

Operating instructions for the system user

VIESSMANN


Heating system with Vitotronic 200 control unit, type HO2B
For weather-compensated mode

VITODENS VITOSOLAR 300-F





Safety instructions

For your safety

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

Safety instructions explained

 **Danger**
This symbol warns against the risk of injury.

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


Note

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

Target group

These operating instructions are intended for heating system users.


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

 **Please note**
Supervise children in the proximity of the appliance.

- Never permit children to play with the appliance.
- Cleaning and maintenance must not be carried out by unsupervised children.

Appliance connection

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


 **Danger**
Incorrectly executed work on the heating system can lead to life threatening accidents.

- Work on gas installations must only be carried out by a registered gas fitter.
- Work on electrical equipment must only be carried out by a qualified electrician.

Work on the appliance


- All settings and work on the appliance must be carried out as specified in these operating instructions. Further work on the appliance may only be carried out by authorised contractors.
- Never open the appliance.

- Never remove casings.
- Never change or remove attachments or fitted accessories.
- Never open or retighten pipe connections.


 **Danger**
Hot surfaces can cause burns.

- Never open the appliance.
- Never touch the hot surfaces of uninsulated pipes, fittings or flue pipes.

Damage to the appliance


 **Danger**
Damaged equipment poses a safety hazard. Check the appliance for external damage. Never start up a damaged appliance.

If you smell gas

 **Danger**
Escaping gas can lead to explosions which may result in serious injury.


- Never smoke. Prevent naked flames and sparks. Never switch lights or electrical appliances on or off.
- Close the gas shut-off valve.
- Open windows and doors.
- Evacuate any people from the danger zone.
- Notify your gas and power supply utility and your local heating contractor from outside the building.
- Have the power supply to the building shut off from a safe place (outside the building).

If you smell flue gas

 **Danger**
Flue gas can lead to life threatening poisoning.

- Shut down the heating system.
- Ventilate the installation site.
- Close all doors in the living space.

In case of fire

 **Danger**
Fire presents a risk of burns and explosion.

- Shut down the heating system.
- Close the shut-off valves in the fuel supply lines.
- Use a tested fire extinguisher, class ABC.

For your safety (cont.)**In case of water leaking from the appliance****Danger**

Water leaking from the appliance poses an electrocution hazard.

- Switch off the heating system at the external isolation point (e.g. fuse box, domestic power distribution unit).
- Notify your local heating contractor.

What to do if the heating system develops a fault**Danger**

Fault messages point to faults in the heating system. If faults are not rectified, they can have life threatening consequences.

Never acknowledge fault messages several times in quick succession. Inform your heating contractor so the cause can be analysed and the fault rectified.

Installation room requirements**Danger**

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

**Danger**

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

**Please note**

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

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

Extractors

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

**Danger**

The simultaneous operation of the boiler and appliances that extract air to the outside can result in life threatening poisoning due to reverse flow of the flue gas.

Take suitable steps to ensure an adequate supply of combustion air. If necessary, contact your heating contractor.

Auxiliary components, spare and wearing parts**Please note**










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

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Symbols

Symbol	Meaning
	Reference to other document containing further information
	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	<ul style="list-style-type: none"> ▪ Component must audibly click into place. or ▪ Acoustic signal
	<ul style="list-style-type: none"> ▪ Fit new component. or ▪ In conjunction with a tool: Clean the surface.
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do not dispose of component in domestic waste.

Terminology

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



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

Intended use

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

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

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

Intended use (cont.)

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

Incorrect usage or operation of the appliance (e.g. the appliance being opened by the system user) is prohibited and will result in an exclusion of liability. Incorrect usage also occurs if the components in the heating system are modified from their intended use (e.g. if the flue gas and ventilation air paths are sealed).

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

Your system has been preset

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

Central heating

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

DHW heating

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

Note

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

Frost protection

- Your boiler and DHW cylinder are protected against frost.

Wintertime/summertime changeover

- This changeover is automatic.

Date and time

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

You can change these settings at any time to suit your individual requirements.

Power failure

All settings are saved if there is a power failure.

Energy saving tips

Central heating

- **Standard room temperature** (see page 24):
Do not overheat your home. Every degree of room temperature reduction saves up to 6 % on your heating bills.
Do not set your standard room temperature ("**Set room temperature**") higher than 20 °C.
- **Time program** (see page 14):
Heat your home to the standard room temperature during the day and to the reduced temperature at night. Set this via the time program.
- **Operating program**:
If you do not require central heating, select one of the following operating programs:
 - "**Only DHW**" (see page 29):
If you require no heating for your home in summer, but you require DHW.
 - "**Standby mode**" (see page 22):
If you do not need to heat your home and do not require DHW for long periods.
- **Short absence** (see page 27):
Reduce the room temperature if you are going out shopping, for example. For this, select "**Economy mode**".
- **Holidays** (see page 24):
If you are going away, select the "**Holiday program**":
The room temperature is reduced, and DHW heating is turned off.
- **Ventilation**:
Close the thermostatic valves when venting. Open the windows fully for a brief time.
- **Roller shutters**:
Close roller shutters (if installed) at dusk.
- **Thermostatic valves**:
Ensure that thermostatic valves are properly adjusted.
- **Radiators**:
Never cover radiators or thermostatic valves.

Energy saving tips (cont.)

DHW heating

- **DHW circulation pump** (see page 30):
Only activate the DHW circulation pump for periods in which DHW is regularly drawn off. Set this via the time program.
- **DHW consumption:**
Consider showering instead of running a bath. A shower generally uses less energy than a full bath.

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

Tips for greater comfort

Central heating

- **Standard room temperature** (see page 24):
You can select your individual preferred temperature **"Set room temperature"** at any time in the standard menu.
- **Time program** (see page 14):
Make use of the time program. In the time program, you can set time phases with different room temperatures, for example different temperatures for day and night time.
- **Heating curve** (see page 25):
The heating curve enables you to individually adjust the heating system to the actual heat demand in your home. If set correctly, your preferred temperature will be achieved all year round.
- **"Comfort mode"** (see page 26):
Select **"Comfort mode"** if you want to heat your home to a temperature that deviates from that in a time program.
Example: Late in the evening, the reduced room temperature is set by the time program. Your guests stay longer.

DHW heating

- **Time program** (see pages 29 and 30):
Use the time program for DHW heating.
Use the time program for the DHW circulation pump.
During the selected time phases, DHW is available at the draw-off points at the required temperature.

Opening the control unit

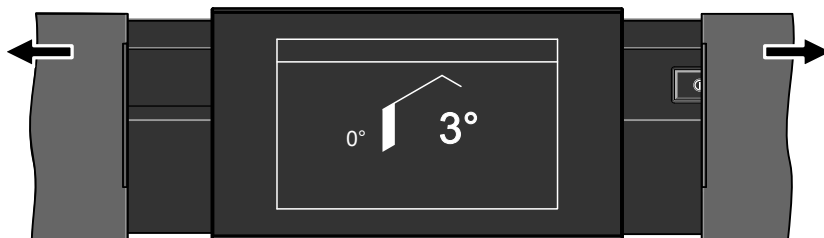


Fig. 1

Programming unit

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



Remote control operating instructions

If there has not been any operation for some time, a **screensaver** appears:

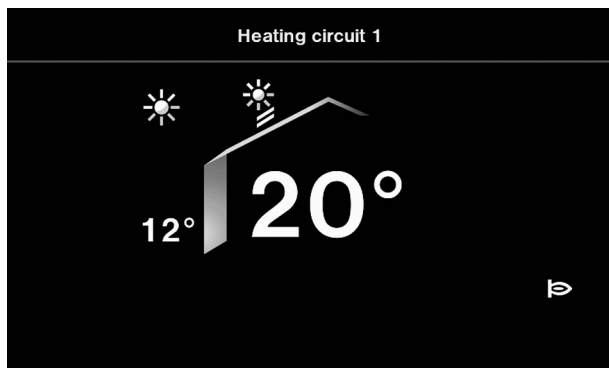


Fig. 2

2 **control levels** are available:

- The standard menu: See page 11
- The main menu: See page 13

The programming unit is equipped with a **touchscreen**. To make settings and scan for information, tap the on-screen buttons.


Standard menu


In the standard menu, you can choose between 3 display areas:

- Default display "Heating"
- Energy cockpit
- Favourites

If you want to permanently select a default display, see page 33.



