

Operating instructions

for the system user



With constant temperature or weather-compensated control unit



VITOPEND 100-W



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.

Note

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



Please note

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

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 never be carried out by unsupervised children.

Appliance connection

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



Danger

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

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

For your safety (cont.)

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 be carried out only 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.

- Do not smoke. Prevent naked flames and sparks. Never switch lights or electrical appliances on or off.
- Close the gas shut-off valve.
- Open windows and doors.

- 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.

Safety instructions

For your safety (cont.)

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**

When water escapes from the appliance there is a risk of electrocution.

- Switch off the heating system by means of an external isolator (for example fuse box, domestic power distribution).
- Notify your 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. Notify your 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.

Do not make any subsequent modifications to the building characteristics that could affect safe operation (e.g. cable/pipe-work routing, cladding or partitions).

**Danger**

Easily flammable liquids and materials (e.g. naphtha/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.

For your safety (cont.)



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.

Have all installation or replacement work carried out exclusively by qualified contractors.

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Introductory information

Intended use

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

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

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

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

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

Commissioning

The commissioning and adjusting of the control unit to local conditions and the structural characteristics of the building must be carried out by your heating contractor.

Terminology

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



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

Your system is preset

Your heating system is set to standby mode at the factory. Frost protection is active.

Your heating contractor can make further settings for you during commissioning.

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

Power failure

All settings are saved if there is a power failure.

Energy saving tips

Central heating

■ **Room temperature:**

Never overheat your rooms. Every degree of room temperature reduction saves up to 6 % on your heating bills.

If possible, set your room temperature no higher than 20 °C (see page 17).

■ **Ventilation:**

For venting/airing, open the windows fully for a brief time. During this time, close the thermostatic valves (if no mechanical ventilation system is installed).

■ **Roller shutters:**

Close roller shutters (where installed) at dusk.

■ **Thermostatic valves:**

Ensure that thermostatic valves are properly adjusted.

■ **Radiators:**

Never cover radiators or thermostatic valves.

DHW heating

■ **DHW temperature:**

Do not set your DHW temperature too high (see page 26).

■ **Hot water consumption:**

Consider showering instead of running a bath. A shower generally uses less energy than a full bath.

Programming unit

Display and control elements

You can change any settings on your heating system centrally at the control unit.

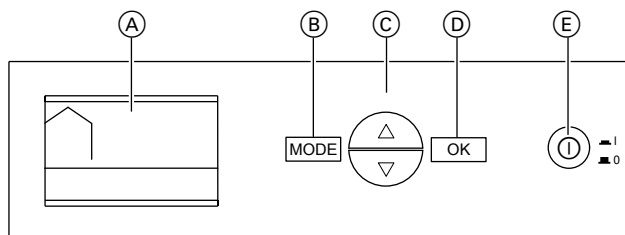
Note

If your system is equipped with a room temperature controller, the room temperature settings can be made on the controller (see separate operating instructions).

All thermostatic radiator valves must be fully open in the room where the room temperature controller is installed.

Note

The display lights up as soon as you make any settings on the programming unit.

