6.2.4 Determine the maintenance interval

In the next step, EasyStart Pro asks for the maintenance interval for the heater.

If desired, set the interval in hours by turning the operating button and confirm by pressing. Otherwise select [OFF] and confirm by pressing.

- 10 h to 1000 h: 10 h increments
- 1000 h to 5000 h: 500 h increments

When the maintenance interval has been defined, initial commissioning has been completed. EasyStart Pro boots on the basis of the inputs previously made. The Start mask is then displayed.

ℹ️ Note

If errors in the configuration are discovered after initial commissioning, the fuse must be removed to reset the system to the delivery condition.

7 Workshop menu

The workshop menu offers the following setting possibilities:

- Configuration change for the operation of EasyStart Pro
- Function modification (display, maintenance, reset to factory settings, etc.)
- Device info on EasyStart Pro (hardware and software version)
- Read out and delete heater and control unit fault memory

7.1 Opening the vehicle workshop menu

To open the workshop menu, select the Settings ⚙️ menu and then hold the BACK button 🔙 pressed for longer than 2 seconds while the clock symbol under the gear wheel is flashing.
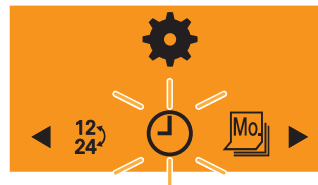
7.2 Standard settings

7.2.1 Display language

The [Language] menu defines the display language.

- Confirm the menu by pressing the operating button.

- Select the desired language by turning the operating button.
- Confirm the selection by pressing the operating button.

7.2.2 Display

The [Display] defines the contrast and brightness of the display.

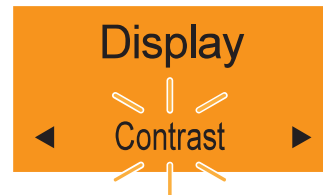- Confirm the menu by pressing the operating button.

Brightness

- Select the menu by turning the operating button.
- Confirm the selection by pressing the operating button.
- Select the desired brightness by turning the operating button.

ℹ Note

Selection of the brightness between 1% and 100% in 1% increments.

- Confirm the selection by pressing the operating button.

Contrast

- Select the menu by turning the operating button.
- Confirm the selection by pressing the operating button.
- Select the desired contrast by turning the operating button.

ℹ Note

Selection of the contrast between 30% and 70% in 1% increments.

7.2.3 Reset to factory settings

The [Factory reset] menu resets all the settings of EasyStart Pro to the delivery condition.

- Confirm the menu by pressing the operating button.
- Select [Yes] or [No].
- Confirm the selection by pressing the operating button.

7.3 Settings and information on the heater

7.3.1 Starting time / departure time

The settings for starting time or departure time for time mode of EasyStart Pro are made in the [Start/departure] menu.

- If starting time is selected, the controlled heater (or heater group) starts at the starting time programmed in the timer.
- If starting time is selected, the controlled heater (or heater group) 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.

Workshop
◄ Start / Dep. ►

- Confirm the menu by pressing the operating button.
- Select [Starting time] or [Departure time].
- Confirm the selection by pressing the operating button.

i **Note**

- If [Departure time] is selected, additional parameters have to be entered:
  - Engine displacement (1000 cc – 4000 cc)
  - Maximum operating time of the heater (10 minutes – 60 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
- If several heaters are connected in heater groups, please see the note on heater identification in chapter "Switch heater group" on page 29.

7.3.2 Control sensor (air heaters)

The [Control sensor] menu defines which temperature sensor is to be used as control sensor for the air heater.

Workshop
◄ Control sensor ►

- Confirm the menu by pressing the operating button.
- Select [Control unit] or [Air heater].
- Confirm the selection by pressing the operating button.

7.3.3 Display sensor (air and water heaters)

The [Display sensor] menu defines whether an external temperature sensor is to be used as display sensor.

- Confirm the menu by pressing the operating button.
- **For water heaters**
  - Select [None] if no display sensor is required.
  - Select [Control unit] if the temperature sensor in the control unit is to be used as display sensor.
- **For air heaters**
  - Select [None] if no display sensor is required.
  - Select [Control unit] if the temperature sensor in the control unit is to be used as display sensor.
  - Select [Air heater] if the temperature sensor in the air heater is to be used as display sensor.
- Confirm the selection by pressing the operating button.

