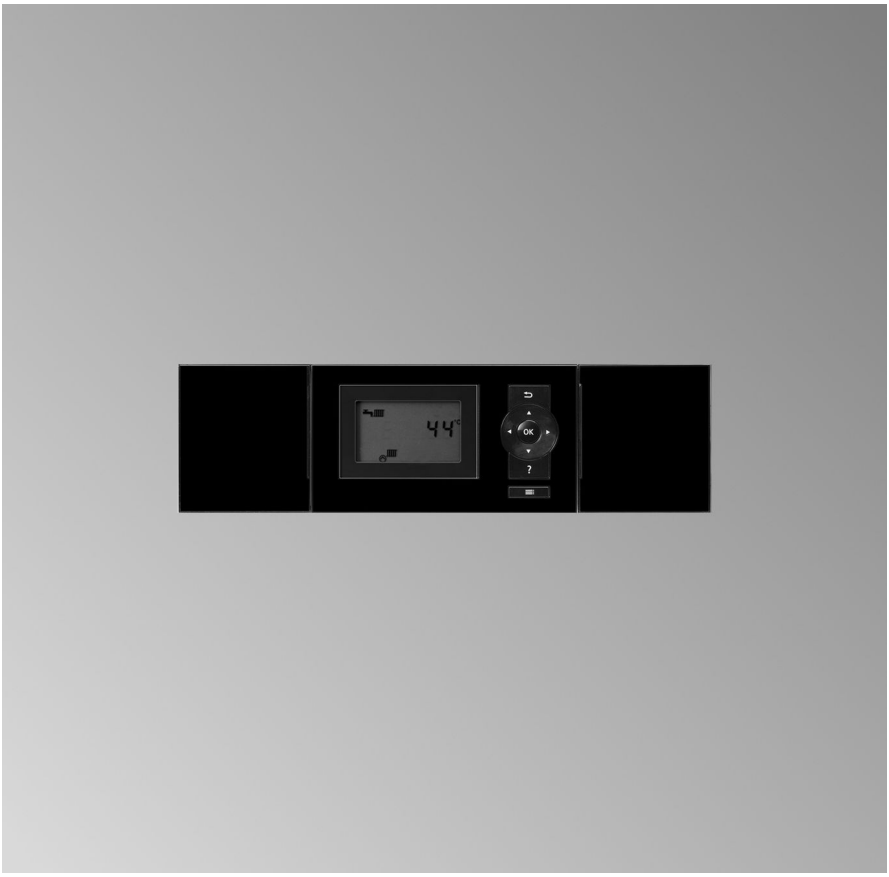
Operating instructions

for the system user

Heating system with the Vitotronic 100 control unit, type HC2A and HC2B
For constant temperature mode

VITODENS



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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 for the heating system user.
This unit is **not** designed to be used by persons (including children) with limited bodily, sensory or mental capacities, or lacking experience and/or lacking knowledge, unless they are supervised by a person responsible for their safety, or have received instructions from such a person as to how to use the unit.

Please note
Children should be supervised. Ensure that children do not play with the unit.

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

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. Never switch lights or electrical appliances ON or OFF.
- Close the gas shut-off valve.
- Open windows and doors.
- Remove all people from the danger zone.
- Notify your gas or electricity supplier and your heating contractor from outside the building.
- Shut off the electricity supply to the building from a safe place (outside the building).

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For your safety (cont.)

If you smell flue gas

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

In case of fire

Danger
Fire creates the risk of burning and explosions.
- Shut down the heating system.
- Close the shut-off valves of the fuel lines.
- Use a tested fire extinguisher, class ABC.

Boiler room requirements

Please note
Incorrect ambient conditions can lead to damage to the heating system and put the safe operation at risk.
- Ensure ambient temperatures above 0 ºC and below 35 ºC.
- 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 frequent drying of washing).
- Never close existing ventilation apertures.

Ancillary components, spare and wearing parts

Please note
Components that are not tested with the heating system may lead to damage to the heating system, or may affect their various functions.
Installation or replacement work must only be carried out by qualified personnel.

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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 heating contractor.

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

Your system is preset at the factory

The control unit is preset to **"  "** at the factory for central heating and DHW heating.
Your heating system is therefore ready for use.

Central heating

- The rooms are heated in accordance with the settings on your control unit and room temperature controller.
- Your heating contractor can make further settings for you during commissioning.
  You can change any settings individually at any time to suit your requirements (see chapter "Central heating").