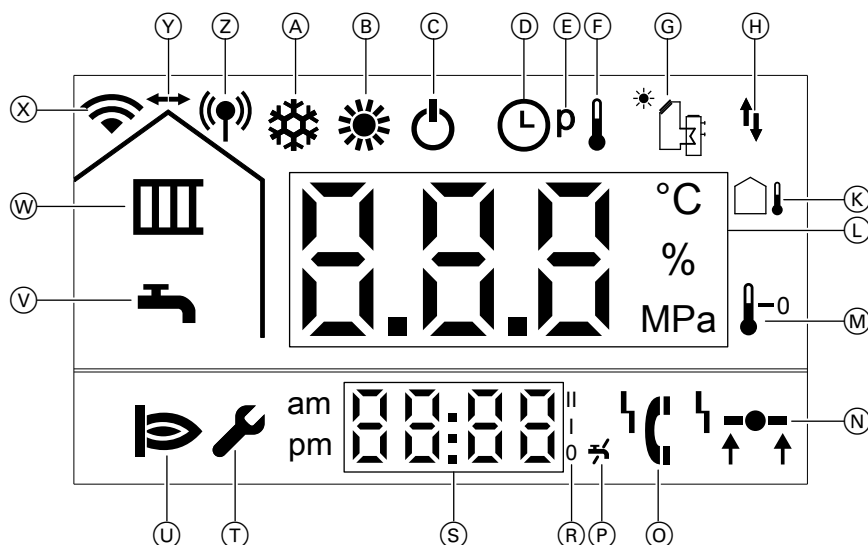


- (A) Display
- (B) **MODE** key, to call up the menu.
- (C) Arrow keys, to scroll through the menu or adjust values.
- (D) **OK** key, to confirm your selection or save the setting made.
- (E) ON/OFF switch

Programming unit (cont.)

Symbols on the display

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



Displays:

- (A) Winter mode is active.
- (B) Summer mode is active.
- (C) Standby mode is active.
- (D) Time program is active.
- (E) Flashes while a time program is being set.
- (F) Lights up or flashes when a room temperature sensor is connected (accessories).
- (G) External extension is active, solar circuit pump (accessories).
- (H) An external extension for the control unit is connected (accessories).
- (K) Outside temperature sensor is connected (accessories).
- (L) Main display with measuring units corresponding to the value displayed
- (M) Frost protection is active.
- (N) Fault display, carry out a reset.
- (O) Fault display, notify your heating contractor.
- (P) DHW heating is active or not active within a time program.
- (R) Operating status
- (S) Additional display, showing the time in standby mode, for example.
- (T) Service setting is active.
- (U) Burner is operational.
- (V) Operating program "DHW" is active.

Operation

Programming unit (cont.)

- | | |
|--|------------------------------|
| (W) Operating program "Heating" is active. | (Y) WiFi data exchange |
| (X) WiFi enabled | (Z) Access point mode active |


Operating program

Operating programs for central heating, DHW, frost protection

Symbol	Operating program	Function
Central heating and DHW heating		
⚙	Heating and DHW (winter mode)	<ul style="list-style-type: none">■ The rooms 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		
☀	DHW only (summer mode)	<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 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 enabled.

Operating modes of the heating system

Operation without room temperature controller

- | | |
|---|--|
|  Further information can be found in chapter "Terminology" in the Appendix. | Setting the required heating water temperature, see page 17. |
|---|--|

Operating modes of the heating system (cont.)

Operation with room temperature controller



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

Make any settings on the connected room temperature controller using the relevant operating instructions.

Note

Set the heating water temperature high enough to achieve the required room temperature.

For settings, see page 17.

Room temperature-dependent operation



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

The heating water temperature is regulated according to a specified room temperature.

For setting the room temperature, see page 17.

Note

To prevent heat being generated unnecessarily at times when you do not require central heating connect either a room temperature controller to your heating system, or a room temperature sensor that specifies the heating times for the boiler control unit via a time switch. This enables central heating to be suspended at night, for example, in order to save energy.

Weather-compensated operation



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

The heating water temperature is regulated in accordance with a specified heating curve and the prevailing outside temperature.

For heating curve setting, see page 23.

Note

To prevent heat being generated unnecessarily at times when you do not require central heating, you should additionally connect a room temperature controller to your heating system or activate the time switch program of the boiler control unit. This enables central heating to be suspended at night, for example, in order to save energy.

Time program



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

A time program can be set with any operating mode:

- Operation without room temperature controller
- Room temperature-dependent operation
- Weather-compensated operation

Time phases

In the time program, a day is divided into one-hour time phases. It is for you to decide what happens in these time phases, e.g. whether your rooms should be heated to the standard room temperature.


Operating status

For each time phase, you can choose between 3 operating statuses. The currently active operating status is shown next to the additional display (see page 11).

