Operating instructions

for the system user



Heating system with control unit for weather-compensated operation

- Vitotronic 200, type CO1E
- Vitotronic 200, type CO1I

With BASE E control unit

VITOTRONIC 200



5863724 GB 9/2018 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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14. Keyword index

Liability

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Symbols

Symbol	Meaning
	Reference to other document containing further information
1.	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
!	Warning of material losses and environ- mental pollution
4	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.
X	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

The Vitotronic 200, type CO1E and type CO1I control units are designed for weather-compensated control of single boiler systems.

The Vitotronic control unit is factory-configured as "Single boiler weather-compensated".

In weather-compensated mode, the flow temperature level is controlled according to the outside temperature. The lower the outside temperature, the higher the flow temperature. This means that more heat is provided for central heating and DHW heating on cold days than on warmer days.

Note

Alternatively, your contractor can configure the Vitotronic 200 for one of the following application areas:

"Single boiler constant control"

This makes the Vitotronic control unit suitable for control of a single boiler system with constant boiler water temperature.

You can find all information on operation in the "Vitotronic 100" operating instructions.

■ "Boiler in the Cascade"

The Vitotronic control unit is then used to control the boiler water temperature of a boiler in a multi boiler system.

You can find all information on operation in the "Vitotronic 300" or "Vitotronic 100" operating instructions.

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

The control unit is equipped with a touchscreen. To input settings and call up information, tap the onscreen buttons.

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



Remote control operating instructions

Home screen: Displays and settings

The home screen provides you with the most frequently used settings and queries.

Call up the home screen as follows:

- Standby display active: Tap the display anywhere.
- From the "Main menu": Tap A.

Home screen displays

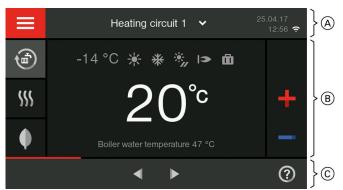


Fig. 1

- (A) Menu line
- (B) Function area
- © Navigation area

Buttons and icons in menu bar (A)

"Main menu" call-up "Heating circuit ..." Heating circuit selection Note

> This selection is only available if at least 2 heating circuits can be operated.

System data:

- Date
- Time

Interfaces:

WiFi connection enabled for contractor

No WiFi connection

Buttons and icons in function area (B)

Buttons:

- **+**/**−** Increase or reduce set room temperature
 - Operating program adjustment

- Comfort mode enable or disable \$\$\$
- Economy mode enable or disable

Meaning of temperatures displayed:

- -14 °C Current outside temperature
- 20 °C Selected set room temperature
- 47 °C Current boiler water temperature

Note

Alternating with the boiler water temperature, the following can be displayed on this line:

- Special operating programs: See page 16
- Days remaining until next service: Display is shown from 28 days beforehand

Symbols:

- * Central heating is at standard room temperature (preferred temperature)
- Central heating is at reduced room temperature
- * Frost protection is active
- In conjunction with a solar thermal system: Solar circuit pump is running
- Boiler (gas or oil) burner in operation
- Holiday program enabled

Home screen: Displays and settings (cont.)

Buttons in navigation area ©

♠ Home screen call-up

One step back in the menu or

Cancellation of started setting

✓ Entry or selection confirmation

Help text call-up

✓ Menu scrolling

or

Switch to other display areas, e.g., to the

"Energy cockpit"

Note

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

Explanation of all buttons and icons: See page 43.

Home screen settings

You can make the following settings in the home screen default display **only**:

■ "Room set temperature" with +/—
Further information: See page 15

■ ③ "Operating program"
Further information: See page 15

■ Energy saving function • "Economy mode"

Further information: See page 23

Note

You can lock the controls for the home screen: See chapter "Locking the controls".

If you do so, you will not be able to make adjustments on either the home screen or the main menu. "Panel locked" is displayed.

Overview of the "Main menu"

In the "Main menu", you can call up and adjust all of the remaining settings for the control unit's range of functions. Call up the "Main menu" as follows:

Standby display active:
 Tap anywhere on the screen and then tap =

■ From the home screen:

Tap **=**.

■ From anywhere in the menu:

Menus available in the "Main menu"

In the "Main menu", you can call up and adjust all further settings for the control unit's range of functions:

"Heating"

For more central heating settings, e.g. for the **Time program**.

Further information: See page 20

T "DHW"

For DHW heating settings, e.g. for the T "DHW temperature".

Further information: See page 25

a" "Settings"

E.g. the display brightness. Further information: See page 27

Energy saving function "Holiday program"

Further information: See page 20

(i) "Information"

To scan operating data, for e.g. temperatures.

Further information: See page 30

■ "Test mode"

For the flue gas inspector **only**. Further information: See page 33

"Service"

For contractors **only**.

Using **◄/** you can scroll through the menu.

Note

The menus available depend on your heating system equipment.

Menu overview with all menus: See page 45

Information in the "Energy cockpit"

The **"Energy cockpit"** provides you with clear information on the energy state of the components in your heating system.

Note

The **"Energy cockpit"** is only shown if it was set up during commissioning. If necessary, notify your contractor.

Tap the following on-screen buttons:

1. If required, \spadesuit for the home screen

2. ◀/▶ for "Energy cockpit"

Note

When you call up the "Energy cockpit" for the first time, you will be notified that the values shown cannot be used for settling bills with the power supply utility.

- The "Energy cockpit" is opened once you confirm this notification with OK. This notification will not appear again.
- If you tap Cancel, the "Energy cockpit" will not be opened. The notification will be shown again next time.

Default display in the "Energy cockpit"

The various components present in the system are shown as images. For information on the energy status of these system components, tap the respective system component. See also following chapters.

Note

The graphics depicting the boiler and the DHW cylinder vary according to the products used in the system.

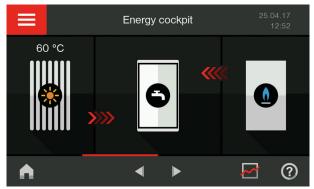


Fig. 2

You can call up the following information in the "Energy cockpit":

60 °C Current solar thermal system temperature

- * Solar thermal system energy yield: See the following chapter.
- Heating system energy statement in conjunction with the solar thermal system:

 See page 14
- DHW cylinder temperature:
 See page 14
- ♠/♠ Energy consumption (gas or oil) and operating data:

See page 14

- DHW cylinder heating by boiler enabled (red and moving)
- DHW cylinder heating by solar thermal system enabled (red and moving)

Energy yield from the solar thermal system

You can call up the energy yield from the solar thermal system for the last 7 days, including the current day. The energy yield is shown in kilowatt hours **"kWh"**.

Note

This information can **only** be retrieved in conjunction with the solar control module, type SM1. When connected to a Vitosolic solar control unit, you can call up the solar energy yield on this device.

Tap the following on-screen buttons:

1. If required, for the home screen

- 2. ◀/▶ for the "Energy cockpit"
- 3. Tap the solar collector ★ The energy yields for the last 7 days, including the current day, are shown as a bar for comparison.
- 4. Tap a day, e.g. "Mo" The energy yield for the selected day is shown in "kWh".

Information in the "Energy cockpit" (cont.)

"Energy statement" in conjunction with solar thermal system

You can call up the energy status for the last 7 days, including the current day. The amount of heat generated from solar power and the energy consumption of the boiler (gas or oil) are shown in kilowatt hours "kWh".

Note

This information can **only** be retrieved in conjunction with the solar control module, type SM1.

Tap the following on-screen buttons:

1. If required, for the home screen

- 2. ◀/▶ for the "Energy cockpit"
- In the navigation area
 The "Energy statement" is displayed as a graphic.
 - Blue: Amount of gas consumed or
 - Dark yellow: Amount of oil consumed
 - * Light yellow: Amount of heat generated by the solar thermal system

DHW cylinder temperatures

You can call up the current DHW temperatures in the DHW cylinder ("Heat-up condition").

