

Operating Instructions

for the system user

VIESSMANN

Vitodens 200-W, B2HE

Models 85 to 199

Wall mounted gas-fired condensing boiler with 7 inch color touchscreen display

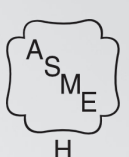
For operation with natural gas or liquid propane gas

Heating Input: 8.5 to 199 MBH

2.5 to 58.3 kW



VITODENS 200-W



WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

Do not store or use gasoline or other flammable liquids in the vicinity of this or any other boiler.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any boilers.
- Do not touch any electrical switches, do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING

Improper installation, adjustment, and/or operation could cause carbon monoxide poisoning resulting in injury or loss of life.

This product must be installed and serviced by a professional service technician who is experienced and qualified in hot water boiler installation and gas combustion.

Product may not be exactly as shown

IMPORTANT

Read and save these instructions for future reference.

Safety, Installation and Warranty Requirements

Please ensure that these instructions are read and understood before commencing installation. Failure to comply with the instructions listed below and details printed in this manual can cause product/property damage, severe personal injury, and/or loss of life. Ensure all requirements below are understood and fulfilled (including detailed information found in manual subsections).

■ Product documentation

Read all applicable documentation before commencing installation. Store documentation near boiler in a readily accessible location for reference in the future by service personnel.

►For a listing of applicable literature, please see section entitled "Important Regulatory and Safety Requirements".



■ Warranty

Information contained in this and related product documentation must be read and followed. Failure to do so renders the warranty null and void.



■ Licensed professional heating contractor

The installation, adjustment, service and maintenance of this equipment must be performed by a licensed professional heating contractor.

►Please see section entitled "Important Regulatory and Installation Requirements".



■ Contaminated air

Air contaminated by chemicals can cause by-products in the combustion process, which are poisonous to inhabitants and destructive to Viessmann equipment.

►For a listing of chemicals which cannot be stored in or near the boiler room, please see subsection entitled "Mechanical room" in the "Installation Instructions".



■ Advice to owner

Once the installation work is complete, the heating contractor must familiarize the system operator/ultimate owner with all equipment, as well as safety precautions/requirements, shutdown procedure, and the need for professional service annually before the heating season begins.



WARNING

Installers must follow local regulations with respect to installation of carbon monoxide detectors. Follow the Viessmann maintenance schedule of the boiler contained in this manual.

Operating and Service Documentation

It is recommended that all product documentation such as parts lists, operating and service instructions be handed over to the system user for storage. Documentation is to be stored near boiler in a readily accessible location for reference by service personnel.

■ Carbon monoxide

Improper installation, adjustment, service and/or maintenance can cause flue products to flow into living space. Flue products contain poisonous carbon monoxide gas.

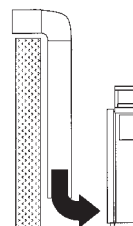
►For information pertaining to the proper installation, adjustment, service and maintenance of this equipment to avoid formation of carbon monoxide, please see subsection entitled "Mechanical room" and "Venting requirements" in the "Installation Instructions".



■ Fresh air

This equipment requires fresh air for safe operation and must be installed ensuring provisions for adequate combustion and ventilation air exist.

►For information pertaining to the fresh air requirements of this product, please see subsection entitled "Mechanical room" in the "Installation Instructions".



■ Equipment venting

Never operate boiler without an installed venting system. An improper venting system can cause carbon monoxide poisoning.

►For information pertaining to venting and chimney requirements, please see section entitled "Venting Connection". All products of combustion must be safely vented to the outdoors.



WARNING

This boiler requires fresh air for safe operation and must be installed with provisions for adequate combustion and ventilation air (in accordance with local codes and regulations of authorities having jurisdiction).

Do not operate this boiler in areas with contaminated combustion air. High levels of contaminants such as dust, lint or chemicals can be found at construction sites, home renovations, in garages, workshops, in dry cleaning/laundry facilities, near swimming pools and in manufacturing facilities.

Contaminated combustion air will damage the boiler and may lead to substantial property damage, severe personal injury and/or loss of life. Ensure boiler/burner is inspected and serviced by a qualified heating contractor at least once a year in accordance with the Service Instructions of the boiler.

Safety

General Information

Operation

Default Displays

Time Programs Central Heating

Safety, Installation and Warranty Requirements	2
About these Instructions	5
For your Safety	5
Operation	5
Working on the equipment	5
Maintenance and cleaning	5
Flue gas smell	5
Dangerous conditions	5
Technical Information	5
Carbon monoxide	6
For safe operation	6
Frozen water pipe hazard	7
Replacement components, spare and wear parts	7
Installation area conditions	7
Sources of combustion and ventilation air contaminants	7
Intended Use	8
Product Information	8
Software Licences	9
Commissioning	9
Your System is Preset	9
Energy Saving Tips	10
Tips for Greater Comfort	10
Operating Principles	11
Screen Displays	11
Buttons and Symbols	12
Overview of the "Main menu"	13
Operating Program	14
"Heating Circuit" or "Continuous Operation"	
Default Display	15
"DHW" Default Display	15
"Dashboard" Default Display	16
"Operating Status Default Display	16
Calling Up Operating Data for the Solar Thermal System	17
Starting One-Off DHW Heating	17
Calling Up Operating Data for the Boiler	17
Procedure for Setting a Time Program	18
Heating Circuit Selection	20
Setting the Room Temperature for a Heating Circuit	20
Switching Central Heating On or Off (Operating program)	20
Setting the Target Supply Temperature for a Heating Zone	21
Setting the Heating Curve	21
Temporarily Adjusting the Room Temperature for Certain Heating Circuits	21
Adjusting the Room Temperature for Longer Periods at Home	22
Saving Energy During Longer Absences	23
Checking the Boiler Status and the Status of Heating Zones	23

DHW Heating

Setting the DHW Temperature	24
Switching DHW Heating On or Off (Operating program)	24
One-Off DHW Heating Outside the Time Program	24
Increased DHW Hygiene	25
Switching DHW Scald Protection On/Off	25

Additional Adjustments

Locking the Controls	26
Setting the Display Brightness	26
Switching the Lightguide On and Off	27
Lead Cascade Boiler Only: Switching On the Display	27
Entering Names for Heating Circuits	27
Entering a Name for the Heating Zone	28
Setting the "Time" and "Date"	28
Automatic "Summertime/Wintertime" Changeover	28
Setting the "Language"	28
Setting "Units"	28
Entering the Contractor's Contact Details	29
Setting the Home Screen	29
Changing the Calorific Value or Correction Factor	29
Switching Internet Access On or Off	29
Switching Off the Display Screen for Cleaning	31
Lead Cascade Boiler Only: Dynamic Control Strategy	31
Restoring Factory Settings	31

Calling Up Information

Calling Up Help Messages	32
Checking Information	32
Displaying the Gas Consumption	32
Calling Up Licences for the Programming Unit	32
Calling Up Licences for the Integrated Module	33
Checking Maintenance Messages	33
Checking Fault Messages	34
Checking Message Lists	35

Emissions Test Mode

Emissions Test Mode	35
---------------------------	----

Switching the System On and Off

Switching the System Off	36
Switching the System On	36

What to do if...

Rooms are too Cold	37
Rooms are too Hot	37
There is no Hot Water	38
The DHW is too Hot	38

Maintenance

Cleaning	39
Inspection and Maintenance	39

Appendix

Overview of "Main menu"	40
Terminology	44

About these Instructions



Take note of all symbols and notations intended to draw attention to potential hazards or important product information. These include "WARNING", "CAUTION", and "IMPORTANT". See below.



WARNING

Indicates an imminently hazardous situation which, if not avoided, could result in loss of life, serious injury or substantial product/property damage.

► Warnings draw your attention to the presence of potential hazards or important product information.



CAUTION

Indicates an imminently hazardous situation which, if not avoided, may result in minor injury or product/property damage.

► Cautions draw your attention to the presence of potential hazards or important product information.

IMPORTANT

► Helpful hints for installation, operation or maintenance which pertain to the product.



► This symbol indicates that additional, pertinent information is to be found.



► This symbol indicates that other instructions must be referenced.

For your Safety

Operation

Before operating the boiler, make sure you fully understand its method of operation. Your heating contractor should always perform the initial start-up and explain the system. Any warranty is null and void if these instructions are not followed.

Working on the equipment

All personnel working on the equipment or the heating system must have the proper qualifications and hold all necessary licenses.

Ensure main power to equipment, heating system, and all external controls has been deactivated. Close main gas supply valve. Take precautions in all instances to avoid accidental activation of power during service work.

Maintenance and cleaning

Regular inspection and service by a qualified heating contractor is important to the performance of the Viessmann Vitodens 200-W. Neglected maintenance impacts on warranty; regular inspection ensures clean, environmentally friendly and efficient operation. We recommend a maintenance contract with a qualified heating contractor.

Flue gas smell

- Deactivate heating equipment.
- Open windows and doors.
- Inform your heating contractor.

Dangerous conditions

- Deactivate main power immediately.
- Close gas supply valve.

Technical information

Literature applicable to all aspects of the Vitodens 200-W

- Technical Data Manual
- Installation Instructions
- Service Instructions
- Operating Instructions

Additional applicable literature:

- Accessory manuals

For your Safety *(continued)*

Carbon monoxide

The U.S. Consumer Product Safety Commission strongly recommends the installation of carbon monoxide detectors in buildings in which gas-burning equipment is installed. Carbon monoxide (CO) is a colorless, odorless gas, which may be produced during incomplete combustion of fuel and/or when the flame does not receive an adequate supply of combustion air.

Carbon monoxide can cause severe personal injury or loss of life.

Therefore, carbon monoxide detectors that are in compliance with a nationally recognized standard (e.g. ANSI/UL 2034, CSA 6.19 latest edition) should be installed and maintained in buildings that contain gas-burning equipment.

Note: Viessmann does not test any detectors and makes no representation regarding any brand or type of detector.



WARNING

This product burns gas to produce heat. The appliance must be properly installed, operated and maintained to avoid exposure to appreciable levels of carbon monoxide and the installer is required to confirm that at least one carbon monoxide alarm is installed in the living space before the appliance is put into operation. It is important for the carbon monoxide alarms to be installed, maintained, and replaced following the alarm manufacturer's instructions and applicable local codes.

For safe operation

We recommend that you frequently:

- Check for debris which could obstruct the flow of flue gases. The vent or chimney must not be blocked. A blocked or partially blocked vent or chimney can cause flue gases to leak into the structure. Flue gases leaking into the house can cause injury or loss of life. Blocked or partially blocked chimneys must have the blockage removed by a qualified heating contractor.
- Check pressure gage for correct system (water) pressure. Check for water on the floor from the discharge pipe of the pressure relief valve or any other pipe, pipe joint, valve or air vent.
- Check for moisture, water, or appearance of rust on the flue gas pipes, their joints as well as vent dampers, or side wall vent terminals (if so equipped).
- Ensure that nothing is obstructing the flow of combustion and ventilation air and no chemicals, garbage, gasoline, combustible materials, flammable vapors and liquids are stored (not even temporarily) in the vicinity of the boiler.
- Do not allow unsupervised children near the boiler.

Service/inspection of the boiler and the system is recommended once a year. Maintenance, service and cleaning are specified in the Installation Instructions.

Before the heating season begins, it is recommended that the boiler and burner be serviced by a qualified heating contractor. Service contracts may be established through gas suppliers or other licensed contractors in your area.



