Operating instructions

for the system user

Control of the boiler water temperature for each boiler in the cascade:
- Vitotronic 100, type GC7B
- Vitotronic 100, type HC1B

Weather-compensated control for a multi boiler system (cascade):
- Vitotronic 300-K, type MW1B
- Vitotronic 300-K, type MW2B

VITOTRONIC 100
VITOTRONIC 300-K

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Please keep safe.

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 designed 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.

Connecting the appliance

- Connection and commissioning of the appliance may only be carried out by authorised contractors.
- Only operate the appliance with suitable fuels.
- Adhere to the 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.

Working on the appliance

- When adjusting settings and carrying out work on the appliance always follow the guidelines in these operating instructions.
  Additional work on the appliance may only be carried out by authorised contractors.
- Never open the appliance.
- Never remove the cladding.
- Never remove or change additional parts or installed 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.
- Do not smoke. Prevent naked flames and sparks. Do not 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.

Emergency contact

If you smell gas or detect a gas leak call the National Gas Emergency service on 0800 111 999. Notify your gas or electricity supplier and your heating contractor.
- Shut off the electricity supply to the building from a safe place (outside the building).

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.

What to do if water escapes from the appliance

Danger
If water escapes from the appliance there is a risk of electrocution.
- Switch OFF the heating system at the external isolator (e.g. fuse box, domestic distribution board).
- Notify heating contractor.

What to do if the heating system develops a fault

Danger
Fault messages indicate faults in the heating system. If faults are not rectified, they can have life threatening consequences.
Do not acknowledge fault messages several times in quick succession. Inform your heating contractor so the cause can be analysed and the fault rectified.

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.
Do not 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. petrol, solvents, cleaning agents, paints or paper) can cause deflagration and fire.
Never store or use such materials in the boiler 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 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 contractor.

Auxiliary components, spare and wearing parts

Please note
Components not tested with the heating system may damage the system or affect its function.
Only allow qualified contractors to carry out installation or replacement work.

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Liability

No liability is accepted for loss of profit, unattained savings, or other direct or indirect consequential losses resulting from use of the Vitocom 100, type LAN 1 and Vitocom 300, type LAN 3 or the corresponding internet services. No liability is accepted for losses resulting from inappropriate use.
Liability is limited to typical damage arising if a fundamental contractual obligation is violated through slight negligence, the fulfilment of which is essential for proper execution of the contract.

The limitation of liability shall not apply if the damage was caused deliberately or through gross negligence, or if mandatory liability applies due to product liability legislation.
The Viessmann General Terms and Conditions apply, which are included in each current Viessmann pricelist.

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Symbols

Symbol	Meaning
	Reference to other document containing further information
	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	▪ Component must audibly click into place. or ▪ Acoustic signal
	▪ Fit new component. or ▪ In conjunction with a tool: Clean the surface.
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do **not** dispose of component in domestic waste.

Terminology

To provide you with a better understanding of the functions of your Vitotronic control unit, some terminology is explained. This information can be found in chapter "Terminology" in the Appendix.

Intended use

The device is intended to control only Viessmann medium sized and industrial/commercial boilers with oil or gas burners, in line with the intended use of those appliances. Observe the relevant installation, service and operating instructions.

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 function.

Product information

These instructions describe the following control units:
- **Vitotronic 100, type GC7B and type HC1B**
  Control of the boiler water temperature for the respective boiler in the cascade
- **Vitotronic 300-K, type MW1B and type MW2B**
  Weather-compensated control of a multi boiler system (cascade)

The Vitotronic 100, type GC7B and type HC1B, is designed to control the boiler water temperature of the respective boiler in the cascade.

The Vitotronic 300-K, type MW1B and type MW2B, is designed for weather-compensated control of multi boiler systems (cascades).

In multi boiler systems, boiler water temperatures can vary between individual boilers. The common flow temperature for the heating system is specified by the Vitotronic 300-K, using weather compensation.

Commissioning

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 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 [where applicable] will also provide you with information on additional activities concerning your combustion equipment (such as regular testing, cleaning, etc.).

Your system is preset

Your heating system is preset at the factory and is therefore ready for operation following commissioning by your contractor:

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

DHW heating
- Between **05:30 and 22:00 h**, the DHW is heated to a 50 °C **"DHW set 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 were set by your heating contractor.

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.

Operating principles

Each boiler is equipped with its own control unit. These control units are regulated by a higher ranking weather-compensated cascade control unit.

- You can make specific settings and call up information about a boiler at each Vitotronic 100.
- You can make settings and call up information about your heating system at the Vitotronic 300-K.

Operating principles (cont.)

Other control devices:
If remote control units are installed in your rooms, you can also adjust the settings at the remote control units.

Remote control operating instructions

Opening the Vitotronic 100

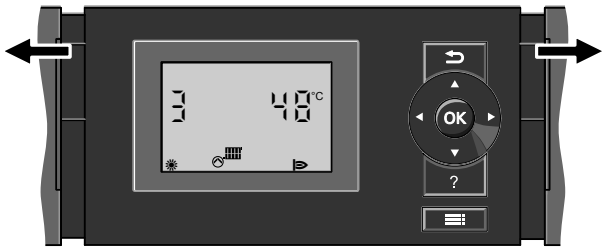

Fig. 1

Vitotronic 100 programming unit

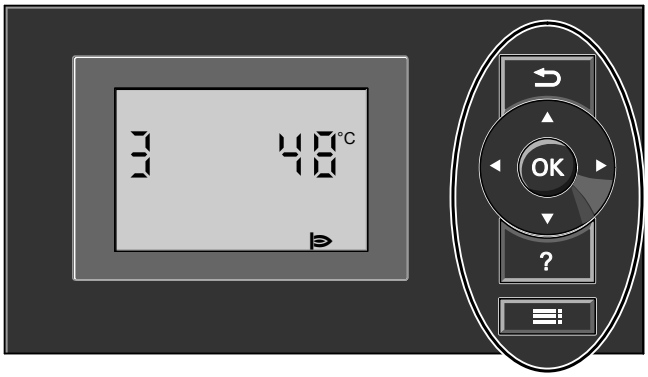

Fig. 2

↩ Takes you to the previous step in the menu or cancels a setting that has been started.

Cursor buttons
Scrolls through the menu or adjusts values.

OK Confirms your selection or saves the setting.

? No function.

Enables you to call up the menu for settings and checks.

How to use the controls, Vitotronic 100

In multi boiler systems, each Vitotronic 100 indicates the boiler number on the **default display**. The following example shows the boiler water temperature as indicated by boiler 3.

Note
*If a boiler is not operational, **"OFF"** appears on the display instead of the boiler water temperature.*

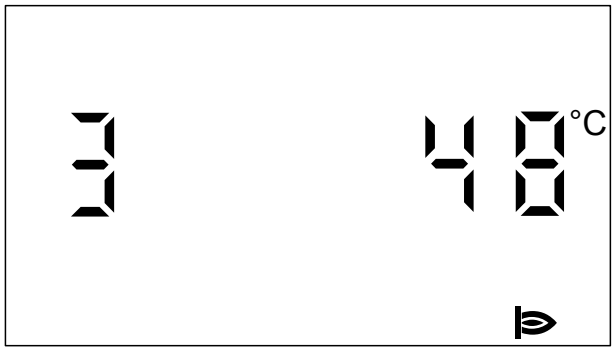

Fig. 3

Press .
Takes you to the menu for settings and checks.

Symbols on the display

These icons are not always displayed, but appear subject to the system version and the operating status. Flashing displays indicate that modifications can be made.

Menu

- Information
- Further settings
- Emissions test mode

Operating program

- Standby mode with frost protection monitoring
- The boiler is available to the cascade control unit for heat production.