- II Standard heating mode
- I Reduced heating mode
- 0 Standby mode

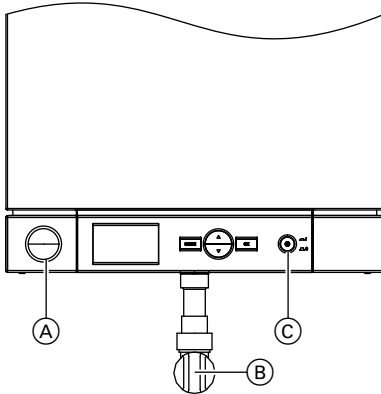
You can set up a time program for the following functions:

- Central heating (see page 19)
- DHW heating (see page 28)

If a time program is set, the  symbol is shown on the display.

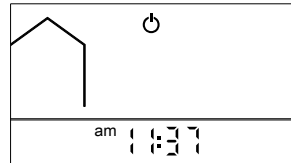
Starting the heating system

We recommend you contact your local heating contractor if your heating system has been out of use for a long period.



1. Check the pressure of your heating system on pressure gauge (A).
Minimum system pressure 0.8 bar (0.08 MPa)
 If the system pressure is too low, top up the water or notify your heating contractor.
2. Open gas shut-off valve (B).

3. Switch ON the power supply, e.g. at a separate MCB/fuse or a mains isolator.
4. Turn ON/OFF switch (C) ON.
 The control unit carries out a self test after being switched ON. Your heating system and room temperature controller (if installed) are now ready for operation.



Note

Boiler frost protection is enabled.



Please note

Frost protection is only ensured for as long as the power supply is stable.
 Switch ON the power supply (MCB/fuse, mains isolator) and the control unit ON/OFF switch.

Shutting down the heating system

- If you do not intend using your heating system for a while, such as during a summer holiday, switch off central heating and DHW heating (see page 25).

- You can switch your heating system OFF at the ON/OFF switch if you do not intend using it.

We recommend you contact your heating contractor if you are planning to take your heating system out of use for long periods.

Your heating contractor can then take suitable steps, such as frost protection for the system or heating surface preservation, as required.

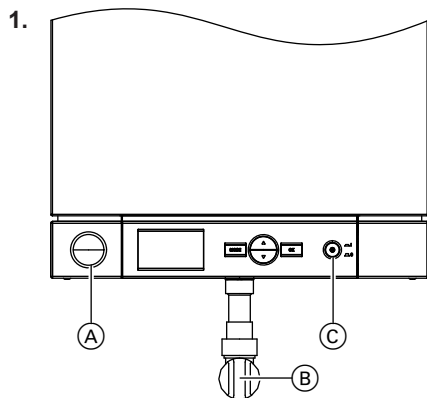
2. Close gas shut-off valve (B).

Note

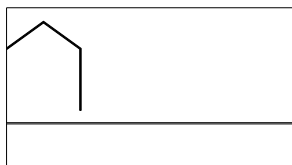
*The system is **no longer** protected against frost.*

All control unit settings are retained.

Shutting down the heating system



Turn ON/OFF switch (C) OFF.
The display goes blank.



Room temperature



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

Setting the standard room temperature

Operation without room temperature controller — Setting the heating water temperature




If no outside temperature sensor and no room temperature controller is connected.

The room temperature is influenced by the heating water temperature. In the delivered condition, the heating water temperature is set to 70 °C.

2. ▲/▼ for the required value.
Setting range:
40 to 76 °C

3. OK to confirm

Press the following keys:

1. **MODE** repeatedly, until the heating water temperature appears on the main display together with symbols  and , and symbol  is flashing.



Room temperature-dependent operation — Setting the set room temperature






If no outside temperature sensor is connected, but a room temperature sensor is.

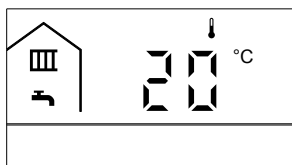
Central heating

Room temperature (cont.)

If the required room temperature is not achieved, ensure the set room temperature setting is sufficiently high. In the delivered condition, the set room temperature is set to 20 °C.

Press the following keys:

1. **MODE** repeatedly, until the set room temperature appears on the main display together with symbols ,  and , and symbols  and  are flashing.