WARNING

As there are no user-serviceable parts on the boiler, burner or control, the end-user must not perform service activities or adjustments of any kind on system components. Failure to heed this warning can cause property damage, severe personal injury, or loss of life.



WARNING

Improper installation, adjustment, service, or maintenance can cause flue products to flow into living space. Flue products contain poisonous carbon monoxide gas which can cause nausea or asphyxiation resulting in severe personal injury or loss of life.



CAUTION

Should overheating occur or the gas supply fail to shut off, do not disconnect the electrical supply to the pump. Instead, shut off the gas supply at a location external to the boiler.



WARNING

The operator/ultimate owner is required to have the heating boiler, burners, and controls checked, as a minimum once per year, by the original installer or by a competent heating contractor familiar with the equipment. Defects must be corrected immediately.



CAUTION

Do not use this boiler if any part has been under water. Immediately call a qualified heating contractor to inspect the boiler and to replace any part of the control system and any gas control which has been under water.



WARNING

Do Not operate the boiler without the cover in place.

For your Safety *(continued)***Frozen water pipe hazard**

Your heating boiler is designed to provide a warm and comfortable living environment. It is not designed to ensure against freezing of water pipes. The boiler is equipped with several safety devices that are designed to shut down the boiler and to prevent it from restarting in the event of various unsafe conditions.

If your boiler remains off for an extended period of time during cold weather, water pipes may freeze and burst, resulting in extensive water damage and conditions in which mold could grow. Certain molds are known to cause respiratory problems, as well as to pose other serious health risks. In case of water damage, immediate measures should be taken to dry out affected areas as quickly as possible to prevent mold from developing.

If your home will be unattended for an extended period of time during cold weather, you should...

- Shut off the water supply to the building, drain the water pipes and add an antifreeze for potable water to drain traps and toilet tanks. Open faucets where appropriate. or..
- Have someone check the building frequently during cold weather and call a qualified service agency if required. or...
- Install a reliable remote temperature sensor that will notify somebody of freezing conditions within the home.

**WARNING**

Failure to protect against frozen pipes could result in burst water pipes, serious property damage and/or personal injury. Boiler may shut down. Do not leave your home unattended for long periods of time during freezing weather conditions without turning off the water supply and draining water pipes or otherwise protecting against the risk of frozen pipes.

Replacement components, spare and wear parts**IMPORTANT**

Components which are not tested with the heating system may damage the heating system or affect its functions. Installation or replacement may only be performed by a qualified heating contractor.

**WARNING**

If you notice fire coming from the boiler, call the fire department immediately! Do not attempt to extinguish the fire unless qualified to do so.

**WARNING**

Fire causes a risk of burns and explosion!

- ☐ Shut down the boiler
- ☐ Close fuel shut-off valves
- ☐ Use a tested fire extinguisher, class ABC.

Installation area conditions**WARNING**

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

Ensure ambient temperatures are higher than 32°F (0°C) and lower than 95°F (35°C).

- Prevent the air from becoming contaminated by halogenated hydrocarbons (e.g. as contained in paint solvents or cleaning fluids) and excessive dust (e.g. through grinding or polishing work). Combustion air for the heating process, and ventilation of the boiler room must be free of corrosive contaminants. To that end, any boiler must be installed in an area that has no chemical exposure. The list below indicates the main, currently known sources.
- Avoid continuously high levels of humidity (e.g. through frequent drying of laundry).
- Never close existing ventilation openings.

Sources of combustion and ventilation air contaminants

Areas likely to contain contaminants:

- New building construction
- Swimming pools
- Remodelling areas, hobby rooms
- Garages with workshops
- Furniture refinishing areas
- Dry cleaning/laundry areas and establishments
- Auto body shops
- Refrigeration repair shops
- Metal fabrication plants
- Plastic manufacturing plants
- Photo processing plants
- Beauty salons

Products containing contaminants:

- Chlorine-type bleaches, detergents and cleaning solvents found in household laundry rooms
- Paint and varnish removers
- Hydrochloric acid, muriatic acid
- Chlorine-based swimming pool chemicals
- Spray cans containing chlorofluorocarbons
- Chlorinated waxes and cleaners
- Cements and glues
- Refrigerant leaks
- Calcium chloride used for thawing
- Sodium chloride used for water softening salt
- Permanent wave solutions
- Adhesives used to fasten building products and other similar items
- Antistatic fabric softeners used in clothes dryers

Intended Use

The boiler is only intended to be installed and operated in sealed unvented heating systems 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 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.

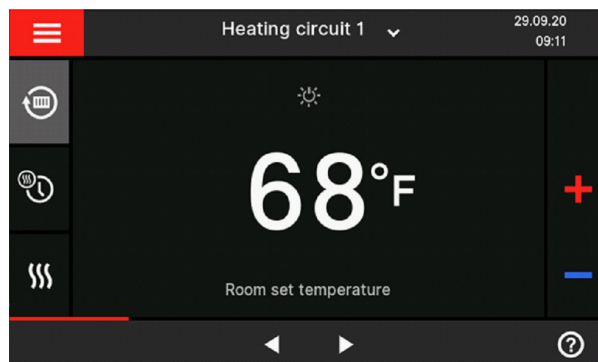
Incorrect usage or operation of the boiler (e.g. the boiler being opened by the system user) is prohibited and results in an exclusion of liability. Incorrect usage also occurs if the components in the heating system are modified from their intended use (e.g. if the flue gas and ventilation air paths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

Product Information

The control unit is a boiler and heating circuit control unit for the following operating modes:

- Weather-compensated operation
- Constant (continuous) operation

Weather-compensated operation



Your heating contractor will configure the operating mode during commissioning in accordance with your heating system. These instructions describe both operating modes.

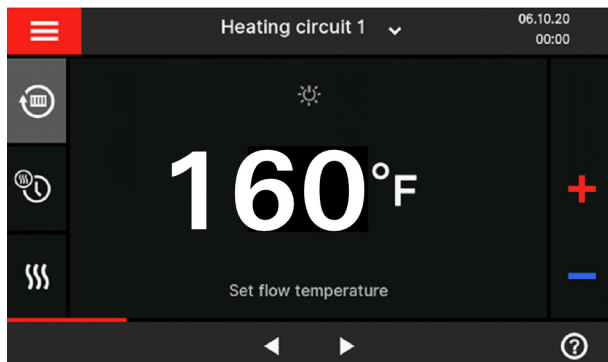
The temperature shown on the display is the target room temperature.

In weather-compensated operation, the supply temperature level is controlled according to the outside temperature.

The lower the outside temperature, the higher the supply temperature. This means that more heat is provided for central heating on cold days than on warmer days.

In weather-compensated operation, 1 heating circuit without mixing valve and up to 3 heating circuits with mixing valve can be operated with the control unit.

Constant operation



The temperature shown on the display is the boiler water temperature.

In constant operation the boiler provides heating water with a constant supply temperature regardless of the outside temperature.

In constant operation, 1 heating circuit without mixing valve and up to 3 heating circuits with mixing valve can be operated with the control unit.

Operation

The control unit is integrated into the boiler and controls all functions of your system. The control unit is operated via a 7 inch color touchscreen.

A WiFi module is integrated into the control unit. This means the system can also be operated remotely via the internet and the "ViCare" app.

In weather-compensated operation, you can set some functions using a remote control.

Software Licences

This product contains third party software, including open source software. You are authorized to use this third party software in compliance with the relevant licensing terms.

- Licences for the integrated wireless module:
See page 33.
- Licences for the programming unit: See page 32.

Commissioning

The commissioning and matching of the boiler to local conditions and building characteristics, as well as instructing the user in the operation of the system, must be carried out by your contractor.

Your System is Preset

Your heating system is preset at the factory and is therefore ready for operation following commissioning by your contractor:

Note: The switching times and target temperatures are not valid for operation with a DHW tank with temperature switch (such as an Aquastat).

Central heating in weather-compensated operation

- Rooms are heated to 68°F (20°C) "Room set temperature" (standard room temperature).

Central heating in constant operation

- Target supply temperature is 140°F (60°C) ("Set flow temperature standard")

DHW heating

- DHW is heated to 122°F (50°C) "Set DHW temperature". Any installed DHW recirculation pump is switched on.

Frost protection

- Your boiler and DHW tank (if installed) are protected against frost.

Wintertime/summertime changeover

- This changeover is automatic.

Date and time

- The date and time were set by your heating contractor. 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

Saving energy when using central heating

- Do not overheat your home. Every degree of room temperature reduction saves up to 6% on your heating bills.
Weather-compensated operation and room temperature-dependent operation:
Do not set your standard room temperature ("Room set temperature") to above 68°F (20°C): See page 20.
- Heat your home to the reduced temperature at night or during regular absences:
 - Weather-compensated operation:
Reduced room temperature
 - Constant operation
Reduced supply temperature
 For this, adjust the settings in the time program for central heating ("Time program, heating"): See page 18.
- To switch off functions that are not required (e.g. central heating in summer), set the operating program to "Standby mode" for the relevant heating circuits: See page 20.
- If you are going away, select the "Holiday program". During the period that you are away, the room temperature will be reduced and DHW heating switched off.


Saving energy on DHW heating

- At night or during regular absences, heat the DHW to a lower temperature. To do so, adjust the time program for DHW heating: See page 18.
- Switch on DHW recirculation only for those times in which you regularly use hot water. To do so, adjust the time program for DHW recirculation pump: See page 18.

For additional energy saving functions, please contact your contractor.

Tips for Greater Comfort

More comfort in your home

- Set your individual preferred temperature: See page 20.
- Adjust the time program for your heating circuits so that your individual preferred temperature is automatically reached when you are present: See page 18.
- Only for weather-compensated operation:
Adjust the heating curves so that your home is heated to your individual preferred temperature all year round: See page 21.
- If you need a higher room temperature in the short term, select the "Extended heating" function: See page 21.
Example: Late in the evening, the reduced room temperature is set by the time program. Your guests stay longer.
- Only for weather-compensated operation:
If you are spending more time than usual at home, select the "Holidays at home"  function: See page 22.
E.g. for public holidays or when the children are on school holidays.

Sufficient DHW heating for your needs

- Adjust the time program for DHW heating so that there is always sufficient hot water in accordance with your habitual routines: See page 18.
Example: You need more DHW in the morning than in the daytime.
- Adjust the time program for the DHW recirculation pump so that hot water is available from the hot taps immediately during times of more frequent usage: See page 18.
- If you need a higher DHW temperature for a short while, select "One-off DHW heating outside the time program": See page 24.

Operating Principles

Touchscreen

You can adjust any setting on your system centrally at the control unit.

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

Remote control for weather-compensated operation

If remote control units are installed in your rooms, you can also adjust the settings at the remote control units.



Remote control operating instructions

Status display with Lightguide

Depending on the type of boiler, a red illuminated strip (Lightguide) is displayed at the lower or upper edge of the control unit during operation.

Meaning of the display:

- Lightguide pulsates slowly:
Display is in standby mode.
- Lightguide is illuminated constantly:
You are operating the control unit. Every input operation is confirmed by a brief flashing.
- Lightguide flashes quickly:
There is a fault in the system.

Note: You can switch off the Lightguide. See page 27.

Screen Displays

Standby display

If the controls have not been operated for some time, the display initially switches to the standby display.

After a few minutes, the illumination is switched off.



Home screen

The default displays provide access to the most important settings and checks.