Messages

- Service message
- The service interval has expired.
- Fault message
- For type HC1B only: Burner fault

Displays

- Circulation pump at output 20 is running (only for type HC1B)
- Burner in operation
- Factory settings

Opening the Vitotronic 300-K

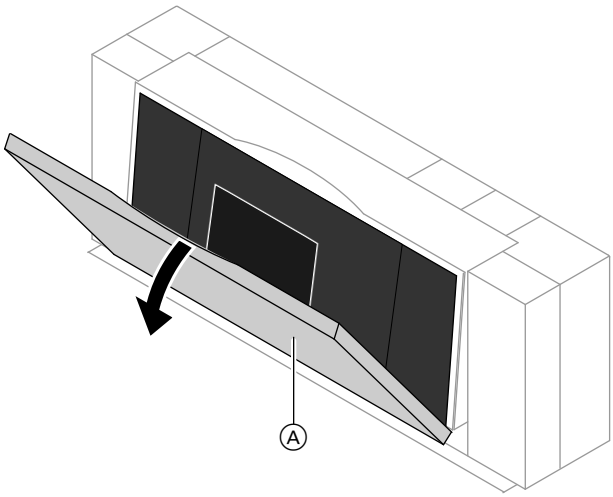

Fig. 4

Ⓐ Cover flap

The programming unit is located behind the cover flap. To open, pull the top edge of the hinged cover forward.

Vitotronic 300-K programming unit

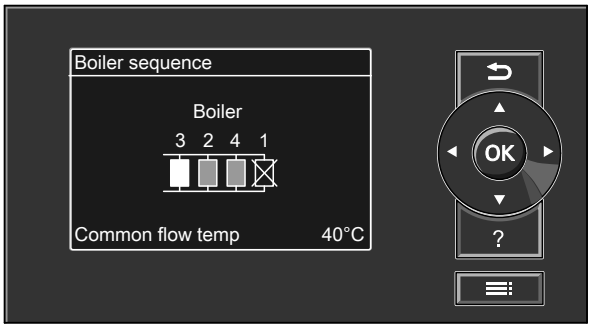

Fig. 5

⮌ Takes you to the previous step in the menu or cancels a setting that has been started.

Cursor buttons
Scrolls through the menu or adjusts values.

OK Confirms your selection or saves the setting.

? Calls up additional information regarding the selected menu option.

Calls up the extended menu.

"Help" menu

This gives you a **short guide** explaining the controls and providing information about heating circuit selection (see page 16).

Call up the short guide as follows:

- If the screensaver is active (see page 14):
  Press **?**.
- From anywhere in the menu:
  Press ⮌ until the standard menu is shown (see the following chapter).
  Press **?**.

Menu, Vitotronic 300-K

There are 2 control levels available, the "Standard menu" and the "Extended menu".

The menu overview can be found on page 40.

Menu, Vitotronic 300-K (cont.)

Standard menu

Call up the standard menu as follows:
- If the screen saver is active (see page 14): Press **OK**.
- From anywhere in the menu: Press ⮌ repeatedly until the standard menu appears.

In the standard menu, the number of boilers installed in the heating system is shown in a specific order (boiler sequence). You can change the boiler sequence (see page 26).

The meanings of the icons are as follows:
- Solid white boiler: The boiler has been enabled by the cascade control unit and is operating.
- Solid grey boiler: The boiler is available for generating heat but has not been enabled by the cascade control unit.
- Solid black boiler, crossed out: The boiler is not available for generating heat.

Extended menu

Call up the extended menu as follows:
- If the screen saver is active (see page 14): Press **OK** and then ☰.
- From anywhere in the menu: Press ☰.

Note
*Your contractor can block operation for the extended menu. In this case, you can **only** check fault messages.*

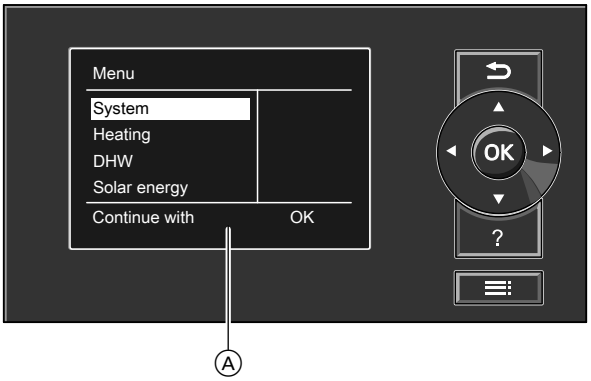

Fig. 6

Ⓐ Dialogue line

How to use the controls, Vitotronic 300-K

The **screen saver** will become active if you have not adjusted any settings on the programming unit for a few minutes. The display brightness is reduced.

1. Press **OK**. This takes you to the standard menu (see page 14).
2. Press ☰. Takes you to the extended menu (see page 14).
   The selected menu option is highlighted in white. The dialogue line Ⓐ (see diagram on page 14) then shows the necessary instructions.

The following diagram shows how to make settings with different dialogue lines, using the set room temperature setting as an example.

How to use the controls, Vitotronic 300-K (cont.)

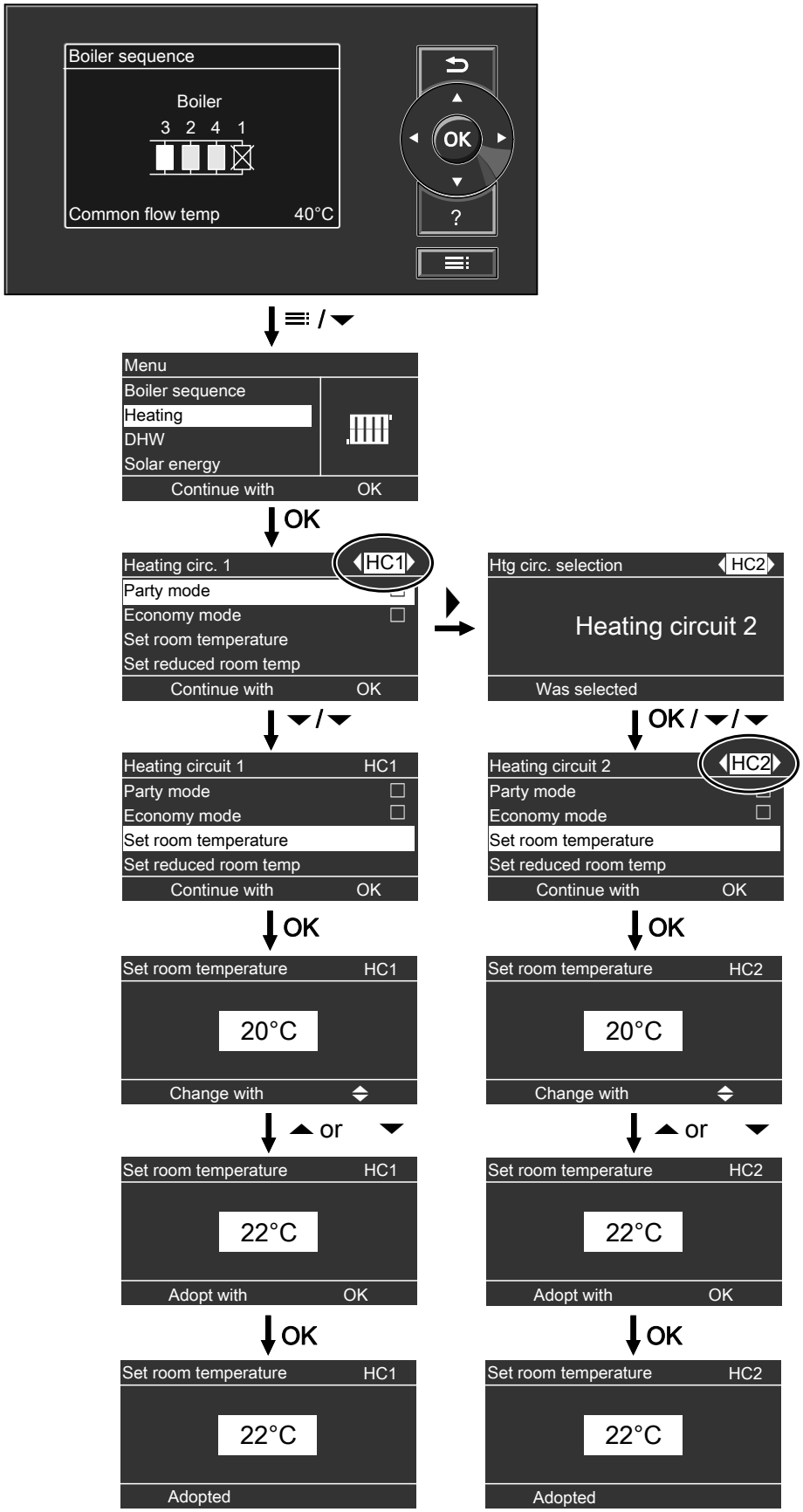

Fig. 7

Required settings (central heating)

This setting can only be made at the Vitotronic 300-K.

