

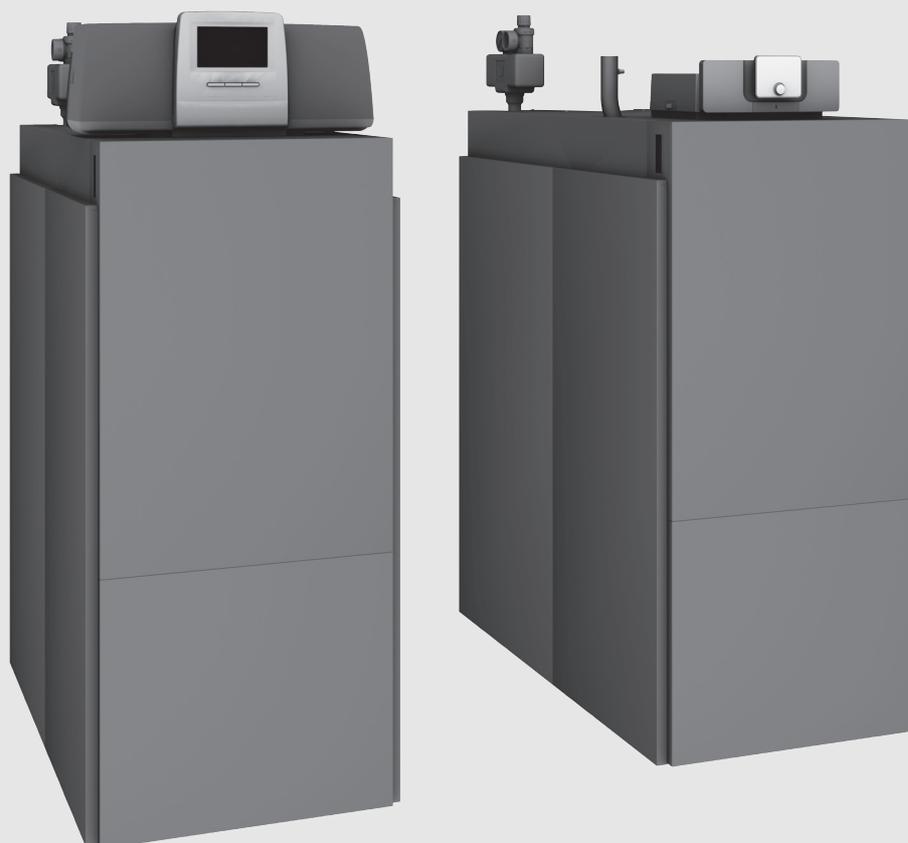


Operating instructions for users

Gas condensing boiler

Condens 7000 F

GC7000F 75...300



1 Explanation of symbols and safety instructions

1.1 Explanation of symbols

Warnings

In warnings, signal words at the beginning of a warning are used to indicate the type and seriousness of the ensuing risk if measures for minimizing danger are not taken.

The following signal words are defined and can be used in this document:

 **DANGER**
DANGER indicates that severe to life-threatening personal injury will occur.

 **WARNING**
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

 **CAUTION**
CAUTION indicates a hazardous situation which, if not avoided, could result in minor to moderate injury.

NOTICE
ATTENTION indicates that material damage may occur.

Important information

 The info symbol indicates important information where there is no risk to people or property.

Additional symbols

| Symbol | Meaning |
|--------|---|
| ▶ | a step in an action sequence |
| → | a reference to a related part in the document |
| • | a list entry |
| – | a list entry (second level) |

Table 1

1.2 General safety instructions

Notices for the target group

These operating instructions are intended for the heating system operator.

All instructions must be observed. Failure to comply with instructions may result in material damage and personal injury, including danger to life.

- ▶ Read and retain the operating instructions (heat generator, heating controller, etc.) prior to operation.
- ▶ Observe the safety instructions and warnings.
- ▶ Operate the heat generator only with the casing fitted and closed.

Safety of electrical devices for domestic use and similar purposes

The following requirements apply in accordance with EN 60335-1 in order to prevent hazards from occurring when using electrical appliances:

“This appliance can be used by children of 8 years and older, as well as by people with reduced physical, sensory or mental capabilities or lacking in experience and knowledge, if they are supervised and have been given instruction in the safe use of the appliance and understand the resulting dangers. Children shall not play with the appliance. Cleaning and user maintenance must not be performed by children without supervision.”

“If the power cable is damaged, it must be replaced by the manufacturer, its customer service department or a similarly qualified person, so that risks are avoided.”

Danger through failure to consider your own safety in an emergency such as a fire

- ▶ Never put yourself at risk of fatal injury. Your own safety is paramount.

If you smell gas

- ▶ Close gas isolator.
- ▶ Open windows and doors
- ▶ Never operate electrical switches, including telephones, plugs or doorbells.
- ▶ Extinguish any naked flames. Do not smoke! Never use any lighters or sources of ignition of any kind!
- ▶ Warn all occupants in the building, but do not ring doorbells.
- ▶ If you can actually hear gas escaping, leave the building immediately. Prevent third parties from entering and notify police and fire brigade **from outside** the building.
- ▶ **From outside** the building, call your gas supplier and licensed contractor.

Danger if you smell flue gas

- ▶ Switch off the boiler.
- ▶ Open windows and doors.
- ▶ Notify an approved contractor.

Danger to life from carbon monoxide

Carbon monoxide (CO) is a poisonous gas, which arises during the incomplete combustion of fossil fuels such as oil, gas or solid fuels.

Dangers arise, if carbon monoxide escapes from the heating system due to a fault or a leak and collects unnoticed in enclosed spaces.

You can neither see, taste nor smell carbon monoxide.

To avoid danger from carbon monoxide:

- ▶ Have the heating system inspected and serviced regularly by an approved contractor.
- ▶ Use a CO detector, which gives an alarm in good time if CO escapes.
- ▶ If you suspect a CO leak:
 - Warn your neighbours and leave the building immediately.
 - Call an approved contractor.
 - Have any defects rectified.

⚠ Installation and conversion

- ▶ Correct and proper installation and adjustment of the burner and the control unit are the fundamental requirements for safe and economical operation of the floor standing boiler.
- ▶ Only permit an authorised contractor to install the boiler.
- ▶ Never modify any parts for flue gas routing.
- ▶ Electrical work must only be carried out by qualified electricians.
- ▶ With **open-flue mode**: do not cover or reduce the size of ventilation apertures in doors, windows or walls. If draught-proof windows are fitted, ensure there is an adequate supply of combustion air.
- ▶ Use the DHW cylinder exclusively for heating hot water.
- ▶ **Never shut off pressure relief valves!**
Water may be expelled at the pressure relief valve of the heating circuit and DHW pipework during heat-up.

⚠ Inspection/maintenance

Heating systems must be regularly maintained.

In that way, you will obtain a high level of efficiency and low fuel consumption.

You will achieve a high level of operational safety and reliability.

And you will obtain the cleanest possible combustion.