Tap the following on-screen buttons:

1. If required, \uparrow for the home screen

2. **◄/**▶ for the "Energy cockpit"

3. Tap the DHW cylinder

Energy consumption and operating data

You can call up the following information about your boiler:

- "Current output" (heating output)
- "Hours run" (operating time)
- "Fuel"
- "Fuel consumption" (energy consumption)

Tap the following on-screen buttons:

- 1. If required, \spadesuit for the home screen
- 2. ◀/▶ for the "Energy cockpit"
- 3. ♠ in conjunction with a gas boiler
 - ♠ in conjunction with an oil boiler The operating data is shown, e.g. the "Hours run"

Note

To reset the hours run: See chapter "Calling up information".

4. Energy consumption:for "Fuel consumption"

- **5.** Tap the required period:
 - ☐ "The past 7 days", including current day
 - "The past 5 weeks", including current week
 - "For the past 12 months", including current month
 - "For the past 2 years", including current year Consumption above or below these levels is shown graphically within the selected time period for comparison purposes:
 - Dark areas: Proportion of energy consumption for central heating
 - → Light areas: Proportion of energy consumption for DHW heating
- 6. Tap e.g. a day or a week on the graph. The energy consumption for this period is shown as a numerical value in kilowatt hours "kWh". 10 kWh corresponds to approximately one litre of fuel oil or one cubic metre of gas.

Information on the energy consumption figures shown

The calculation of the energy consumption takes into account the installed system components and the user behaviour (e.g. operating time and utilisation level). Depending on system-specific conditions, differences may arise between the displayed (calculated) and actual consumption figures.

They therefore **cannot** be used as a binding basis for billing with the power supply utility.

Information in the "Energy cockpit" (cont.)

Energy consumption correction factor

You can enter a correction factor to adjust the displayed (calculated) values for energy consumption/fuel consumption to the actual values (as measured by the meter in your home). The calculated value is multiplied by the correction factor. However, due to seasonal climate conditions and other factors, discrepancies may still arise.

Tap the following on-screen buttons:

- 1. If required, \spadesuit for the home screen
- 2. **◄/**▶ for the "Energy cockpit"

- 3. <u>♠</u> in conjunction with a gas boiler or
 - in conjunction with an oil boiler
- 4. > for "Fuel consumption"
- 5. 3--- "Input adjustment factor"
- **6.** ✓ for the required correction factor
- 7. to confirm

Central heating and DHW heating energy consumption distribution

Specify the ratio in which your total energy consumption (100 %) is to be split for central heating and DHW heating. You can estimate the values or establish them through repeated meter readings (gas meter or oil consumption) over the year.

The values set here are only used in the graphs for energy consumption ("Fuel consumption").

Factory setting:

DHW heating: 30 %Central heating: 70 %

Tap the following on-screen buttons:

1. If required, for the home screen

- 2. **◄/**▶ for the "Energy cockpit"
- 3. <u>♠</u> in conjunction with a gas boiler
 - ♠ in conjunction with an oil boiler
- 4. > for "Fuel consumption"
- 5. ३ "Proportion DHW heating"
- 7. ✓ to confirm

Set "Favourites"

You can set some menus as favourite for faster access.

Tap the following on-screen buttons:

- **1.** If required, ♠ for the home screen
- 2. **◄/**► for "Favourites"

- **3. /** for the list of selectable menus.
- **4.** ☐ in the desired menu, e.g., in **"Time program, DHW"**

The selection is indicated by **Y**.

5. to confirm

Operating program information

Using the "Operating program", you set e.g. whether you want rooms heated, or DHW heating only.

If multiple heating circuits are present in your heating system, set the "Operating program" separately for each heating circuit.

Operating program information (cont.)

Operating programs for central heating, DHW, frost protection

Symbol	Operating program	Function
Central hea	nting and DHW heating	
⊕∭	"Heating and DHW"	 The rooms of the selected heating circuit are heated in accordance with the room temperature and time program specified (see chapter "Central heating"). DHW is heated in accordance with the DHW temperature and time program specified (see chapter "DHW heating").
(III)	Only for systems without DHW cylinder: "Heating"	The rooms of the selected heating circuit are heated in accordance with the room temperature and time program specified: See chapter "Cen- tral heating".
DHW heatir	ng (available in conjunction with DHW cylinder	only)
⊕	"Only DHW"	 DHW is heated in accordance with the DHW temperature and time program specified (see chapter "DHW heating"). No central heating Frost protection for the boiler, heating circuit and DHW cylinder is active.
Frost prote	ction	•
	"Standby mode"	 No central heating No DHW heating Frost protection for the boiler, heating circuit and DHW cylinder is active.

Special operating programs

The following special operating programs are available according to system equipment:

■ "Screed drying"

This function is activated by your contractor. Your screed is dried in line with a set time program (temperature/time profile) suitable for the relevant building materials. Your settings for central heating are deactivated for the duration of the screed drying. This function can be altered or cancelled by your contractor.

■ "External hook-up"

The operating program set at the control unit was e.g. changed over via an externally connected button

Example: In a school, heating demand exists outside of school times, e.g. for a parents' evening. This function cannot be influenced via the control unit. Once the external changeover no longer applies, the set operating program becomes active again.

■ "External program"

The operating program set at the control unit has been changed by another control device. You can change the operating program on the Vitotronic control unit.

■ m "Holiday program" (see page 23)

Note

The special operating programs are shown on the display in alternation with the boiler water temperature. In the main menu, you can call up the set operating program under **"Information"** (see page 30).

Setting a time program

Time programs and time phases

In the time programs, you specify what your heating system should do at what time. To do so, divide the day into sections. These are called **time phases**.

Different operating statuses are enabled within and outside these time phases. The available operating statuses differ, e.g. through different temperature levels

You can set up a time program for the following functions:

Function	Operating status		
	Within the time phase	Outside the time phase	
Central heating	Your rooms are heated to standard room temperature.	Your rooms are heated to reduced room temperature.	
DHW heating	DHW heating is set. The water in the DHW cylinder is heated to the set DHW temperature.	DHW heating is blocked.	
DHW circulation pump	Note Your contractor can limit the DHW circulation pump runtime.	The DHW circulation pump is not operational. Note Your contractor can enable DHW circulation pump operation.	

- The frost protection limit is factory-set to **③ "Automatic"**.
- You can set **③ "Individual"** time programs to be the same, or different, for every day of the week.
- In the main menu, you can call up the time programs under ① "Information".

The following explains how to input the settings for a time program, using central heating for heating circuit 1 as an example. The specifics of the individual time programs can be found in the relevant chapters.

Setting time phases

You can set up to 4 time phases in each "Time program". The time phases are numbered.
Set the "Start" and "End" for each time phase.

Example:

"Time program" for "Monday" for "Heating circuit

- Time phase "1": 05:30 to 09:00 h
- Time phase "2": 16:30 to 22:00 h

Tap the following on-screen buttons:

- 1.
 for the "Main menu"
- 2. "Heating" for central heating settings
- 3. (s) "Heating circuit 1"
- 4. Time program
- 5. "Mo" for "Monday"
- 6. / to edit the "Time program".

The bar in the time diagram is adjusted.

Cancelling the setting of a time phase early Tap ←.

- 8. + to create time phase "2".
- /✓ for time phase "2" "Start" and "End" from 16:30 h to 22:00 h

The bar in the time diagram is adjusted.



Setting a time program (cont.)

10. 🗸 to confirm



Fig. 3

11. ♠ to quit the "Time program".

Copying the time program to other days of the week

You can **copy** the **"Time program"** to other days of the week.

Example:

You want to copy the "Monday" "Time program" to "Tuesday" until "Friday".

