## Operating instructions



for the system user

Heating system with weather-compensated, digital boiler and heating circuit control unit Vitotronic 200, type FO1



## **VITOLIGNO 300-P**



5592 617 GB 1/2014 Please keep safe.

#### 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 has **not** been designed to be operated by individuals (including children) with limited physical, sensory or mental capacities or who are lacking in the appropriate experience and/or knowledge, unless they are supervised by a person with responsibility for their safety or were instructed by that person in the operation of this appliance.



#### Please note

Children must be supervised. Ensure that children never play with the appliance.



#### Danger

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

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

#### If you smell gas



#### Danger

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

- Do not smoke. Prevent naked flames and sparks. Do not switch lights or electrical appliances on or off.
- Close the gas shut-off valve.
- Open windows and doors.
- Evacuate any people from the danger zone.
- Notify your gas or electricity supplier and your local heating contractor from outside the building.
- Shut off the electricity supply to the building from a safe place (outside the building).

## For your safety (cont.)

#### If you smell flue gas



#### Danger

Flue gas can lead to life-threatening poisoning.

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

#### In case of fire



#### Danger

If there is a fire, there is a risk of burns and explosion.

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

## What to do if the heating system develops faults



#### 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.

#### Installation room conditions



#### Danger

Sealed vents result in a lack of combustion air. This leads to incomplete combustion and the formation of life threatening carbon monoxide.

Never cover or close existing vents.

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



#### **Danger**

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



#### Please note

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

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

#### Safety instructions

### For your safety (cont.)

#### **Extractors**

Operating 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 heating contractor.

## Auxiliary components, spare and wearing parts

#### Please note

Components not tested with the heating system may lead to damage to the heating system, or may affect its functions.

Installation or replacement work must only be carried out by qualified personnel.

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#### Intended use

#### The Clean Air Act 1993 and Smoke Control Areas

Under the Clean Air Act local authorities may declare the whole or part of the district of the authority to be a smoke control area. It is an offence to emit smoke from a chimney of a building, from a furnace or from any fixed boiler if located in a designated smoke control area. It is also an offence to acquire an "unauthorised fuel" for use within a smoke control area unless it is used in an "exempt" appliance ("exempted" from the controls which generally apply in the smoke control area).

The Secretary of State for Environment, Food and Rural Affairs has powers under the Act to authorise smokeless fuels or exempt appliances for use in smoke control areas in England. In Scotland and Wales this power rests with Ministers in the devolved administrations for those countries. Separate legislation, the Clean Air (Northern Ireland) Order 1981, applies in Northern Ireland. Therefore it is a requirement that fuels burnt or obtained for use in smoke control areas have been "authorised" in Regulations and that appliances used to burn solid fuel in those areas (other than "authorised" fuels) have been exempted by an Order made and signed by the Secretary of State or Minister in the devolved administrations

Further information on the requirements of the Clean Air Act can be found here: http://smokecontrol.defra.gov.uk/

Your local authority is responsible for implementing the Clean Air Act 1993 including designation and supervision of smoke control areas and you can contact them for details of Clean Air Act requirements.

#### Intended use (cont.)

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 water that is of potable water quality.

Intended usage 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 does not comply with regulations.

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

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

## Commissioning

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

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

### Your system is preset at the factory

The control unit has been preset at the factory to "Heating & DHW", i.e. the system delivers central heating and DHW heating (if a DHW cylinder is installed). 9 Your heating system is therefore ready for operation:

#### Introductory information

### Your system is preset at the factory (cont.)

- Between 06:00 and 22.00 h the system delivers central heating with standard room temperature.
- Between 05:30 and 22:00 h the DHW is reheated to the selected set temperature (if a DHW cylinder is installed). The DHW circulation pump is switched on (if connected to the control unit).
- Between 22:00 and 06:00 h the system delivers central heating with reduced room temperature (set to 3 °C, frost protection).

- Between 22:00 and 05:30 h the DHW cylinder will not be reheated.
- The system automatically changes over between summer and wintertime.

The day and time are entered by your heating contractor during commissioning.

You can change the standard settings in accordance with your personal requirements.

#### Note

All data will be retained in the case of a power failure.

### Safety during maintenance and cleaning

#### Please note

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

- Wear suitable safety gloves.
- Use the covers provided to transport the ash box safely.
- Only dispose of the ash in fireproof containers with lids.

#### Note

Observe the country-specific regulations on the disposal of materials, waste and system components.

## Summary of controls and indicators

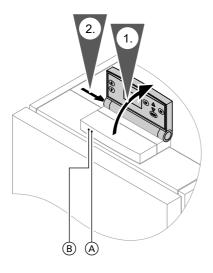
You can change all the settings of your heating system centrally, at the programming unit.

You may also make such changes at any remote control units that may be connected to your system.



Remote control operating instructions

## Opening the control unit

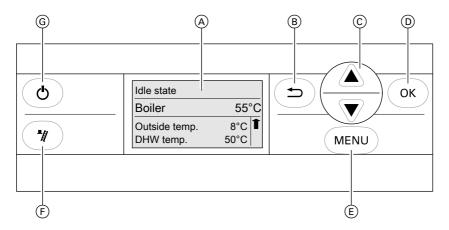


- 1. Lift up the top part of the control unit.
  - This clicks into a specific position.
- **2.** You can change this position by pushing button © at the side.

- A ON indicator (green)
- B Fault indicator (red)

## Summary of controls and indicators (cont.)

#### **Functions**



- A Display
- Back key
  This key always takes you back to
  the previous menu choice.
- © Cursor keys (for scrolling up and down through the menu and adjusting values)
- (D) Confirmation
- (E) Menu settings
- Emissions test key (only for servicing)
- G Standby (see page 16)

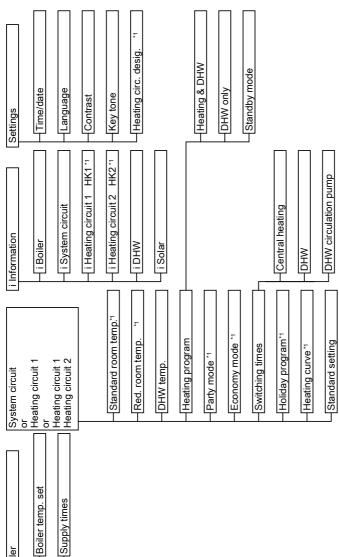
#### **Display layout**

At any one time, the display shows 4 lines of the selected menu. Select further menu points with  $\blacktriangle/\blacktriangledown$ .

If you choose a menu point where a value can be changed, e.g. **"Standard room temp."**, you change it with keys ▲/▼ and confirm the new value by pressing ⓒ.

## Summary of controls and indicators (cont.)

## Summary of menu structure



\*\*Not for system circuit with constant boiler water temperature.

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## Summary of controls and indicators (cont.)