Use ◀▶ to choose between the following displays:


- Heating circuit or Continuous operation
- DHW
- Dashboard
- Cascade status (if available)

For further information regarding the default displays: See page 12 onwards.

After starting or activating the control unit the home screen is shown.

With the factory settings, the "Heating circuit" or "Continuous operation" display is shown as the home screen. The display depends on the operating mode (weather-compensated operation, constant (continuous) operation). You can specify a different display for the home screen:

Call up the home screen as follows:

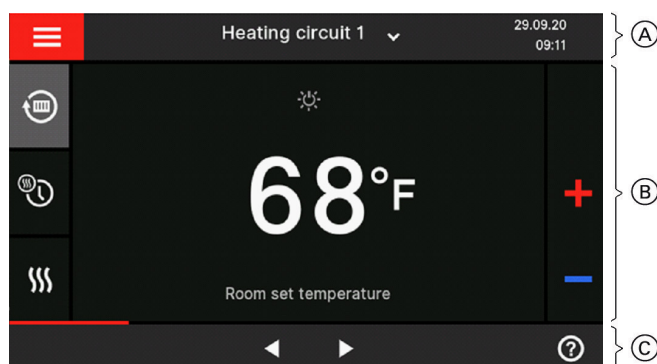
- Standby display active:
Tap anywhere on the screen.
- From the "Main menu":
Tap .

Note: You can prevent operation of the home screen: See page 26.

If you do so, you will not be able to make adjustments on either the home screen or the main menu.

"Panel locked" is displayed.

Buttons and Symbols



Legend

- Ⓐ Menu line
- Ⓑ Function area
- Ⓒ Navigation area

Symbols

- ❄ Frost protection is active.
- 🔧¹ Central heating with reduced room temperature in weather-compensated operation
Central heating with supply temperature in constant operation
- 🔧² Central heating with standard room temperature in weather-compensated operation
Central heating with standard supply temperature in constant operation
- 🔧³ Central heating with comfort room temperature in weather-compensated operation
Central heating with comfort supply temperature in constant operation
- 🏠 Holiday program is switched on.
- 🏠 Holidays at home is switched on.

Buttons and symbols in menu bar Ⓐ

- ☰ Calls up the "Main menu".
- "Heating circuit ..." Selects the heating circuit.

Note: This choice is only available if there are several heating circuits in your system.

System data:

- Date
- Time

Interfaces:

- 📶? No data transfer
- 📶✗ No WiFi connection
- 📶🔄 Establishing a connection
- 📶! Communication error
- 📶📶 WiFi connection is active (very low reception quality).
- 📶📶 WiFi connection is active (low reception quality).
- 📶📶 WiFi connection is active (medium reception quality).
- 📶📶 WiFi connection is active (high reception quality).

Buttons and symbols in function area Ⓑ

For buttons in the default displays: See page 13 onwards.

- Note:**
- What buttons and symbols are available depends on the operating mode: Weather-compensated operation or constant operation.
 - These symbols are not always displayed, but appear subject to the system version and the operating status.

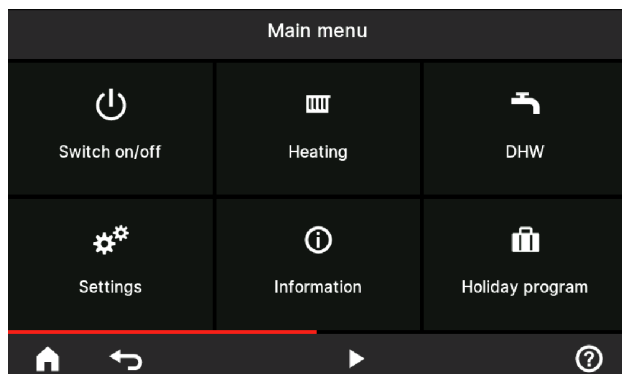
Buttons and symbols in navigation area Ⓒ

Note: The buttons and symbols available depend on the operating mode: Weather-compensated operation or constant operation

- 🏠 Takes you back to the home screen.
- ↶ Takes you one step back in the menu.
- or
- ✂ Terminates an adjustment in progress.
- ✂ WiFi is switched off: See page 30.
- ✓ Confirms a change.
- ✍ Makes changes in the menu.
- ❓ Calls up the help text.
- ⚠ Calls up messages.
- ◀▶ Scrolling through the menu.
- or
- Switches to other display areas, e.g. to "DHW".

Note: If "DEMO" is displayed in the navigation area, there is no central heating, no DHW heating and no frost protection.

Overview of the “Main menu”



In the “Main menu”, you can check and adjust all of the settings for the control unit’s range of functions.

Call up the “Main menu” as follows:

- If the screensaver is active:
Tap anywhere on the screen and then tap .
- From the home screen:
Tap .
- From anywhere in the menu:
Tap and then .

Menus available in the “Main menu”

Note: What buttons and symbols are available depends on the operating mode: Weather-compensated operation or constant operation.

“Heating”

For more central heating settings, e.g. target temperature values.

Further information: See page 15.

“Test mode”

For contractors only

Further information: See page 35.

“DHW”

For DHW heating settings, e.g. for the “DHW temperature”.

Further information: See page 15.

“Settings”

For example the display setting

Further information: See page 26.

“Information”

For checking operating data

Further information: See page 32.

“Holiday program”

Energy saving function “Holiday program”

Further information: See page 23.

“Holidays at home”

“Holidays at home” function

Further information: See page 22.

“Message lists”

Calls up all pending messages

For further details regarding messages:

See page 35.

“Service”





For contractors only

You can find the menu overview on page 33.

Operating Program

Operating programs for central heating and DHW heating

Note: The operating programs for central heating and DHW heating can be set separately.

Symbol	Operating program	Function
Central heating		
	"Heating"	The rooms of the selected heating circuit are heated in accordance with the specified room temperature or supply temperature and the time program (see chapter "Room heating"). Note: In room temperature-dependent operation, a time program for central heating can only be set at the room temperature controller: See the operating instructions for the room temperature controller.
	"Standby mode"	<ul style="list-style-type: none"> ■ No central heating ■ Frost protection for the boiler is active.
DHW heating		
Note: Not valid for systems with a DHW tank with temperature switch (such as an Aquastat).		
	"DHW" "ON"	DHW is heated in accordance with the DHW temperature and time program specified (see chapter "DHW heating").
	"DHW" "OFF"	<ul style="list-style-type: none"> ■ No DHW heating ■ Frost protection for the DHW tank is active.

■ "External hook-up"

The operating program set at the control unit was changed over by an external device, e.g. an EM-EA1 extension (DIO electronics module). The operating program cannot be changed via the control unit for as long as the external hook-up is active.





■ "Holiday program": See page 23.

■ "Holidays at home": See page 22.

Note: The special operating programs and functions are displayed alternately with the room temperature or the supply temperature of the boiler.
In the main menu, you can call up the set operating program under "Information": See page 32.

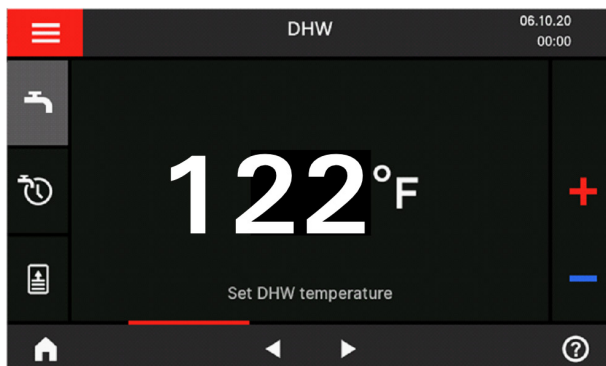
"Heating Circuit" or "Continuous Operation" Default Display

In the "Heating circuit" or "Continuous operation" default display, you can adjust and check the most frequently used settings:

- +** Raises the room temperature value in weather-compensated operation.
Raises the supply temperature value in constant operation.
- −** Lowers the room temperature value in weather-compensated operation.
Lowers the supply temperature value in constant operation.
-  Sets the "Heating" operating program for a heating circuit.
-  To select "Standby mode".
-  To switch the "Extended heating" function on or off.
-  To call up the "Time program, heating" for central heating.




The temperature display represents the selected target room temperature [e.g. 68°F (20°C)] or target supply temperature [e.g. 140°F (60°C)] for the current time phase.

"DHW" Default Display

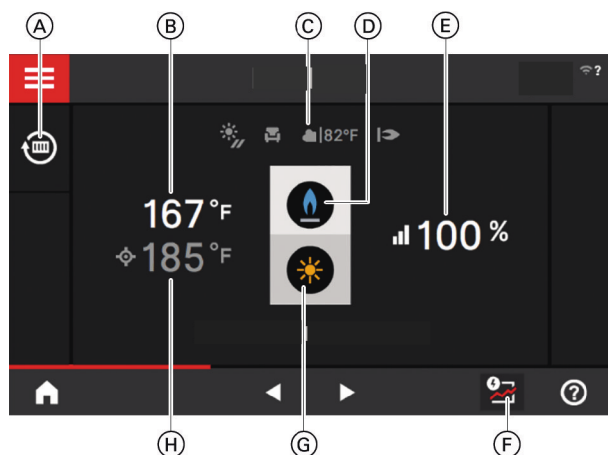


Note: The DHW default display is not available for systems with a storage tank with temperature switch (such as an Aquastat).

In the "DHW" default display you can carry out the settings and checks you use most frequently:

- +** Raises the DHW temperature value.
- −** Lowers the DHW temperature value.
-  Turns "DHW" "ON"/"DHW" "OFF".
-  Calls up the "Time program, DHW".
-  To switch one-off DHW heating on or off.

"Dashboard" Default Display

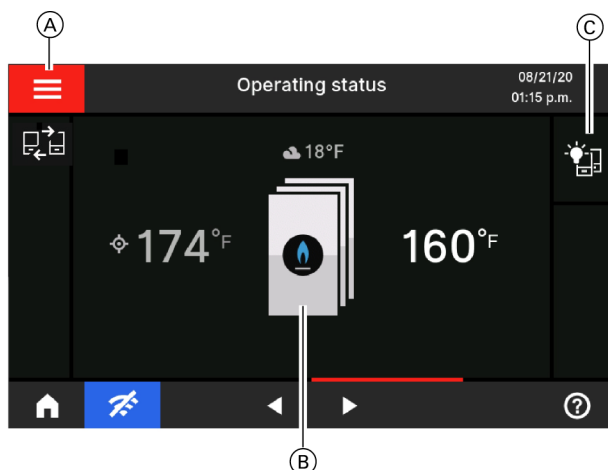


The various components present in the system are shown as graphics. Some information on the components is also provided in the default display. For more information, tap the relevant component.

What buttons and symbols are available depends on the system version.