Tap the following on-screen buttons:

- 1. for the "Main menu"
- 2. "Heating" for central heating settings
- 3. (m) "Heating circuit 1"

- 4. Time program"
- 5. "Mo" for "Monday"
- 6. to copy the "Monday" "Time program".
- 7. "Tu", "We", "Th", "Fr"
- 8. to confirm
- 9. \spadesuit to quit the "Time program".

Changing the time phases

You can change the time phase settings at any time.

Example:

For "Monday", you want to change time phase "2" "Start" to 19:00 h.

Tap the following on-screen buttons:

- 1.
 for the "Main menu"
- 2. "Heating" for central heating settings
- 3. (si) "Heating circuit 1"
- 4. Time program

- 5. "Mo" for "Monday"
- 6. / to edit the "Time program".
- **7. ⟨**/**>** for time phase "2"
- 9. to confirm
- **10.** ♠ to quit the "Time program".

Deleting time phases

You can delete individual time phases at any time.

Example:

For "Monday", you want to delete Time phase "2".

Tap the following on-screen buttons:

- 1. for the "Main menu"
- 2. "Heating" for central heating settings

Setting a time program (cont.)

- 3. (m) "Heating circuit 1"
- 4. Time program"
- 5. "Mo" for "Monday"
- 6. / to edit the "Time program".

- 8. X to delete Time phase "2".
- 9. 🗸 to confirm
- 10. to quit the "Time program".

Heating circuit selection

The heating of your rooms can be split over several heating circuits if necessary.

E.g., one heating circuit for your home, and one heating circuit for your office.

In the factory setting, the heating circuits are designated "Heating circuit 1" "Heating circuit 2" and "Heating circuit 3".

- If you are operating several heating circuits, select the heating circuit to which the change should apply in the home screen first.
- If you are only operating one heating circuit, this option is not available.

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. "Heating circuit 1" in the menu bar
- 3. "Heating circuit 2"

or

"Heating circuit 3"

Setting the room temperature

Setting the standard room temperature for the selected heating circuit

Set the room temperature at which you feel comfortable here. This room temperature applies to the time periods you set in the central heating **"Time program"**.

Factory setting: 20 °C Setting range: 3 to 37 °C

- 2. Select "Heating circuit..." from the menu bar
- 3. +/- for "Room set temperature"
- 4. +/- for the required value
- 5. to confirm

Tap the following on-screen buttons:

1. If required, \spadesuit for the home screen

Setting the reduced room temperature

Here you can set the room temperature for time periods during which you require less heat. This room temperature applies outside the central heating time phases set in the **"Time program"**.

Central heating with this temperature:

- Between the time phases for central heating at standard temperature
- In the holiday program

Factory setting: 3 °C Setting range: 3 to 37 °C

Tap the following on-screen buttons:

1. If required, for the home screen

- 2. for the "Main menu"
- 3. "Heating" for central heating settings
- 4. (%) "Heating circuit 1"

or

■ "Heating circuit 2"

or

- "Heating circuit 3"
- 5. 1 "Reduced room temperature"
- 6. +/— for the required value
- 7. to confirm

Setting "Operating program" for central heating

Enable the "Operating program" for central heating.

The setting is required only where one of the following operating programs is set:

- Only DHW
- Standby mode

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. "Heating circuit 1" in the menu bar for the heating circuit selection

Setting "Operating program" for central heating (cont.)

- 3. ⑤ or ⑥ for "Operating program"

 The set "Operating program" is highlighted.
- **4.** Select "Heating and DHW" or Theating to set central heating.

5. \checkmark to confirm

5. Time program"

For information on the operating programs, see page 15.

Setting "Time program" for central heating

Set individual time phases for central heating at standard room temperature.

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

Note

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

To see how to set a time program, see page 18.

Tap the following on-screen buttons:

- 1. If required, $\begin{cases} \begin{cases} \begin{cases}$
- 2. for the "Main menu"
- 3. "Heating" for central heating settings
- 4. (81) "Heating circuit 1"

O

■ "Heating circuit 2"

OI

® "Heating circuit 3"

Setting the "Heating curve"

By setting the **"Heating curve"**, you influence the flow temperature provided by the boiler.

So that your rooms are heated optimally at all outside temperatures, you can adjust "Heating curve" "Slope" and "Level".

Factory setting:

- "Slope": 1.4
- "Level": 0

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. for the "Main menu"
- 3. "Heating" for central heating settings
- 4. (81) "Heating circuit 1"

or

№ "Heating circuit 2"

10

® "Heating circuit 3"

- 5. ∠ "Heating curve"
- ←/— in each case for the required value for "Slope" and "Level"

The graph displayed clearly shows the change in the "Heating curve" as soon as you alter the value for the "Slope" or "Level".

Depending on the differing outside temperatures (shown on the horizontal axis), the assigned set flow temperatures for the heating circuit are displayed.

7. to confirm

Note

Heating curve explanation: See chapter "Terminology"

Setting the "Heating curve" (cont.)

Tips for setting "Slope" and "Level":

Action
Adjust the "Heating curve" "Slope" to the next higher value.
Adjust the "Heating curve" "Slope" to the next lower value.
Set the "Heating curve" "Level" to a higher value.
Set the "Heating curve" "Level" to a lower value.
Adjust the "Heating curve" "Slope" to the next lower value and the "Level" to a higher value.
Adjust the "Heating curve" "Slope" to the next higher value and the "Level" to a lower value.

Stopping central heating

Disable the central heating "Operating program". The setting is required, only where the "Heating and DHW" or "Heating" "Operating program" is set for central heating.

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. "Heating circuit 1" in the menu bar for the heating circuit selection

- 3. for "Operating program"

 The set "Operating program" is highlighted.

or

- "Standby mode" (frost protection for the boiler and DHW cylinder is enabled)
- 5. to confirm

Adjusting room temperature temporarily

If you want to heat your rooms to a higher or lower temperature for a limited time period, independently of "Time program", you enable "Comfort mode".

- The rooms are heated to the set "Comfort mode" temperature.
- Firstly, the DHW is heated to the set DHW temperature, before central heating.
- The DHW circulation pump is switched on (if installed).

Note

Your contractor can disable the **"Comfort mode"** DHW circulation pump.

Setting "Comfort mode"

Tap the following on-screen buttons:

- **1.** If required, ♠ for the home screen
- "Heating circuit ..." in the menu bar for the heating circuit selection
- 3. \" to activate "Comfort mode".
- ♣/─ for the required set room temperature in comfort mode

5. to confirm

Home screen displays:

- The \ss icon is highlighted.
- The standard set room temperature continues to display.
- "Comfort temperature" and "Boiler water temperature" are displayed alternately.

Adjusting room temperature temporarily (cont.)

Ending "Comfort mode"

You have 3 options for ending "Comfort mode":

■ Tap \\ again.

or

"Comfort mode" ends automatically when the system switches to operation at standard room temperature according to the "Time program".

or

"Comfort mode" ends automatically after 8 hours (delivered condition).

Note

Your contractor can change the **"Comfort mode"** time limit within a time period between 1 hour and 12 hours.

Reducing room temperature temporarily

In the central heating "Time program", you have set time phases for heating to standard room temperature. If you would like to heat your rooms to a lower temperature within these time phases, enable "Economy mode".

Note

You can activate this energy saving function in the *\epsilon* "Heating and DHW" or *\epsilon* "Heating" "Operating program" only.

Setting "Economy mode"

Tap the following on-screen buttons:

- 1. If required, for the home screen
- "Heating circuit ..." in the menu bar for the heating circuit selection
- 3. ♦ to activate "Economy mode".

Home screen displays:

- The icon is highlighted.
- The standard set room temperature continues to display.
- "Boiler water temperature" is displayed alternating with "Economy mode".

Ending "Economy mode"

You have 2 options for ending "Economy mode":

- "Economy mode" ends automatically when the system switches to operation at reduced room temperature according to the "Time program".

