



Control unit for Eberspächer pre-heaters

A WORLD OF COMFORT





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### 1 Introduction

### 1.1 Please read first

Before you start with the setting and operation of EasyStart Pro, please read these operating instructions through carefully.

The operating instructions contain important information you require for the setting and operation of EasyStart Pro.

Please keep the operating instructions in a safe place for future reference.

### 1.2 Special text formats and presentations

Special text formats and picture symbols are used in these instructions to emphasise different situations and subjects. Refer to the following examples for their meanings and appropriate action.

### 1.2.1 Lists

- This dot (■) indicates a list or action step, introduced by a heading.
  - If an indented dash (-) follows a "dot", this list/action step is a sub-section/secondary step of the black dot.

### 1.2.2 Cross references

Underlined blue text denotes a cross-reference, which can be clicked in the PDF format. The part of the document named in the text is then displayed.

### 1.3 Explanation of the icons



# **§** Regulation!

This information indicates a statutory regulation. Any violation of these regulations results in expiry of the type-approval for the heater and exclusion of any guarantee and liability claims against Eberspächer Climate Control Systems GmbH & Co. KG.



# **Danger!**

"Danger" indicates a situation that can directly result in death or serious injuries if not avoided.

→ This arrow indicates the appropriate measures to avert the imminent danger.



# ⚠ Warning!

"Warning" indicates a situation that can potentially result in death or serious injuries if not avoided.

→ This arrow indicates the appropriate measures to avert the potential danger.



# **A** Caution!

"Caution" indicates a situation that can potentially result in minor or slight injuries or damage to the device.

→ This arrow indicates the appropriate measures to avert the potential danger.



This note contains recommendations for use and useful tips for the operation, installation and repair of the product.



### 1.4 Repair

Repair of the EasyStart Pro control unit is not permitted. Failure to comply with this will void the warranty and this will lead to the exclusion of any warranty and liability on the part of Eberspächer Climate Control Systems GmbH & Co. KG.

### 1.5 Disposal

Dispose of the product only according to the relevant legal regulations.

### 1.6 Safety instructions



# ⚠ Danger!

Always note and follow all information and notes, especially the safety instructions in this documentation and in the technical description of the heater.

- Risk of fire/deflagration due to ignition. Hazardous situations can occur if the heater is operated in the immediate vicinity of flammable gases, fumes, liquids or dust.
- → Do not use the EasyStart Pro control unit if the heater to be activated is in an environment in which flammable gases, fumes, liquids or dust are present or could be present.
- Risk of poisoning due to escaping exhaust gases. Hazardous situations can occur during operation of the heater in enclosed rooms.
- → Do not use the EasyStart Pro control unit if the activated heater is located in enclosed rooms, e.g. in a garage or a multi-storey car park.

- Risk of short-circuit due to penetrating liquid. Penetration of liquid into the receiver unit of the EasyStart Pro can result in dangerous situations.
- → To reduce the risk of an electrical shortcircuit or damage, do not expose the receiver unit of the EasyStart Pro to moisture.

### 1.7 Intended use

The EasyStart Pro control unit serves for selecting the operation mode, for setting the operating time, for preselecting the starting time and for switching a heater and/or other option from Eberspächer Climate Control Systems GmbH & Co. KG installed in the vehicle ON or OFF.



### 1.8 Non-intended use

- Use of the EasyStart Pro control unit for any purpose other than the intended use specified by the manufacturer is not permitted.
- → Use the EasyStart Pro control unit only for its intended purpose.
- Do not use the EasyStart Pro control unit if a malfunction could cause a hazard and /or damage to property.
- Do not use the EasyStart Pro control unit if there is reason to assume that safe operation of the activated heater is no longer assured.
- → Take all measures to prevent accidental restarting.

### 1.9 Disclaimer

The manufacturer is not liable for damage caused by improper use or incorrect operation. Failure to comply with the safety instructions makes the guarantee null and void and this leads to the exclusion of any liability of Eberspächer Climate Control Systems GmbH & Co. KG.