- ▶ **Recommendation for customers:** arrange a maintenance and inspection contract with an authorised contractor, covering an annual inspection and demand-dependent maintenance.
- ▶ Maintenance and repairs may only be carried out by an authorised contractor.
- ▶ Have any faults immediately rectified to prevent damage to the system.
- ▶ The user is responsible for ensuring the heating system is safe and environmentally compatible.
- ▶ Only use genuine spare parts! Damage caused by the use of spare parts not supplied by Bosch is not covered by the warranty.

⚠ Danger posed by explosive and easily flammable materials

- ▶ Any work on components that carry gas may only be carried out by an approved contractor.
- ▶ Never use or store easily flammable materials (paper, thinners, paints etc.) near the boiler.

⚠ Danger of poisoning

Insufficient ventilation can lead to dangerous flue gas leaks.

- ▶ Ensure that ventilation or extract air apertures are not reduced or closed.
- ▶ Faults should be rectified without delay, otherwise the boiler must not be operated.
- ▶ If flue gas enters the installation location, ventilate and vacate the area and if necessary call the fire brigade.
- ▶ Inform the system user in writing of the problem and associated danger.

⚠ Danger of water damage

- ▶ In the event of severe risk of flooding, shut down the power and fuel supply to the device before water enters the installation location.
- ▶ Never use the device if any part of it has been under water.
- ▶ Immediately get in touch with a qualified service technician to have the device inspected and have any part of the control system and any air/gas ratio control valves that have been under water replaced.

⚠ Combustion air/ambient air

The air in the installation location must be free of flammable or chemically aggressive substances.

- ▶ Do not store or use any corrosive substances (solvents, adhesives, chlorinated cleaning agents, etc.) within the vicinity of the heat source.
- ▶ Avoid very dusty atmospheres.

⚠ Risk of damage from operating errors

Operator errors can result in personal injury and/or material damage.

- ▶ Ensure that children never operate this appliance unsupervised or play with it.
- ▶ Ensure that only personnel who can operate this appliance correctly have access to it.

⚠ Further important notices

- ▶ Never switch off or interrupt the power supply to the pump in case of overheating or if the gas supply does not shut down. Instead, interrupt the gas supply at another point outside of the heating system.
- ▶ The flue system must be checked every year. During this inspection, have a contractor replace any parts that show signs of damage through corrosion or other causes.
- ▶ The boiler must be serviced annually by a qualified service provider. The inspection must include the main burner, the entire flue gas and air supply system and the ventilation apertures or air inlet openings. During this inspection, have any parts that show signs of damage through corrosion or other causes replaced.
- ▶ Operate the boiler only with mounted and closed casing.

2 Product Information

To ensure safe, economical and environmentally responsible use of the heating system, we recommend that you read the safety instructions and operating instructions carefully.

These instructions provide the operator of the heating system with an overview of the use and operation of the boiler.

2.1 Intended use

The Condens 7000 F is designed for use as a floor standing gas condensing boiler for DHW and central heating.

Only approved gases can be used.

2.2 GB Importer

Bosch Thermotechnology Ltd.
Cotswold Way, Warndon
Worcester WR4 9SW / UK

2.3 Product data for energy consumption

The following product data satisfy the requirements of the EU Regulations No. 811/2013, No. 812/2013, No. 813/2013 and No. 814/2013 supplementing Directive 2010/30/EU.

| Right-hand version | | | 8732909990 | 8732909991 | 8732909992 | 8732909993 | 8732909994 | 8732909995 |
|---|--------------------|--------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Left-hand version | | | 8732909996 | 8732909997 | 8732909998 | 8732909999 | 8732910000 | 8732910001 |
| Product data | Symbol | Unit | | | | | | |
| Product type | - | - | Condens 7000 F-75 | Condens 7000 F-100 | Condens 7000 F-150 | Condens 7000 F-200 | Condens 7000 F-250 | Condens 7000 F-300 |
| Floor standing condensing boiler | - | - | Yes | Yes | Yes | Yes | Yes | Yes |
| Nominal heat output | P _{rated} | kW | 69 | 93 | 140 | 186 | 233 | 280 |
| Available heat output | | | | | | | | |
| At rated output and high-temperature operation ¹⁾ | P ₄ | kW | 69.4 | 93.0 | 139.8 | 186.2 | 233.1 | 280.0 |
| At 30 % of rated output and low-temperature operation ²⁾ | P ₁ | kW | 23.1 | 31.0 | 46.5 | 62.1 | 77.7 | 93.0 |
| Useful efficiency | | | | | | | | |
| At rated output and high-temperature operation ¹⁾ | η ₄ | % | 88.3 | 88.1 | 88.1 | 88.3 | 88.2 | 88.3 |
| At 30 % of rated output and low-temperature operation ²⁾ | η ₁ | % | 97.8 | 98.0 | 97.7 | 98.1 | 98.0 | 97.7 |
| Auxiliary power consumption | | | | | | | | |
| At full load | e _{l,max} | kW | 0.083 | 0.156 | 0.250 | 0.234 | 0.298 | 0.336 |
| At part load | e _{l,min} | kW | 0.028 | 0.032 | 0.046 | 0.048 | 0.049 | 0.057 |
| In standby mode | P _{SB} | kW | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| Other data | | | | | | | | |
| Standby heat loss | P _{stby} | kW | 0.161 | 0.161 | 0.183 | 0.247 | 0.261 | 0.298 |
| Energy consumption of the ignition flame | P _{ign} | kW | - | - | - | - | - | - |
| NOx emissions | NOx | mg/kWh | 41 | 49 | 34 | 36 | 32 | 36 |

1) High temperature operation means a return temperature of 60 °C at the boiler inlet, and a flow temperature of 80 °C at the boiler outlet.

2) Low temperature operation means a return temperature (at the boiler inlet) of 30 °C for floor standing condensing boilers, of 37 °C for floor standing boilers, and 50 °C for other boilers

Table 2 Product data for energy consumption

2.4 Water quality (fill and top-up water)

► For information regarding the water quality, see the enclosed operator's log "Water quality requirements for heat sources made from aluminium".



Do **not** use softened water as fill and top-up water.

- Switching the heating system on/off
- Setting the DHW temperature and the maximum boiler temperature in heating mode
- Status display



This floor standing boiler can be operating via the CC 8313 or MX25 control unit.

2.5 Product overview

The Condens 7000 F is a floor standing condensing boiler with an aluminium heat exchanger.