Energy saving function for longer absences

In the central heating "Time program", you have set time phases for heating to standard room temperature. If you want to heat your rooms to a lower temperature for a number of days, without changing the "Time program", enable the "Holiday program".

Energy saving function for longer absences (cont.)

The "Holiday program" has the following effects:

- Central heating:
 - For heating circuits in the ⑤ "Heating and DHW" or ⑥ "Heating" "Operating program":
 - The rooms are heated to the set reduced room temperature (see page 20).
 - For heating circuits in the ③ "Only DHW" "Operating program":

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

■ DHW heating:

No DHW heating. Frost protection for the DHW cylinder is active.

Setting the "Holiday program"

Factory setting: The **"Holiday program"** applies to **all** heating circuits.

Note

Your system is factory-configured as a "Detached house". All heating circuits in your system are assigned to a house or home.

If you want to assign your heating circuits to individual homes, your contractor can change this setting to "Apartment building". The "Apartment building" setting allows you to select the heating circuits, and therefore the homes, to which the **"Holiday program"** applies.

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. for the "Main menu"
- 3. 🛍 "Holiday program"
- If required, ☐ for the heating circuit or circuits to which the "Holiday program" should apply, and then ✓

★ /➤ respectively for the desired departure and return dates

Note

The "Holiday program" starts at 00:00 h the day after the departure date. The "Holiday program" ends at 00:00 h on the return date. This means that the set "Time program" is active on the departure and return dates.

6. ✓ to confirm

Home screen displays:

- The standard set room temperature continues to display.
- The icon is displayed.
- Alternating with "Boiler water temperature", "Holiday program" and the set departure and return dates are shown.

Cancelling or deleting the "Holiday program"

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. for the "Main menu"
- 3. in "Holiday program"

- **4.** If required, ☐ for the heating circuit or circuits to which the "Holiday program" should apply, and then ✓
- 5. to delete the "Holiday program".

Setting DHW temperature

Set the **"Set DHW temperature"** for the DHW cylinder.

Factory setting: 50 °C Setting range: 10 to 60 °C

Note

Your contractor can change the setting range. For this, consult your contractor.

Tap the following on-screen buttons:

1. If required, \spadesuit for the home screen

- 2. for the "Main menu"
- 3. Thursday in the string of t
- 4. 1 "DHW set temperature"
- 5. +/— for the required value
- **6.** ✓ to confirm

Setting "Operating program" for DHW heating

Enable "Operating program" for DHW heating. The setting is required only where the **③** "Standby mode" "Operating program" is set.

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. "Heating circuit ..." in the menu bar for the heating circuit selection

- - "Heating and DHW"
- 5. to confirm

For information on the operating programs, see page 15

Setting "Time program" for DHW heating

Set individual time phases for DHW heating. DHW heating is enabled during these time phases. DHW heating starts automatically as soon as the DHW temperature falls below the set value.

In automatic mode, DHW heating starts automatically half an hour before the central heating to standard room temperature time phase. E.g., DHW heating will start at 05:30 h if the start time for central heating is 06:00 h. This means hot water is already available when your system starts operating at standard room temperature.

Note

Your system is factory-configured as a "Detached house". All heating circuits in your system are assigned to a house or home.

If you want to assign your heating circuits to individual homes, your contractor can change this setting to "Apartment building". The "Apartment building" setting allows you to select the heating circuits, and therefore the homes, to which the time program applies.

Tap the following on-screen buttons:

1. If required, for the home screen

- 2. for the "Main menu"
- 3. Thus of the settings in the setting in the s
- 4. The program of the program of the state o
- 5. If required, (m) "Heating circuit 1" or
 - **2 "Heating circuit 2"
 - **№ "Heating circuit 3"**
- 6. 3 "Individual"
- 7. to confirm

Note

- When setting time programs, bear in mind that your heating system requires some time to heat the DHW cylinder to the required temperature.
- Any started water heating process continues until the set DHW temperature is achieved, even if the time phase end is reached.

To see how to set a time program, see page 18.

Setting "Time program" for DHW heating (cont.)

Increased DHW hygiene

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 (see page 25). During this time, DHW will be heated to the second set DHW temperature.

Note

Start and stop times must be set for time phases 2 and 3. These may also be within time phase 1.

One-time DHW heating outside the time program

In the DHW heating **"Time program"** you have set the time phases during which DHW heating is enabled. If you require hot water outside these time phases, enable DHW heating using the comfort mode.

Note

One of the following operating programs must be set for at least one heating circuit in your system:

- "Heating and DHW"
- ⑤ "Only DHW"

- 2. III to enable "Comfort mode"
- 3. to confirm
- 4. \(\square\) to disable "Comfort mode"

 The water in the DHW cylinder is heated to the "DHW set temperature".

Tap the following on-screen buttons:

1. If required, for the home screen

Setting the "Time program" for the DHW circulation pump

The DHW circulation pump transports the DHW through a loop line between the DHW cylinder and the draw-off points (e.g. hot tap). This ensures that hot water is rapidly available to you when you open the tap.

You can set individual time phases for DHW circulation pump operation.

In automatic mode, the DHW circulation pump operates in parallel to the **"Time program"** for DHW heating.

Tap the following on-screen buttons:

- **1.** If required, ♠ for the home screen
- 2. for the main menu

- 3. The "DHW" for DHW heating settings
- 4. Time program, DHW circulation
- 5. If required, ® "Heating circuit 1"

or

■ "Heating circuit 2"

~

™ "Heating circuit 3"

- 6. 3 "Individual"
- 7. to confirm

To see how to set a time program, see page 18.

Switching off DHW heating

Deactivate DHW heating.

Tap the following on-screen buttons:

- 1. If required, \uparrow for the home screen
- 2. for the main menu

- 3. The "DHW" for DHW heating settings
- 4. In "DHW set temperature"
- **5. —** for 10 °C
- 6. ✓ to confirm

Setting the "Language"

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. for the "Main menu"
- 3. a* "Settings"

- 4. Panguage"
- 5. Flag for the required "Language"
- **6.** ✓ to confirm

Setting the display brightness

2 settings are available to you:

- Brightness for operation
- Brightness for the standby screen

Tap the following on-screen buttons:

- **1.** If required, \uparrow for the home screen
- 2. for the "Main menu"
- 3. 🌣 "Settings"

- 4. Tipical Display brightness"
- 5. "Brightness, operation" or"Brightness, standby"
- for the required value
- 7. to confirm

Setting the "Time" and "Date"

Your control unit has a power reserve of approx. 1 month. If your heating system has been shut down for a prolonged period, you may need to reset the "Time" and "Date".

Tap the following on-screen buttons:

- 1. If required, \spadesuit for the home screen
- 2. for the "Main menu"
- 3. a* "Settings"

- 4. 31 "Date and time"
- 5. **31 "Date"** or
 - (\) "Time"
- **6.** Select your preferred format, e.g. "DD-MM-YY", "24-hour display"
- 8. to confirm

Signal tone for operation

In the delivered condition, a signal tone is produced every time a button is tapped. You can turn this signal tone off and turn it back on if required.

Tap the following on-screen buttons:

- 1. If required, \spadesuit for the home screen
- 2. for the "Main menu"

- 3. a* "Settings"
- 4. 🖭 "Buzzer"
- 5. | "ON"

Or

- O "OFF"
- **6.** ✓ to confirm

Naming heating circuits

You can name all heating circuits individually.

Further adjustments

Naming heating circuits (cont.)

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2. for the "Main menu"
- 3. a "Settings"
- 5. (m) "Heating circuit 1"

or

■ "Heating circuit 2"

or

"Heating circuit 3"

6. Using the virtual keyboard, enter the desired name; e.g. "Ground floor".

Note

← deletes the last character entered; ℜ discards the whole entry.