Call up the standard menu as follows:

- If the screensaver is active:
Tap anywhere on the screen.
- If you are in the main menu:
Tap .

The default display appears on the screen. Use  to go to the energy cockpit or favourites.

Default display "Heating"

In the default display (see fig. 3), you can adjust and call up the settings used most frequently:

- Set room temperature
- Operating program
- Comfort mode 
- Economy mode 

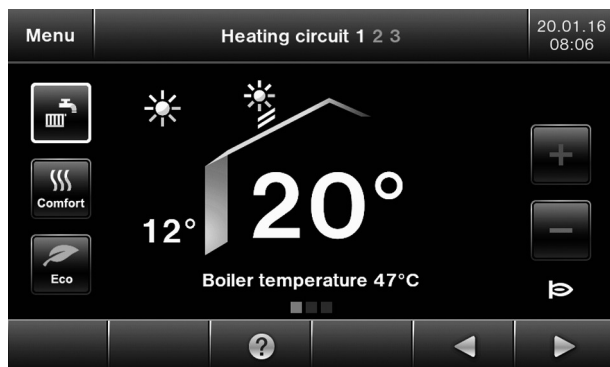


Fig. 3

Temperature displays

- 12° Current outside temperature
- 20° Selected set room temperature

Symbols and buttons

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

Symbols

- ❄ Frost protection enabled
- ☀ Central heating at standard room temperature (preferred temperature)
- ☾ Central heating with reduced room temperature
- ☀ In conjunction with a solar thermal system:
Solar circuit pump is running
- 🔥 Burner in operation

Buttons in the default display

- ➕ Increases the value for standard room temperature.
- ➖ Reduces the value for standard room temperature.
- 🏠/🌞/🌿 Sets the operating program (for operating programs, see page 13).
- ☁ Enables/disables comfort mode.
- 🌿 Enables/disables economy mode.

Note

If your heating system is not designed for DHW heating, 🏠 is not displayed.

Buttons in the header

"Menu"

Calls up the main menu.

" Heating circuit 1, 2, 3"

Selects the heating circuit.

Note

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

Buttons in the footer

- 🏠 Returns you to the standard menu.
- ⬅ Moves to the previous step in the menu or cancels a setting that has been started.
- ❓ Calls up the help text.
- ⚠ Calls up fault or service messages.
- ⏪ Standard menu:
Calls up the energy cockpit or your selected favourites.
Main menu:
Scrolls through the menu.

Energy cockpit

In the energy cockpit display area, you will find information about the energy situations of the heating system and its components. For further information, see page 16.

When the energy cockpit is called up for the first time, a message is displayed.

- If you confirm the message with **OK**, the energy cockpit opens. The message will not be displayed again.
- If you tap Cancel, the message reappears when the energy cockpit is next called up.

Favourites


In the "Favourites" display area, you can arrange the most frequently used menu points individually. For further information, see page 21.

Programming unit (cont.)

Main menu

In the main menu, you can make and scan **all** settings for the functions available in the control unit. You can find the menu overview on page 43.

Call up the main menu as follows:

- If the screensaver is active:
Tap the display anywhere and then tap **"Menu"**.
- If you are in the standard menu:
Tap **"Menu"**.
- From anywhere in the menu:
Tap  and then tap **"Menu"**.

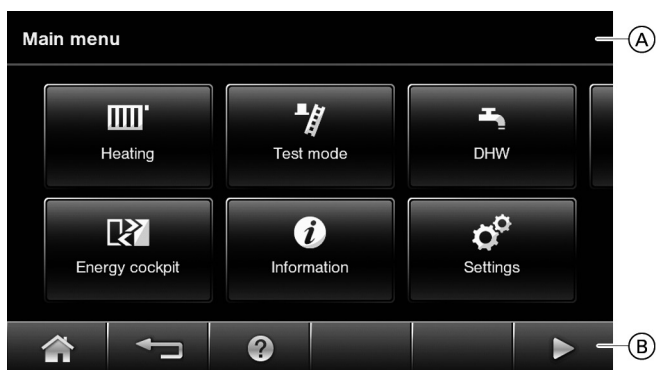





Fig. 4

- (A) Header
- (B) Footer

Operating program

Operating programs for central heating, DHW, frost protection

Symbol	Operating program	Function
Central heating and DHW heating		
	"Heating and DHW"	<ul style="list-style-type: none"> ▪ The rooms of the selected heating circuit are heated in accordance with the room temperature and time program specified (see chapter "Central heating"). ▪ DHW is heated in accordance with the DHW temperature and time program specified (see chapter "DHW heating").
DHW heating		
	"Only DHW"	<ul style="list-style-type: none"> ▪ 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 and the DHW cylinder is active.
Frost protection		
	"Standby mode"	<ul style="list-style-type: none"> ▪ No central heating ▪ No DHW heating ▪ Frost protection for the boiler and the DHW cylinder is active.

Operating program (cont.)

Special operating programs

Special operating programs:

- **"Screed drying"**

This function is activated by your heating contractor. Your screed is dried in line with a set time program suitable for the relevant building materials (temperature/time profile). Your settings for central heating have no effect for the duration of screed drying (max. 32 days). Your heating contractor can modify or cancel this function.

- **"External hook-up"**

The operating program set at the control unit has been switched over by an external device, e.g. EA1 extension. This function cannot be influenced via the control unit.

- **"External program"**

The operating program was changed via a communication interface (e.g. Vitocom 100). This function can be influenced via the control unit.

- **"Holiday program"** (see page 24)

Note

Special operating programs are displayed alternately with the boiler water temperature.

*You can call up the set operating program in the extended menu, under **"Information"** (see page 34).*

Time program

The following explains how to input the settings for a time program using central heating heating circuit 1 as an example.

The special features of individual time programs are described in the relevant chapters.

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

- Central heating
- DHW heating
- DHW circulation pump

- The time program allows you to divide the day into sections. These are called **time phases**.
- You can select up to 4 time phases per day.

- For each time phase, you select the start and end points.
- You can set the time program **individually**, to be the same, or different, for every day of the week.
- In the main menu, you can call up the time programs under **"Information"** (see from page 34).

The following functions are active within the time phases:

- During central heating, rooms will be heated to the standard room temperature.
- During DHW heating, DHW in the DHW cylinder is heated to the set DHW temperature.
- The DHW circulation pump is in operation.

Setting time phases

Example

- Time program for **"Monday"** for heating circuit 1
- Time phase 1:
05:30 to 09:00 h
- Time phase 2:
16:30 to 22:00 h

In between these time phases the system heats to a reduced temperature.

Tap the following on-screen buttons:

1. **"Menu"**
2. **"Heating"**
3. **Heating circuit 1**
4. **"Time program, heating"**

5. **"Mo"**

6. **"Change"**

Time program (cont.)

- 7. ▲/▼ for the start and end point of time phase 1. The bar in the time diagram is adjusted.

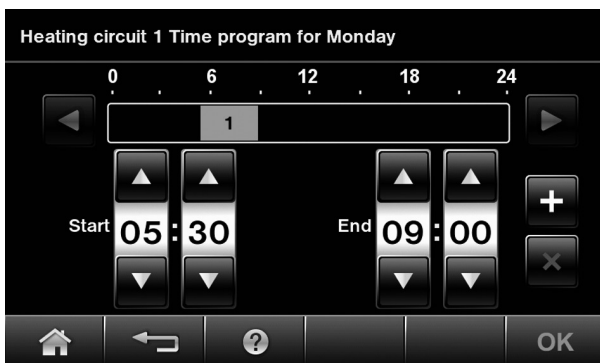


Fig. 5

Cancelling the setting of a time phase early
Tap

- 8. + to create time phase 2.
- 9. ▲/▼ for the start and end point of time phase 2. The bar in the time diagram is adjusted.

