# Operating instructions

**for the system user**

Heating system
With constant temperature control unit

# VITOPEND 100-W


5592 609 GB 9/2015

**Please keep safe.**

## For your safety

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

### Safety instructions explained

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

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

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

### Target group

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

**Please note**
Supervise children in the proximity of the appliance.
- Never permit children to play with the appliance.
- Cleaning and maintenance must not be carried out by unsupervised children.

### Appliance connection

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

**Danger**
Incorrectly executed work on the heating system can lead to life threatening accidents.
- Work on gas installations must only be carried out by a registered gas fitter.
- Work on electrical equipment must only be carried out by a qualified electrician.

### Work on the appliance

- All settings and work on the appliance must be carried out as specified in these operating instructions. Further work on the appliance may only be carried out by authorised contractors.
- Never open the appliance.
- Never remove casings.
- Never change or remove attachments or fitted accessories.
- Never open or retighten pipe connections.

5592 609 GB

## For your safety (cont.)

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

**Damage to the appliance**

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

**If you smell gas**

**Danger**
Escaping gas can lead to explosions which may result in serious injury.
- Never smoke. Prevent naked flames and sparks. Never switch lights or electrical appliances on or off.
- Close the gas shut-off valve.
- Open windows and doors.
- Evacuate any people from the danger zone.
- Notify your gas and power supply utility and your local heating contractor from outside the building.
- Have the power supply to the building shut off from a safe place (outside the building).

**If you smell flue gas**

**Danger**
Flue gas can lead to life threatening poisoning.
- Shut down the heating system.
- Ventilate the installation site.
- Close all doors in the living space.

**In case of fire**

**Danger**
Fire presents a risk of burns and explosion.
- Shut down the heating system.
- Close the shut-off valves in the fuel supply lines.
- Use a tested fire extinguisher, class ABC.

**In case of water leaking from the appliance**

**Danger**
Water leaking from the appliance poses an electrocution hazard.
- Switch off the heating system at the external isolation point (e.g. fuse box, domestic power distribution unit).
- Notify your local heating contractor.

## For your safety (cont.)

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

**Danger**
Fault messages point to faults in the heating system. If faults are not rectified, they can have life threatening consequences.
Never acknowledge fault messages several times in quick succession. Inform your heating contractor so the cause can be analysed and the fault rectified.

**Installation room requirements**

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

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

**Please note**
Incorrect ambient conditions can lead to heating system damage and can put safe operation at risk.
- Ensure ambient temperatures are above 0 °C and below 35 °C.
- Prevent air contamination by halogenated hydrocarbons (e.g. as contained in paints, solvents or cleaning fluids) and excessive dust (e.g. through grinding/polishing work).
- Avoid continuously high humidity levels (e.g. through continuous drying of washing).

**Extractors**

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

**Danger**
The simultaneous operation of the boiler and appliances that extract air to the outside can result in life threatening poisoning due to reverse flow of the flue gas.
Take suitable steps to ensure an adequate supply of combustion air. If necessary, contact your heating contractor.

## For your safety (cont.)

### 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.

# Index



5592 609 GB

## **Index** (cont.)

## Intended use

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

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

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

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

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

## Commissioning

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

In accordance with the Ecodesign Directive, from 26/09/2015 your appliance may only be commissioned if the following conditions are met:

- Existing apartment building
- Flue gas routing:
  shared chimney with flue gas routed outside
- Ventilation air routing:
  combustion air supplied from the installation room (open flue operation)

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

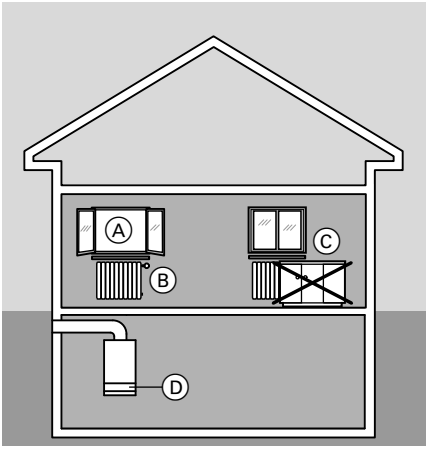
## Your system is preset at the factory

The control unit is preset at the factory for standard operation.