DHW heating

- DHW is heated to 50 °C.
- Your heating contractor can make further settings for you during commissioning.
  You can change any settings individually at any time to suit your requirements (see chapter "DHW heating").

Frost protection

- Your boiler and DHW cylinder are protected against frost.

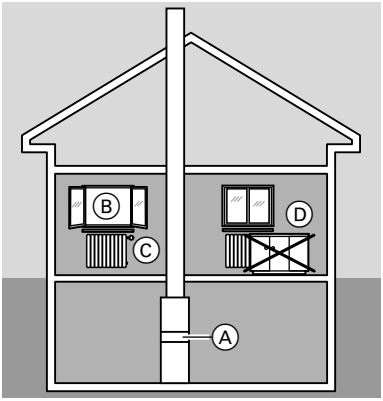
Power failure

- All data is saved if there is a power failure.

Terminology

To provide you with a better understanding of the functions of your control unit, the appendix contains chapter "Terminology" (see page 33).

Tips on saving energy



Use the adjustment options on control unit Ⓐ and the room temperature controller:

- Never overheat your rooms. Every degree by which the room temperature is reduced saves up to 6 % of your heating bills.
  Never set your room temperature higher than 20 °C (see page 12).
- Never set the DHW temperature too high (see page 16).
- Select the operating program that meets your current requirements:
  – In summer, when you don't want any central heating but will need DHW, select operating program **"🚿"** (see page 16).
  – If you don't want central heating and you don't require DHW for an extended period, select operating program **"⏻"** (see page 11).

Further recommendations:

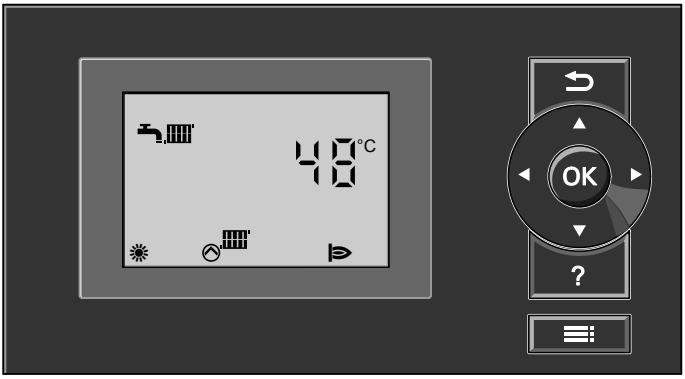
- Correct airing/venting.
  Briefly open window Ⓑ fully and at the same time close thermostatic valves Ⓒ.
- Close roller shutters (if installed) at dusk.
- Set thermostatic valves Ⓒ correctly.
- Never cover radiators Ⓓ or thermostatic valves Ⓒ.
- Controlled DHW consumption: A shower generally uses less energy than a full bath.

Controls

You can change the settings for your heating system centrally at the programming unit.
If you have a room temperature controller installed in your rooms, you can also change the settings on the room temperature controller.

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

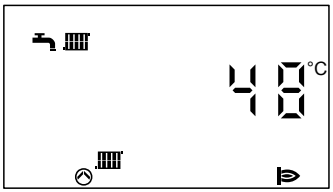
Room temperature controller operating instructions



- ⮌ Takes you one step back in the menu
- Cursor keys
  Scroll through the menu or select values
- **OK** Enables you to confirm your selections or settings
- **?** No function
- Enables you to call up the menu for settings and scanning

How to use the controls

Standard display



Press ☰. This takes you to the settings and scanning menu.

Symbols

These symbols are not always shown, but appear subject to the system version and the operating state. Flashing displays indicate that modifications can be made.

Menu
- Central heating
- DHW heating
- Information
- Emissions test mode
- Additional settings
- Setting the time or time program
- Setting the date

Operating program
- Frost protection monitoring (standby mode)
- DHW heating
- Central heating and DHW heating
- Comfort mode for central heating
- **COMF** Comfort mode for DHW heating
- **ECO** Without comfort mode for DHW heating

Messages
- Service message
- The service interval has expired
- Fault message
- Burner fault message

Displays
- Temperature
- Frost protection monitoring
- Central heating
- Heating circuit pump running
- Cylinder primary pump running
- In conjunction with a solar thermal system: Solar circuit pump is running
- Burner running
- Factory settings

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Starting the heating system

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

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. In this case, top up with water or notify your local heating contractor.