If you require central heating, check the following points:
- Have you selected the heating circuit?
  For settings, see the next chapter.
- Have you set the required room temperature?
  For settings, see page 16.
- Have you selected the correct heating program?
  For settings, see page 17.
- Have you set the required time program?
  For settings, see page 17.

Note
*Your contractor can, for example, enable the **"Screed function"** to dry the screed in your new building or extension. Your settings for central heating are deactivated for the duration of the screed drying. For a more detailed explanation, see chapter "Terminology" in the appendix.*
*In the extended menu, you can scan the selected heating program under **"Information"** (see chapter "Scanning information", **"Heating circuit ..."** group).*

Selecting a heating circuit

This setting can only be made at the Vitotronic 300-K. The heating of all rooms can, if necessary, be split over several heating circuits.
- In the case of heating systems with several heating circuits, for all central heating settings, **first** select the heating circuit where you want to make a change.
- This selection is not possible in heating systems with only one heating circuit.

Example:
- **"Heating circuit 1"** is the heating circuit for the offices on the ground floor.
- **"Heating circuit 2"** is the heating circuit for the offices on the first floor.

The heating circuits are marked at the factory as **"Heating circuit 1"** (**HC1**), **"Heating circuit 2"** (**HC2**) and **"Heating circuit 3"** (**HC3**).

If you or your contractor have renamed the heating circuits, e.g. as "Ground floor" or similar, that name is displayed instead of **"Heating circuit ..."** (see page 26).

Extended menu

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. ►/◄ for the required heating circuit.

Setting the room temperature

This setting can only be made at the Vitotronic 300-K.

Setting the standard room temperature

Factory setting: 20 °C

Extended menu

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if required (see page 16).
5. **OK** to confirm
6. **"Set room temperature"**
7. **OK** to confirm
8. Set the required value.

Setting the reduced room temperature (night setback)

Factory setting: 3 °C

Extended menu

1. ☰

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Setting the room temperature (cont.)

2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if required (see page 16).
5. **OK** to confirm
6. **"Set red. room temp"**
7. **OK** to confirm
8. Set the required value.

The rooms are heated to this temperature:
- Between the time phases for standard heating mode (see page 17).
- In the holiday program (see page 20).

Setting the "Heating program" for central heating

This setting can only be made at the Vitotronic 300-K.
Factory setting: **"Heating and DHW"**

Extended menu

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if required (see page 16).
5. **OK** to confirm
6. **"Heating program"**
7. **OK** to confirm
8. **"Heating and DHW"**

- The rooms of the selected heating circuit are heated in accordance with the room temperature and time program settings.
- DHW is reheated in accordance with the set DHW temperature and time program (see chapter "DHW heating").

Setting the time program for central heating

- The time program for central heating is made up of time phases. **One** time phase from 06:00 to 22:00 **for every day of the week** is set at the factory.
- You can set the time program **individually**, to be the same for every day of the week or different:
  You can select up to 4 time phases per day for standard heating mode. Set the start and end points for each time phase. Between these time phases, the rooms are heated with the reduced room temperature (see chapter "Setting the room temperature for reduced heating mode").
- When setting, bear in mind that your heating system requires some time to heat the rooms to the required temperature.
- In the extended menu, you can scan the current time program under **"Information"** (see chapter "Scanning information", **"Heating circuit ..."** group).

Extended menu:

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if necessary.
5. **OK** to confirm
6. **"Heating time program"**
7. **OK** to confirm
8. Select part of the week or a day.
9. Select the time phase 1, 2, 3 or 4.
10. Set the start and end points for the relevant time phase.
11. Press ⮌ to exit the menu.

Note
If you want to terminate a time phase setting process prematurely, press ⮌ repeatedly until the required display appears.

Setting the time program for central heating (cont.)

Example shown:
- Time program for Monday to Friday (**"Mo-Fr"**)
- Time phase 1:
  From 05:00 to 08:30
- Time phase 2:
  From 16:30 to 23:00

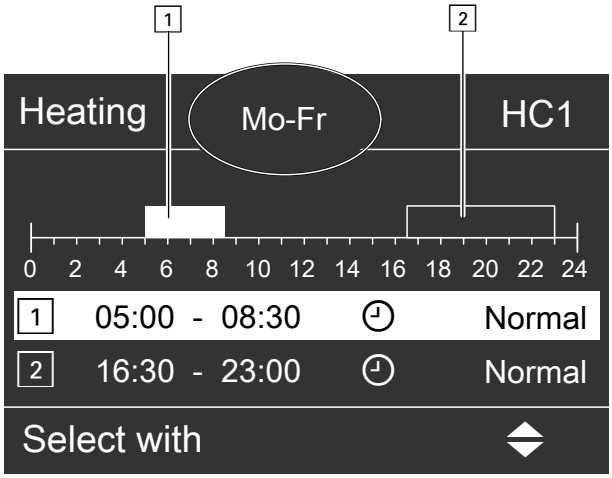

Fig. 8

Example:
You want to set the same time program for every day except Monday:
Select the period **"Monday–Sunday"** and set the time program.
Then select **"Monday"** and set the time program for this.

Deleting a time phase

Set the time for the end point to the same time that was set for the start point. The display shows the selected time phase "**- - : - -**".

Setting the "Heating curve"

This setting can only be made at the Vitotronic 300-K. Your system's heating characteristics are affected by the slope and the level of the selected **"heating curve"**. Further information about the **"Heating curve"** can be found under "Terminology" on page 44.

Factory setting:
- Slope: 1.4
- Heating curve level: 0
- Standard room temperature (set value): 20 °C
- Reduced room temperature (set value): 3 °C

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if required (see page 16).
5. **OK** to confirm
6. **"Heating curve"**
7. **OK** to confirm
8. **"Slope"** or **"Level"**

   Note
   *Tips on when and how to change the **"Heating curve"** slope and level are displayed by pressing **"?"**.*
9. Set the required value.

Tips for setting the "Slope" and "Level":

Heating characteristics	Measure
Living space is too cold during the winter.	Adjust the **"Slope"** of the **"Heating curve"** to the next highest value.
Living space is too warm during the winter.	Adjust the **"Slope"** of the **"Heating curve"** to the next lowest value.
Living space is too cold in spring/autumn and winter.	Set the **"Level"** of the **"Heating curve"** to a higher value.
Living space is too warm in spring/autumn and winter.	Set the **"Level"** of the **"Heating curve"** to a lower value.

Setting the "Heating curve" (cont.)

Heating characteristics	Measure
Living space is too cold in spring/autumn, but warm enough in winter.	Adjust the **"Slope"** of the **"Heating curve"** to the next lowest value and the **"Level"** to a higher value.
Living space is too warm in spring/autumn, but warm enough in winter.	Adjust the **"Slope"** of the **"Heating curve"** to the next highest value and the **"Level"** to a lower value.

Switching off central heating

Extended menu

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if required (see page 16).
5. **OK** to confirm
6. **"Heating program"**
7. **OK** to confirm
8. **"Only DHW"** (summer mode, no central heating) or **"Standby mode"** (frost protection monitoring)

Adjusting the room temperature temporarily

This setting can only be made at the Vitotronic 300-K. The **"Party mode"** function allows you to change the room temperature for a few hours, e.g. if guests stay until late in the evening. You do not have to change any existing control settings. With this function, the DHW is reheated to the specified set temperature.