## 1.10 Target groups for this document

This document is intended for the following target groups:

### **Specialist workshop**

The "specialist workshop" target group includes all workshops trained by Eberspächer that purchase heaters or air conditioning systems and their control units, accessories and spare parts from Eberspächer or the trade and install, repair or service these on behalf of an end user.

### **Installation shop**

The "installation shop" target group includes all companies trained by Eberspächer that purchase heaters or air conditioning systems and their control units, accessories and spare parts from Eberspächer and install, repair or service these on behalf of another company (normally the motor vehicle manufacturer / body builder).

### **End user**

The "end user" target group includes all natural persons who operate a heater or air conditioning system using a control unit, irrespective of whether as a consumer or as part of their normal work.



# 1.11 Instruction obligation of the target groups

Each of the above-mentioned target groups must unconditionally observe its instruction obligation. The instruction obligation includes the passing on of technical documents.

Technical documents are all documents published for the installation, operation, maintenance or repair of heaters or air conditioning systems and their control units, accessories and spare parts from Eberspächer.



- Unless otherwise expressly stipulated below, the technical documents may be passed on in printed form, on a data medium or by Internet download.
- The latest technical documents are available for download via the Eberspächer website.

### Responsibility of the installation shop

The installation shop must pass on the following technical documents to the contracting company with the obligation to pass on these to the end user:

- Technical description
- Operating instructions

### Responsibility of the specialist workshop

The specialist workshop must pass on the following technical documents to the end user. even if the order comes from a sub-contractor:

- Technical description
- Operating instructions



The above-mentioned target groups must ensure that the end users are provided with the operating instructions on the product prepared by the manufacturer in printed form and in the end user's national language. If necessary, this can be an abridged form of the complete operating instructions that is additionally included with the product on a data medium or is available via Internet download.

# 1.12 EU Declaration of Conformity

We herewith declare that the control unit 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 at www.eberspaecher.com.



# 2 Getting to know EasyStart Pro

### 2.1 General information

EasyStart Pro has a simple operating structure. All settings, functions and parameters are controlled with a single operating button.

If the power supply in the vehicle is interrupted (e.g. the battery is disconnected), EasyStart Pro retains all the basic settings, with the exception of date and time. When the power supply is restored, only the date and time have to be set again for timer mode, see page 14.

The use of EasyStart Pro is described in detail from page 9.

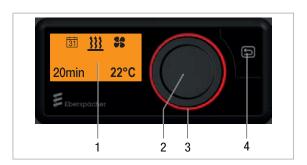
## 2.2 Product properties

EasyStart Pro is a permanently installed control unit for air and water heaters. It is based on the CAN bus communication and has been designed for the new Hydronic S3 Economy / Commercial and Airtronic S2 / M2 heater generations.

EasyStart Pro is generally installed in the cockpit or dash panel of the vehicle.

EasyStart Pro allows you to make all the necessary settings for heater, ventilator and timer mode of up to two heaters separately or of two identical heaters (Airtronic 2 or Hydronic S3) in a group.

# 2.3 Description of the operating components



### 1 Display

The display shows the following parameters:

- Current operating mode
- Current interior temperature
- Operating mode
- Timer positions
- Settings
- Error codes

### 2 Operating button

The operating button is used to operate, select and program all the functions and values in EasyStart Pro.

- Turning selects a value/function within a menu.
  - Turning to the right increases a value or selects the next menu item to the right.
  - Turning to the left decreases a value or selects the next menu item to the left.
- Pressing confirms the flashing menu item or value on the display.
- If EasyStart Pro is in sleep mode (display OFF), pressing or turning "wakes up" the active display mode.
  - If all heaters are switched off, the Start mask will be displayed.



 When the heater is running, the currently remaining operating time of the heater is displayed. If several heaters are running, the currently remaining operating times will be displayed alternately.

 When the heater is running, the currently remaining operating time of the heater is displayed. If several heaters are running, the currently remaining operating times will be displayed alternately.

