

Operating instructions for the system user

VIESMANN

Pellet boiler, 18 to 48 kW
with Ecotronic weather-compensated, digital boiler and heating circuit control unit



VITOLIGNO 300-C



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 designed for heating system users.
This appliance can also be operated by children of 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 as well as in 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 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 change or remove attachments or fitted accessories.
- Never open or retighten pipe connections.

 **Danger**
Hot surfaces can cause burns.
Never touch the hot surfaces inside the appliance or those of uninsulated pipes, fittings or flue pipes.

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.
- Use a tested fire extinguisher, class ABC.

What to do if the heating system develops a fault

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

Conditions for siting

 **Danger**
Sealed vents result in a lack of combustion air. This leads to incomplete combustion and the formation of life threatening carbon monoxide. Never cover or close existing vents.
Do not make any subsequent modifications to the building characteristics that could affect safe operation (e.g. cable/pipework routing, cladding or partitions).

For your safety (cont.)**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 vacuum 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 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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Introductory information

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. orAcoustic signal
	<ul style="list-style-type: none">Fit new component. orIn 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.

Intended use

The appliance is only intended to be installed and operated 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 the heating of 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 operated for longer periods when open) 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) or if other fuels than those intended for this appliance are used.

Ordering fuel

The pellets used must meet the requirements of ENplus, class A1 and DIN EN 17225-2, class A1 (Ⓐ): ÖNORM 7135). Only use pellets with the following properties:

- Diameter: 6 mm
- Length: 5 to 30 mm (max. 20 % of the pellets can be up to 45 mm)
- Residual moisture: max. 7 to 12 %

Note

Never burn waste in this boiler.

Delivery methods

Pellets are sold in 15 to 30 kg sacks, in bulk cartons up to 1000 kg and in bulk.

Bulk pellets are transported by silo tanker and blown into the storage room via a hose system.

Note

The pellet hopper inside the boiler has a capacity of approx. 50 l. This corresponds to approx. 2 sacks of 15 kg each.

Commissioning

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



Service instructions

As the user of new combustion equipment, you may be obliged to notify your local flue gas inspector of the installation [check local regulations]. Your local flue gas inspector (where applicable) will also provide you with information on additional activities concerning your combustion equipment (such as regular testing, cleaning, etc.).

Prepare and carry out the emissions tests according to 1st BImSchV:



Service instructions

Recurring emissions test

- Your heating contractor must prepare the boiler for this test.
- Notify your heating contractor approx. 2 weeks prior to the next emissions test being due.
- Ensure that suitable fuel in line with the operating instructions is available.

Prepare and carry out the emissions tests according to 1st BImSchV:



Service instructions

Your system is preset at the factory

Your boiler's control unit is set at the factory.

- The heating circuits are set to the "**Heating**" operating program.
- The domestic hot water heating is set to the "**DHW**" operating program.

Your system is preset at the factory (cont.)

Your heating system is therefore ready for use:

Central heating

- From **06:00 to 22:00 h** your interior is heated to 22 °C "**Set room temp.**" (standard heating mode).
- From **22:00 to 06:00 h** your interior will be heated with "**Red. set room temp.**" (room temperature for reduced heating mode, night setback).
- Your heating contractor can make further settings for you during commissioning.
You can change any settings at any time to suit your individual requirements (see from page 16).

DHW heating

- DHW is heated to 60 °C "**Set DHW temperature**" every day from **00:00 to 24:00 h**.
- Your heating contractor can make further settings for you during commissioning.
You can change any settings at any time to suit your individual requirements (see from page 25).

Frost protection

- Your boiler, DHW cylinder and heating water buffer cylinder are protected against frost.

Wintertime/summertime changeover

- This changeover is automatic.

Time and date

- The day and time were set by your heating contractor during commissioning.

Power failure

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

Terminology

The appendix contains a chapter entitled "Terminology" to provide you with a better understanding of the functions of your boiler.

Energy saving tips

Use the adjustment options offered by your boiler control unit:

- For central heating, select the operating program that meets your current requirements:
 - For short periods of absence (a few hours, such as shopping trips), select "**Economy mode**" (see page 22).
The room temperature is reduced for as long as economy mode is activated.
 - If you are going away, select the "**Holiday program**" (see page 23).
The operating program for central heating is automatically set to "**Standby mode**" while the holiday program is active.
 - If, for an extended period, you neither want to heat the interior nor do you require DHW, select the "**Standby mode**" operating program for the relevant heating circuits and for DHW.
 - See page 21 for the relevant heating circuits
 - See page 27 for DHW heating
- Never set the DHW cylinder temperature excessively high (see page 25).

Contact your heating contractor for additional energy saving functions offered by your boiler control unit. For general recommendations on energy savings, see page 49.

Boiler controls and components

Supply via vacuum system

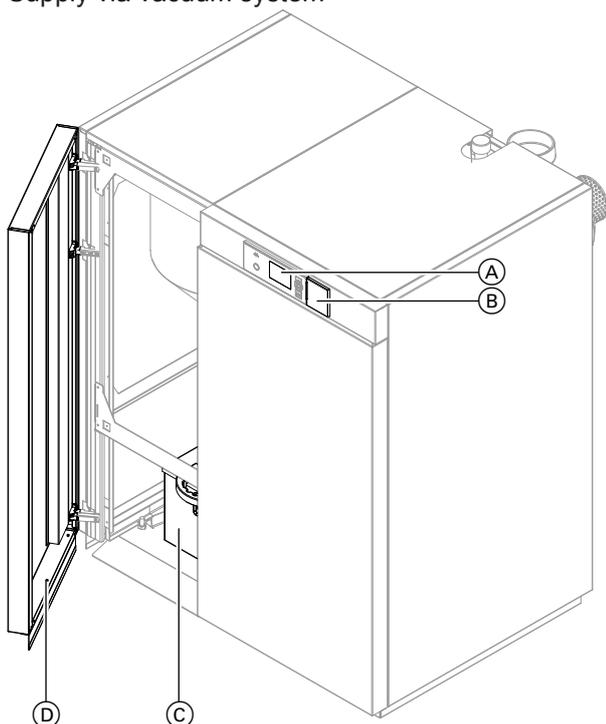


Fig.1

Supply via flexible screw conveyor

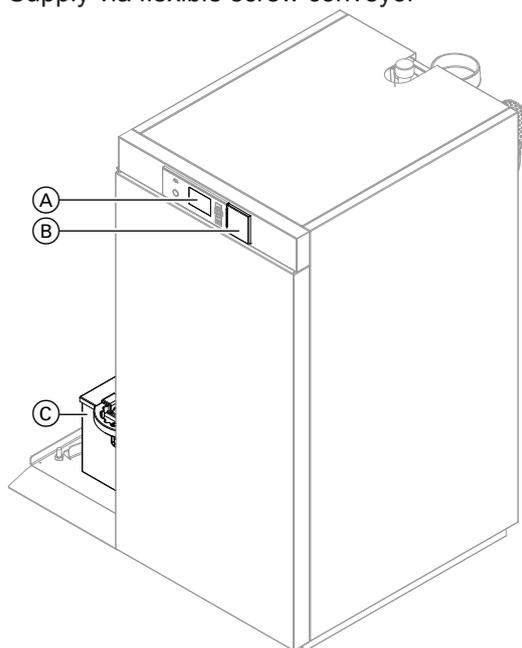


Fig.2

- Ⓐ Programming unit of the control unit
- Ⓑ Reset button for high limit safety cut-out behind the cover
- Ⓒ Ash box
- Ⓓ L.h. front panel (door)

Note

You will find an overview of the cleaning and maintenance tasks from page 45.

Control unit controls and display elements

The programming unit

You can adjust all control unit settings centrally at the programming unit.

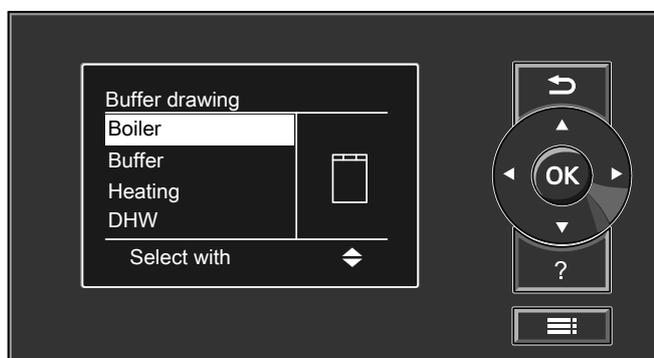


Fig.3

- ↶ Takes you to the previous step in the menu or cancels a setting that has been started.
- ⬅ Cursor keys
Scrolls through the menu or adjusts values.
- Ⓞ OK Confirms your selection or saves your setting.
- ? Calls up the help text relevant to the selected menu point.
- ☰ Calls up the extended menu.

For operating the control unit, see from page 12.

Heat-up preparations

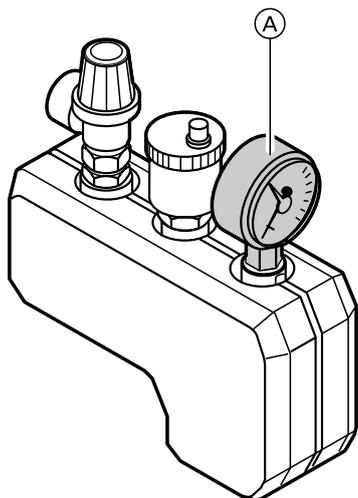


Fig.4

1. Check the pressure of the heating system at pressure gauge (A):
The system pressure is too low if the indicator points to the area below the red field. In this case, top up with water or notify your heating contractor.
Minimum system pressure: 1.0 bar (0.1 MPa)

2. Check that the vents in the installation room are unrestricted.

Note

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

3. Verify that the heating system or the heating water buffer cylinder is drawing off heat. Open the thermostatic valves on the radiators if necessary.