## Symbols in the display

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

Risk of frost

# Emissions test function enabled

Radio clock reception (only with radio clock module, accessory)

Please wait

HC1 Heating circuit 1

HC2 Heating circuit 2

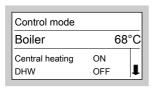
# Heating circuit selection – before making any settings or calling up data

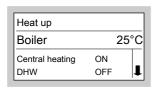
Your building may be heated by several independent heating circuits (e.g. underfloor heating circuits or radiator circuits).

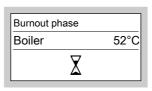
You need to select these before making **any** adjustment or calling up data. The heating circuits can be individually designated (see chapter "Heating circuit designation").

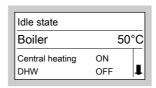
## Possible standard displays

Subject to the operating condition of the boiler, the following standard displays can be shown:

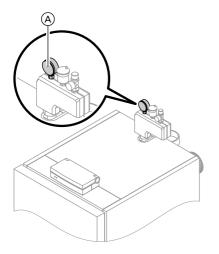








## Starting the heating system



**1.** Check the heating system pressure at pressure gauge (A):

The system pressure is too low if the indicator points to the area below the red field (minimum system pressure 1.0 bar or 0.1 MPa). In this case, top up with water or notify your local heating contractor.

- Check that the vents of the installation room are unrestricted.
- **3.** Check whether the heat consumption is assured by the heating system, e.g. if radiator valves are open.
- **4.** Press 🔘.

The heating system begins standard operation.

The green indicator (ON) illuminates.

After a short while, the standard display relating to the operating condition appears (see page 14).

## Shutting down the heating system

If you intend shutting down your heating system **temporarily**, e.g. during a summer holiday.

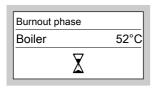
#### Start-up/shutdown

### Shutting down the heating system (cont.)

Press 🕲.

The green indicator (ON indicator) flashes.

■ If the burner is in use it goes into the burnout phase.



#### Note

If the boiler happens to be in the heatup phase then this is terminated before the boiler enters the burnout phase.

If the system is in the "Idle state", Standby immediately becomes active.

#### Note

- The display illumination extinguishes and the connected consumers, e.g. the heating circuit pumps, are switched off.
- Frost protection monitoring is **no longer** active.
- All control unit settings are retained.
- If a remote control is connected to the heating circuits, then its display illumination extinguishes as well.

## Starting a heating circuit and DHW heating

You wish to heat your rooms and have DHW available.

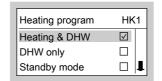
Press the following keys:

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit"
- 3. (OK) to confirm.
- 4. ▲/▼ for "Heating program".

- **5.** OK to confirm.
- 6. ▲/▼ for "Heating & DHW".
- 7. 

  to confirm.

  In the display "Accepted" is shown briefly and a check mark appears in the relevant box.



## Starting a heating circuit and DHW heating (cont.)

For the selected heating circuit, central heating will be provided with standard or reduced room temperature (frost protection) according to the set switching times.

Standard setting:

From 06:00 to 22:00 h standard room temperature; at other times reduced room temperature.

DHW heating (if a DHW cylinder is installed) is enabled and the DHW circulation pump (if installed) is switched on according to the selected switching times Standard setting:

From 05:30 to 22:00 h, DHW is reheated to the set temperature and the DHW circulation pump is on.
Observe the information on page 30.

■ The boiler and the DHW cylinder are protected against frost.

#### Shutting down a heating circuit and DHW heating

You do not wish to heat any rooms or have DHW available.

Press the following keys:

1. "MENU".

▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit"

**3.** OK to confirm.

4. ▲/▼ for "Heating program".

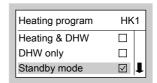
**5.** (OK) to confirm.

**6.** ▲/▼ for "Standby mode".

7. OK

to confirm.

In the display **"Accepted"** is shown briefly and a check mark appears in the relevant box



- Central heating is disabled for the selected heating circuit.
- No DHW heating. Observe the information on page 30.
- The boiler and the DHW cylinder are protected against frost.

## Shutting down a heating circuit and DHW heating (cont.)

#### Note

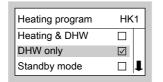
The pumps are briefly started every 24 hours to prevent them from seizing up.

#### Starting DHW heating only

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

Press the following keys:

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- 3. (OK) to confirm.
- 4. ▲/▼ for "Heating program".
- **5.** OK to confirm.
- **6. ▲**/**▼** for **"DHW only"**.
- 7. (R) to confirm.
  In the display "Accepted" is shown briefly and a check mark appears in the relevant box.



- Central heating is disabled for the selected heating circuit.
- DHW heating (if a DHW cylinder is installed) is enabled and the DHW circulation pump (if installed) is switched on according to the selected switching times.

Standard setting:

From 05:30 to 22:00 h, DHW is reheated to the set temperature and the DHW circulation pump is on.
Observe the information on page 30.

■ The boiler and the DHW cylinder are protected against frost.

If the boiler water temperature falls to 5 °C, the temperature is increased again to 50 °C.

#### Note

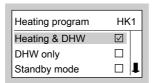
The heating circuit pumps are briefly started every 24 hours to prevent them from seizing up.

### Stopping DHW heating

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

Press the following keys:

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** (OK) to confirm.
- 4. ▲/▼ for "Heating program".
- **5.** OK to confirm.
- **6.** ▲/▼ for "**Heating & DHW**".
- 7. (K) to confirm.
  In the display "Accepted" is shown briefly and a check mark appears in the relevant box.



**8.** Delete the time phases for DHW heating (see page 35).

or

Adjust the set DHW temperature to 10 °C (see page 31).

For the selected heating circuit, central heating will be provided with standard or reduced room temperature (frost protection) according to the set switching times.

Standard setting:

From 06:00 to 22:00 h standard room temperature; at other times reduced room temperature.

- No DHW heating. Observe the information on page 30.
- The boiler and the DHW cylinder are protected against frost.

  If the boiler water temperature falls to 5 °C, the temperature is increased again to 50 °C.

#### Note

The cylinder pump is briefly started every 24 hours to prevent it from seizing up.

## Setting a permanent room temperature

Observe the following points if your heating circuit should provide central heating:

#### Checking the "Heating & DHW" setting for the heating circuit

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

Press the following keys:

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** OK to confirm.
- 4. ▲/▼ for "Heating program"; the check mark must be next to "Heating & DHW".
  If not, proceed as follows:

- 5. ▲/▼ for "Heating & DHW".
- **6.** OK to confirm.
- 7.  $\bigoplus$  until the standard display is shown (see page 14).

You can set the standard room temperature (for day) (see page 21) and the reduced room temperature (for night) (see page 22) for the relevant heating circuit.

## Checking the "Switching times" setting for the heating circuit

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; see page 23).

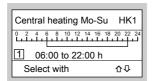
- If one or more time phases are selected, central heating with standard room temperature will be active for those times.
- If no time phases are selected, central heating will be enabled for the whole day with reduced room temperature.