7. to confirm

The name assigned to the relevant "Heating circuit" appears on the home screen, in the "Main menu" and, if available, on the remote control display.

Deactivating the display screen for cleaning

If you wish to clean the display screen, you can deactivate it for 30 seconds. This prevents you making settings unintentionally.

Tap the following on-screen buttons:

1. If required, for the home screen

- 2. for the "Main menu"
- 3. a "Settings"

A counter begins and the display turns black. After 30 seconds, the main menu appears.

Locking the controls

You have 2 options for locking the controls. This prevents you making settings unintentionally.

"Lock everything"

In this case, you will not be able to make adjustments on either the default display of the home screen or the main menu.

In the main menu, only emissions test mode can be activated.

■ "Only default display operational"

Settings can only be made on the default display of the home screen.

In the main menu, only emissions test mode can be activated.

Note

Your contractor can change the password. If the password has been changed, please consult your contractor.

Tap the following on-screen buttons:

- 1. If required, \uparrow for the home screen
- 2. for the "Main menu"
- 3. a* "Settings"

- 4. 🔁 "Lock panel"
- 5. Lock everything"

or

n "Only home screen operable"

- **6.** Using the virtual keyboard, enter the password "viservice" or the new password.
- 7. to confirm

Unlocking the controls

Tap the following on-screen buttons:

 Swipe the screen with your finger. or

Tap any button.

- 2. \checkmark to confirm the note.
- **3.** Using the virtual keyboard, enter the password "viservice" or the new password.
- 4. to confirm

Restoring "Factory settings"

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

Settings and values that are reset:

- Set room temperature
- 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 are disabled

Tap the following on-screen buttons:

1. If required, for the home screen

Note

The following settings are retained:

- Heating circuit name: See page 27
- Contractor contact details: See page 29
- Signal tone operation: See page 27
- Display brightness: See page 27
- Operating data (meters): These have to be reset separately; see page 30

- 2. for the "Main menu"
- 3. a* "Settings"
- 5. "Heating circuit 1"
 - "Heating circuit 2"
 - ® "Heating circuit 3"
- 6. ✓ to confirm

or

X to cancel the operation.

Entering the contractor's contact details

Enter your contractor's contact details.

Tap the following on-screen buttons:

- 1. If required, $\begin{cases} \begin{cases} \begin{cases}$
- 2. for the "Main menu"
- 3. (i) for "Information"

- 4. for "Service contact details"
- 5. Relevant entry field
- **6.** Using the virtual keyboard, enter your contractor's contact details.
- 7. to confirm

Calling up help messages

You can call up help messages relating to the displays and functions.

2. to return to the previous screen.

Tap the following on-screen buttons:

1. ② to call up the help messages.

Calling up information

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

The information is split into groups:

(i) "General"

<u>♠</u>/♠ "Burner" (gas or oil)

■ "Heating circuit 1"

"Heating circuit 2"

"Heating circuit 3"

→ "DHW"

• "LAN" (not available)

Note

If names have been given to the heating circuits, these are shown: See chapter "Setting names for heating circuits".

Detailed scanning options for the individual groups can be found in chapter "Menu overview".

Tap the following on-screen buttons:

1. If required, for the home screen

2.
for the "Main menu"

3. (i) "Information"

Checking the solar thermal system energy yield

Note

This information can **only** be retrieved in conjunction with the solar control module, type SM1. When connected to a Vitosolic solar control unit, you can call up the solar energy yield on the Vitosolic.

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2.
 for the "Main menu"

- 3. (i) "Information"
- ¥ "Solar energy"
- 5. Only for the energy yield of the solar thermal system:
 - > "Solar energy bar chart"

Note

You can also call up the energy yield of the solar thermal system in the "Energy cockpit".

Resetting operating data (meter)

You can reset the operating data (meters) to zero, depending on the connected components.

You can reset the following operating data to zero:

- "Burner hours run"
- "Burner starts"
- "Solar circuit pump"
- "Solar energy"
- "SM1 output 22" (hours run)
- "All data"

Tap the following on-screen buttons:

If required, for the home screen

- 2.
 for the "Main menu"
- 3. (i) "Information"
- 4. 🖹 "Reset data"
- at the required data point or
 - "All data"
- 6. ✓ to confirm

or

X to cancel the procedure.

Calling up service messages

Your contractor can set service intervals (limits) (e.g. for burner hours run). As soon as the limits are exceeded, a service message is generated.

If your system is due for a service, this is indicated on the display with the \checkmark icon and "Service".

If you have entered the contact details for your contractor (see page 29), these are also displayed.

Tap ✓.

▲ flashes in the navigation area.

Calling up a service message

Tap the following on-screen buttons:

in the navigation area.
 The service message appears in a list.

If several messages are present at once, the following menus may appear after you tap **\(\Lambda \)**:

- "Fault list" for faults in the heating system
- "Burner fault" for faults on burner control unit or boiler burner
- "Service messages" for pending service work
- 2. "Service messages"

The service messages appear in a list.

3. With **②** you can call up notes about the service message.

4. Notify your heating contractor.

Note

If your system is remotely monitored by your heating contractor, service messages are forwarded automatically.

- 5. (x) to acknowledge all service messages.
- **6.** ✓ to confirm.

Note

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

Scanning fault messages

If your system has developed faults, this is shown on the display by the **\(\Lambda \)** icon and **"Fault"**. If you have entered the contact details for your contractor (see page 29), these are also displayed.

Tap ✓.

flashes in the navigation area.

Note

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

Calling up a fault message

Tap the following on-screen buttons:

in the navigation area.
 The fault message appears in a list.

If several messages are present at once, the following menus may appear after you tap **\(\Delta \)**:

- "Fault list" for faults in the heating system
- "Burner faults" for faults on burner control unit or boiler burner: See following chapter "Burner faults"
- "Service messages" for pending service work
- 2. "Fault list"

The fault messages appear in a list.

- 3. With ② you can call up notes about the heating system characteristics.
 - Tips on measures you can take yourself **before** notifying your contractor are displayed.
- 4. Make a note of the fault code and the cause of the fault. For example: "30: Boiler water temperature sensor".

This enables the contractor to be better prepared and may save you unnecessary travelling costs.

5. (1) to acknowledge all fault messages.



Scanning fault messages (cont.)

6. Notify your heating contractor.

Note

If your system is remotely monitored by your heating contractor, fault messages are forwarded automatically.

7. \checkmark to confirm.

\j\

Danger

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

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

Burner faults

In the event of a burner fault, the **A** icon and **"Burner fault"** are displayed.

In conjunction with the Vitotronic 200, type CO1E

1. Press the burner reset button.



See separate boiler or burner instructions.

- **2.** Press (4) in the navigation area to acknowledge all fault messages.
- If the burner fault occurs again, notify your contractor

In conjunction with the Vitotronic 200, type CO1I

Tap the following on-screen buttons:

1. to acknowledge the fault message.

- 2. to reset the burner
 - **X** to cancel the procedure.
- 3. Notify heating contractor.



Danger

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

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

The following functions are activated:

- The burner is switched on. "Test in progress" appears on the display
- The pumps are started.

- The mixers remain set to the control function.
- The burner is switched off when the maximum temperature set at the control unit is reached.

Note

Ensure that enough heat is being drawn during emissions test mode.

Activating emissions test mode

Tap the following on-screen buttons:

- 1. If required, for the home screen
- 2.
 for the "Main menu"

- 3. "Test mode"
- 4. to confirm

Ending emissions test mode

You have 2 options for ending emissions test mode:

- Tap **X**. or
- Emissions test mode ends automatically after 60 minutes.

