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 warms 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 appli-

- Never permit children to play with the appli-
- 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 require-
- 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.



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.

For your safety (cont.)

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.

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.

Safety instructions

For your safety (cont.)

Installation room requirements

1

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.

Auxiliary components, spare and wearing parts

Please note

Components not tested with the heating system may damage the system or affect its function. Have all installation or replacement work carried out exclusively by qualified contractors.

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Information

Symbols

Symbol	Meaning
\$	Reference to other document containing further information
0	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
!	Warning of material losses and environ- mental pollution
4	Live electrical area
(3)	Pay particular attention.
00	Component must audibly click into place or Acoustic signal
本	Fit new component. or In conjunction with a tool: Clean the surface.
	Dispose of component correctly
×	Dispose of component at a suitable collec- tion point. Do not dispose of component in domestic waste.

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).

Termi

To provi tions of is explai The terr

Terminology

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

The terms are marked as follows:



Further information can be found in chapter-"Terminology" in the appendix.

Introductory information

Commissioning

The commissioning and adjusting of the control unit to local conditions and to building characteristics, plus the instruction of the user in operating the system, 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]. 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

Your heating system is preset at the factory and is therefore ready for operation.

Your heating contractor can make further adjustments for you during commissioning.

You can change these settings at any time to suit your individual requirements.

Power failure

All settings are saved if there is a power failure.

Energy saving tips

Central heating

· Room temperature:

Never overheat your rooms. Every degree of room temperature reduction saves up to 6 % on your heating bills.

Never set your room temperature higher than 20 °C.

Operating modes:

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

- In summer, if you do not want to heat any rooms but do need DHW, set the boiler water temperature to OFF (see page 12).
- If you require neither room heating nor DHW for an extended period, set the boiler water temperature and the DHW temperature to OFF.

· Ventilation:

To ventilate, open windows fully briefly, and meanwhile close the thermostatic valves (if there is no mechanical ventilation system installed).

* Roller shutters:

Close roller shutters (where installed) at dusk.

Thermostatic valves:

Ensure that thermostatic valves are properly adjusted.

· Radiators:

Never cover radiators or thermostatic valves.

DHW heating

DHW temperature:

Never set the DHW cylinder temperature excessively high (see page 15).

· Hot water consumption:

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

Summ

Controls

(

Fig. 1

- Press
 Touch
- © ON/C

Display

The control make set screen be



Fig. 2

Displ
 Temp

- © Heat
- DHW
 Displ
- ⊕ Fault
- @ Burn
- Temp
 value

On-scree

MODE S OK A

Summary of controls and indicators

Controls and display elements

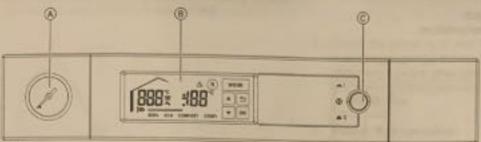


Fig. 1

- A Pressure gauge
- (B) Touchscreen with controls
- © ON/OFF switch

Display indicators and operating buttons

The control unit is equipped with a touchscreen. To make settings and call up information, tap the on-screen buttons.

A R MODE

BBB C SERV ECO COMFORT CONFI

Fig. 2

Display value or fault code

(D) (N)

Temperature in °C (in conjunction with the display value)

0

C Heating mode

(P)

- DHW heating
- Display value or fault code
- F Fault indicator
- @ Burner fault reset
- Temperature in °C (in conjunction with the display value)

- The state of the s
- On-screen buttons (see page 9)
 Commissioning setting active (only for contractors)

Activation of the on-screen buttons is confirmed with a

signal tone. Your heating contractor can turn the signal

- DHW comfort function active (only for boilers with integral instantaneous water heater, see page 15)
- (N) Current burner output

tone off.

- DHW comfort function not active (only for boilers with integral instantaneous water heater)
- P Service setting active (only for contractors)
- (R) Burner in operation

On-screen buttons for operation

MODE Selecting/terminating functions

- Changing or selecting values
 - Changing or selecting values
- OK Accepting values/confirming selection
- 1 step back
- R Burner fault reset

Operation

Summary of controls and indicators (cont.)

Default display

The following is displayed:

- Current boiler water temperature
- Operating mode
- Burner operation and current burner output



Fig. 3

Operating mode of the heating system

Operation without room temperature controller

i

Further information can be found in chapter "Terminology" in the appendix. Setting the required heating water temperature, see page 13.

Operation with room temperature controller



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

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

Note

Set the boiler water temperature high enough to achieve the required room temperature.

For boiler water temperature setting, see page 13

Weather-compensated operation



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

In weather-compensated mode, the boiler water temperature is regulated subject to the outside temperature.

Note

Connect a room temperature controller to your heating system to prevent heat being generated unnecessarily at times when you do not require central heating. This enables central heating to be suspended at night, for example, in order to save energy.

For setting the room temperature, see page 14.

Starting

We recomm tractor if you that has not



ig. 4

0

Fig. 5

Shuttin

With fros



If you do it you can s Set the bo ature to C

Without

Shut down be needed We recommunitractor if yout of use then take system or

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.