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".
- 3. (OK) to confirm.
- 4. ▲/▼ for "Switching times".

#### Setting a permanent room temperature (cont.)

- **5.** (OK) to confirm.
- 6. ▲/▼ for "Central heating".
- 7. (K) until the display for the "Central heating" time phases appears on a time slot graphic.



In this example, time phase 1 is set from 06:00 to 22:00 h.

This means that during this time, central heating with standard room temperature is delivered.

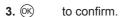
8.  $\bigcirc$  until the standard display is shown (see page 14).

For changing the switching times, see page 23.

## Setting the standard room temperature

Press the following keys:

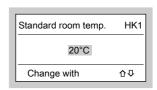
- 1. "MENU".
- ▲/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".



4. ▲/▼ for "Standard room temp."

5. (OK)

to confirm.



**6.**  $\triangle/\nabla$  for the required temperature.

**7.** (OK) to confirm.

"Accepted" appears briefly in the display.



#### Adjusting the room temperature

### Setting a permanent room temperature (cont.)

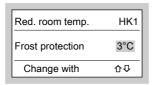
**8.**  $\Longrightarrow$  until the standard display is shown (see page 14).

#### Setting the reduced room temperature

Press the following keys:

**6.** ▲/▼ for the required temperature.

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** (OK) to confirm.
- **4. ▲**/**▼** for **"Red. room temp."**.
- **5.** OK to confirm.



#### Note

If the reduced room temperature is set to 3 °C, "Frost protection" will be displayed.

- 7. (K) to confirm.

  "Accepted" appears briefly in the display.
- 8.  $\bigoplus$  until the standard display is shown (see page 14).

## Setting a permanent room temperature (cont.)

#### **Switching times**

- For central heating, up to 4 changes per day between standard and reduced room temperature can be programmed (4 time phases).
- At the factory, **time phase** 1 is set for every day from 06:00 to 22:00 h, i.e. during that time, all rooms are heated with standard room temperature.
- You can set switching times individually for the following days or parts of the week:
  - The same for every day: Monday to Sunday
  - For individual parts of the week:
     Monday to Friday and Saturday to Sunday
  - For every day individually: Monday, Tuesday etc.

When setting switching times, note that your heating system requires some time to heat the rooms to the required temperature.

For the steps to set switching times, see page 23.

For the steps to delete a time phase, see page 24.

#### Setting switching times

Press the following keys:

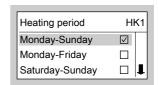
- 1. "MENU".
- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".
- 3. (OK) to confirm.

- 4. ▲/▼ for "Switching times".
- **5.** (ok) to confirm.
- 6. ▲/▼ for time switch "Central heating".

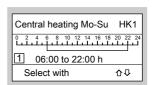
#### Note

If you want to terminate the set switching times prematurely, press (a) until the standard display is shown (see page 14).

**7.** (ok) to confirm.



- **8.** ▲/▼ until the required part of the week or day appears.
- **9.** OK to confirm.



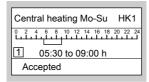
10. ▲/▼ to select the time phase. The relevant time phase is represented by a number (1, 2, 3 or 4).



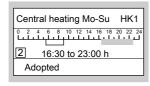
## Adjusting the room temperature

### Setting a permanent room temperature (cont.)

- **11.** (OK) to confirm.
- **12.** ▲/▼ for the start point of the time phase.
- **13.** (OK) to confirm.
- **14.** ▲/▼ for the end point of the time phase.
- **15. (K)** to confirm.



**16.** To adjust the beginning and end of further time phases, proceed as described in steps 10 to 15.



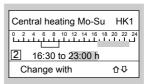
until the standard display is shown (see page 14).

#### **Deleting time phases**

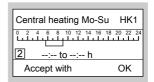
Press the following keys if you want to **delete** a time phase:

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

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



3. ▲/▼ until "--:-" is displayed for the end point.



- 4. (OK) to confirm.
- **5.**  $\Longrightarrow$  until the standard display is shown (see page 14).

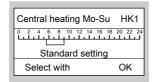
## Incorporating time phases into the standard settings

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

 Proceed as described in points 1 to 9 of chapter "Setting switching times".

### Setting a permanent room temperature (cont.)

#### 2. ▲/▼ for "Standard setting".



- **3.** (0K)
- twice to confirm.
- 4. 😑
- until the standard display is shown (see page 14).

## Changing the room temperature for a few days only

The following energy saving options are available for times when you are on holiday:

You can shut down the central heating completely (see "Shutting down a heating circuit and DHW heating" on page 17).

or

- You can set the central heating to minimum energy consumption (e.g. to prevent your house plants from being damaged by the cold). To do so, select the "Holiday program".
  - When "Heating & DHW" is selected, all heating circuits are heated with the selected reduced room temperature whilst the holiday program is active (see page 22), but there will be no DHW heating.
  - When "DHW only" has been selected, the holiday program for all heating circuits will only deliver frost protection monitoring for the boiler and the DHW cylinder.

### Setting a holiday program

The holiday program starts at 00:00 h the day following your departure and ends at 00:00 h on the day of your return, i.e. the set switching times are active on the day of departure and the day of return.

#### Note

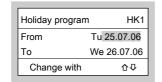
The control unit is set so that the holiday program applies to **all** heating circuits. If you want to change this, contact your local heating contractor.

## Adjusting the room temperature

### Changing the room temperature for a few days... (cont.)

Press the following keys:

- 1. "MENU".
- A/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** (OK) to confirm.
- **4.** ▲/▼ for "Holiday program".
- to confirm; the current date "From" and the following date "To" are displayed.



**6.** ▲/▼ for departure date.

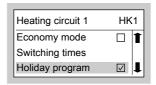
#### Note

If you want to terminate the set holiday program prematurely, press (a) until the standard display is shown (see page 14).

- 7. (OK) to confirm.
- **8.** ▲/▼ for return date.

**9.** (ok) to confirm.

In the display "Accepted" is shown briefly and a check mark appears in the relevant box.



#### 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. "MFNU".
- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".
- 3. (OK) to confirm.
- 4. ▲/▼ for "Holiday program".
- **5.** OK to confirm.
- 6. ▲/▼ for "Delete program".
- **7. OK** to confirm.
- 8. ▲/▼ for "Delete?" "Yes".

### Changing the room temperature for a few days... (cont.)

- 9. OK to confirm.
  - "Accepted" appears briefly in the display.
- until the standard display is shown (see page 14).

#### Changing the room temperature for a few hours only

The following functions enable you to change the room temperature for a few hours, without permanently altering your control unit settings.

- To save energy, you can reduce the standard room temperature with
   "Economy mode" (see chapter "Setting economy mode").
- As an exception, you want central heating with the standard room temperature and to have DHW available. For this, select "Party mode" (see chapter "Setting party mode").