4. Ensure that all heating flow and heating return shut-off gate valves are open.

5. Check that all covers on the boiler are closed.

6. Ensure that power is supplied to the boiler.

Action in case of the boiler overheating

The high limit safety cut-out protects your boiler from overheating.

Note

*Never make adjustments at the high limit safety cut-out which would result in an exclusion of liability.
Replace faulty components only with genuine spare parts from Viessmann.*

Note

Notify your heating contractor if the boiler overheats again after a short time or overheats regularly.

Boiler water temperature has reached 100 °C

High limit safety cut-out

The reset button of the high limit safety cut-out is located behind cover (A) of the program unit (see the following Fig.).

Note

Any high limit safety cut-out response requires a manual reset.

Triggering the function:

The high limit safety cut-out will respond if the boiler temperature exceeds **100 °C**.

labelling the function:

Note

The high limit safety cut-out can only be reset (unlocked) once the boiler water temperature has reached approx. 70 °C.

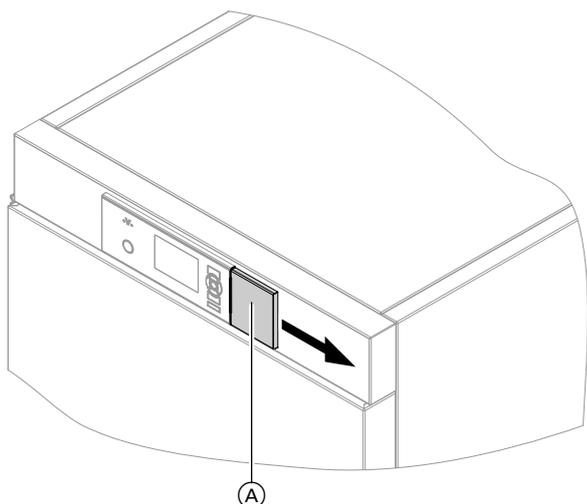
Action in case of the boiler overheating (cont.)

Fig.5

1. Slide cover (A) on the programming unit to the right.
2. Press the green button on the high limit safety cut-out. A quiet "click" will be audible. The high limit safety cut-out has been reset.
3. Close the programming unit cover.
4. Acknowledge the excess temperature on the programming unit of the control unit with (OK).

Navigation in the control unit menu

Display

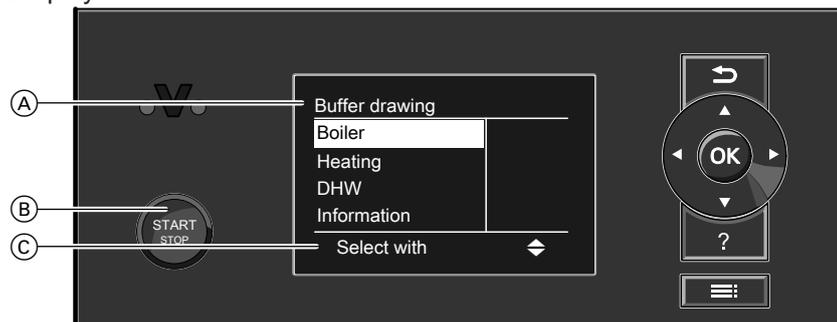


Fig.6

- Ⓐ Display of operating phase
- Ⓑ Start-Stop pushbutton
- Ⓒ Dialogue line

The selected menu point is highlighted in white.

Dialogue line Ⓒ gives the necessary instructions.

Start-Stop pushbutton function Ⓑ

Start-Stop pushbutton:

Does not illuminate	The boiler is off; no frost protection.
Illuminates	The boiler is in standby mode and will start automatically on demand or the boiler is operating.
Flashing	An external demand has been activated via CA 44 or the boiler is in burnout mode.
Flashing rapidly	Contact at plug 270 closed There is an external demand.
Flashing slowly	Contact at plug 270 open There is no current demand.

Navigation in the control unit menu (cont.)

Example: Procedure for settings with different dialogue lines

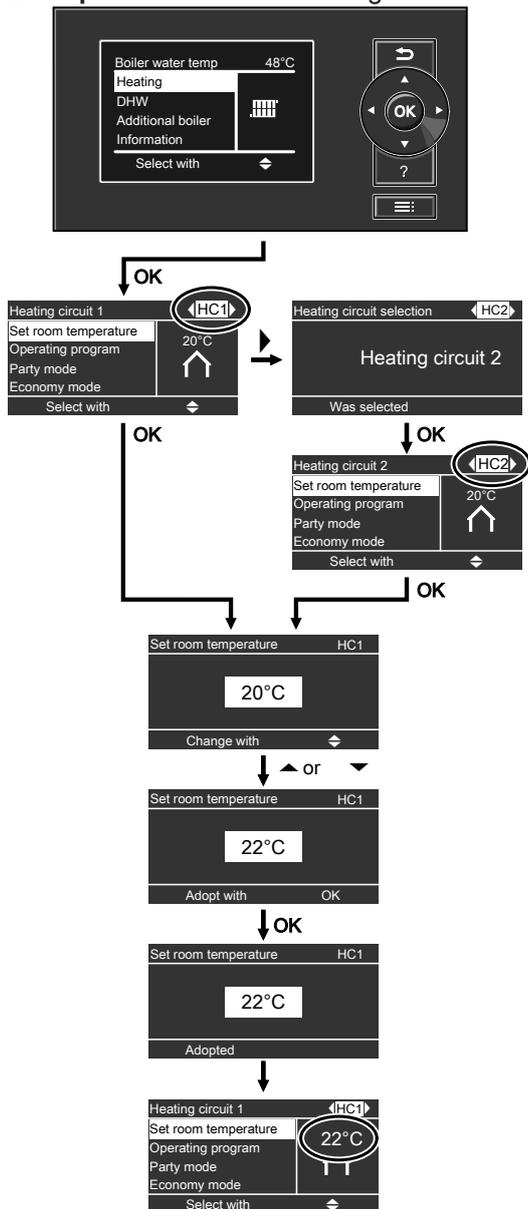


Fig.7

Menu structure of the control unit

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

Standard menu

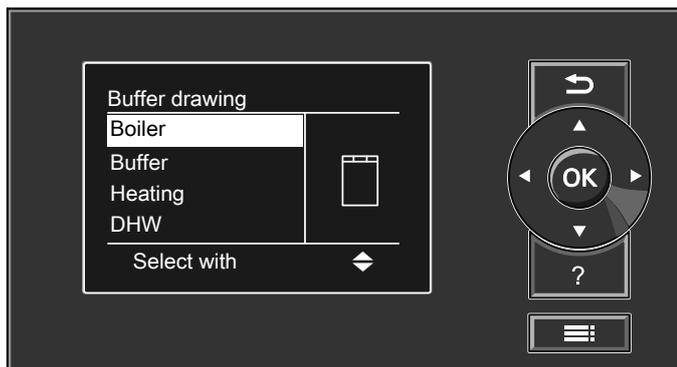


Fig.8

You can call up the settings **you require most frequently** from the standard menu:

- Select the set room temperature.
- Set the operating program.
- Set the comfort function "Party mode".
- Set the energy saving function "Economy mode".
- Scan the operating status.
- Scan temperatures, e.g. outside temperatures.

- Scan information.
- Scan notes, warning and fault messages.

Call up the standard menu as follows:

- If the screensaver is active:
Press **any** key.
- From anywhere in the menu:
Keep pressing ↻ until the standard menu appears.

Extended menu

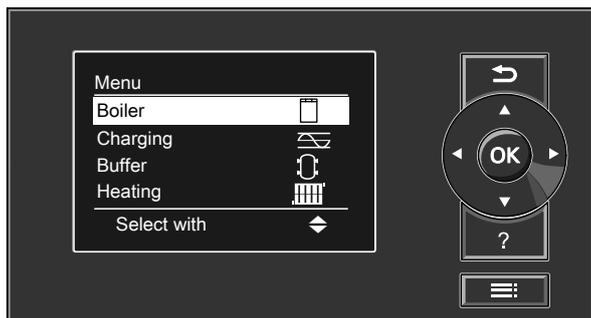


Fig.9

In the extended menu, you can call up and adjust the settings of the control unit's range of **less frequently used** functions, holiday program and time programs for example.

Call up the extended menu as follows:

- If the screensaver is active:
Press **any** key followed by ≡.
- From anywhere in the menu:
Press ≡.

Screensaver

- The screensaver will be enabled if no adjustments are made on the programming unit for a few minutes.
- Depending on the operating phase, the screensaver will inform you about the current values of the boiler or heating water buffer cylinder.

Menu structure of the control unit (cont.)