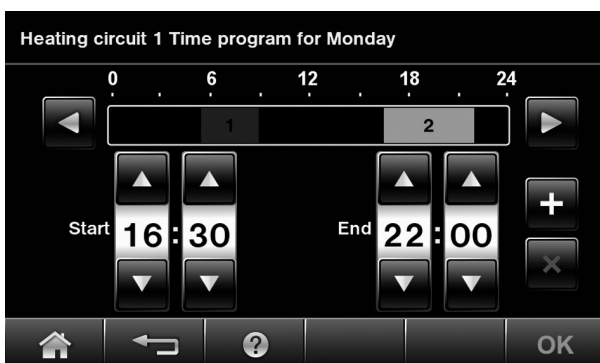


Fig. 6

- 10. OK to confirm

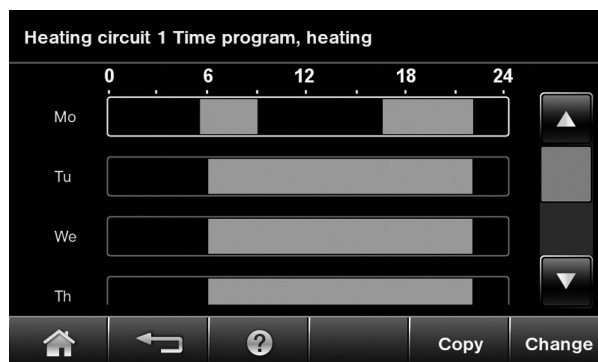


Fig. 7

- 11. Home to exit the time program

Transferring the time program to other days of the week

You can **copy** this time program for any other days of the week. You want to copy the time program for Monday to Tuesday to Friday.

Tap the following on-screen buttons:

1. "Menu"
2. "Heating"
3. Heating circuit 2
4. "Time program, heating"
5. "Mo"
6. "Copy"

- 7. "Tu", "We", "Th", "Fr"

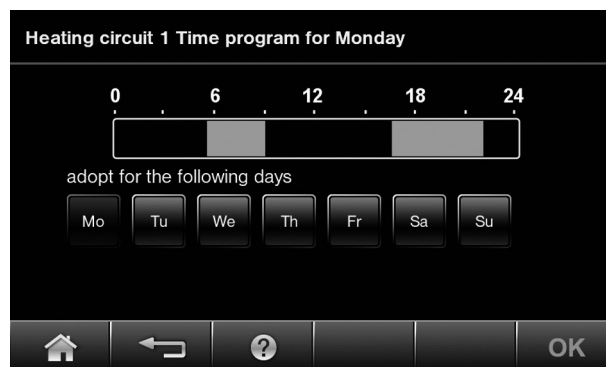


Fig. 8

- 8. OK to confirm



Time program (cont.)

9. to exit the time program

Changing time phases

Example:

For **Monday** you want to change the start point of time phase 2 to 19:00 h.

Tap the following on-screen buttons:

1. "Menu"
2. "Heating"
3. Heating circuit 2
4. "Time program, heating"
5. "Mo"
6. "Change"
7. for time phase 2

8. for the start point of time phase 2. The bar in the time diagram is adjusted.

9. **OK** to confirm

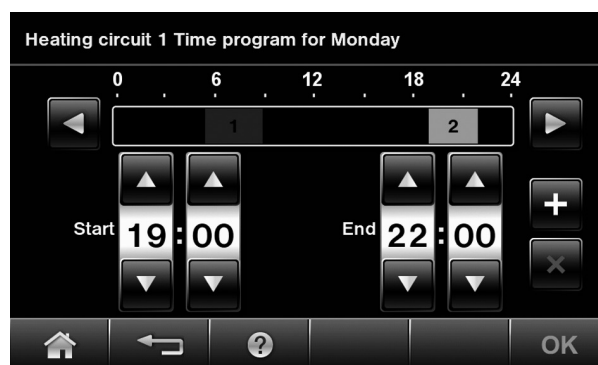


Fig. 9

10. to exit the time program

Deleting time phases

Example:

For **Monday** you want to delete time phase 2.

Tap the following on-screen buttons:

1. "Menu"
2. "Heating"
3. Heating circuit 2
4. "Time program, heating"
5. "Mo" for the required day
6. "Change"
7. for time phase 2

8. to delete the time phase

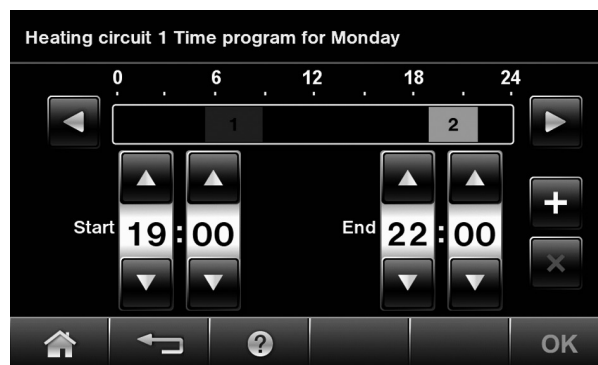


Fig. 10

9. **OK** to confirm

10. to exit the time program

Energy cockpit

You can call up the following information about the heating system's energy situation in the energy cockpit:

- Current temperatures of the solar thermal system (if installed in the system)
- Energy yield of the solar thermal system for the last 2 years in various time segments

- Energy statement of the heating system in conjunction with the solar thermal system for the last 2 years in various time segments
- Temperatures and heat-up condition of the DHW cylinder
- Energy consumption of the heat generator (gas and electricity consumption)

Energy cockpit (cont.)

Energy cockpit default display

The components installed in the system are shown graphically. Some information regarding the components is displayed in the default display. For further information, tap the relevant system component. Also see the following chapters.

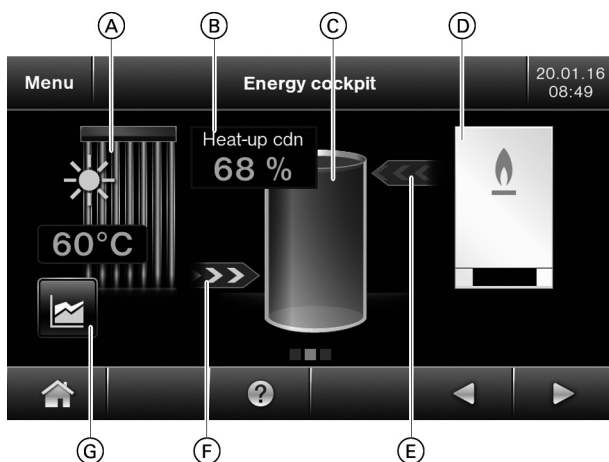


Fig. 11 Example with Vitodens 300-W

- (A) Solar thermal system
Call up energy yield (see page 17)
- (B) Heat-up condition of the DHW cylinder
Display according to type of DHW cylinder
- (C) DHW cylinder
Call up temperatures and heat-up condition (see page 18)
- (D) Heat generator (boiler)
Call up energy situation (see page 19)
- (E) Heating of DHW cylinder by the heat generator active (red and animated)
- (F) Heating of DHW cylinder by the solar thermal system active (yellow and animated)
- (G) Call up energy statement of the solar thermal system (see page 18)

Note

The depiction of the heat generator and the DHW cylinder depends on the products used in the system. In case of heat generators with integral DHW cylinders, the DHW cylinder is shown inside the heat generator.

Temperature of the solar thermal system

The current temperature of the solar thermal system is permanently displayed in the energy cockpit default display.

Energy yield of the solar thermal system

You can call up the energy yield of the solar thermal system for the last 2 years. The values are displayed in kilowatt hours.

You can call up the following periods:

- The last 7 days including the current day
- The last 52 weeks including the current week
- The last 12 months including the current month
- The last 2 years including the current year

1. Use ◀▶ to call up the energy cockpit from the standard menu.
2. Tap the collector.
3. Tap the required period.
The energy yields are shown graphically.

Energy cockpit (cont.)

4. Tap the diagram for a period (e.g. day). The energy yield for this period is displayed as a numerical value.



Fig. 12


Energy statement in conjunction with solar thermal system

You can call up the energy situation for the entire heating system. The amount of solar heat generated and the gas consumption are displayed in kilowatt hours.

You can call up the following periods:

- The last 7 days including the current day
- The last 52 weeks including the current week
- The last 12 months including the current month
- The last 2 years including the current year

1. Use ◀▶ to call up the energy cockpit from the standard menu.

2. Tap  below or beside the collector.

3. Tap the required period.



Fig. 13

The energy statement is displayed graphically.

- The red area represents the amount of gas consumed.
- The yellow area represents the amount of heat generated by the solar thermal system.