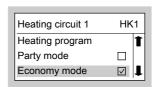
#### Setting economy mode

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

Press the following keys:

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".
- 3. OK to confirm.
- 4. ▲/▼ for "Economy mode".

to confirm.
In the display "Economy
mode ON" is shown briefly
and a check mark appears in
the relevant box



#### Terminating economy mode

Economy mode ends automatically with the next changeover to central heating with reduced room temperature.

#### Adjusting the room temperature

### Changing the room temperature for a few hours... (cont.)

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

- 1. "MENU".
- A/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** OK to confirm.
- 4. ▲/▼ for "Economy mode".
- to confirm.
   In the display "Economy mode OFF" appears briefly.

## Setting party mode

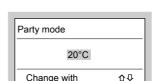
- Central heating will be enabled at any temperature you select (party temperature).
- DHW is reheated to the selected set temperature.
- The DHW circulation pump is switched on.

Press the following keys:

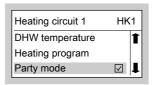
- 1. "MENU".
- ▲/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** (OK) to confirm.

4. ▲/▼ for "Party mode".
 A value for the room temperature during party mode is

shown in the display.



- **5.** ▲/▼ for the required temperature, if you want to change it.
- 6. (In the display "Accepted" is shown briefly and a check mark appears in the relevant box.



## Changing the room temperature for a few hours... (cont.)

#### Terminating party mode

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

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

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** (OK) to confirm.
- 4. ▲/▼ for "Party mode".
- 5. (ix) to confirm.
  In the display "Party mode
  OFF" appears briefly.

## Selecting constant DHW heating

#### Note

The control unit is adjusted so that the setting for DHW heating applies to all heating circuits. If you want to change this, contact your local heating contractor.

Observe the following points if you want to enable DHW heating:

You can set the DHW temperature (see page 31).

## Checking the "Heating & DHW"/"DHW only" setting for the heating circuit

Check whether "Heating & DHW" or "DHW only" is set for the relevant heating circuit.

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".
- **3.** (0K) to confirm.

for "Heating program"; the 4. ▲/▼ check mark must be next to "Heating & DHW" or "DHW only".

If not, proceed as follows:

- for "Heating & DHW" or 5. **A**/**V** "DHW only".
- 6. (OK) to confirm.
- **7**. (=)until the standard display is shown (see page 14).

## Checking the "Switching times" setting for the heating circuit

The time when DHW heating is enabled for the heating circuit and when the DHW circulation pump (if installed) runs is dependent on the settings of the switching times for the relevant day (4 possible time phases; see page 33).

#### Note

If DHW heating is set to automatic mode (see page 32), the switching times are checked by calling up the switching times for central heating (see page 20).

Press the following keys:

1. "MENU".

▲/▼ for selecting "Heating circuit
 1" (HC1), "Heating circuit
 2" (HC2) or "System circuit".

7.  $\rightleftharpoons$  until the standard display is shown (see page 14).

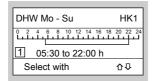
3. OK to confirm.

For changing the switching times, see page 32.

4. ▲/▼ for "Switching times".

**5. ▲**/**▼** for "**DHW**".

**6. (IX)** until the display for the **"DHW"** time phases appears on a time slot graphic.



In this example, time phase 1 is set from 05:30 to 22:00 h.

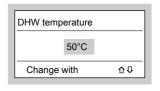
This means that DHW heating is enabled during this time.

### **Setting the DHW temperature**

Press the following keys:

- 1. "MFNU".
- A/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".

4. ▲/▼ for "DHW temperature".



**5.** ▲/▼ for the required temperature.

592 617 GB



to confirm.



6. OK

to confirm.

"Accepted" appears briefly in the display.

7. 😑

until the standard display is shown (see page 14).

## **Switching times**

## Heating system without DHW circulation pump

#### Note

The control unit is adjusted so that the setting for DHW heating applies to **all** heating circuits. If you want to change this, contact your local heating contractor.

- DHW heating can be started and stopped up to 4 times per day (4 time phases).
- Automatic mode (set at the factory)
  DHW heating is enabled in parallel to
  the central heating switching times of
  the first available heating circuit, but
  starts 30 minutes earlier (from 05:30 to
  22:00 h).

#### ■ Individual switching times

You can also set up individual switching times for the following days or parts of the week if you do not wish to operate in automatic mode:

- The same for every day: Monday to Sunday
- For individual parts of the week: Monday to Friday and Saturday to Sunday
- For every day individually: Monday, Tuesday etc.

When setting switching times, note that your heating system requires some time to heat the DHW cylinder to the required temperature.

For the steps to set switching times, see page 34.

For the steps to delete a time phase, see page 35.

## Heating system with DHW circulation pump

#### Note

The control unit is adjusted so that the setting for DHW heating applies to **all** heating circuits. If you want to change this, contact your local heating contractor.

- The DHW circulation pump transports hot water through a ring pipeline between the DHW cylinder and the draw-off points to deliver DHW to the taps as quickly as possible.
- DHW heating and the DHW circulation pump can be started and stopped up to 4 times per day (4 time phases).
- Activating the DHW circulation pump is only advisable for those times when DHW is actually drawn.

- Automatic mode (set at the factory)
  DHW heating and the DHW circulation
  pump are enabled in parallel to the
  central heating switching times of the
  first available heating circuit, but start
  30 minutes earlier (from 05:30 to 22:00
  h).
- Individual switching times

You can also set up individual switching times for the following days or parts of the week if you do not wish to operate in automatic mode:

- The same for every day: Monday to Sunday
- For individual parts of the week:
   Monday to Friday and Saturday to Sunday
- For every day individually: Monday, Tuesday etc.

The following explains how to set switching times using DHW heating by way of an example. Proceed as for setting switching times for the DHW circulation pump.

When setting switching times, note that your heating system requires some time to heat the DHW cylinder to the required temperature.

For the steps to set switching times, see page 34.

For the steps to delete a time phase, see page 35.

#### Setting switching times

#### Setting individual switching times

Press the following keys:

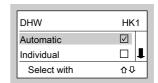
1. "MENU".

- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit"
- **3.** (ok) to confirm.
- 4. ▲/▼ for "Switching times".
- **5.** OK to confirm.
- **6.**  $\triangle/\nabla$  for "**DHW**" time switch.

#### Note

If you want to terminate the set switching times prematurely, press (a) until the standard display is shown (see page 14).

7. (OK) to confirm.



- 8. ▲/▼ for "Individual".
- 9. OK to confirm.

DHW period	HK1
Monday-Sunday	
Monday-Friday	
Saturday-Sunday	

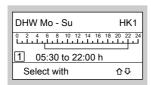
10. ▲/▼ until the required part of the week or day appears.



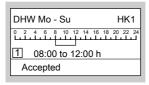
### Selecting DHW heating

## Selecting constant DHW heating (cont.)

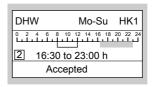
**11.** (OK) to confirm.



