Operating instructions



for the system user

Heating system with control unit for constant temperature or weather-compensated mode



VITODENS 111-W



5618 673 GB 4/2012 **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 for the heating system user.

This unit is **not** designed to be used by persons (including children) with limited bodily, sensory or mental capacities, or lacking experience and/or lacking knowledge, unless they are supervised by a person responsible for their safety, or have received instructions from such a person as to how to use the unit.



Please note

Children should be supervised. Ensure that children do not play with the unit.



Danger

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

- Work on gas appliances 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. Never switch lights or electrical appliances ON or OFF.
- Close the gas shut-off valve.
- Open windows and doors.
- Remove all people from the danger zone.
- Notify your gas or electricity supplier and your 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 boiler room.
- Close all doors in the living space.

In case of fire



Danger

Fire creates the risk of burning and explosions.

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

Boiler room requirements

Please note

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

- Ensure ambient temperatures 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).
- Never close existing ventilation apertures.

Ancillary components, spare and wearing parts



Please note

Components that are not tested with the heating system may lead to damage to the heating system, or may affect their various functions.

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

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Commissioning

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

(GB) Gas council no.				
Rated heating	Gas council no.			
output range				
kW				
6.5 - 26	47-819-24			
8.8 - 35	47-819-25			

Terminology

To provide you with a better understanding of the functions of your Viessmann control unit some terminology is explained.



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

The terms are marked as follows.

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 setting in accordance with individual requirements.

Energy saving tips

Utilise the setting options for the control unit and remote control (if available).

Central heating

■ Room temperature:

Never overheat your rooms. Every degree of room temperature reduction saves up to 6 % of your heating bills. Set your room temperature no higher than 20 °C.

■ Operating modes:



Introductory information

Energy saving tips (cont.)

If you do not require central heating, select one of the following operating modes:

- If you do not wish to heat rooms in summer but require domestic hot water, set rotary selector "\$\frac{1}{2}\tau"\" (see page 11) and turn rotary selector "\$\frac{1}{2}\tau\tau"\" to "0".
- If you require neither central heating nor DHW for a prolonged period, set rotary selectors "IIIII" and "I"to "0" (see pages 11 and 11).

■ Ventilation:

To ventilate, open the windows fully for a brief time and meanwhile close the thermostatic valves (if there is no domestic ventilation system installed).

■ Roller shutters:

Close roller shutters (where installed) at dusk.

■ Thermostatic valves:

Ensure that thermostatic valves are properly set.

■ Radiators:

Never cover radiators or thermostatic valves.

DHW heating

■ DHW temperature:

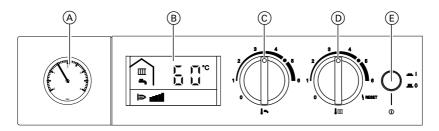
Never set the DHW cylinder temperature excessively high (see page 11).

■ DHW consumption:

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

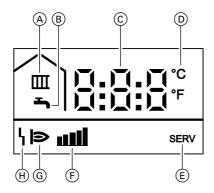
Summary of controls and indicators

Control and display elements



- A Pressure gauge
- (B) Display
- D III Rotary selector "heating water temperature" and "reset"
- (E) ON/OFF switch

Indicators on display



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

Operating mode of the heating system

Operation without room temperature control unit



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

The required heating water temperature can be set with the rotary selector "IIII" (see page 11).

Operation with room temperature control unit



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

Please make any adjustments to the connected room temperature control unit using the relevant operating instructions.

Weather-compensated mode



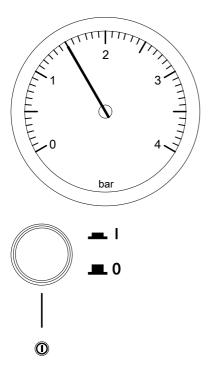
Further information can be found in chapter "Terminology" in the Appendix.

Note

The heating water temperature must be set sufficiently high using the rotary selector ""[""]" for the desired 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 period.



 Check the pressure of your heating system on the pressure gauge.
 Minimum system pressure
 0.8 bar.
 If the system pressure is too low,

If the system pressure is too low, please notify your heating contractor.

2. With conventional flue operation (combustion air is taken from the boiler room):

There must be fixed permanent ventilation into the boiler room.

- 3. Open the gas shut-off valve.
- **4.** Switch on the ON/OFF switch. Your heating system and room temperature control unit (if connected) are now ready for operation.

Shutting down the heating system

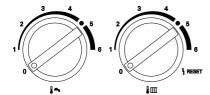
Switching the Vitodens off with frost protection



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

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

Shutting down the heating system

Shut down your heating system completely if it will not be needed for a long period of time (several months). We recommend you contact your local heating contractor if you are planning to shut down your heating system for long periods. Your heating contractor can then take any necessary action, subject to requirements, e.g. system frost protection or preserving the heating surfaces.

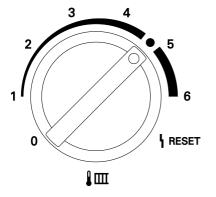
- Close the gas shut-off valve and safeguard against unauthorised reopening.
- Switch off the ON/OFF switch. The power to the system is now switched off.

Note that the system is no longer frost-protected.

Heating

i

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



Switching on:

Note

If a room temperature control unit is connected, use this unit to set the desired room temperature (see page 8).

If central heating is active, the display shows "IIII".

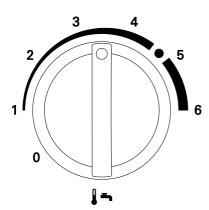
Switching off:

Turn rotary selector "IIII 4" to "0".