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

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

3. Open the gas shut-off valve.

   Note
   Ask your heating contractor to explain the positioning and handling of these components.

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

5. Turn the ON/OFF switch "⏻" ON. After a short while, the standard display appears and the green ON indicator illuminates. Your heating system and room temperature controller are now ready for operation.

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Shutting down the heating system

With frost protection monitoring

Select the operating program "⏻" for frost protection monitoring (standby mode).

Press the following keys:

1. ☰ for settings; "▦" flashes.
2. **OK** to confirm; "⏻🚿▦" flashes.
3. **OK** to confirm; "🚿▦" flashes.
4. ◄ until "⏻" flashes.
5. **OK** to confirm; frost protection is activated.

- No central heating.
- No DHW heating.
- Frost protection for boiler and DHW cylinder is enabled.

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

Ending the operating program "⏻"

Select another operating program.

Press the following keys:

1. ☰ for settings; "▦" flashes.
2. **OK** to confirm; "⏻🚿▦" flashes.
3. **OK** to confirm; "⏻" flashes.
4. ► until "🚿▦" flashes: The central heating and DHW are provided.
   or
   until "🚿" flashes: DHW is heated but there will be no central heating.
5. **OK** to confirm; the selected operating program is activated.

Without frost protection monitoring (shutdown)

1. Switch the ON/OFF switch "⏻" OFF.
2. Close the gas shut-off valve.

   Note
   Ask your heating contractor to explain the positioning and handling of these components.

3. Isolate the heating system from its main power supply, e.g. at a separate MCB/fuse or a mains isolator.
4. Where outside temperatures of below 3 °C are anticipated, please take suitable measures to protect the heating system against frost. If necessary, contact your heating contractor.

Note
After an extended shutdown, it may be necessary to reset the date and time (see page 20).

Required settings for central heating

If you want central heating, check the following points:

- Have you set the required room temperature?

Room temperature controller operating instructions

- Have you set the heating flow temperature high enough?
  For settings, see the next chapter.
- Have you selected the correct operating program?
  For setting, see page 12
  and

Room temperature controller operating instructions

- Have you set the required time program?
  For setting, see page 13
  and

Room temperature controller operating instructions

Setting the heating flow temperature

Set the heating flow temperature high enough so the required room temperature can be achieved.
Factory setting: 74 °C

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. OK to confirm; "⏻▥" flashes.

3. ► for heating flow temperature; "🌡" flashes.

4. OK to confirm; the selected temperature flashes.

5. ▲/▼ for the required heating flow temperature.

6. OK to confirm; the new temperature is saved.

Setting the operating program (central heating)

Factory setting: "▥" for central heating and DHW heating (winter mode).

Setting the operating program (central heating) (cont.)

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. OK to confirm; "⏻🚿▥" flashes.

3. OK to confirm.

4. ▶/◀ until "🚿▥" flashes.

5. OK to confirm; the rooms and DHW are heated.

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 h for each day is set at the factory.
- 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 to the frost protection temperature.
- You can set the time program **individually**.
  When setting, bear in mind that your heating system requires some time to heat the rooms to the required temperature.

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. OK to confirm; "⏻🚿▥" flashes.

3. ▶/◀ until "🕘" flashes.

4. OK to confirm, "①②③④⑤⑥⑦" flashes.

5. OK if you want to set the same time program for every day of the week
or

▶/◀ to select a single day ("①" for Monday, "②" for Tuesday etc.) and **OK** to confirm.
Time phase "**1**" flashes.

6. ▶/◀ for the required time phase.

7. OK to confirm; ↑ appears and the previously selected start time or "**- - : - -**" flashes.

8. ▶/◀ for the required start time.

9. OK to confirm; ↓ appears and the previously selected end time or "**- - : - -**" flashes.

10. ▶/◀ for the required end time.

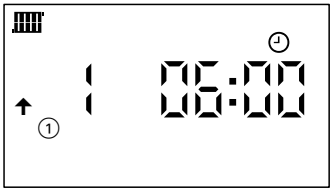
11. OK to confirm.

Note
If you have set a time program for central heating at the room temperature controller, a time program for at least the same period must also be set in the control unit.

Setting the time program for central heating (cont.)

Example shown:

The start time of time phase 1 for Monday: 06:00 h.