Your heating system is therefore ready for operation. You may change the factory settings in accordance with individual requirements.

## Energy saving tips

You can also save energy by taking the following steps:

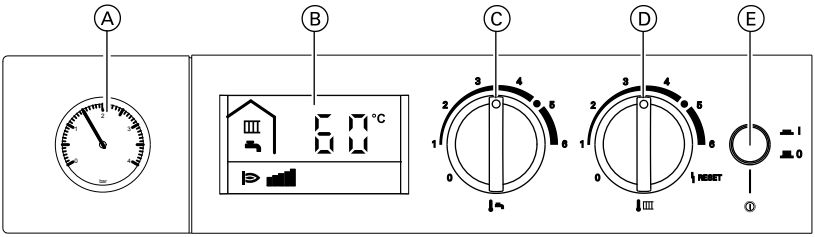



- Correct ventilation/airing
  Briefly open window Ⓐ fully and at the same time close thermostatic valves Ⓑ.
- Never overheat the interior; endeavour to achieve a room temperature of 20 °C; every degree of room temperature reduction saves up to 6 % of your heating bills.
- At dusk, close roller shutters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

5592 609 GB

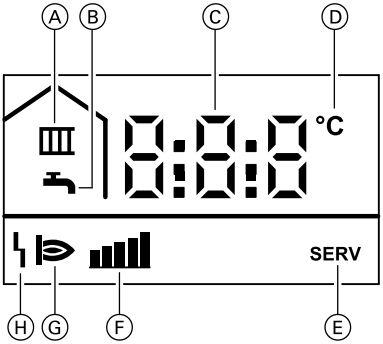
## Summary of controls and indicators

### Control and display elements




Ⓐ Pressure gauge
Ⓑ Display
Ⓒ Rotary selector "DHW temperature"
Ⓓ Rotary selector "Heating water temperature"
Ⓔ ON/OFF switch

### Indicators on display




Ⓐ Heating mode
Ⓑ DHW heating
Ⓒ Display value or fault code
Ⓓ Temperature in °C
Ⓔ Service setting active (only for contractors)
Ⓕ Current burner output
Ⓖ Burner in operation
Ⓗ Fault

## Operating mode of the heating system

### Operation without room temperature controller

The required heating water temperature can be set with rotary selector "🌡" (see page 14).

### Operation with room temperature controller

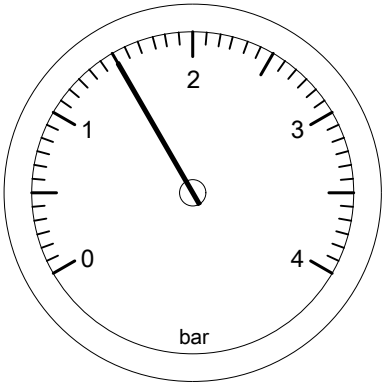
Make any settings on the connected room temperature controller using the relevant operating instructions.

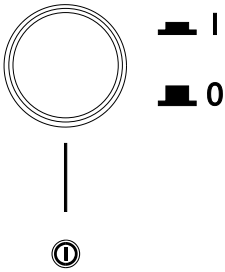
***Note***

*The heating water temperature must be set sufficiently high using rotary selector "🌡" for the required room temperature to be reached.*

## Starting the heating system

We recommend you contact your local heating contractor if you are planning to start up a heating system that has not been used for a long time.




1. Check the pressure of your heating system on the pressure gauge.
   **Minimum system pressure 0.8 bar.**
   Notify your heating contractor if the system pressure is too low.

2. **In open flue operation:**
   Combustion air is drawn from the installation room.
   Check whether the ventilation apertures in the installation room are open and unobstructed.

3. Open the gas shut-off valve.

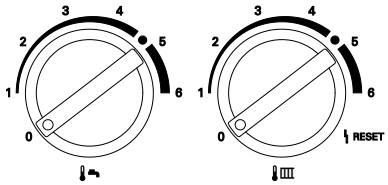
4. Switch the ON/OFF switch ON.
   Your heating system and room temperature controller (if connected) are now ready for operation.

