Operating instructions
for the system user

Vitocrossal, type CI
with Vitotronic 200 control unit, type GW7B, for weather-compensated operation
Safety instructions

For your safety

Please follow these safety instructions closely to prevent accidents and material losses.

Safety instructions explained

Danger
This symbol warns against the risk of injury.

Please note
This symbol warns against the risk of material losses and environmental pollution.

Note
Details identified by the word "Note" contain additional information.

Target group

These operating instructions are intended for heating system users. This appliance can also be operated by children 8 years and older, as well as by individuals with reduced physical, sensory or mental faculties or those lacking in experience and knowledge, provided such individuals are being supervised or have been instructed in the safe use of this appliance and any risks arising from it.

Please note
Supervise children in the proximity of the appliance. • Never permit children to play with the appliance. • Cleaning and maintenance must not be carried out by unsupervised children.

Appliance connection

■ The appliance may only be connected and commissioned by authorised contractors. ■ Only operate the appliance with suitable fuels. ■ Observe the specified electrical connection requirements. ■ Modifications to the existing installation may only be carried out by authorised contractors.

Danger
Incorrectly executed work on the heating system can lead to life threatening accidents. • Work on gas installations must only be carried out by a registered gas fitter. • Work on electrical equipment must only be carried out by a qualified electrician.

Work on the appliance

■ All settings and work on the appliance must be carried out as specified in these operating instructions. Further work on the appliance may only be carried out by authorised contractors. ■ Never open the appliance. ■ Never remove casings. ■ Never change or remove attachments or fitted accessories. ■ Never open or retighten pipe connections.

Danger
Hot surfaces can cause burns. ■ Never open the appliance. ■ Never touch the hot surfaces of uninsulated pipes, fittings or flue pipes.

Damage to the appliance

Danger
Damaged equipment poses a safety hazard. Check the appliance for external damage. Never start up a damaged appliance.
For your safety (cont.)

If you smell gas

⚠️ Danger
Escaping gas can lead to explosions which may result in serious injury.
- Never smoke. Prevent naked flames and sparks. Never switch lights or electrical appliances on or off.
- Close the gas shut-off valve.
- Open windows and doors.
- Evacuate any people from the danger zone.
- Notify your gas and power supply utility and your local heating contractor from outside the building.
- Have the power supply to the building shut off from a safe place (outside the building).

If you smell flue gas

⚠️ Danger
Flue gas can lead to life threatening poisoning.
- Shut down the heating system.
- Ventilate the installation site.
- Close all doors in the living space.

In case of fire

⚠️ Danger
Fire presents a risk of burns and explosion.
- Shut down the heating system.
- Close the shut-off valves in the fuel supply lines.
- Use a tested fire extinguisher, class ABC.

In case of water leaking from the appliance

⚠️ Danger
Water leaking from the appliance poses an electrocution hazard.
- Switch off the heating system at the external isolation point (e.g. fuse box, domestic power distribution unit).
- Notify your local heating contractor.

What to do if the heating system develops a fault

⚠️ Danger
Fault messages point to faults in the heating system. If faults are not rectified, they can have life threatening consequences.
Never acknowledge fault messages several times in quick succession. Inform your heating contractor so the cause can be analysed and the fault rectified.
Safe instructions

For your safety (cont.)

Installation room requirements

⚠️ Danger
Sealed vents result in a lack of combustion air. This leads to incomplete combustion and the formation of life threatening carbon monoxide. Never cover or close existing vents. Never make any subsequent modifications to the building characteristics that could affect safe operation (e.g. cable/pipework routing, cladding or partitions).

⚠️ Danger
Easily flammable liquids and materials (e.g. naphtha, solvents, cleaning agents, paints or paper) can cause deflagration and fire. Never store or use such materials in the installation room or in direct proximity to the heating system.

Please note
Incorrect ambient conditions can lead to heating system damage and can put safe operation at risk.

- Ensure ambient temperatures are above 0 °C and below 35 °C.
- Prevent air contamination by halogenated hydrocarbons (e.g. as contained in paints, solvents or cleaning fluids) and excessive dust (e.g. through grinding/polishing work).
- Avoid continuously high humidity levels (e.g. through continuous drying of washing).

Extractors

The operation of appliances that extract air to the outside (cooker hoods, extractors, air conditioning units, etc.) can create negative pressure. If the boiler is operated at the same time, this can lead to a reverse flow of the flue gas.

⚠️ Danger
The simultaneous operation of the boiler and appliances that extract air to the outside can result in life threatening poisoning due to reverse flow of the flue gas. Take suitable steps to ensure an adequate supply of combustion air. If necessary, contact your heating contractor.

Auxiliary components, spare and wearing parts

⚠️ Please note
Components not tested with the heating system may damage the system or affect its function. Have all installation or replacement work carried out exclusively by qualified contractors.
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### Symbols

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<tr>
<td><img src="1" alt="Symbol" /></td>
<td>Reference to other document containing further information</td>
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<tr>
<td><img src="2" alt="Symbol" /></td>
<td>Step in a diagram: The numbers correspond to the order in which the steps are carried out.</td>
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<tr>
<td><img src="3" alt="Symbol" /></td>
<td>Warning of material losses and environmental pollution</td>
</tr>
<tr>
<td><img src="4" alt="Symbol" /></td>
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</tr>
<tr>
<td><img src="5" alt="Symbol" /></td>
<td>Pay particular attention.</td>
</tr>
</tbody>
</table>
| ![Symbol](6) | - Component must audibly click into place.  
  or  
  - Acoustic signal |
| ![Symbol](7) | - Fit new component.  
  or  
  - In conjunction with a tool: Clean the surface. |
| ![Symbol](8) | Dispose of component correctly. |
| ![Symbol](9) | Dispose of component at a suitable collection point. Do **not** dispose of component in domestic waste. |

### Intended use

The appliance is intended solely for installation and operation in sealed unvented heating systems that comply with EN 12828, with due attention paid to the associated installation, service and operating instructions. It is only designed for heating up heating water that is of potable water quality.

Intended use presupposes that a fixed installation in conjunction with permissible, system-specific components has been carried out.

Commercial or industrial usage for a purpose other than heating the building or DHW shall be deemed inappropriate.

Any usage beyond this must be approved by the manufacturer in each individual case.

Incorrect usage or operation of the appliance (e.g. the appliance being opened by the system user) is prohibited and will result in an exclusion of liability. Incorrect usage also occurs if the components in the heating system are modified from their intended use (e.g. if the flue gas and ventilation air paths are sealed).
The commissioning and matching of the control unit to local conditions and building characteristics, as well as instructing the user in the operation of the system, must be carried out by your heating contractor.

As the user of new combustion equipment, you may be obliged to notify your local flue gas inspector of the installation [check local regulations]. Your local flue gas inspector will also inform you [where appropriate] about work he may be required to carry out on your combustion equipment (e.g. regular checks, cleaning).

To provide you with a better understanding of the functions of your Vitotronic control unit, some terminology is explained. The terms are marked as follows:

Further information can be found in chapter "Terminology" in the appendix.