Central heating menu
Time program menu
① Weekday Monday
Start time
1 Time phase "**1**"
06:00 Time

Example:
You want to set the same time program for every day except Monday:

Select the period
"①②③④⑤⑥⑦" and set the time program.
Then select "①" and set the time program for this.

Note
If you want to terminate the setting process prematurely, keep pressing ⮌ 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. For the selected time phase the display shows "**- - : - -**".

Stopping the central heating

You do not want to heat any rooms but you want to heat DHW.

Press the following keys:

1. ☰ for settings; "" flashes.

2. OK to confirm; "" flashes.

3. OK to confirm; "" flashes.

4. ◄ until "" flashes.

5. OK to confirm; central heating is disabled and DHW will be heated (summer mode).

You do not want either central heating or DHW.

Press the following keys:

1. ☰ for settings; "" flashes.

2. OK to confirm; "" flashes.

3. OK to confirm; "" flashes.

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Stopping the central heating (cont.)

4. ◄ until "⏻" flashes.

5. OK to confirm; central heating and DHW heating are disabled, frost protection monitoring is active (standby mode).

Central heating comfort function

With this function, you can change the room temperature for several hours, e.g. if guests unexpectedly stay longer in the evening. You do not have to change any existing control settings. DHW is reheated in this function to the specified set temperature.

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. OK to confirm; "⏻🚿▥" flashes.

3. ►/◄ until "🍸" flashes.

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

5. OK to confirm; the rooms and DHW are heated.

- Rooms are heated to the required temperature.
- DHW is reheated to the selected DHW temperature.

Ending central heating comfort function

- Automatically after 8 hours
  or
- Automatically when the system switches to standard heating mode in accordance with the time program
  or
- Set the comfort function to **"OFF"**:

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. OK to confirm; "⏻🚿▥" flashes.

3. ►/◄ until "🍸" flashes.

4. OK to confirm.

5. ►/◄ until **"OFF"** flashes.

6. OK to confirm; comfort function is switched off.

Required settings (DHW heating)

If you want DHW heating, check the following points:

- Have you set the required DHW temperature?
  For settings, see the next chapter.
- Have you selected the correct operating program?
  For settings, see page 16.
- Have you set the required time program?
  For settings, see page 17.

Setting the DHW temperature

Factory setting: 50 °C

Press the following keys:

1. ☰ for settings; "▮▮▮" flashes.

2. ► for "🚿".

3. OK to confirm; temperature flashes.

4. ▲/▼ for required DHW temperature.

5. OK to confirm; the new temperature is saved.

Setting the operating program (DHW heating)

Factory setting: "🚿▮▮▮" for central heating and DHW heating (winter mode).

Press the following keys:

1. ☰ for settings; "▮▮▮" flashes.

2. OK to confirm; "⏻🚿▮▮▮" flashes.

3. OK to confirm; "🚿▮▮▮" flashes.

4. ►/◄ until "🚿" flashes for DHW heating (summer mode, no central heating).
or
until "🚿▮▮▮" flashes for central heating and DHW heating (winter mode).

5. OK to confirm; the selected operating program is activated.

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Setting the time program for DHW heating

- The time program for DHW heating is made up of time phases. **One** time phase from 05:30 to 22:00 h for each day is set at the factory. To ensure that hot water is available at the start of standard heating mode, the time phase for DHW heating begins half an hour earlier than the time phase for standard heating mode.
- You can select up to 4 time phases per day for DHW heating. Set the start and end points for each time phase. DHW is not reheated between these time phases.
- You can set the time program **individually**.
  When setting, bear in mind that your heating system requires some time to heat the DHW to the required temperature.

Press the following keys:

1. ☰ for settings; "▦" flashes.

2. ▶/◀ until "🚿" flashes.

3. OK to confirm; temperature flashes.

4. ▶/◀ until "🕒" flashes.

5. OK to confirm, "①②③④⑤⑥⑦" flashes.

6. OK if you want to set the same time program for every day of the week
or

▶/◀ to select a single day ("①" for Monday, "②" for Tuesday etc.) and **OK** to confirm.
Time phase "**1**" flashes.

7. ▶/◀ for the required time phase.

8. OK to confirm; ↑ appears and the previously selected start time or "**- - : - -**" flashes.

9. ▶/◀ for the required start time.

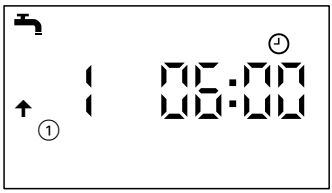
10. OK to confirm; ↓ appears and the previously selected end time or "**- - : - -**" flashes.

