



# **USER AND MAINTENANCE INSTRUCTIONS EBERSPACHER AIRTRONIC / HYDRONIC HEATERS**

## SEGMENT OVERVIEW



CONSTRUCTION



AGRICULTURE/  
FORESTRY



RV



UTILITY/CARGO



CAR/LCV



AMBULANCE



PUBLIC SAFETY



MARINE



PERSONAL  
TRANSPORT



TRUCK/HCV



RAILWAY



MILITARY

# 1 Operating and Maintenance Instructions

valid for Eberspächer

- Air heaters
- Airtronic air heaters
- Hydronic water heaters

Thank you for purchasing an Eberspächer heater. We hope that you get a lot of pleasure out of your heater.

We assume that your installation garage/workshop has instructed you in how to use the heater. If necessary, you will find the relevant information in the operating instructions for the control unit, which were issued to you by the workshop.

## 1.1 Intended use of the heater

The heater is for

- heating passenger compartments, cargo spaces and ships' cabins,
- defrosting the vehicle's windscreen and windows,
- in the case of water heaters used in conjunction with the vehicle's heating system, for pre-heating the vehicle engine.



### PLEASE READ FIRST

Before you switch on the heater, ensure that you read through this documentation carefully. The documentation contains important information, which you require for safe use of your heater.

Further detailed information is given in the technical description of the heater, which is stored on a CD included with the heater.

Please keep this documentation and the CD in a safe place for subsequent reference.

## 1.2 Notes and safety instructions

Notes and safety instructions in this documentation are marked accordingly and must always be followed.

### 1.2.1 Safety instructions for operation



#### DANGER

#### RISK OF FIRE, EXPLOSION AND POISONING!

If the heater is operated in unapproved locations, a fire or explosion can occur or exhaust fumes can cause poisoning.

- The heater must not be operated
  - in petrol stations and at refuelling systems.
  - in closed rooms, e.g. in the garage or in a multi-storey car park, not even with preselected mode.
  - there where flammable materials are located in the area of the exhaust system, e.g. dry grass, leaves, paper or similar.
  - there where flammable fumes and dusts can form, e.g. near fuel, coal, wood and grain storage and similar.
- The installation space of the heater must remain clear. In particular, fuel canisters, oil cans, spray cans, gas cartridges, fire extinguishers, cleaning rags, items of clothing, paper, etc. must not be stored or transported on or next to the heater.

 **NOTE**

The afterrun must not be stopped prematurely, except for emergency stop.

**Emergency stop – EMERGENCY OFF**

If an emergency shutdown – EMERGENCY OFF – is necessary during operation:

- Switch the heater off at the control unit
- or
- Remove the heater's fuse

**1.2.2 Safety instructions for air heaters**

 **DANGER**

**RISK OF FIRE AND BURNS!**

- A fire can occur if hot air is blown onto flammable objects.
  - Burns can occur if hot components of the heater on which hot air is blown are touched.
- Do not touch the heater while it is running.
- Operate the heater only with closed maintenance damper and installed outlet hood.
- Adjustable hot air outlets must always be aligned so that they cannot blow hot air directly at people, animals or objects sensitive to temperature (loose and / or fastened).

**1.2.3 Note for water heaters**

 **NOTE**

The proportion of anti-freeze in the coolant circuit must be at least 10 % and must not exceed 50 %.

**1.3 Operating the heater**

The heater is operated by a control unit.

- Before switching on or preselecting heating mode, make all the necessary settings at the control unit.
- In the case of water heaters, switch the vehicle's heating control to "WARM" (maximum setting) and the blower to "slow level" (low electricity consumption).
- In the case of air heaters, set the required temperature range at the control unit.

Recommendation:

In case of preselection and short journeys, match the heating mode duration to the journey time (e.g. single trip 20 min = heating time 20 min).

**1.4 Special function**

**Forced shutdown in ADR mode**

In vehicles for the transport of dangerous goods (e.g. tanker trucks), the heater must be switched off before the truck drives into a danger area (refinery, petrol station, etc.).

EN

Failure to comply results in the heater switching off automatically when:

- the vehicle engine is switched off.
- an additional unit is switched on (auxiliary drive for unloading pump, etc.).