Your system is preset

Your heating system is preset at the factory and is therefore ready for operation:

Central heating
- Between 06:00 and 22:00 h, the rooms are heated to 20 °C "Set room temperature" (standard room temperature).
- Between 22:00 and 06:00 h, the rooms are heated to 3 °C "Set reduced room temp" (reduced room temperature, frost protection).

DHW heating
- Between 05:30 and 22:00 h, the DHW is heated to 50 °C "Set DHW temperature". Any installed DHW circulation pump is switched on.
- Between 22:00 and 05:30 h, the DHW cylinder is not reheated. Any installed DHW circulation pump is switched off.

Note
Any DHW heating begun before 22:00 h is terminated.

Frost protection
- Your boiler and DHW cylinder are protected against frost.

Wintertime/summertime changeover
- This changeover is automatic.

Date and time
- The date and time have been set by your heating contractor.

Your heating contractor can make further settings for you during commissioning. You can change the settings at any time to suit your individual requirements.

Power failure
All settings are saved if there is a power failure.
If the heating system has been shut down for a prolonged period, reset the date and time.

Tips on saving energy

Central heating
- Standard room temperature ("Room temp set-point", see page 19): Do not overheat your home. Every degree of room temperature reduction saves up to 6 % on your heating bills. Never set your standard room temperature higher than 20 °C.
- Time program (see page 19): Heat your home to the standard room temperature during the day and the reduced temperature at night. Set this via the time program.

Operating program:
If you do not require central heating, select one of the following operating programs:
- "Only DHW" (see page 24): If you require no heating for your home in summer, but you require DHW.
- "Standby mode" (see page 17): If you don't need to heat your home and don't require DHW for long periods.
- Short absence (see page 21): Reduce the room temperature if you are going out shopping, for example. For this, select "Economy mode".
**Tips on saving energy** (cont.)

- **Holidays** (see page 22):
  If you are going away, select the "Holiday program":
  The room temperature is reduced and DHW heating is turned off.
- **Ventilation**:
  Close the thermostatic valves when venting/airing.
  Open the windows fully for a brief time.
- **Roller shutters**:
  Close roller shutters (if installed) at dusk.
- **Thermostatic valves**:
  Ensure that thermostatic valves are properly adjusted.
- **Radiators**:
  Never cover radiators or thermostatic valves.

**DHW heating**

- **DHW circulation pump** (see page 25):
  Only activate the DHW circulation pump for periods in which DHW is regularly drawn off. Set this via the time program.
- **DHW consumption**:
  Consider showering instead of running a bath. A shower generally uses less energy than a full bath.

For additional energy saving functions of the Vitotronic control unit, please contact your heating contractor.

**Tips for greater comfort**

**Central heating**

- **Standard room temperature** ("Room temp setpoint", see page 19):
  You can select your individual preferred temperature at any time in the standard menu.
- **Preferred heating circuit** (see page 27):
  If your heating system consists of several heating circuits, you can make any important adjustments for your preferred heating circuit directly via the standard menu.
- **Time program** (see page 19):
  Make use of the time program. In the time program, you can set time phases with different room temperatures, for example different temperatures for day and night time.
- **Heating curve** (see page 20):
  The heating curve enables you to individually adjust the heating system to the actual heat demand in your home. If set correctly, your preferred temperature will be achieved all year round.
- **"Party mode"** (see page 21):
  If you want to heat rooms to a different temperature from the one set in the time program, select "Party mode".
  Example: Late in the evening, the reduced room temperature is set by the time program. Your guests stay longer.

**DHW heating**

- **Time program** (see page 24 and 25):
  Use the time program for DHW heating.
  Use the time program for the DHW circulation pump.
  During the selected time phases, DHW is available at the draw-off points at the required temperature.
Operation

Opening the control unit

You can change any setting on your heating system centrally at the programming unit of the control unit. If remote control units are installed in your rooms, you can also adjust the settings at the remote control units.

Remote control operating instructions

- Takes you to the previous step in the menu or cancels a setting that has been started.
- Scrolls through the menu or adjusts values.
- Confirms your selection or saves the setting made.

2 control levels are available:
- The standard menu: See page 11
- The extended menu: See page 12

"Help" menu

Displays explanations about operation in the form of a short guide.

Call up the short guide as follows:
- If the screensaver is active (see page 12):
  Press ?.
- From anywhere in the menu:
  Press ? repeatedly until the standard menu is shown (see page 11).
  Press ?.

Programming unit

You can change any setting on your heating system centrally at the programming unit of the control unit. If remote control units are installed in your rooms, you can also adjust the settings at the remote control units.

Note
The programming unit can be placed in a wall mounting base. The wall mounting base is available as an accessory. Ask your heating contractor for further information.

Fig. 1

Fig. 2

Note
The screensaver is activated if you have not made any adjustments on the programming unit for a few minutes (see page 12).
Symbols

These symbols are not always displayed, but appear subject to the system version and the operating condition.

Displays:
- Frost protection is active.
- Central heating to standard room temperature
- Central heating with reduced room temperature
- Party mode is active.
- Economy mode is active.
- In conjunction with a solar thermal system:
  - Solar circuit pump is running

Heating circuits:
- HC...

Operating programs:
- Call up the standard menu as follows:
  - If the screensaver is active (see page 12): Press OK.
  - If you are in the extended menu (see page 12): Press repeatedly until the standard menu appears.

Messages:
- Fault
- Service

Standard menu

The following settings for preferred heating circuit D can be called up and adjusted in the standard menu:
- Set room temperature
- Operating program

Call up the standard menu as follows:
- If the screensaver is active (see page 12): Press OK.
- If you are in the extended menu (see page 12): Press repeatedly until the standard menu appears.

Fig. 3

A Operating program for preferred heating circuit D
B Current outside temperature
C Set room temperature for preferred heating circuit D
D Preferred heating circuit (see page 27)
  - Not displayed if only one heating circuit is installed.

Setting the standard room temperature for the preferred heating circuit

Press the following keys:
\[\text{\textup{\textbackslash{}\textbackslash{}}}/\text{\textbackslash{}\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslash{}}\text{\textbackslashes} for the required value OK

Note
- Settings for the preferred heating circuit can also be adjusted in the extended menu (see page 12).
- The settings for any other connected heating circuits can only be adjusted in the extended menu.
- Your heating contractor can block operation for the standard menu. In such cases, you will not be able to make adjustments in either the standard menu or the extended menu.
Setting the operating program for the preferred heating circuit

Press the following keys:

► for the required operating program
OK

Extended menu

In the extended menu, you can call up and adjust all the settings from the Vitotronic control unit range of functions, e.g. holiday program and time programs. You can find the menu overview on page 38.

Call up the extended menu as follows:

- If the screensaver is active (see page 12):
  Press OK and then  
- From anywhere in the menu:
  Press  

Note

Your heating contractor can block operation for the extended menu. In this case, you can only call up service and fault messages.

How to use the controls

If you have not made any settings for a few minutes, the screensaver is activated. The display brightness is reduced.

Fig. 4

Dialogue line

Fig. 5

Current outside temperature
Set room temperature
1. Press OK. This takes you to the standard menu (see page 11).