Fig. 4

_ 1

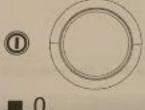


Fig. 5

 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.

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

- 3. Open the gas shut-off valve.
- Turn ON the ON/OFF switch.

 Your heating system and room temperature controller (if connected) are now ready for operation.

Shutting down the heating system

With frost protection monitoring

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 appliance off.

Set the boiler water temperature and the DHW temperature to OFF. Frost protection monitoring is now active for the boiler and the DHW cylinder.

Note

Frost protection for the entire heating system – see operating instructions for the room temperature controller.

Without frost protection (shutdown)

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.

- Close the gas shut-off valve and safeguard against unauthorised reopening.
- Turn OFF the ON/OFF switch.
 The power to the system is now at zero volt.

 Note that the system is no longer protected against frost.

Start-up/shutdown

Stopping central heating and DHW heating

Stopping central heating

You do not want to heat your interior but you want to have DHW available (summer mode).

Tap the following on-screen buttons:

 the set boiler water temperature flashes and is displayed. 2. v until "OFF" is displayed.

3. OK to confirm.

Note

 The circulation pump briefly starts every 24 hours to prevent it from seizing up. if r

atı. Th

Boiler frost protection is enabled.

Stopping DHW heating

You do not want to have DHW available.

Tap the following on-screen buttons:

1. MODE

A/▼ until → flashes.

OK to confirm.
 The set DHW temperature flashes.

v until "OFF" is displayed.

5. OK to confirm.

Setting the central heating temperature

Operation without room temperature controller — Setting the heating water temperature

If no outside temperature sensor and no room temperature controller is connected.

3. OK to confirm.

The room temperature is influenced by the heating water temperature. In the delivered condition, the heating water temperature is set to 70 °C.

Tap the following on-screen buttons:

- 1. A/* the set heating water temperature flashes and iiii is displayed.
- a/v until the required heating water temperature is displayed.



Fig. 6

Operation with room temperature controller - Setting the boiler water temperature

If no outside temperature sensor is connected, but a room temperature controller is.

room temperature controller is.
If the required room temperature is not achieved,
ensure the boiler water temperature setting is sufficiently high. In the delivered condition, the boiler water
temperature is set to 70 °C.

3. OK to confirm.

Tap the following on-screen buttons:

- A/v the set boiler water temperature flashes and IIII is displayed.
- a/v until the required boiler water temperature is displayed.

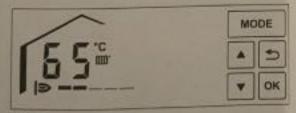


Fig. 7

Weather-compensated operation - Setting the room temperature

An outside temperature sensor must be connected for weather-compensated operation.

Settings

Setting the central heating temperature (cont.)

In the delivered condition, a parameter value of 20 is set for central heating. Should you wish to set a higher room temperature, increase the parameter value; reduce it for a lower room temperature.

3. OK to confirm.

D

Tap the following on-screen buttons:

- * the set parameter flashes and iii is displayed in the i.h. display area.
- 2. ▲/▼ until the required room temperature is achieved.

Note

When adjusting this setting, bear in mind that your heating system requires some time to heat the interior to the required temperature.

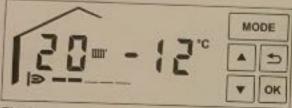


Fig. 8

Note

The current outside temperature is displayed in the r.h. display area,

DHW temperature

Tap the following on-screen buttons:

5. OK to confirm.

1. MODE

2. A/v until - flashes.

3, OK to confirm.

The set DHW temperature flashes.

4. A/v to set the required DHW temperature.

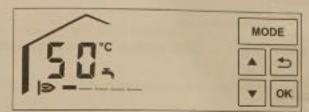


Fig. 9

DHW comfort function

Only for boilers with integral instantaneous water heater. Your heating contractor can activate the DHW comfort function. This makes DHW available faster when required. The display then shows "COMFORT".

Emissions test mode

Starting emissions test mode

Emissions test mode should be activated only by your floe gas inspector, during the annual inspection. Various output stages can be set for checking the flue gas.

 to confirm.
 "SERV" is displayed permanently, test mode is active.

Press the following buttons:

1. MODE

- 2 a/* until "SERV" flashes.
- OK to confirm. "OFF" flashes (test mode not active).
- 4. A/V to set the required burner output.

Shown on the display		Burner output
	"OFF"	0 %
	20	20 %
:	40	40 %
	60	60 %
	80	80 %
	100	100 %

Ending emissions test mode

This function will also terminate automatically after 30 minutes.

Press the following buttons:

- 1. MODE
- 2. A until "SERV" flashes.

OK to confirm. The value set last flashes.

4. v until "OFF" flashes.

5. OK to confirm.

"SERV" disappears, test mode is no longer active.

