This liability exclusion particularly applies for:

- installation by untrained personnel
- improper use
- repairs that have been carried out by a service workshop other than Webasto
- use of non-genuine parts
- Conversion of the eThermo Top Eco 20 P | 30 P without permission from Webasto

## 2 Intended use

In parking heating mode, the electric water heater works together with the vehicle's heating system to preheat the cab and engine.

The heater works independently of the vehicle engine and is integrated in the cooling system and the electrical system of the vehicle.

The heater eThermo Top Eco 20 P | 30 P is currently approved for the following applications:

- Car
- Caravans, campers, motor homes

The heater eThermo Top Eco 20 P | 30 P is currently not approved for the following applications:

- Industrial premises, residential premises, business and commercial premises or small businesses
- Trucks, buses (vehicle classes N and O)
- Construction machinery, agriculture and forestry machinery, earth-moving machinery, industrial trucks



### NOTE

Please contact your authorised Webasto dealer with any questions.

## 3 Operation



### DANGER

The heater may only be connected to 230 V / 50 Hz power grids that are protected with the following minimum current and designed accordingly:

eThermo Top Eco 20 P: **min. 10 A**

eThermo Top Eco 30 P: **min. 16 A**

The heater is in operation as soon as the power supply is connected.

As an alternative, the heater operation can be controlled using a commercially available timer switch.



### NOTE

- Maximum continuous operating duration of the heater: 120 min.
- A commercially available timer switch can be used for this purpose (230 V).

Ensure there is sufficient switching power:

eThermo Top Eco 20 P: (min. 10 A / 2.30 kW)

eThermo Top Eco 30 P: (min. 16 A / 3.68 kW)



### NOTE

Protect the connector and power cable from damage.

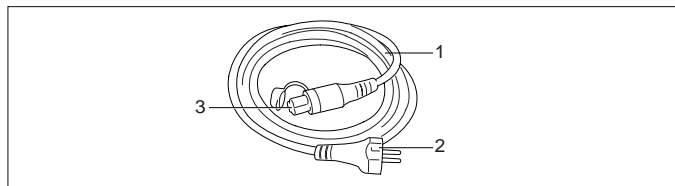


Fig. 01: Power cable

Legend:

1. Power cable
2. Power connector (230 V)
3. Female connector, vehicle side

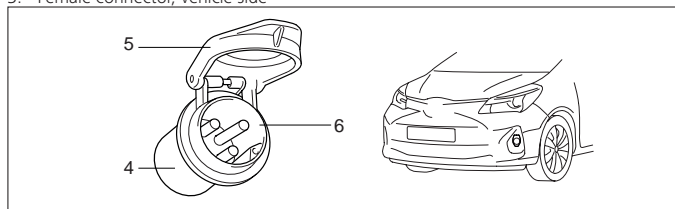


Fig. 02: Example connection to the vehicle

Legend:

4. Installation cable (in vehicle, to heater)
5. Cover for integrated connector
6. Integrated connector in vehicle (connection for power cable female connector, vehicle side)

### 3.1 Connecting the power cable (vehicle – 230 V power grid)

- ✓ First connect the power cable to the vehicle, before connecting the power connector to the power grid.
- ▶ Connect the female connector to the integrated connector.
- ▶ Connect the power connector to a 230 V socket outlet with earthing contact.



#### NOTE

At low temperatures the power cable may feel a little more rigid; this is a characteristic of the product.

### 3.2 Removing the power cable (power grid – vehicle)

- ▶ First disconnect the power connector from the power grid, then disconnect the female connector.
- ▶ Stow the power cable.



#### **NOTE**

The cover for the integrated connector should be closed when not in use.

## 4 Maintenance

Before or after the winter season:

- ▶ Protect the contact pins of the integrated connector (in the vehicle) against corrosion. Use a silicone spray that is approved for electrical contacts.
- ▶ Check all contacts, the integrated connector cover, the power cable and the heater supply cable for damage. Replace damaged parts.



#### **DANGER**

If maintenance is not carried out, there will be insufficient or no protection from electric shocks, and this can result in corresponding injuries. In the event of non-compliance, Webasto is released from any liability, insofar as this is legally permissible.

## 5 Cleaning



#### **DANGER**

During cleaning, the heater must not be connected to the power grid.

Carefully clean the heater using water and a cleaning agent suitable for cleaning vehicles.

## 6 Disposal end of live



The eThermo Top Eco 20 P | 30 P must not be disposed of in domestic waste.

- ▶ Observe the regional regulations for disposal of electronic products.

## 7 Service and customer services

Do you have any technical queries or a problem with your heater? Country-specific telephone numbers for our branches can be found on the Webasto service point flyer or under [webasto.com](http://webasto.com).

## 8 Technical data

Heater (230 V / 12 V)	e Thermo Top Eco	
	20 P	30 P
Design	Water heater (electrical operation)	
Power connection [V] (50 Hz)	220 - 230	
Heating capacity [kW]	2	3
Output voltage [V]	12.0 - 14.0	
Permissible ambient temperature (operation) [°C]	-40 / +80	
Heater weight, empty [kg]	1.4	
Coolant pump (12 V)		
Volume flow against 0.1 bar [l/h] 900	900	
Operating voltage range [V]	10.5 -17	
Rated power consumption [W]	14	
Weight [kg]	0.3	

Original Operating Instructions. If your language is missing, it can be requested from Webasto.

The telephone number of each country can be found in the Webasto service centre leaflet or the website of the respective Webasto representative of your country.

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