Temperatures and heat-up condition of the DHW cylinder

You can perform the following scans and functions for the DHW cylinder:

- DHW temperatures
- Heat-up condition according to type of DHW cylinder
- Currently active heat-up process:
 - Animated red arrows: Heating by the boiler
 - Animated yellow arrows: Heating by solar thermal system
- Start once-only cylinder heating by the boiler (only if cylinder heating is not enabled in the current operating mode)

2. Tap the DHW cylinder to call up further temperatures and heat-up conditions.

1. Use ◀▶ to call up the energy cockpit from the standard menu.

Energy cockpit (cont.)

Starting once-only cylinder heating

2. **OK** to confirm

Tap the following on-screen buttons:

1. 

"One-off cylinder heating", to start once-only cylinder heating by the boiler.

The DHW cylinder is heated to the selected set DHW temperature.

To terminate cylinder heating early, tap **"One-off cylinder heating"** again.

Energy situation of the heat generator

You can call up for the following information about the energy situation and operating data of the heat generator:

- Current heating output
- Runtime (operating hours)
- Electricity consumption
- Gas consumption



Note

The energy cockpit provides the system user with information about the thermal and electrical consumption of the heating system throughout the year. These values are calculated taking account of the system components used and user behaviour (e.g. runtime and utilisation level). Due to system-specific parameters (e.g. elevation of the installation or flue system design), there may be discrepancies between the displayed and actual consumption values.

To improve the accuracy of the display, we recommend that the system user enters the calorific value, gas correction factor and gas meter readings. Seasonal environmental conditions and other factors may nevertheless continue to cause discrepancies. Therefore, it has to be noted that the displayed values are not determined using measuring equipment but are only calculated. The energy cockpit is intended to visualise consumption to date and is useful for highlighting increased or decreased consumption in specific comparison periods. It cannot be used as a reliable basis for billing.

To enter additional data, see page 20.

Heating output, runtimes and consumption

1. Use   to call up the energy cockpit from the standard menu.
2. Tap the heat generator to call up the current output and the runtime.
To reset the runtime, see page 35.
3. **Electricity consumption**
Tap **"Electricity consumption"**.
4. Tap the required period.
5. Tap the diagram for a period (e.g. day). The electricity consumption for this period is displayed as a numerical value.
6. **Gas consumption**
Tap **"Gas consumption"**.

You can call up the following periods:

- The last 7 days including the current day
- The last 52 weeks including the current week
- The last 12 months including the current month
- The last 2 years including the current year

Energy cockpit (cont.)

7. Tap the required period.

You can call up the following periods:

- The last 7 days including the current day
- The last 52 weeks including the current week
- The last 12 months including the current month
- The last 2 years including the current year

The gas consumption for central heating is shown in red.

The gas consumption for DHW heating is shown in yellow.

8. Tap the diagram for a period (e.g. day). The gas consumption for this period is displayed as a numerical value.

Input of additional data for gas consumption

You can improve the accuracy of displayed gas consumption values by entering your gas meter readings as comparison values. Make the first input shortly after commissioning or at the start of the heating season. Make the second input at the end of the heating season so that at least 100 m³ of gas were consumed in the past period. If required, this can be repeated for the next heating season. The more comparison values you enter, the more accurate the displayed gas consumption values will be.

Note

- *There is no retrospective correction of values that have already been recorded.*
- *No additional consumer may be connected to the gas meter.*

1. Use ► to call up the energy cockpit from the standard menu.
2. Tap the heat generator.
3. Tap **"Gas consumption"**.
4. Tap **"Input, counter reading"**.
5. Confirm the message with **"Yes"**.
6. Tap the entry field.
7. Enter the meter reading.
Use ← to remove existing values
8. Confirm twice with **OK**.
9. After a few months (ideally at the end of the heating season), enter the current meter reading as the second value. For procedure, see above.

10. If you want to enter further values after some time: Move the last entered value upwards. To do so, tap **"Move 2 to 1"**. To continue, see previous steps.

Input of gas quality

Here you can enter values for the calorific value of the gas used and its gas correction factor. Both values can be found on your gas bill. If you do not have a gas bill, you can request the information from your gas supply utility.

Note

No additional consumer may be connected to the gas meter.

1. Use ► to call up the energy cockpit from the standard menu.
2. Tap the heat generator.
3. Tap **"Gas consumption"**.
4. Tap **"Input, gas quality"**.
5. Tap the entry fields.
6. Enter the relevant value.
Use ← to remove existing values
7. Confirm twice with **OK**.

Favourites

Arranging menu points as favourites

You can select your favoured menu points from a list. They can then be called up by tapping **"Favourites"**. The selection can be changed at any time.

Tap the following on-screen buttons:

1. ► until menu point **"Select favourites"** appears.
2. **"Select favourites"**
The list of selectable menu points appears.
3. Tap the required menu points. The selected points are marked with check marks.
A maximum of 12 menu items can be selected.
4. **OK** to confirm

Switching the heating system on

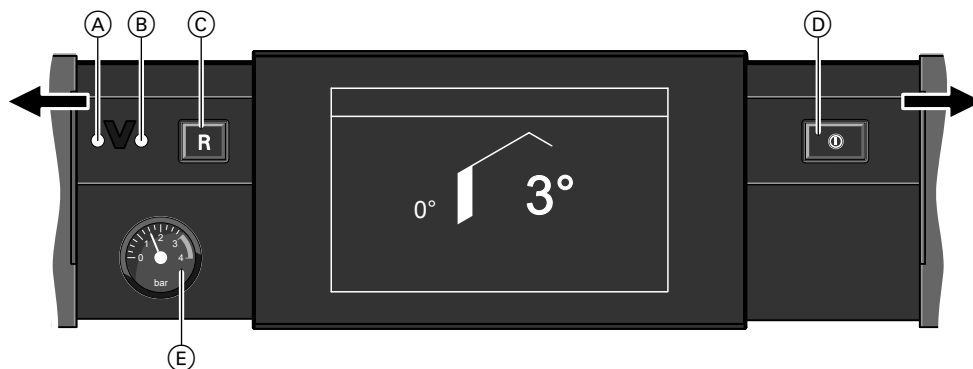


Fig. 14

- (A) Fault indicator (red)
- (B) ON indicator (green)
- (C) Reset button

- (D) ON/OFF switch
- (E) Pressure gauge (heating system pressure indication)

Ask your heating contractor about the following:

- Level of the required system pressure
- Position of the following components:
 - Pressure gauge
 - Gas shut-off valve
 - Vents

1. Check the heating system pressure at the pressure gauge. The heating system pressure is too low if the indicator points to the area below 1.0 bar. Top up with water or notify your local heating contractor.
2. For **open** flue operation: Check that the vents in the installation room are open and unrestricted.

Note

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

3. Open the gas shut-off valve.
4. Switch on the power supply, e.g. at a separate MCB/fuse or a mains isolator.
5. Turn on the ON/OFF switch. After a short time, the standard menu is displayed. The green ON indicator illuminates. Your heating system and, if installed, your remote controls are ready for use.

Shutting down the heating system

With frost protection monitoring

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

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

See also chapter "Switching central heating off" on page 26.

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 ON/OFF switch.
2. Close the gas shut-off valve.

Shutting down the heating system (cont.)

3. 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 heating contractor.

Information on a prolonged shutdown

- *Circulation pumps may seize up as they are not being supplied with power.*
- *After an extended shutdown, it may be necessary to reset the date and time (see page 32).*

Central heating

Heating circuit selection

If required, the heating of your rooms can be split over several heating circuits.

At the factory, heating circuits are designated **1, 2, 3** in the header.

- If you are controlling several heating circuits, for all central heating settings, first select the heating circuit to which the change should apply.
- If you are only controlling one heating circuit, this option is not available.

Tap repeatedly on **"Heating circuit 1 2 3"** until the required heating circuit is active.

