



Installation, User and Service Manual Control panel

Gas 210 ECO PRO

210-80 – 210-120 – 210-160 – 210-200

Dear Customer,

Thank you very much for buying this appliance.

Please read through the manual carefully before using the product, and keep it in a safe place for later reference. In order to ensure continued safe and efficient operation we recommend that the product is serviced regularly. Our service and customer service organisation can assist with this.

We hope you enjoy years of problem-free operation with the product.

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1 Safety

1.1 General safety instructions

Adhere strictly to the specific safety instructions in this manual.



Danger of electric shock

- This equipment operates using electricity.
- Disconnect the equipment from the power supply before making electrical connections.
- Only qualified professionals are authorised to work on the appliance and the installation.
- Only the manufacturer is authorised to carry out repairs.



Warning

If the mains lead is damaged, it must be replaced by the original manufacturer, the manufacturer's dealer or another suitably skilled person to prevent hazardous situations from arising.

1.2 Recommendations

Only qualified professionals are authorised to work on the control panel and the installation.



Important

- Store this document in the document wallet on the inside of the boiler casing.
- Keep the control panel accessible at all times.

1.3 Liabilities

1.3.1 Manufacturer's liability

Our products are manufactured in compliance with the requirements of the various Directives applicable. They are therefore delivered with the CE marking and any documents necessary. In the interests of the quality of our products, we strive constantly to improve them. We therefore reserve the right to modify the specifications given in this document.

Our liability as manufacturer may not be invoked in the following cases:

- Failure to abide by the instructions on installing the appliance.

- Failure to abide by the instructions on using the appliance.
- Faulty or insufficient maintenance of the appliance.

1.3.2 Installer's liability

The installer is responsible for the installation and initial commissioning of the appliance. The installer must observe the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Install the appliance in compliance with prevailing legislation and standards.
- Carry out initial commissioning and any checks necessary.
- Explain the installation to the user.
- If maintenance is necessary, warn the user of the obligation to check the appliance and keep it in good working order.
- Give all the instruction manuals to the user.

1.3.3 User's liability

To guarantee optimum operation of the system, you must abide by the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Call on a qualified professional to carry out installation and initial commissioning.
- Get your installer to explain your installation to you.
- Have the required inspections and maintenance carried out by a qualified installer.
- Keep the instruction manuals in good condition close to the appliance.

2 About this manual

2.1 Additional documentation

This manual forms part of the documents pack supplied with the boiler.

2.2 Symbols used

2.2.1 Symbols used in the manual

This manual uses various danger levels to draw attention to special instructions. We do this to improve user safety, to prevent problems and to guarantee correct operation of the appliance.

**Danger**

Risk of dangerous situations that may result in serious personal injury.

**Danger of electric shock**

Risk of electric shock.

**Warning**

Risk of dangerous situations that may result in minor personal injury.

**Caution**

Risk of material damage.

**Important**

Please note: important information.

**See**

Reference to other manuals or pages in this manual.

3 Control panel description

3.1 General description

The HMI Gas 210 ECO PRO control panel is designed for the operation and control of the Gas 210 ECO PRO boilers.

The control panel can be used to:

- Read out the values measured in the heating circuit.
- Read out error codes.
- Read out and set boiler parameters.
- Set a chimney sweep mode.

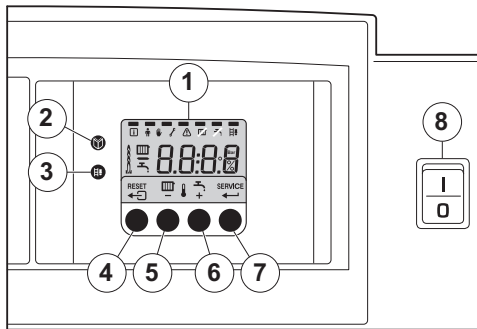


Important

For operation of the Gas 210 ECO PRO boiler: each module has its own control panel.

3.2 What each key means

Fig.1 Control panel



- 1 Display
- 2 [Menu] key
- 3 [Chimney sweep] key
- 4 [Escape] or [Reset] key
- 5 [Central heating temperature] or [-] key
- 6 [DHW temperature] or [+] key
- 7 [Enter] key or [Service] indicator
- 8 On/off switch

The display has several positions and symbols and provides information about the operating status of the boiler and any faults. A maintenance message may also appear on the display. Numbers, dots and/or letters may be shown. The symbols above the function keys indicate the current function.