2. **▲/▼** for the selected value

3. **OK** to confirm

Note

If a room temperature sensor is used (Viessmann accessories), the use of a room temperature controller is not required. The set value adjustments are made directly on the boiler control unit.

Weather-compensated operation — Setting the heating curve

If an outside temperature sensor is connected.

See chapter "Setting the heating curve" on page 23.

Operating program





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

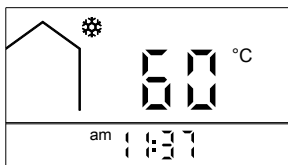
Operating program (cont.)

Setting the operating program for central heating and DHW heating

You want to heat your rooms and you want to have DHW available.

Press the following keys:

1. **MODE** repeatedly, until **"Set"** appears on the main display, together with a flashing  symbol for winter mode.
2. **OK** to confirm
3. If there is no demand for central heating or DHW heating and no time program is active, only symbol , the heating water temperature (for example 60 °C) and the current time are displayed.



If there is a current demand or a time program is active, you may also see additional symbols.

Time program



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



Central heating

Time program (cont.)


Switching the time program on/off

Press the following keys:

3. OK to confirm

1. **MODE** repeatedly, until **"Set"** appears on the main display, together with flashing symbols , **p** and .

Note
"On" Time program is switched on.
"OFF" Time program is switched off.

2. / until **"On"** or **"OFF"** appears on the additional display.



Selecting the operating status and setting a value

Depending on the operating mode of the heating system you can input different settings for the operating status. The currently active operating status is shown next to the additional display.

- II Standard heating mode
- I Reduced heating mode
- 0 Standby mode



Operation without room temperature controller

You are setting the heating water temperature. Example:

Operating status I	Operating status II
 <div>⌚ P °C 45</div> <div>L: I</div>	 <div>⌚ P °C 75</div> <div>L: II</div>

Room temperature-dependent operation

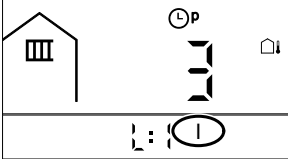
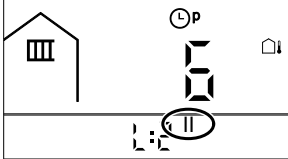
You select the set room temperature. Example:

Operating status I	Operating status II
 <div>⌚ P I °C 19</div> <div>L: I</div>	 <div>⌚ P I °C 23</div> <div>L: II</div>





Time program (cont.)



Weather-compensated operation

You are setting the heating curve. Example:

Operating status I	Operating status II
	



Press the following keys:

1. **MODE** repeatedly, until symbols , **P** and  flash and the current temperature value or the current heating curve is shown on the main display.
"L:1" and symbol **I** flash in the additional display.
2. / to change the current value or the heating curve for reduced mode.
3. **MODE** to confirm
"L:2" and symbol **II** flash in the additional display.

4. / to change the current value or the heating curve for standard mode.

5. **OK** to confirm

Note

- With room temperature-dependent operation, the following symbol also flashes: .
- With weather-compensated operation, the following symbol also flashes: .

Setting the heating programs

There are 3 different, preset heating programs: P01, P02 and P03
P01 and P02 are unmodifiable standard programs: P01 for working days and P02 for weekend days

P03 can be individually programmed.

Central heating

Time program (cont.)

Preset heating levels

Phase (hour)	P01 (working days)	P02 (weekend days)	P03 (programmable)
0	I	I	I
1	I	I	I
2	I	I	I
3	I	I	I
4	I	I	I
5	I	I	I
6	II	II	II
7	II	II	II
8	II	II	II
9	I	II	I
10	I	II	I
11	I	II	I
12	I	II	I
13	I	II	I
14	I	II	I
15	I	II	I
16	I	II	I
17	II	II	I
18	II	II	II
19	II	II	II
20	II	II	II
21	II	II	II
22	I	I	I
23	I	I	I

Setting a seven-day program

Press the following keys:

- 1. **OK+▼** simultaneously for longer than 5 seconds.
- 2. **MODE** to confirm.

Note
The program starts with the current day of the week.