11. ▶/◀ for the required end time.

12. OK to confirm.

Example shown:

The start time of time phase 1 for Monday: 06:00 h.



🚿 DHW heating menu
🕒 Time program menu
① Weekday Monday
↑ Start time
1 Time phase "**1**"
06:00 Time

Setting the time program for DHW heating (cont.)

Example:
You want to set the same time program for every day except Monday:
Select the period "①②③④⑤⑥⑦" and set the time program.
Then select "①" and set the time program for this.

Note
If you want to terminate the setting process prematurely, keep pressing ⮌ 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. For the selected time phase the display shows "**- - : - -**".

Stopping DHW heating

You do not want DHW, but do want central heating.

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. OK to confirm; "⏻🚿▥" flashes.

3. OK to confirm; "🚿" flashes.

4. ▶ until "🚿▥" flashes.

5. OK to confirm; the rooms and DHW are heated (winter mode).

6. ☰ for settings; "▥" flashes.

7. ▶ for "🚿".

8. OK to confirm; temperature flashes.

9. ▼ to 10 °C.

10. OK to confirm; the new temperature is saved.

You want neither DHW nor central heating.

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. OK to confirm; "⏻🚿▥" flashes.

3. OK to confirm; "🚿" flashes.

4. ◀ until "⏻" flashes.

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Stopping DHW heating (cont.)

5. OK to confirm; DHW heating and central heating are stopped, frost protection monitoring is active (standby mode).

DHW heating comfort function (if available)

With the comfort function you can pre-heat the water in the instantaneous water heater to the selected DHW temperature. This makes DHW available immediately.

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. ► for "🚿".

3. OK to confirm, **"COMF ECO"** flashes.

4. OK to confirm; **"ECO"** flashes.

5. ◄ for **"COMF"**.

6. OK to confirm; the comfort function is active.

Ending the DHW heating comfort function

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. ► for "🚿".

3. OK to confirm, **"COMF ECO"** flashes.

4. OK to confirm; **"COMF"** flashes.

5. ► for **"ECO"**.

6. OK to confirm; the comfort function is terminated.

Setting the time and date

Setting the time

Press the following keys:

1. ☰ for settings; "▮▮▮▮" flashes.

2. ▲/▼ for "⚙".

3. OK to confirm; 🕒 flashes.

4. OK to confirm.

5. ▲/▼ for the required time.

6. OK to confirm; the new time is saved.

Setting the date

Press the following keys:

1. ☰ for settings; "▮▮▮▮" flashes.

2. ▲/▼ for "⚙".

3. OK to confirm; 🕒 flashes.

4. ▲/▼ for "📅".

5. OK to confirm.

6. ▲/▼ for the required date.

7. OK to confirm; the new date is saved.

After a prolonged shutdown

If your heating system has been shut down for a long time, it may be necessary to reset the time and date. After the system is switched on, the time display immediately starts flashing (🕒).

Press the following keys:

1. ▲/▼ for the required time.

2. OK to confirm; the new time is saved and 📅 appears.

3. ▲/▼ for the required date.

4. OK to confirm; the new date is saved.

Setting the temperature unit (°C/°F)

Factory setting: °C

Press the following keys:

1. ☰ for settings; "▮▮▮▮" flashes.

2. ► for "⚙".

3. OK to confirm; "|◄" flashes.

4. ▲/▼ for required temperature unit (**"°C"** or **"°F"**).

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

5. OK to confirm; the new temperature unit is saved.

Restoring factory settings

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

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. ► for "⚙".

3. OK to confirm; "⊢" flashes.

4. OK to confirm; the factory setting is reinstated.

Factory settings:
- Operating program: "🚿▥"
- Temperature unit: °C
- Heating flow temperature: 74 °C
  or
  Room temperature: 20 °C
- DHW temperature: 50 °C

Scanning information

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

Press the following keys:

1. ☰ for settings; "▥" flashes.

2. ► for "**i**".

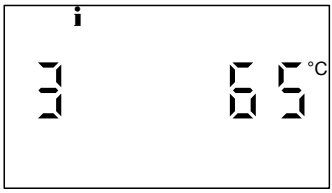
3. OK to confirm.

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.

Example:
On the display, you can see the number "3" which indicates the heating flow temperature. The current heating flow temperature is 65 °C.