Screensaver during operating phase "Boiler load operation"

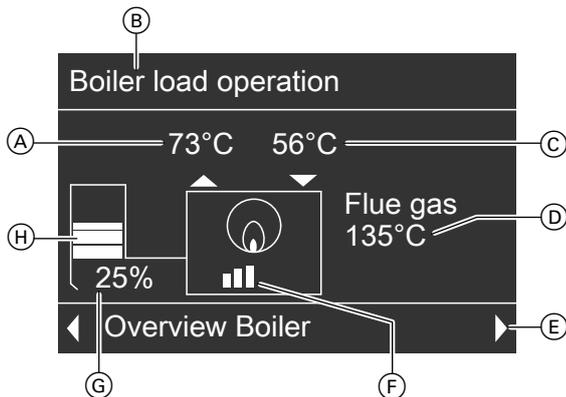


Fig.10

- | | |
|-------------------------------|----------------------------------|
| (A) Boiler flow temperature | (E) Dialogue line |
| (B) Operating phase | (F) Boiler heating output |
| (C) Boiler return temperature | (G) Feed delivery rate (pellets) |
| (D) Flue gas temperature | (H) Pellet hopper fill level |

Screensaver during operating phase "Buffer drawing"

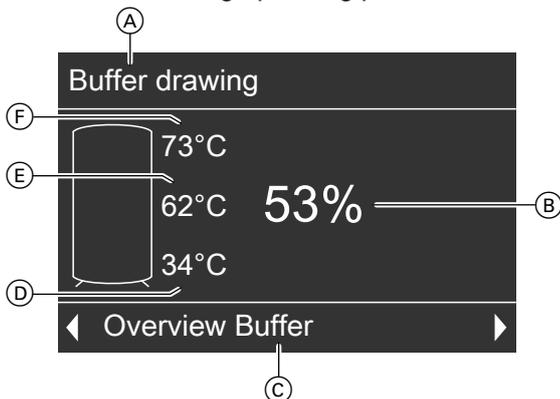


Fig.11

- | | |
|---|---|
| (A) Operating phase | (D) Heating water buffer cylinder temperature, bottom |
| (B) Heating water buffer cylinder charging state in % | (E) Heating water buffer cylinder temperature, centre |
| (C) Dialogue line | (F) Heating water buffer cylinder temperature, top |

Press any key. This takes you to the standard menu (see page 14).

"Help" menu

You can view an abridged guide giving an explanation of the controls and information about heating circuit selection.

Call up the short guide as follows:

- From anywhere in the menu:
 - Call up the **"Help"** menu point by pressing **"?"**.

Central heating

Required settings

If you require central heating, check the following points:

- Have you selected the heating circuit?
For settings, see chapter "Selecting a heating circuit" on page 16.
- Have you set the required room temperature?
For settings, see page 16.
- Have you selected the correct operating program?
For settings, see page 28.
- Have you selected the required time program?
For settings, see page 28.

Selecting a heating circuit

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

- In the case of heating systems with several heating circuits, for all central heating settings, first select the heating circuit where you want to make a change.
- This selection is not possible in heating systems with only one heating circuit.

Example:

- "Heating circuit 1" is the heating circuit for the rooms occupied by you.
- "Heating circuit 2" is the heating circuit for the rooms of a separate apartment.

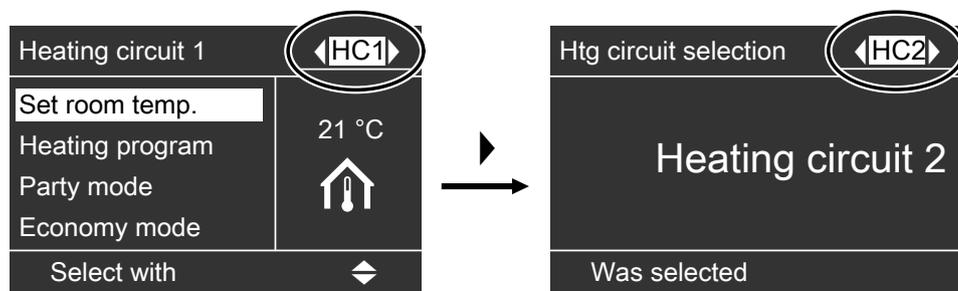


Fig. 12

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

If you or your heating contractor have renamed the heating circuits (as "Apartment", etc. for example), that title is then displayed instead of "Heating circuit 1" (see page 34).

Setting the room temperature

You can set the standard room temperature (for day) (see page 16) and the reduced room temperature (for night) (see page 17) for the relevant heating circuit.

Setting the standard room temperature for standard heating mode

Press the following keys in the standard menu:

1. ▲/▼ to select "Heating"
2. OK to confirm.
3. ◀/▶ to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
4. ▲/▼ for "Set room temp".
5. OK to confirm.
6. ▲/▼ for the required temperature.
7. OK to confirm.
"Adopted" appears briefly in the dialogue line of the display.
8. ↵ until the standard display is shown.

Setting the room temperature (cont.)

Set the room temperature for reduced heating mode (night setback)

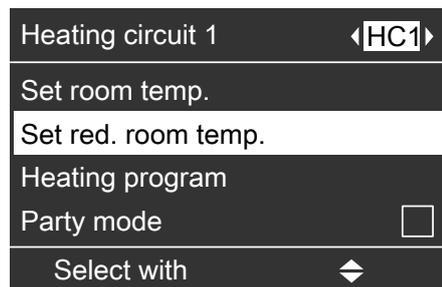


Fig.13

Press the following keys:

1. for "Extended menu".
2. to select "Heating".
3. to confirm.
4. to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
5. for "Set red. room temp.".
6. to confirm.
7. for the required temperature.
8. to confirm. "Adopted" appears briefly in the dialogue line of the display.
9. until the standard display is shown.

Setting the operating program

Check if "Heating" is set for the relevant heating circuit.

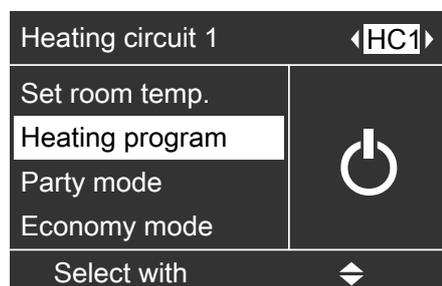


Fig.14

Press the following keys in the standard menu:

1. for "Heating".
2. to confirm.
3. to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
4. for "Operating program".
5. to confirm. The check mark must be next to "Heating". If not, proceed as follows:
6. for "Heating".
7. to confirm.
8. until the standard display is shown.

The rooms of the selected heating circuit are heated in accordance with the room temperature and time program settings.

Setting a time program

The time when the heating circuit delivers central heating with standard or reduced room temperature is dependent on the settings of the switching times for the relevant day (4 possible time phases).

- If one or more time phases are selected, central heating with standard room temperature will be active for those times.
- If no time phases are selected, central heating will be enabled for the whole day with reduced room temperature.

Press the following keys:

1. for "Extended menu".
2. to select "Heating".
3. to confirm.

Setting a time program (cont.)

Deleting time phases

Press the following keys if you want to **delete** a time phase:

1. Proceed as described in points 1 to 11 of chapter "Setting switching times".
2. **OK** until the end point of the selected time phase is displayed.
3. **▲/▼** until, for the end point, "- - : - -" is displayed.

Note

"- - : - -" appears if the start and end time are the same.



Fig. 17

4. **OK** to confirm.
5. **↶** until the standard display is shown.

Restoring time phases to factory settings

If you want to restore **all** time phases to their factory settings, press the following keys:

1. **☰** for "Extended menu".
2. **▲/▼** to select "**Settings**".
3. **OK** to confirm.
4. **▲/▼** for "**Factory settings**".
5. **OK** to confirm.
6. **▲/▼** for "**Heating**".
7. **OK** to confirm.
8. **◀▶** to select "**Heating circuit 1**" (HC1), "**Heating circuit 2**" (HC2), "**Heating circuit 3**" (HC3) or "**Heating circuit 4**" (HC4).
9. **▲/▼** to select "**Yes**".
10. **OK** to confirm.
11. **↶** until the standard display is shown.

Changing the heating curve

- You can alter the heating characteristics if the room temperature does not meet your requirements for any prolonged period of time.
- You influence the heating characteristics by changing the slope and level of the heating curve. For more information regarding the heating curve, see page 20.
- Please observe the modified heating characteristics over several days (if possible, wait for a major change in the weather) before making further adjustments.

Changing slope and level

For assistance, use the following table.

Heating characteristics	Measures	Example				
The living space is too cold during the heating season .	Adjust the heating curve slope to the next highest value (e.g. 1.5).	<table border="1"> <tr> <td>Slope</td> <td>1.5</td> </tr> <tr> <td>Level</td> <td>0 K</td> </tr> </table>	Slope	1.5	Level	0 K
Slope	1.5					
Level	0 K					
The living space is too hot during the heating season .	Adjust the heating curve slope to the next lowest value (e.g. 1.3).	<table border="1"> <tr> <td>Slope</td> <td>1.3</td> </tr> <tr> <td>Level</td> <td>0 K</td> </tr> </table>	Slope	1.3	Level	0 K
Slope	1.3					
Level	0 K					

Changing the heating curve (cont.)

Heating characteristics	Measures	Example
The living space is too cold during spring/autumn and during the heating season .	Adjust the heating curve level to the next highest value (e.g. +3).	Slope 1.4 Level 3 K
The living space is too hot during spring/autumn and during the heating season .	Adjust the heating curve level to the next lowest value (e.g. -3).	Slope 1.4 Level -3 K
The living space is too cold during spring/autumn , but warm enough during the heating season.	Set the heating curve slope to the next lower value and the level to a higher value.	Slope 1.3 Level 3 K
The living space is too hot during spring/autumn , but warm enough during the heating season.	Set the heating curve slope to the next higher value and the level to a lower value.	Slope 1.5 Level -3 K

Press the following keys:

1. for "Extended menu".
2. to select "Heating".
3. to confirm.
4. to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
5. for "Heating curve".
6. to confirm.
7. for "Slope" or "Level".
8. to confirm.
9. for the required value.