- 3. **▲/▼** to select the required program.
- 4. **OK** to confirm.
The following day is shown.
The previously selected program is automatically adopted.
- 5. **▲/▼** to change the program.

Time program (cont.)

6. OK to confirm.
Repeat steps 3 to 6 for the other days of the week.

7. MODE to exit write mode for the seven-day program.

Setting a day program

Press the following keys:

Note

Starting from the "Seven-day program setting" menu

- 1. OK+▼** simultaneously for longer than 5 seconds.
- 2. OK** to get into the P03 program to be edited.
- 3. ▲/▼** to select the required heating level (0, I, II) for the hourly phases.

4. OK to confirm.
The subsequent phase is shown. The previously selected value is automatically adopted into the phase.

5. ▲/▼ to change the value.

6. OK to confirm.
Repeat steps 3 to 6 for the full 24 hours.

7. MODE to return to write mode for the seven-day program.

Note

*Any changes that are not confirmed with **OK** are not adopted.*

Terminating or prematurely cancelling the setting of time phases

1. MODE repeatedly until the required display appears.

Heating curve — Weather-compensated operation



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

Setting the heating curve


An outside temperature sensor must be connected for weather-compensated operation.

Central heating

Heating curve — Weather-compensated operation (cont.)

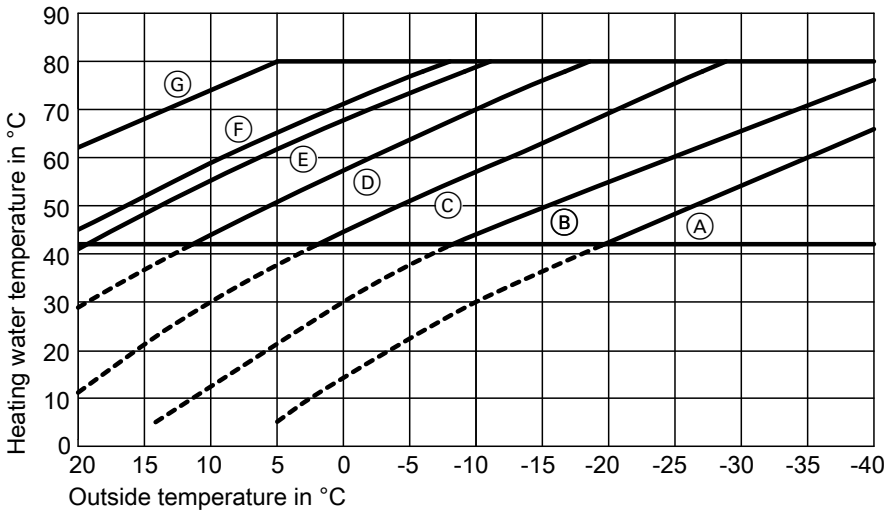
Press the following keys:

2. ▲/▼ to select the heating curve

1. **MODE** repeatedly, until  flashes and the current set heating curve appears on the main display.
Heating curve "1" to "6" or "dEF" for the factory setting

3. **OK** to confirm

Vitopend 100-W heating curves





- (A) Do not adjust (heating curve "1")
- (B) Heating curve "2"
- (C) Heating curve "3"
- (D) Heating curve "4"

- (E) Factory set heating curve "dEF"
- (F) Heating curve "5"
- (G) Heating curve "6"

Stopping central heating

Press the following keys:

2. OK to confirm

1. **MODE** repeatedly, until **"SEt"** appears on the main display, together with a flashing  symbol for summer mode (no central heating) or repeatedly, until **"SEt"** appears together with a flashing  symbol for standby mode (frost protection is active)

DHW heating

DHW temperature

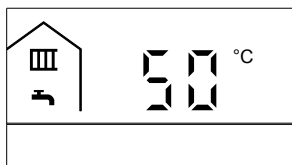


Further information can be found in chapter "Terminology" in the Appendix.

Setting the DHW temperature

Press the following keys:

- 1. MODE** repeatedly, until the DHW temperature appears on the main display together with symbols and , and symbol is flashing.