- The rooms are heated to the required temperature.
- The DHW is reheated to the specified set temperature.
- The DHW circulation pump is switched on (if installed).

Setting "Party mode"

Extended menu

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if required (see page 16).
5. **"Party mode"**
6. **OK** to confirm
7. Set the room temperature required during party mode with ▲/▼.
8. **OK** to confirm

Ending "Party mode"

- Automatically when the system switches to standard heating mode in accordance with the time program.
  or
- In the extended menu, set **"Party mode"** to **"OFF"**.

Reducing the room temperature temporarily

This setting can only be made at the Vitotronic 300-K.

To save energy, you can reduce the room temperature in **standard heating mode**. For example, if you are going out for a few hours.

Reducing the room temperature temporarily (cont.)

Setting "Economy mode"

Extended menu

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. Select the heating circuit if required (see page 16).
5. **OK** to confirm
6. **"Economy mode"**
7. **OK** to confirm

Ending "Economy mode"

- Automatically when the system switches to reduced heating mode in accordance with the time program.
  or
- In the extended menu, set **"Economy mode"** to **"OFF"**.

Energy saving function for longer absences

To save energy, for example if you are on holiday for a long time, you can enable the **"Holiday program"**. This setting can only be made at the Vitotronic 300-K.

Note
*The control unit is set up so that the **"Holiday program"** applies to **all** heating circuits. If you want to make changes to this, please consult your contractor.*

The **"Holiday program"** has the following effects on the heating circuits and DHW heating:

- **Central heating**:
  - For heating circuits in the **"Heating and DHW"** operating program:
    In these heating circuits, the rooms are heated to the selected reduced room temperature (see page 16).
  - For heating circuits in the **"Only DHW"** operating program:
    No central heating in these heating circuits.
    If the **"Only DHW"** operating program is selected for all heating circuits, frost protection monitoring is **only** enabled for the boiler and DHW cylinder.
- **DHW heating**:
  DHW heating is switched off; frost protection monitoring for the DHW cylinder is active.

The **"Holiday program"** starts at 00:00 on the day following your departure and ends at 00:00 on the day of your return. This means that on the departure and return dates, the time program specified for those days is active (see page 17).

Setting the "Holiday program"

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. **"Holiday program"**
5. **OK** to confirm
6. Set the required departure and return dates.
7. **OK** to confirm

Energy saving function for longer absences (cont.)

Display in the extended menu

In the extended menu, you can check the selected **"Holiday program"** under **"Information"** (see chapter "Checking information", **"Heating circuit ..."** group).

Cancelling or deleting a "Holiday program"

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. **"Holiday program"**
5. **"Delete program"**
6. **OK** to confirm

Setting the DHW temperature

This setting can only be made at the Vitotronic 300-K.

If you want DHW heating, check the following points:
- Have you set the required DHW temperature?
  For settings, see the next chapter.
- Have you set the correct operating program?
  For settings, see page 22.
- Have you set the required time program?
  For settings, see page 22.

Note
*The control unit is set up so that DHW heating applies to **all** heating circuits. If you want to make changes to this, please consult your contractor.*

Extended menu

1. ☰
2. **"DHW"**
3. **OK** to confirm
4. **"Set DHW temperature"**
5. **OK** to confirm
6. Set the required value.
7. **OK** to confirm

Setting the "Heating program" for DHW heating

This setting can only be made at the Vitotronic 300-K.

Extended menu

1. ☰
2. **"Heating"**
3. **OK** to confirm
4. **"Operating program"**
5. **OK** to confirm
6. Select the heating circuit if required (see page 16).
7. **OK** to confirm
8. **"Heating and DHW"** (with central heating)
   or
   "Only DHW" (summer mode, no central heating)

Setting the time program for DHW heating

This setting can only be made at the Vitotronic 300-K.

- The time program for DHW heating is made up of time phases. One time phase from 05:30 to 22:00 **for every day of the week** is set at the factory.
- **Automatic mode** is set at the factory for DHW heating. This means that, in standard heating mode, the DHW is reheated to the set temperature. To ensure that hot water is available at the start of standard heating mode, the time phase for DHW heating automatically begins half an hour earlier than the time phase for standard heating mode.
- If you don't want the automatic mode, you can select up to 4 **individual** time phases per day for DHW heating, which can be the same for every day of the week or different. For each time phase you set the start and end points.
- When adjusting the setting, bear in mind that your heating system requires some time to heat the DHW to the required temperature.
- In the "Extended menu", you can check the current time program under **"Information"** (see chapter "Checking information", **"DHW"** group).

Extended menu:

1. ☰
2. **"DHW"**
3. **OK** to confirm
4. **"DHW time prog"**
5. **OK** to confirm
6. **"Individual"**

Setting the time program for DHW heating (cont.)

7. **OK** to confirm
8. Select part of the week or a day.
9. Select the time phase 1, 2, 3 or 4.
10. Set the start and end points for the relevant time phase.
11. ⮌ to exit the menu.

Note
If you want to terminate a time phase setting process prematurely, press ⮌ repeatedly until the required display appears.

Example shown:
- Time program for Monday to Friday (**"Mo-Fr"**)
- Time phase 1:
  From 04:30 to 06:30
- Time phase 2:
  From 15:30 to 20:30

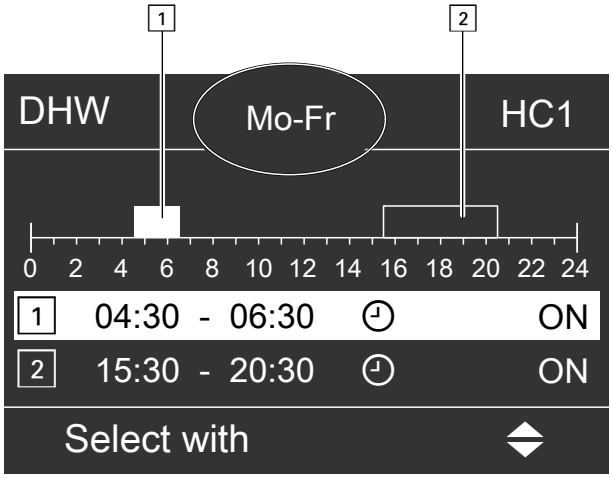

Fig. 9

Example:
You want to set the same time program for every day except Monday:
Select the period **"Monday–Sunday"** and set the time program.
Then select **"Monday"** and set the time program for this.

Deleting a time phase

Set the time for the end point to the same time that was set for the start point. The display shows the selected time phase as "**- - : - -**".

Increased DHW hygiene

This setting can only be made at the Vitotronic 300-K.

This function allows you to improve the microbiological quality of the water in the DHW cylinder.
Your contractor can enable this function by providing a second, higher, set DHW temperature.
Activate this function by setting a fourth time phase for DHW heating. During this time, DHW will be heated to the second set DHW temperature.

Note
Start and stop times must be set for the second and third time phases. These may also be within the first time phase.

Setting the time program for DHW heating (cont.)

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"**
3. **OK** to confirm
4. **"Party mode"**
5. **OK** to confirm
6. Deactivate **"Party mode"** again with **"OFF"** to prevent unintentional central heating to standard room temperature.

Setting a time program for the DHW circulation pump

For further information about the DHW circulation pump, see chapter "Terminology".

- **Automatic mode** is set for the DHW circulation pump time program. In other words, the DHW circulation pump operates in parallel to the DHW heating time program.
- If you don't want the automatic mode, you can select up to 4 **individual** time phases per day for the DHW circulation pump, which can be the same for every day of the week or different. Set the start and end points for each time phase.
- In the **"Information"** menu, you can scan the current time program (see chapter "Scanning information", **"DHW"** group).

Note
Activating the DHW circulation pump is only advisable for those times when DHW is actually drawn.