Note
The scan mode terminates automatically after 30 min or if you press ⮌.

The information appears in the following sequence:

Display			Meaning	Notes
0	10		LON subscriber number	–
1	15	°C	Outside temperature	Display only if an outside temperature sensor is connected.
2	95	°C	Flue gas temperature	–
3	65	°C	Boiler water temperature	–
4	45	°C	Temperature, heating water buffer cylinder or low loss header	Displayed only if a heating water buffer cylinder or low loss header is connected.
5	50	°C	DHW temperature	Displayed only if a DHW cylinder is connected.
51	50	°C	DHW temperature, top	Displayed only if two cylinder temperature sensors are connected.
52	50	°C	DHW temperature, bottom	
5c	95	°C	Collector temperature	Displayed only if a Viessmann solar control module is installed.
5□	45	°C	DHW temperature with solar operation	Displayed only if a solar thermal system is connected.

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Scanning information (cont.)

Display	Meaning	Notes
53 50 °C	Temperature, sensor [7]	Displayed only if the Viessmann solar control module is available and a third temperature sensor has been connected.
54 50 °C	Temperature, sensor [10]	Displayed only if the Viessmann solar control module is available and a fourth temperature sensor has been connected.
6 70 °C	Collector temperature	Displayed only if a solar thermal system is connected.
2 6 3 5 7 2 h ①	Burner hours run	Number of hours run (only approximate values). The hours run can be reset to "0" with "⊣⊢".
0 3 0 5 2 9 ③	Burner starts	The number of burner starts can be reset to "0" with "⊣⊢".
0 0 1 4 1 7 h ⑤	Solar circuit pump hours run	Displayed only if a Viessmann solar control module is installed. The hours run can be reset to "0" with "⊣⊢".
0 0 1 4 2 5 ⑥	Pump starts, solar circuit pump	Displayed only if a Viessmann solar control module is installed. The pump starts can be reset to "0" with "⊣⊢".
0 0 0 5 0 6 h ⑦	Hours run, output 22	Displayed only if the Viessmann solar control module is installed and a second circulation pump has been connected. The hours run can be reset to "0" with "⊣⊢".
0 0 0 5 0 6 ⑧	Pump starts, output 22	Displayed only if the Viessmann solar control module is installed and a second circulation pump has been connected. The pump starts can be reset to "0" with "⊣⊢".
0 0 2 8 5 0 ⑨	Solar yield in kWh	Displayed only if a Viessmann solar control module is installed. The solar energy can be reset to "0" with "⊣⊢".

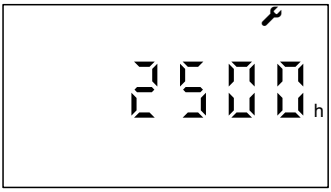
Scanning information (cont.)

Display	Meaning	Notes
4 ① ②	Reception quality of Vitocom 100, type GSM	Displayed only if Vitocom 100, type GSM, is connected. ■ 0 - no reception ■ 5 - very good reception

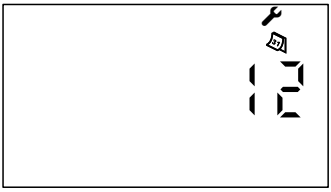
Scanning service messages

Your heating contractor can set a service interval. For example, burner service after 35,510 hours run or service after 12 months.
If your heating system is due for a service, symbol "🔧" flashes on the display and the expired service interval is shown.

Example:
Service display with the service interval of 1800 hours run by the burner:



Service display with the service interval of 12 months:



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

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

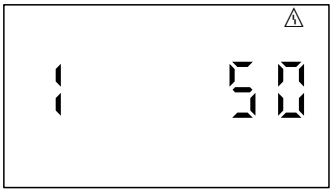
Calling up an acknowledged service message

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

Scanning fault messages

If any faults have occurred in your heating system, symbol "⚠" flashes on the display and the fault code is shown. In addition, the red fault indicator flashes (see page 10).

Example:
Fault code shown: "50"



1. Notify your heating contractor of the fault code. This enables the heating contractor to be better prepared for the service call and may save additional travelling costs.

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

   Note
   - *If signalling equipment (e.g. an alarm) has been connected for fault messages, this is deactivated when the fault message is acknowledged.*
   - *If the fault can only be fixed at a later date, 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 scan these in sequence by pressing ▼/▲.