2. Press $\equiv$. This takes you to the extended menu (see page 12). The selected menu point is highlighted in white. Dialogue line $\equiv$ (see diagram on page 12) shows the necessary instructions.

Adjustments to the central heating can be made for every heating circuit. It is therefore necessary to select the required heating circuit prior to making any adjustments (e.g., room temperature).

The following diagram shows how to make adjustments, using the set room temperature as an example. The diagram shows the adjustment without and with selection of the heating circuit, as well as different dialogue lines.

**Note**
Heating circuit 3 can also be selected.
Operation

Operating program

Operating programs for central heating, DHW, frost protection

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Operating program</th>
<th>Function</th>
</tr>
</thead>
</table>
| ![Central heating and DHW heating](image) | "Heating and DHW" | ▪ The rooms of the selected heating circuit are heated in accordance with the room temperature and time program specified (see chapter "Central heating").  
▪ DHW is heated in accordance with the DHW temperature and time program specified (see chapter "DHW heating"). |
| ![DHW heating](image) | "Only DHW" | ▪ DHW is heated in accordance with the DHW temperature and time program specified (see chapter "DHW heating").  
▪ No central heating |
| ![Frost protection](image) | "Standby mode" | ▪ No central heating  
▪ No DHW heating  
▪ Frost protection for the boiler and the DHW cylinder is enabled. |

Special operating programs

Display in the standard menu

Special operating programs ⚫:
▪ "Screed drying"
  This function is activated by your heating contractor. Your screed is dried in line with a set time program suitable for the relevant building materials (temperature/time profile). Your settings for central heating are deactivated for the duration of the screed drying.
▪ "External hook-up"
  Your Vitotronic control unit is regulated by a higher ranking control unit.
▪ "External program"
  The operating program has been changed by a communication interface.
▪ "Holiday program" (see page 22)

Note
In the extended menu, you can call up the set operating program under "Information" (see page 38).

Time program

The following explains how to enter the settings for a time program. The special features of individual time programs are described in the relevant chapters.

You can set up a time program for the following functions:
▪ Central heating (see page 19)
▪ DHW heating (see page 24)
▪ DHW circulation pump (see page 25)

The time program allows you to divide the day into sections. These are called time phases. It is for you to decide what happens in these time phases, e.g. whether your rooms should be heated to the standard room temperature.
▪ You can set the time program individually, to be the same, or different, for every day of the week.
▪ You can select up to 4 time phases per day.
For each time phase you set the start and end points. The selected time phase is illustrated by a white bar on the time chart.

In the extended menu, you can call up the time programs under "Information" (see page 38).

Setting a time program, using central heating as an example

Extended menu:
1. "Heating"
2. "Heating time program"
3. for the required heating circuit if necessary
4. "Heating time program"
5. Select part of the week or a day.
6. Select a time phase 1 to 4. The selected time phase is illustrated by a white bar on the time chart.
7. Set the start and end points for the relevant time phase. The length of the white bar on the time chart is adjusted.
8. To exit the menu, press ．

Cancelling the setting of a time phase early
Press ． repeatedly until the required display appears.

Example of time phases within the time program for central heating

- Time program for "Monday-Friday" ("Mo-Fr")
- Time phase [1]: 05:00 to 08:30 h
- Time phase [2]: 16:30 to 23:00 h
In between these time phases the system heats to a reduced temperature.

Setting the time program effectively

If you would like to set a different time program for just one day of the week, proceed as follows.
Example: You want to set a different time program for Monday:

1. Select "Monday-Sunday". Set the time program.

   **Note**
   The tick is always set at the sections of the week with identical time phases.
   Factory setting: Same for all days of the week, therefore "Monday-Sunday" is ticked.

2. Select "Monday". Set the time program for this.

   **Note**
   The "Saturday-Sunday" part of the week will be ticked because this is now the only part of the week which has identical time phases.

**Deleting time phases**

- Set the time for the end point to the same time that was set for the start point.
- For the start point, select a time prior to 00:00 h. The display shows the selected time phase as "- - - - - -".
Switching on the heating system

Ask your heating contractor about the following:
- Level of the required system pressure
- Position of the following components:
  - Pressure gauge
  - Shut-off valve
  - Gas shut-off valve
  - Vents

1. Check the heating system pressure at the pressure gauge. The heating system pressure is too low if the indicator points to the area below the red field. Top up with water or notify your local heating contractor.

2. For open flue operation:
   Check that the vents in the installation room are open and unrestricted.

   **Note**
   *With open flue operation, the combustion air is drawn from the installation room.*

Shutting down the heating system

With frost protection monitoring

For every heating circuit, select the "Standby mode" operating program.

- No central heating
- No DHW heating
- Frost protection for the boiler and the DHW cylinder is enabled.
Start-up/shutdown

**Shutting down the heating system (cont.)**

---

**For the preferred heating circuit**

**Standard menu**
1. ➤ for the operating program "Standby mode" (frost protection monitoring).
2. OK

**Extended menu**
1. ➤
2. "Heating"
3. ➤ for the required heating circuit if necessary
4. "Heating program"
5. "Standby mode"

**Note**
The circulation pumps are briefly started every 24 hours to prevent them from seizing up.

---

**For all heating circuits**

---

**Without frost protection monitoring (shutdown)**

1. Turn off the system ON/OFF switch.
2. Close the gas shut-off valve.
3. Isolate the heating system from its main power supply, e.g. at the separate MCB/fuse or at a mains isolator.

**Information on prolonged shutdown**
- Circulation pumps may seize up as they are not being supplied with power.
- After an extended shutdown, it may be necessary to reset the date and time (see page 27).

---

**Please note**
If outside temperatures of below 3 °C are expected, take appropriate measures to protect the heating system from frost.
If necessary, contact your heating contractor.
### Room temperature

Further information can be found in chapter "Terminology" in the appendix.

### Setting the standard room temperature

**Factory setting:** 20 °C

**For the preferred heating circuit**

<table>
<thead>
<tr>
<th>Standard menu</th>
<th>Extended menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ✔️/ ❌ for the required value</td>
<td>1. ✔️</td>
</tr>
<tr>
<td>2. OK</td>
<td>2. &quot;Heating&quot;</td>
</tr>
</tbody>
</table>

**For all heating circuits**

<table>
<thead>
<tr>
<th>Standard menu</th>
<th>Extended menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ✔️/ ❌ for the required heating circuit if necessary</td>
<td>3. ✔️/ ❌ for the required heating circuit if necessary</td>
</tr>
<tr>
<td>2. &quot;Set room temperature&quot;</td>
<td>4. &quot;Set room temperature&quot;</td>
</tr>
<tr>
<td>3. ✔️/ ❌ for the required heating circuit if necessary</td>
<td>5. ✔️/ ❌ for the required heating circuit if necessary</td>
</tr>
</tbody>
</table>

### Setting the reduced room temperature

**Factory setting:** 3 °C

**Central heating with this temperature:**
- Between the time phases for standard heating mode (see page 19)
- In the holiday program (see page 22)

**For all heating circuits**

<table>
<thead>
<tr>
<th>Standard menu</th>
<th>Extended menu</th>
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</thead>
<tbody>
<tr>
<td>1. ✔️</td>
<td>1. ✔️</td>
</tr>
<tr>
<td>2. &quot;Heating&quot;</td>
<td>2. &quot;Heating&quot;</td>
</tr>
<tr>
<td>3. ✔️/ ❌ for the required heating circuit if necessary</td>
<td>3. ✔️/ ❌ for the required heating circuit if necessary</td>
</tr>
<tr>
<td>4. &quot;Set reduced room temp&quot;</td>
<td>4. &quot;Set reduced room temp&quot;</td>
</tr>
<tr>
<td>5. ✔️/ ❌ for the required heating circuit if necessary</td>
<td>5. ✔️/ ❌ for the required heating circuit if necessary</td>
</tr>
</tbody>
</table>

### Heating program

Further information can be found in chapter "Terminology" in the appendix.