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3.3 Meaning of the symbols on the display

Tab.1 Symbols on the display


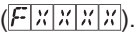
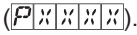
	Information menu: read out various current values.
	ECO mode is on.
	User menu: settings for user level parameters can be changed.
	Manual mode menu: manual mode can be configured.
	Installer menu: parameters at installer level can be changed.
	Error menu: errors can be read out.
	Central heating operation is switched off.
	DHW operation is switched off.
	Chimney sweep mode is enabled (forced full load or part load for O ₂ /CO ₂ measurement).
	Burner output level
	Central heating operation is enabled.
	DHW operation is enabled.

4 Commissioning

4.1 Start-up program



Immediately after the power is connected, the start-up program will begin. Various short items of information appear on the screen during start-up.

The following messages are displayed one after the other:

- Display of the control panel version ().
- Display of the CU board software version ().
- Display of the CU board parameter version ().
- When the letters *N*:*L* are flashing on the display, then the phase and neutral have been connected incorrectly. Swap the wires of the power supply cable on the connection box.
- Once the start-up program has run, the main display appears.




Important

If no key is pressed for 3 minutes, the standby screen appears with the  and  symbols.





Important

If a fault occurs during start-up, the  symbol appears with a flashing error code on the display. The meaning of the error codes can be found in the error table.

5 Operation

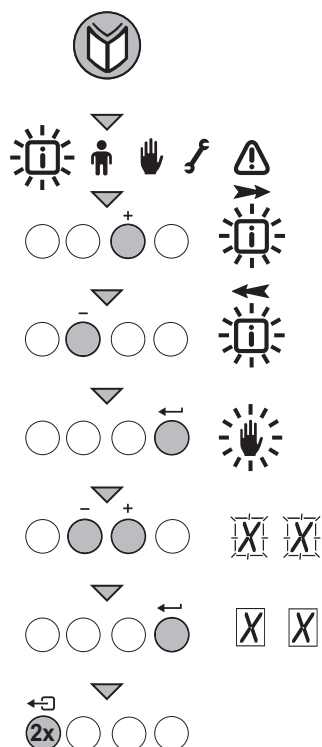
5.1 Use of the control panel










The meaning of the symbols in this display are described elsewhere in this user manual.

If no key is pressed for 3 minutes, the display lighting switches off and the display only shows the  and  symbols. Press any key to activate the display: the current boiler status and current operating code will be shown on the display. If an error has occurred, this is permanently displayed.

5.1.1 Browsing in the menus

Fig.2 Browsing in the menu



1. Press the  key to activate the regulator from the stand-by screen.
⇒ The  symbol flashes in the menu bar.
2. Press the  key to move the cursor to the right.
3. Press the  key to move the cursor to the left.
4. Press the  key to confirm the selection of the desired menu.
5. Press the  or  key to change the value.
6. Press the  key to confirm the value.
7. Press the  key once to go to the previous step, or twice to go back to the main display.

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6 Settings

6.1 Changing the parameters

The boiler's control unit is set for the most common central heating systems. These settings will ensure that virtually every central heating system operates effectively. The user or the installer can optimise the parameters as required.

For operation in open vented systems, the **P35** parameter must be adjusted.

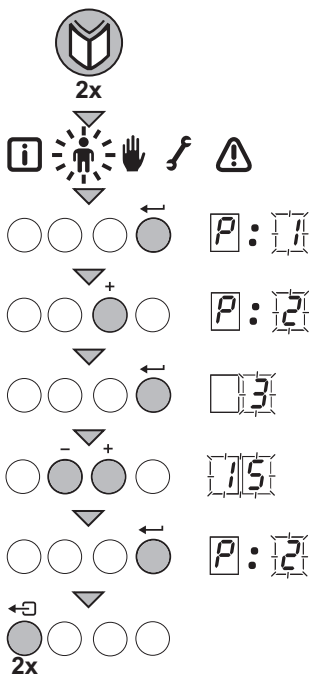


Caution

Modification of the factory settings may impair boiler operation.