Control unit controls

Vitotronic 200, type CO1E

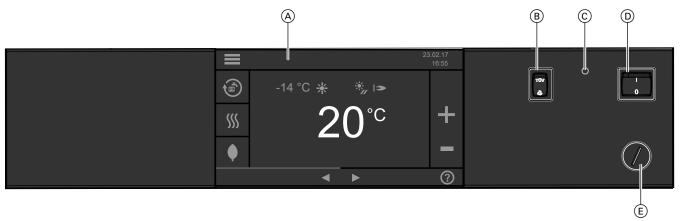


Fig. 4

- A Display
- B For contractors only:

 TÜV-button to test the high limit safety cut-out
- © For contractors only:

 Reset button for high limit safety cut-out
- (D) ON/OFF switch
- E For contractors only: Temperature controller

Vitotronic 200, type CO1I

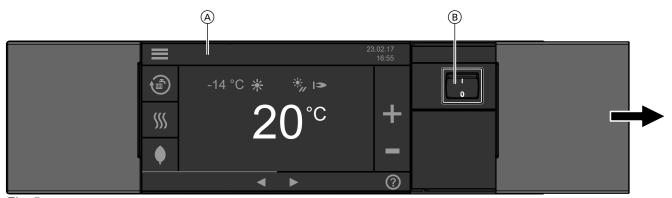


Fig. 5

- A Display
- (B) ON/OFF switch

Shutting down the heating system

With frost protection monitoring

For **every** heating circuit, select the **(a)** "Standby mode" operating program.

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

See also chapter "Switching off the central heating" on page 22.

Note

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

Without frost protection monitoring (shutdown)

1. Turn off the system ON/OFF switch.

Shutting down the heating system (cont.)

- Gas boiler: Close the gas shut-off valve.Oil boiler: Close the shut-off valves in the oil lines (at the oil tank and filter).
- Isolate the heating system from its main power supply, e.g. at the separate MCB/fuse or at a mains isolator.

Please note

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

Information on prolonged shutdown

- As the circulation pumps no longer run for a longer period of time, these may seize.
- After an extended shutdown, it may be necessary to reset the date and time (see page 27).

Starting up the heating system

Ask your contractor about the following:

- Necessary commissioning steps
- Required system pressure level (minimum system pressure)
- Position of the following components:
 - Pressure gauge
 - Vents
- Water quality requirements
- Gas boilers: Gas shut-off valve
 Oil boilers: Shut-off valves in the oil lines (at the oil tank and filter)
- Check the pressure of your heating system on the pressure gauge. If the pressure in the heating system is too low (< 1.0 bar/< 0.1MPa), top it up with water or notify your contractor.
- 2. Check that the vents in the installation room are open and unrestricted.

- 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).
- Switch ON the power supply, e.g. at a separate MCB/fuse or a mains isolator.
- Turn on the ON/OFF switch. The home screen is shown after a short time. Your heating system and, if installed, remote controls are ready for use.

Note

If your heating system has been shut down for a prolonged period, you may need to reset the "Time" and "Date": See chapter "Setting the time and date".

Rooms are too cold

Cause	Remedy
The heating system is switched off.	 Turn on the ON/OFF switch (see page 34). Switch ON the mains isolator if installed (outside the boiler room). Set the MCB in the power distribution board (main domestic MCB).
 Control unit incorrectly adjusted. The remote control (if installed) is set incorrectly. Separate operating instructions 	Central heating must be set. Check the settings and correct if required: Operating program (see page 15) Room temperature (see page 20) Time (see page 27) Time program, central heating (see page 21) Heating curve (see page 21)
The DHW cylinder is being heated.	Wait until the DHW cylinder has been heated up. Reduce the DHW draw-off rate or temporarily reduce the DHW temperature as required.
No fuel.	With oil or 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.
▲ "Fault" is displayed.	Check what type of fault it is. Acknowledge the fault (see page 31). If necessary, notify your contractor.
■ "Burner fault" is displayed.	Vitotronic 200, type CO1E: Press the burner reset button. See separate boiler or burner instructions. Vitotronic 200, type CO1I: Follow the instructions on the display: See page 32. Contact your contractor if the burner still fails to start. Danger If faults are not rectified, they can have life threatening consequences. Do not acknowledge fault messages several times in quick succession. Notify your contractor if a fault recurs. Your contractor will be able to analyse the cause and rectify the fault.
"Screed drying" is activated.	No action required. The set operating program will be enabled once the screed drying time has elapsed.
The mixer motor is faulty.	Notify your heating contractor.
"External hook-up" enabled.	No action required. The operating program set at the control unit was e.g. changed over via an externally connected button. Example: In a school, heating demand exists outside of school times, e.g. for a parents' evening. This function cannot be influenced via the control unit. Once the external changeover no longer applies, the set operating program becomes active again.
"External program" activated.	The operating program set at the control unit has been changed by another control device. You can change the operating program on the Vitotronic control unit.

Rooms are too hot

Cause	Remedy
 Control unit incorrectly adjusted. The remote control (if installed) is set incorrectly. Separate operating instructions 	Check the settings and correct if required: Operating program (see page 15) Room temperature (see page 20) Time (see page 27) Time program, central heating (see page 21) Heating curve (see page 21)
▲ "Fault" is displayed.	Check what type of fault it is. Acknowledge the fault (see page 31). If necessary, notify your contractor.
The mixer motor is faulty.	Notify your heating contractor.
"External hook-up" enabled.	No action required. The operating program set at the control unit was e.g. changed over via an externally connected button. Example: In a school, heating demand exists outside of school times, e.g. for a parents' evening. This function cannot be influenced via the control unit. Once the external changeover no longer applies, the set operating program becomes active again.
"External program" activated.	The operating program set at the control unit has been changed by another control device. You can change the operating program on the Vitotronic control unit.

There is no hot water

Cause	Remedy
The heating system is off.	 Turn on the ON/OFF switch (see page 34). Switch ON the mains isolator if installed (outside the boiler room). Set the MCB in the power distribution board (main domestic MCB).
 Control unit incorrectly adjusted. The remote control (if installed) is set incorrectly. Separate operating instructions 	DHW heating must be set. Check the settings and correct if required: Operating program (see page 15) DHW temperature (see page 25) Time (see page 27) Time programs for DHW heating (see page 25) Heating curve (see page 21)
No fuel.	With oil or 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.
▲ "Fault" is displayed.	Check what type of fault it is. Acknowledge the fault (see page 31). If necessary, notify your contractor.

There is no hot water (cont.)

Cause	Remedy
▲ "Burner fault" is displayed.	■ Vitotronic 200, type CO1E: Press the reset button at the boiler burner control unit. You can access the reset button via an opening in the outer panel. See separate boiler or burner instructions. ■ Vitotronic 200, type CO1I: Follow the instructions on the display: See page 32. Contact your contractor if the burner still fails to start. Danger If faults are not rectified, they can have life threatening consequences. Do not acknowledge fault messages several times in quick succession. Notify your contractor if a fault recurs. Your contractor will be able to analyse the cause and rectify the fault.
"External hook-up" enabled.	No action required. The operating program set at the control unit was e.g. changed over via an externally connected button. Example: In a school, heating demand exists outside or school times, e.g. for a parents' evening. This function cannot be influenced via the control unit. Once the external changeover no longer applies, the set operating program becomes active again.
"External program" enabled.	The operating program set at the control unit has been changed by another control device. You can change the operating program on the Vitotronic control unit.

The DHW is too hot

Cause	Remedy
The control unit is set incorrectly.	Check the DHW temperature and correct it if required (see page 25).
The DHW is being heated by the solar thermal system.	Check the settings at the solar control unit and correct them if required.
	Separate operating instructions
"External hook-up" enabled.	No action required. The operating program set at the control unit was e.g. changed over via an externally connected button. Example: In a school, heating demand exists outside or school times, e.g. for a parents' evening. This function cannot be influenced via the control unit. Once the external changeover no longer applies, the set operating program becomes active again.
"External program" enabled.	The operating program set at the control unit has been changed by another control device. You can change the operating program on the Vitotronic control unit.