10. to confirm.

11. until the standard display is shown.

Note

Setting the heating curve slope or level too high or too low will not result in damage to your heating system.

For technically-minded system users

- Heating curves illustrate the relationship between the outside temperature and the flow temperature. Simplified: The lower the outside temperature, the higher the flow temperature.
- The illustrated heating curves apply with the following settings:
 - Heating curve level = 0
 - A different value for level shows a curve which is off-set in parallel to the vertical.
 - Standard room temperature = approx. 20 °C
- In the delivered condition, the slope is set to 1.4, and the level to 0.

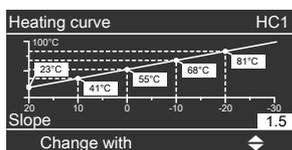


Fig. 18

Changing the heating curve (cont.)

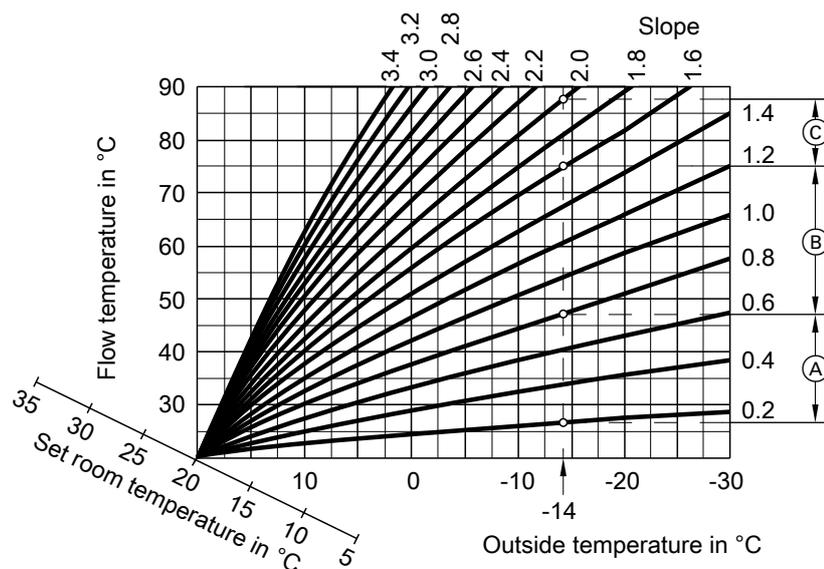


Fig.19

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

Stopping central heating

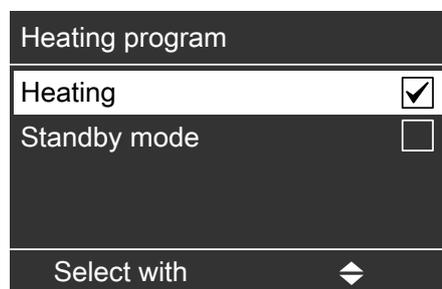


Fig.20

Press the following keys in the standard menu:

1. ▲/▼ for "Heating"
2. Ⓚ to confirm.
3. ◀▶ to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
4. ▲/▼ for "Operating program".
5. Ⓚ to confirm.
6. ▲/▼ for "Standby mode".
7. Ⓚ to confirm. The display briefly shows "Standby mode".

8. ↶ until the standard display is shown.

Comfort and energy saving functions

Selecting party mode

With this comfort function, you can change the room temperature of a heating circuit for a few hours, e.g. if guests stay longer in the evening. You do not have to change any existing control settings.

- The rooms are heated to the required temperature.

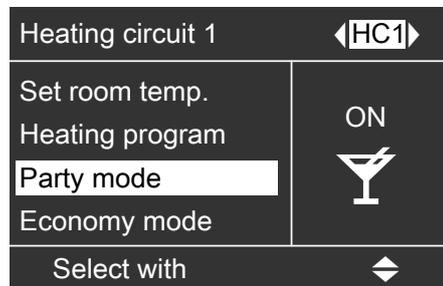


Fig.21

Press the following keys in the standard menu:

1. ▲/▼ for "Heating".
2. Ⓞ to confirm.
3. ⬅/➡ to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
4. ▲/▼ for "Party mode".
5. Ⓞ to confirm.
The room temperature during party mode is shown in the display.
6. ▲/▼ for the required temperature, if you want to change it.
7. Ⓞ to confirm.
"Adopted" appears briefly in the dialogue line of the display. "On" appears on the right-hand side of the display in the following menu.

Ending party mode

Party mode ends automatically with the next change-over to central heating with standard room temperature, but no later than after 8 hours.

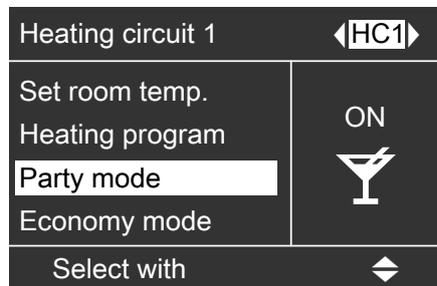


Fig.22

If you want to terminate party mode prematurely, press the following keys in the standard menu:

1. ▲/▼ for "Heating".
2. Ⓞ to confirm.
3. ⬅/➡ to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
4. ▲/▼ for "Party mode".
5. Ⓞ to confirm.
"Off" appears briefly on the dialogue line of the display. "Off" appears on the right-hand side of the display in the following menu.

Selecting economy mode

To save energy, you can reduce the room temperature in standard heating mode, for example, if you leave the house for a few hours.

Setting economy mode

In economy mode, the standard room temperature will be reduced automatically.

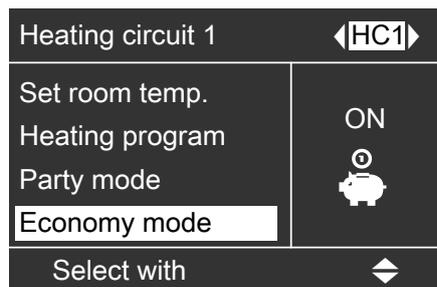


Fig.23

Selecting economy mode (cont.)

Press the following keys in the standard menu:

1. ▲/▼ for "Heating".
2. Ⓞ to confirm.
3. ◀▶ to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
4. ▲/▼ for "Economy mode".
5. Ⓞ to confirm.
"Economy mode On" appears briefly in the display. "On" appears on the right-hand side of the display in the following menu.

Terminating economy mode

Economy mode ends automatically the next time the system changes over to central heating with standard room temperature.

If you want to terminate economy mode prematurely, press the following keys in the standard menu:

1. ▲/▼ for "Heating".
2. Ⓞ to confirm.
3. ◀▶ to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
4. ▲/▼ for "Economy mode".
5. Ⓞ to confirm.
In the display "Economy mode Off" appears briefly. "Off" appears on the right-hand side of the display in the following menu.

Selecting the holiday program

To save energy, for example during long holiday absences, you can enable the holiday program.

Setting a holiday program

The holiday program starts at 00:00 h the day after the departure date. The holiday program terminates at 00:00 h on the day of your return. In other words, the set switching times will be active on the day of your departure and the day of your return.

Note

The control unit is set so that the holiday program applies to **all** heating circuits and there is **no** DHW heating. If you want to change this, contact your heating contractor.

Holiday program	HC1
Departure date:	
Date	Tu 25.02.2014
Return date:	
Date	We 26.02.2014
Change with	◀▶

Fig.24

Press the following keys:

1. ≡ for "Extended menu".
2. ▲/▼ to select "Heating".

3. Ⓞ to confirm.
4. ◀▶ to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
5. ▲/▼ for "Holiday program".
6. Ⓞ to confirm; the current date "Departure date:" and the following date "Return date:" are displayed.
7. ▲/▼ for departure date.
If you want to terminate the set holiday program prematurely, press ⊖ until the standard display is shown (see page 13).
8. Ⓞ to confirm.
9. ▲/▼ to set the required date.
10. Ⓞ to confirm.
"Adopted" appears briefly in the display.
11. ▲/▼ for return date.
12. Ⓞ to confirm.
13. ▲/▼ to set the required date.

Selecting the holiday program (cont.)

14.  to confirm.
"Adopted" appears briefly in the dialogue line of the display.

Terminating the holiday program

The holiday program terminates automatically on the day of return.

If you want to terminate the holiday program prematurely, press the following keys:

1.  for "Extended menu".
2.  to select "Heating".
3.  to confirm.
4.  to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
5.  for "Holiday program".
6.  to confirm.
7.  for "Delete program".
8.  to confirm.
9.  for "Yes".
10.  to confirm.
"Adopted" appears briefly in the dialogue line of the display.
11.  until the standard display is shown (see page 13).

Change set holiday program

If you wish to change a set holiday program, press the following keys:

1.  for "Extended menu".
2.  to select "Heating".
3.  to confirm.
4.  to select "Heating circuit 1" (HC1), "Heating circuit 2" (HC2), "Heating circuit 3" (HC3) or "Heating circuit 4" (HC4).
5.  for "Holiday program".
6.  to confirm.
7.  for "Change?"

8.  to confirm.