### Setting the operating program

**For the preferred heating circuit**

<table>
<thead>
<tr>
<th>Standard menu</th>
<th>Extended menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ✔️/ ❌ for the operating program: &quot;Heating and DHW&quot;</td>
<td>1. ✔️</td>
</tr>
<tr>
<td>2. OK</td>
<td>2. &quot;Heating&quot;</td>
</tr>
</tbody>
</table>

**For all heating circuits**

<table>
<thead>
<tr>
<th>Standard menu</th>
<th>Extended menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ✔️/ ❌ for the required heating circuit if necessary</td>
<td>3. ✔️/ ❌ for the required heating circuit if necessary</td>
</tr>
<tr>
<td>2. &quot;Heating program&quot;</td>
<td>4. &quot;Heating program&quot;</td>
</tr>
<tr>
<td>3. ✔️/ ❌ for the required heating circuit if necessary</td>
<td>5. ✔️/ ❌ for the required heating circuit if necessary</td>
</tr>
<tr>
<td>4. &quot;Heating and DHW&quot;</td>
<td>5. E.g. &quot;Heating and DHW&quot;</td>
</tr>
</tbody>
</table>

For information on the operating programs, see page 14.

### Time program

Further information can be found in chapter "Terminology" in the appendix.
Central heating

**Time program (cont.)**

**Setting the time program for central heating**

Factory setting: **One** time phase from 06:00 to 22:00 h for every day of the week

Extended menu:
1. 
2. "Heating"
3. ➪ for the required heating circuit if necessary
4. "Heating time program"
5. Set the required time phases.

To see how to set a time program, see page 14.

**Note**
When adjusting the setting, bear in mind that your heating system requires some time to heat the rooms to the required temperature.

**Heating curve**

Further information can be found in chapter “Terminology” in the appendix.

**Setting the heating curve**

Factory setting:
- "Slope": 1.4
- Heating curve "level": 0

Extended menu:
1. 
2. "Heating"
3. ➪ for the required heating circuit if necessary
4. "Heating curve"
5. "Slope" or "Level"
6. Set the required value.

**Note**
If you press ? , you will be given tips on how to set the heating curve.

Example: Changing the heating curve slope to 1.5

A graph clearly shows the change in the heating curve as soon as you alter the value for the slope or level.

**Stopping central heating**

**For the preferred heating circuit**

Standard menu
1. ➪ for the operating program:
   - "Only DHW" (no central heating)
   or
   - "Standby mode" (frost protection active)
2. OK

**For all heating circuits**

Extended menu
1. 
2. "Heating"
3. ➪ for the required heating circuit if necessary
4. "Heating program"
5. "Only DHW" (no central heating)
   or
   "Standby mode" (frost protection active)
Comfort function "Party mode"

Setting "Party mode"

Extended menu
1. Menu
2. "Heating"
3. ➧ for the required heating circuit if necessary
4. "Party mode"
5. Set the required room temperature for "Party mode".

Display in the standard menu

![Display showing party mode settings]

Party mode | HC1
---|---
23°C

Change with ➧

Fig. 14

Note
The display of the set room temperature does not change.

- The rooms are heated to the required temperature.
- Provided your heating contractor has not altered the settings, the DHW is heated to the selected DHW temperature first. Only then will central heating commence.
- The DHW circulation pump is switched on (if installed).

Terminating "Party mode"

- Automatically after 8 hours
  Note
  If you want to make changes to this, contact your local heating contractor.
  or
  Ends automatically when the system switches to standard heating mode in accordance with the time program
  or
  Set "Party mode" to "OFF".

Energy saving function "Economy mode"

Setting "Economy mode"

Extended menu
1. Menu
2. "Heating"
3. ➧ for the required heating circuit if necessary
4. "Economy mode"
Central heating

Energy saving function "Economy mode" (cont.)

Display in the standard menu

![Display](image_url)

**Note**
The display of the set room temperature does not change.

Terminating "Economy mode"

- Ends automatically when the system switches to reduced heating mode in accordance with the time program or
- Set "Economy mode" to "OFF".

"Holiday program" energy saving function

Setting the "Holiday program"

**Note**
The holiday program applies to all heating circuits. If you want to make changes to this, contact your local heating contractor.

The holiday program starts at 00:00 h the day after the leaving date. The holiday program ends at 00:00 h on the return date. This means that the set time program is active on the days of departure and return.

Extended menu:
1. ○
2. "Heating"
3. "Holiday program"
4. Set the required departure and return dates.

The holiday program has the following effects:

- **Central heating:**
  - For heating circuits in the "Heating and DHW" operating program:
    - The rooms are heated to the set reduced room temperature (see page 19).
  - For heating circuits in the "Only DHW" operating program:
    - No central heating. Frost protection for the boiler and the DHW cylinder is enabled.

- **DHW heating:**
  - No DHW heating. Frost protection for the DHW cylinder is active.

Display in the standard menu
Display in the extended menu

In the extended menu, you can call up the set holiday program under "Information" (see page 38).

Cancelling or deleting the "Holiday program"

Extended menu
1. 
2. "Heating"
3. "Holiday program"
4. "Delete program"
### DHW heating

#### DHW temperature

Factory setting: 50 °C

Extended menu
1. □□
2. "DHW"

3. "Set DHW temperature"
4. Set the required value.

#### Heating program

Further information can be found in chapter “Terminology” in the appendix.

### Setting the operating program for DHW heating

**For the preferred heating circuit**

<table>
<thead>
<tr>
<th>Standard menu</th>
<th>Extended menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ▶️ for the operating program: &quot;Heating and DHW&quot; or &quot;Only DHW&quot;</td>
<td>1. □□</td>
</tr>
<tr>
<td>2. OK</td>
<td>2. &quot;Heating&quot;</td>
</tr>
</tbody>
</table>

**For all heating circuits**

<table>
<thead>
<tr>
<th>Extended menu</th>
<th>1. □□</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. &quot;Heating&quot;</td>
<td>3. ▶️ for the required heating circuit if necessary</td>
</tr>
<tr>
<td>4. &quot;Heating program&quot;</td>
<td>5. &quot;Heating and DHW&quot; or &quot;Only DHW&quot;</td>
</tr>
</tbody>
</table>

For information on the operating programs, see page 14.

#### Time program

Further information can be found in chapter “Terminology” in the appendix.