6.2 Changing the user-level parameters

Fig.3 Access to the user-level parameters



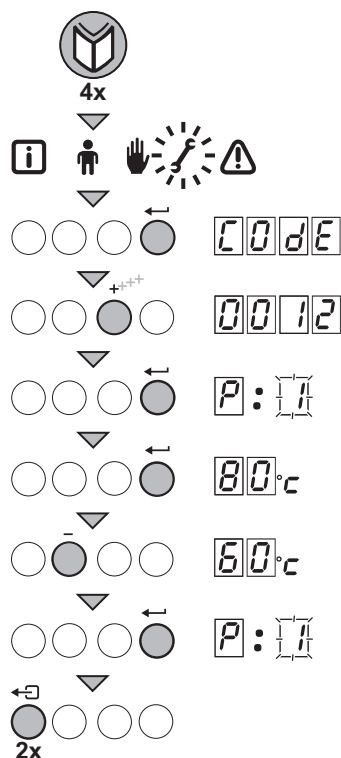
The parameters at user level (**P1** to **P4**) can be changed by the user as required.

1. Navigate to the user menu.
⇒ The symbol flashes in the menu bar.
2. Select the user menu using the key.
⇒ **P:1** appears with flashing **1**.
3. Press the key.
⇒ **P:2** appears with flashing **2**.
4. Press the key.
⇒ **3** (min.) appears and flashes (factory setting).
5. Change the value by pressing the or key.
6. Confirm the value with the key.
⇒ **P:2** appears with flashing **2**.
7. Press the key twice to go back to the main display.

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6.3 Setting the parameters in the Installer level

Fig.4 Access to the installer level



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Parameters at installer level (see table of parameters) may be modified only by a recognised installer. To prevent unwanted modifications to settings, some parameters can only be changed after the special access code **0012** is entered.

1. Navigate to the Installer menu.
⇒ The **f** symbol flashes in the menu bar.
2. Select the installer menu using the **←** key.
⇒ **CODE** appears on the display.
3. Using the **+** or **-** keys, set the installer code **0012**.
4. To confirm, press the **←** key.
⇒ **P1** appears.
5. Press the **←** key.
⇒ The value **80** °C will appear (factory setting).
6. Change the value by pressing the **+** or **-** keys. Reduce the value to **60** °C, for example, using the **-** key.
7. Press the **←** key to confirm the value.
⇒ **P1** appears.
8. Set any other parameters by selecting them using the **+** or **-** keys.
9. Press the **←** key twice to go back to the main display.



Important

The main menu will appear even if no keys are pressed for 3 minutes.

Fig.5 Setting full load

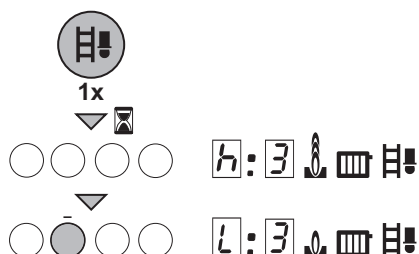


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6.3.1 Setting full load

1. Press the **H!** key.
⇒ The **H!** symbol will appear in the display.
2. Wait a while until **H: 3** appears in the display.
⇒ Full load has now been set.

Fig.6 Setting low load

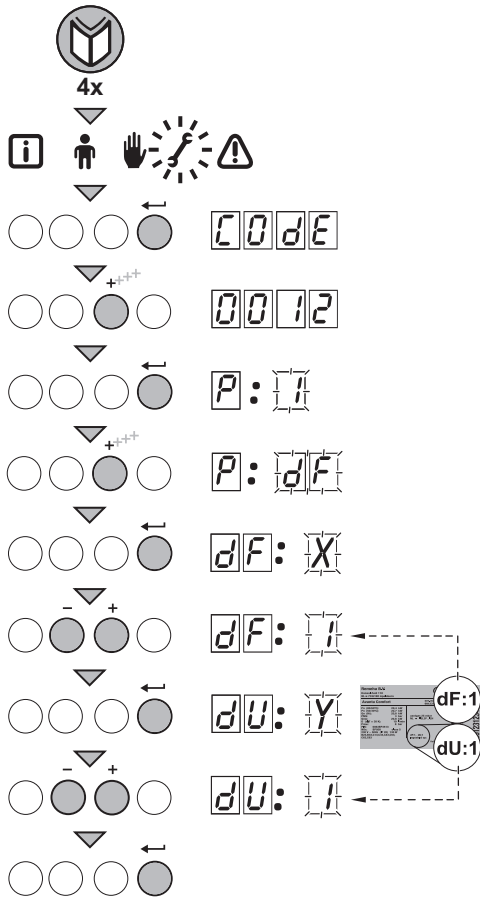


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6.3.2 Setting low load

1. Press the **H!** key.
⇒ The **H!** symbol will appear in the display.
2. Wait a while until **H: 3** appears in the display.
3. Press the **-** key until **L: 3** appears on the display.
⇒ Low load has now been set.