Extended menu:

1. ☰
2. **"DHW"**
3. **OK** to confirm
4. **"DHW circ time prog"**
5. **OK** to confirm
6. **"Individual"**
7. Select part of the week or a day.
8. Select the time phase 1, 2, 3 or 4.
9. Set the start and end points for the relevant time phase.
10. ⮌ to exit the menu.

Note
If you want to terminate a time phase setting process prematurely, press ⮌ repeatedly until the required display appears.

Deleting a time phase

Set the time for the end point to the same time that was set for the start point. The display shows the selected time phase "**- - : - -**".

Switching off DHW heating

You do not want to heat any rooms or DHW.

Extended menu

1. ☰
2. Select the heating circuit if required (see page 16).
3. **"Heating"**
4. **OK** to confirm
5. **"Heating program"**
6. **OK** to confirm
7. **"Standby mode"** (frost protection monitoring)
8. **OK** to confirm

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Switching off DHW heating (cont.)

You do not want DHW, but do want to heat the rooms.

Extended menu

1. ☰
2. Select the heating circuit if required (see page 16).
3. **"Heating"**
4. **OK** to confirm
5. **"Heating program"**
6. **OK** to confirm
7. **"Heating and DHW"**
8. ⮌ until the menu is displayed.
9. **"DHW"**
10. **OK** to confirm
11. **"Set DHW temperature"**
12. Set 10 °C.
13. **OK** to confirm

Setting the "Boiler sequence"

This setting can only be made at the Vitotronic 300-K. Depending on the set coding addresses and internal control calculations, the control unit offers various boiler sequences.
The boiler sequence can be changed: See page 14.

Extended menu

1. ☰

2. **"Boiler sequence"**

3. Set the required boiler sequence and confirm with **OK**.

Setting the display "Contrast"

This setting can only be made at the Vitotronic 300-K.

You would like to be able to read the text in the menu better. To do so, adjust the contrast of the display to suit the lighting conditions in the room.

Extended menu

1. ☰

2. **"Settings"**

3. **"Contrast"**

4. Set the required contrast.

Setting the display "Brightness"

This setting can only be made at the Vitotronic 300-K.

If you would like the texts in the menu to be more clearly legible, change the brightness for **"Control"**. You can also alter the screen saver brightness.

Extended menu:

1. ☰

2. **"Settings"**

3. **"Brightness"**

4. **"Control"** or **"Screen saver"**

5. Set the required brightness.

Entering names for the heating circuits

This setting can only be made at the Vitotronic 300-K.

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

Extended menu

1. ☰

2. **"Settings"**

3. **"Name for heating circ."**

4. **"Heating circuit 1"**, **"Heating circuit 2"** or **"Heating circuit 3"**

5. **"Change?"**

6. ▲/▼ selects the required character.

7. ►/◄ takes you to the next character.

8. Press **OK** to accept all entered characters at once and simultaneously exit this menu.

   Note
   *Select **"Reset?"** to delete the entered term.*

Setting the "Time" and "Date"

This setting can only be made at the Vitotronic 300-K.

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. ☰

2. **"Settings"**

3. **"Time / Date"**

4. Set the time and date.

Setting the "Language"

This setting can only be made at the Vitotronic 300-K.

Extended menu

1. ☰

2. **"Settings"**

3. **"Language"**

4. Select the required language.

Setting the "Temperature unit" (°C/°F)

Vitotronic 100

Factory setting: °C

Press the following keys:

1. ☰ for settings; **"▮▮▮"** flashes.

2. ► until **"⚙"** flashes.

3. **OK** to confirm; **"⇹"** flashes.

4. ▲/▼ for the required **"Temperature unit"**.

5. **OK** to confirm; the new **"Temperature unit"** is saved.

Vitotronic 300-K

Factory setting: °C

Extended menu

1. ☰

2. **"Settings"**

3. **"Temperature unit"**

4. Select the temperature unit **"°C"** or **"°F"**.

Restoring factory settings

Vitotronic 100

You can simultaneously reset all changed values to the factory settings.

Press the following keys:

1. ☰ for settings; **"▮▮▮"** flashes.

2. ► until **"⚙"** flashes.

3. **OK** to confirm; **"⇹"** flashes.

4. **OK** to confirm; the factory settings are reinstated.

Factory settings:
- Operating program: **"▮▮▮"**
- Temperature unit: °C

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Restoring factory settings (cont.)

Vitotronic 300-K

You can individually restore all modified values for each heating circuit to their factory setting.

Extended menu

1.

2. **"Settings"**
3. **"Standard setting"**
4. **"Heating circuit 1"**, **"Heating circuit 2"** or **"Heating circuit 3"**.

System setting	Settings and values that are reset
"Heating circuit 1", **"Heating circuit 2"** or **"Heating circuit 3"**	▪ Set room temperature: 20 °C ▪ Set reduced room temperature ▪ Operating program ▪ DHW set 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"** and **"Holiday program"**) are deleted. ***Note*** *If heating circuits have been named (see chapter "Naming heating circuits") the assigned name is retained.*

Checking information

Vitotronic 100, checks for each boiler

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

Press the following buttons:

1. ☰ for settings; **"▮▮▮"** flashes.

2. ▶ until **"i"** flashes.

3. OK to confirm.

4. ▲/▼ for the required information.

5. OK to confirm; if you want to reset the value to "0" (see following table), "⏭" flashes.

6. OK to confirm; the value is reset.

Note
Checking mode terminates automatically after 30 minutes or if you press ⮌.

Information appears in the following sequence:

Shown on display	Meaning	Notes
0 7.5 1	LON subscriber number	Control unit has subscriber number 1.
2 107 °C	Flue gas temperature	Displayed only if a flue gas temperature sensor is connected.
3 65 °C	Boiler water temperature	—
① 2 6 3 5 7 2 h	Burner hours run	The value can be reset to "0" with "⏭".
③ 0 1 3.5 7 8	Burner starts	The number of burner starts can be reset to "0" with "⏭".

Vitotronic 300-K, checks for the heating system

Subject to the components connected and the settings made, you can check 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 given names, the name is displayed (see chapter "Entering names for the heating circuits").
Detailed options for checking the individual groups can be found in chapter "Checking options in the extended menu".

Extended menu

1. ☰

2. **"Information"**

3. **OK** to confirm

4. Select the group.

5. Select the information you wish to call up.

Checks in conjunction with solar thermal systems

Extended menu

1. ☰

2. **"Solar energy"**

3. **OK** to confirm

The solar energy yield for the past 7 days is displayed on a graph.
The flashing line on the graph indicates that the current day is not yet over.

Checking information (cont.)

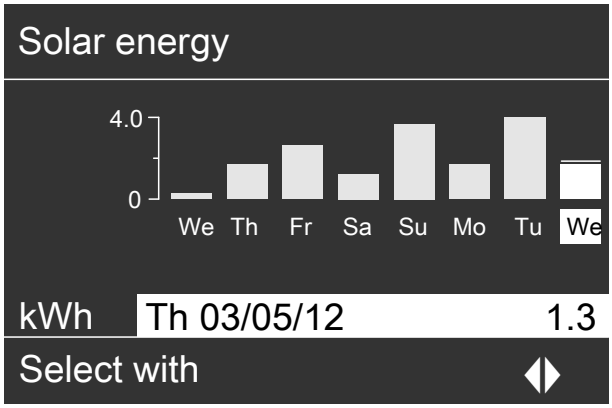

Fig. 10

Note
*For further options, e.g. to check the solar circuit pump hours run, see the extended menu under **"Information"** in the **"Solar"** group.*

Resetting data to 0

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

Extended menu

1. ☰
2. **"Information"**
3. **OK** to confirm
4. **"Reset data"**
5. **OK** to confirm

Checking service messages

Vitotronic 100

If your heating system is due for a service, the symbol "🔧" flashes on the **Vitotronic 100** display, and the following displays are shown.
Your contractor can select when a service should be carried out:
- After a certain number of burner hours run, e.g. 2500 hours.
- After a certain time, e.g. 12 months.
- When a certain flue gas temperature is reached, e.g. 150 °C (only with the Vitotronic 100, type GC7B).