Cause	Remedy
The heating system is off.	Turn ON the ON/OFF switch "O" (see figure on page 9). Switch ON the mains isolator if installed (outside the boiler room). Set the MCB in the power distribution board (main do mestic MCB).
Control unit or room temperature controller incorrectly adjusted.	Operation with room temperature controller: Set a higher boiler water temperature (see page 13). Weather-compensated operation: Set a higher room temperature (see page 13).
Only when operating with DHW heating: DHW priority is enabled (""" is displayed).	Wait until the DHW cylinder has been heated up ("">" disappears). In the case of operation with an instantaneous water heater, stop DHW draw-off.
No fuel.	With LPG: Check the fuel reserves and re-order if required. For natural gas: Open the gas shut-off valve. If necessary, check with your gas supply utility.
A' is shown on the display.	Notify your heating contractor of the fault code shown.
A" and the fault code flash on the display. The burner does not start.	Reset burner fault (see page 19). Notify your heating contractor if the fault recurs.
	Danger If faults are not rectified, they can have life threatening consequences. Do not reset the burner fault several times in quick succession. Notify your heating contractor if a fault recurs. Your heating contractor will be able to analyse the cause and rectify the fault.
ir in the heating system.	Bleed radiators.
he burner is switched off. Blockage in the ventilation r supply or flue system.	Notify your local heating contractor.

Rooms are too hot

Cause	Remedy
Control unit or room temperature controller incorrectly set.	Check and correct the room temperature or boiler water temperature (see page 13)
	Room temperature controller operating instruc- tions
"∆" is shown on the display.	Inform your heating contractor of the fault code.

What to do if ...

There is no hot water

Cause	Remedy
The heating system is off.	 Turn ON the ON/OFF switch "O" (see page 9). Switch ON the mains isolator if installed (outside the boiler room). Set the MCB in the power distribution board (main domestic MCB).
Control unit incorrectly set.	Check and correct the DHW temperature (see page 15)
No fuel.	With LPG: Check the fuel reserves and re-order if required. For natural gas: Open the gas shut-off valve. If necessary, check with your gas supply utility.
'A" is shown on the display.	Notify your heating contractor of the fault code shown.
A" and the fault code flash on the display. The burner foes not start.	Reset burner fault (see page 19). Notify your heating contractor if the fault recurs. Danger If faults are not rectified, they can have life threatening consequences. Do not reset the burner fault several times in
	quick succession. Notify your heating contractor if a fault recurs. Your heating contractor will be able to analyse the cause and rectify the fault.

The DHW is too hot

The control unit is set incorrectly	Remedy
	Check and correct the DHW temperature (see page 15)

"A" and the fault code flash on the display

Cause	Remedy
The burner does not start	Reset burner fault (see page 19). Notify your heating contractor if the fault recurs.
	Danger If faults are not rectified, they can have life threatening consequences. Do not reset the burner fault several times in quick succession. Notify your heating contractor if a fault recurs. Your heating contractor will be able to analyse the cause and rectify the fault.

"A" is shown on the display

Cause	
Heating system fault	Remedy
and all significants	Inform your heating contractor of the fault code
	yes richard contractor of the fault code

Fault in

in the case play will sh You can ch notify your the heating call and m

Resett

Note If "A" flas burner is



in the case of a fault with your heating system, the display will show & and the fault code.

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.

If A flashes and "R" appears, the burner is locked out. See the following chapter.

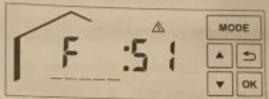


Fig. 10

Resetting a burner fault

Note

if "A" flashes and "R" appears on the display, the burner is locked out.

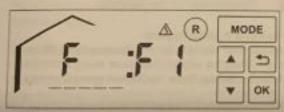


Fig. 11

Touch "R" for approx. 2 seconds. If the fault no longer exists, the default display will appear. Notify your heating contractor if the fault recurs.

1

Danger

If faults are not rectified, they can have life threatening consequences.

Do not reset the burner fault several times in quick succession. Notify your heating contractor if a fault recurs. Your heating contractor will be able to analyse the cause and rectify the fault.

Maintenance

Cleaning

All appliances may be cleaned with a commercially available domestic cleaning agent (non-accuring).

Inspection and maintenance

The inspection and maintenance of a heating system is prescribed by the Energy Saving Ordinance [EnEV - Germany] and the DIN 4755, DIN 1988-8 and EN 806 standards.

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

Boiler

Increasing boiler contamination raises the flue gas temperature and thereby increases energy losses. 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

CC

W

Drinking water filter (if installed)



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

For reasons of good hygiene

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

Terminology

Constant temperature operation

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

Heating water temperature

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

Boiler water temperature

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Gas

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apter

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onths),

onths.

acorded in

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

Open flue operation

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

Room sealed operation

The combustion air is drawn from outside the building.

Room temperature-dependent operation

A room temperature controller captures the room temperature and compares this with the required room temperature you set. 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.

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

Note

The heating water temperature must be set high enough in order to achieve the required room temperature.

Safety valve

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

Drinking water filter

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

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 referred to as return temperature.

Weather-compensated operation

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.

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 reculations.
- 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).