The fan then runs on for max. 40 seconds.

## 1.5 Fuel supply

### NOTE

- The heater may only be operated with the fuel approved by the manufacturer.
- For notes on alternative fuels, refer to the technical description of the heater.
- After refuelling with winter or cold diesel, fill the fuel lines and the metering pump with new fuel by running the heater for 15 minutes.

### 1.5.1 Fuel quality for petrol heater

The heater runs problem-free on standard commercial grade petrol to EN 228.

### 1.5.2 Fuel quality for diesel heater

The heater runs on standard commercial grade diesel fuel to EN 590 with max. 30 % biodiesel content (FAME). In case of storage periods longer than 30 days it is advisable to use FAME-free products, as ageing effects can have a negative effect on the fuel, especially regarding its flow properties and filterability.

## 2 Faults

### NOTE

- If the heater is run without fuel it switches to fault and locks.
- Replace defective fuses only with fuses with the specified fuse rating.
- Guarantee claims can expire if the heater is modified by a third party or by the installation of third party parts.

### 2.1 Correcting a fault yourself

- The heater does not start after it has been switched on.
  - Switch the heater off and back on again (max. 2 times).
- If the heater still does not start, check whether
  - Fuel in the tank?
  - The fuses are ok?
  - The electrical cables, connections, terminals, are ok?
  - Hot air system is blocked (air heaters only)?
  - Coolant liquid level low (water heaters only)?
  - Exhaust system and / or combustion air system blocked?

If the heater remains faulty even after you have checked all the above items, it must be checked by the trained personnel of Eberspächer Climate Control Systems GmbH.

## 2.2 If the following faults occur, switch off the heater and have the fault corrected immediately

If the following occur during heating mode

- sustained thick smoke,
- smell of fuel,
- smell of overheated electrical / electronic components,
- if unusual burning noises occur,
- if fuel escapes from the fuel system of the heater system (leak),

switch off the heater and disable by removing the fuse.

Do not start up again until it has been checked by trained personnel of Eberspächer Climate Control Systems GmbH.

## 3 Statutory Regulations

### NOTE

- Compliance with the statutory regulations and all notes and safety instructions in these operating and maintenance instructions and the technical description is prerequisite for guarantee and liability claims.
- Failure to comply with the statutory regulations, notes and safety instructions and incorrect repairs, even if original spare parts are used, make the guarantee null and void and exclude any liability whatsoever of Eberspächer Climate Control Systems GmbH.
- The statutory regulations are binding and must also be observed in countries which do not have any special regulations.

- Repairs by non-authorised third-parties and/or with non-original spare parts are dangerous and are therefore not allowed. They result in expiry of the type-approval of the heater and therefore they can cause expiry of the vehicle's operating licence.

### 3.1 Type approval

The Federal Motor Transport Authority has issued a type approval for a component according to ECE-R122 and ECE-R10 for the heater for installation in motor vehicles, with an official type-approval marking noted on the heater's nameplate.

### 3.2 EU Declaration of Conformity

We herewith declare that the version of the heater placed on the market by us conforms to the applicable provisions of the following EU Directive.

EU Directive 2014/30/EU



The full Declaration of Conformity can be viewed and downloaded from the download centre under [www.eberspaecher.com](http://www.eberspaecher.com).

### 3.3 UKCA Declaration of Conformity

We herewith declare that the version of the heater placed on the UK market by us conforms to the applicable provisions of the following UK Directive.

Electromagnetic Compatibility,  
Statutory Instrument 2016 No. 1091



The full Declaration of Conformity can be viewed and downloaded from the download centre under [www.eberspaecher.com](http://www.eberspaecher.com).

## 4 Maintenance Instructions

### NOTE

- Switch off the heater before cleaning.
- Do not use high-pressure jetting equipment to clean the heater.
- Any repair and maintenance work may only be carried out by personnel trained by Eberspächer Climate Control Systems GmbH.

### 4.1 Cleaning and maintenance

After a lengthy stoppage of the heater, check the openings

- of the hot air system (of air heaters only),
- the combustion air system,
- the exhaust system,

clean if necessary.

Switch on the heater once a month for about 10 minutes, even outside the heating period.

Run through a trial run before the heating period.

BUTLER TECHNİK

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