Notify your contractor and acknowledge the service message by pressing **OK**.

Note
If the service can only be carried out later, the service message will reappear after 7 days.

Calling up an acknowledged service message

Hold down **OK** for approx. 4 s.

Vitotronic 300-K

A service interval cannot be set at the Vitotronic 300-K. No service message will be displayed.

Checking fault messages

Vitotronic 100

If any faults have occurred in a boiler, the symbol ⚠ flashes on the display and the fault code is shown. The red fault indicator also flashes (see chapter "Controls").

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Checking fault messages (cont.)

Example:
Fault code shown: "d1"

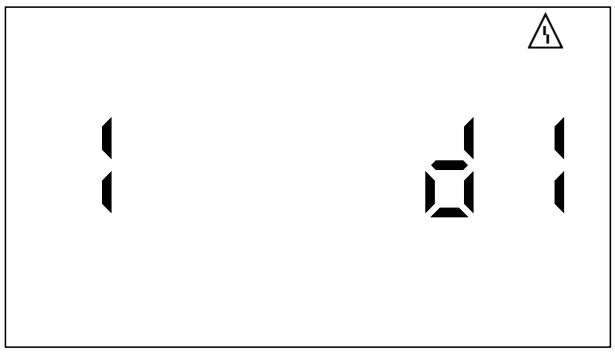

Fig. 11

1. Inform your contractor of the fault code. This enables the contractor to be better prepared and may save additional travelling costs.

2. Acknowledge the fault message with **OK**. Symbol ⚠ no longer flashes.

Note
- *If you have connected signalling equipment to indicate fault messages (e.g. a buzzer), this is deactivated when the fault message is acknowledged.*
- *If the fault can only be fixed later, the fault message will reappear the following day.*

Calling up an acknowledged fault message

Hold down **OK** for approx. 4 s.

Note
If there are several fault messages, you can call these up in sequence by pressing ▼/▲.

Vitotronic 300-K

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

1. The cause of the fault can be called up with **OK**.

2. Pressing **?** calls up information on the heating system characteristics.
   Tips on which measures you can take yourself **before** notifying your contractor are also displayed.

3. Make a note of the cause of the fault and the fault code on the right.
   This enables the contractor to be better prepared and may save additional 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.

Note
- *If you have connected signalling equipment to indicate fault messages (e.g. a buzzer), this is deactivated when the fault message is acknowledged.*
- *If the fault can only be rectified at a later date, the fault message is displayed again the next day and the alarm is switched on again.*

Calling up an acknowledged fault message

Extended menu

1. ☰

2. **"Fault"**

Emissions test mode

Emissions test mode should **only** be activated by your flue gas inspector during the annual inspection. Emissions test mode is enabled for flue gas measurement with temporarily increased boiler water temperature.

Test mode must be activated at the Vitotronic 100 **of the boiler to be tested** and also, for heat transfer, at the Vitotronic 300-K cascade control unit.

Activating emissions test mode

Press the following buttons:

1. for settings; **"⚙"** flashes.

2. ► until **"🔧"** flashes.

3. OK to confirm; **"ON"** flashes.

4. OK to confirm.

Terminating emissions test mode

Press the following buttons:

1. for settings; **"⚙"** flashes.

2. ► until **"🔧"** flashes.

3. OK to confirm; **"OFF"** flashes.

4. OK to confirm.

Emissions test mode ends automatically after 30 minutes.

Control unit controls

Vitotronic 100 controls

Vitotronic 100, type GC7B

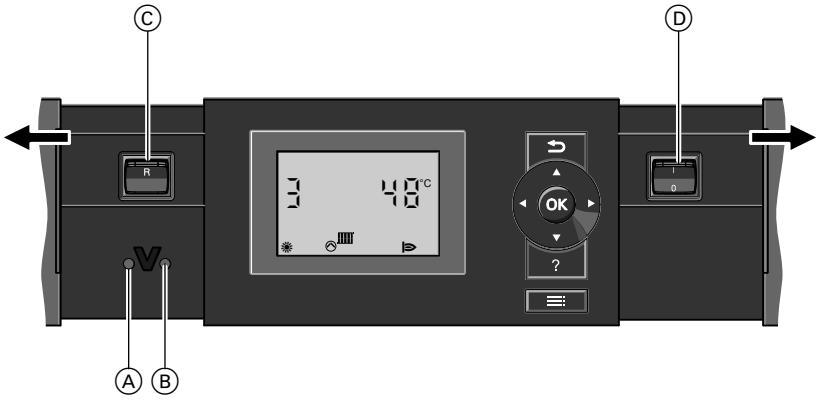

Fig. 12

Ⓐ Fault indicator (red)
Ⓑ ON indicator (green)
Ⓒ Reset button
Ⓓ ON/OFF switch

Vitotronic 100, type HC1B

Fig. 13

Ⓐ Fault indicator (red)
Ⓑ ON indicator (green)
Ⓒ Reset button
Ⓓ ON/OFF switch
Ⓔ Pressure gauge (pressure display)

Vitotronic 300-K controls

Vitotronic 300-K, type MW1B and MW2B

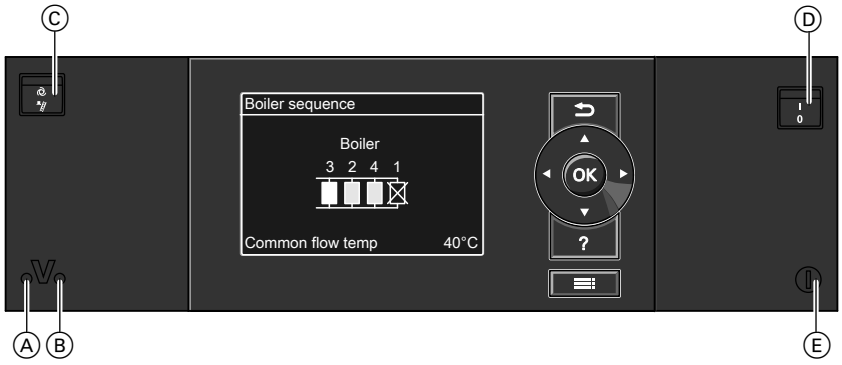

Fig. 14

Ⓐ ON indicator (green)
Ⓑ Fault indicator (red)
Ⓒ Emissions test switch
(only for servicing purposes)
Ⓓ ON/OFF switch
Ⓔ Fuse

Switching off the heating system

With frost protection monitoring

At the Vitotronic 300-K, select the **"Standby mode"** operating program for **every** heating circuit.
- No central heating
- No DHW heating
- Frost protection for the heating circuits and the DHW cylinder is active.

Extended menu

1.
2. **"Heating"**
3. Select the heating circuit if required (see page 16).
4. **"Heating program"**
5. **"Standby mode"** (frost protection monitoring)

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

Ending the "Standby mode" operating program

Select another operating program.

Switching off individual boilers at the respective Vitotronic 100

Press the following buttons:

1. for settings; "" flashes.
2. **OK** to confirm; "" flashes.
3. **OK** to confirm; "" flashes.
4. ◄ until "" flashes.
5. **OK** to confirm.

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

Ending the "Standby mode" operating program

Select another operating program.

Without frost protection monitoring (shutdown)

1. Turn off the ON/OFF switches at **all** Vitotronic 100 and Vitotronic 300-K (see chapter "Controls").
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.
4. If outside temperatures below 3 °C are expected, please take appropriate measures to protect the heating system from frost. If necessary, contact your contractor.

Information on prolonged shutdown
- *Circulation pumps may seize up as they are not being supplied with power.*
- *Vitotronic 300-K:*
  It may be necessary to reset the date and time (see page 27).