# Note

- A LONGPRESS (min. 2 sec.) immediately starts all connected heaters. The standard operating time here is set at the factory to 30 minutes.
- During operation, a LONGPRESS (min. 2 sec.) immediately switches off all connected heaters.
- If terminal 58 has voltage, sleep mode will not be activated as long as the vehicle lights are switched on.

## 3 LED ring

The LED ring with its different colours serves to indicate the operating mode.

Red ring: Heating mode Blue ring: Ventilator mode Residual heat mode Orange ring: White ring: System configuration • Red flashing ring: Fault in one of the connected heaters or in EasyStart Pro

# 4 Button **S** BACK

The BACK button causes a jump back to the menu or command at the next higher level. If EasyStart Pro is in sleep mode (display OFF), pressing "wakes up" the active display mode.

If all heaters are switched off, the Start mask will be displayed.

### 3 Notes on operation and setting

### 3.1 **Activating EasyStart Pro**

If the display is not lit, EasyStart Pro has to be activated. Pressing the operating button or BACK button bu continue with operation or setting.

### 3.2 Display

The display is lit

- During operation of EasyStart Pro
- When terminal 58 has voltage, for example when the vehicle lights are switched on (optional).
- When the heater is ON (the display goes out after approx. 30 seconds).

### 3.2.1 Display language

The display language is set by the workshop during installation. In the delivery condition of EasyStart Pro, German or English are available as display languages.

A further 25 display languages are currently available. If necessary, agree on the display language to be set with your installation workshop. It will then undertake the necessary configuration.



### 3.2.2 Display goes out

The display goes out after approx. 30 seconds if

- No settings are made.
- No heater is switched on.
- When using terminal 58, when the vehicle lights are switched off.

EasyStart Pro then goes to sleep mode. Before going to sleep mode, an overview mask is displayed. EasyStart Pro then has to be activated (see above) before a new input can be made.

### 3.3 Activating a function

The symbol of the function to be activated appears in the middle and flashing in the display.

### Flashing function / flashing value

- Select the flashing function in the menu bar by pressing the operating button.
- Increase or decrease the flashing value by turning the operating button. Then confirm the selected value by pressing the operating button.

### **Cancel settings**

Any settings being made can be cancelled with the BACK button .



### Note

Settings and changes must always be confirmed by pressing the operating button, otherwise they will be lost.

### 3.4 Setting the operating time

The operating time can be set individually using the operating button.

- Turning to the right increases the operating time.
- Turning to the left decreases the operating
- Setting range for the operating time: min. 10 minutes to max. 120 minutes in oneminute steps.
- The operating time can be prolonged to infinite. Above the 120th minute, the input is made in 60-minute steps.



- With air and water heaters, continuous heating mode  $[\infty]$  is also possible.
- The operating times of all the connected heaters can be set independently of one another.

### 3.5 Operating modes

### 3.5.1 Heating

- In this operating mode, a water heater heats the vehicle engine via the coolant circuit and the vehicle interior via the ventilation louvres, irrespective of the configuration.
- An air heater heats the vehicle interior with warm air that is distributed by a fan in the heater.

### 3.5.2 Ventilation

In this operating mode, the water or air heater supplies the vehicle interior with fresh outdoor



air via the ventilation louvres. This operating mode is only possible if the function is supported by the heater version (see also the Technical Description of the heater).

### 3.6 Temperature sensor

EasyStart Pro has an integrated temperature sensor that measures the interior temperature and regulates the power of the air heater. During installation, an additional external temperature sensor can be connected and integrated into the system.

With air heaters, the temperature sensor installed in the heater for control of the heater can also be used to measure the interior temperature. This function will be installed by the installing workshop during initial commissioning.

### 3.7 Further devices

EasyStart Pro allows the simultaneous operation of up to 2 heaters, see page 19. It is also possible to combine a heater with a fan. The fan is then used to circulate the air inside the vehicle.



The number of symbols and displays differs depending on the installed heater and feature options.