2.5.1 Product Description

The main Condens 7000 F components are:

- Control unit
- Boiler block
- Appliance frame and casing
- Gas burner

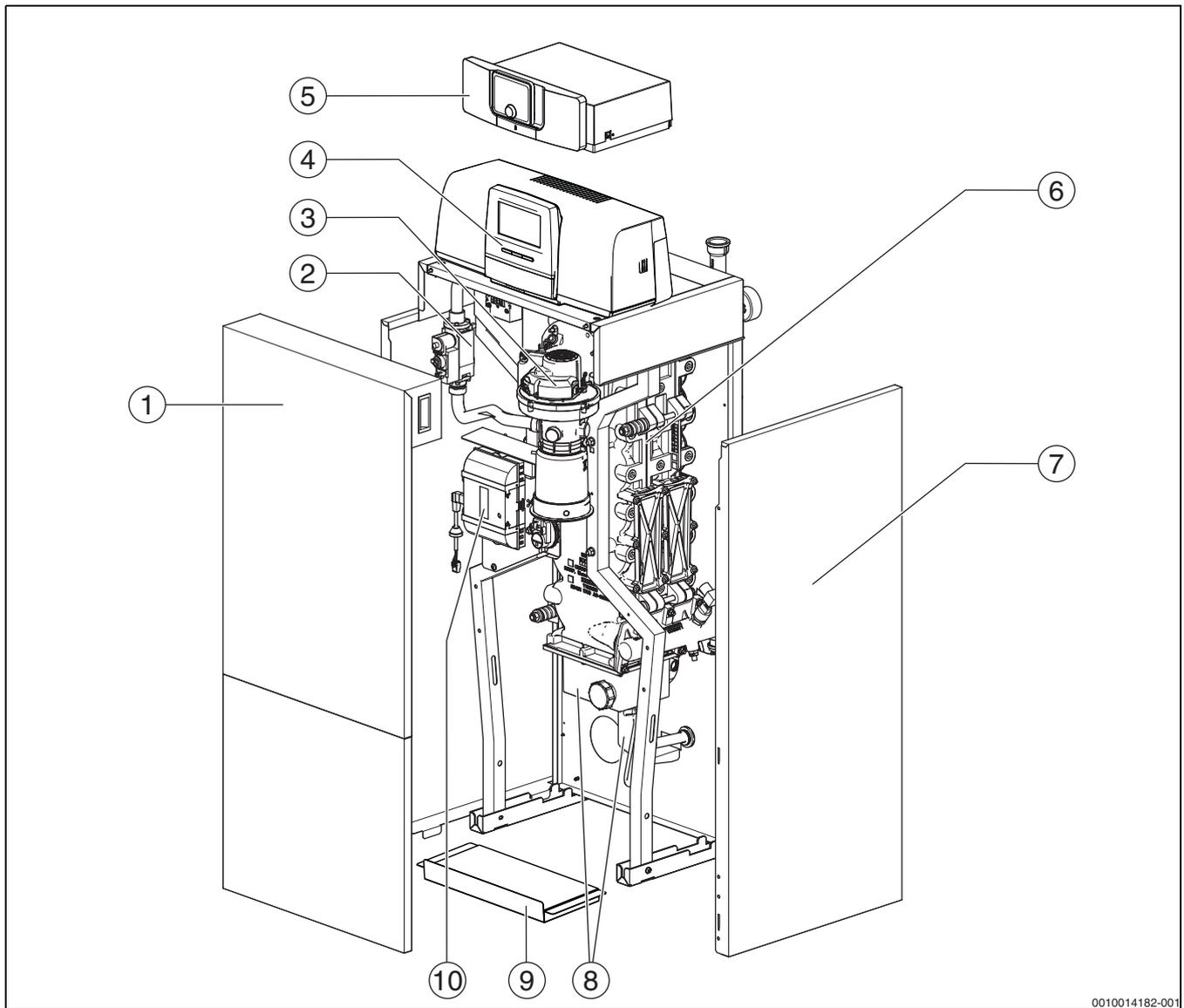
The control unit monitors and controls all electrical boiler components.

The boiler block transfers the heat generated by the burner to the heating water. The thermal insulation reduces the radiation and standby losses.

The control unit enables the standard operation of the heating system. For this, it makes the following functions available, including:



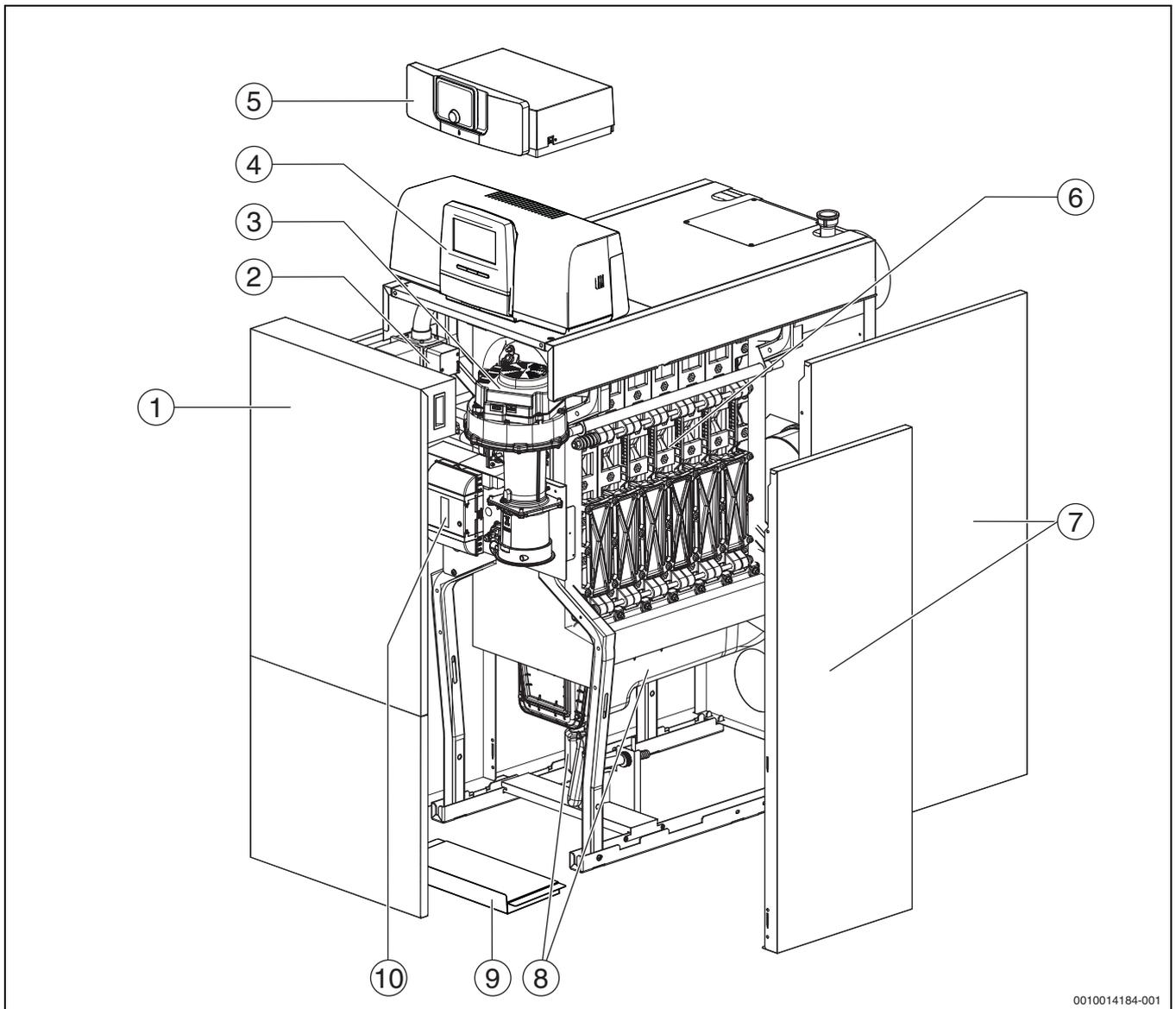
Many additional functions that enhance control and operating convenience as well as information on the heating system settings are described in the corresponding Technical documentation of the installed control unit.