- 2. ▲/▼** for the selected value
Setting range: 30 to 57 °C
(30 to 60 °C for operation with DHW cylinder)
- 3. OK** to confirm

Note

If you set a temperature value below 30 °C for the DHW temperature, "OFF" appears and DHW heating is deactivated.

Operating program



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

Setting the operating program for DHW heating

You do not want to heat your rooms but would like to have DHW available.

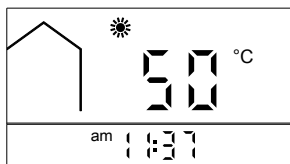
- 2. OK** to confirm

Press the following keys:

- 1. MODE** repeatedly, until "Set" appears on the main display along with a flashing symbol for summer mode.


Operating program (cont.)

3. If there is no demand for central heating or DHW heating and no time program is active, only symbol ☀, the DHW temperature (e.g. 50 °C) and the current time are displayed.




If there is a current demand or a time program is active, you may also see additional symbols.

Time program

-  Further information can be found in chapter "Terminology" in the Appendix.

Switching the time program on/off

Press the following keys:

1. **MODE** repeatedly, until "**SET**" appears on the main display, together with flashing symbols ☼, **p** and .

2. **▲/▼** until "**On**" or "**OFF**" appears in the additional display.

3. **OK** to confirm

Note

"On" Time program is switched on.
"OFF" Time program is switched off.

Time program (cont.)

Setting the time program for DHW heating

Note

You can only adjust the time program for DHW heating if a DHW cylinder is connected to the central heating boiler.

In the time program, a day is divided into one-hour time phases. For each time phase you can select whether DHW heating should be on or off.

Setting a day program

Press the following keys:

1. **OK+▲** simultaneously for longer than 5 seconds.
2. **MODE** to confirm
3. **▲/▼** for switching DHW heating on/off in the 1-hour time phase.

Note

Display

- e.g. **"50 °C"** (preset DHW temperature):
DHW heating is switched on.
- **"OFF"**:
DHW heating is switched off.

4. **OK** to confirm. The next phase is displayed. The previously selected value is automatically adopted.

5. Repeat steps 3 and 4 for the full 24 hours.

Note

*Any changes that are not confirmed with **OK** are not adopted.*

Terminating or prematurely cancelling the setting of time phases

1. **MODE** repeatedly until the required display appears.

Setting the time and date

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

Press the following keys:

- | | | | |
|------------------|---|----------------|--|
| 1. MODE+▼ | simultaneously for approx. 5 seconds, until "Set" appears on the main display together with a flashing ☉ symbol. | 6. OK | to confirm
The selected minute, e.g. ":45" is shown in the additional display. |
| 2. MODE | to confirm.
"12H" or "24H" is shown in the additional display | 7. ▲/▼ | to select the current minute |
| 3. ▲/▼ | to select the 12-hour or 24-hour mode | 8. OK | to confirm |
| 4. OK | to confirm
The selected hour, e.g. "10:" is shown in the additional display. | 9. ▲/▼ | to select the day of the week |
| 5. ▲/▼ | to select the current hour | 10. OK | to confirm |
| | | 11. ▲/▼ | to select the month |
| | | 12. OK | to confirm |
| | | 13. ▲/▼ | to select the day |
| | | 14. OK | to confirm |
| | | 15. ▲/▼ | to select the year |
| | | 16. OK | to confirm |

Displaying the date

You can display the set date:

Further adjustments

Setting the time and date (cont.)

Press the following keys:

1. ▲+▼ simultaneously. The year **"2015"**, weekday **"d.1"** and month:day **"01:01"** are shown on the additional display.
This means: Monday,
01/01/2015

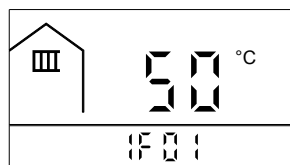
Scanning information

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

Press the following keys:

1. ▲/▼ to scroll through the information.
 - The current values are shown in the main display.
 - Details of what is currently being scanned are shown in the additional display.