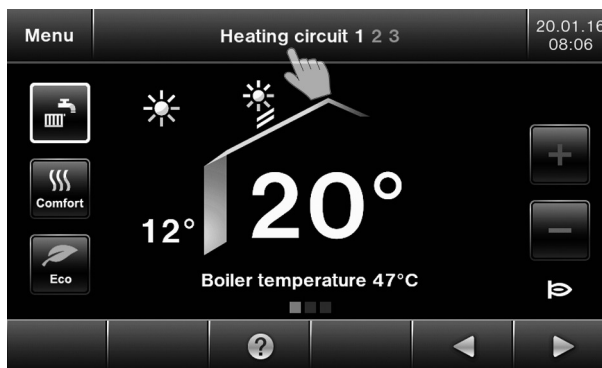


Fig. 15

Room temperature



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

Setting the standard room temperature for the selected heating circuit

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

Tap the following on-screen buttons:

1. **"Heating circuit 1 2 3"** in the header to select the required heating circuit

2. **+/-** for the required value
3. **OK** to confirm

Setting reduced room temperature

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

Tap the following on-screen buttons:

1. **"Menu"**
2. **"Heating"**
3. **"Heating circuit 1 2 3"** for the required heating circuit

4. **"Reduced room temperature"**
5. **+/-** for the required value
6. **OK** to confirm

Central heating with this temperature:

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

Operating program



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

Operating program (cont.)

Setting the operating program

Only necessary if **"Only DHW"**  or **"Standby mode"**  is selected.

Tap the following on-screen buttons:

1. **"Heating circuit 1 2 3"** in the header to select the required heating circuit

2. 

or



The frame around the set operating program is highlighted in white.

3. **"Heating and DHW"** to set central heating

4. **OK** to confirm

For information on the operating programs, see page 13.

Time program



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

Setting a time program

Factory setting: **One** time phase from 6:00 to 22:00 h for every day of the week

1. **"Menu"**

2. **"Heating"**

3. **"Heating circuit 1"**, **"Heating circuit 2"** or **"Heating circuit 3"** as the required heating circuit

4. **"Time program, heating"**

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

Note

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

Heating curve



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

Setting the heating curve

Factory setting:

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

Tap the following on-screen buttons:

1. **"Menu"**

2. **"Heating"**

3. **"Heating circuit 1"**, **"Heating circuit 2"** or **"Heating circuit 3"** as the required heating circuit

4. **"Heating curve"**

5. **+/-** for the required value for **"Slope"** or **"Level"**

6. **OK** to confirm

Central heating

Heating curve (cont.)

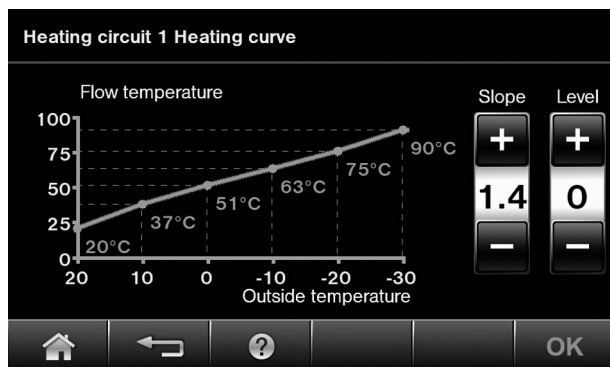


Fig. 16

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

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

Switching central heating off

Only required if "Heating and DHW" is set.

Tap the following on-screen buttons:

1. "Heating circuit 1 2 3" in the header to select the required heating circuit



3. ■ "Only DHW" (no central heating)
or
■ "Standby mode" (frost protection for the boiler and the DHW cylinder is active)

4. **OK** to confirm

Comfort function

Setting "Comfort mode"

Tap the following on-screen buttons:

1. "Heating circuit 1 2 3" in the header to select the required heating circuit



3. for the required set room temperature in comfort mode

4. Tap **OK** to confirm. The frame around the symbol is highlighted in white.

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

Note

The standard set room temperature continues to be shown in the standard menu. "Comfort mode" and the selected temperature are displayed alternately with the boiler water temperature.

Comfort function (cont.)

Ending "Comfort mode"

Tap again on



or

Automatically when the system switches to standard heating mode in accordance with the time program

or

Automatically after 8 hours


Energy saving function "Economy mode"

Setting "Economy mode"

Tap the following on-screen buttons:

1. "Heating circuit 1 2 3" in the header to select the required heating circuit



3. Tap **OK** to confirm. The frame around the  symbol is highlighted in white.

Note

This energy saving function can only be enabled in standard heating mode.

Ending "Economy mode"

Tap again on



or

Automatically when the system switches to reduced heating mode in accordance with the time program

Energy saving function "Holiday program"

Setting "Holiday program"

Note

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

The holiday program starts at 00:00 h the day after the 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 days of departure and return.

As long as the holiday program is enabled, "**Holiday program**" is displayed in the default display.

2. "Heating"

3. "Heating circuit 1 2 3" for the required heating circuit

4. "Holiday program"

Tap the following on-screen buttons:

1. "Menu"

Energy saving function "Holiday program" (cont.)

5. ▲/▼ for "Departure date" and "Return date"

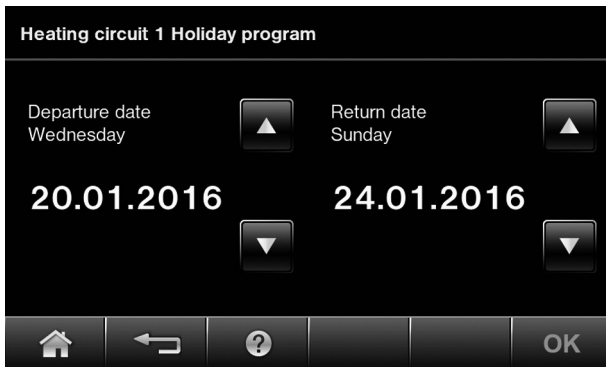


Fig. 17

6. OK to confirm
"Holiday program" is displayed in the default display.

The holiday program has the following effects:

- **Central heating:**
 - For heating circuits in the operating program **"Heating and DHW"**:
The rooms are heated to the set reduced room temperature (see page 24).
 - For heating circuits in the operating program **"Only DHW"**:
No central heating. Frost protection for the boiler and the DHW cylinder is active.
- **DHW heating:**
No DHW heating. Frost protection for the DHW cylinder is active.

Cancelling or deleting the "Holiday program"

Tap the following on-screen buttons:

1. "Menu"
2. "Heating"
3. "Heating circuit 1", "Heating circuit 2" or "Heating circuit 3" as the required heating circuit
4. "Holiday program"
5. ▼ for "Return date" the same date as for the "Departure date"
6. OK to confirm

DHW temperature

Factory setting: 50 °C

If you want to make changes to this, contact your local heating contractor.

Tap the following on-screen buttons:

1. "Menu"

2. "DHW"

3. "Set temperature, DHW"

4.  for the required value

5. OK to confirm

Operating program



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

Setting the operating program

Only required if "Standby mode"  is set.

Tap the following on-screen buttons:

1. "Heating circuit 1 2 3" in the header to select the required heating circuit

2. 

3. "Only DHW" (no central heating)

or

"Heating and DHW" (with central heating)

4. OK to confirm

For information on the operating programs, see page 13

Time program



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

Setting a time program

Factory setting: "Automatic"

During operation with standard room temperature, DHW in the DHW cylinder is heated to the set DHW temperature (see page 29).

The time phase for DHW heating automatically starts half an hour earlier than the time phase for central heating with standard room temperature. DHW heating will start, for example, 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.

You can change this time program **individually** in accordance with your requirements.

Tap the following on-screen buttons:

1. "Menu"

2. "DHW"

3. "Time program, DHW"

Note

Only for setting "Apartment building":
"Heating circuit 1 2 3" in the header to select the required heating circuit

4. "Individual"

5. OK to confirm

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

Note

- The DHW is not heated between the time phases. Frost protection for the DHW cylinder is active.
- When setting time programs, bear in mind that your heating system requires some time to heat the DHW cylinder to the required temperature.
- Any DHW heating process that has started will continue until the set DHW temperature is reached, even if the stop time has been reached.

DHW heating

Time program (cont.)

Increased DHW hygiene

This function can be used to heat the water in the DHW cylinder to a higher set DHW temperature. Your heating contractor can enable this function by specifying a second set DHW temperature. Set time phase 4 for this (see page 14). During this time, DHW will be heated to the second set DHW temperature value.

Note

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

Once-only DHW heating outside the time program

Note

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

In the energy cockpit, tap **"One-off cylinder heating"** (see page 19).

Setting the time program for the DHW circulation pump

Factory setting: **"Automatic"**

The DHW circulation pump operates in parallel to the DHW heating time program.

You can change this time program **individually** in accordance with your requirements.

4. **"Individual"**

5. **OK** to confirm

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

Tap the following on-screen buttons:

1. **"Menu"**
2. **"DHW"**
3. **"Time program, DHW circulation"**

Note


The DHW circulation pump remains off between the time phases.