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Fig. 1 Condens 7000 F, 75...100 kW main components (shown: right-hand version; cleaning cover and flow and return are located on the right)

- [1] Boiler front panel (2-part)
- [2] Gas valve
- [3] Gas burner with burner rod
- [4] Control unit CC 8313 (optional)
- [5] MX25 control unit (optional)
- [6] Boiler block with thermal insulation
- [7] Boiler casing
- [8] Condensation catch pan and siphon
- [9] Bottom panel
- [10] Burner control unit



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Fig. 2 Condens 7000 F, 150...300 kW main components (shown: right-hand version; cleaning cover and flow and return are located on the right)

- [1] Boiler front panel (2-part)
- [2] Gas valve
- [3] Gas burner with burner rod
- [4] Control unit CC 8313 (optional)
- [5] MX25 control unit (optional)
- [6] Boiler block with thermal insulation
- [7] Boiler casing
- [8] Condensation catch pan and siphon
- [9] Bottom panel
- [10] Burner control unit



The right-hand versions of the boiler are shown. In this case the cleaning cover and the flow and return are located on the right. In the left-hand version, the cleaning cover and flow and return are located on the left.

2.5.2 The heating system is operated and monitored via App or Web Portal

We offer, in combination with the relevant control unit, a comprehensive range of products for monitoring, diagnosis and control of the floor standing boiler via mobile terminal devices, PC or tablet.

3 Product description of optional control units

3.1 Product description of optional control units

The Condens 7000 F is equipped with a control unit that was assigned when ordering.

A brief description of the optional control units follows. Additional functions that enhance control and operating convenience as well as information on the heating system settings are described in the corresponding Technical documentation of the installed control unit.

3.2 Switching on the boiler at the control unit

- ▶ To commission the control unit, observe the technical documentation for the specific control unit.



To avoid frequent cycling of the burner and to ensure efficient operation, the heating curve should generally be set as low as possible.

4 MX25 control unit

4.1 Control unit MX25

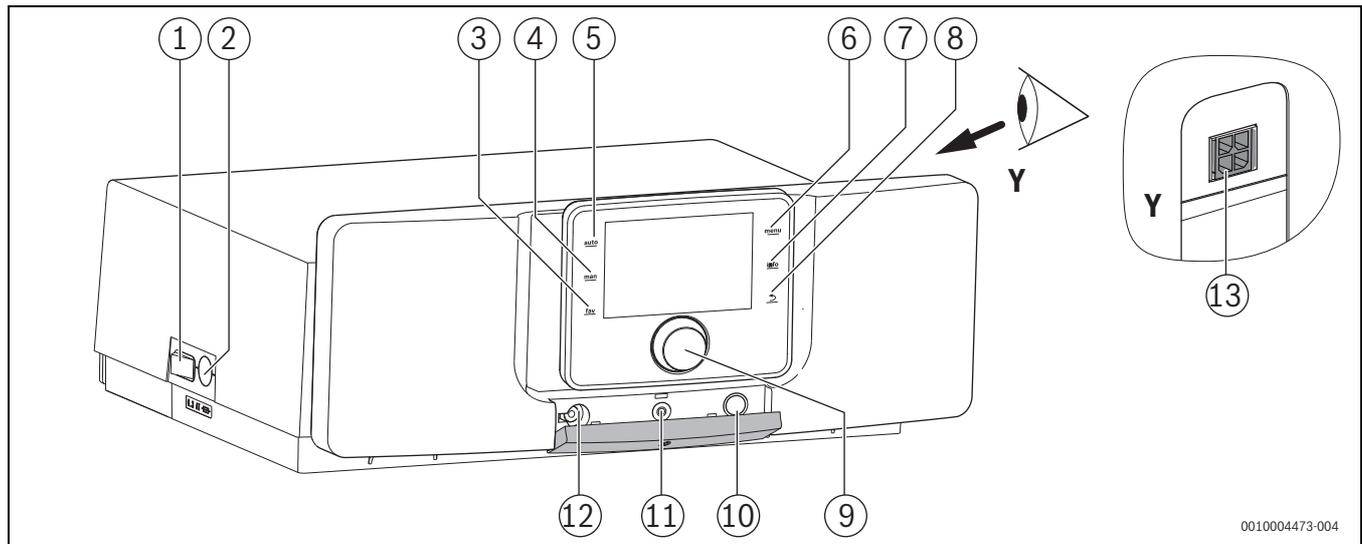


Fig. 3 Control unit MX25 with user interface – control elements

- [1] Main power switch
- [2] Appliance fuse 6.3 A
- [3] fav key (favourites functions)
- [4] man button (manual operation)
- [5] auto button (automatic mode)
- [6] menu button (call up menus)
- [7] info button (info menu and help)
- [8] Back key
- [9] Selector
- [10] Flue gas inspector, reset and emergency operation key
- [11] Status-LED
- [12] Service key connection
- [13] Connection for communication module (accessory)

The MX25 control unit enables the standard operation of the heating system.

The following functions are available for this:

- Activation of chimney sweep mode
- Status displays for boiler and burner operation
- Reset of locking faults
- Activation of emergency operation (manual operation)

The user interface offers many additional functions for conveniently controlling the heating system via the CW 400/CW 800 operating unit or the CR 100 and CR 10 (available separately).

4.2 Overview of control elements



If the display lighting is off, pressing any control element for the first time activates the lighting only. The descriptions of the steps to be carried out by the operator in these instructions always assume that the lighting is activated. If no control element is actuated, the lighting turns off automatically.

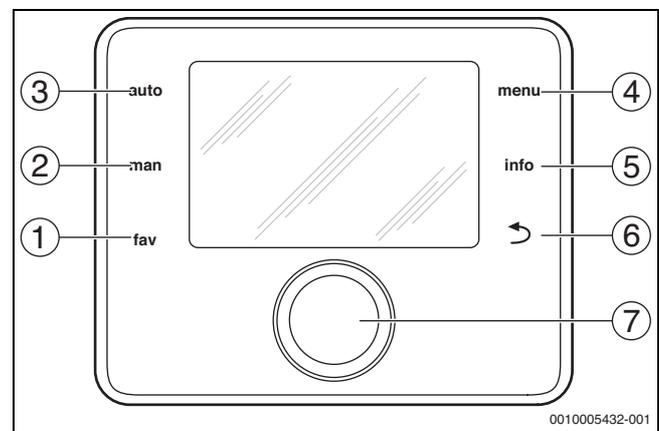


Fig. 4 Control elements

- [1] fav key – Press briefly to call up and hold pressed to configure favourites functions
- [2] man key – Press briefly to activate manual operation and hold pressed to set duration for manual operation
- [3] auto key – Activate automatic mode
- [4] menu key – Press briefly to open the main menu and hold pressed to open the service menu
- [5] info key – Displays the info menu for information about the current selection
- [6] Back key – Returns to previous menu or discards a value (press briefly); returns to the standard display (hold down)
- [7] Control knob – Selects (turn) and Confirms (press)

4.3 Switching the boiler on or off

- ▶ Switch the conventional floor standing boiler On / Off [1].
The display lights up and shows the appliance temperature after a short time.