### 3.8 Factory setting

### Timer mode (for all heaters)

■ Weekday group: Mon – Fri

Departure time: 07:00 h

### Air heaters

Operating time: 30 minutes

Maximum operating time: 720 minutes

Target temperature: 22°C / 72°F

### **Water heaters**

Operating time: 30 minutes

Maximum operating time: 720 minutes

### **Operating and configuring** 4 **EasyStart Pro**

### 4.1 The menus and their functions



Menu bar

Status area

### Menu bar

The following menus can be selected from the menu bar (turn the operating button to the right):

Symbol	Menu
<b>***</b>	Heat
35	Ventilate
(1)	Residual heat
*	Settings
31	Timer



# i Note

- The Ventilation function is only displayed if the heater supports this function.
- The timer function 31 is not available on vehicles in ADR mode.
  - ADR mode is reserved for vehicle transporting hazardous goods on the road (e.g. road tankers).

### Status area

When the menu (heating, ventilation, settings, timer or residual heat) is activated, various items of information are display in the status area. These are presented and described in the respective sections of these operating instructions.

### Input area



Menu bar

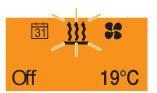
Input area

### Display:

e.g. Heating ON / Operating time 107 min.

In the menu bar, the symbol of the selected menu item appears in the middle of the display. The corresponding setting value flashes in the input area and can be altered by turning the operating button to the left or right and confirmed by pressing.

## 4.2 Heating



In the Start mask, a flashing heater symbol **111** in the menu bar and the current temperature and status of the heater are displayed.

Possible actions are:

- HEATING IMMEDIATELY with LONGPRESS
- HEATING ON with settings

# 4.2.1 HEATING IMMEDIATELY with LONGPRESS:

- Press operating button for longer than 2 seconds.
- → Heating mode starts immediately with the last operating time used. The LED ring lights up red and the residual heating mode time is displayed.



The function LONGPRESS ON is not available in ventilator and residual heat mode.

### 4.2.2 HEATING ON with settings:

- Press the operating button.
- Select the operating time by turning the operating button.



With air heaters, select and confirm the target temperature.

Confirm the operating time by pressing the operating button.



- → Heating mode starts with the set operating time. The LED ring lights up red, the residual heating mode time and the current temperature are displayed.
- Heating mode ends at the end of the set operating time.



If an air heater is operated with EasyStart Pro, the desired temperature can also be set in heating mode.

 $14^{\circ}\text{C} - 36^{\circ}\text{C}$  in  $1^{\circ}\text{C}$  steps,  $57^{\circ}\text{F} - 97^{\circ}\text{F}$  in  $1^{\circ}\text{F}$  steps.

# Changing the operating time during heating mode

- Press the operating button.
- Select and confirm flashing menu !!!.
- Select and confirm the settings by turning and pressing the operating button
- Set the desired operating time by turning and press to confirm.

# **i** Note

With air heaters, select and confirm the target temperature beforehand.

→ Heating mode is continued with the set operating time. The LED ring lights up red and the residual heating mode time is displayed.

### **HEATING OFF during heating mode**

- Press the operating button.
- Select and confirm flashing menu !!!.
- When OFF flashes on the display, press the operating button again.
- Heating mode is terminated.

# **i** Note

- LONGPRESS terminates heating mode immediately and all further connected heaters are also switched off.
- If the heater is connected to the vehicle battery (e.g. car battery), the operating time of the heater should not exceed the subsequent driving time of the vehicle. This will ensure that the vehicle battery is sufficiently charged. Example:

Operating time of the heater: 25 minutes
Driving time of the vehicle: min. 25 minutes

## 4.3 Ventilation



In the Start mask, a flashing fan symbol in the menu bar and the current temperature and status of the heater are displayed.

### **4.3.1 VENTILATION ON with settings:**

- Press the operating button.
- Select the operating time by turning the operating button and confirm, or confirm the displayed operating time.
- → Ventilation mode starts with the set operating time. The LED ring lights up red and the residual ventilation mode time is displayed.
- Ventilation mode ends at the end of the set operating time.