Note

- If [Control unit] is selected as display sensor, the desired temperature offset must then be selected. The temperature offset can be selected in the range from –5°C to +5°C.

- If several air heaters are connected in heater groups, please see the note on heater identification in chapter "Switch heater group" on page 29.

7.3.4 Hour counter

The [Hour counter] menu displays the actual operating hours of all the connected heaters.

- Confirm the menu by pressing the operating button.
- Read out the number of operating hours.

Note

If several heaters are connected, the operating hours of each heater are displayed individually.

- Go back by pressing the operating button or BACK button.

7.4 Information on EasyStart Pro

7.4.1 Version information

The [Version] menu reads out information on the hardware and software of EasyStart Pro.

- Confirm the menu by pressing the operating button.
- Read out information on the following parameters by turning the operating button:
  - [ID]: ID number of this device
  - [BootSW]: Boot software version on this device
  - [SW]: Software version on this device
  - [HW]: Hardware version of this device
  - [ResVer]: Resource version of this device
- Go back by pressing the BACK button.

7.5   Maintenance and diagnostics

7.5.1   Set maintenance interval

The [Maint. interval] defines the intervals at which EasyStart Pro should be serviced. In addition, the current status of the maintenance interval can be read out or reset.

- Confirm the menu by pressing the operating button.

Set maintenance interval
- Select between [ON] and [OFF].
- Confirm the selection by pressing the operating button.
- If [ON] is selected, select the maintenance interval in h and confirm.

i **Note**

Selection of the maintenance interval:
- Between 10 h and 1000 h in 10 h increments
- Between 1000 h and 5000 h in 500 h increments

Read out status of the maintenance interval
- Confirm the menu by pressing the operating button.
- Select [Status] by turning the operating button and confirm by pressing.
- The current status of the maintenance interval is displayed, e.g.

- Go back by pressing the BACK button.

Reset the maintenance interval after carrying out maintenance
- Confirm the menu by pressing the operating button.
- Select [Reset] by turning the operating button and confirm by pressing.
- The maintenance interval is reset to 0 and starts again.

7.5.2 Reading out the fault memory

Fault messages from EasyStart Pro and all connected heaters are stored in the [Fault messages] menu. They can be read out and deleted after remedying the respective fault.

- Confirm the menu by pressing the operating button.
- Select [Control unit] or [Heater] by turning the operating button.

> **ℹ️ Note**
>
> If several heaters are connected, they are displayed in turn. The fault messages for each heater can be displayed and read out in turn by turning and pressing the operating button.

- Confirm the selection by pressing the operating button.
- Select [Read] by turning the operating button and confirm by pressing.
- Read out the fault message and remedy the fault. Fault diagnostics, see from page 31.
- Then select [Delete] by turning the operating button.
- Delete the fault list by pressing the operating button.

7.6 Switch heater group

The [Swap] menu allows the heater groups 1 and 2 configured during initial commissioning to be switched.

- Confirm the menu by pressing the operating button.
- Then select [Yes] by turning the operating button.
- Confirm the selection by pressing the operating button.

> **ℹ️ Note**
>
> The [Identification] menu allows connected heaters to be unambiguously assigned to heater group 1 or heater group 2:

- Confirm the [Swap] menu by pressing the operating button.
- Select [Identification] by turning the operating button.

- Confirm the selection by pressing the operating button.
- Select between [Group 1] and [Group 2] by turning the operating button.

Identification

◄　　Group 1　　►

- Confirm the selection by pressing the operating button.
- Select between [ON] and [OFF] by turning the operating button.