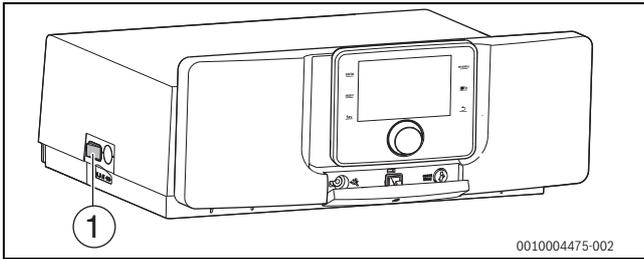


Fig. 5 Switch On/Off

- [1] Appliance on/off switch

4.4 Switching the heating on or off

NOTICE

Risk of damage to the system from frost!

When heating mode is switched off and in summer mode, only device frost protection exists.

- ▶ Observe the need for frost protection if there is a risk of frost.

- ▶ Open **Main menu**.
- ▶ Select and confirm the **Heat source** menu.
- ▶ Select and confirm **Heating**.
- ▶ Select and confirm **On or Off**.

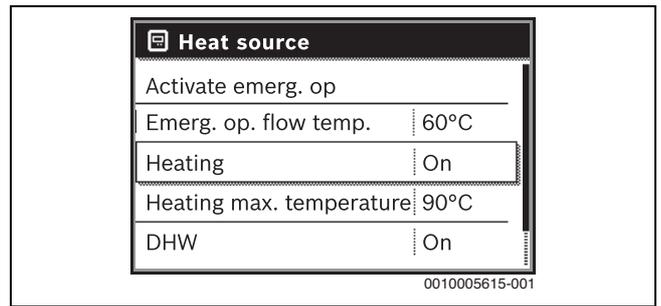


Fig. 6 Switching heating on

- ▶ To select manual summer mode, go to the menu **Main menu > Heating > Sum./wint. changeover** and select the setting **Sum./wint. changeover** under the menu item **Permanently summer**.
The heating is off and DHW heating is active in summer mode.

For more information on summer mode → see the technical documentation of the user interface.

5 CC8313 control unit

5.1 Overview of the control unit and the control elements

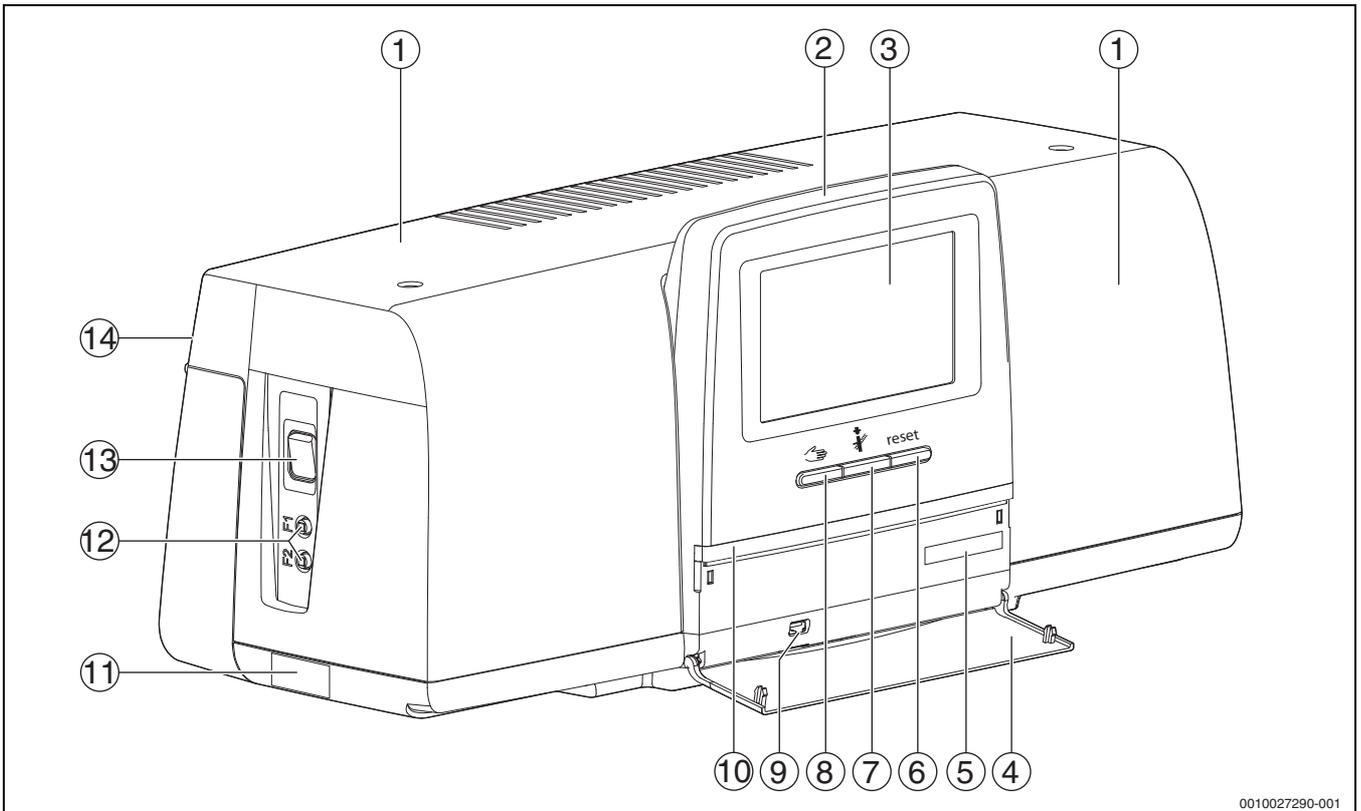


Fig. 7 Overview of the control unit and the control elements

- [1] Housing lid/cover
- [2] Control unit
- [3] Touch screen
- [4] Front cover
- [5] Activation code (registration code)
- [6] **Reset button** (e.g. high limit safety cut-out, SAFe) reset
- [7] **Chimney sweep button (Flue gas test)** ↕
- [8] **Manual operation button** ↵
- [9] USB connection (e.g. for service purposes)
- [10] LED-Status display
- [11] Data plate
- [12] F1-, F2 miniature circuit breaker
- [13] **ON/OFF switch**
- [14] Rear panel

5.2 Function keys of the user interface

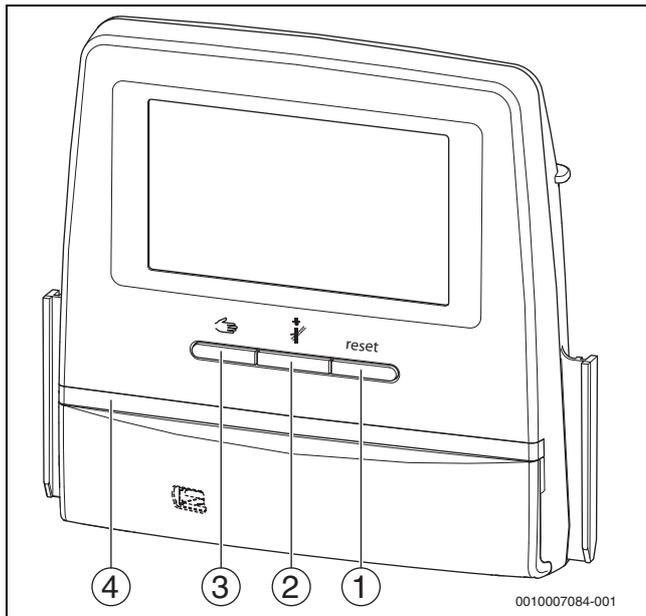


Fig. 8 Function keys

- [1] **Reset button**  reset
- [2] **Chimney sweep button** 
- [3] **Manual operation button** 
- [4] LED-Status display