- 12. ▲/▼ to select the time phase. The relevant time phase is represented by a number (1, 2, 3 or 4).
- **13.** OK to confirm.
- **14.** ▲/▼ for the start point of the time phase.
- **15.** OK to confirm.
- **16.** ▲/▼ for the end point of the time phase.
- 17. (ok) to confirm.



**18.** To adjust the beginning and end of further time phases, proceed as described in steps 12 to 17.

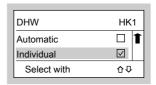


19.  $\Longrightarrow$  until the standard display is shown (see page 14).

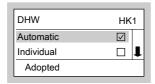
#### Automatic mode, setting

Press the following keys:

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** OK to confirm.
- 4. ▲/▼ for "Switching times".
- **5.** OK to confirm.
- **6.** ▲/▼ for "**DHW**" time switch.
- 7. (OK) to confirm.



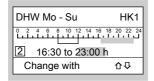
8. ▲/▼ for "Automatic".



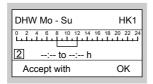
#### **Deleting time phases**

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

- 1. Proceed as described in points 1 to 12 of chapter "Setting switching times".
- 2. (K) until the end point of the selected time phase is displayed.



3. ▲/▼ until, for the end point, "- -: -" is displayed.

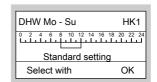


- **4.** (OK) to confirm.
- **5.**  $\Longrightarrow$  until the standard display is shown (see page 14).

## Restoring time phases to the standard settings

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

- 1. Proceed as described in points 1 to 11 of chapter "Setting switching times".
- 2. ▲/▼ for "Standard setting".



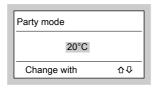
- **3. OK** twice to confirm.
- **4.**  $\rightleftharpoons$  until the standard display is shown (see page 14).

## Selecting DHW heating for a few hours only

The following functions enable you to heat DHW for several hours, without permanently altering your control unit settings. For this, select "Party mode". During party mode, the DHW circulation pump runs and central heating operates with the party mode temperature.

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit"
- 3. OK) to confirm.
- 4. ▲/▼ for "Party mode".



#### Note

If you do not require central heating (e.g. in summer), set the temperature for party mode to 4 °C (see chapter "Setting party mode").

**5.** (OK) twice to confirm.

#### **Terminating party mode**

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

If you want to delete party mode prematurely, press the following keys:

- 1. "MENU".
- ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".
- **3.** (ok) to confirm.
- 4. ▲/▼ for "Party mode".
- 5. (i) to confirm.
  In the display "Party mode OFF" appears briefly.

### Selecting DHW heating only once

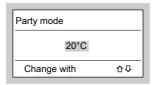
The following function enables you to heat DHW once, without permanently altering your control unit settings. For this, select "Party mode".

#### Preconditions:

- Not in "Standby mode" and not in the "Holiday program".
- The DHW temperature must be below the set value (see page 31).

Press the following keys:

- 1. "MENU".
- A/▼ for selecting "Heating circuit
   1" (HC1), "Heating circuit
   2" (HC2) or "System circuit".
- **3.** (OK) to confirm.
- **4. ▲**/**▼** for **"Party mode"**.



- **5.** (ok) twice to confirm.
- **6.** After approx. 10 s, press ( again. Party mode is then terminated. DHW heating continues until the set value is reached.

### Further adjustments

### Setting supply times for fuel supply

#### Note

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

The standard setting for the supply time is **"Subj. to demand"**, meaning the supply system is enabled automatically.

You can also set the supply times individually, if required, so that the pellet hopper is only allowed to be charged at certain times.

Select the supply times in such a way that there is sufficient fuel during blocking times.

### Setting supply times

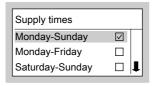
Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for "Boiler".
- **3.** (OK) to confirm.
- 4. ▲/▼ for "Supply times".
- **5.** OK to confirm.
- 6. ▲/▼ for "Individual".

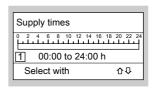
#### Note

If you want to terminate the set supply times prematurely, press (a) until the standard display is shown (see page 14).

**7.** OK to confirm.



- **8.** ▲/▼ until the required part of the week or day appears.
- 9. (OK) to confirm.



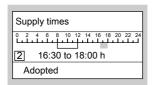
- 10. ▲/▼ to select the time phase. The relevant time phase is represented by a number (1, 2, 3 or 4).
- **11. ()** to confirm.
- **12.** ▲/▼ for the start point of the time phase.
- **13.** OK to confirm.
- **14.** ▲/▼ for the end point of the time phase.

### Setting supply times for fuel supply (cont.)

**15.** OK to confirm.



 To adjust the beginning and end of further time phases, proceed as described in steps 10 to 15.



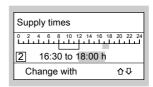
17. (a) until the standard display is shown (see page 14).

### **Deleting time phases**

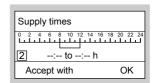
Press the following keys if you want to **delete** a time phase:

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

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



▲/▼ until, for the end point, "--: -" is displayed.



- **4.** OK to confirm.
- **5.**  $\rightleftharpoons$  until the standard display is shown (see page 14).

# Restoring time phases to the standard settings

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

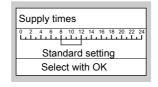
**1.** Proceed as described in points 1 to 9 of chapter "Setting supply times".



### Further adjustments

### Setting supply times for fuel supply (cont.)

2. ▲/▼ for "Standard setting".



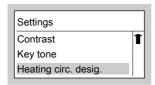
- **3.** (ok) twice to confirm.
- 4.  $\rightleftharpoons$  until the standard display is shown (see page 14).

### Heating circuit designation

You can give heating circuits 1 and 2 (HC1 and HC2) individual names. The abbreviations HC1 and HC2 cannot be changed.

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for "Settings".
- 3. OK to confirm.
- 4. ▲/▼ for "Heating circ. desig.".



- **5.** OK to confirm.
- 6. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".

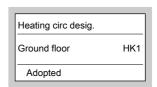
- 7. (OK) to confirm.
- **8.**  $\triangle/\nabla$  for the required letter.

#### Note

You can hold down ▲/▼ until the required letter appears.

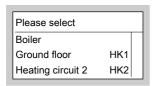
If you want to delete letters, press ▲/▼, until a blank space appears.

- 9. (0K) to confirm.
- **10.** Continue until the word is complete.
- 11. (ix) until the line is filled with blank spaces and "Accepted" appears in the display.



### Heating circuit designation (cont.)

For further settings the following display is shown for **"Heating circuit 1"**:

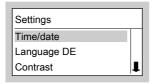


### Setting the time and date

The date and time are set by your contractor and may be changed manually.

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for "Settings".
- 3. (OK) to confirm.
- 4. ▲/▼ for "Time/date".