## Shutting down the heating system

### Switching the boiler off with frost protection

If you do not wish to use your boiler for several days you can switch the appliance off.

## Shutting down the heating system (cont.)




Turn both rotary selectors to "0".
Frost protection is now active for the boiler.

***Note***
*Frost protection for the entire heating system - see operating instructions for the room temperature controller.*

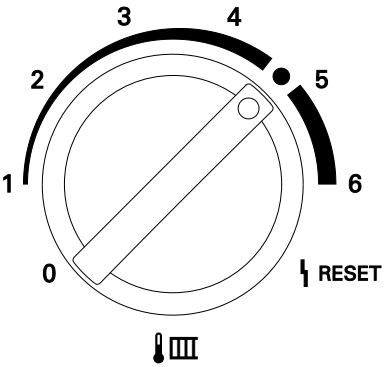
## Shutting down the heating system

Shut down your heating system completely if it will not be needed for longer periods (several months).
We recommend you contact your local heating contractor if you are planning to take your heating system out of use for long periods. Your heating contractor can then take suitable steps such as frost protection for the system or heating surface preservation as required.

1. Close the main gas shut-off valve and safeguard against unauthorised reopening.

2. Switch OFF the system ON/OFF switch.
   The power to the system is now at zero volt.
   **Note that the system is no longer frost-protected.**

## Heating



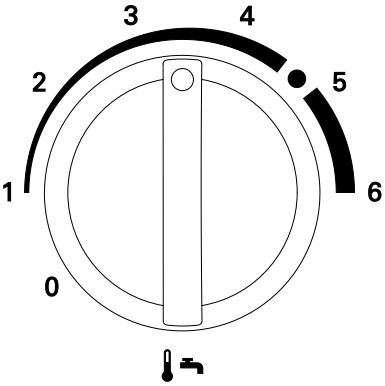

- **Switching on:**
  Move rotary selector "🌡" to the required heating water temperature.

  ***Note***
  *If a room temperature controller is connected, use this unit to set the required room temperature (see page 11).*

  When central heating is being provided, "🌡" will be displayed.
- **Switching off:**
  Move rotary selector "🌡" to "0".

## Domestic hot water

Select the DHW temperature in accordance with your personal requirements (e.g. for showering).

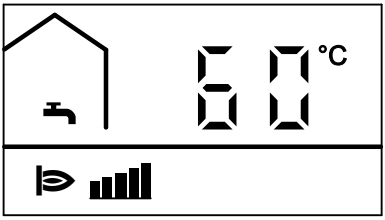



- **Switching on:**
  Move rotary selector "🌡" to the required DHW temperature.
  When DHW heating is being provided, "🚿" will be displayed.
- **Switching off:**
  Move rotary selector "🌡" to "0".

  ***Note***
  *If the boiler does not have a DHW cylinder connected or an integral instantaneous water heater, turn rotary selector "🌡" to "0". Otherwise, fault code "F58" will be displayed.*

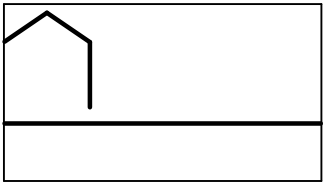
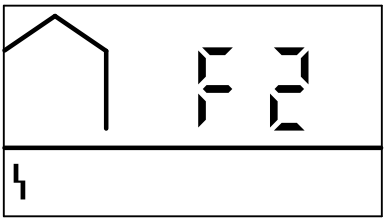
5592 609 GB

## Heating water temperature




The boiler water temperature appears on the display at all times during operation.

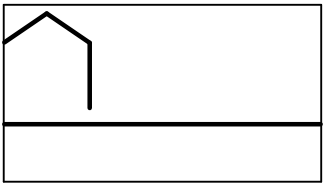
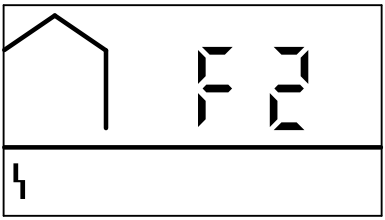
## Rooms are too cold