# Changing the operating time during ventilation mode

- Press the operating button.
- Select and confirm flashing menu \$\mathbb{x}\$.
- Select and confirm the settings by turning and pressing the operating button
- Set the desired operating time by turning and press to confirm.
- → Ventilation mode is continued with the set operating time. The LED ring lights up blue, the residual ventilation mode time and the current temperature are displayed.

### **VENTILATION OFF during ventilation mode**

- Press the operating button.
- Select and confirm flashing menu
- When OFF flashes on the display, press the operating button again.
- Ventilation mode is terminated.



LONGPRESS terminates ventilation mode immediately. All connected heaters are switched off.

## 4.4 Settings



In the Start mask, a flashing gear wheel in the menu bar and the set day of the week and the current time are displayed.

Possible actions are:

- Standard settings for day of the week, time and temperature format
- Heating at high altitudes: ON / OFF
- Low temperature during heating: ON/OFF
- Fault diagnosis: Display of error messages
- Reset user settings

### 4.4.1 Standard settings

- Set time:
  - Select and confirm.
  - Set the hours and confirm.
  - Set the minutes and confirm.
- Set time format
  - Select and confirm.
  - Select between 12 h and 24 h format and confirm.
- Set weekday
  - Select and confirm.
  - Set the day of the week and confirm.
- Set temperature format
  - Select and confirm.
  - Select between degrees Celsius and degrees Fahrenheit and confirm.



### 4.4.2 Heating mode at high altitudes



This function applies only to the Hydronic S3 12 V. This setting is not visible on heaters with integrated altitude sensor as it is not required.

When operating the heater at an altitude above 1500 m above sea level, an adjustment has to be made in this menu in order to regulate the fuel supply according to the altitude.

- Select and confirm.
- Select between ON (above 1500 m above sea level) and OFF (below 1500 m above sea level) and confirm.

### 4.4.3 Low temperature heating mode

Low temperature heating mode fulfils the following functions:

- Water heaters: Comfort function at higher outdoor temperatures. The function modifies the control thresholds of the heater in order to harmonise heating mode, e.g. in the summer months.
- Air heaters: Reduction of the outlet temperature at the air louvre by approx. 10 °C / 18°F (depending on the air routing), e.g. if the air louvre is near the body or discharges onto temperature-sensitive components in the vehicle.
  - Select and confirm.
  - Select between ON and OFF and confirm.

### 4.4.4 Fault diagnosis

- Select and confirm.
- Select and confirm the connected heater or control unit.
- The faults are displayed in the order of their occurrence.



If a fault occurs, the symbol suppears on the display during operation:



- The LED ring flashes red as soon as a fault occurs. It stops flashing when the error message has been cancelled by pressing the operating button.
- Further information on fault diagnosis from on page 22.

## 4.4.5 Resetting the user settings

- Select and confirm.
- YES resets the user settings in the EasyStart Pro and deletes the programmed timer, date and other settings.
- NO retains the existing user settings in the EasyStart Pro.



### 4.5 Timer

## 4.5.1 General information on programming the timer positions

The timer selection menu controls up to three programmable timer positions. The timer positions can either all take place on one weekday or can be distributed between different weekdays or weekday ranges.

Weekday ranges, e.g.

Mon – Fri 5 x heat / ventilate

Mon – Sun 7 x heat / ventilate

If a programmed weekday range is activated, all the days of the week are processed in turn as long as the timer is active. Renewed programming is not necessary.



- If EasyStart Pro is activated with a programmed weekday range Mon - Fri on Sunday, the heater heats or ventilates from the following Monday to Friday with the set defaults (5x HEATING / VENTILATION).
- If EasyStart Pro is activated with a programmed weekday range Mon – Fri on Wednesday, the heater heats or ventilates on Wednesday, Thursday and Friday. In the following wee, operation is continued with the set defaults on Monday and Tuesday (5x **HEATING / VENTILATION).**
- When a weekday range has been processed. the time position has to be reactivated for the following week.
- If the 31 symbol is not displayed in the menu bar, the heater is in ADR mode. Timer mode is not possible here.