▲ and "Fault" are displayed

Cause	Remedy
Heating system fault	Proceed as described on page 31.

▲ and "Burner fault" are displayed

Cause	Remedy
Fault on burner control unit or boiler burner.	 Vitotronic 200, type CO1E: Press the burner reset button. See separate boiler or burner instructions. Vitotronic 200, type CO1I: Follow the instructions on the display: See page 32. Contact your contractor if the burner still fails to start. Danger If faults are not rectified, they can have life threatening consequences. Do not acknowledge fault messages several times in quick succession. Notify your contractor if a fault recurs. Your contractor will be able to analyse the cause and rectify the fault.

✗ and "Service" are displayed

Cause	Remedy
The time for a service as specified by your contractor has arrived.	Proceed as described on page 31.

"External hook-up" is displayed

Cause	Remedy
The operating program set at the control unit was e.g. changed over via an externally connected button. Example: In a school, heating demand exists outside of school times, e.g. for a parents' evening.	No action required. This function cannot be influenced via the control unit. Once the external changeover no longer applies, the set operating program becomes active again.

"External program" is displayed

Cause	Remedy
The operating program set at the control unit has been changed by another control device.	You can change the operating program.

Cleaning

The control unit can be cleaned with a commercially available domestic cleaning agent (non-scouring). You can clean the display screen with a microfibre cloth.

Note

You can temporarily deactivate the display screen for cleaning: See chapter "Deactivating the display screen for cleaning"

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.

Boiler

Increasing boiler contamination raises the flue gas temperature and thereby increases energy losses. We recommend having the boiler 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 cables / lines

If there is damage to the connecting cables or lines of the appliance or externally installed accessories, these must be replaced with special cables or lines. Only use Viessmann cables / lines as replacement. For this, notify your qualified contractor.

Ordering fuel oil

If you have any questions, ask your contractor.

Fuel oil additives

Fuel oil additives have the following properties:

- They improve the stability of the fuel during storage
- They improve the thermal stability of the fuel
- They reduce odour development during filling

Please note

Fuel oil additives can create residues and impair the safe operation of your heating system.

The use of fuel oil additives that leave residues is not permissible.

Combustion improvers

Combustion improvers are additives for optimising fuel oil combustion.

Viessmann pressure-jet oil burners do not require combustion improvers, as these burners operate with clean and efficient combustion.

Please note

Combustion improvers can create residues and impair safe operation.

The use of combustion improvers that leave residues is not permissible.

Biofuels

Biofuels are made from vegetable oils, e.g. sunflower or rapeseed oil.

Please note

Biofuels can cause damage to Viessmann pressure-jet oil burners.

With boilers built in or after 2012, up to 10 % added bio-components (FAME) are generally allowed. Fuel oil must comply with DIN 51603-6-EL A Bio 10.

Buttons and icons

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

Buttons and icons in the menu bar

Buttons in the menu bar

Main menu call-up

" Heating circuit ..." Heating circuit selection

Icons in the menu bar

WiFi service interface

☆ ★ No connection

Connection active

Buttons in the navigation area

Home screen call-up

One step back in the menu

Abort a setting

Help text call-up **②**

Fault message or service message call-up

Fault message or service message acknowl-

✓ Energy cockpit or favourites call-up from home screen

or

Menu scrolling

Settings adjustment

Entry or selection confirmation

Ø Entry reset

Entry or selection deletion

· 자립 Setting or selection cancellation

Copy setting

Energy statement call-up

For contractors only: Service menu call-up

Buttons and icons in the function area

General buttons in the function area

✓ / Scroll up or down

Increase or decrease value

</> Scroll left or right

Increase or decrease value

Function on Function off ☑/◎ Entry selection Entry deselection

Buttons and icons in the energy cockpit

Solar energy yield call-up

DHW cylinder heat-up condition call-up

The DHW cylinder is heated by the solar thermal system.

The DHW cylinder is heated by the boiler.

Gas boiler operating data call-up

Oil boiler operating data call-up Fuel consumption call-up:

☐ Last 7 days

Last 5 weeks

Last 12 months

Last 2 years

☐ Energy proportions setup for central heating and DHW heating

\$-- Energy consumption correction factor setup

Buttons and icons in the favourites

h Holiday program open

★ Energy statement open

★ DHW heating time program menu

* Central heating time program menu

Solar energy yields open

Central heating and DHW heating buttons and icons

* Central heating at standard room temperature (preferred temperature)

Central heating with reduced room temperature

* Frost protection enabled

*, In conjunction with a solar thermal system: Solar circuit pump running

■ Burner (gas or oil) in operation

Operation with gas <u>0</u>

Operation with oil

Central heating settings menu open

Proportion of energy consumption for central heating

DHW heating settings menu open

Proportion of energy consumption for DHW heat-

Standard room temperature adjustment

Reduced room temperature adjustment



Buttons and icons (cont.)

- DHW temperature adjustment
- Set an operating program:
 - ⊕/m Central heating and DHW heating
 - ⑤/★ Only DHW heating
 - ⊕/IIII Only central heating
 - ⊕/ປ Standby mode
- Select heating circuit:
 - Select heating circuit 1
 - Select heating circuit 2
 - Select heating circuit 3
- SS Enable/disable comfort mode
- Enable/disable economy mode
- Set a holiday program
- Time program setup for central heating
- Time program setup for DHW heating
- Time program setup for DHW circulation pump
- Individual time program setup
- Time program set to automatic
- ∠ Heating curve setup

Advanced menu buttons and icons

- * Further settings menu open
- Language selection
- Screen brightness adjustment:
 - Brightness adjustment for operation
 - * Brightness adjustment for standby screen
- Lock the controls:
 - Lock everything
 - nly default display operational

- Date and time setting:
 - Date setting
 - Time setting
- Key tone on/off
- Temporary deactivation of display screen for cleaning
- For the flue gas inspector only:
 - Test mode activation
- For contractors only: Service menu call-up
- Meating circuit naming

Service menu buttons and icons

For contractors only.

Settings and scans

- Text view as brief scan
- □ Code view as brief scan
- ← Settings switch
- Refresh
- Information on the set value

System components/system hydraulics

- DHW cylinder
- Heating circuit without mixer
- @ Heating circuit with mixer

Menu overview

Home screen overview

4	•
ı	

Home screen				
	Main menu			
		See the following chapter		
	Heating circuit selection			
	Heating circuit 1			
		Heating circuit 2		
		Heating circuit 3		
	Oalastia	· ·		
	Selecting opera			
		Standby mode		
		Only DHW		
		Heating and DHW		
	0 f t 1 -			
	Comfort mode			
	Economy mode			
	Set room temperature			
Energy cockpi	t			
znorgy occupi		in the Energy cockpit		
	Boldan dioplay	Solar thermal system energy yield		
		Energy statement in conjunction with solar thermal system		
		DHW cylinder temperature		
		Energy consumption and operating data		
		Energy consumption and operating data		
Favourites				
	For faster acce	ss to set menus		

"Main menu" overview

Note

Subject to the features of your heating system, not all of the menu entries shown may be available under =

=

Heating				
	Heating circuit 1			
		Reduced room temperature		
		Time program		
		Heating curve		
	Heating circuit 2			
	Reduced room temperature			
		Time program		
		Heating curve		
	Heating circuit 3			
		Reduced room temperature		
		Time program		
		Heating curve		
Test mode				
-				
Settings	Τ.			
	Language			
	Display brightness			
	· -	Brightness, operation		
		Brightness, standby		
	Date and time			
		Date		
		Time		
	Buzzer			
	Rename heating			
		Heating circuit 1		
	<u> </u>	Heating circuit 2		
		Heating circuit 3		
	Factory settings			
		Heating circuit 1		
		Heating circuit 2		
		Heating circuit 3		
	LAN ON/OFF (do	not adjust)		
	Clean screen			

Lock panel

Dł	W set temperature
	W time program
	Automatic
	Individual
Tir	ne program, DHW circulation
	Automatic
	Individual

Note

Subject to the features of your heating system, not all of the call-up options may be available under "Information".