Legend

- Ⓐ Operating program
- Ⓑ Current supply temperature
- Ⓒ Solar collectors active
- Ⓓ Holiday program active
- Ⓔ Current outside temperature
- Ⓕ Burner status
- Ⓖ Burner symbol
- Ⓗ Current modulation level
- Ⓘ Solar yield (if active)
- ⓖ Solar storage tank (if installed)
- ⓓ Target supply temperature



"Dashboard" default display for cascade control

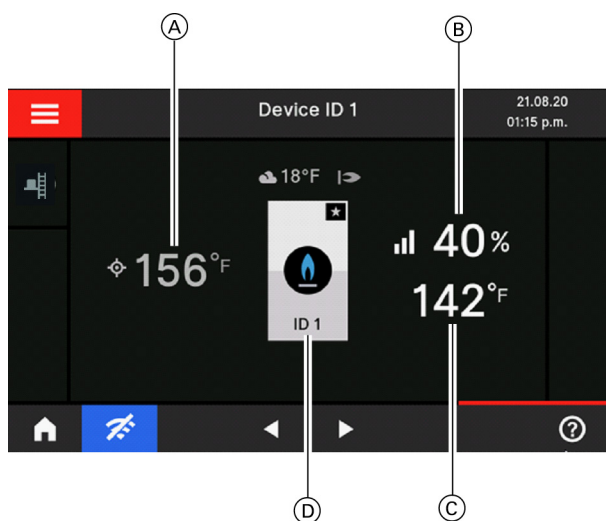
This display shows the lead boiler in the cascade, its current supply temperature, the target supply temperature and the modulation level.

Note: All information in this display relates to the lead boiler in the cascade system.

Legend

- Ⓐ Dynamic control strategy
- Ⓑ All cascade participants can be called up (status, burner run hours)
- Ⓒ Switch on all displays of the cascade participants (deactivated by standby)

"Operating Status" Default Display



This display shows the participants in the cascade as well as the current supply temperature and the target supply temperature.

Legend

- Ⓐ Target supply temperature
- Ⓑ Modulation level
- Ⓒ Current temperature
- Ⓓ Identification number of the lead or lag boiler.



This display shows the lead boiler in the cascade, its current supply temperature, the target temperature, the modulation level and the identification number.

Calling Up Operating Data for the Solar Thermal System

You can call up the following operating data:

- Solar energy yield (Solar energy bar chart):
See the following chapter
- Total solar energy generated
- Solar circuit pump operating time
- Solar circuit pump operating state
- Reheating suppression
- Solar stagnation
- Solar circulation pump
- TS3: Buffer temperature
- TS4: Return temperature, heating circuit
- Solar central heating backup
- TS3: DHW preheating




Tap the following buttons:

1. 
2.  "Information"
3. "Solar"

Calling up the solar energy yield

You can call up the amount of energy generated by your solar thermal system. Values are shown in kilowatt hours.

Tap the following buttons:

1. 
2.  "Information"
3. "Solar"
4. "Solar energy bar chart"
5. Required period :
 - Current month
 - Last month
 - Current year
 - Last year






The solar energy yield is displayed as a diagram with yellow bars.

6. Required period in diagram: Day of the week or month.
The solar energy yield for the selected period is displayed numerically.

Starting One-Off DHW Heating

Note: Not valid for systems with a DHW tank with temperature switch (such as an Aquastat).

Tap the following buttons:



1. If applicable  , for the "DHW" default display
2.  to start one-off DHW heating by the boiler.
The DHW tank is heated to the selected target DHW temperature.
If you want to terminate DHW heating early, tap  again.
3.  to confirm

Calling Up Operating Data for the Boiler

You can call up the following operating data:

- Current output
- Hours run
- Burner runtime
- Burner starts
- And further data

Tap the following buttons:

1. 
2.  "Information"
3. Select group
4. Retrieve data

Procedure for Setting a Time Program

The following explains how to input the settings for a time program. The specifics of the individual time programs can be found in the relevant chapters.

Time programs and time phases

In the time programs you determine what your heating system should do at what time. To do so, divide the day into sections. These are called time phases.

Different temperature levels are active within and outside these time phases.

You can set up a time program for the following functions:

Function	Temperature level	
	Within the time phase	Outside the time phase
Central heating	Weather-compensated operation: Your rooms are heated to standard room temperature or comfort room temperature.	Your rooms are heated to reduced room temperature.
	Constant operation: Your rooms are heated with standard supply temperature or comfort supply temperature.	Your rooms are heated with reduced supply temperature.
DHW heating Note: Not valid for systems with a DHW tank with temperature switch (such as an Aquastat).	DHW heating is switched on. The water in the DHW tank is heated to the target DHW temperature.	DHW heating is switched off.
DHW recirculation pump	The DHW recirculation pump is switched on.	The DHW recirculation pump is switched off.

- The time programs can be set individually to be the same, or different, for every day of the week.
- In the main menu, you can check the time programs under ⓘ "Information": See page 32 onwards.

Setting time phases

Note: ■ DHW is not heated between the time phases. Frost protection for the DHW tank is active.

- When setting time programs, bear in mind that your system needs some time to heat the DHW tank to the required temperature.

The procedure is explained using the example of central heating for heating circuit 1 in weather-compensated operation.

You can set up to 4 time phases in each "Time program". For each time phase, you define the start point "Start" and the end point "End".

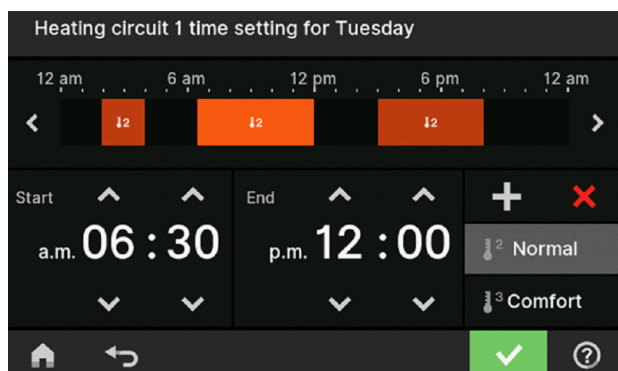
Example:

"Time program" for "Monday" for "Heating circuit 1"

- Time phase 1:
06:30 to 12:00 with standard room temperature
 - Time phase 2:
15:00 to 20:00 with comfort room temperature
- In between these time phases the system heats to a reduced temperature.

Tap the following buttons:

1. "Heating circuit 1" ✓ in the menu bar
2. ⓘ
3. "Mo"
4. ✓
5. ⤴ ⤵ for the "Start" and "End" of time phase 1. The bar in the time diagram is adjusted.
6. ⚡² "Standard" to select standard room temperature.
7. + to add time phase 2.
8. ⤴ ⤵ for the "Start" and "End" of time phase 2.
9. ⚡³ "Comfort" to select comfort room temperature.
10. ✓ to confirm
11. 🏠 to exit the "Time program".



The bars in the time diagram are adjusted.

Procedure for Setting a Time Program *(continued)*






Copying the time program to other days of the week

The procedure is explained using the example of central heating for heating circuit 1 in weather-compensated operation.

Example:

You want to copy the "Monday" "Time program" over to "Thursday" and "Friday".

Tap the following buttons:

1. "Heating circuit 1  in the menu bar
2. 
3. "Mo"
4. 
5. "Th", "Fr"
6.  to confirm
7.  to quit the time program.










Changing time phases

The procedure is explained using the example of central heating for heating circuit 1 in weather-compensated operation.

Example:

For "Monday", you want to change the start point "Start" of time phase 2 to 19:00.

Tap the following buttons:

1. "Heating circuit 1  in the menu bar
2. 
3. "Mo"
4. 
5.  for time phase 2
6.  for the start point of time phase 2.
The bar in the time diagram is adjusted.
7.  ² "Standard" for standard room temperature
or
 ³ "Comfort" for comfort room temperature
8.  to confirm
9.  to quit the time program.








Deleting time phases

The procedure is explained using the example of central heating for heating circuit 1 in weather-compensated operation.

Example:

For Monday you want to delete time phase 2.

Tap the following buttons:

1. "Heating circuit 1  in the menu bar
2. 
3. "Mo" to select the required day
4. 
5.  for time phase 2
6.  to delete the time phase.
7.  to confirm
8.  to quit the time program.

Heating Circuit Selection

The heating of your rooms can be split over several heating circuits if necessary.

E.g., one heating circuit for your home, and one heating circuit for your office.

In the menu bar, the heating circuits are designated at the factory as "Heating circuit 1", "Heating circuit 2" etc. If names have been given to the heating circuits, the allocated name is shown: See chapter "Entering names for heating circuits".

- For all central heating settings for heating systems with several heating circuits, first select the heating circuit that you want to change from the "Heating circuit" default display.
- If you are only operating one heating circuit, this option is not available.

Tap the following buttons:

1. If applicable, ◀▶ for the "Heating circuit" default display
2. "Heating circuit 1" ✓ in the menu bar
3. Required heating circuit

Setting the Room Temperature for a Heating Circuit

Factory settings for the temperature levels

Weather-compensated operation:

- Standard room temperature: 68°F (20°C)
- Reduced room temperature: 37°F (3°C)
- Comfort room temperature: 68°F (20°C)

Constant operation and room temperature-dependent operation:

- Standard supply temperature: 140°F (60°C)
- Reduced supply temperature: 68°F (20°C)
- Comfort supply temperature: 158°F (70°C)

Setting temperature levels for central heating

Tap the following buttons:

1. If applicable, ◀▶ for the "Heating circuit" or "Continuous operation" default display
2. If applicable, ✓ in the menu bar for the relevant heating circuit
3. + — for the required value of the relevant temperature level:
 - 1 "Reduced"
 - 2 "Standard"
 - 3 "Comfort"
4. ✓ to confirm

Switching Central Heating On or Off (Operating Program)






For information on the operating programs, see page 14.

Tap the following buttons:

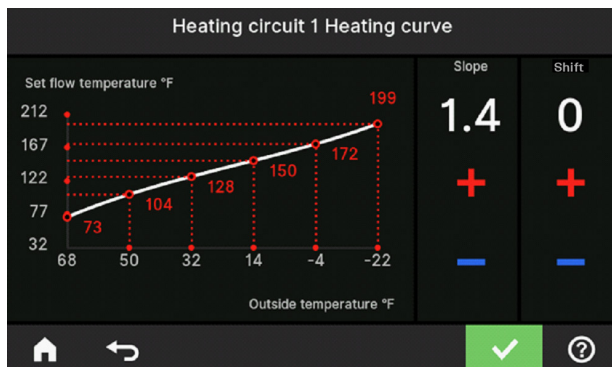
1. ☰
2. ⏻ "Turn on/off"
3. Tap the required heating circuit or heating zone to switch it on or off.
4. ✓ to confirm

Setting the Target Supply Temperature for a Heating Zone

Tap the following buttons:

1. 
2.  "Heating"
3. Select "heating zone or heating circuit".
4. Select a heating zone or heating circuit and confirm with .
5.  to adjust the target supply temperature.
6.  to confirm

Setting the Heating Curve



Note: The heating curve can only be adjusted in weather-compensated operation.







By setting the "Heating curve", you influence the supply temperature provided by the boiler.

To ensure your rooms are heated optimally at any outside temperature, you can adjust the "Shift" and "Slope" of the "Heating curve".

Factory setting:

- "Slope": 1.4
- "Shift": 0

Tap the following buttons:

1. 
2.  "Heating"
3. Select "heating zone or heating circuit".
4. Select a heating zone or heating circuit, e.g.  "Heating circuit 1"
5.  "Heating curve"
6.  for the required value for "Slope" and "Shift" respectively
7.  to confirm

The graph displayed clearly shows the change in the "Heating curve" as soon as you alter the value for the "Slope" or "Shift".

Note: Extensive information on adjusting the "Heating curve" can be found in chapter "Terminology" in the appendix.



Temporarily Adjusting the Room Temperature for Certain Heating Circuits

Switch on the "Extended heating" function if you want to heat your home with standard room temperature/supply temperature or comfort room temperature/supply temperature during a time phase with reduced room temperature.