### Start time

The heater starts on the selected day on reaching the set starting time.



"Start time" mode is set at the factory.

"Departure time" mode has to be configured by the specialist workshop during installation.

### Start time conditions

Under the following conditions, the preselected heating mode is not started on the current day.

- The current day and the preselected day are identical.
- The current time lies within the time period, departure time minus operating time.

### Example:

Current day / preselected day: Thu

Current time: 18:45 h Departure time: 19:00 h Operating time: 30 minutes

Consequently: Time range for operating time:

18:30 to 19:00 h

The current time lies within the time period of the operating time. The heater is not switched on. The program will be run during the next week.

In all other configurations the start takes place according to the preset operating time.

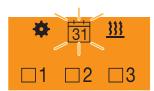
### **Departure time (with water heaters)**

The heater starts on the selected day before reaching the set departure time so that engine and vehicle interior are heated up in good time. This takes place in line with parameters such as current temperature, preselected operating time and engine displacement.



### 4.5.2 Programming the timer

- Display ON, the Start display appears.
- Select in the menu bar 31 with the operating button.

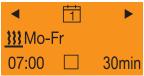


Picture 1: Display if no timer is activated.



Picture 2: Display if a timer is activated, here T2.

- Confirm timer selection by pressing the operating button.
- → The first timer position T1 appears. Turn the operating button to select the alternative timer positions T2 or T3.



Picture 3: T1 with factory settings

- The factory settings are:
  - Heating mode
  - Weekday range Mon Fri
  - Starting time: 7:00 h
  - Operating time: 30 minutes
- Call up timer T1 by pressing the operating button. You are now in configuration mode.

### The following settings are possible:

- Timer T1 ON/OFF by turning and pressing the operating button.
- After selecting in the menu bar, next select the day of the week / weekday range by turning the operating button. Each day of the week is selected individually and confirmed by pressing. Pressing a second time deselects the day of the week again. At the end of the selection, turn the operating button to [OK] and press to confirm.



 Step 2: Setting the starting time. Turning and pressing confirms first the hour, then the minutes:



 Step 3: Selection of heating or ventilation mode:





If an air heater is operated with EasyStart Pro, the desired temperature in heating mode can also be set before setting the operating time:

 $14^{\circ}\text{C} - 36^{\circ}\text{C}$  in  $1^{\circ}\text{C}$  steps,

57°F – 97°F in 1°F steps.



- Step 4: Select the operating time: min. 10 minutes - max. 120 minutes:



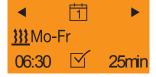


If the heater is connected to the vehicle battery (e.g. car battery), the operating time of the heater should not exceed the subsequent driving time of the vehicle. This will ensure that the vehicle battery is sufficiently charged.

### Example:

Operating time of the heater: 25 minutes Driving time of the vehicle: min. 25 minutes

- Select the heating level (only for water heaters with automatic operating time calculation)
  - ECO heating level = normal heating
  - HIGH heating level = comfort heating
- After activation of timer T1, the following appears on the display:



- Heating mode
- Weekday range Mon Fri
- Starting time: 6:30 h
- Operating time: 25 minutes
- Timer T1 is activated. The heater will be started at the set time on the next working day and will run for 25 minutes.

If a timer is activated, the timer symbol appears on the display:



Timer positions T2 and T3 can be configured in the same way.



To edit an existing timer, it first has to be selected and then switched to configuration mode by pressing the operating button. Then carry out steps 1 to 4 as described above.

### 4.5.3 Deactivate timer

To deactivate a timer position, it first has to be selected with the operating button. Press once and with OFF flashing, press the operating button again. All operating settings of the timer remain saved.



When a weekday range has been processed, the time position has to be reactivated for the following week.



### 4.6 Residual heat

### Display before switching on



In the Start mask, a flashing heater symbol in a circle (1) in the menu bar and the current status of the heater are displayed.

In residual heat mode, the heating system uses the residual heat in the coolant circuit of the warm engine and distributes heated air in the vehicle interior. In this operating mode, only the water pump and fan are in operation.