- **5.** OK to confirm.
- **6.**  $\triangle/\nabla$  for the required time.
- **7.** (OK) to confirm.
- **8.**  $\triangle/\nabla$  for the required date.
- 9. (ok) to confirm.
- **10.**  $\Longrightarrow$  until the standard display is shown (see page 14).

# Language selection

Press the following keys:

1. "MFNU".

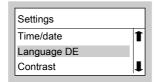
- 2. ▲/▼ for "Settings".
- **3.** (0K) to confirm.



### Further adjustments

### Language selection (cont.)

### 4. ▲/▼ for "Language".



- **5.** (OK) to confirm.
- **6.**  $\triangle/\nabla$  for the required language.
- **7.** OK to confirm.
- 8.  $\bigoplus$  until the standard display is shown (see page 14).

### Modifying the boiler heating characteristics

You can alter the heating characteristics if the room temperature does not meet your requirements over a longer period of time.

You alter the characteristics by changing the slope and level of the heating curve. For more information regarding the heating curve, see page 44.

Please observe the modified heating characteristics over several days (if possible, wait for a major change in the weather) before making further adjustments.

Make short-term adjustments to the standard room temperature as described on page 21.

Make short-term adjustments to the reduced room temperature as described on page 22.

### Slope and level, changing

For assistance, use the following table.

Heating characteristics	Action	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)	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)	Slope 1.3 Level 0 K

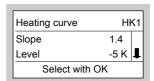
### **Modifying the boiler heating characteristics** (cont.)

Heating characteristics	Action	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 a lower value (e.g3)	Slope 1.4 Level -3 K
The living space is too cold during spring/autumn, but warm enough during the heating season	Adjust the heating curve slope to the next lowest value and the level to a higher value	Slope 1.3 Level 3 K
The living space is too hot during spring and autumn, but warm enough during the heating season	Adjust the heating curve slope to the next highest value and the level to a lower value	Slope 1.5 Level -3 K

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit"
- 3. (OK) to confirm.
- 4. ▲/▼ for "Heating curve".
- **5.** (0K) to confirm.

6. ▲/▼ for "Slope" or "Level".



- 7. (OK) to confirm.
- **8.** ▲/▼ for the required value.
- 9. (OK) to confirm.
- until the standard display is shown (see page 14).

#### Note

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

### Modifying the boiler heating characteristics (cont.)

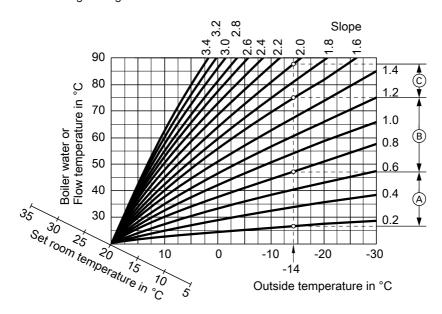
### For technically-minded system users

The heating curves demonstrate the relationship between the outside temperature and the boiler water temperature or flow temperature. To put it simply, the lower the outside temperature, the higher the boiler water temperature or flow temperature.

The illustrated heating curves apply with the following settings:

- Heating curve level = 0 Different level settings shift the curve in parallel in a vertical direction.
- Standard room temperature = approx. 20 °C

In the delivered condition, the slope is set to 1.4; the level to 0.



### Modifying the boiler heating characteristics (cont.)

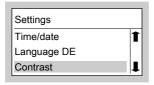
For example, for outside temperature -14 °C:

- (A) Underfloor heating system, slope 0.2 to 0.8
- B Low temperature heating system, slope 0.8 to 1.6
- © Heating system with a boiler water temperature in excess of 75 °C, slope 1.6 to 2.0

## Adjusting the display contrast

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for "Settings".
- 3. (OK) to confirm.
- 4. ▲/▼ for "Contrast".



- **5.** (OK) to confirm.
- **6.**  $\triangle/\nabla$  to adjust the contrast.
- **7.** OK to confirm.
- 8.  $\Leftrightarrow$  until the standard display is shown (see page 14).

# Adjusting the key tone

If you wish to hear a sound every time you press a key, then you can select one.

Press the following keys:

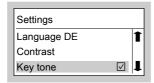
- 1. "MENU".
- 2. ▲/▼ for "Settings".



### Further adjustments

### Adjusting the key tone (cont.)

- 3. OK to confirm.
- **4. ▲**/**▼** for **"Key note"**.



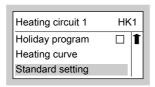
- 5. (i) for "Key note ON" or "Key note OFF".
- **6.**  $\Longrightarrow$  until the standard display is shown (see page 14).

### Restoring the standard settings

It is possible to simultaneously reset all modified values for the heating circuit to the standard settings.

Press the following keys:

- 1. "MENU".
- 2. ▲/▼ for selecting "Heating circuit 1" (HC1), "Heating circuit 2" (HC2) or "System circuit".
- **3.** (OK) to confirm.
- 4. ▲/▼ for "Standard setting".



**5.** (OK) to confirm.

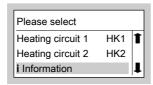
- **6.** ▲/▼ for "Yes".
- **7.** (OK) to confirm.
- 8.  $\Leftrightarrow$  until the standard display is shown (see page 14).

### Scanning temperatures

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

Press the following keys:

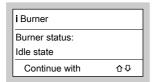
- 1. "MENU".
- 2. ▲/▼ for "Information".



- **3.** (ok) to confirm.
- **4.** ▲/▼ for the following selection:
  - "Boiler"
    - "System circuit"
    - "Heating circuit 1"
    - "Heating circuit 2"
  - "DHW"
  - "Solar"
- **5.** OK to confirm.

### **Boiler information**

Select with ▲/▼.



- "Burner status"
  - "Idle state"
  - "Heat up"
  - "Control mode"
  - "Burnout phase"
  - "Cleaning in op." for automatic cleaning of the heat exchanger surfaces inside the boiler
  - "Cleaning with stop" for automatic cleaning of the ash grate
- "Outside temp."
- "Boiler water temperature"
- "Buffer temperature top" if a heating water buffer cylinder is installed
- "Buffer temperature bottom" if a heating water buffer cylinder is installed
- "Burner operation"\*1 burner hours run



<sup>\*1</sup> For resetting to "0", see page 50.

### Scanning temperatures (cont.)

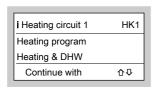
- "Burner starts"\*1
- "Fuel consumption"\*1\*2 –, subject to appropriate settings having been made by the heating contractor
- "Supply times" "Enabling"/"Disabled"
- "Fuel delivery" "ON"/"OFF" "Fuel supply" "ON"/"OFF"
- "Return t. rais. pump" "ON"/"OFF"

   if a return temperature raising pump is installed

- "Output 52 M1" "Open"/"Control mode"/"Close"
- "Output 52 M2" "Open"/"Control mode"/"Close"
- "Output 50" "ON"/"OFF"
- "Output 28" "ON"/"OFF"
- "Output 20 M1" "ON"/"OFF"
- Time
- Date

# System circuit information (weather-compensated), heating circuit 1 and heating circuit 2

Select with ▲/▼.