Group 1

◄　　On　　►

- Confirm the selection by pressing the operating button.
- If [ON] is selected, the fan of each of the heaters connected in the respective group starts. This allows a clear allocation to this heater group.
- Confirmation of [OFF] terminates the identification of the heaters connected in the respective group at the end of the fan function.
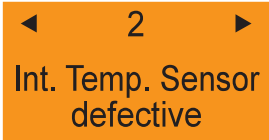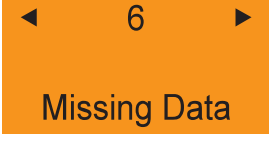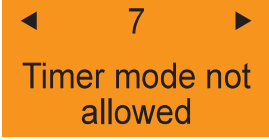
8   Fault diagnosis and remedy

8.1   Heater error messages

Display	Description	Remedy / Customer
Service	▪ There is a fault in the heater that can only be remedied by a specialist workshop.	▪ Visit an authorised Eberspächer workshop.
Undervoltage	▪ Undervoltage applied at the heater control box without interruption for at least 20 seconds.	▪ Check battery for a drop in voltage. ▪ Charge battery or replace, if necessary.
Overvoltage	▪ Overvoltage applied at the heater control box without interruption for at least 20 seconds.	▪ Check battery and replace, if necessary.
Fuel Supply or Pump	▪ Fault in the fuel supply or fuel pump.	▪ Check cables for continuity, short circuit and damage. ▪ Pull the plug off the metering pump and inspect for damage. ▪ Check the fuel level in the fuel tank. ▪ If the fault cannot be remedied, please contact Eberspächer Support.
Water Circuit or Pump	▪ With water heaters only: Water temperature in the heater too high.	▪ Check the water pump for proper function. ▪ Check the water circulation in the water circuit. ▪ The heater can be reset to the delivery condition by removing the heater fuse. ▪ If the fault cannot be remedied, please contact Eberspächer Support.

| Display	Description	Remedy / Customer
Air Ducting or Outlet	▪ With air heaters only: Air temperature in the heater too high.	▪ Check the air lines. Are air lines clogged or kinked? Air all air louvres free? ▪ The heater can be reset to the delivery condition by removing the heater fuse. ▪ If the fault cannot be remedied, please contact Eberspächer Support.
Overheat. Heater locked.	▪ 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. ▪ If the fault cannot be remedied, please contact Eberspächer Support.
Restricted Operation	▪ 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). ▪ If the fault cannot be remedied, please contact Eberspächer Support.

8.2 Control unit error messages

Display	Description	Remedy / Customer
◄ 1 ► Ext. Temp. Sensor defective	▪ The external temperature sensor is defective.	▪ Check the wiring of the external temperature sensor for continuity, short-circuit or damage; replace the temperature sensor, if necessary. If the fault cannot be remedied, please contact Eberspächer Support.
◄ 2 ► Int. Temp. Sensor defective	▪ The internal temperature sensor is defective.	▪ There is no remedy for this fault. The control unit has to be replaced.
◄ 3 ► Rotary Knob jammed	▪ The operating button is blocked.	▪ Can the operating button be freed again by hand? If the fault cannot be remedied, please contact Eberspächer Support.
◄ 4 ► Pushbutton jammed	▪ The button is blocked.	▪ Can the button be freed again by hand? If the fault cannot be remedied, please contact Eberspächer Support.
◄ 6 ► Missing Data	▪ Data are missing for EasyStart Pro for initial commissioning.	▪ Disconnect EasyStart Pro from the power supply and connect again. If the fault cannot be remedied, please contact Eberspächer Support.
◄ 7 ► Timer mode not allowed	▪ Timer mode is not permitted during ADR mode.	▪ Terminate ADR mode and test timer mode again. If the fault cannot be remedied, please contact Eberspächer Support.

Display	Description	Remedy / Customer
◄ 8 ► Operation not supported	▪ The heater is in auxiliary heating mode via Switching Plus and cannot be operated via EasyStart Pro during this time.	▪ Terminate auxiliary heating mode via Switching Plus.
◄ 9 ► CAN communication error	▪ Communication error on the CAN bus link.	▪ Inspect the wiring for cable breakages/short-circuits. If the fault cannot be remedied, please contact Eberspächer Support.