Your home will be heated with the temperature of the last active time phase for standard room temperature/supply temperature or comfort room temperature/supply temperature.

Switching on "Extended heating"

Tap the following buttons:



1. If applicable,  in the menu bar for the relevant heating circuit
2. 

The temperature of the last active time phase for standard room temperature/supply temperature or comfort room temperature/supply temperature will be selected.

Switching off "Extended heating"

The function ends automatically when switching to the next time phase for standard room temperature/supply temperature or comfort room temperature/supply temperature.


Tap the following on-screen buttons to terminate "Extended heating" early:


1. If applicable,  in the menu bar for the relevant heating circuit
2. 

Adjusting the Room Temperature for Longer Periods at Home

Note:

The "Holidays at home" function is not valid for heating zones.

If you are continuously at home for one or more days but do not want to change the time program, select the function "Holidays at home" , e.g. on public holidays or when the children are on school holidays.

The function "Holidays at home"  has the following effect:

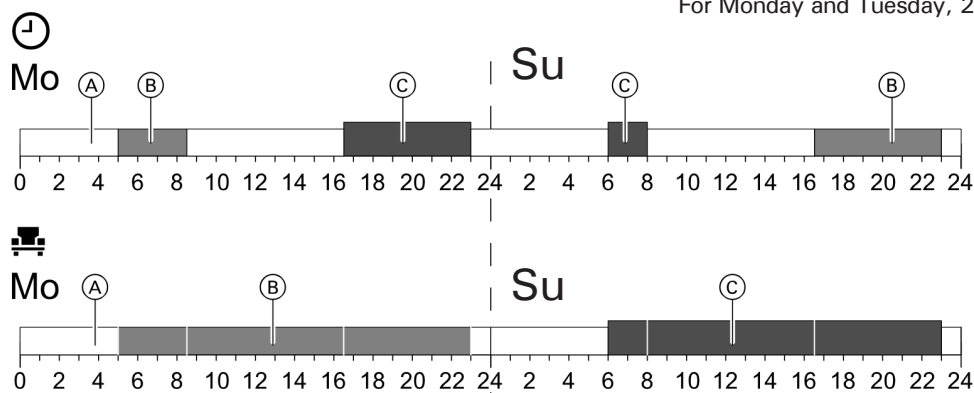
- The room temperature during the periods between the set time phases is raised to the target value of the first time phase of the day: From reduced room temperature to standard room temperature or comfort room temperature.
- If no time phase is active before (0:00), your rooms are heated to the reduced room temperature until the next time phase becomes active.
- DHW heating is active.
- The "Holidays at home" function starts and ends according to the set times for the start date and end date.
- Only valid for heating circuits

Note: ■ As long as the "Holidays at home" function is switched on, the default display shows "Holidays at home" and the set start date and end date.


- If "Detached house" was selected by your contractor during commissioning, the function is adopted for all heating circuits.

Example:

For Monday and Tuesday, 2 time phases are set respectively.



⌚ Temperature levels in line with the set time program

 Temperature level if "Holidays at home" is active






(A) Reduced room temperature

(B) Standard room temperature

(C) Comfort room temperature





Switching on "Holidays at home" 

Tap the following buttons:


1. 
2.  "Holidays at home"
3. Use  to select the required heating circuit
4.  for "Start" and "End"
5.  to confirm

Switching off "Holidays at home" 



Tap the following buttons:

1. 
2.  "Holidays at home"
3. Use  to select the required heating circuit
4. 

Saving Energy During Longer Absences

To save energy during long periods of absence, select "Holiday program" .

The holiday program has the following effect:







- Central heating:
 - For heating circuits in the  "Heating" operating program:
The rooms are heated to the set reduced room temperature.
 - For heating circuits in the  "Standby mode" operating program:
No central heating: Frost protection for the heat generator and the DHW tank is active.
- DHW heating:
No DHW heating; frost protection for the DHW tank is active.
- The vacation program starts at 00:00 on the first day of your vacation and ends at 23:59 on the final day.

Note:

- As long as the "Holiday program" function is switched on, the selected first and last day of the holiday are shown in the "Heating circuit" and "Holiday program" default display.
- If "Detached house" was selected by your contractor during commissioning, the holiday program is switched on for all heating circuits.
- If "Apartment building" was selected by your contractor during commissioning, DHW heating will only be switched off if all heating circuits are in the holiday program.
- The "Holiday program" function is not available for heating zones or DHW heating in systems with a DHW tank with temperature switch (e.g. Aquastat).
- If all heating circuits are in the active "Holiday program", DHW heating is switched off, except in systems with a DHW tank with temperature switch (e.g. Aquastat).





Switching on the "Holiday program"

Tap the following buttons:

1. 
2.  "Holiday program"
3. Use  to select the required heating circuit
4.   for "First holiday" and "Last holiday"
5.  to confirm


Switching off the "Holiday program"

Tap the following buttons:

1. 
2.  "Holiday program"
3. Use  to select the required heating circuit
4. 

Checking the Boiler Status and the Status of Heating Zones

Tap the following buttons:

1.  to select the device status of the lead or lag boiler.
2. On the lead boiler tap the symbol in the middle of the screen.
The status of the heating zones is displayed.

Setting the DHW Temperature

Note: Not valid for systems with a DHW tank with temperature switch (e.g. Aquastat).

The factory settings depend on the boiler.

Note: For reasons of good hygiene, you should not set the DHW temperature lower than 122°F (50°C).



Tap the following buttons:

1. If applicable, ◀▶ for the "DHW" default display
2. +− for the required value
3. ✓ to confirm

Switching DHW Heating On or Off (Operating Program)

If you switch off DHW heating, no water can be heated. This also applies for the function "One-off DHW heating outside the time program".


Tap the following buttons:

1. If applicable, ◀▶ for the "DHW" default display
2. Highlighted button  or 
3. ■ | "ON" if you want to start DHW heating.
■ ○ "OFF" if you want to stop DHW heating.

For information on the operating programs: See page 14.

One-Off DHW Heating Outside the Time Program

Note: Not valid for systems with a DHW tank with temperature switch (such as an Aquastat).


If you require hot water outside the set time phases, switch on "One-off DHW heating" .

The DHW tank is heated once to the set DHW temperature.


This function has a higher priority than other functions, such as the time program for example.

Switching on one-off DHW heating


Tap the following buttons:

1. If applicable, ◀▶ for the "DHW" default display
2. 
3. ✓ to confirm

Switching off one-off DHW heating

"One-off DHW heating"  ends as soon as the target DHW temperature has been reached.

Tap the following on-screen buttons to terminate "One-off DHW heating" early:

1. If applicable, ◀▶ for the "DHW" default display
2. 

Increased DHW Hygiene

Note: Not valid for systems with a DHW tank with temperature switch (e.g. Aquastat).

You can heat the water in the DHW tank to above 140°F (60°C) once a week or for an hour every day. This function is regularly carried out at the specified time.



WARNING

High DHW temperatures can cause scalding, e.g. if the DHW temperature is above 140°F (60°C). Mix with cold water at the draw-off points.

Switching on increased DHW hygiene

Tap the following buttons:

- 1.
2. "DHW"
3. "Hygiene function"
4. for the starting time "Start"
5. Select the required day or every day.
The selection is highlighted.
6. to confirm

Switching off increased DHW hygiene

Tap the following buttons:

- 1.
2. "DHW"
3. "Hygiene function"
4. Deselect the highlighted day or every day.
5. to confirm

Switching DHW Scald Protection On/Off

Note: Not valid for systems with a DHW tank with temperature switch (such as an Aquastat).

Tap the following buttons:

- 1.
2. "DHW"
3. "Scald protection"
4. "On" or "Off"
5. to confirm

Note: With scald protection switched off, a target DHW temperature of over 140°F (60°C) can be selected, depending on the boiler. There is an increased risk of scalding!

Locking the Controls







You can lock the controls in 2 ways:

Level 1 All functions on the default displays are operable.

All other functions are disabled.

Level 2 All functions are disabled.




Tap the following buttons:

1. 
2.  "Settings"
3.  "Lock panel"
4.  "Lock everything"
- or
4.  "Only home screen operable"
5. Enter the password "viessmann".
6.  to confirm

This password can be changed:







Unlocking the controls

Tap the following buttons:

1. Any on-screen button
"Panel locked" is displayed.
2. 
3.  "Do you want to unlock the operation?" is displayed.
An entry field and keyboard appear.
4. Enter the password "viessmann" or the password you have specified.
5.  to confirm








Changing the password for the "Lock panel" function

Tap the following buttons:

1. 
2.  "Settings"
3.  "Change password"
4. Enter the current password.
5.  to confirm
6. Enter the new password (1 to 20 characters).
Note: You will not be required to confirm the new password.
7.  to confirm
A prompt is displayed.
8.  to confirm the prompt

Setting the Display Brightness

Tap the following buttons:

1. 
2.  "Settings"
3.  "Display setting"
4.  "Brightness, operation"
- or
4.  "Brightness, standby"
5.  for the required value
6.  to confirm

Switching the Lightguide On and Off

Depending on the type of boiler, a red illuminated strip (Lightguide) is displayed at the lower or upper edge of the control unit during operation.

In the delivered condition, the Lightguide is switched on. You can switch off the Lightguide.



Meaning of the display:

- Lightguide pulsates slowly:
Display is in standby mode.
- Lightguide is illuminated constantly:
You are operating the control unit. Every input operation is confirmed by a brief flashing.
- Lightguide flashes quickly:
There is a fault in the system.

Tap the following buttons:

1. 
2.  "Settings"
3.  "Display setting"
4. "Lightguide on/off"
5.  "ON"



or

-  "OFF"
6.  to confirm

Note: Faults are shown by flashing lights even if the Lightguide is switched off.

Lead Cascade Boiler Only: Switching on the Display

Tap the following buttons:






1. 
2.  "Wake up display"
3. Select and confirm the lag boiler.

Entering Names for Heating Circuits

You can name all heating circuits individually, e.g. "Ground floor".

Note: The abbreviations 1, 2, 3, 4 will be retained in the default display.





Tap the following buttons:

1. 
2.  "Settings"
3.  "Rename heating circuits"
4. Required heating circuit, e.g.  "Heating circuit 1"
5. Type in the required name,
e.g. "Ground floor" (1 to 20 characters).
6.  to confirm

The name assigned to the relevant heating circuit is shown in the main menu.

Entering a Name for the Heating Zone

Tap the following buttons:

1. 
2.  "Settings"
3.  "Rename heating zone"
4. Tap the required heating zone
5. Type in the required names (1 to 20 characters).
6.  to confirm








You can name all heating zones individually.

The name assigned to the relevant heating zone is shown in the main menu.

Setting the "Time" and "Date"






The "Time" and "Date" are set at the factory. If your system has been shut down for a prolonged period, you may need to reset the "Time" and "Date".

Tap the following buttons:

1. 
2.  "Settings"
3.  "Date and time"
4.  "Date"
- or
-  "Time"
5.  for the required value
6.  to confirm





Automatic "Summer/Wintertime" Changeover

Tap the following buttons:

1. 
2.  "Settings"
3.  "Date and time"
4. "Time changeover"
5.  for "ON" or "OFF"
6.  to confirm

Setting the "Language"





Tap the following buttons:

1. 
2.  "Settings"
3.  "Language"
4. Required language
5.  to confirm

Setting "Units"

You can change all the available units, e.g. for temperature, date, etc.