- "Heating program"
  - "Heating & DHW"
  - "DHW only"
  - "Standby mode"
  - "Economy mode"
  - "Party mode"
  - "Holiday program"
  - "Screed program"
  - "External program"
  - "External hook-up"
- "Operating status"
  - "Heating mode"
  - "Reduced mode"
  - "Standby mode"

- "Flow temperature"
- "Standard room temp."
- "Red. room temp."
- "Party mode" if party mode is enabled
- "Room temperature" actual value if a remote control unit is connected
- "Mixer" "Open"/"Control mode"/"Close"
- "Heating circuit pump" "ON"/"OFF"
- "Holiday program" if one has been entered

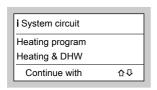
<sup>\*1</sup> For resetting to "0", see page 50.

<sup>\*2</sup> The fuel consumption is a calculated value. It can vary from the actual value by up to 15 %.

### Scanning temperatures (cont.)

# System circuit information (with constant boiler water temperature)

### Select with ▲/▼.

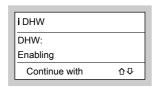


- "Flow temperature"
- "Heating circuit pump" "ON"/"OFF"
- "Holiday program" if one has been entered

- "Heating program"
  - "Heating & DHW"
  - "DHW only"
  - "Standby mode"
  - "Screed program"
  - "External program"
  - "External hook-up"
- "Operating status"
  - "Heating mode"
  - "Reduced mode"
  - "Standby mode"

### DHW information (if a DHW cylinder is installed)

### Select with ▲/▼.



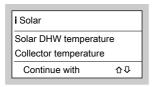
- "DHW" "Enabling"/"Disabled"
- "DHW temperature"
- "Cyl. prim. pump" "ON"/"OFF"
- "DHW circulation pump" "ON"/"OFF"

### **Solar information**

This information menu is only displayed if the solar thermal system is regulated by the boiler Vitotronic 200-FO1. Select with  $\blacktriangle/\blacktriangledown$ .

### Scanning options

### Scanning temperatures (cont.)



- "Solar DHW temperature"
- "Collector temperature"

Resetting system data

Press the following keys:

**1.** (OK) with information display, i.e. "Burner operation".

- "Solar energy"\*1— in kWh
- "Solar circuit pump"\*1— hours run in
- "Solar circuit pump" "ON"/"OFF"
- "Reheating suppression" "ON"/"OFF"

- 2. ▲/▼ for "Hours run delete? Yes"
- 3. (OK) to confirm.

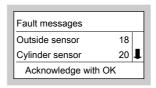
### Calling up the fault display

If your heating system has developed a fault, it will be indicated in the display and by the red fault indicator flashing (see page 11). You can check the fault message and code in the display and then notify your heating contractor accordingly. This allows the heating contractor to prepare better for the service call and may save additional costs.



Press the following keys:

**1.** (OK) for troubleshooting.



- 2. ▲/▼ to display further fault messages if there are several faults.
- 3. (OK) to "Acknowledge" all fault messages.

<sup>\*1</sup> For resetting to "0", see page 50.

### Calling up the fault display (cont.)

- ▲/▼ for "Yes" or "No".
   With "Acknowledge? Yes"
   you confirm that you have
   noted the fault.
- **5.** (OK) to confirm.

To recall acknowledged fault messages, press the following keys:

- 1. "MENU".
- 2. ▲/▼ for "Fault messages".
- **3.** (OK) to confirm.
- **4.** ▲/▼ for the list of current faults.

#### Note

The fault message will be redisplayed at 07:00 h the following day if the fault has not been rectified.

The red fault indicator flashes until the fault has been rectified.

# Rooms are too cold

Cause	Remedy
Heating system in "Standby"	■ Press ( (see page 15).
ON indicator (green) flashes	■ Switch ON the power supply, e.g. at a
or	separate MCB/fuse or a mains isolator
The heating system is off and the	(outside the boiler room).
ON indicator (green) is off	■ Check the MCB/fuse in the power distribution board (main domestic MCB/fuse).
Control unit incorrectly set	Check settings and correct if required:  ■ The heating circuit must be on (see page 20)  ■ Room temperature (see page 20)  ■ Time (see page 41)  ■ Boiler heating characteristics (see page 42)
Only when operating with a DHW cylin-	Wait until the DHW cylinder has been
der:	heated up.
DHW heating priority	
No fuel	Check the fuel reserves and re-order if
	required.
	Check the set supply times. Select the
	supply times in such a way that there is
Control unit fault:	sufficient fuel during blocking times.  Check the type of fault (see page 50) and
"Fault" is displayed and the red fault indicator flashes (see page 50)	notify your local heating contractor.
In conjunction with the mixer circuit: Mixer motor faulty	Unhook motorised lever (A) and manually adjust mixer lever (B) (e.g. to "5"). Inform your local heating contractor.
	B

# Rooms are too hot

Cause	Remedy
Control unit incorrectly set	Check settings and correct if required:  The heating circuit must be on (see page 20)  Room temperature (see page 20)  Time (see page 41)  Boiler heating characteristics (see page 42)
Control unit fault or outside temperature sensor/boiler water temperature sensor faulty:  "Fault" is displayed and the red fault indicator flashes (see page 50)	Check the type of fault (see page 50) and notify your local heating contractor.
In conjunction with the mixer circuit: Mixer motor faulty	Unhook motorised lever (A) and manually adjust mixer lever (B) (e.g. to "5"). Inform your local heating contractor.

### What to do if...

### There is no hot water

Cause	Remedy
Heating system in "Standby"	■ Press ③ (see page 15).
ON indicator (green) flashes or The heating system is off and the ON indicator (green) is off	<ul> <li>Switch ON the power supply, e.g. at a separate MCB/fuse or a mains isolator (outside the boiler room).</li> <li>Check the MCB/fuse in the power distribution board (main domestic MCB/fuse).</li> </ul>
Control unit incorrectly set	Check settings and correct if required:  DHW heating must be on (see page 30)  DHW temperature (see page 31)  Time (see page 41)
No fuel	See page 52.
Control unit fault:	Check the type of fault (see page 50) and
<b>"Fault"</b> is displayed and the red fault indicator flashes (see page 50)	notify your local heating contractor.
Circulation pump for cylinder heating faulty	Inform your local heating contractor.

# The DHW is too hot

Cause	Remedy
Control unit incorrectly set	Check and correct the DHW temperature
	if required (see page 31).
Sensor fault	Inform your local heating contractor.

# "Fault" is shown in the display

Cause	Remedy
Heating system fault	Check the type of fault (see page 50) and
	notify your local heating contractor.