9   Circuit diagram

9.1   Connection to Airtronic 2 | Hydronic S3 12 Volt / 24 Volt

22 1000 35 2210.0A
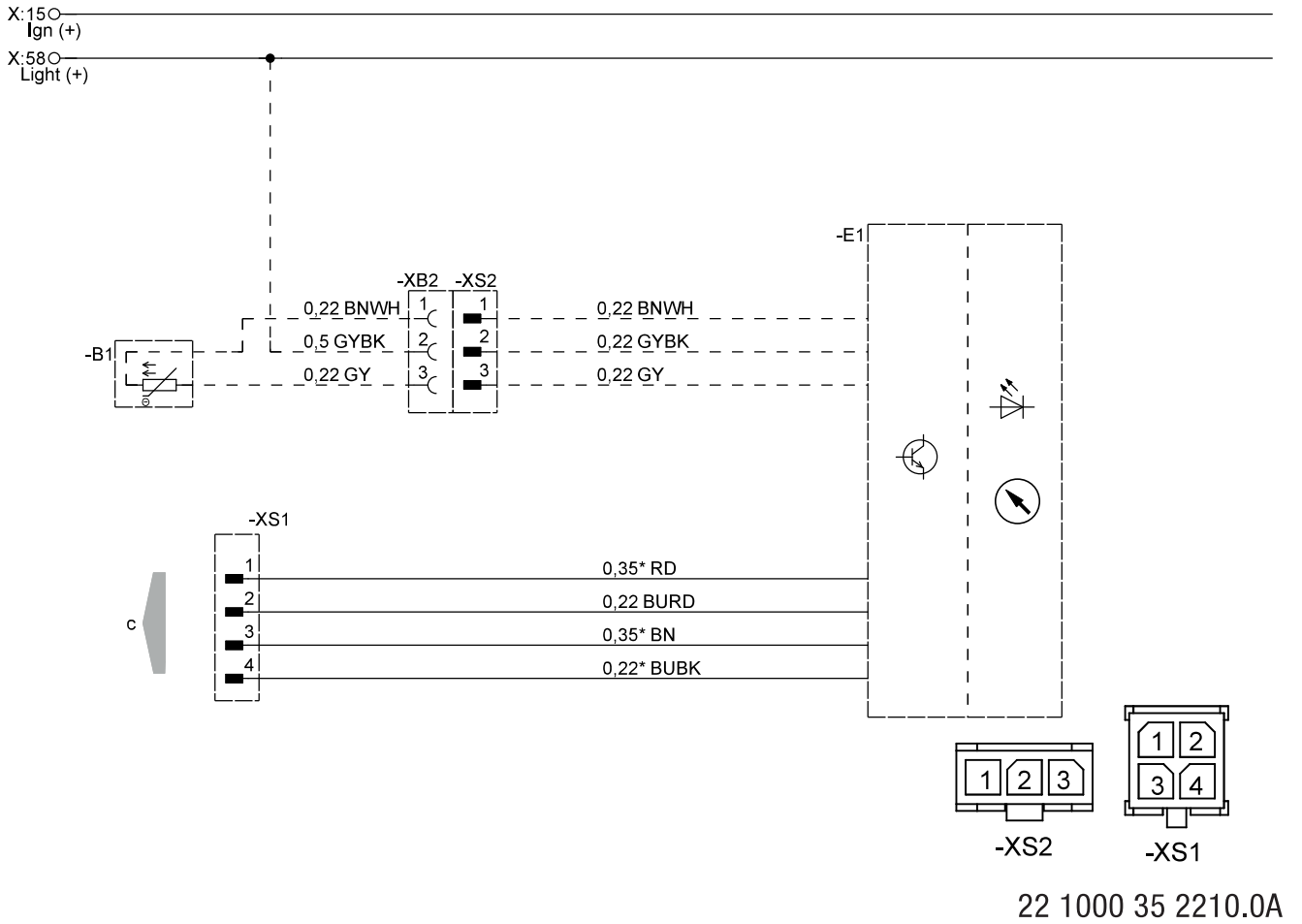
-E1 EasyStart Pro timer
-B1 Temperature sensor (optional)
c   to the heater

Cable colours

RD	red	GY	grey	BK	black
BU	blue	YE	yellow	GN	green
WH	white	VT	violet	BN	brown

10 Service

10.1 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

In Canada please contact:
support-CA@eberspaecher.com

In the United States of America please contact:
support-US@eberspaecher.com

Eberspächer Climate Control Systems
GmbH & Co. KG
Eberspächerstraße 24
73730 Esslingen
Germany
info@eberspaecher.com
www.eberspaecher.com

Eberspächer