5.3 Function buttons and system status

Function keys

The function keys enable:

- **Manual operation** 
- **Flue gas test** 
- **Reset** (e.g. high limit safety cut-out, SAFe) 

System status, function status, component status

The status of the system, the functions and system components is displayed via the status display (→ Fig. 13, [2], [6], page 13) and the LED status display (→ Fig. 7, [10], page 9):

- Green = The system works fault-free, no other functions active
- Blue flashing = software update
- Green flashing = pairing (establishing connection with the control unit)
- Yellow = system in manual mode, **Flue gas test**, Service display, no Internet connection available (if previously activated), **Maintenance** or **Blocking fault** SAFe
- Yellow flashing = **Control unit coupling**
- Red = **Fault**
- White flashing = System information is being saved
- Violette = Software update detected on the USB stick

5.3.1 Reset button

Press the **reset** button to unlock the locking fault and reset the functions (e.g. following triggering of the high limit safety cut-out or resetting of the SAFe).

To unlock a function:

- ▶ Press and hold the **reset** key for 2 seconds.

When using separate burners, the burner control unit cannot be reset via the **reset** key.

5.3.2 Chimney sweep button (flue gas test)

WARNING

Risk of scalding from hot water!

Setting the set temperature > 60 °C creates a risk of scalding.

- ▶ Do not draw off DHW unmixed.

To perform the flue gas test:

- ▶ Observe the relevant national requirements for limiting flue losses from the heating system.

The **Flue gas test** can only be started by the control unit that is assigned to the heat source.

If the operating mode **Manual** or the **Manual operation button**  has been set, the flue gas test has priority. Once the flue gas test is complete, the control unit switches back to manual operation.

If the heat source is integrated into a cascade, it will not be available for the cascade during the flue gas test. A different heat source goes into operation, depending on the dependencies and settings of the cascade.

The **Flue gas test** is switched on if required at the heat source (→ Technical documentation of heat source) or at the control unit.

To ensure heat draw in the heating system:

- ▶ Briefly press  key.
A message window opens to indicate the test is starting.

-or-

- ▶ Press the  key and hold it down until the window showing the settings used to perform the test opens.

To cancel the operation:

- ▶ Tap in the message window at the top on the right .

The LED status display turns yellow (→ Figure 8, [4], page 10). The chimney sweep and attention symbol symbols appear in the header of the system overview and in the header of the heat source.

- The **Flue gas test** is performed using the values specified in **Settings** (minimum/maximum boiler temperature, minimum/maximum performance).
- The maximum boiler temperature cannot be changed in the **Flue gas test**.
- The heat source emits heat, providing the flue gas test is not aborted or automatically stopped, until the maximum boiler temperature set is reached.
- If a parameter (e.g. minimum boiler output) falls below or exceeds the preset value when making the adjustment, a warning message appears and must be confirmed. The parameter remains at the previous value.

5.3.3 Key for manual operation, emergency operation

WARNING

Risk of scalding from hot water!

Setting the set temperature > 60 °C creates a risk of scalding.

- ▶ Do not draw off DHW unmixed.

Key for manual operation

Press the key  to ensure a **manual operation** if, for example, the user interface has dropped out or the internal controller communication is disrupted. The heat source heats continuously without setback at a boiler temperature of 60 °C. The pumps and mixers of the heating circuits, the DHW heating of the central module and the function modules continue running normally. The LED status display lights up yellow.

Manual operation

The **manual operation** operating mode can be set and adjusted for every function separately.

- ▶ Observe the operating instructions of the control unit.

Emergency mode

The **emergency operation** is activated automatically if the user interface is faulty or if communication with the control unit via the internal BUS is interrupted.

During **emergency operation**, the heat source heats continuously without setback at a boiler temperature of 60 °C. All pumps connected to the central module (boiler circulation pump, pump of heating circuit 00, DHW pump and DHW circulation pump) are switched on.

The SR mixing valve is de-energised and must be adjusted manually if necessary. The installed function modules cannot be triggered by the user interface BCT531 and do not work.

In **emergency operation** the LED status display lights up red.

5.4 Switch on and enable control unit

- ▶ Switch control unit On/Off at switch (→ Figure 7, [13], page 9). The standard display appears following initialisation of the control unit, or if there has been no user activity at the display for some time. The system name of the control unit series appears briefly during initialisation.

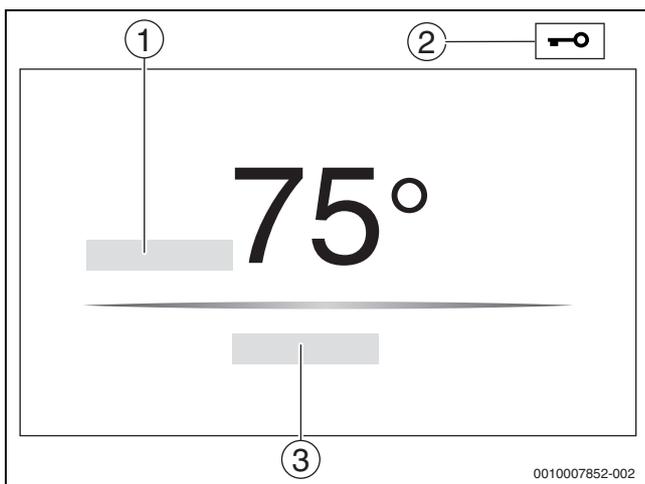


Fig. 9 Standard display

- [1] **Boiler temperature**
- [2] **Lock screen** activated
- [3] **Continue to overview**

The boiler temperature (adjustable) is displayed and the display is disabled in the standard display. To reduce the current consumption of the control unit, the display changes to sleep mode after several minutes. When this happens the display becomes darker.

To activate the display:

- ▶ Tap the display.

To enable the display:

- ▶ Tap **Continue to overview**.

The start page is then displayed with the system overview.

5.5 Lock Screen

The main menu can be protected from unauthorised access using a 4-digit password. The block can only be set up and removed by customer service.

If the display remains untouched for a longer period, the main menu is disabled.

The interlock (→ Fig. 9, [2], page 11) is indicated by a key symbol.

The password is requested the next time the display is touched.

- ▶ Tap password entry field.
- ▶ Enter password and confirm with .
- ▶ Tap **OK**.



If the password is lost the block can only be removed by customer service.

5.6 Operating and display elements of the touch screen



Whether menu items can be displayed or selected depends on which modules are inserted and which settings have been made. The displays shown are examples. Which symbols are displayed depends on which software is installed, which modules are inserted and which settings have been made.