Note

*Only for setting "Apartment building":
"Heating circuit 1 2 3" in the header to select the required heating circuit*

Switching DHW heating off

Tap the following on-screen buttons:

1. **"Menu"**
2. **"DHW"**
3. **"Set temperature, DHW"**
4.  for 10 °C
5. **OK** to confirm

Locking out the controls

The controls can be locked out in 2 stages via the display:

- All functions in the standard menu are operable. Emissions test mode can be enabled. All other functions are locked.
- All functions are locked. Emissions test mode can be enabled.

Tap the following on-screen buttons:

1. **"Menu"**

2. **"Settings"**

3. **"Disable operation"**

4. **"Only default display operational"** or **"Lock everything"**

5. Enter the password **"vitotronic"**.
You can change the password (see page 31).

6. **OK** to confirm

Unlocking the controls

Tap the following on-screen buttons:

1. Tap anywhere on the screen.
"Operation disabled" is displayed.

2. Tap **"Unlock"**.
The entry field and keyboard are displayed.

3. Enter password **"vitotronic"** or the password you have assigned.

4. **OK** to confirm

Changing the password for the control lockout function

Tap the following on-screen buttons:

1. **"Menu"**

2. **"Settings"**

3. **"Change passwords"**

4. Enter the old password.

5. Enter the new password.

Note

You will be asked to enter the new password again to confirm.

6. **OK** to confirm

Setting the display backlighting

Tap the following on-screen buttons:

1. **"Menu"**

2. **"Settings"**

3. **"Screen"**

4. **"Brightness, standby"** or **"Brightness, operation"**

5. ▲/▼ for the required value

6. **OK** to confirm

Signal tone for display operation (button tone)

In the delivered condition, a signal tone is enabled which sounds each time an on-screen button is tapped. This signal tone can be disabled.

Tap the following on-screen buttons:

1. **"Menu"**

2. **"Settings"**

3. **"Buzzer"**

4. **"ON"** or **"OFF"** for the required function.

Further adjustments

Naming heating circuits

You can name all heating circuits individually.

Note

The abbreviations **1**, **2**, **3** in the standard menu are retained.

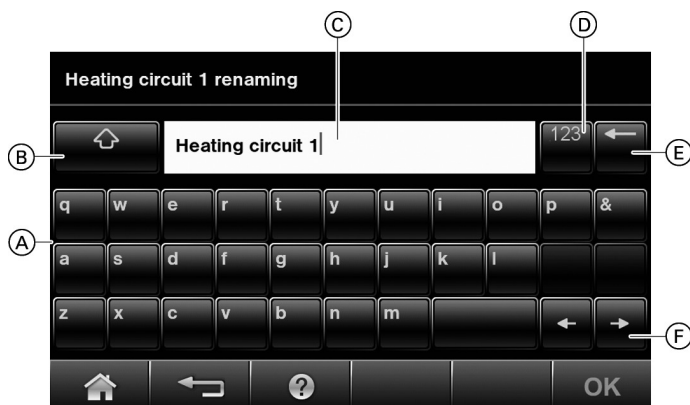


Fig. 18

- (A) Keypad
- (B) Shift between upper and lower case letters
- (C) Text box
- (D) Shift to the numeric keypad
- (E) Delete individual characters
- (F) Scroll forwards and backwards in the text box

Tap the following on-screen buttons:

1. "Menu"
2. "Settings"
3. "Rename heating circuits"
4. Select "Heating circuit 1", "Heating circuit 2" or "Heating circuit 3" and enter the required name, such as "Ground floor".

5. **OK** to confirm

The name assigned for each heating circuit appears in the main menu.

Setting the time and date

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

Tap the following on-screen buttons:

1. "Menu"
2. "Settings"
3. "Date and time"
4. "Date" or "Time"
5. ▲/▼ for the required value
6. **OK** to confirm

Setting the language

Tap the following on-screen buttons:

1. "Menu"
2. "Settings"
3. "Language"
4. Required language
5. **OK** to confirm

Entering contact details for the heating contractor

You can enter the contact details for your heating contractor. These details can be called up under Information.

Tap the following on-screen buttons:

1. "Menu"
2. "Settings"
3. "Input, service contact details"
4. Required entry field
5. Enter the text in the individual fields (see page 32).
6. OK to confirm

Permanently selecting the default display

You can select one of the following displays as the default display:

- "Heating"
- "Energy cockpit"
- "Favourites"

Tap the following on-screen buttons:

1. "Menu"
2. "Settings"
3. "Selecting the default display"
4. Required display
5. OK to confirm

Note

If you tap , the selected display will appear.

Restoring factory settings

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

Note

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

Settings and values that are reset:

- Set room temperature
- Reduced set room temperature
- Operating program
- Set DHW temperature
- Time program for central heating
- Time program for DHW heating
- Time program for DHW circulation pump
- Heating curve slope and level
- Comfort and energy saving functions are deleted.

Tap the following on-screen buttons:

1. "Menu"
2. "Settings"
3. "Factory settings"
4. "Heating circuit 1 2 3" for the required heating circuit
5. OK to confirm

Calling up information

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

Information in the main menu is split into groups:

- "General"
- "Heating circuit 1"
- "Heating circuit 2"
- "Heating circuit 3"
- "DHW"
- "Solar"
- "Reset data"
- "Service, contact details"

Note

If heating circuits have been named (see chapter "Naming heating circuits") the assigned name is displayed.

Detailed options for scanning individual groups can be found in chapter "Scanning options".

Tap the following on-screen buttons:

1. "Menu"
2. "Information"

DHW cylinder temperature curve

Subject to the type of DHW cylinder, the temperature curve is displayed graphically.

Temperature curves are shown for the individual test points in the DHW cylinder.

Tap the following on-screen buttons:

1. "Menu"
2. "Information"

3. "DHW"
4. "Cylinder bar chart"
5. Required period

You can call up the following periods:

- 24 hours
- 7 days
- 30 days

DHW cylinder temperature stratification

Subject to the type of DHW cylinder, the temperature stratification is displayed graphically.

Tap the following on-screen buttons:

1. "Menu"
2. "Information"
3. "DHW"

4. "Cylinder, temperature stratification"
5. Required period

You can call up the following periods:

- 24 hours
- 7 days
- 30 days

Calling up the solar energy yield in conjunction with solar thermal systems

Only in connection with solar control unit, type SM1. In conjunction with a Vitosolic solar control unit, you can call up the solar energy yield on the Vitosolic.

Tap the following on-screen buttons:

1. "Menu"
2. "Information"

3. "Solar"
4. "Solar energy bar chart"

Note

For further scanning options, e.g. for the solar circuit pump hours run, see the extended menu under "Information" in the "Solar" group.

Calling up contact details for your heating contractor

Tap the following on-screen buttons:

1. "Menu"

2. "Information"

Calling up information (cont.)

3. "Service, contact details"

Note

If no details have been entered, see page 33.

Resetting operating data (meters)

The following data can be reset to zero:

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

2. "Information"

3. "Reset data"


4. Required data point or "All data"

5. OK to confirm


Tap the following on-screen buttons:

1. "Menu"


Calling up service messages

Your heating contractor can set service intervals (limits) (e.g. for burner hours run). A service message is generated when these limits are exceeded. The display indicates that your heating system is due for a service by showing the  symbol and "Service".


Tap "Confirm".

 flashes in the footer.

Calling up a service message

1. Tap  in the footer.
The service message will be listed in yellow.

2. Notify your heating contractor.

If your heating system has several fault messages simultaneously, the following will be displayed after tapping :

"Faults" and "Service", "messages".


3. Tap "Service", "messages"

The service messages will be listed in yellow.

Note

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

Calling up fault messages

Your display indicates that your heating system has developed faults by showing the  symbol and "Fault". The red fault indicator on the control unit flashes (see chapter "Switching the heating system on").

Tap "Confirm".


 flashes in the footer.