Switching on the heating system

1. Check the heating system pressure at the pressure gauge. The system pressure is too low if the indicator points to the area below 1.0 bar or is below the red band. In this case, top up with water or notify your contractor.
2. 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.
3. Gas boilers: Open the gas shut-off valve.
   Oil boilers: Open the shut-off valves in the oil lines (at the oil tank and filter).

Switching on the heating system (cont.)

4. Switch ON the power supply, e.g. at a separate MCB/fuse or a mains isolator.

5. Turn on the ON/OFF switches at **all** Vitotronic 100 and Vitotronic 300-K (see chapter "Controls").
   After a short time, the following is shown on the display:
   - Vitotronic 100: The default display (see page 11)
   - Vitotronic 300-K: The standard menu (see page 14)

   The green ON indicator illuminates. Your heating system and, if installed, your remote control units are now ready to operate.

Note
On every Vitotronic 100, "" must be set, otherwise the Vitotronic 300-K cannot use the corresponding boiler to generate heat.

Rooms are too cold

Cause	Remedy
Heating system is off.	▪ Turn on the ON/OFF switch at all control units (see chapter "Controls"). ▪ Switch ON the mains isolator, if installed (outside the boiler room). ▪ Check the fuse/MCB in the power distribution board (main domestic fuse/MCB), and reset/replace if required.
Control unit or remote control incorrectly set.	Check settings and correct if required: ▪ At every Vitotronic 100: "▮▮▮▮" must be set (see page 35). ▪ At the Vitotronic 300-K: – **"Heating and DHW"** must be selected for the heating circuit (see page 17). – Room temperature (see page 16). – Time (see page 27). – Time program (see page 17). – **"Heating curve"** (see page 44) ▪ Check the settings at the remote control (if available). Separate operating instructions
Only when operating with DHW heating: DHW priority is enabled.	Wait until the DHW cylinder has been heated up.
Screed drying is activated.	Wait until the screed drying time has elapsed.
No fuel.	▪ With fuel oil or LPG: Check the fuel reserves and re-order if required. ▪ With natural gas: Open the gas shut-off valve or enquire with your gas supply utility if required.
"Fault" is displayed at the Vitotronic 300-K, and the red fault indicator flashes (see chapter "Controls").	Check the type of fault, make a note of the fault code and acknowledge the message (see page 30). If necessary, notify your contractor.
Symbol "⚠" is displayed on the Vitotronic 100.	Check the type of fault, make a note of the fault code and acknowledge the message (see page 30). If necessary, notify your contractor.
Symbol "🔧" is displayed on the Vitotronic 100.	Press "**R**" (see chapter "Controls"). Acknowledge the fault message with **OK**. Notify your contractor of the fault code if the fault recurs.

Rooms are too hot

Cause	Remedy
Control unit or remote control incorrectly set.	Check settings and correct if required: ▪ At the Vitotronic 300-K: – **"Room temperature"** (see page 16). – **"Time"** (see page 27). – **"Time program"** (see page 17). – **"Heating curve"** (see page 44). ▪ Check the settings at the remote control (if available). Separate operating instructions
"Fault" is displayed at the Vitotronic 300-K, and the red fault indicator flashes (see chapter "Controls").	Check the type of fault, make a note of the fault code and acknowledge the message (see page 30). If necessary, notify your contractor.

Rooms are too hot (cont.)

Cause	Remedy
Symbol "⚠" is displayed on the Vitotronic 100.	Check the type of fault, make a note of the fault code and acknowledge the message (see page 30). If necessary, notify your contractor.
Emissions test mode is activated.	Terminate emissions test mode (see page 32).

There is no hot water

Cause	Remedy
The heating system is switched off.	▪ Turn the ON/OFF switches (see chapter "Controls") at all control units ON. ▪ Switch ON the mains isolator, if installed (outside the boiler room). ▪ Check the fuse/MCB in the power distribution board (main domestic fuse/MCB), and reset/replace if required.
Control unit or remote control incorrectly set.	Check settings and correct if required: ▪ At every Vitotronic 100: "▦" must be set (see page 35). ▪ At the Vitotronic 300-K: – DHW heating must be enabled (see page 22). – **"Set DHW temperature"** (see page 22). – **"Time"** (see page 27). – Time program (see page 22). ▪ Check the settings at the remote control (if available). Separate operating instructions
No fuel.	See page 36.
"Fault" is displayed at the Vitotronic 300-K, and the red fault indicator flashes (see chapter "Controls").	Check the type of fault, make a note of the fault code and acknowledge the message (see page 30). If necessary, notify your contractor.
Symbol "⚠" is displayed on the Vitotronic 100.	Check the type of fault, make a note of the fault code and acknowledge the message (see page 30). If necessary, notify your contractor.
Symbol "⇧" is displayed on the Vitotronic 100.	Press "**R**" (see chapter "Controls"). Acknowledge the fault message with **OK**. Notify your contractor of the fault code if the fault recurs.

The DHW is too hot

Cause	Remedy
Control unit incorrectly adjusted.	Check the DHW temperature and correct it if required (see page 22).
DHW heating is carried out by the solar thermal system.	Check and correct settings, if required, at the solar control unit. Separate operating instructions
Emissions test mode is enabled.	Terminate emissions test mode (see page 32).

"OFF" is displayed at the Vitotronic 100

Cause	Remedy
The operating program ⏻ is enabled or the boiler is shut down externally.	Set the operating program . If necessary, notify your contractor.

"🔧" is displayed at the Vitotronic 100

Cause	Remedy
The time for a service as specified by your contractor has arrived.	Proceed as described on page 30.

"⚠" is displayed at the Vitotronic 100

Cause	Remedy
Heating system fault	Proceed as described on page 30.

"⚠" flashes and "Fault" is displayed at the Vitotronic 300-K

Cause	Remedy
Heating system fault	Proceed as described on page 30.

"Controls locked out" is displayed at the Vitotronic 300-K

Cause	Remedy
This function is disabled.	Your contractor can unlock the controls.

"External hook-up" is displayed at the Vitotronic 300-K

Cause	Remedy
The heating program selected at the control unit was changed over by an external switching device.	No remedy required.

"Central control" is displayed at the Vitotronic 300-K

Cause	Remedy
The settings of the heating and holiday programs will be adopted from the heating circuit for which "Central control" has been selected.	—

"External program" is displayed at the Vitotronic 300-K

Cause	Remedy
The heating program set at the control unit was changed over by the Vitocom communication interface.	You can change the heating program.

Maintenance

Cleaning

The appliance surfaces can be cleaned with a commercially available domestic cleaning agent (non-scouring).

You can clean the front of the programming unit with a microfibre cloth.

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.

Damaged connecting cables

If connecting cables of the appliance or externally installed electrical accessories are damaged, replace them with special connecting cables. Use only Viessmann cables/lines as replacement. Notify your contractor.

Menu overview Vitotronic 300-K

Note
Depending on the features of your heating system, not all of the checks listed may be available.
Where information is marked with ▶, you can call up further details.

- **Boiler sequence**
- **Heating**
  - Party mode
  - Economy mode
  - Set room temperature
  - Set reduced room temp
  - Heating program
    - Heating and DHW
    - Only DHW
    - Standby mode
  - Heating time program
  - Holiday program
  - Heating curve
- **DHW**
  - Set DHW temperature
  - DHW time prog
  - DHW circ time prog
- **Solar energy**
- **Test mode**

Menu overview Vitotronic 300-K (cont.)

Information		
	General	
		Outside temp
		Boiler sequence ▶
		Boiler temperature ▶
		Sensor 17 A
		Sensor 17 B
		Common flow temp
		Output 20
		Output 29
		Output 52
		Feed pump
		Block 3rd pty dev
		Central fault mess.
		Subscriber no.
		Input ext. EA1 ▶
		Time
		Date
		Radio clock signal
	Heating circuit 1 (HC1)	
		Heating program ▶
		Operating status ▶
		Time program ▶
		Set room temperature
		Room temperature
		Set reduced room temp
		Set ext. room temp
		Set party temp
		Slope
		Level
		Heating circ pump
		Holiday program ▶

Menu overview Vitotronic 300-K (cont.)