| Cause | Remedy |
|---|---|
| Room temperature controller incorrectly adjusted | Set the required room temperature at the room temperature controller |
| The heating system is switched off.<br>  | ■ Switch the ON/OFF switch "⏻" ON<br>■ Switch ON the mains isolator if installed (outside the boiler room)<br>■ Check the MCB/fuse in the power distribution board (main domestic MCB/ fuse) |
| Control unit incorrectly set | Turn rotary selector "🌡" to select a higher heating water temperature (see page 14) |
| DHW heating priority | Stop drawing off hot water or wait until DHW cylinder has heated up |
| Fault display:<br>Symbol "ϟ" and the fault code appear, "F2" for example<br>  | Briefly turn rotary selector "🌡" clockwise as far as it will go and then back again (reset). Contact your local heating contractor if the fault reappears on the display. Check the fault code on the display and notify your heating contractor. This allows the heating contractor to better prepare for the service call and may save additional travelling costs. |
| Air in the heating system | Bleed the radiators |
| No fuel | Open the gas shut-off valve<br>■ With LPG:<br>check the fuel supply and order more if necessary<br>■ For natural gas:<br>check with your gas supply utility |
| Fault in the ventilation air supply or flue system | Contact your local heating contractor |
| Circulation pump faulty | Contact your local heating contractor |

## Rooms are too hot

| Cause | Remedy |
|---|---|
| Room temperature controller incorrectly adjusted | Set the required room temperature at the room temperature controller |
| Control unit incorrectly set | Turn rotary selector "🌡" to select a lower heating water temperature (see page 14) |

## There is no hot water

| Cause | Remedy |
|---|---|
| The heating system is switched off.<br>  | ■ Switch the ON/OFF switch "⏻" ON<br>■ Switch ON the mains isolator, if installed (outside the boiler room)<br>■ Check the MCB/fuse in the power distribution board (main domestic MCB/ fuse) |
| Control unit incorrectly set | Turn rotary selector "🌡" to select the required DHW temperature (see page 14) |
| Fault display:<br>Symbol "ϟ" and the fault code appear, "F2" for example<br>  | Briefly turn rotary selector "🌡" clockwise as far as it will go and then back again (reset). Contact your local heating contractor if the fault reappears on the display. Check the fault code on the display and notify your heating contractor. This allows the heating contractor to better prepare for the service call and may save additional travelling costs. |
| No fuel | Open the gas shut-off valve<br>■ With LPG:<br>check the fuel supply and order more if necessary<br>■ For natural gas:<br>check with your gas supply utility |

## The DHW is too hot

| Cause | Remedy |
|---|---|
| Control unit incorrectly adjusted | Turn rotary selector "🌡🚰" to select the required DHW temperature (see page 14) |

## Fault code "F58" on the display

| Cause | Remedy |
|---|---|
| Rotary selector "🌡🚰" is **not** set to "0" **and** the boiler does **not** have a DHW cylinder connected **nor** an integral instantaneous water heater | Set rotary selector "🌡🚰" to "0" |

## Cleaning

All equipment can be cleaned with a commercially available domestic cleaning agent (non-scouring).

## Inspection and maintenance

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

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

### Appliance

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

### Potable water filter (if installed)

To maintain high hygienic standards, proceed as follows:

- Replace filter element on non-back flushing filters every six months (visual inspection every two months).
- On back flushing filters, back flush every two months.

## Information on disposal

### Disposal of packaging

You heating contractor will dispose of the packaging of your Viessmann product.

**DE:** Packaging waste is channelled for recycling to a certified disposal contractor in line with statutory regulations.

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

### Final decommissioning and disposal of the heating system

Viessmann products can be recycled. Components and fluids from your heating systems are not part of ordinary domestic waste.
Please contact your heating contractor in connection with the correct disposal of your old system.

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

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

5592 609 GB

## Keyword index



5592 609 GB

## 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.

Viessmann Werke GmbH & Co. KG
D-35107 Allendorf
Telephone: +49 6452 70-0
Fax: +49 6452 70-2780
www.viessmann.com

Viessmann Limited
Hortonwood 30, Telford
Shropshire, TF1 7YP, GB
Telephone: +44 1952 675000
Fax: +44 1952 675040
E-mail: info-uk@viessmann.com

5592 609 GB Subject to technical modifications.