Fig.7 Restoring to factory settings

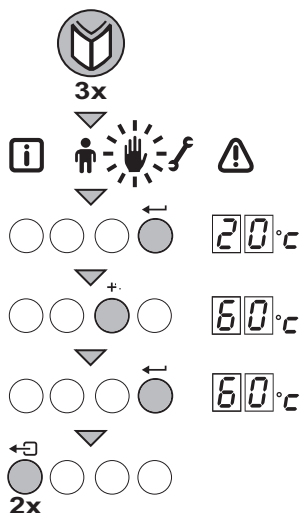


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6.3.3 Restoring to factory settings

1. Navigate to the Installer menu.
⇒ The \mathcal{f} symbol flashes in the menu bar.
2. Select the installer menu using the \leftarrow key.
⇒ The text $\square\{7\}\{8\}\{9\}\{10\}\{11\}\{12\}$ flashes in the display.
3. Using the $+$ or $-$ keys, set the installer code $\square\square\square\square$.
4. To confirm, press the \leftarrow key.
⇒ $P:\square$ appears with a flashing \square .
5. Press the $+$ key several times until $P:dF$ appears on the display with a flashing dF .
6. To confirm, press the \leftarrow key.
⇒ dF appears with a flashing X . This is the current value of X for dF. Check this against the value of X on the type plate.
7. Enter the value of X shown on the type plate using the $+$ or $-$ key.
8. To confirm, press the \leftarrow key.
⇒ $dU:Y$ appears with a flashing Y . This is the current value of Y for dU. Check this against the value of Y on the type plate.
9. Enter the value of Y shown on the type plate using the $+$ or $-$ key.
10. To confirm, press the \leftarrow key.
⇒ The factory settings are reset.
11. The display shows the main display.

Fig.8 Activating manual mode



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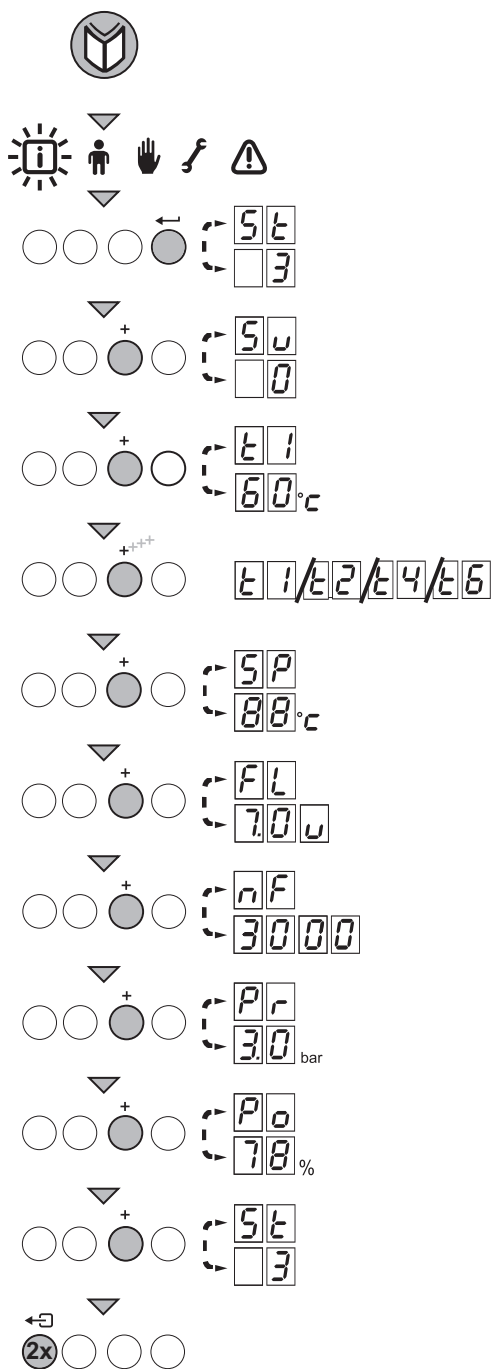
6.3.4 Activating the manual mode menu

In some cases, it may be necessary to set the boiler to manual mode, for example when the regulator has not yet been connected.