### Setting the time program for DHW heating

Factory setting: "Automatic"
During operation with standard room temperature (see page 19), the DHW in the DHW cylinder will be heated to the set DHW temperature. The time phase for DHW heating automatically starts half an hour earlier than the time phase for central heating with standard room temperature. This means hot water is already available when your system starts operating at standard room temperature.

Extended menu:
1. □□
2. "DHW"

3. "DHW time prog"
4. Set the required time phases.

To see how to set a time program, see page 14.

**Note**
- The DHW is not heated between the time phases. Frost protection for the DHW cylinder is active.
- When adjusting the setting, bear in mind that your heating system requires some time to heat the DHW cylinder to the required temperature.
DHW heating once, outside the time program

**Note**
The "Heating and DHW" or "Only DHW" operating program must be set for at least one system heating circuit.

Extended menu
1. ☰
2. "Heating"

Setting the time program for the DHW circulation pump

Factory setting: "Automatic"
In other words, the DHW circulation pump operates in parallel to the DHW heating time program.

Extended menu:
1. ☰
2. "DHW"

**Note**
Between the time phases the DHW circulation pump remains off.

Switching off DHW heating

<table>
<thead>
<tr>
<th>You do not want to heat DHW or provide central heating</th>
<th>You do not want to heat DHW, but do want to provide central heating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For the preferred heating circuit</strong></td>
<td></td>
</tr>
<tr>
<td>Standard menu</td>
<td></td>
</tr>
<tr>
<td>1. ► for the “Standby mode” operating program (frost protection is active)</td>
<td>—</td>
</tr>
<tr>
<td>2. OK</td>
<td></td>
</tr>
<tr>
<td><strong>For all heating circuits</strong></td>
<td></td>
</tr>
<tr>
<td>Extended menu</td>
<td></td>
</tr>
<tr>
<td>1. ☰</td>
<td></td>
</tr>
<tr>
<td>2. &quot;Heating&quot;</td>
<td></td>
</tr>
<tr>
<td>3. ► for the required heating circuit if necessary</td>
<td></td>
</tr>
<tr>
<td>4. &quot;Heating program&quot;</td>
<td></td>
</tr>
<tr>
<td>5. &quot;Standby mode&quot; (frost protection active)</td>
<td></td>
</tr>
<tr>
<td>Extended menu</td>
<td></td>
</tr>
<tr>
<td>1. ☰</td>
<td></td>
</tr>
<tr>
<td>2. &quot;Heating&quot;</td>
<td></td>
</tr>
<tr>
<td>3. ► for the required heating circuit if necessary</td>
<td></td>
</tr>
<tr>
<td>4. &quot;Heating program&quot;</td>
<td></td>
</tr>
<tr>
<td>5. &quot;Heating and DHW&quot;</td>
<td></td>
</tr>
<tr>
<td>6. ⊗ until the menu appears</td>
<td></td>
</tr>
<tr>
<td>7. &quot;DHW&quot;</td>
<td></td>
</tr>
<tr>
<td>8. &quot;Set DHW temperature&quot;</td>
<td></td>
</tr>
<tr>
<td>9. Set 10 °C.</td>
<td></td>
</tr>
</tbody>
</table>
Further adjustments

Setting the display contrast

You can make the menu texts easier to read. To do so, adjust the contrast of the display to suit the lighting conditions in the room.

1. Extended menu:

2. "Settings"
3. "Contrast"
4. Set the required contrast.

Setting the display brightness

You would like to be able to read the text in the menu better. Change the brightness level of the "Control" display.
You can also alter the "Screen saver" brightness.

1. Extended menu:

2. "Settings"
3. "Brightness"
4. "Control" or "Screen saver"
5. Set the required brightness.

Naming heating circuits

You can name all heating circuits individually. The abbreviations "HC1", "HC2" and "HC3" will be retained.

Extended menu
1. "Settings"
2. "Name for heating circ."
3. "Heating circuit 1", "Heating circuit 2" or "Heating circuit 3"
4. "Change?"
5. You can select the required character with ▲▼
6. ▲▼ takes you to the next character.
7. Press OK to accept all entered characters at once and simultaneously exit this menu.

Note
You can delete the name entered with "Reset?".

Example:
Name for "Heating circuit 2": Apartment

Fig. 19

Heating circuit 2

<table>
<thead>
<tr>
<th>g</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating circuit 1</td>
<td></td>
</tr>
</tbody>
</table>

Change with

Fig. 20

Heating circuit 2

| Apartment |

Adopted
Naming heating circuits (cont.)

The menu shows "Apartment" for "Heating circuit 2".

<table>
<thead>
<tr>
<th>Apartment</th>
<th>HC2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party mode</td>
<td>22°C</td>
</tr>
<tr>
<td>Economy mode</td>
<td></td>
</tr>
<tr>
<td>Set room temperature</td>
<td></td>
</tr>
<tr>
<td>Set reduced room temp</td>
<td></td>
</tr>
<tr>
<td>Select with</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 21

Setting the preferred heating circuit for the standard menu

If your heating system has several heating circuits, you can select the heating circuit to be displayed in the standard menu.

Extended menu
1. "Settings"
2. "Standard menu"
3. Select the heating circuit:
   - "Heating circuit 1" (for heating circuit 1) "HC1" is displayed
   - "Heating circuit 2" (for heating circuit 2) "HC2" is displayed
   - "Heating circuit 3" (for heating circuit 3) "HC3" is displayed

Setting the time and date

The time and date are factory-set. If your heating system has been shut down for a prolonged period, you may need to reset the time and date.

Extended menu
1. "Time / Date"
2. Set the time and date.

Setting the language

1. Extended menu: "Settings"
2. "Language"
3. Select the required language.

Setting the temperature unit (°C/°F)

Factory setting: °C

1. Extended menu: "Settings"
Further adjustments

**Setting the temperature unit (°C/°F)** (cont.)

2. "Settings"
4. Select the temperature unit "°C" or "°F".
3. "Temperature unit"

**Restoring factory settings**

You can reset the factory settings of all modified values for each heating circuit separately.

Extended menu
1. ⌁
2. "Settings"
3. "Standard setting"
4. "Heating circuit 1", "Heating circuit 2" or "Heating circuit 3".

<table>
<thead>
<tr>
<th>System setting</th>
<th>Settings and values that are reset</th>
</tr>
</thead>
</table>
| "Heating circuit 1", "Heating circuit 2" or "Heating circuit 3" | - Set room temperature: 20 °C  
- Set reduced room temperature  
- Operating program  
- Set DHW temperature  
- Time program for central heating  
- Time program for DHW heating  
- Time program for DHW circulation pump  
- Heating curve slope and level  
- Comfort and energy saving functions ("Party mode", "Economy mode", "Holiday program") are deleted. |

**Note**
If heating circuits have been named (see chapter "Naming heating circuits") the assigned name is retained.
Scanning information

Subject to the components connected and the settings made, you can scan current temperatures and operating conditions.

In the extended menu, information is split into groups:
- "General"
- "Heating circuit 1"
- "Heating circuit 2"
- "Heating circuit 3"
- "DHW"
- "Solar"
- "Reset data"

Note
If heating circuits have been named (see chapter "Naming heating circuits") the assigned name is displayed.
Detailed options for data scanning on individual groups can be found in chapter "Scanning options".