### "Maintenance" is shown in the display

Cause	Remedy
The maintenance interval has expired.	Arrange a service with your local heating
	contractor.

# "Remote control" is shown in the display

Cause	Remedy
	Make adjustments or call up data at the remote control (see separate operating instructions).

## "Close ash door" is shown in the display

Cause	Remedy
Ash door is open.	Close the ash door.

# "Cleaning in op." is shown in the display

Cause	Remedy
Automatic cleaning of the heat exchanger	Wait until this function has been comple-
surfaces is enabled.	ted.

# "Cleaning with stop" is shown in the display

Cause	Remedy
Automatic combustion grate cleaning is	Wait until this function has been comple-
enabled.	ted.

### What to do if...

# "Refill store" is shown in the display

Cause	Remedy
The pellet store or pellet silo is empty.	Refill the pellet store or pellet silo.
<b>Note</b> This display will only be shown if a pellet sensor has been fitted inside the pellet hopper and has been enabled.	

# "Grate cleaning" is shown in the display

Cause	Remedy
The grate is automatically cleaned, as un-	Wait until this function has been comple-
burned pellets can remain on the grate	ted.
(e.g. after error "Not ignited").	

# "Empty ash box" is shown in the display

Cause	Remedy
The grate has recently been cleaned. Remove unburned pellets from the ash box.	Empty the ash box and close the ash door (see page 58).

### **Ordering fuel**

For combustion in the Vitoligno 300-P, use wood pellets with a diameter of 6 mm, a length from 5 to 30 mm (20 % up to 45 mm) and a maximum residual moisture content of 10 %. Pellets certified to ENplus conforming to EN 14961 Part 2 class A1 are suitable for use in the Vitoligno 300-P appliances (see Section 1 of the Vitoligno 300-P Technical Guide for more information).

### **Delivery methods**

Pellets are sold in sacks of 15 to 30 kg, in bulk up to 1000 kg and loose. In their loose form, wood pellets are transported by silo tanker and blown into the storage room via a hose system.

#### Note

Over time, dust collects inside the storage room and in the boiler pellet hopper, which can impair the pellet charging. With this in mind, remove all dust from the hopper and pellet storage area before reordering.

### **Emptying the ash box**

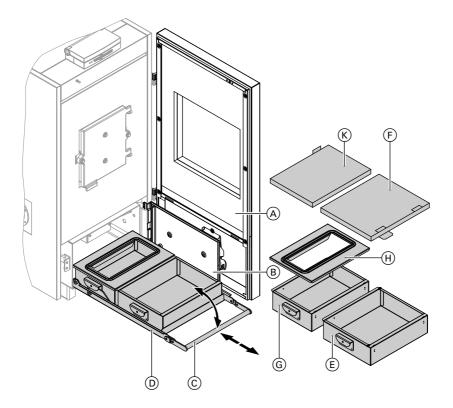
Empty the ash box regularly.

Rated heating	Clean after fuel con-
output	sumption of
12 to 24 kW	800 to 1000 kg
32 to 48 kW	1200 to 1500 kg

Empty the ash box immediately when "Empty ash box" is displayed on the control unit. This occurs when there are unburned pellets in the forward ash box.

#### Note

Subject to the pellet quality and operating conditions, the intervals at which the ash container must be emptied can increase or decrease.



- 1. Switch the boiler to standby mode. To do so, press  $\circlearrowleft$  on the control unit.
- **2.** Open door (A).

### Emptying the ash box (cont.)

3. Open ash door B.

#### Note

Never open the ash door during the "heat-up process". Only open the ash door once the boiler is switched off or the control unit displays "Idle state". Depending on the current operating conditions, burnout can take up to 40 minutes.

- **4.** Pivot bracket © of ash pan D fully downwards.
- **5.** Pull ash pan ① out as far as it will go.
- Pull front ash box (E) out of ash pan
   and seal the ash box with cover (F) for handling purposes.
- 7. Pull rear ash box ⑤ forward, remove cover Ĥ and seal ash box with cover ৎ for handling purposes.
- 8. Empty both ash boxes.
- Check the ash chamber and sealing faces inside the boiler and remove any ash residue found. To do this, you can lift the entire ash pan out of the guide rails.

 Remove cover (K) from rear ash box and place cover (H) on the ash box

#### Note

Clean the gasket in cover (H) and check the gasket for damage. When replacing the cover, ensure it is seated correctly.

- **12.** Remove cover (F) from front ash box (E) and position the ash box on ash pan (D).
- Push the ash pan in as far as it will go and pivot bracket © upwards.

#### Note

The ash boxes must not be swapped round when being reinserted. An incorrectly inserted ash pan can lead to boiler damage.

- **14.** Close ash door B and door A.
- Observe the following details regarding the boiler emptying intervals 58.

### Cleaning



#### Danger

Touching 'live' components can result in the transfer of dangerous body currents.

Switch OFF the mains supply (e.g. at a separate MCB/fuse or a mains isolator) before starting cleaning procedures and wait until the boiler has cooled down.

Clean at least once per heating season.



Service instructions

Only clean the boiler with the cleaning implements supplied and with a vacuum cleaner. Never use chemical cleaning agents.

### Inspection and maintenance

The inspection and maintenance of heating systems is compulsory according to the Energy Savings Ordinance [Germany], EN 806, and DIN 1988-8 (A: ÖNORM B8131).

Regular maintenance ensures troublefree, energy-efficient and environmentally responsible heating operation. To achieve this, we strongly advise you to arrange an inspection and maintenance contract with your local heating contractor.

#### **Boiler**

Increasing boiler contamination raises the flue gas temperature and thereby increases energy losses. All boilers should therefore be cleaned annually.

### DHW cylinder (if installed)

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

Only a qualified heating contractor should clean the inside of a DHW cylinder and the DHW connections.

Refill any water treatment equipment (e.g. a sluice or injection system) in good time, if such equipment is installed in the cold water supply of the DHW cylinder. In this connection, observe the manufacturer's instructions.

In addition for the Vitocell 100:

We recommend that the correct function of the sacrificial anode is checked annually by your heating contractor. The anode function can be checked without interrupting 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).

### **Inspection and maintenance** (cont.)

### **Drinking water filter (where installed)**

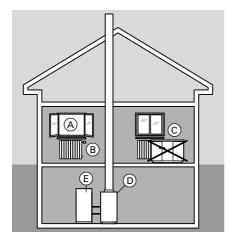
For hygiene reasons:

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

### Energy saving tips

### **Energy saving tips**

With the following steps, you can save additional energy:



- Correct ventilation.
   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.
- Close roller shutters (where installed) in front of windows at dusk.
- Adjust thermostatic valves (B) correctly.
- Never cover radiators © or thermostatic valves ®.
- Make full use of the setting options offered by control unit ①, e.g. "Standard room 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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5592 617 GB

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### **Applicability**

For heating systems with Vitoligno 300-P, DHW cylinder and Vitotronic 200, type FO1.

### 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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