1. Navigate to the manual mode menu.
⇒ The \mathcal{H} symbol flashes in the menu bar.
2. Press the \leftarrow key to open the menu.
⇒ The minimum flow temperature value appears on the screen.
3. Press the $+$ or $-$ key to temporarily change this value in manual mode.
4. To confirm, press the \leftarrow key.
⇒ The boiler is now set to manual mode.
5. Press the \leftarrow key twice to stop manual mode and to go back to the main display.

6.4 Reading the various current values

Fig.9 Reading the current values



The following current values can be read in the information menu **i**:

- St = Status.
- Su = Sub-status.
- $t1$ = Flow temperature ($^{\circ}C$).
- $t2$ = Return temperature ($^{\circ}C$).
- $t3$ = Boiler temperature ($^{\circ}C$).
- $t4$ = Outside temperature ($^{\circ}C$). (If connected).
- $t6$ = Heat exchanger temperature ($^{\circ}C$).
- SP = Internal setpoint ($^{\circ}C$).
- FL = Ionisation current (μA).
- nF = Fan speed (rpm).
- Pr = Water pressure (bar). (If connected).
- Po = Supplied heat output (%).

The current values can be read as follows:

1. Navigate to the information menu
 ⇒ The **i** symbol flashes in the menu bar.
2. Confirm the menu selection with the **←** key.
 ⇒ The screen alternates between the St parameter and the current status, e.g. 3 .
3. Press the **+** key.
 ⇒ The screen alternates between the Su parameter and the current sub-status, e.g. 30 .
4. Press the **+** key.
 ⇒ The screen alternates between the $t1$ parameter and the current flow temperature, e.g. $60^{\circ}C$.
5. Press the **+** key several times consecutively to scroll through the various parameters.
 ⇒ At a certain point, the readout cycle starts again with the St parameter.
6. Press the **←** key twice to go back to the main display.

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7 Troubleshooting

7.1 Error codes

The boiler is fitted with an electronic regulation and control unit. The heart of the control is a microprocessor, the **Comfort Master®**, which both protects and controls the boiler. In the event of an error, a corresponding code is displayed.

The meaning of the error codes can be found in the error table.






Important

Note the error code displayed. The error code is needed to find the cause of the error quickly and correctly and for any support from Remeha.

7.1.1 Blocking

A (temporary) blocking mode is a boiler status, resulting from an abnormal state. The display shows a blocking code (for example **S1:9**). The control unit makes a number of attempts to start the boiler again. The blocking codes can be read out as follows:

1. Press the  key, followed by the  key.
⇒ **S1** will now appear flashing in the menu bar. = **9**.
2. Press the  key.
⇒ **S1** and the blocking code will appear.



Important

The boiler automatically returns to operation once the cause of the blocking has been removed.

The meaning of the blocking codes can be found in the table of blocking codes.

7.1.2 Lock-out

If the blocking conditions still exist after various start attempts, the boiler goes into lock-out (also called error). The boiler will also lock out if an error is signalled anywhere in the boiler. An error code will appear on the display. The error code is displayed as follows:

- the symbol 
- the symbol **RESET**
- the error code, for example **E:01**

The meaning of the error codes can be found in the error table. Note the error code.



See

User manual for the boiler.



Important

The error code is needed to find the cause of the error quickly and correctly and for any support from Remeha.

1. Press the **RESET** key for two seconds.
⇒ If the error code continues to display, search for the cause in the error table and apply the solution.