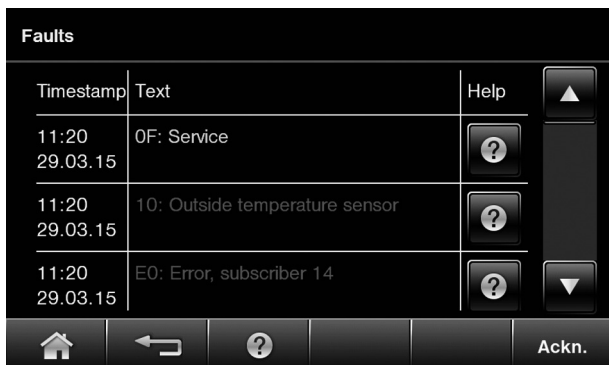
Note

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

Calling up fault messages (cont.)

Calling up a fault message

1. Tap  in the footer.
The fault message will be listed in red.
Service messages that are present at the same time appear in yellow.







Timestamp	Text	Help
11:20 29.03.15	OF: Service	
11:20 29.03.15	10: Outside temperature sensor	
11:20 29.03.15	E0: Error, subscriber 14	

Fig. 19

2. Tapping  calls up information on the heating system characteristics.
Tips on measures you can take yourself **before** notifying your heating contractor are displayed.
3. Make a note of the fault code and the cause of the fault. For example: **10 "Outside temperature sensor"**.
This enables the heating contractor to be better prepared and may save you unnecessary travelling costs.

4. Notify your heating contractor.
5. Tap **"Ackn."**.



Danger

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

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

Note

If service messages are present on your heating system at the same time, **"Faults"** and **"Service"**, **"messages"** will be displayed.



Tap **"Faults"**

The fault messages will be listed in red.

Calling up help texts

You can call up help texts about the displays and functions.

Tap the following on-screen buttons:

1.  to call up the help texts
2.  to return to the original display

Emissions test mode

Emissions test mode for testing the flue gas with briefly raised boiler water temperature.

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

Note

The flue gas inspector can also activate emissions test mode if the controls are locked out by your heating contractor.


Activating emissions test mode

Tap the following on-screen buttons:

1. "Menu"
2. "Test mode"

3. "ON"

The following functions are activated:

- The burner is switched on. The display shows 
- The pumps are started.
- The mixers remain set to the control function.
- The electronic temperature controller regulates the boiler water temperature.



Note

Ensure that enough heat is being drawn while the function is active.


Ending emissions test mode

- Automatically after 30 minutes
or
- Tap "OFF".


Rooms are too cold

Cause	Remedy
The heating system is switched off.	<ul style="list-style-type: none"> ▪ Turn on the ON/OFF switch (see page 22). ▪ Switch on the mains isolator if installed (outside the boiler room). ▪ Set the MCB in the power distribution board (main domestic MCB).
<ul style="list-style-type: none"> ▪ Control unit incorrectly adjusted. ▪ The remote control (if installed) is set incorrectly.  Separate operating instructions	<p>Central heating must be enabled.</p> <p>Check the settings and correct if required:</p> <ul style="list-style-type: none"> ▪ Operating program (see page 13) ▪ Room temperature (see page 24) ▪ Time (see page 32) ▪ Time program central heating (see page 25) ▪ Heating curve (see page 25)
The DHW cylinder is being heated.	<p>Wait until the DHW cylinder has been heated up.</p> <p>Reduce the DHW draw-off rate or temporarily reduce the DHW temperature as required.</p>
No fuel.	<p>With LPG: Check the fuel reserves and re-order if required.</p> <p>For natural gas: Open the gas shut-off valve. If necessary, check with your gas supply utility.</p>
"Burner fault" is displayed.	<p>Press R (see page 22).</p> <p>Acknowledge the fault (see page 36).</p> <p> Danger If faults are not rectified, they can have life threatening consequences. Do not acknowledge fault messages several times in quick succession. Notify your heating contractor if a fault recurs. Your heating contractor will be able to analyse the cause and rectify the fault.</p>
"Fault" is displayed. The red fault indicator flashes.	<p>Check what type of fault it is. Acknowledge the fault (see page 36). If necessary, notify your heating contractor.</p>
"Screed drying" is activated.	<p>No action required.</p> <p>After expiry of the screed drying time, the selected operating program will become active.</p>
The mixer motor is faulty.	<p>Adjust the mixer manually.</p>


Rooms are too hot

Cause	Remedy
<ul style="list-style-type: none"> ▪ Control unit incorrectly adjusted. ▪ The remote control (if installed) is set incorrectly.  Separate operating instructions	Check the settings and correct if required: <ul style="list-style-type: none"> ▪ Operating program (see page 13) ▪ Room temperature (see page 24) ▪ Time (see page 32) ▪ Time program central heating (see page 25) ▪ Heating curve (see page 25)
"Fault" is displayed. The red fault indicator flashes.	Check what type of fault it is. Acknowledge the fault (see page 36). If necessary, notify your heating contractor.
The mixer motor is faulty.	Adjust the mixer manually.

There is no hot water

Cause	Remedy
The heating system is off.	<ul style="list-style-type: none"> ▪ Turn on the ON/OFF switch (see page 22). ▪ Switch on the mains isolator if installed (outside the boiler room). ▪ Set the MCB in the power distribution board (main domestic MCB).
<ul style="list-style-type: none"> ▪ Control unit incorrectly adjusted. ▪ The remote control (if installed) is set incorrectly.  Separate operating instructions	DHW heating must be enabled. Check the settings and correct if required: <ul style="list-style-type: none"> ▪ Operating program (see page 13) ▪ Room temperature (see page 24) ▪ Time (see page 32) ▪ Time program central heating (see page 25) ▪ Heating curve (see page 25)
No fuel.	With LPG: Check the fuel reserves and re-order if required. For natural gas: Open the gas shut-off valve. If necessary, check with your gas supply utility.
"Fault" is displayed. The red fault indicator flashes.	Check what type of fault it is. Acknowledge the fault (see page 36). If necessary, notify your heating contractor.

The DHW is too hot

Cause	Remedy
The control unit is incorrectly adjusted.	Check and correct the DHW temperature if required (see page 29).
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

What to do if...

"Fault" is displayed

Cause	Remedy
Heating system fault	Proceed as described on page 36.

and "Service" are displayed

Cause	Remedy
The time for a service, as specified by your heating contractor, has arrived.	Proceed as described on page 35.

"Operation disabled" is displayed

Cause	Remedy
The controls have been locked out.	Unlock the controls (see page 31).

"External hook-up" is displayed

Cause	Remedy
The operating program set at the control unit has been switched over by an external device, e.g. EA1 extension.	No action required. When the external changeover is no longer present, the set operating program is active again.

"External program" is displayed

Cause	Remedy
The operating program set at the control unit has been switched over by the Vitocom communication interface.	You can change the operating program.

Cleaning

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

Inspection and maintenance

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

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

Appliance

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

DHW cylinder (if installed)

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

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

In addition for Vitocell 100:

We recommend that the correct function of the sacrificial anode is checked annually by your heating contractor.

The function of the sacrificial anode can be checked without interrupting the system operation. The heating contractor will check the earth current with an anode tester.

Safety valve (DHW cylinder)

The function of the safety valve must be checked every six months by the user or a contractor through venting (see valve manufacturer's instructions). The valve seat may become contaminated.

Water may drip from the safety valve during a heat-up process. The outlet is open to the atmosphere and must not be closed off.

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.