Further details can be called up for any information marked with **>**.

Information

Information general							
Outside temper	Outside temperature						
Boiler temperate	Boiler temperature						
Act. boiler outpu	Act. boiler output						
Sensor 17A							
Sensor 17B							
Sensor 9							
Flue gas tempe	Flue gas temperature Central fault message						
Central fault me							
Output 20							
Output 29							
Output 52							
Feed pump							
LON subscriber no.							
Inputs, extension EA1							
Digital input 1							
	Digital input 2						
	Digital input 3						
External hook-up 0 10 V, extension EA1 Pump output signal PM1							
				Flow rate set val. pmp PM1			
				Pump power su			
Floating contact							
Temperature se							
Temperature se							
Temperature se							
Temperature se							
Fault mess inpu	ut PM1						
Time							
Date							
Serial number b	poiler						
Serial number of	control unit						

Information

Information burner					
	Burner				
	Burner hours run				
	Burner starts				
	Burner state				
		Burner stage 1			
		Burner stage 2			
	Actual burner or	utput			
	Burner output st	age 1			
	Burner output stage 2 Boiler temperature Set boiler water temperature Flue gas temperature				
	Fuel type				
	Gas type Altitude				
	Maximum boiler water temperature				
	Ionisation current Gas pressure Temperature limiter				
	Burner locked o	ut			
Internal fault code, burner control unit					
Information DHW					
	Time program, [DHW >			
	Time program, [DHW circulation >			
	DHW temperature DHW temperature				
		Тор			
		Bottom			
	DHW circulation pump				
	Cylinder primary pump				



Information

Information hear	ion heating circuit 1, Information heating circuit 2, Information heating circuit 3			
	Operating program			
		Heating and DHW		
		Only DHW		
		Standby mode		
		Comfort mode		
		Economy mode		
		Holiday program		
		Screed function		
		External hook-up		
		External program		
	Operating status	3		
		Standard heating mode		
		Reduced heating mode		
		Standby mode		
	Time program >			
	Room temperature			
	Set reduced room temperature			
	External set room temperature			
	Comfort temperature Heating curve slope Heating curve level Heating circuit pump Mixer			
	Flow temperature Holiday program			
		Departure date		
		Return date		

Information Information solar energy Only in conjunction with solar control module, type SM1: Solar energy bar chart > Collector temperature Solar DHW Solar circuit pump Solar energy Speed, solar circuit pump Heating suppression, DHW Only in conjunction with solar control module, type SM1: SM1 output 22 Only in conjunction with solar control module, type SM1: SM1 output 22 Only in conjunction with solar control module, type SM1: SM1 outp.22 starts Only in conjunction with solar control module, type SM1: Only in conjunction with solar control module, type SM1: Sensor 10 Only in conjunction with solar control module, type SM1: Heating suppression, heating Service contact details Name Telephone Mobile Email Information LAN (not available) Information, reset data Burner hours run > Burner starts > Solar circuit pump > Solar energy > SM1 output 22 > All data >

Holiday program

Service

Terminology

Setback mode (reduced heating mode)

See "Reduced heating mode".

Operating program

You define the following with the operating program:

- Central heating and DHW heating or
- DHW heating only, no central heating or
- Only frost protection for the boiler and the DHW cylinder is active.

No central heating, no DHW heating

Note

An operating program for central heating without DHW heating is only available for systems without a DHW cylinder. When central heating is needed, hot water is generally also required (winter mode).

Operating status

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

Extension kit for heating circuit with mixer

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

Screed drying

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

The screed drying function affects heating circuits with mixer:

- All rooms are heated according to the temperature/ time profile.
 - Your settings for central heating have no effect for the duration of screed drying (max. 32 days).
- DHW heating is enabled. The priority control (DHW heating first, then central heating) is however suspended.

Underfloor heating

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

Therefore, heating to the reduced room temperature at night or switching on **"Economy mode"** during short absences does not result in significant energy savings.

Heating mode

Standard heating mode

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

Reduced heating mode

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

Terminology (cont.)

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 and therefore the flow temperature are regulated independently of the outside temperature.

Weather-compensated heating mode

In weather-compensated mode, the flow temperature is controlled according to the outside temperature. More heat is made available at a lower outside temperature than at a higher one.

The outside temperature is captured and transmitted to the control unit by a sensor. The sensor is fitted to the exterior of the building.

Heating curve

Heating curves illustrate the relationship between the outside temperature, the set room temperature and the boiler water temperature or flow temperature. The lower the outside temperature, the higher the boiler water temperature or flow temperature.

In order to guarantee sufficient heat and minimum fuel consumption at any outside temperature, the conditions of your building and your heating system must be taken into consideration. The heating curve is set by your contractor for this purpose.

The heating curves shown apply with the following settings:

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

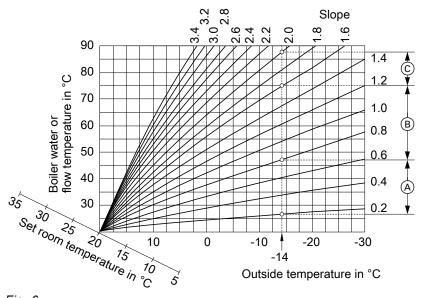


Fig. 6

Example:

For outside temperature -14 °C:

- (A) Underfloor heating system, slope 0.2 to 0.8
- (B) 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

Factory-set slope = 1.4 and level = 0.

Appendix

Terminology (cont.)

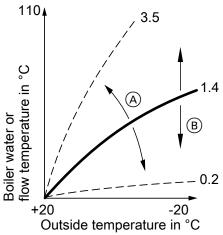


Fig. 7

- A Changing the slope:
 - The steepness of the heating curve changes.
- B Changing the level:

The heating curves are shifted in parallel in a vertical direction.

Heating circuit

A heating circuit is a sealed unvented circuit that connects the boiler and radiators and 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 circulating the heating water in the heating circuit

Mixer

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

Night setback

See "Reduced heating mode"

Open flue operation

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

Terminology (cont.)

Room sealed operation

The combustion air is drawn from outside the building.

Room temperature

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

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.

The heating circuits are also equipped with safety valves.

Solar circuit pump

In conjunction with solar thermal systems.

The solar circuit pump delivers the cooled heat transfer medium from the indirect coil of the DHW cylinder to the solar collectors.

Set temperature

See "Set temperature".

Summer mode

Operating program "Only DHW".

In warmer months, you can switch off heating mode. The boiler remains operational for DHW heating. Central heating is switched off.

Cylinder 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.

Set temperature

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

Appendix

Terminology (cont.)

Weather-compensated operation

See "Heating mode"

DHW circulation pump

The DHW circulation pump transports the DHW around a loop line between the DHW cylinder and the draw-off points (e.g. hot tap). This ensures that hot water is rapidly available at the draw-off points.

Information on disposal

Disposal of packaging

Your contractor will dispose of the packaging from your Viessmann product.

- **DE:** Packaging waste is channelled for recycling to a certified disposal contractor in line with statutory regulations.
- AT: Packaging waste is channelled for recycling to a certified disposal contractor in line with statutory regulations. Use the ARA statutory disposal system (Altstoff Recycling Austria AG, licence number 5766).

Final decommissioning and disposal of the heating system

Viessmann products can be recycled. Components and fluids from your heating systems are not part of ordinary domestic waste.

Please speak to your contractor about the correct disposal of your old system.

- **DE:** Operating fluids (e.g. heat transfer medium) can be disposed of at municipal collection points.
- **AT:** Operating fluids (e.g. heat transfer medium) can be disposed of at municipal collection points (ASZ).

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Certification

RoHS compliant

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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