- ▶ Please observe the operating instructions for the control unit and the heat source.

The following displays can be called up via the touch screen:

- Heat sources in the system
- Heat consumers and heat distributors in the system
- Networked control units
- Monitor data
- Setting parameters for commissioning and system optimisation. These parameters are protected by a key code.

5.6.1 System overview

The status of the overall system, the Internet connection (if available and configured), the heat production and the system (heat distribution) can be identified in the display of the system overview.

To select a section of the system overview:

- ▶ Tap **Heat production**.

The overview of the heat generator connected to the master control unit opens.

To view the heat distribution and the other networked control units:

- ▶ Tap **System**.

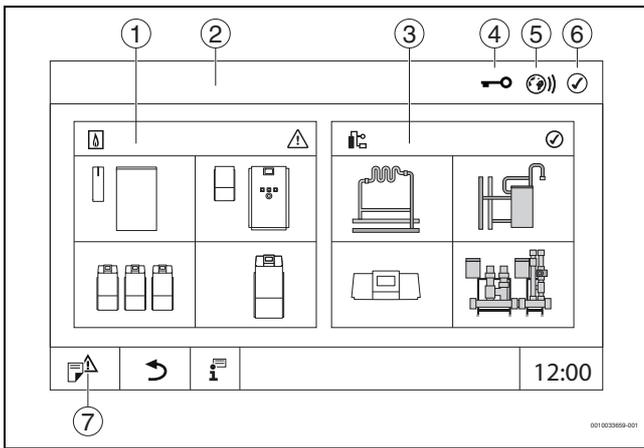


Fig. 10 System overview (example)

- [1] **Heat production**
- [2] **Control unit 00** (Master control unit)
- [3] **System** (Heat distribution)
- [4] Header with status display, e.g. Lock Screen is activated
- [5] Status display of Internet connection (display depends on software version)
- [6] Status display of the system (display depends on the software version)
- [7] **Fault display, Service display**

From software version 3.0.x, clicking on the Internet connection status display [5] opens a message in a separate window. By confirming this message, permanent write access can be granted to the Bosch / Buderus maintenance service → Chapter 5.8, Page 15).

5.6.2 Selection of control units

Other control units on the CBC bus can only be accessed from the master control unit.

If several control units are linked, the control unit for the system to be operated must be selected first. The other levels (e.g. heating circuits) can then be displayed and selected.

All functions of another control unit logged on to the CBC bus (Slave) can be viewed and adjusted from the master control unit. The functions can be accessed from the master control unit and at the local control unit simultaneously.



If the same parameters are changed from the master control unit and at the local control unit, the last values entered apply.

5.6.3 Networked control units



To call up the functions, displays and messages for a control unit, the control unit whose settings and messages are to be displayed must always be selected first.

To select a control unit:

- ▶ Tap on **System** (→ Figure 10, [3], page 12).
The system overview with connected functions and control unit (slave control units (Subsystem)) opens.

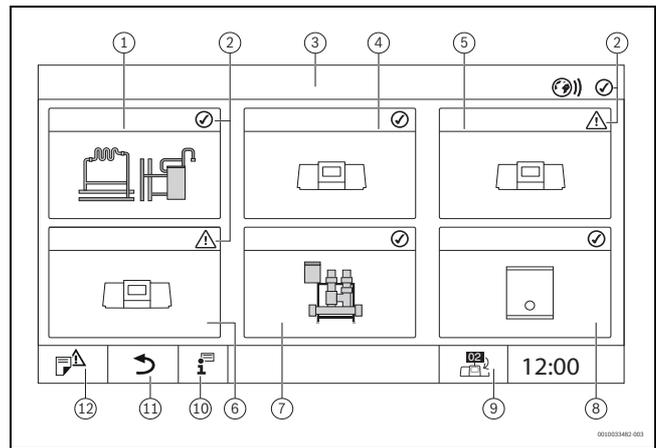


Fig. 11 System overview (example)

- [1] System of the master control unit
- [2] Status display of the respective control unit
- [3] Selected control unit (here, master control unit with control unit address 00)
- [4] Networked control unit (slave control unit with address 01)
- [5] Networked components (slave control unit with address 02)
- [6] Networked components (slave control unit with address 03)
- [7] Connected HSM plus modules
- [8] BACnet Gateway
- [9] Changes to the view of the master control unit (only displayed with slave control units)
- [10] Further information on the selected control unit
- [11] Press symbol to return to the previous level/screen of the selected control unit
- [12] Press symbol to access the selected control unit in the system overview or in the control unit overview

- ▶ Tap on the desired control unit.
The system overview of the selected control unit opens.

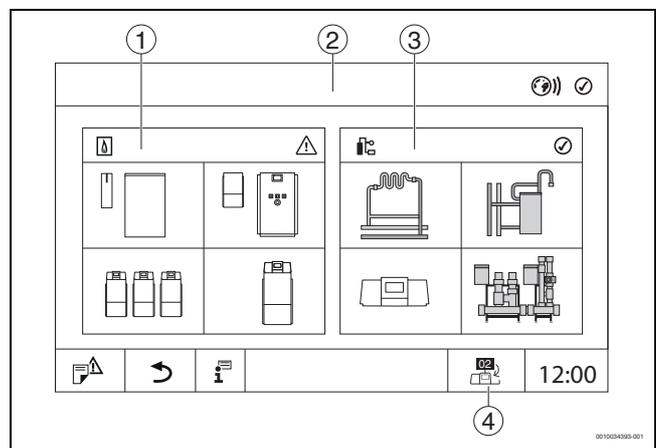


Fig. 12 System overview (example)

- [1] **Heat production** (heat generator connected to the selected control unit)
- [2] Display of selected control unit (with display of the address 01 ... 15)
- [3] **System** (Heat distribution of the selected control unit)
- [4] Display of the control unit address in the networking icon.
Changes to the view of the master control unit (only displayed with slave control units)

5.6.4 Heat production

If several heat sources are available, one heat source can be selected in the display. The current operating states of the connected components and the sensor values of the selected heat generator are displayed. The depiction of the heat generator depends on the type of the heat generator.