For example **"IF01"**, the current heating water temperature:










Scan	Display	Symbols	
		flashes	continuously shown
Current heating water temperature	"IF01"		°C
Set heating water temperature	"IF02"		 ⊕ °C
Set maximum heating output	"IF03"		%
Current DHW temperature	"IF04"		°C
Set DHW temperature	"IF05"		 °C
DHW flow rate	"IF06"		
Current collector temperature (only in conjunction with external extension)	"IF07"		 °C
Current cylinder temperature, bottom (only in conjunction with external extension)	"IF08"		 °C 1
Current cylinder temperature, top (only in conjunction with external extension)	"IF09"		 °C 2

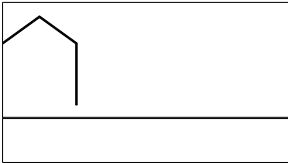


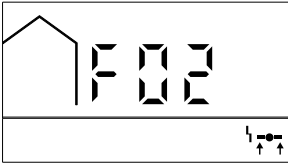



Calling up information

Scanning information (cont.)





Scan	Display	Symbols flashes	continuously shown
Current outside temperature (for operation with outside temperature sensor)	"IF10"		°C
Current room temperature (for operation with room temperature sensor)	"IF10"		°C
Set heating curve (for operation with outside temperature sensor)	"IF11"		 
Set room temperature (for operation with room temperature sensor)	"IF11"		 °C 
Burner status	"IF12"		
Current modulating current	"IF13"		
Current burner output	"IF14"		%
---	"IF15"		
Gas solenoid valve position ("On" or "OFF")	"IF16"		
Fan status ("On" or "OFF")	"IF17"		
Circulation pump status ("On" or "OFF")	"IF18"		
3-way diverter valve position ("3CH" (heating position) or "3dH" (DHW position) or "3--" (centre position))	"IF19"		
Boiler type	"IF21"		
OpenTherm ("Ot""On" or "Ot""OFF")	"IF22"		

Rooms are too cold


Cause	Remedy
<p>The heating system is switched off.</p> 	<ul style="list-style-type: none"> ■ Turn ON the ON/OFF switch (see diagrams from page 10). ■ Switch the mains isolator ON (if installed). ■ Check the MCB/fuse in the power distribution board (main domestic MCB/fuse).
<ul style="list-style-type: none"> ■ Control unit incorrectly adjusted. ■ The room temperature controller (if installed) is set incorrectly. <p> Separate operating instructions</p>	<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 19) ■ Room temperature (see page 17) ■ Time (see page 29) ■ Time program, central heating (see page 19) ■ Heating curve (see page 23)
<p>Symbol  is shown and message code F02, F03, F04, F05, F07 or F08 is flashing.</p> 	<p>Simultaneously press MODE and OK, until the  symbol flashes (reset). Contact your local heating contractor if the fault reappears on the display.</p>

What to do if...

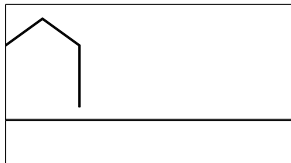







Rooms are too cold (cont.)

Cause	Remedy
<p>Symbols  and  are shown;  and message code 0C, A0, CC, F10, F18, F30, F38, F51, F59, F70, F78, F80, F88, F90 or F98 are flashing.</p> 	<p>Notify your heating contractor.</p>
<p>No fuel.</p>	<p>Open the gas shut-off valve. If necessary, check with your gas supply utility.</p>

Rooms are too hot

Cause	Remedy
<ul style="list-style-type: none">■ Control unit incorrectly adjusted.■ The room temperature controller (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 19)■ Room temperature (see page 17)■ Time (see page 29)■ Time program, central heating (see page 19)■ Heating curve (see page 23)