Special considerations for multi boiler systems

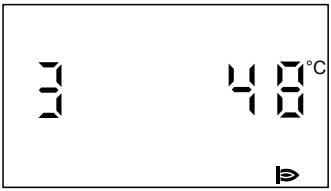
In systems with several boilers (multi boiler systems), each boiler is equipped with its own control unit. These control units are regulated by a higher control unit. Make the required settings (e.g. room temperature) at the higher control unit.

Operating instructions of the higher control unit

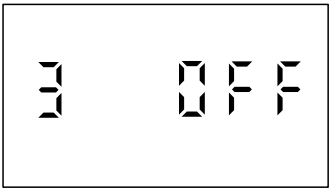
Boiler number

In multi boiler systems, each boiler control unit indicates the boiler number on the standard display.

Example:
Boiler number "3"



Boiler number "3" has been blocked by the higher control unit.



Operating program

- "⏻" for frost protection monitoring (standby mode):
  By selecting the operating program "⏻", you shut down the respective boiler individually.
  Boiler frost protection monitoring is active.
- "🚿" for DHW heating (summer mode):
  You **cannot** set operating program "🚿".

Room temperature/heating flow temperature

You cannot adjust either room temperature or heating flow temperature.

Starting emissions test mode

Emissions test mode should only be activated by your flue gas inspector during the annual inspection.

Press the following keys:

1. ☰ for settings; **"▥"** flashes.

2. ► for **"🔧"**.

3. OK to confirm; **"On"** flashes.
For boilers with flow rate capture, **"FL"** appears. Ensure an adequate flow rate (e.g. by opening radiator valves).

4. OK to start the burner for testing, **"On"** is displayed constantly.
The flow rate is inadequate if **"FL"** and "⚙▥" flash (boilers with flow rate capture). Increase the flow rate by drawing off heat.
If the flow rate is adequate, **"On"** flashes.

5. OK to start the burner for testing.
"On" is displayed constantly.
After 4 s, the standard display is shown.

Stopping emissions test mode

Press the following keys:

1. ☰ for settings; **"▥"** flashes.

2. ► for **"🔧"**.

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

4. OK to confirm.

Note
Emissions test mode also ends automatically after 30 min.

Rooms are too cold

Cause	Remedy
The heating system is switched off.	■ Switch ON/OFF switch "⏻" ON (see figure on page 10). ■ Switch ON the mains isolator, if installed (outside the boiler room). ■ Reset the MCB in the power distribution board (main domestic MCB).
Control unit or room temperature controller incorrectly adjusted.	Check settings and correct if required: ■ "🛁" has to be adjusted (see page 12) ■ Heating flow temperature (see page 12) or Room temperature (see room temperature controller operating instructions) ■ Time (see page 20 and room temperature controller operating instructions) ■ Time program (see page 13 and room temperature controller operating instructions)
Only when operating with DHW heating: DHW priority is enabled ("🛁" is displayed).	Wait until the DHW cylinder has been heated up ("🛁" symbol extinguishes). In the case of operation with an instantaneous water heater, stop DHW draw-off.
No fuel.	With LPG: Check the fuel reserves and re-order if required. With natural gas: Open the gas shut-off valve. If necessary, check with your gas supply utility.
Symbol "🔧" is shown on the display.	Press "**R**" (see diagram on page 10). Acknowledge the fault message with **OK** (see page 25). Notify your heating contractor of the fault code if the fault reoccurs.
Symbol "⚠" is shown on the display.	Notify your heating contractor of the fault code displayed. Acknowledge the fault message with **OK** (see page 25).

Rooms are too hot

Cause	Remedy
Control unit or room temperature controller incorrectly adjusted.	Check settings and correct if required: ■ Heating flow temperature (see page 12) or Room temperature (see room temperature controller operating instructions) ■ Time (see page 20 and room temperature controller operating instructions) ■ Time program (see page 13 and room temperature controller operating instructions)
Symbol "⚠" is displayed.	Notify your heating contractor of the fault code. Acknowledge the fault message with **OK** (see page 25).

There is no hot water

Cause	Remedy
The heating system is off.	■ Switch ON/OFF switch "⏻" ON (see page 10). ■ Switch ON the mains isolator, if installed (outside the boiler room). ■ Reset the MCB in the power distribution board (main domestic MCB).
Control unit incorrectly adjusted.	Check settings and correct if required: ■ DHW heating must be enabled (see page 16) ■ DHW temperature (see page 16) ■ Time (see page 20) ■ Time program (see page 17)
No fuel.	With LPG: Check the fuel reserves and re-order if required. With natural gas: Open the gas shut-off valve. If necessary, check with your gas supply utility.