Extended menu
1.  "Information"
2.  Select the group.
3.  Select the information you wish to call up.

Calling up the solar yield in conjunction with solar thermal systems

Extended menu
1.  "Information"
2.  "Solar energy"

The solar energy yield is shown in diagrammatic form.
The flashing line on the graph indicates that the current day is not yet over.

Scanning service messages

If your heating system is due for a service, the symbol flashes on the display and "Service" is shown.

Solar energy

Select with ▼

Extended menu
1.  "Information"
2.  "Reset data"

Resetting data

You can reset the following data:
- Burner hours run
- Fuel consumption
- In conjunction with a solar thermal system:
  Solar energy yield, solar circuit pump hours run and hours run output 22.
- All the above data simultaneously

Extended menu
1.  "Information"
2.  "Reset data"
1. You can call up the reason for the service with OK.

<table>
<thead>
<tr>
<th>Service</th>
<th>Burner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>05500 h</td>
</tr>
</tbody>
</table>

**Acknowledge with** OK

*Fig. 24*

2. Pressing ? calls up information on the service that is due.

3. If you want to acknowledge the service message, follow the instructions in the menu.
   Notify your heating contractor.
   The service message is copied to the menu.
   Display in the standard menu

![Standard menu display](image)

*Fig. 25*

Display in the extended menu

<table>
<thead>
<tr>
<th><strong>Menu</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Heating</strong></td>
</tr>
<tr>
<td><strong>DHW</strong></td>
</tr>
<tr>
<td><strong>Solar energy</strong></td>
</tr>
<tr>
<td><strong>Select with</strong></td>
</tr>
</tbody>
</table>

*Fig. 26*

**Note**

*If the service cannot be carried out until a later date, the service message will be displayed again the following Monday.*

**Calling up an acknowledged service message**

Extended menu

1. ?
2. "Service"
Scanning fault messages

If any faults have occurred in your heating system, the \( \Delta \) symbol flashes on the display and "Fault" is shown. The red fault indicator flashes (see chapter "Starting the heating system").

The red fault indicator flashes (see chapter "Starting the heating system").

31

DANGER

If faults are not rectified, they can have life threatening consequences.

Do not acknowledge fault messages several times in quick succession. Notify your heating contractor if a fault recurs. Your heating contractor will be able to analyse the cause and rectify the fault.

1. You can call up the cause of the fault with OK.

2. Pressing ? calls up information on the heating system characteristics.

Tips on measures you can take yourself before notifying your heating contractor are displayed.

3. Make a note of the cause of the fault and the fault code next to it on the right. In the example: "Outside t sens 18" and "Fault A2". This enables the heating contractor to be better prepared and may save you unnecessary travelling costs.

4. If you want to acknowledge the fault message, follow the instructions in the menu.

The fault message is copied to the menu.

Display in the standard menu

Display in the extended menu

Note

- If you have connected an alarm to alert you to fault messages (e.g. a buzzer), this is deactivated when the fault message is acknowledged.
- If troubleshooting cannot be carried out until a later date, the fault message will be displayed again the following day at 07:00 h. The alarm is switched on again.

Calling up an acknowledged fault message

Extended menu

1. "Fault"

2. "Fault"
Emissions test mode

Emissions test mode for testing flue gas with briefly raised boiler water temperature. Emissions test mode should only be activated by your flue gas inspector during the annual inspection.

Extended menu
1. ☐️
2. "Test mode"
3. "Activate?" "Yes"
   "Flue gas test ON"

Test mode

<table>
<thead>
<tr>
<th>Boiler temperature</th>
<th>62°C</th>
</tr>
</thead>
</table>

Terminate with OK

*Fig. 31*

The following functions are activated:
- The burner is switched on. The display shows the symbol ⬤.  
  **Note**
  *Burner start-up can be delayed, e.g. due to connected components.*
- The pumps are started.
- The mixers remain set to the control function.
- The boiler water temperature is monitored by the boiler control unit.

**Ending emissions test mode**
- Automatically after 30 minutes
- Press OK.
### Causes and Remedies

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The heating system is switched off.</td>
<td>- Turn on the ON/OFF switch (see diagrams from page 17).</td>
</tr>
<tr>
<td></td>
<td>- Switch ON the mains isolator if installed (outside the boiler room).</td>
</tr>
<tr>
<td></td>
<td>- Set the MCB in the power distribution board (main domestic MCB).</td>
</tr>
<tr>
<td>Control unit incorrectly adjusted.</td>
<td>Central heating must be enabled.</td>
</tr>
<tr>
<td>The remote control (if installed) is set incorrectly.</td>
<td>Check the settings and correct if required:</td>
</tr>
<tr>
<td></td>
<td>- Operating program (see page 19)</td>
</tr>
<tr>
<td></td>
<td>- Room temperature (see page 19)</td>
</tr>
<tr>
<td></td>
<td>- Time (see page 27)</td>
</tr>
<tr>
<td></td>
<td>- Time program, central heating (see page 19)</td>
</tr>
<tr>
<td></td>
<td>- Heating curve (see page 20)</td>
</tr>
<tr>
<td>The DHW cylinder is being heated.</td>
<td>Wait until the DHW cylinder has been heated up.</td>
</tr>
<tr>
<td></td>
<td>Reduce the DHW draw-off rate or temporarily reduce the standard DHW</td>
</tr>
<tr>
<td></td>
<td>temperature as required.</td>
</tr>
<tr>
<td>No fuel.</td>
<td>For operation with LPG:</td>
</tr>
<tr>
<td></td>
<td>- Check the fuel reserves and re-order if required.</td>
</tr>
<tr>
<td></td>
<td>For operation with natural gas:</td>
</tr>
<tr>
<td></td>
<td>- Open the gas shut-off valve. If necessary, check with your gas</td>
</tr>
<tr>
<td></td>
<td>- supply utility.</td>
</tr>
<tr>
<td>&quot;Combustion controller&quot; is displayed.</td>
<td>Press button R (see page 17).</td>
</tr>
<tr>
<td></td>
<td>Acknowledge the fault (see page 31).</td>
</tr>
<tr>
<td></td>
<td><strong>Danger</strong></td>
</tr>
<tr>
<td></td>
<td>If faults are not rectified, they can have life threatening</td>
</tr>
<tr>
<td></td>
<td>consequences.</td>
</tr>
<tr>
<td></td>
<td>Do not acknowledge fault messages several times in quick succession.</td>
</tr>
<tr>
<td></td>
<td>Notify your heating contractor if a fault recurs.</td>
</tr>
<tr>
<td></td>
<td>Your heating contractor will be able to analyse the cause and rectify</td>
</tr>
<tr>
<td></td>
<td>the fault.</td>
</tr>
<tr>
<td>&quot;Fault&quot; is displayed. The red fault indicator flashes.</td>
<td>Check what type of fault it is. Acknowledge the fault (see page 31).</td>
</tr>
<tr>
<td></td>
<td>If necessary, notify your heating contractor.</td>
</tr>
<tr>
<td>&quot;Screed drying&quot; is activated.</td>
<td>No action required.</td>
</tr>
<tr>
<td></td>
<td>After expiry of the screed drying time, the selected operating</td>
</tr>
<tr>
<td></td>
<td>program will become active.</td>
</tr>
<tr>
<td>The mixer motor is faulty.</td>
<td>Adjust the mixer manually.</td>
</tr>
</tbody>
</table>
## What to do if...