Tap the following buttons:

1. 
2.  "Settings"
3.  "Units"
4. Select the required unit type, e.g. °C for the temperature.
5.  to confirm

Entering the Contractor's Contact Details

You can enter your contractor's contact details. These can then be called up in the ⓘ "Information" menu.

Tap the following buttons:

1. ☰
2. ⓘ "Information"
3. 👤 "Contractor contact details"
4. Relevant entry field
5. Enter your contractor's contact details into the individual boxes.
6. ✓ to confirm

Setting the Home Screen

Note: Not valid for systems with a DHW tank with temperature switch (such as an Aquastat).

Note: Which default displays are available depends on the operating mode: Weather-compensated operation or constant operation.

You can choose from the following default displays as your home screen:

- "Heating circuit" or "Continuous operation"
- "DHW"
- "Device status"

Tap the following buttons:

1. ☰
2. ⚙️ "Settings"
3. 🏠 "Selecting the default display"
4. Required display
5. ✓ to confirm

Note: Tap 🏠 to call up the selected home screen.

Changing the Calorific Value or Correction Factor

Tap the following buttons:

1. ☰
2. ⚙️ "Settings"
3. 🎮 "Energy cockpit"
4. Select "Calorific value" or "Correction factor"
5. Enter the value.
6. ✓ to confirm

Note: The value has an effect on the calculated consumption data. (consumption value not suitable for billing purposes!)

Switching Internet Access On or Off

You can control your system remotely via the internet using an app. To do this, establish an internet connection via WiFi: See the following chapter.

The required credentials for internet access to the control unit via app can be found on the adjacent label:



Place WiFi label here

Switching WiFi on or off

Tap the following buttons:











1. ☰
2. ⚙️ "Settings"
3. 🌐 "Internet"
4. "WiFi operating mode"
5. ✖️ "OFF" if you want to switch off the WiFi.
or
📶 "Internet" if you want to switch on the WiFi.
6. ✓ to confirm

Switching Internet Access On or Off *(continued)*

Establishing a WiFi connection

Note: Prerequisite: WiFi is switched on.








Tap the following buttons:

1. 
2.  "Settings"
3.  "Internet"
4. "Network selection"
 - Available WiFi networks are displayed.
 - Note:** If a connection as already exists, "Connected" is shown next to the relevant network.
 - If you want to use an invisible WiFi network:
Tap  and enter the name of the WiFi network (SSID) and the password.
5. Select WiFi.
 - Note:** Use  to refresh the list of available WiFi networks.
6.  to confirm
7. If your selected WiFi is not protected :
to acknowledge the connection message
or
If your selected WiFi is protected :
Enter the password (maximum 40 characters).
 to confirm your password
8. to confirm the prompt about internet use
The default display shows  .
Note: ■ If the connection was not established, an error message is shown.
 - An internet connection only exists if the selected WiFi is connected to the internet.
Check your WiFi settings if necessary.

Static IP address

Prerequisite: Your WiFi is configured so that the subscriber addresses in the network (IP addresses) are not automatically assigned.

Tap the following buttons:

1. 
2.  "Settings"
3.  "Internet"
4. "Network selection"
5. Available WiFi networks are displayed.
 - Note:** Tap  to refresh the list of available WiFi networks.
6. Select the network.
7. 
8. "STATIC" for static IP address
9.  to confirm
10. Enter network data:
 - IP address
 - Subnet mask
 - Standard gateway
 - Primary DNS server
 - Secondary DNS server
11.  to confirm

Note: An internet connection only exists if the selected WiFi is connected to the internet. Check your WiFi settings if necessary.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.



CAUTION




Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Switching Off the Display Screen for Cleaning

If you want to clean the display screen, you can deactivate it for 30 seconds. This prevents unintentional operation.

Clean the display with a microfiber cloth.

Tap the following buttons:

1. 
2.  "Settings"
3.  "Clean screen"

The display is deactivated. A countdown begins.

Lead Cascade Boiler Only: Dynamic Control Strategy

From the display, you can adjust the dynamic control strategy and runtime optimization settings so that each boiler in the cascade has the same runtime.

Here you can also decide which of the boilers in the cascade should be started first or last.

Restoring Factory Settings





You can reset all entries and values to their factory settings.

Note: If the heating circuits have been named, the assigned names will be retained: See page 28.

Settings and values that are reset with all operating modes:

- Standard room temperature or standard supply temperature
- Reduced room temperature or reduced supply temperature
- Operating program
- DHW temperature
- Time program for DHW heating
- Time program for DHW recirculation pump
- Only for weather-compensated operation
Heating curve slope and level
- Comfort room temperature or comfort supply temperature
- Time program for central heating
- The "Extended heating" function is switched off.
- "Holiday program" and "Holidays at home"



Tap the following buttons:

1. 
2.  "Settings"
3.  "Factory settings"
4.  to confirm

Calling Up Help Messages

You can call up help messages relating to the displays and functions.










Tap the following buttons:

1.  to call up the help messages.
2.  to return to the previous screen.

Checking Information

Depending on the system equipment level and the settings made, you can call up current system data, e.g. temperatures.

The system data is divided into the following groups:

-  General
-  Burner
-  DHW
-  Heating circuit 1 to 4
-  Heating zones 1 to 4
-  Solar energy
-  Contractor contact details
-  Internet
-  Open source licence
- Cascade
- Cascade boilers

Calls up the licence for the programming unit.



Note: If names have been given to the heating circuits or

heating zones, the allocated name is shown:

See page 28.



Detailed options for checking the individual groups can be found in chapter "Menu overview".

Tap the following buttons:

1. 
2.  "Information"
3. Required group

Displaying the Gas Consumption





Tap the following buttons:

1. 
2.  "Information"
3. OK to confirm
4. "General"
5. OK to confirm

Calling Up Licences for the Programming Unit

Calls up the licence for the programming unit.

Tap the following buttons:






1. Call up the home screen.
2. 
3.  for "Information"
4. OK to confirm
5.  for "Open source licences"
6. OK to confirm
7.  for approx. 4 sec, to exit the menu.

Calling Up Licences for the Integrated Wireless Module

Switch on the "Access point" of the boiler so that you can call up online legal information, such as open source licences.

Switching on access point

Tap the following buttons:

1. 
2.  "Settings"
3.  "Internet"
4. "WiFi operating mode"
5.  "Access point"
6. Follow the instructions in the mobile device app.
7.  to confirm

Calling up open source licences

1. Call up the WiFi settings of your smartphone or PC.
2. Connect your smartphone or PC to the WiFi "Viessmann-xxxx>".
You will be asked to enter a password.
3. Enter the WiFi password.
Note: The credentials can be found on the label: See chapter "Switching internet access ON or OFF".
4. With your connected mobile device, open <http://192.168.0.1> in your internet browser
5. Follow the link "Open Source Components Licences".

Third party software

Overview

This product contains third party software, including open source software. You are entitled to use this third party software in compliance with the respective licence conditions as provided under the link below.
A list of the third party software components used and of licence texts can be accessed by connecting your boiler, as explained in the instruction manual.

Acknowledgements

Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>). This product includes cryptographic software written by Eric Young (eay@cryptsoft.com) and software written by Tim Hudson (tjh@cryptsoft.com).


Disclaimer

The open source software contained in this product is distributed WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. The single licences may contain more details on a limitation of warranty or liability.

How to obtain the source code

The software included in this product may contain copyrighted software that is licensed under a licence requiring us to provide the source code of that software, such as the GPL or LGPL. To obtain the complete corresponding source code for such copyrighted software, please contact us via the contact information provided in section 5 below, indicating the build number you will find under the "Open Source Licences" link mentioned in section 1 above. This offer is not limited in time and is valid for anyone in receipt of this information.

Checking Maintenance Messages

Your contractor can set service intervals. When these service intervals are exceeded, a service message is displayed automatically: "Service" and .

If available, your heating contractor's contact details will be displayed.

Tap the following buttons:







 flashes in the navigation area.

Note: If the service cannot be carried out until a later date, the service message will be displayed again the following Monday.

Calling up service messages

Tap the following buttons:

1.  in the navigation area.
If fault messages are also present in your system, they and any further messages can be called up with  "Faults", "Service messages".
2. "Service messages"
The service messages will be listed in yellow.
3. Tapping on  calls up information about the system characteristics.
Tips on measures you can take yourself before notifying your contractor are displayed.
4. Make a note of the service message number.
For example: P.1 "Maintenance due after interval".
This enables the contractor to be better prepared and may save you unnecessary travelling costs.
5. Please notify your contractor.
6.  to acknowledge the service if necessary.

Checking Fault Messages

If your system has developed faults, "Fault" and are displayed. The Lightguide flashes even when switched off: See chapter "Switching the Lightguide on and off".

Tap the following buttons:

1. ✓

△ flashes in the navigation area.

Note: ■ If you have connected a message facility to alert you to fault messages (e.g. a buzzer), this is deactivated when the fault message is acknowledged.

- If troubleshooting cannot be carried out until a later date, the fault message will be displayed again the following day at 07:00. The message facility is switched on again.

Calling up a fault message

Tap the following buttons:

1. △ in the navigation area.
If service messages are also present in your system, they and any further messages can be called up with △ "Faults", "Service messages".
2. "Faults"
The fault messages will be listed in red.
3. Tapping on ? calls up information about the system characteristics.
Tips on measures you can take yourself before notifying your contractor are displayed.
4. Make a note of the fault number and the cause of the fault. For example: F.160 "Communication error CAN bus".
This enables the contractor to be better prepared and may save you unnecessary travelling costs.
5. Please notify your contractor.
6. ✓ to acknowledge the fault.

Resetting the burner after a burner fault

If the burner is locked due to a fault, you can reset the burner.

Tap the following buttons:

1. ✓
A further prompt is displayed.
2. □ "Reset"
3. ✓ to confirm
The burner is reset and will restart.





WARNING

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

Do not reset the burner several times in quick succession. Immediately notify your contractor if a burner fault occurs. Your contractor will be able to analyze the cause and rectify the fault.

Checking Message Lists

Tap the following buttons:

1. 
2.  "Message lists"
3. If there are any corresponding messages:
 - "Status"
 - "Warnings"
 - "Information"
 - "Faults"
 - "Service messages"

Emissions Test Mode

Note: You can only activate emissions test mode in the service menu.

Emissions test mode for testing flue gas must only be activated by your certified contractor. If possible, have the emissions test carried out during the heating season.

Note: The certified contractor can activate emissions test mode even if the control panel is locked.

Switching the System Off

Shutting down heat generation with frost protection monitoring ("Standby mode")

For each heating circuit and each heating zone, select the "Standby mode" operating program and switch off DHW heating: See pages 20 and 24.

- No central heating
- No DHW heating
- Frost protection for the boiler and the DHW tank is active.

Note: ■ All circulation pumps connected to the control unit are briefly started every 24 hours to prevent them from seizing up.

- The diverter valves are switched over at regular intervals.

Switching off heat generation without frost protection monitoring

- No central heating
- No DHW heating
- Frost protection for the boiler and the DHW tank is not active.

1. Turn off the ON/OFF switch.
2. Close the gas shut-off valve.

IMPORTANT

If outside temperatures of below 37°F (3°C) are expected, take appropriate measures to protect the system from frost.