There is no hot water (cont.)

Cause	Remedy
Symbol "⇧" is displayed.	Press "**R**" (see diagram on page 10). Acknowledge the fault message with **OK** (see page 25). Notify your heating contractor of the fault code if the fault reoccurs.
Symbol "⚠" is displayed.	Notify your heating contractor of the fault code. Acknowledge the fault message with **OK** (see page 25).

The DHW is too hot

Cause	Remedy
The control unit is incorrectly adjusted.	Check and correct the DHW temperature if required (see page 16)

"⚠" flashes on the display

Cause	Remedy
Heating system fault.	Notify your heating contractor of the fault code. Acknowledge the fault message with **OK** (see page 25).

"⇧" flashes on the display

Cause	Remedy
Heating system fault.	Press "**R**" (see diagram on page 10). Acknowledge the fault message with **OK** (see page 25). Notify your heating contractor of the fault code if the fault reoccurs.

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"🔧" flashes on the display

Cause	Remedy
The time for a service, as specified by your heating contractor, has arrived.	Notify your heating contractor and acknowledge the service message with **OK** (see page 24).

Maintenance

Cleaning

All equipment can be cleaned with a commercially available domestic cleaning agent (non-scouring).

Inspection and maintenance

Inspection and maintenance of your heating system is prescribed by the Energy Savings Order and DIN 4755, DVGW-TRGI 2008 and DIN 1988-8. 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, we advise you to arrange an inspection and maintenance contract with your local heating contractor.

Boiler

Increasing boiler contamination raises the flue gas temperature and thereby increases energy losses. For that reason, all boilers should be cleaned annually.

DHW cylinder (if installed)

The DIN 1988-8 and EN 806 specify that maintenance and cleaning should be carried out no later than two years after commissioning and thereafter as required.
Only a qualified heating contractor should clean the inside of a DHW cylinder and the DHW connections.

Refill any water treatment equipment (e.g. a lock or injection system) in good time, if such equipment is installed in the cold water supply of the DHW cylinder. Observe the manufacturer's instructions.
Additionally for a Vitocell 100:
We recommend that the correct function of the sacrificial anode is checked annually by your heating contractor.
The anode function 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 safety valve function should be checked every six months by venting, either by the system user or the local heating contractor. The valve seat may become contaminated (see the valve manufacturer's instructions).

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.

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Terminology

Constant temperature operation

In constant temperature operation, the heating water is constantly heated to the selected heating flow temperature.

Operating program

With the operating program you determine whether you provide central heating and DHW, or only DHW heating, or whether you shut down your heating system with frost protection monitoring.

You can select the following operating programs:

- **"🚿🔥"**
  Central heating and DHW heating is provided (winter mode).
- **"🚿"**
  DHW is provided but there is no central heating (summer mode).
- **"⏻"**
  Frost protection for the boiler and DHW cylinder is active, no central heating, no DHW heating (standby mode).

Note
No operating program for central heating without DHW heating is available. If rooms are to be heated, hot water is generally also required (winter mode).
*If you do want just central heating, select operating program **"🚿🔥"** and set the DHW temperature to 10 °C (see page 18). This means that you will not heat DHW unnecessarily but the DHW cylinder is protected against frost.*

Heating circuit

A heating circuit is a sealed unvented circuit between the boiler and radiators, in which the heating water circulates.

Heating circuit pump

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

Actual temperature

Current temperature at the time of the scan; e.g. actual DHW temperature.

Boiler water temperature

See "Constant temperature operation".

Open flue operation

The combustion air is drawn from the room where the boiler is installed.

Balanced flue operation

The combustion air is drawn from outside the building.

Safety valve

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

Set temperature

Default temperature that should be reached; e.g. set DHW temperature.

Terminology (cont.)

Summer mode

Operating program **"🚿"**.
During the warmer months of the year, i.e. if the rooms do not have to be heated, you can deactivate heating mode. The boiler remains operational for DHW heating.

Cylinder primary 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.

Keyword index

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Keyword index (cont.)

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Keyword index (cont.)

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Your contact

Contact your local contractor if you have any questions regarding the maintenance and repair of your system. You may, for example, find local contractors on the internet under www.viessmann.com.

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