### Note

- Residual heat mode cannot be used if the coolant temperature is too low.
- Residual heat mode is only available with water heaters.

Possible actions are:

- Residual heat mode ON
- Residual heat mode OFF

### Residual heat mode ON

- Press the operating button and select ON.
- → Residual heat mode starts if there is residual heat in the engine coolant.
- → The LED ring lights up orange. The operating time of the heating mode depends on the available residual heat.
- → The operating status and mode of the heater appear on the display:



### Residual heat mode OFF

- Press the operating button and select OFF.
- LONGPRESS (min. 2 sec.) on the operating button immediately switches off all connected heaters.
- → Residual heat heating mode stops.

### 4.7 Further menu items

## 4.7.1 Control of several heaters

EasyStart Pro offers the possibility of controlling several heaters via one control unit.



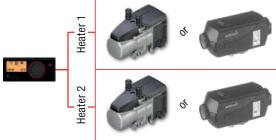
Configuration of several heaters is carried out by the workshop during installation. Please discuss your configuration wishes with the workshop before installation.



The following combinations are possible:

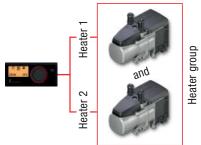
### Two heaters

- Heater 1 (water or air heater)
- Heater 2 (water or air heater)
- → Each heater is operated individually.



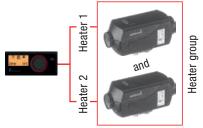
Picture 4: EasyStart Pro with 2 separately controller heaters

- Heater 1 (water heater)
- Heater 2 (water heater)
- → Both heaters are controlled simultaneously in a group.



Picture 5 EasyStart Pro with 2 water heaters in a group OR

- Heater 1 (air heater)
- Heater 2 (air heater)
- → Both heaters are controlled simultaneously in a group.



Picture 6: EasyStart Pro with 2 air heaters in a group

### 4.7.2 Configuration example

- Two heaters are connected and are operated separately from one another:
  - 1 water heater
  - 1 air heater
- They are designated with numbers in the display to distinguish between them.
- Display for the water heater:



Display for the air heater:



 After selection with the operating button, the operating and timer possibilities described in this chapter are available for each of the heaters. The same applies to a heater group.



### Note

If the LONGPRESS function is used here, all the heaters are switched on together. The operating time corresponds to the last setting used.

### 4.7.3 Set standard operating time

The standard operating time is set at the factory to 30 minutes. During operation, the standard operating time corresponds to the last settings used for the respective heater or heater group.



## 5 What to do if ...?

### 5.1 Maintenance interval

- If a maintenance interval for the connected heaters is set by the workshop during initial commissioning,
  - EasyStart Pro reminds the user to visit a specialist workshop to have the maintenance carried out by means of a notice on the display on expiry of the interval.



 EasyStart Pro prompts the user to switch on the "HEATING" function for 10 minutes even in the summer months after four months of non-operation by means of a notice on the display. Brief operation removes any residues and deposits in the combustion chamber and ensures proper operation during the heating period.



## 5.2 Display fault / error

EasyStart Pro displays faults or errors in the heater or control unit by means of a red flashing LED ring on the operating button.

- An error message appears on the display.
   Pressing the operating button cancels the error message and the LED ring stops flashing.
- If there are several faults or errors, these will be displayed in turn by repeatedly pressing the operating button.
- If several heaters are connected, the error message will be preceded by either "H1" or "H2" to clearly localise the fault.



Fault diagnosis can also be called up with the function 4 in menu 4.