9. To enter the new data, follow steps 7 to 14 in the chapter entitled "Setting the holiday program" from page 23.

Required settings

If you want DHW heating, check the following points:

- Have you selected the required set DHW temperature?
For settings, see page 25.
- Have you selected the correct operating program?
For settings, see page 28.
- Have you selected the required time program?
For settings, see page 25.

Setting the DHW temperature

Press the following keys in the standard menu:

1. ▲/▼ for "DHW"
2. Ⓞ to confirm.
3. ▲/▼ for "Set temperature".
4. Ⓞ to confirm.
5. ▲/▼ for the required temperature.
6. Ⓞ to confirm.
"Adopted" appears briefly in the dialogue line of the display.
7. ↩ until the standard display is shown (see page 13).

Setting the operating program

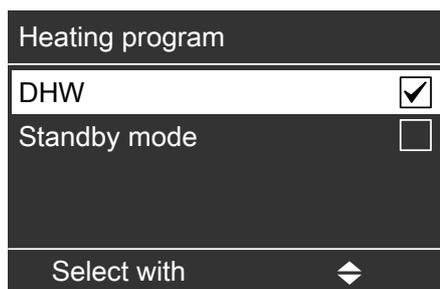


Fig.25

Press the following keys in the standard menu:

1. ▲/▼ for "DHW".
2. Ⓞ to confirm.
3. ▲/▼ for "Operating program".
4. Ⓞ to confirm.
5. ▲/▼ for "DHW" or "Standby mode".
6. Ⓞ to confirm.
7. ↩ until the standard display is shown.

Setting a time program

When DHW heating is enabled for the heating circuit depends on the settings of the switching times for the respective day (4 possible time phases).

- The time program for DHW heating is made up of time phases. A time phase from 06:00 to 22:00 h every day is set at the factory.
- **Automatic mode** is set at the factory for DHW heating.
- If you don't want automatic mode, you can select up to 4 **individual** time phases per day for DHW heating. For each time phase you select the start and end points.
- In the "Extended menu", you can scan the current time program under "**Information**" (see page 38).

Settings in the extended menu:

1. ≡ for "Extended menu".
2. ▲/▼ for "DHW"
3. Ⓞ to confirm.
4. ▲/▼ for "Time prog". "DHW"
5. Ⓞ to confirm.
6. ▲/▼ for "Individual"
7. Ⓞ to confirm.

Setting a time program (cont.)

8. ▲/▼ to select the required part of the week or day.
9. Ⓞ to confirm.
10. ▲/▼ for selecting the time phase 1, 2, 3 or 4.
11. Ⓞ to confirm.
12. ▲/▼ to set the start time.
13. Ⓞ to confirm.
14. ▲/▼ to set the end time.
15. Ⓞ to confirm.

Example:

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

Note

If you want to terminate the setting process prematurely, keep pressing ↵ until the required display appears.

Example shown:

- Time program for Monday to Friday ("Mo-Fr")
- Time phase 1:
from 04:30 to 06:30 h
- Time phase 2:
from 15:30 to 20:30 h

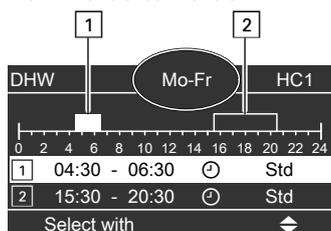


Fig.26

Deleting time phases

To **delete** a time phase, press the following keys:

1. Proceed as described in points 1 to 12 of chapter "Setting a time program".
2. Ⓞ until the end point of the selected time phase is displayed.
3. ▲/▼ until, for the end point, "- : -" is displayed.
4. Ⓞ to confirm.
5. ↵ until the standard display is shown.

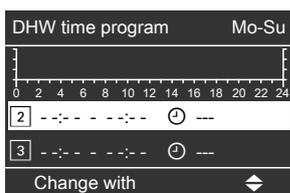


Fig.27

Setting a time program (cont.)

Restoring time phases to the factory settings

If you want to restore **all** DHW heating time phases to their factory settings, press the following keys:

1.  for "Extended menu".
2.  for "Settings".
3.  to confirm.
4.  for "Factory settings".
5.  to confirm.
6.  for "DHW".
7.  to confirm.
8.  for "Yes".
9.  to confirm.
10.  until the standard display is shown (see page 13).

Stopping DHW heating

Press the following keys in the standard menu:

1.  for "DHW".
2.  to confirm.
3.  for "Operating program".
4.  to confirm.
5.  for "Standby mode".
6.  to confirm.

Selecting an operating program

There are 3 operating programs available for controlling the heating water temperatures in the heating water buffer cylinder:

■ "Automatic"

In automatic mode, the average set temperature of the heating water buffer cylinder is determined automatically via the selected heating curve of the buffer cylinder. A set value is determined subject to the outside temperature and the selected values for level and slope.

■ "Manual"

In manual mode, you can specify a fixed value for the average set temperature of the heating water buffer cylinder. You can enter this set value in the "Buffer" menu when manual mode is selected. For a description, see page 28.

■ "OFF"

In this operating program, the heating water buffer cylinder is charged by the boiler. The boiler will endeavour to achieve the set boiler temperature. The buffer temperatures have no influence on the boiler output control.

Press the following keys to set the operating program:

1.  for "Extended menu".
2.  for "Buffer"
3.  to confirm.
4.  for "Operating program".
5.  to confirm.
6.  for "Automatic", "Manual" or "Off".
7.  to confirm.

Entering the average set temperature of the heating water buffer cylinder in manual mode:

1.  for "Extended menu".
2.  for "Buffer"
3.  to confirm.
4.  for "Set temp man mode". This menu point is only available when manual mode is selected.
5.  to confirm.
6.  for the required temperature.
7.  to confirm.

Setting the time program

You can set these heating times by adjusting the time program for the heating water buffer cylinder. During the set time phases, the charging condition of the heating water buffer cylinder has an effect on the boiler operation.

Note

If you are using a solar thermal system for central heating backup, balance the charging times of the heating water buffer cylinder with the control unit of the solar thermal system.

- The time program for the heating water buffer cylinder is made up of time phases. A time phase from 06:00 to 22:00 h every day is set at the factory.
- The time program for the heating water buffer cylinder is preset to **Automatic mode** at the factory. In automatic mode, the time program for the heating water buffer cylinder is disregarded.
- If you don't require automatic mode, you can select up to 4 **individual** time phases per day. For each time phase you select the start and end points.
- In the "Extended menu", you can scan the current time program under "Information" (see page 38).

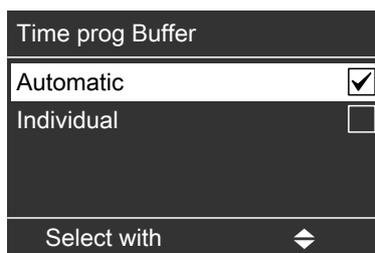


Fig.28

Settings in the extended menu:

1.  for "Extended menu".
2.  for "Buffer"
3.  to confirm.
4.  for "Time program"
5.  to confirm.
6.  for "Individual"

Setting the time program (cont.)

- 7. **OK** to confirm.
- 8. **▲/▼** to select the required part of the week or day.
- 9. **OK** to confirm.
- 10. **▲/▼** for selecting the time phase **1**, **2**, **3** or **4**.
- 11. **OK** to confirm.
- 12. **▲/▼** to set the start time.
- 13. **OK** to confirm.
- 14. **▲/▼** to set the end time.

- 15. **OK** to confirm.

Example shown:

- Time program for Monday to Friday ("**Mo-Fr**")
- Time phase **1**:
from 04:30 to 08:30 h
- Time phase **2**:
from 16:30 to 23:00 h

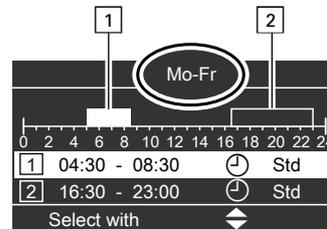


Fig.29

Deleting time phases

To **delete** a time phase, press the following keys:

- 1. Proceed as described in points 1 to 12 of chapter "Setting a time program" from page 28.
- 2. **OK** until the end point of the selected time phase is displayed.
- 3. **▲/▼** until, for the end point, "- : -" is displayed.

- 4. **OK** to confirm.
- 5. **↶** until the standard display is shown.

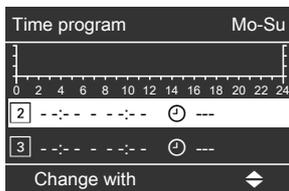


Fig.30

Setting the heating curve

In the "**Automatic**" operating program, the control unit automatically determines the average set temperature of the heating water buffer cylinder. It takes into account the selected heating curve and the outside temperature.

Press the following keys:

- 1. **☰** for "Extended menu".
- 2. **▲/▼** to select "**Buffer**".
- 3. **OK** to confirm.

- 4. **▲/▼** for "**Heating curve**".
- 5. **OK** to confirm.
- 6. **▲/▼** for "**Slope**" or "**Level**".
- 7. **OK** to confirm.

Setting the heating curve (cont.)

8. ▲/▼ for the required value.

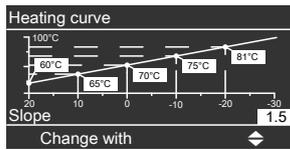


Fig.31

9. OK to confirm.

10. ↶ until the standard display is shown.

Blocking times for automatic fuel supply

Note

Blocking times for pellet supply can only be set if pellets are supplied via a vacuum system.

If you only want the pellet hopper to be charged at certain times, you can set the blocking times individually. Select the times so that there is sufficient fuel available during the blocking times.