Important

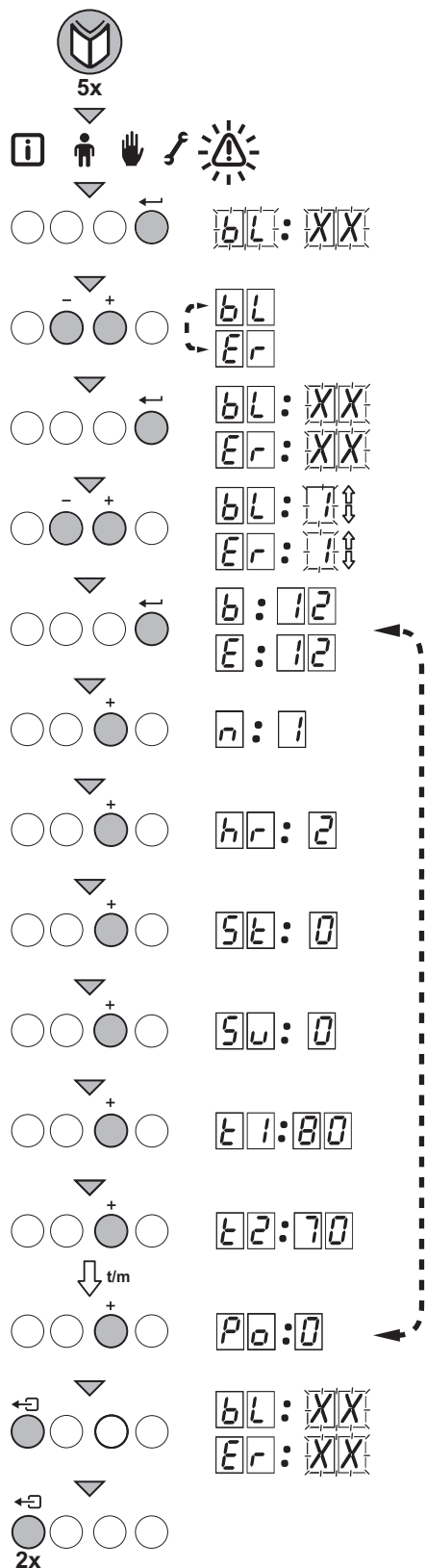
If the display shows **SERVICE** rather than **RESET**, switch the boiler off for 10 seconds and then back on. Try to reset the error code again.

7.2 Blockage and fault memory

The boiler control unit has an error memory. This stores the 16 most recent blockages and the 16 most recent faults.

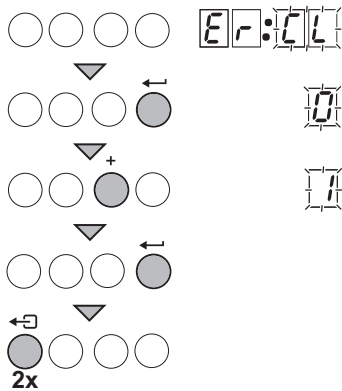
7.2.1 Reading out the error memory

Fig.10 Reading out the error memory



1. Navigate to the error menu.
⇒ The symbol flashes in the menu bar.
2. Press the key to open the menu.
⇒ appears in the display (is the number of displayed shutdowns)
3. Use the or key to select the list of shutdowns () or errors ().
4. Press the key to confirm the selection.
⇒ appears on the display.
5. The error list or blocking list can be displayed by pressing the or key.
6. Press the key to view details of the blocking.
⇒ For example from
 7. Press the or keys to view the following data:
 - ⇒ - = Number of times that the error occurred.
 - = Number of burning hours.
 - = Status.
 - = Sub-status.
 - = Flow temperature (°C).
 - = Return temperature (°C).
 - = Boiler temperature (°C).
 - = Outside temperature (°C).
 - = Heat exchanger temperature (°C).
 - = Internal setpoint (°C).
 - = Ionisation current (µA).
 - = Fan speed (rpm).
 - = Water pressure (bar).
 - = Supplied heat output (%).
8. Press the key to interrupt the display cycle.
⇒ or appears with a flashing = last error that occurred.
9. Press the or key to view the following errors, if applicable.
10. Press the key twice to go back to the main display.

Fig.11 Clearing error memory



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7.2.2 Clearing error memory

When reading out the error memory, **Er:CL** appears last in the list (or **bL:CL** for shutdowns); in both cases, the letters **CL** will flash.

Clear the errors or shutdowns as follows:

1. Press the **←** key.
⇒ The display shows a flashing **0**.
2. Press the **+** key to change the setting to **1**.
⇒ **1** flashes in the display.
3. Press the **←** key to confirm the selection.
⇒ The list of errors (or shutdowns) is cleared.
4. Press the **←** key twice to go back to the main display.

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