# Operating instructions



for the system user

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



# **VITODENS 100-W**



### 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 structural characteristics of the building 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).

#### GB Gas-Council-No.

Rated heating output range kW	
6.5 - 21	41-819-30
6.5 - 25	41-819-31

### Your system is preset at the factory

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

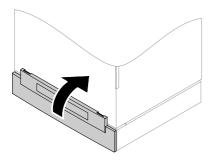
Your heating system is therefore ready for operation. You may change the factory settings in accordance with individual requirements.

### Where to find the controls

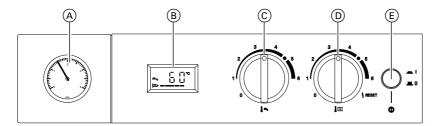
### Summary of controls and indicators

### Opening the control unit

The controls and display elements are behind the cover flap at the front.



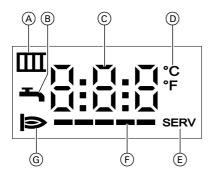
### **Control and display elements**



- A Pressure gauge
- B Display
- C In Rotary selector "DHW temperature "
- D Image Rotary selector "Heating water temperature" and "Reset"
- € ON/OFF switch

### Summary of controls and indicators (cont.)

### Indicators on display



- A Heating mode
- B DHW heating
- © Display value or flashing fault code
- Temperature in °C or °F (in conjunction with the display value)
- (E) Service setting active (only for contractors)
- (F) Current burner output
- G Burner in operation

### Operating mode of the heating system

### Operation without room temperature control unit

The required heating water temperature can be set with the rotary selector "**J**III" (see page 10).

### Operation with room temperature control unit

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

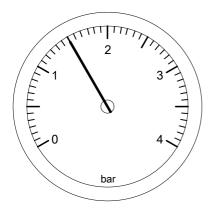
#### Note

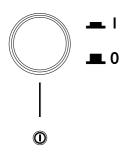
The heating water temperature must be set sufficiently high using the rotary selector " [[[[[["]" for the desired room temperature to be reached.

### Start-up/shutdown

### 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, please notify your heating contractor.

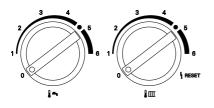
- During open flue operation (combustion air is removed from the installation room): Check that the ventilation openings of the installation room are open and unrestricted.
- 3. Open the gas shut-off valve.
- Turn ON/OFF switch ON. Your heating system and room temperature control unit (if connected) are now ready for operation.

### Shutting down the heating system

### With frost protection monitoring for the boiler

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.

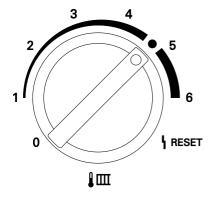
### Shutting down the heating system

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

- Close the gas shut-off valve and safeguard against unauthorised reopening.
- Switch ON/OFF switch OFF. The power to the system is now switched off. Note that the system is no longer frost-protected.

### Settings

### Heating



#### Switching ON:

Move rotary selector "**[III**]" to the required heating water temperature.

#### Note

If a room temperature control unit is connected, use this unit to set the desired room temperature (see page 7).

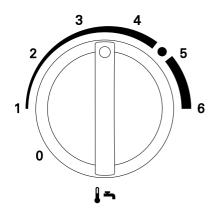
If central heating is active, the display shows "IIII".

#### Switching OFF:

Turn rotary selector "IIII &" 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.

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

#### Switching OFF:

Turn rotary selector "

#### Note

If the boiler does not have a DHW cylinder connected or an integral instantaneous water heater, turn the rotary selector "#="" to "0".

## Heating water temperature



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

What to do if...

# System characteristics

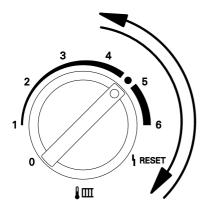
What to do if?	Cause	Remedy
The heating system will not operate	No mains voltage	Switch the ON/OFF switch ON
	Rotary selector	Setting the desired heating water temperature (see
		page 10)
	Fuse/MCB in the	Notify your local heating con-
	power distribution	tractor
	board (domestic	
	mains fuse) or in	
	control unit has	
	blown/responded	
Burner is not started or starts	No gas available	Open the gas shut-off valve
irregularly		and if necessary check with
		your gas supply utility
	Control unit fault	Check the fault code on the
		display. Contact your local heating contractor with the
		fault code
The burner will not start and	False start	Reset burner fault (see
a flashing fault code appears on		page 13) – if this attempt to
the display		start also fails, notify your
		heating contractor
	Low water	Notify your local heating con-
		tractor
Burner is switched off even	Fault in the ventila-	Notify your local heating con-
though rooms are not yet at the	tion air supply or	tractor
desired temperature	flue system	
	Heating water tem-	Raise the heating water tem-
	perature or required	perature with rotary selector
	room temperature	"IIII" (see page 10) or raise
	are set too low	required room temperature
		(see room temperature con-
		trol unit operating instruc-
	Air in the heating	tions) Bleed radiators
	Air in the heating system	
Rooms are not at the required	DHW priority	Stop drawing off hot water or
temperature, even though		wait until DHW cylinder has
burner is operating		heated up
	Circulation pump	Notify your local heating con-
	faulty	tractor

5608 698 GB

### System characteristics (cont.)

What to do if?	Cause	Remedy
DHW temperature is too low	DHW temperature is set too low or rotary selector "IT" is on "0"	Set the desired DHW tem- perature
For boilers <b>without</b> a DHW cylinder connected, fault code "58" flashes on the display	Rotary selector "♣♣" is not on "0"	Set rotary selector "

#### Reset burner fault (Reset)



Turn rotary selector " $\blacksquare$ " to position "hRESET" for less than 2 s and then back to the control range.

### Fault indicator on 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.

Any fault in your heating system will flash on the display.

### Maintenance

### 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, 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.

#### 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.

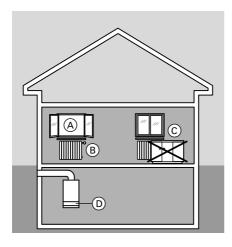
Failure to complete the Logbook may result in difficulties should a problem arise with your appliance during the guarantee period. This Logbook forms part of the industry's Benchmark code of practice for the installation, commissioning and servicing of central heating systems. All CORGI Registered Installers carry a CORGI ID card and have a registration number. Both should be recorded in your Logbook. You can check your installer is CORGI registered by calling CORGI on 0870 401 2230.

#### Drinking water filter (if installed)

For hygiene reasons

- renew filter insert on non-backwashing filters every 6 months (visual inspection every 2 months)
- on backwashing filters, backwash every 2 months.

## **Energy saving tips**



You can also save energy by taking the following steps:

- Correct ventilation.
  Briefly open window (A) fully and at the same time close the thermostatic valves (B).
- Never overheat rooms; endeavour to achieve a room temperature of 20 °C; you can save up to 6% on your heating bills for every degree you reduce your room temperature.
- Close roller shutters (where installed) at dusk.
- Adjust thermostatic valves 

   B correctly.
- Never cover radiators C and thermostatic valves B.
- Utilise the setting options offered by control unit D.
- Only activate the DHW circulation pump if DHW is being drawn.
- Controlled DHW consumption: A shower generally uses less energy than a full bath.

### Keyword index

### **Keyword index**

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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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