Domestic hot water



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



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

Switching on:

Move rotary selector "♣★" to the required DHW temperature.

If DHW heating is active, the display shows "-".

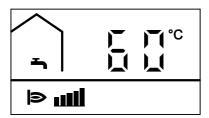
Switching off:

Turn rotary selector "▮ → " to "0".

Heating water temperature



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



The boiler water temperature appears on the display at all times during operation. The heating water temperature is roughly equal to the boiler water temperature.

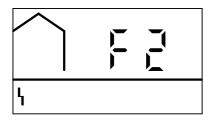
System characteristics

What to do if	Cause	Remedy
the heating system will not	No mains voltage	Switch on the ON/OFF switch
start	Rotary selector	Setting the desired heating wa-
	" ↓ ∭" is on "0"	ter temperature (see page 11)
	Fuse/MCB in the	Notify your local heating con-
	power distribution	tractor
	board (domestic	
	mains fuse) or in	
	control unit has	
	blown/responded	
the burner is not started or starts intermittently	No gas available	Open the gas shut-off valve and if necessary check with your gas supply utility
	Control unit fault	Check the fault code on the dis-
		play. Notify your local heating contractor and state the fault code.
the burner fails to start;	False start	Reset burner fault (see
fault message "կ" is dis-		page 14) – if this attempt to
played		start also fails, notify your heat-
		ing contractor
	Water shortage	Notify your local heating contractor.
the burner shuts down	Fault in the ventila-	Notify your local heating con-
even if the rooms have not	tion air supply or flue	tractor
reached their required tem-	system	
perature	Heating water tem-	Raise the heating water temper-
	perature or required	ature with rotary selector
	room temperature is	"III" (see page 11) or raise re-
	set too low	quired room temperature (see
		room temperature control unit operating instructions)
	Air in the heating	Bleed radiators
	Air in the heating system	
the rooms have not	DHW priority	Wait until the DHW cylinder has
reached the required tem-		been heated up
perature, even though the	Circulation pump	Notify your local heating con-
burner is operational	faulty	tractor
DHW temperature is too	DHW temperature is	Set the desired DHW tempera-
low	set too low or rotary	ture
	selector " 🛵 " is on	
	"0"	

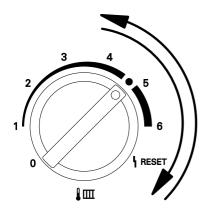
Fault indicator on display

Any fault in the heating system will be shown on the display.

You can check the fault code on the display and then notify your heating contractor accordingly. This allows the heating contractor to better prepare for the service call and may save additional travelling costs.



Reset burner fault (Reset)



- Turn rotary selector "IIII I to "
 «
 RESET" for less than 2 s, then back into the control range.
- If the attempt to start fails, contact your heating contractor with the fault code.

Cleaning

All appliances may 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 Savings Ordinance [EnEV - Germany] and the DIN 4755, DIN 1988-8 and EN 806 standards.

Regular maintenance ensures troublefree, energy-efficient and environmentally responsible heating. For this, it is recommended that you take out an inspection and maintenance contract with your local contractor.

Boiler

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

Logbook

Please ensure that you have a Logbook supplied with your appliance. This Logbook should be completed by your installer to verify that the correct installation and commissioning procedure was followed.

Failure to complete the Logbook may result in difficulties should a problem arise with your appliance during the guarantee period. This Logbook forms part of the industry's Benchmark code of practice for the installation, commissioning and servicing of central heating systems.

All Gas Safe Registered Installers carry a ID card and have a registration number. Both should be recorded in your Logbook. You can check your installer is Gas Safe registered by calling GasSafe register on +44 (0)800 408 5500 or visit the website www.gassaferegister.co.uk

Servicing

Inspection and maintenance (cont.)

Drinking water filter (if installed)



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

For hygiene reasons

- replace filter element on non-backwashing filters every six months (visual inspection every two months)
- on backwashing filters, backwash every two months

Terminology

Constant temperature mode

In constant temperature mode, the heating water is constantly (continuously) heated to the selected boiler water temperature.

Operating modes

You can select the following operating modes:

- When IIII and ♣ are selected:
 The rooms are heated. DHW is heated (winter mode).
- When → is selected:

 DHW is heated but there is no central heating (summer mode).
- When III is selected:
 The rooms are heated but there is no DHW heating.
- When III and → are set to "0":
 Frost protection for the boiler and
 DHW cylinder is active, no central
 heating, no DHW heating (standby
 mode).

Heating water temperature

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

Boiler water temperature

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

Open flue operation

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

Balanced flue operation

The combustion air is drawn from outside the building.

Room temperature-dependent opera-

A room temperature control unit captures the room temperature and compares this with the required room temperature you selected. If the room temperature is lower than the required value, the boiler is switched on; if the room temperature is higher than the required value, the boiler is switched off.

Please make any adjustments to the connected room temperature control unit using the relevant operating instructions.

Note

The heating water temperature must be set sufficiently high using the rotary selector ""["" for the desired room temperature to be reached.

Safety valve

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

Appendix

Terminology (cont.)

Drinking water filter

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

Flow temperature

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

Weather-compensated mode

In weather-compensated mode, the flow temperature is controlled according to the outside temperature. This means that no unnecessary heat is generated in order to heat the rooms to the required room temperature you selected. The outside temperature is captured and transmitted to the control unit by a sensor fitted outside the building.

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Your contact

Contact your local contractor if you have any questions regarding the maintenance and repair of your system. You may, for example, find local contractors on the internet under www.viessmann.com.

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