Information

Heating circuit 2 (HC2), Heating circuit 3 (HC3)

- Heating program ►
- Operating status ►
- 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
- Return temperature
- Holiday program

DHW

- DHW time prog
- DHW circ time prog
- DHW temperature
- Cylinder prim pump
- DHW circ pump

Solar

- Collector temp
- Solar DHW
- Solar circuit pump (hours run)
- Solar energy history
- Solar energy
- Solar circuit pump or Solar circ pump speed
- Heating suppr. DHW
- SM1 output 22
- SM1 output 22 (hours run)
- Sensor 7
- Sensor 10
- Heat suppr. heating

Menu overview Vitotronic 300-K (cont.)

Settings	
	Time / Date
	Language GB
	Contrast
	Brightness
	Temperature unit
	Name for heating circ.
	Standard menu
	Standard setting

Terminology

Operating program

The operating program determines whether you heat the rooms and DHW, only heat DHW, or whether you switch off central heating (with frost protection).

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 when you set the time program.

Mixer extension kit

Assembly (accessory) for controlling a heating circuit with mixer.
See "Mixer".

Screed drying

Your contractor can activate this function for screed drying in your new build or extension, for example. 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 on the duration of screed drying (max. 32 days).
- DHW heating is carried out (but priority control is cancelled).

Underfloor heating system

Underfloor heating systems are slow, low temperature heating systems and respond only very slowly to short term temperature changes.

Therefore, heating to the reduced room temperature at night or activating **"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 a room is heated until the set room temperature has been reached. For this, a separate temperature sensor must be installed in the room.
The heating output 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. This means that only the exact amount of heat necessary to heat the rooms to the selected temperature is generated.
The outside temperature is captured and transmitted to the control unit by a sensor fitted outside the building.

Terminology (cont.)

Heating curve

Heating curves illustrate the relationship between the outside temperature, room temperature (set value) and boiler water or (heating circuit) flow temperature. The lower the outside temperature, the higher the boiler water temperature or heating circuit 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. For this, you can adjust the heating curve.

Note

If your heating system includes heating circuits with mixers, then the flow temperature for the heating circuit without mixer is higher by a selected differential than the flow temperature for the heating circuits with mixer.

The illustrated heating curves apply with the following settings:

- Heating curve level = 0
- Standard room temperature (set value) = 20 °C

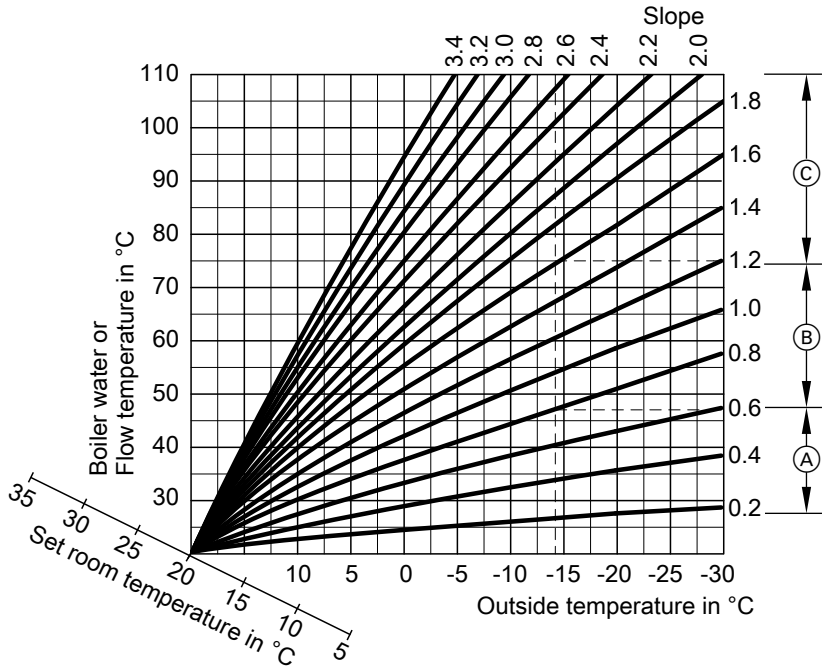

Fig. 15

For outside temperature **−14 °C**:

Ⓐ Underfloor heating system, slope 0.2 to 0.8
Ⓑ Low temperature heating system, slope 0.8 to 1.6
Ⓒ Heating system with a boiler water temperature in excess of 75 °C, slope 1.6 to 2.0

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Terminology (cont.)

Factory settings: Slope = 1.4 and level = 0.

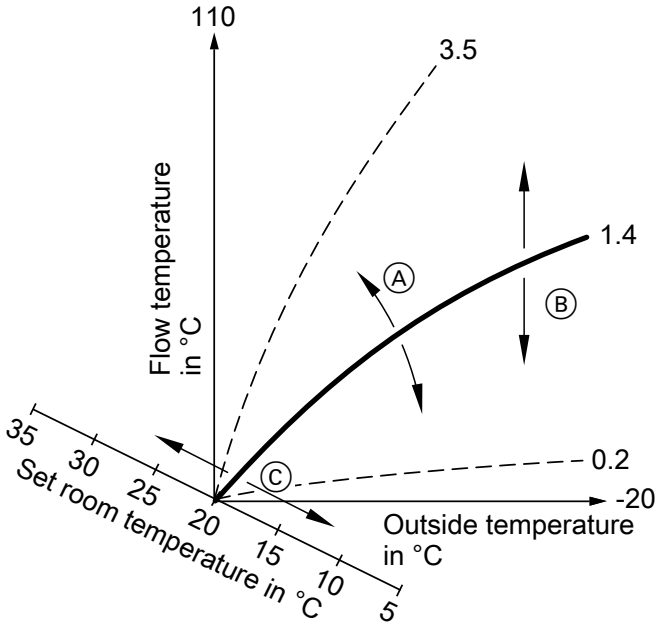

Fig. 16

Ⓐ Changing the slope:
The gradient of the heating curves changes.
Ⓑ Changing the level:
The heating curves are shifted in parallel in a vertical direction.
Ⓒ Changing the standard room temperature (set value):
The heating curves are moved along the "set room temperature" axis.

Note
Setting the slope or level of the heating curve too high or too low will not result in damage to your heating system.
Both settings affect the level of the flow temperature, which may then be too low or unnecessarily high.
*Tips on when and how to change the heating curve slope and level are displayed by pressing **?**.*

Heating circuit

A heating circuit is a sealed unvented circuit that connects the boiler and radiators, in which the heating water circulates.
A heating system may comprise several heating circuits. For example, one heating circuit for the rooms occupied by you and one heating circuit for the rooms of a separate apartment.

Heating circuit pump

Circulation pump for the circulation of the heating water in the heating circuit.

Mixer

A mixer mixes the water heated in the boiler with the cooled water returning from the heating circuit. The water, thus brought to the right temperature, is pumped to the heating circuit by the heating circuit pump. The control unit adjusts the heating circuit flow temperature via the mixer to suit different conditions, for example when the outside temperature changes.

Room temperature

- Standard room temperature:
  Set the standard room temperature for periods when you are at home during the day.
- Reduced room temperature:
  Set the reduced room temperature for periods when you will be absent or during the night. See also "Heating mode".

Safety valve

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

Terminology (cont.)

Solar circuit pump

In conjunction with solar thermal systems.
The solar circuit pump transports the heated heat transfer medium from the collectors into the indirect coil of the DHW cylinder.

Set temperature

Specified temperature that should be reached, e.g. set DHW temperature.

Cylinder loading pump

Circulation pump for heating the DHW in 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 heating mode

See "Heating mode".

DHW circulation pump

The DHW circulation pump pumps domestic hot water around a ring pipeline between the DHW cylinder and the draw-off points (e.g. hot taps). This ensures that hot water is rapidly available at the draw-off points.

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Your contact

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.

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