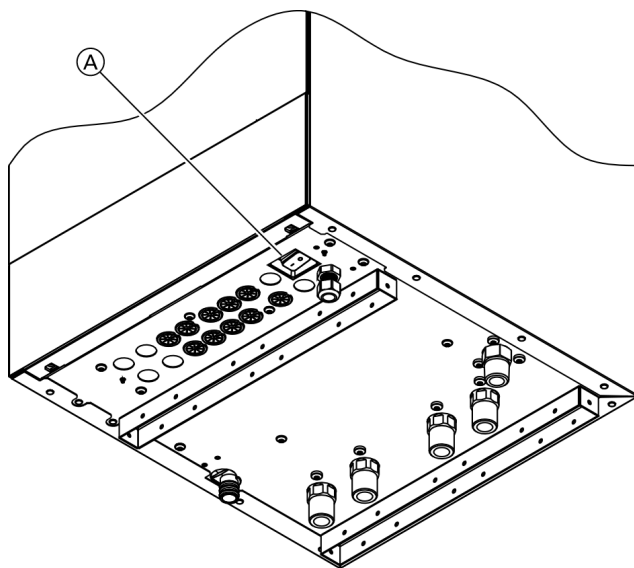
If necessary, contact your contractor.

Note: ■ As they are not being supplied with power, the circulation pumps and diverter valves may seize up.

- If your system has been shut down for a prolonged period, you may need to reset the "Time" and "Date": See page 28.

Switching the System On

Vitodens 200-W



Note: The control unit can be located at the top or bottom.

Legend

Ⓐ ON/OFF switch

Ask your contractor about the following:



- Required system pressure
 - Position of ventilation apertures in the installation room, if applicable
1. Open gas shut-off valve.
 2. Check whether the power supply to your system is switched on, e.g. at a separate circuit breaker.

Note: The power supply to the system was switched on by your heating contractor during commissioning.


If possible, do not interrupt the power supply, even when the system is in standby mode.

3. Turn ON/OFF switch Ⓐ on.
 - After a short while, the home screen is shown on the display.
 - The Lightguide is illuminated constantly. Your system and, if installed, your remote controls are ready for operation.
4. Check the system pressure on the manometer:
 - If the pressure shown is below 12 psi (0.8 bar): Please top up with water or notify your heating contractor.


Rooms are Too Cold

Cause	Remedy
The boiler is switched off.	<ul style="list-style-type: none"> ■ Turn on the ON/OFF switch: See page 36. ■ Switch on the power supply to your system, e.g. at a separate MCB/fuse or mains isolator.
<ul style="list-style-type: none"> ■ Incorrect control unit settings. ■ The remote control (if used) or room temperature controller (if used) is set incorrectly.  Operating instructions for the remote control or room temperature controller	Central heating must be enabled. Check the settings and correct if necessary: <ul style="list-style-type: none"> ■ Operating program: See page 14. ■ Room temperature/supply temperature: See page 20. ■ Time: See page 28. ■ Time program for central heating: See page 18. ■ Only for weather-compensated operation: Heating curve: See page 21. ■ The vacation program is switched on: See page 23.
The DHW tank is being heated.	Wait until the DHW tank has been heated up. Reduce the DHW draw-off rate or temporarily reduce the set DHW temperature as required.
No fuel.	Open the gas shut-off valve. If necessary, check with your gas supply utility.
"Burner fault" is displayed.	Reset the burner: See page 34. <div style="border: 1px solid black; padding: 5px;">  WARNING If faults are not rectified, they may have life threatening consequences. Do not reset the burner several times in quick succession. Immediately notify your contractor if a burner fault occurs. Your contractor will be able to analyze the cause and rectify the fault. </div>
"Fault" is displayed.	Check what type of fault it is. Make a note of the fault message and acknowledge the fault: See page 33. If necessary, notify your contractor.

Rooms are Too Hot

Cause	Remedy
<ul style="list-style-type: none"> ■ Incorrect control unit settings. ■ The remote control (if installed) or the room temperature controller (if installed) is set incorrectly.  Operating instructions for the remote control or room temperature controller	Check the settings and correct if necessary: <ul style="list-style-type: none"> ■ Operating program: See page 14. ■ Room temperature/supply temperature: See page 20. ■ Time: See page 28. ■ Time program for central heating: See page 18. ■ Only for weather-compensated operation: Heating curve: See page 21. ■ The "Holidays at home" function is switched on: See page 22.
"Fault" is displayed.	Check what type of fault it is. Make a note of the fault message and acknowledge the fault: See page 33. If necessary, notify your contractor.

There is No Hot Water

Cause	Remedy
The boiler is switched off.	<ul style="list-style-type: none"> ■ Turn on the ON/OFF switch: See page 36. ■ Switch on the power supply to your system, e.g. at the circuit breaker
<ul style="list-style-type: none"> ■ Incorrect control unit settings. ■ The remote control (if used) or room temperature controller (if used) is set incorrectly.  Operating instructions for the remote control or room temperature controller	DHW heating must be enabled. Check the settings and correct if necessary: <ul style="list-style-type: none"> ■ Operating program: See page 14. ■ Room temperature/supply temperature: See page 20. ■ Time: See page 28. ■ Time program for central heating: See page 18. ■ The vacation program is switched on: See page 23.
No fuel.	Open the gas shut-off valve. If necessary, check with your gas supply utility.
"Fault" is displayed.	Check what type of fault it is. Make a note of the fault message and acknowledge the fault: See page 33. If necessary, notify your contractor.

The DHW is Too Hot

Cause	Remedy
Incorrect control unit settings.	Check and correct the set DHW temperature if necessary: See page 22.
The hygiene function is switched on.	Wait until the hygiene function has been completed.
DHW temperature for solar DHW heating is set too high.	Have your contractor change the setting.

"Fault" is Displayed

Cause	Remedy
System fault	Proceed as described on page 33.

🔧 and "Service" are Displayed

Cause	Remedy
The time for a service as specified by your contractor has arrived.	Proceed as described on page 33.

"Panel Locked" is Displayed

Cause	Remedy
The control panel is locked.	Unlock it: See page 26.

"External Hook-up" is Displayed

Cause	Remedy
The set operating program was changed over by an external device, e.g. an EM-EA1 extension (DIO electronics module): See page 14.	No action required. Once the external changeover no longer applies, the set operating program is switched on again.

Cleaning

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

Clean the surface of the operating unit with a microfiber cloth.

Inspection and Maintenance

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.

Boiler

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

DHW tank

Maintenance or cleaning should be carried out no later than 2 years after commissioning and thereafter as required.

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

If any water treatment equipment (e.g. a sluice or injection system) is installed in the cold water supply of the DHW tank, ensure this is refilled in good time. For this, observe the manufacturer's instructions.

Safety valve (DHW tank)

The function of the safety valve must be checked every six months by the user or a contractor through venting (see valve manufacturer's instructions).

The valve seat may become soiled.

Water may drip from the safety valve during a heat-up process. The outlet is open to the atmosphere.



CAUTION


Overpressure can cause damage.
Do not close the safety valve.

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.

Overview of “Main menu”

Note: Depending on the features of your system, not all of the displays and checks listed may be available under .

Heating

Heating circuit 1

Set room temperatures or Set supply temperature
Time program, heating
Only for weather-compensated operation: Heating curve

Additional heating circuits , ...

As for  Heating circuit 1
--

Heating zones

Supply temperature or heating curve

DHW

Note: Not valid for systems with a DHW tank with temperature switch (such as an Aquastat).

DHW on/off

Set DHW temperature

Time program, DHW

Time program, DHW circulation

Hygiene function

Settings

Language

Display setting

Date and time

Buzzer

Rename heating circuits, Rename heating zones

Factory settings

Internet

Clean screen

Units

Lock panel

Change password

Selecting the default display







Energy cockpit

Overview of "Main menu" *(continued)*

i Information		
	i General	
		Only for weather-compensated operation: Outside temperature
		Supply temperature
		Boiler circuit pump
		Temperature, low loss header
		Flue gas temperature
		Burner
		Burner hours run
		Thermal output
		Central fault message
		Diverter valve position
		Screed function
		Time
		Date
		Serial number boiler VIN
		Serial number HMU heat management unit
		OEM software number
		Status of safety function, heating zone 1, 2, 3
		Altitude
	Heating zones 1 to 4	
		Status
		Pump
		Heating curve slope (with weather-compensated operation)
		Heating curve level (with weather-compensated operation)
		Supply temperature
	w1 Heating circuit 1	
		Operating program
		Operating status
		Only for weather-compensated or constant operation: Time program
		Ext. heating circuit hookup
		Status plug 96
		Room temperature
		Set reduced room temperature or Reduced
		Set normal room temperature or Standard
		Set comfort room temperature or Comfort
		Only for weather-compensated operation: Heating curve slope
		Heating curve level
		Heating circuit pump
		Supply temperature
		Set supply temperature
		Holiday program
		Holidays at home

Overview of “Main menu” (continued)

Information (continued)

	Additional heating circuits  , ...	
		As for  Heating circuit 1
	 DHW	
		Time program, DHW
		Time program, DHW recirculation
		DHW temperature
		DHW recirculation pump
		Tank loading pump
		Status of tank with temperature switch
	 Burner	
		Burner
		Burner hours run
		Burner starts
		Burner modulation
		Supply temperature
		Flue gas temperature
		Flow rate in L/h
		Status of external blocking
	 Contractor contact details	
	 Internet	
		Manufacturer's details
		MAC address
		Activated
		Network
		Signal strength
		DHCP activated
		Ipv4 address
		Ipv4 subnet mask
		Standard gateway
		Primary DNS server
		Secondary DNS server
		Backend connection
		Network connection

 Open source licence

Overview of “Main menu” *(continued)*

Information

Solar energy

Solar energy bar chart

Collector temperature

Solar DHW

Solar circuit pump (operating time)

Solar energy

Solar circuit pump (operating state)

Set DHW temperature for reheating suppression

Solar stagnation

TS3: Temperature, DHW preheating

TS4: Temperature, DHW reheating

Solar circulation pump

TS3: Buffer temperature

TS4: Return temperature, heating circuit

Solar 3-way valve position

Solar central heating backup

TS3: DHW preheating temperature

Holiday program

Note: This can be selected only if “Apartment building” was selected during commissioning and multiple heating circuits are installed.

Select all

Heating circuit 1

Heating circuit 2

etc.

Holidays at home

Note: This can be selected only if “Apartment building” was selected during commissioning and multiple heating circuits are installed.

Select all

Heating circuit 1

Heating circuit 2

etc.

Message lists

Service

Terminology

Standby mode

Heat generation is switched off. Only frost protection of boiler and DHW tank is active. No central heating, no DHW heating

Setback mode (reduced heating operation)

See "Reduced heating operation".

System version

The system version describes the components of your system.

Some examples:

- Boiler
- Heating circuit pump
- Mixing valve
- Valves
- Electronics module
- Radiator

Every system is individually configured and adapted to the local conditions by your heating contractor.

Operating program

The operating program enables you to define the following, for example:

- How you heat your rooms
- Whether you heat DHW

Operating status

See "Time program".

Operating mode

See "Heating operation".

Mixing valve extension kit

Assembly (accessories) for controlling a heating circuit with mixing valve: See "Mixing valve".

Infloor heating

Infloor heating systems are slow, low temperature heating systems that respond only very slowly to short term temperature changes.

Heating with reduced room temperature at night therefore does not result in any significant energy savings.