Setting blocking times

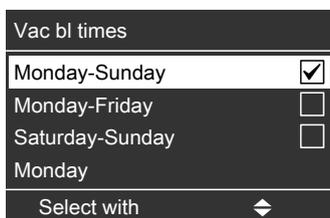


Fig.32

Press the following keys:

1. for "Extended menu".
2. for "Charging".
3. to confirm.
4. for "Vac bl times".
5. to confirm.

Note

If you want to terminate the set supply times prematurely, press until the standard display is shown (see page 13).

6. until the required part of the week or day appears.
7. to confirm.

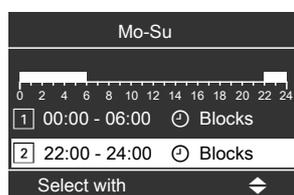


Fig.33

8. to select the time phase. The relevant time phase is represented by a number (1, 2, 3 or 4).
9. to confirm.
10. for the start point of the time phase.
11. to confirm.
12. for the end point of the time phase.

Note

Never set blocking times longer than 10 hours. Blocking times in excess of 10 hours will trigger a fault message due to fuel shortage.

13. to confirm.
14. To adjust the beginning and end of additional time phases, proceed as described in steps 10 to 15.
15. until the standard display is shown (see page 13).

Deleting time phases

Press the following keys if you want to **delete** a time phase:

1. Proceed as described in points 1 to 11 of chapter "Setting blocking times".

2. until the end point of the selected time phase is displayed.

Blocking times for automatic fuel supply (cont.)

3. ▲/▼ until, for the end point, "- - : - -" is displayed. "- - : - -" appears if the start and end time are the same.

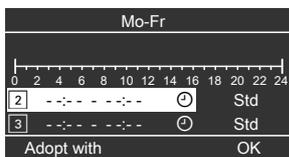


Fig.34

4. Ⓞ to confirm.
5. ↶ until the standard display is shown (see page 13).

Setting suction wand assignment/blocking suction wands

Note

You can set the wand assignment and blocking times for pellet supply only for pellet supply with a vacuum system and when using an automatic changeover unit.

Blowing pellets into the pellet store results in an uneven height of pellets stored inside the storage area. In order to enable the pellet store to be emptied uniformly, the proportion of supply volume (assignment in %) can be adjusted individually for each suction wand.

Setting the wand assignment

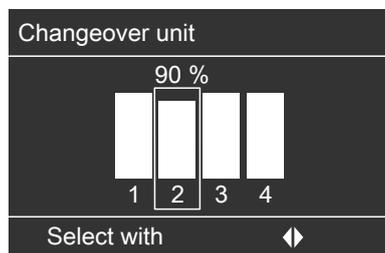


Fig.35

Press the following keys:

1. ☰ for "Extended menu".
2. ▲/▼ for "Charging".
3. Ⓞ to confirm.
4. ▲/▼ for "Changeover unit".
5. Ⓞ to confirm.
The settable suction wands are shown.
6. ⏪ for selecting the suction wand.

7. Ⓞ to confirm.
The current fuel assignment in % (proportion of supply volume) will be shown.

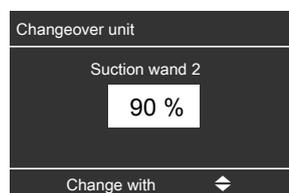


Fig.36

8. ▲/▼ for selecting the required value of fuel assignment.
The fuel assignment per suction wand is adjustable from 0 to 100 %.
Choosing a setting of 0 % results in the suction wand being blocked manually, in other words the suction wand will not be used.

9. Ⓞ to confirm.
The suction wands available for selection will be redisplayed.

10. Repeat steps 6 to 9 to select the assignment of further suction wands.

11. ↶ until the standard display is shown (see page 13).

Note

Check the suction wand assignment again when next filling the pellet store and readjust the assignment if required.

Flushing and/or resetting suction wands

In the case of a shortage of pellets at one suction wand, that wand will be blocked and a changeover to the next suction wand occurs.

Blocking times for automatic fuel supply (cont.)

A blocked suction wand can be purged. A blocked wand can also be re-enabled without prior purging. If several wands have been preselected for purging, these wands will be purged in sequence. Afterwards, the system will be restarted in standard mode. Manual purging will only commence if the boiler hopper is not full.

Press the following keys:

1.  for "Extended menu".
2.  for "**Charging**".
3.  to confirm.
4.  for "**Changeover unit**".
5.  to confirm.
The settable suction wands are shown.
An "X" will be shown below blocked suction wands instead of their suction wand number.
6.  for selecting the suction wand.
7.  to confirm.
8.  for "**Purging**", "**Reset**" or "**Reset all**".
If "**Purging**" is selected: The suction wand will be automatically blocked following purging.
9.  to confirm.
The suction wands available for selection will be redisplayed.
10. Repeat step 6 to 9 for purging or resetting additional suction wands.
11.  until the standard display is shown (see page 13).

Further adjustments

Setting the display contrast

Press the following keys in the standard menu:

1.  for "Extended menu".
2.  for "**Settings**".
3.  to confirm.
4.  for "**Contrast**".
5.  to confirm.
6.  for the required contrast
7.  to confirm.
8.  until the standard display is shown.

Setting the display brightness

You would like to be able to read the text in the menu better. Change the brightness level of the "**programming unit**" display:

You can also alter the screen saver brightness.

Press the following keys in the standard menu:

1.  for "Extended menu".
2.  for "**Settings**".
3.  to confirm.
4.  for "**Brightness**".
5.  to confirm.
6.  for "**Operation**" or "**Screen saver**".
7.  to confirm.
8.  for the required brightness
9.  to confirm.
10.  until the standard display is shown.

Naming the heating circuits

You can give heating circuits 1, 2, 3 and 4 ("**HC1**", "**HC2**", "**HC3**" and "**HC4**") individual names. The abbreviations "**HC1**", "**HC2**", "**HC3**" and "**HC4**" are retained.

Press the following keys in the standard menu:

1.  for "Extended menu".
2.  for "**Settings**".
3.  to confirm.
4.  for "**Heating circuit designation**".
5.  to confirm.
6.  to select "**Heating circuit 1**" (HC1), "**Heating circuit 2**" (HC2), "**Heating circuit 3**" (HC3) or "**Heating circuit 4**" (HC4).
7.  to confirm.
8.  to change the letters.
9.  to select the next character.
10.  to confirm.
11.  until the standard display is shown.

Naming the heating circuits (cont.)

Example:

Designation for heating circuit 1: Apartment

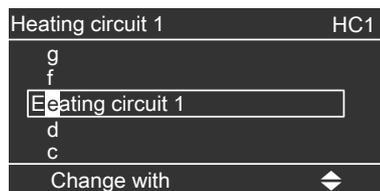


Fig.37

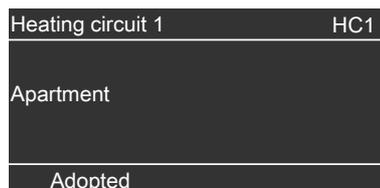


Fig.38

The menu shows "Apartment" for heating circuit 1.

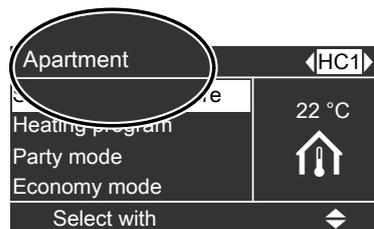


Fig.39

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.

Press the following keys in the standard menu:

1. for "Extended menu".
2. for "Settings"
3. to confirm.
4. for "Time/date"
5. to confirm.
6. for "Time" or "Date"
7. to confirm.
8. for the required time or the required date.
9. to confirm.
10. until the standard display is shown.

Language selection

Press the following keys in the standard menu:

1. for "Extended menu".
2. for "Settings"
3. to confirm.
4. for "Language"
5. to confirm.
6. for the required language.
7. to confirm.
8. until the standard display is shown.

Setting the temperature unit (°C/°F)

Factory setting: °C

Further adjustments

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

Press the following keys in the standard menu:

1.  for "Extended menu".
2.  for "Settings"
3.  to confirm.
4.  for "Temperature unit"
5.  to confirm.
6.  for the required unit.
7.  to confirm.
8.  until the standard display is shown.

Changing the boiler water temperature

In the delivered condition, the boiler water temperature is set to 85 °C. The temperature of the boiler water is regulated to the set value.

Press the following keys in the standard menu:

1.  for "Extended menu".
2.  for "Boiler"
3.  to confirm.
4.  for "Boiler temperature"
5.  to confirm.
6.  for the required temperature.
7.  to confirm.
8.  until the standard display is shown.

Setting the minimum system temperature

Note

This setting is only available if it has been enabled by your heating contractor on the control unit.

Select a value according to the minimum temperature you require for the heating system. When the temperature falls below this value, the boiler or the additional heat generator starts.

1.  for "Extended menu".
2.  for "Boiler"
3.  to confirm.
4.  for "Min set system temp"
5.  to confirm.
6.  for the required temperature.
7.  to confirm.
8.  until the standard display is shown.

Restoring factory settings

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

1.  for "Extended menu".
2.  for "Settings"
3.  to confirm.
4.  for "Factory settings"
5.  to confirm.
6.  for selecting the required parameter group. "General", "Heating" and "DHW" are available. Select the required heating circuit under "Heating" with  and continue.

Restoring factory settings (cont.)

7.  to confirm.
8.  to change "No" to "Yes"
9.  until the standard display is shown.