# 5.3 Fault diagnosis and remedy

# 5.3.1 Heater error messages

Display	Description	Remedy / Customer
Service	<ul> <li>There is a fault in the heater that can only be remedied by a specialist workshop.</li> </ul>	<ul> <li>Visit an authorised Eberspächer workshop.</li> </ul>
Undervoltage	<ul> <li>Undervoltage applied at the heater control box without interruption for at least 20 seconds.</li> </ul>	<ul> <li>Check battery for a drop in voltage.</li> <li>Charge the battery, if necessary visit your vehicle workshop.</li> </ul>
Overvoltage	<ul> <li>Overvoltage applied at the heater control box without interruption for at least 20 seconds.</li> </ul>	<ul> <li>Check the battery, if necessary visit your vehicle workshop.</li> </ul>
Fuel Supply or Pump	Fault in the fuel supply or fuel pump.	<ul> <li>Check the fuel line to the heater for free passage, short-circuit and damage.</li> <li>Pull the plug off the metering pump and inspect for damage.</li> <li>Check the fuel level in the fuel tank.</li> <li>Visit your vehicle workshop, if necessary.</li> </ul>
Water Circuit or Pump	<ul> <li>With water heaters only: Water temperature in the heater too high.</li> </ul>	<ul> <li>Check the water pump for proper function.</li> <li>Check the water circulation in the water circuit.</li> <li>The heater can be reset to the delivery condition by removing the heater fuse.</li> <li>Recommendation: Visit an authorised Eberspächer workshop to have the fault remedied.</li> </ul>



### Display



### Description

 With air heaters only: Air temperature in the heater too high.

### Remedy / Customer

- Check the air lines. Are air lines clogged or kinked? Are all air louvres free and not blocked by objects?
- The heater can be reset to the delivery condition by removing the heater fuse.
- Recommendation: Visit an authorised Eberspächer workshop to have the fault remedied.



 Overheating of the heater detected. The heater is interlocked for safety reasons.

- The heater can be reset to the delivery condition by removing the heater fuse.
- Recommendation: Visit an authorised Eberspächer workshop to have the fault remedied.



Emergency running of the heater.

- There is a fault in the heater.
   Restricted operation is still possible,
   however (with air heaters with target temperature 20 °C).
- Recommendation: Visit an authorised Eberspächer workshop to have the fault remedied.



## 5.3.2 Control unit error messages

Display	Description	Remedy / Customer
■ 1 ► Ext. Temp. Sensor defective	<ul> <li>The external temperature sensor is defective.</li> </ul>	<ul> <li>Check the wiring of the external temperature sensor for continuity, short-circuit or damage; replace the temperature sensor, if necessary.</li> <li>If the fault cannot be remedied, please visit your vehicle workshop.</li> </ul>
■ 2 ► Int. Temp. Sensor defective	<ul> <li>The internal temperature sensor is defective.</li> </ul>	There is no remedy for this fault. The control unit has to be replaced. Please visit your vehicle workshop for that.
■ 3 ► Rotary Knob jammed	<ul> <li>The operating button is blocked.</li> </ul>	<ul> <li>Can the operating button be freed again by hand?</li> <li>If the fault cannot be remedied, please visit your vehicle workshop.</li> </ul>
■ 4 Pushbutton jammed	■ The button is blocked.	<ul> <li>Can the button be freed again by hand?</li> <li>If the fault cannot be remedied, please visit your vehicle workshop.</li> </ul>
▼ 7 Timer mode not allowed	Timer mode is not permitted.	<ul> <li>Check the configuration.</li> <li>If the fault cannot be remedied, please visit your vehicle workshop.</li> </ul>
◆ 8     Operation not supported	<ul> <li>The heater is in auxiliary heating mode via Switching Plus and cannot be operated via EasyStart Pro during this time.</li> </ul>	<ul> <li>Terminate auxiliary heating mode via Switching Plus.</li> <li>If the fault cannot be remedied, please visit your vehicle workshop.</li> </ul>
◆ 9     CAN communication error	<ul> <li>Communication error on the CAN bus link.</li> </ul>	<ul> <li>Inspect the wiring for cable breakages/short-circuits.</li> <li>If the fault cannot be remedied, please visit your vehicle workshop.</li> </ul>



# 6 Service

# 6.1 Technical Support

If you have any technical questions or problems with the heater, the control unit or the operating software, please contact the following service address:

support-UK@eberspaecher.com



www.krueger.co.uk

Eberspächer dealer



www.eberspaecher.com

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