Heating operation

Operating modes

To heat your home, the boiler provides heat as specified by the set supply temperature. The operating mode determines whether the supply temperature is specified with a fixed value or whether it is automatically calculated and adjusted subject to several ancillary conditions.

Your contractor can configure the following operating modes during commissioning:

- Weather-compensated operation
- Constant operation
- Room temperature-dependent operation

Comfort mode

For periods when you are at home during the day, heat your home with the comfort room temperature or the comfort supply temperature, depending on the operating mode. Set the periods (time phases) with the "Comfort" temperature level using the time program for central heating.

Constant operation

In constant operation the boiler provides heating water with a constant supply temperature regardless of the outside temperature.

With this operating mode, you can operate several heating circuits via your control unit.

Standard heating operation

For periods when you are at home during the day, heat your home with the standard room temperature or the standard supply temperature, depending on the operating mode. Set the periods (time phases) with the "Standard" temperature level using the time program for central heating.

Room temperature-dependent heating operation

In room temperature-dependent operation a room is heated until the set room temperature has been reached. For this, a separate temperature sensor must be installed in the room.

The heating output is regulated independently of the outside temperature.

With this operating mode, you can operate one heating circuit via your control unit. You can input some of the settings for this heating circuit at your room temperature controller.

Reduced heating operation

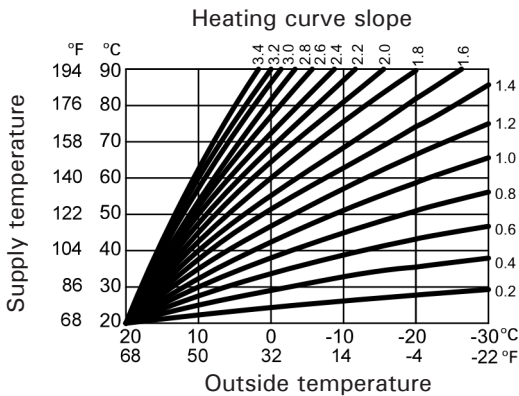
For periods when you will be absent or during the night, heat your rooms with the reduced room temperature or the reduced supply temperature, depending on the operating mode. Set the periods (time phases) with the "Reduced" temperature level using the time program for central heating.

With infloor heating systems, reduced heating operation only yields limited energy savings (see "Infloor heating system").

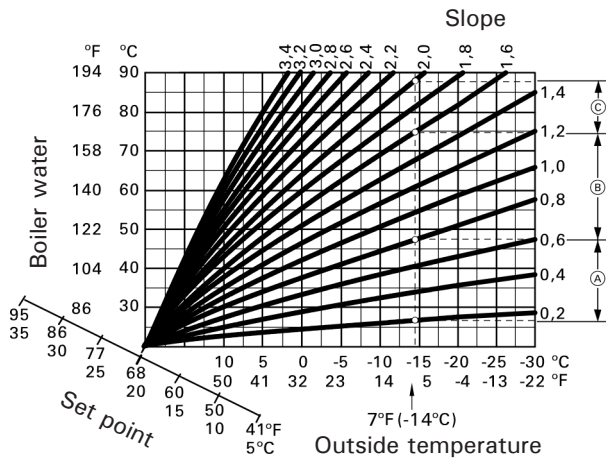
Weather-compensated heating operation

In weather-compensated operation, the supply temperature is controlled subject to outside temperature. More heat is made available at lower outside temperatures than at a higher ones.

The outside temperature is captured and transmitted to the control unit by a sensor fitted outside the building. With this operating mode, you can operate several heating circuits via your control unit. If remote control units are installed in your rooms, you can also adjust the settings at the remote control units.

Terminology *(continued)***Heating curve**

Heating curves illustrate the relationship between the outside temperature, the target room temperature and the supply temperature. The lower the outside temperature, the higher the supply temperature. In order to guarantee sufficient heat with minimum fuel consumption at any outside temperature, the conditions of your building and system must be taken into consideration. The heating curve is set by your contractor for this purpose.

**Setting the slope and shift, taking the heating curve as an example**

Factory settings:

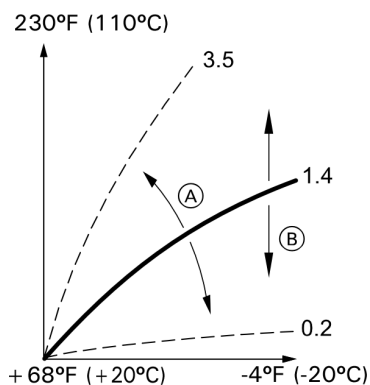
- Slope = 1.4
- Shift = 0

The illustrated heating curves apply with the following settings:

- Heating curve level = 0
- Standard room temperature (target room temperature) = 68°F (20°C)

For outside temperature 7°F (-14°C):

- (A) Infloor heating system: Slope 0.2 to 0.8
- (B) Low temperature heating system: Slope 0.8 to 1.6
- (C) System with a supply temperature in excess of 167°F (75°C), slope 1.6 to 2.0



Note: Setting the slope or shift too high or too low will not cause any damage to your heating system. Both settings affect the level of the supply temperature, which may then be too low or unnecessarily high.

- (A) If you change the slope:
The steepness of the heating curves changes.
- (B) If you change the shift:
The heating curves are shifted in parallel in a vertical direction.
- (B) If you change the standard room temperature (target room temperature):
The heating curves are offset along the "Target room temperature" axis.

Terminology *(continued)*

Heating circuit

A heating circuit is a sealed unvented circuit connecting the boiler and the radiators, in which the heating water circulates.

A system may comprise several heating circuits.

For example, one heating circuit for the rooms occupied by you and one heating circuit for the rooms of a separate apartment.

The heating circuits are designated at the factory as "Heating circuit 1", "Heating circuit 2", etc.

If you or your qualified contractor have renamed the heating circuits, e.g. as "Apartment", that name will be displayed instead of "Heating circuit ...".

Heating circuit pump

Circulation pump for circulating the heating water in the heating circuit

Mixing valve

Hot heating water from the boiler is mixed with cooled heating water from the heating circuit. The heating water, brought to the right temperature as required, is pumped to the heating circuit by the heating circuit pump.

To ensure the required target room temperature is achieved, the control unit adjusts the supply temperature via the mixing valve to suit different conditions.

Night setback

See "Reduced heating operation"

Room air dependent operation

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

Direct vent operation

Combustion air is drawn from outside the building.

Room temperature

- Standard room temperature or comfort room temperature:

Set the standard room temperature or comfort room temperature for periods when you are at home during the day.

- Reduced room temperature:

For periods when you will be absent or during the night, set the reduced room temperature; see "Heating operation".

Return temperature

The return temperature is the temperature at which the heating water leaves a system component such as a heating circuit.

Safety valve

Safety equipment that must be installed in the cold water pipe by your contractor. The safety valve opens automatically to prevent excess pressure in the DHW tank. The heating circuits are also equipped with safety valves.

Solar circuit pump

In conjunction with solar thermal systems. The solar circuit pump delivers the cooled heat transfer medium from the DHW cylinder indirect coil to the solar collectors.

Temperature target

See "Target temperature".

Summer mode

In warmer months, you can switch off heating operation. To do so, select "DHW" operating program "On" and "Standby mode".

The system remains in operation for DHW heating. Central heating is switched off.

Storage tank loading pump

Circulation pump for heating the DHW in the DHW tank.

Target temperature

Specified temperature that should be reached, e.g. target DHW temperature.

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.

Supply temperature

The supply temperature is the temperature at which the heating water enters a system component such as a heating circuit.

Weather-compensated operation

See "Heating operation"

Time program

In the time programs you determine what your heating system should do at what time.

Operating status

The operating status indicates how a component of your heating system is being operated.

For example, the operating statuses for central heating have different temperature levels.

The times for the operating status changeover are defined when the time program is set.

DHW recirculation pump

The DHW recirculation pump transports the DHW around a loop line between the DHW tank and the draw-off points (e.g. hot tap). This ensures that hot water is rapidly available at the draw-off points.

Lighting and Operating Instructions

FOR YOUR SAFETY READ BEFORE OPERATING

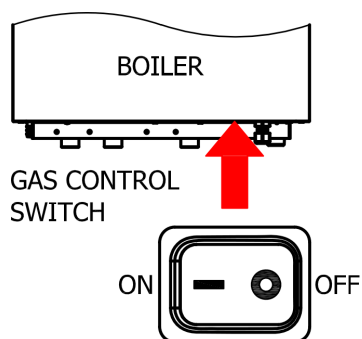
W A R N I N G: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This boiler does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do Not try to light the burner by hand.
- B. **BEFORE OPERATING** smell all around the boiler area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any boiler.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push the main gas supply switch. Never use tools. If the main gas supply switch will operate by hand, don't try to repair it, call a qualified service technician.
 Force or attempted repair may result in a fire or explosion.
- D. Do not use this boiler if any part has been under water. Immediately call a qualified service technician to inspect the boiler and to replace any part of the control system and any gas control which has been under water.

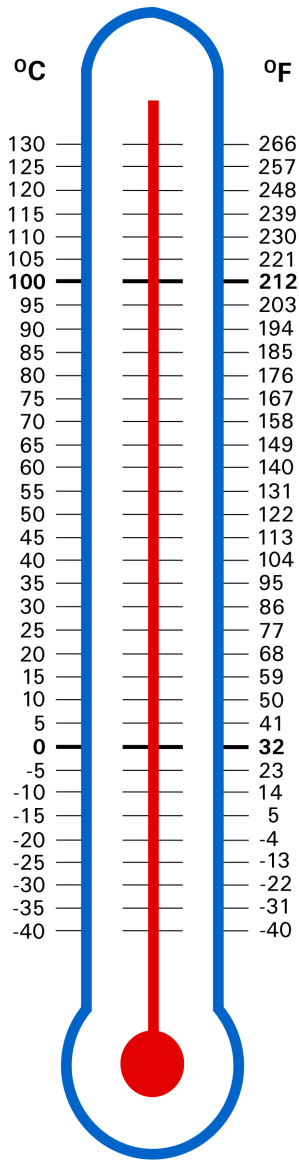
OPERATING INSTRUCTIONS

1. **STOP!** Read the safety information above.
2. Set thermostat or other operating control to lowest setting.
3. Turn off all electric power to the boiler.
4. This boiler is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
5. Close main gas shut-off valve.
6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above. If you don't smell gas, go to the next step.
7. Open main gas shut-off valve.
8. Turn on all electric power to the boiler.
9. Set thermostat or other operating control to desired setting.
10. If the boiler will not operate, follow the instructions "To Turn Off Gas To Boiler" and call your service technician or gas supplier.



TO TURN OFF GAS TO BOILER

1. Set thermostat or other operating control to lowest setting.
2. Turn off all electric power to the boiler if service is to be performed.
3. Turn off the control gas switch.



Scan for
digital copy
of this
document



Viessmann Manufacturing Company (U.S.) Inc.
45 Access Road
Warwick, Rhode Island · 02886 · USA
TechInfo Line 1-888-484-8643
1-800-288-0667 · Fax (401) 732-0590
www.viessmann-us.com · info@viessmann-us.com

Viessmann Manufacturing Company ULC
750 McMurray Road
Waterloo, Ontario · N2V 2G5 · Canada
TechInfo Line 1-888-484-8643
1-800-387-7373 · Fax (519) 885-0887
www.viessmann.ca · info@viessmann.ca