Amongst others, the following settings and values will be reset:

- Set room temperature
- Set DHW temperature
- Time program for central heating
- Time program for DHW heating
- Time program for DHW circulation pump
- Party mode is deleted
- Economy mode is deleted
- Holiday program is deleted
- Heating curve slope and level

Scanning fault messages

If any faults have occurred in your heating system, the symbol "▲" flashes in the display and "Fault" is shown.

The heating contractor uses fault messages to quickly pinpoint the cause of your boiler's fault. This can reduce the time required to resolve the fault and therefore also your costs.

Make a note of the fault message displayed so you can advise your heating contractor accordingly. This makes preparations easier and may save extra travel expenses.



Danger

Danger due to unresolved faults in the heating system.

- If a fault occurs, shut the system down and make it safe.
- Contact your heating contractor immediately.
- Rectify the fault immediately or have a heating contractor rectify it if necessary.
- When rectifying the fault, no-one else should be present in the danger zone around the heating system.

1. You can call up the cause of the fault with .

Fault	
Outside temp sensor	34
Fault O2 probe	91
Acknowledge with	OK

Fig.40

2. Pressing ? calls up information on the heating system characteristics.

Tips on which measures you can take yourself **before** notifying your heating contractor are also displayed.

Calling up an acknowledged fault message in the standard menu

1. ▲/▼ for "Fault"

2.  to confirm.

3. Make a note of the cause of the fault and the fault code next to it on the right. In this example: "**Out-side temp sensor 34**" and "**Fault O2 probe 91**". This enables the heating contractor to be better prepared for the service call and may save additional travelling costs.
4. If you want to acknowledge the fault message, follow the instructions in the menu. The fault message is adopted into the menu.

Boiler water temp		48°C
Fault		
Boiler		
Buffer		
Heating		
Continue with		OK

Fig.41

Note

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

Scanning information

You can scan information in the standard menu and in the extended menu. They differ in the extent of the information displayed.

If you select the "**Heating**" sub-menu, you can request information on the required heating circuit via "◀▶".

Scanning information in the standard menu

Note

Subject to system version, different information will be available.

Scanning information (cont.)

Press the following keys in the standard menu:

1. ▲/▼ for **"Information"**
2. Ⓞ to confirm. The following scanning options are now available:

Scanning in the **"Standard menu"**:

- Outside temperature
- **"Heating"** sub-menu:
 - Set flow temperature
 - Actual flow temperature
 - Heating circuit pump
 - Valve
 - Operating program
 - Operating status
- **"DHW"** sub-menu
 - Set DHW temperature
 - Actual DHW temperature
 - Set return temperature
 - Actual return temperature
 - Pump
 - Valve
 - Operating program
 - Operating status
- **"Solar"** sub-menu
 - Solar DHW
 - Collector temperature
 - Current solar circuit pump
 - Solar circuit pump hours run
 - Reheating suppression enabled

Scanning information in the extended menu

Press the following keys:

1. ≡ for displaying the extended menu
2. ▲/▼ for **"Information"**
3. Ⓞ to confirm. The following scanning options are now available:

Scanning in the **"Extended menu"**:

- **"General"** sub-menu:
 - Outside temperature
 - Set system temperature
 - Enable additional boiler
 - Time
 - Date
- **"Boiler"** sub-menu:
 - Boiler water temperature
 - Boiler return
 - Flue gas temperature
 - Flue gas residual O2
 - Primary air damper
 - Secondary air damper
 - Boiler circuit pump
 - Boiler valve
 - Flue gas fan
 - Feed screw conveyor
 - Fuel consumption
 - Ash box
 - Boiler start
 - Hours run
- **"Heating"** sub-menu:
 - Operating program
 - Operating status
 - Time program
 - Set room temperature
 - Set reduced room temperature
 - Set flow temperature
 - Actual flow temperature
 - Slope
 - Level
 - Heating circuit pump
 - Valve
- **"DHW"** sub-menu
 - Operating program
 - Status
 - DHW time program
 - Set DHW temperature
 - Actual DHW temperature
 - Set return temperature
 - Actual return temperature
 - Pump
 - Valve

Scanning temperatures

You can scan temperatures in the standard menu and in the extended menu. The range of displayed values is wider in the extended menu. We therefore recommend scanning temperatures via the extended menu.

Scanning temperatures in the standard menu

Press the following keys:

1. ▲/▼ for **"Information"**

Scanning information (cont.)

2.  to confirm.
3.  for **"Outside temperature"**, **"Heating"** or **"DHW"**.
The overview below shows the temperatures displayed in the **"Heating"** and **"DHW"** sub-menus.

"Heating" sub-menu:

- Set flow temperature
- Actual flow temperature

"DHW" sub-menu:

- Set DHW temperature
- Actual DHW temperature
- Set return temperature
- Actual return temperature

Scanning the heating water buffer cylinder temperatures in the standard menu

Press the following keys:

1.  for **"Buffer"**
2.  to confirm.
3.  to display the required temperature

The following temperatures can be scanned in the **"Buffer"** menu:

- Set buffer
- Buffer average
- Buffer sensors

Scanning temperatures in the extended menu

Press the following keys:

1.  for **"Extended menu"**.
2.  for **"Information"**
3.  to confirm.
4.  for **"General"**, **"Boiler"**, **"Heating"** or **"DHW"**.
The following overviews show the temperatures displayed in the sub-menus.
5.  to confirm.

Temperatures in the **"General"** sub-menu:

- Outside temperature
- Set system temperature

Temperatures in the **"Boiler"** sub-menu:

- Boiler water temperature
- Boiler return
- Flue gas temperature

Temperatures in the **"Heating"** sub-menu:

- Set room temperature
- Set reduced room temperature
- Set flow temperature
- Actual flow temperature

Temperature in the **"DHW"** sub-menu:

- Set DHW temperature
- Actual DHW temperature
- Set return temperature
- Actual return temperature

Shutting down the heating system for an extended period

You can switch your heating system OFF if you do not intend using it. We recommend you contact your heating contractor before and after shutting down for longer periods.

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

Note

No special measures are required when shutting down the system on a temporary basis.

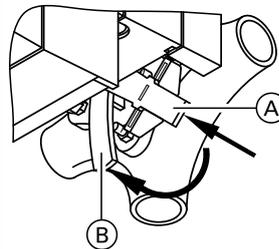
Shutdown

1. Switch off the boiler by pressing the "**START/STOP**" button on the control unit.
2. Wait until the run-on time has passed and let the boiler cool down.
3. Perform all work described in the overview of the chapter entitled "Maintenance and repairs" on page 45.
4. When there is a risk of frost, drain the boiler, observing the instructions issued by your heating system installer or ask them to charge the system with antifreeze.

What to do if...

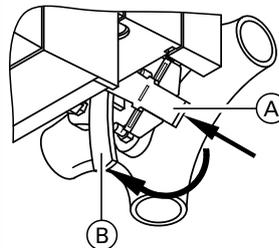
Rooms are too cold

Cause	Remedy
Central heating is off.	
Control unit incorrectly set.	Check the settings and correct if required: <ul style="list-style-type: none"> ▪ The heating circuit must be ON (see page 17) ▪ Room temperature (see page 16) ▪ Time (see page 35) ▪ Switching times (see page 17)
Control unit fault: "Fault" is displayed and the red fault indicator flashes	Check the type of fault (see page 38) and notify your heating contractor.
The heating circuit pump is not working.	Contact your heating contractor.
Heating circuit with mixer: mixer motor faulty	Unhook motorised lever (A) and manually adjust mixer lever (B) (to "5" for example). Notify your heating contractor.



Rooms are too hot

Cause	Remedy
Control unit incorrectly set.	Check the settings and correct if required: <ul style="list-style-type: none"> ▪ The heating circuit must be ON. See page 17 ▪ Room temperature (see page 16) ▪ Time (see page 35) ▪ Switching times (see page 17)
Control unit fault or outside temperature sensor/boiler water temperature sensor faulty: "Fault" will be displayed; the red fault indicator flashes.	Check the type of fault (see page 38) and notify your heating contractor.
Heating circuit with mixer: mixer motor faulty	Unhook motorised lever (A) and manually adjust mixer lever (B) (to "5" for example). Notify your heating contractor.



There is no hot water

Cause	Remedy
Control unit incorrectly set.	Check the settings and correct if required: <ul style="list-style-type: none"> ▪ DHW heating must be ON (see page 25) ▪ DHW temperature (see page 25) ▪ Time (see page 35) ▪ Switching times (see page 25)
DHW cylinder is cold.	Check the DHW heating times (see page 25) Check the set DHW temperature (see page 25) If the heating times are OK: check the temperature of the DHW cylinder. If that is too low: notify your heating contractor.
The DHW cylinder pump is not running.	Check the heating times. If the pump is running according to the times set in the control unit: notify your heating contractor.
Mixing valve faulty	Notify your heating contractor.

The DHW is too hot

Cause	Remedy
Control unit incorrectly set.	Check and correct the DHW temperature if required (see page 25).
Sensor fault	Notify your heating contractor.

"Fault" is shown in the display

Cause	Remedy
Heating system fault	Check the type of fault (see page 38) and notify your heating contractor.

Care, inspection and maintenance

Regular maintenance ensures trouble-free, energy efficient and environmentally responsible heating. For this, we strongly advise you to arrange an inspection and maintenance contract with your heating contractor.