### Rooms are too hot

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control unit incorrectly adjusted.</td>
<td>Check the settings and correct if required:</td>
</tr>
<tr>
<td>The remote control (if installed) is set incorrectly.</td>
<td>• Operating program (see page 19)</td>
</tr>
<tr>
<td>■ Control unit incorrectly adjusted.</td>
<td>• Room temperature (see page 19)</td>
</tr>
<tr>
<td>■ The remote control (if installed) is set incorrectly.</td>
<td>• Time (see page 27)</td>
</tr>
<tr>
<td>■ Control unit incorrectly adjusted.</td>
<td>• Time program, central heating (see page 19)</td>
</tr>
<tr>
<td>■ The remote control (if installed) is set incorrectly.</td>
<td>• Heating curve (see page 20)</td>
</tr>
<tr>
<td>[Image 48x698 to 73x717]</td>
<td>[Image 48x422 to 73x441]</td>
</tr>
<tr>
<td>[Image 294x121 to 319x140]</td>
<td>[Image 37x23]</td>
</tr>
<tr>
<td>“Fault” is displayed. The red fault indicator flashes.</td>
<td>[Image 37x23]</td>
</tr>
<tr>
<td>[Image 48x743]</td>
<td>[Image 48x731]</td>
</tr>
<tr>
<td>The mixer motor is faulty.</td>
<td>Adjust the mixer manually.</td>
</tr>
<tr>
<td>The mixer motor is faulty.</td>
<td>Adjust the mixer manually.</td>
</tr>
</tbody>
</table>

### There is no hot water

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The heating system is off.</td>
<td>• Turn on the ON/OFF switch (see diagrams from page 17).</td>
</tr>
<tr>
<td></td>
<td>• Switch ON the mains isolator if installed (outside the boiler room).</td>
</tr>
<tr>
<td></td>
<td>• Set the MCB in the power distribution board (main domestic MCB).</td>
</tr>
<tr>
<td>■ Control unit incorrectly adjusted.</td>
<td>DHW heating must be enabled.</td>
</tr>
<tr>
<td>■ The remote control (if installed) is set incorrectly.</td>
<td>Check the settings and correct if required:</td>
</tr>
<tr>
<td>■ Control unit incorrectly adjusted.</td>
<td>• Operating program (see page 24)</td>
</tr>
<tr>
<td>■ The remote control (if installed) is set incorrectly.</td>
<td>• DHW temperature (see page 24)</td>
</tr>
<tr>
<td>■ Control unit incorrectly adjusted.</td>
<td>• Time program, DHW heating (see page 24)</td>
</tr>
<tr>
<td>■ The remote control (if installed) is set incorrectly.</td>
<td>• Time (see page 27)</td>
</tr>
<tr>
<td>No fuel.</td>
<td>For operation with LPG:</td>
</tr>
<tr>
<td></td>
<td>Check the fuel reserves and re-order if required.</td>
</tr>
<tr>
<td></td>
<td>For operation with natural gas:</td>
</tr>
<tr>
<td></td>
<td>Open the gas shut-off valve. If necessary, check with your gas supply utility.</td>
</tr>
<tr>
<td>“Fault” is displayed. The red fault indicator flashes.</td>
<td>Check what type of fault it is. Acknowledge the fault (see page 31). If necessary, notify your heating contractor.</td>
</tr>
</tbody>
</table>

### The DHW is too hot

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The control unit is set incorrectly.</td>
<td>Check and correct the DHW temperature if required (see page 24)</td>
</tr>
<tr>
<td>The DHW is being heated by the solar thermal system.</td>
<td>Check the settings at the solar control unit and correct them if required.</td>
</tr>
<tr>
<td></td>
<td>Separate operating instructions</td>
</tr>
</tbody>
</table>
## What to do if...

### Flashes and "Fault" is displayed

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating system fault</td>
<td>Proceed as described on page 31.</td>
</tr>
</tbody>
</table>

### Flashes and "Service" is displayed

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The time for a service, as specified by your heating contractor, has arrived.</td>
<td>Proceed as described on page 29.</td>
</tr>
</tbody>
</table>

### "Controls locked out" is displayed

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control was blocked by your heating contractor.</td>
<td>Your heating contractor can lift this block.</td>
</tr>
</tbody>
</table>

### "External hook-up" is displayed

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The operating program set at the control unit has been switched over by an external device, e.g. EA1 extension.</td>
<td>No action required</td>
</tr>
</tbody>
</table>

### "External program" is displayed

<table>
<thead>
<tr>
<th>Cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>The operating program set at the control unit has been switched over by a communication interface.</td>
<td>You can change the operating program.</td>
</tr>
</tbody>
</table>
**Maintenance**

**Cleaning**

All equipment can be cleaned with a commercially available domestic cleaning agent (non-scouring). Clean the surface of the programming unit with the microfibre cloth provided.

**Inspection and maintenance**

The inspection and maintenance of a heating system is prescribed by the Energy Saving Ordinance [EnEV - Germany] and the DIN 4755, DVGW-TRGI 2008 and DIN 1988-8 standards.

Regular maintenance ensures trouble-free, energy efficient, environmentally responsible and safe heating. Your heating system must be serviced by an authorised contractor at least every 2 years. For this, it is best to arrange an inspection and maintenance contract with your local heating contractor.

**Appliance**

Increased contamination raises the flue gas temperature and thereby increases energy losses. We recommend the appliance is cleaned annually.

**DHW cylinder (if installed)**

Standards DIN 1988-8 and EN 806 specify that maintenance and cleaning should be carried out no later than 2 years after commissioning and as required thereafter.

Only a qualified heating contractor should clean the inside of a DHW cylinder and the DHW connections. If any water treatment equipment (e.g. a sluice or injection system) is installed in the cold water supply of the DHW cylinder, ensure this is refilled in good time. In this connection, observe the manufacturer's instructions.

In addition for Vitocell 100:

We recommend that the correct function of the sacrificial anode is checked annually by your heating contractor. The function of the sacrificial anode can be checked without interrupting the system operation. The heating contractor will check the earth current with an anode tester.

**Safety valve (DHW cylinder)**

The function of the safety valve must be checked every six months by the user or a contractor through venting (see valve manufacturer's instructions). The valve seat may become contaminated. Water may drip from the safety valve during a heat-up process. The outlet is open to the atmosphere.

**Please note**

Overpressure can cause damage. Do not close the safety valve.

**Potable water filter (if installed)**

To maintain high hygienic standards, proceed as follows:

- Replace filter element on non-back flushing filters every six months (visual inspection every two months).
- On back flushing filters, back flush every two months.
If there is damage to the connecting cables or lines of the appliance or externally installed accessories, these must be replaced with special cables or lines. Only use Viessmann cables / lines as replacement. For this, notify your qualified contractor.
Appendix

Overview of extended menu

Fig. 32

Scanning options under "Information"

Note
Subject to the features of your heating system, not all of the information listed here may be available to call up.
You can call up more details where information is marked with ▶.