Overview of extended menu

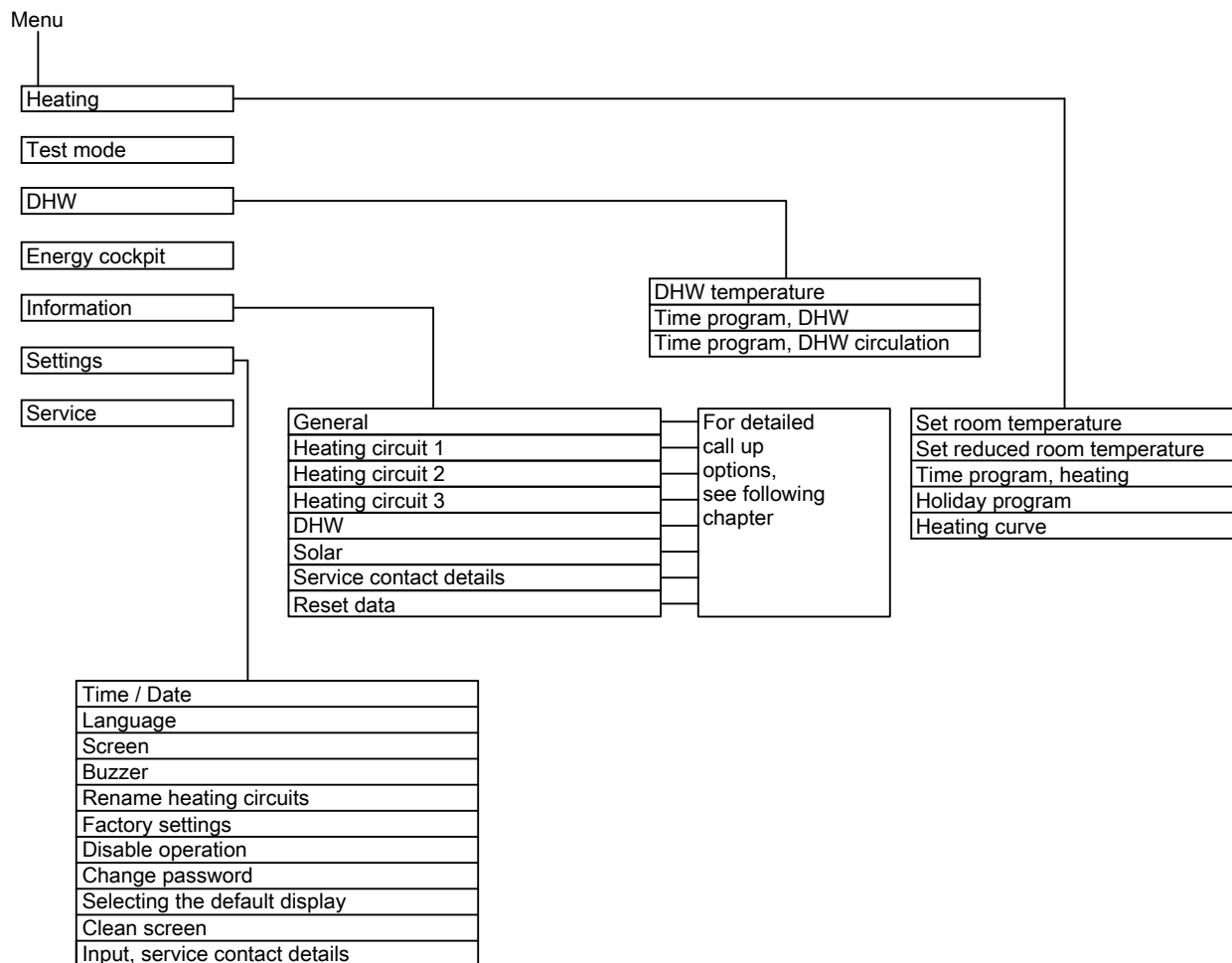


Fig. 20

Scanning options under "Information"

Note

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

Tap the following on-screen buttons:

1. "Menu"
2. "Information"
3.
 - "General"
 - "Heating circuit 1"
 - "Heating circuit 2"
 - "Heating circuit 3"
 - "DHW"
 - "Solar"
 - "Reset data"
 - "Service, contact details"

General

"Outside temperature"
"Boiler temperature"
"Common flow temperature"
"Flue gas temperature"
"Burner"
"Burner hours run"
"Central fault message"
"Subscriber no."
"Inputs, extension EA1" ►
"Function, input, ext. EA1, input DE1" ►
"Function, input, ext. EA1, input DE2" ►
"Function, input, ext. EA1, input DE3" ►
"External hook-up 0 .. 10 V, extension EA1"
"Time"
"Date"
"Serial number boiler"
"Serial number control unit"

Scanning options under "Information" (cont.)

Heating circuit 1, 2 or 3

"Operating program" ▶
"Operating status" ▶
"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" ▶

DHW

"Time program, DHW" ▶
"Time program, DHW circulation"▶
"Cylinder bar chart"▶
"Cylinder, temperature stratification"▶
"DHW temperature"
"Calculated cylinder temperatures"▶
"DHW circulation pump"
"Cylinder primary pump"
"Heat-up condition, DHW cylinder"
"Cylinder type"

Solar

"Solar energy bar chart" ▶
"Collector temperature"
"Solar DHW"
"Solar circuit pump" (hours run)
"Solar energy"
"Solar circuit pump"
or
"Speed, solar circuit pump"
"Heating suppression, DHW"
"SM1 output 22"
"Sensor 7"
"Sensor 10"
"Heating suppression, heating"
"Absorber area"

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

Note

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

Operating status

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

Extension kit for heating circuit with mixer

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

Screed drying

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

Terminology (cont.)

The screed drying function affects heating circuits with mixer:

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

Underfloor heating

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

Therefore, heating to the reduced room temperature at night and enabling "**Economy mode**" during short absences do not result in significant energy savings.

Heating mode

Standard heating mode

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

Reduced heating mode

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

Room temperature-dependent heating mode

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

The room temperature is captured and transmitted to the control unit by a sensor. The sensor is fitted in the room.

The flow temperature is regulated independently of the outside temperature.

Weather-compensated heating mode

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

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

Heating curve

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

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

The heating curves shown apply with the following settings:

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

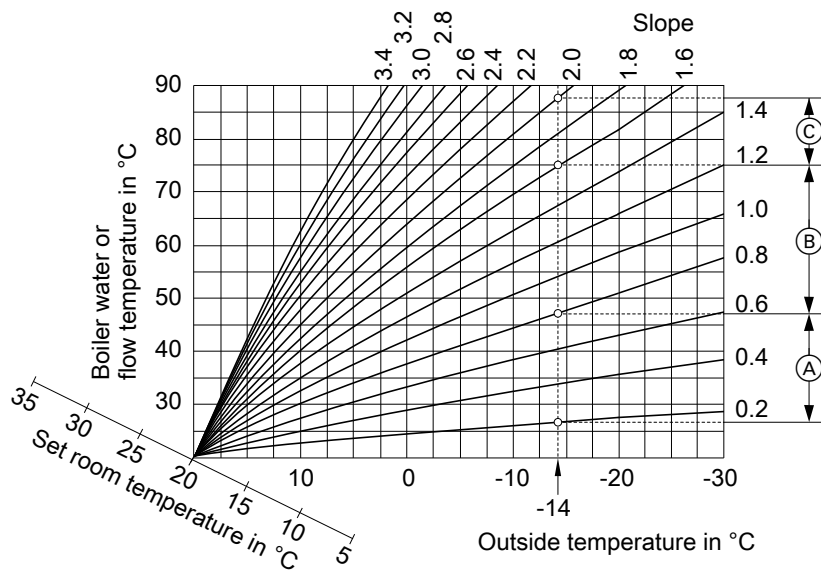


Fig. 21

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
- (C) Heating system with a boiler water temperature in excess of 75 °C, slope 1.6 to 2.0

Factory settings: slope = 1.4 and level = 0.

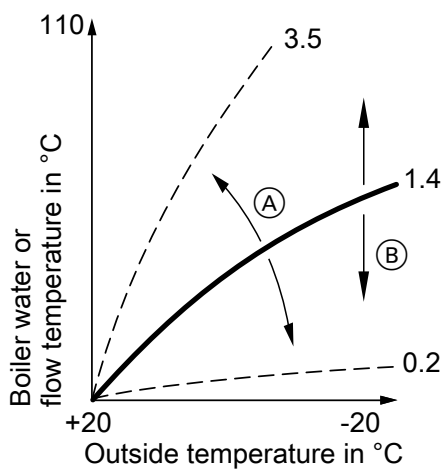


Fig. 22

- (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 between the boiler and radiators, in which the heating water circulates.

A heating system may comprise several heating circuits. For example, one heating circuit for the rooms occupied by you and one heating circuit for the rooms of a separate apartment.

Heating circuit pump

Circulation pump for circulating the heating water in the heating circuit

Mixer

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

Night setback

See "Reduced heating mode"

Open flue operation

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

Room sealed operation

The combustion air is drawn from outside the building.

Room temperature

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

Terminology (cont.)

Safety valve

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

Solar circuit pump

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

Set temperature

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

Summer mode

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

Cylinder loading pump

Circulation pump for heating the water inside the DHW cylinder

Drinking water filter

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

Weather-compensated mode

See "Heating mode"

DHW circulation pump

The DHW circulation pump transports the DHW around a ring pipeline 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 point.

Information on disposal

Disposal of packaging

You heating contractor will dispose of the packaging of 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 contact your heating contractor in connection with 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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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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