Boiler

Increasing boiler contamination raises the flue gas temperature and thereby increases energy losses. The boiler must therefore be thoroughly cleaned by your heating contractor once a year.

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 (such as a sluice or injection system) is installed in the cold water supply of the DHW cylinder, ensure this is recharged in good time. For this, observe the manufacturer's instructions.

Additional care for DHW cylinders with sacrificial anode:

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)

Check the safety valve function every six months by venting, or have it checked by your heating contractor. The valve seat may become contaminated (see the valve manufacturer's instructions).

Drinking water filter (where installed)

For reasons of good hygiene:

- Replace the filter element on non-backwashing filters every 6 months (visual inspection every 2 months)
- On backwashing filters, backwash every 2 months.

Replacing fuses



Danger

Contact with 'live' components of the control unit can lead to fatal injury due to electric shock. Only a heating contractor may replace fuses/ MCBs.

Cleaning information

Have a heating contractor clean the interior of the boiler once a year.



Danger

Hot surfaces can lead to dangerous injuries. Only open the boiler after it has cooled down.



Please note

During maintenance and cleaning work, and when manipulating the ash box, there is a risk of fire and burns due to hot parts and ash.

- Wear suitable safety gloves.
- Only dispose of the ash in fireproof containers with covers.

Maintenance intervals

Vitoligno 300-C	System user	Heating contractor
For 18/24 kW: After 1000 kg of pellets have been consumed or at least annually		
For 32-48 kW: After 1500 kg of pellets have been consumed or at least annually		
Empty ash box (see page 45).	X	
Check the system pressure (see page 10).	X	
Clean the secondary heating surfaces, flue gas chamber, lambda probe and the flue gas fan.		X
Clean the combustion chamber, reversing chamber and finned grate.		X
Clean the ash chamber and ash removal.		X
Clean the pellet sensor and intake grille in the pellet hopper.		X
Clean the suction module with a vacuum cleaner.		X
For 18/24 kW: After 5000 kg of pellets have been consumed or at least every 3 years		
For 32-48 kW: After 8000 kg of pellets have been consumed or at least every 3 years		
Maintenance of moving parts (shafts, friction bearings, cogs, etc.)		X
Every 5 years		
Replace the battery inside the control unit.		X

Emptying the ash box

Note

If the ash box is being emptied without a message having been displayed on the control unit, reset the ash fill level at the control unit:

☰: for "Extended menu" ▶ "Information" ▶ "Reset data" ▶ Select "Ash box" ▶ "Reset data" ▶ "Yes"- "No" ▶ ⓧ to confirm.



Danger

Breathing in ash or pellet dust is detrimental to health.

Wear a dust mask to protect your respiratory tract.

Emptying the ash box (cont.)

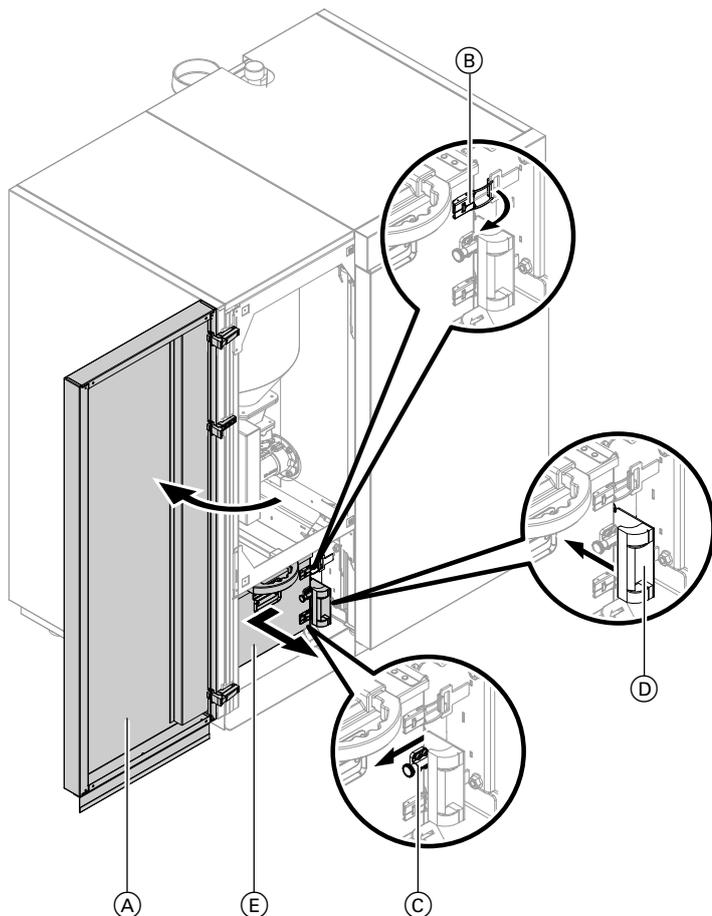


Fig.42

1. Switch off the boiler.
2. Only for pellet supply via vacuum system:
Open the l.h. front panel (door) (A).
3. Open the tensioning toggles (B); for this push down on the tensioning toggle clip. Push the ash box a little to the left.
4. Extract locking bolt (C). Push ash partition (D) back as far as it will go.
5. Pull out ash box (E) towards the front.

Note

The telescopic handle can be pulled out to various lengths.

6. Empty the ash box. For this remove the ash box cover.
7. Remove residues of ash from the bottom plate.
8. Reseal the ash box with its cover.

9. Proceed in reverse order to re-insert the ash box and close the boiler.

Note

Observe before closing the boiler that ash separator (D) must be opened again.

10. Switch the boiler ON.

Terminology

Setback mode (reduced heating mode)

See "Reduced heating mode".

Extension kit for heating circuit with mixer

Assembly (accessories) for controlling a heating circuit with mixer.

See "Mixer".

Heating circuit

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

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

Heating circuit pump

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

Actual temperature

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

Mixer

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

Night setback

See "Reduced heating mode".

Standard heating mode

For periods when you will be at home during the day, use standard heating mode to heat your interior. Set the periods using the time program for central heating. During these periods, the interior is heated to the standard room temperature.

Standard room temperature

For periods when you will be at home during the day, select the standard room temperature.

Open flue operation

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

Reduced heating mode

For periods when you will be absent or during the night, heat your rooms in reduced heating mode (setback mode). Set the periods using the time program for central heating. During these periods, the interior is heated to the reduced room temperature.

Reduced room temperature

For periods when you will be absent or during the night, select the reduced room temperature. See also "Reduced heating mode".

Safety valve

A safety device 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.

Set temperature

Default temperature that should be reached, set DHW temperature for example.

Drinking water filter

A device that removes solids from potable 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

In weather-compensated mode, the heating flow temperature is regulated according to the outside temperature. This means that no more heat is generated than is actually required to heat the interior to the set room temperature you selected.

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

Efficient and clean operation

To ensure efficient and clean operation of your heating system, please note the following:

- Only qualified and trained personnel may install and adjust the system.
- Only use the fuels specified in our operating instructions (see chapter "Ordering fuel"). This is essential for ensuring clean, efficient and reliable operation of your heating system.
- Regularly carry out the recommended maintenance and cleaning work on your system. For details, see chapter "Maintenance and repairs" in the operating instructions. This guarantees not only the operational reliability of the heating system and its safety equipment, but also its efficient and clean operation. For the best support of your heating system, we recommend taking out a maintenance contract.
- Your boiler can be controlled within a range of 30 to 100 % of its rated heating output. To avoid unnecessary emissions in low load operation, the appliances should be operated in the middle and upper output range (adjusted to the relevant heat demand) if possible. To avoid unnecessary cycling and to ensure the longest possible runtimes, combination with a modulating room or heating controller is ideal.
- In terms of energy, a buffer cylinder and combination with a solar thermal system are recommended. This guarantees efficient and clean operation of your heating system.

Information on disposal

Disposal of packaging

Your 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).

General energy saving tips

With the following steps, you can save even more energy:

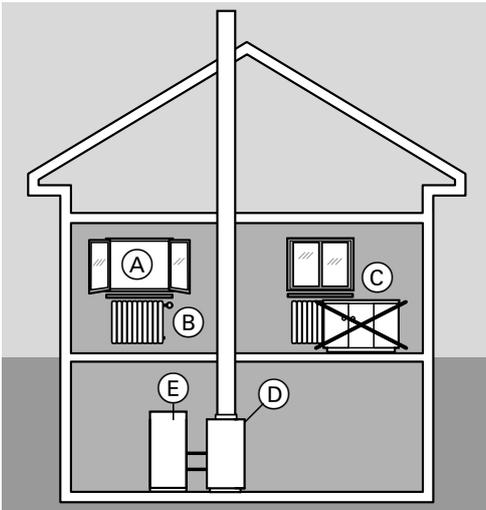


Fig. 43

- Correct ventilation/airing.
Briefly open window (A) fully and at the same time close thermostatic valves (B).
- Never overheat the interior; endeavour to achieve a room temperature of 20 °C; every degree of room temperature reduction saves up to 6 % of your heating bills.
- At dusk, close roller shutters (if installed) on windows.
- Adjust thermostatic valves (B) correctly.
- Never cover radiators (C) or thermostatic valves (B).
- Make use of the setting options offered by remote control D, e.g. standard temperature alternating with "reduced room temperature".
- Set the DHW temperature of DHW cylinder (E) at control unit (D).
- Only activate the DHW circulation pump (via switching times at the control unit) when DHW is actually drawn.
- Controlled DHW consumption: A shower generally uses less energy than a full bath.

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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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