General
"Outside temp"
"Boiler temperature"
"Common flow temp"
"Flue gas temp"
"Burner"

"Burner stage 1"
"Burner stage 2"

"Burner stage 1"
"Burner stage 2"

"Fuel consumpt."
"Feed pump"

"Central fault mess."  ▶
"Subscriber no."

"Input ext. EA1" ▶
"Wireless repeater Yes/No"
"Wireless outside t sens" ▶
"Wireless remote control" ►
"Time"
"Date"
"Radio clock signal"

Heating circuit 1 (HC1)

"Operating program" ►
- "External hook-up"
- "Holiday program"
- "External program"
- "Party mode"
- "Economy mode"
- "Heating and DHW"
- "Only DHW"
- "Standby mode"

"Operating status:" ►
- "Standard heating mode"
- "Reduced mode"
- "Standby mode"

"Time program" ►
"Set room temperature"
"Room temperature"
"Set reduced room temp"
"Set ext. room temp"
"Set party temp"
"Slope"
"Level"
"Heating circ pump"
"Mixer"
"Flow temperature"
"Holiday program" ►

DHW

"DHW time program" ►
"DHW re-circ time prog" ►
"Set DHW temperature"
"Cylinder prim pump"
"DHW circ pump"
"Flow switch"
"Plate heat exchanger" ►

"Collective temp"
"Solar DHW"
"Solar circuit pump" (hours run)
"Solar energy history" ►
"Solar energy"

"Solar circuit pump" (ON/OFF)
or
"Solar circ pump speed" (%)
"Heating suppr. DHW"
"SM1 output 22" (ON/OFF)
"SM1 output 22" (hours run)
"Sensor 7"
"Sensor 10"
"Heat suppr. heating"

Terminology

Setback mode (reduced heating mode)

See "Reduced heating mode".
Operating program

You define the following with the operating program:
- Central heating and DHW heating
  or
- DHW heating only, no central heating
  or
- Only frost protection for the boiler and the DHW cylinder is active.
  No central heating, no DHW heating

**Note**
No operating program is available for central heating without DHW heating. When central heating is needed, hot water is generally also required (winter mode).

Operating status

In the "Heating and DHW" operating program, the operating status changes from "Standard heating mode" to "Reduced heating mode" and vice versa. The times at which the operating status is changed over are defined by you when setting the time program.

**Extension kit for heating circuit with mixer**

Assembly (accessories) for controlling a heating circuit with mixer, see "Mixers"

Screed drying

Your heating contractor can activate this function for screed drying, for example in your new build or extension. This means your screed is dried in line with a fixed time program (temperature/time profile) that is appropriate for the building materials used.

The screed drying function affects heating circuits with mixer:
- All rooms are heated according to the temperature/time profile.
  Your settings for central heating have no effect for the duration of screed drying (max. 32 days).
- DHW heating is carried out (but priority control is cancelled).

Underfloor heating

Underfloor heating systems are slow, low temperature heating systems that respond only very slowly to short term temperature changes.
Therefore, heating to the reduced room temperature at night or switching on "Economy mode" during short absences does not result in significant energy savings.

Heating mode

**Standard heating mode**

For periods when you will be at home during the day, heat your rooms to the standard room temperature. Set the periods (time phases) using the time program for central heating.

**Reduced heating mode**

For periods when you will be absent or during the night, heat your rooms to the reduced room temperature. Set the periods using the time program for central heating. With underfloor heating systems, reduced heating mode only yields limited energy savings (see "Underfloor heating system").

**Room temperature-dependent heating mode**

In room temperature-dependent mode, the flow temperature is controlled according to the room temperature. More heat is made available at a lower room temperature than at a higher one.
The room temperature is captured and transmitted to the control unit by a sensor. The sensor is fitted in the room.
The flow temperature is regulated independently of the outside temperature.

**Weather-compensated heating mode**

In weather-compensated mode, the flow temperature is controlled according to the outside temperature. More heat is made available at a lower outside temperature than at a higher one.
The outside temperature is captured and transmitted to the control unit by a sensor. The sensor is fitted to the exterior of the building.

**Heating curve**

Heating curves illustrate the relationship between the outside temperature, the set room temperature and the boiler water temperature or flow temperature. The lower the outside temperature, the higher the boiler water temperature or flow temperature.
In order to guarantee sufficient heat and minimum fuel consumption at any outside temperature, the conditions of your building and your heating system must be taken into consideration. The heating curve is set by your heating contractor for this purpose.

The heating curves shown apply with the following settings:
- Heating curve level = 0
- Standard room temperature (set value) = 20 °C
**Example:**
For outside temperature \(-14\, ^\circ C\):
- **A** Underfloor heating system, slope 0.2 to 0.8
- **B** Low temperature heating system, slope 0.8 to 1.6
- **C** Heating system with a boiler water temperature in excess of 75 °C, slope 1.6 to 2.0

Factory settings: Slope = 1.4 and level = 0.

**Heating circuit pump**
Circulation pump for circulating the heating water in the heating circuit

**Mixer**
Hot heating water from the boiler is mixed with cooled heating water from the heating circuit. The heating water, thus brought to the required temperature, is pumped to the heating circuit by the heating circuit pump. The control unit adjusts the flow temperature via the mixer to suit different conditions, e.g. changing outside temperatures.

**Night setback**
See "Reduced heating mode"

**Open flue operation**
The combustion air is drawn from the room where the boiler is installed.

**Room sealed operation**
The combustion air is drawn from outside the building.

**Room temperature**
- Standard room temperature:
  Set the standard room temperature for periods when you are at home during the day.
- Reduced room temperature:
  For periods when you will be absent or during the night, set the reduced room temperature; see "Heating mode".
Appendix

**Terminology (cont.)**

**Safety valve**
Safety equipment that must be installed in the cold water pipe by your heating contractor. The safety valve opens automatically to prevent excess pressure in the DHW cylinder.

**Solar circuit pump**
In conjunction with solar thermal systems. The solar circuit pump delivers the cooled heat transfer medium from the indirect coil of the DHW cylinder to the solar collectors.

**Set temperature**
Specific temperature that should be reached, e.g. set DHW temperature for example.

**Summer mode**
Operating program "Only DHW". In warmer months, you can switch off heating mode. The boiler remains operational for DHW heating. Central heating is switched off.

**Cylinder loading pump**
Circulation pump for heating the potable water inside the DHW cylinder.

**Drinking water filter**
A device that removes solids from the water. The drinking water filter is installed in the cold water pipe upstream of the DHW cylinder or the instantaneous water heater.

**Weather-compensated mode**
See "Heating mode"

**Time program**
In the time programs, you specify what your heating system should do at what time.

**DHW circulation pump**
The DHW circulation pump transports the DHW around a loop line between the DHW cylinder and the draw-off points (e.g. hot tap). This ensures that hot water is rapidly available at the draw-off points.
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Contact your local contractor if you have any questions about your system or wish to arrange maintenance or repair work. You can find local contractors on the internet at www.viessmann.de.