There is no hot water




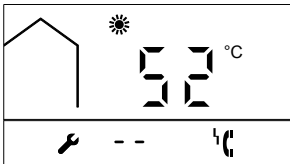
Cause	Remedy
<p>The heating system is switched off.</p> 	<ul style="list-style-type: none"> ■ Turn ON the ON/OFF switch (see diagrams from page 10). ■ Switch the mains isolator ON (if installed). ■ Check the MCB/fuse in the power distribution board (main domestic MCB/fuse).
<p>Control unit incorrectly adjusted.</p>	<p>DHW heating must be enabled.</p> <p>Check the settings and correct if required:</p> <ul style="list-style-type: none"> ■ Operating program (see page 26) ■ DHW temperature (see page 26) ■ Time program, DHW heating (see page 27)
<p>Symbol  is shown and message code F02, F03, F04, F05, F07 or F08 is flashing.</p> 	<p>Simultaneously press MODE and OK, until the  symbol flashes (reset). Contact your local heating contractor if the fault reappears on the display.</p>
<p>Symbols  and  are shown;  and message code 0C, A0, CC, F10, F18, F30, F38, F51, F59, F70, F78, F80, F88, F90 or F98 are flashing.</p> 	<p>Notify your heating contractor.</p> <p>Note <i>The type of lock-out described here cannot be reset by the system operator.</i></p>
<p>No fuel.</p>	<p>Open the gas shut-off valve. If necessary, check with your gas supply utility.</p>

What to do if...

The DHW is too hot

Cause	Remedy
The control unit is set incorrectly.	Check and correct the DHW temperature if required (see page 26).
The DHW is being heated by the solar thermal system.	Notify your heating contractor.

Symbols and are shown

Cause	Remedy
Maintenance reminder Symbols  and  are shown,  is flashing.	Notify your heating contractor to arrange a boiler service. You can deactivate the display for 24 hours by pressing OK .
	Note <i>Please note that regular servicing increases the service life of the product and significantly reduces gas consumption.</i>

Cleaning

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

Water hardness

For areas with a water hardness > 450 milligrams per litre we recommend the use of a water softening system.

Consult your heating contractor.

Inspection and maintenance

Regular maintenance ensures trouble-free, energy efficient, environmentally responsible and safe heating. We recommend you have your heating system 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 be cleaned annually.

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. Use only Viessmann cables/lines as replacement. For this, contact your qualified contractor.

Software licences

Software licences

Third party software

1 Overview

This product contains third party software and/or open source software. You are entitled to use this third party software in compliance with the respective licence conditions as provided under the link below.

Which open source software components are used on your product can be determined by the following steps: Follow the instructions as described above to start the WiFi module in Access Point Mode. Then connect to the WiFi "Viessmann-<xxx>" with your smartphone. You will find the password for the WiFi on the QR code at "WPA2 login". On an iOS device, simply follow the link "Open Source Components Licenses", which is shown in a window that opens automatically. On your android device, please open a browser and access <http://vitoconnect.gateway> or enter <http://192.168.19.1> into the browser address line. Then follow the link "Open Source Components Licenses".

2 Acknowledgements

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Terminology

Operating program

You define the following with the operating program:

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

Note

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

Operating status

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

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.

Room temperature-dependent operation

A room temperature controller captures the room temperature and compares this with the required room temperature you set. If the room temperature is lower than the required value, the boiler is switched on. If the room temperature is higher than the required value, the boiler is switched off.

Make any settings on the connected room temperature controller using the relevant operating instructions.

Note

The heating water temperature must be set high enough in order to achieve the required room temperature.

Room temperature-dependent operation with room temperature sensor

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

Terminology (cont.)

Weather-compensated operation

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 room temperature and the heating water temperature (boiler water temperature). The lower the outside temperature, the higher the heating water temperature (boiler water temperature).

Heating circuit

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

Heating water temperature

The temperature of the heating water that flows to the radiators (roughly equal to boiler water temperature).

Boiler water temperature

The heating water in the boiler (boiler water) is heated to the temperature set at the control unit. This temperature is referred to as boiler water temperature.

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 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 DHW cylinder indirect coil to the solar collectors.

Set temperature

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

Summer mode

Operating program "DHW only".

Terminology (cont.)

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

Flow temperature

The temperature of the heating water that flows to the radiators (in the flow line). Accordingly, the temperature of the heating water that flows from the radiators to the boiler (in the return line) is referred to as return temperature.

Weather-compensated operation

See "Heating mode"

Time program

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

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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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