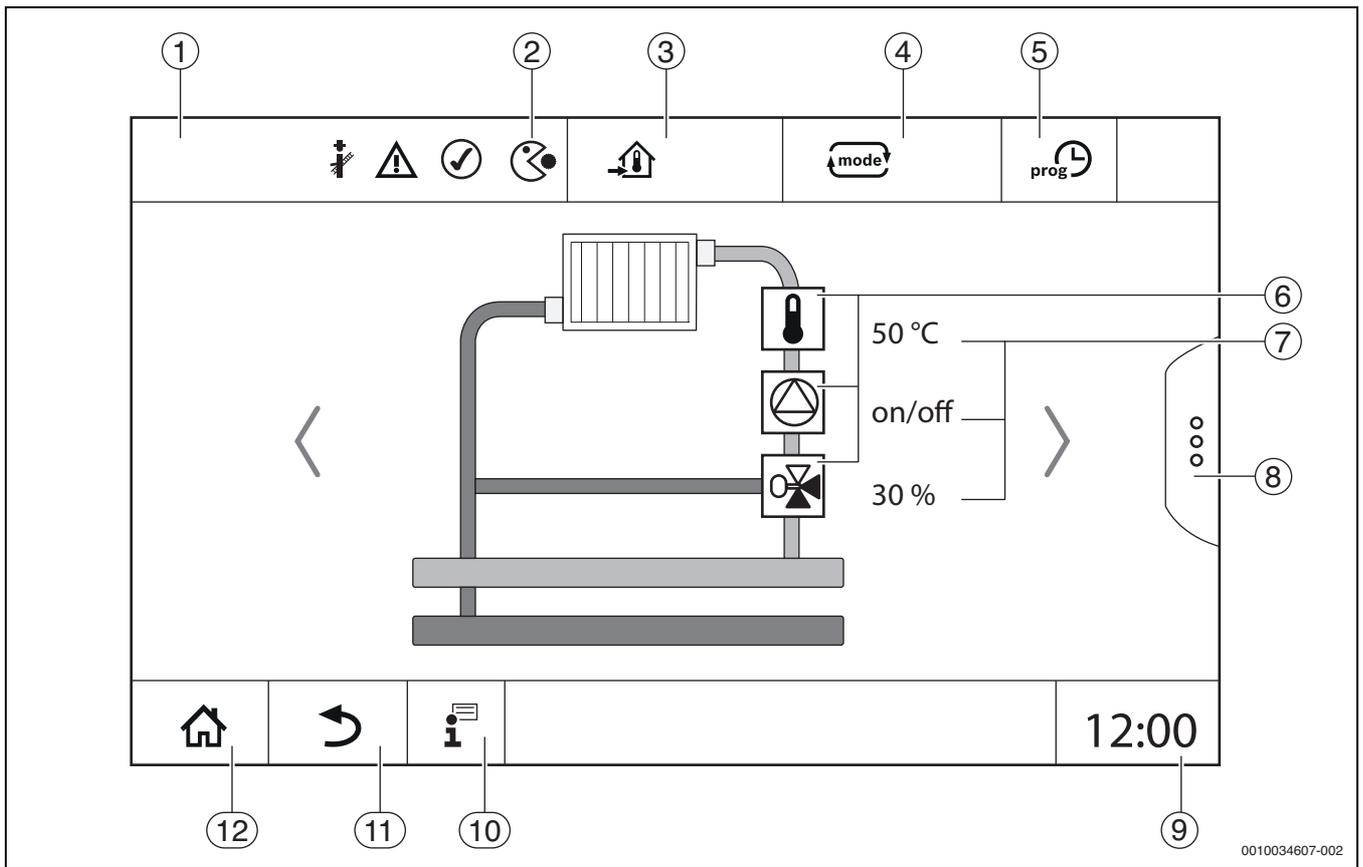


Fig. 13 Operating and display elements (example)

- [1] Display of system, subsystem or function
- [2] Status display of active menu level
- [3] Display of temperature set (set temperature)
- [4] Display of operating mode set
- [5] Display of time program set
- [6] Display of system components
- [7] Status display of system components
- [8] Advanced functions for heating circuit, DHW
- [9] Display of time
- [10] Information menu
- [11] Field for returning to the previous level/previous view
- [12] Field for returning to the system overview

5.7 Operation

The display and operation is organised in several menu levels. These can be accessed by tapping the corresponding symbol. Several menu levels can only be accessed by contractors. If an arrow is displayed on the right or left of the selected menu (→ Fig. 13, page 13) additional menu items are available. The corresponding status of the system, part of the system, function or system components can be identified from the individual images displayed.

Further information:

- Menu structure (→ Chapter 3.1, from page 7)
- Functions (→ Chapter 3.1, from page 7)

Tap, swipe and scroll the touch screen to navigate through the menu levels and operate the functions.

To go back to the previous level/screen:

- ▶ Tap ↶ symbol.

5.7.1 Calling up menu levels or functions

To call up individual menu levels or select functions:

- ▶ Tap the corresponding position on the display with your finger.

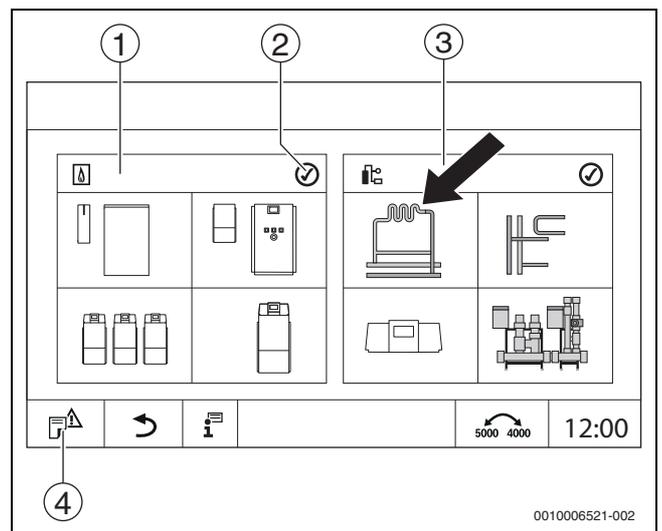


Fig. 14 Call up menu level or function

- [1] **Heat production**
- [2] Status display
- [3] **System** (Heat distribution)
- [4] **Fault history**

The next menu level or function is displayed.

Menu levels

If several menus or functions exist at one level:

- ▶ Tap the corresponding position (function) on the display with your finger.

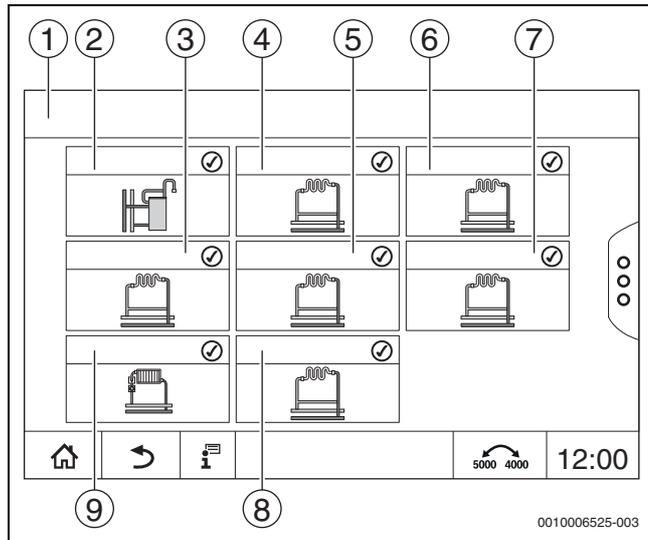


Fig. 15 Heating circuit overview (example)

- [1] **Control unit 00 > System**
- [2] **Domestic hot water**
- [3] **Heating circuit 03**
- [4] **Heating circuit 01**
- [5] **Heating circuit 04**
- [6] **Heating circuit 02**
- [7] **Heating circuit 05**
- [8] **Heating circuit 07**
- [9] **Heating circuit 06**

Scroll, swipe

To select a different function within a menu level:

- ▶ Tap the right or left arrow on the display with your finger.

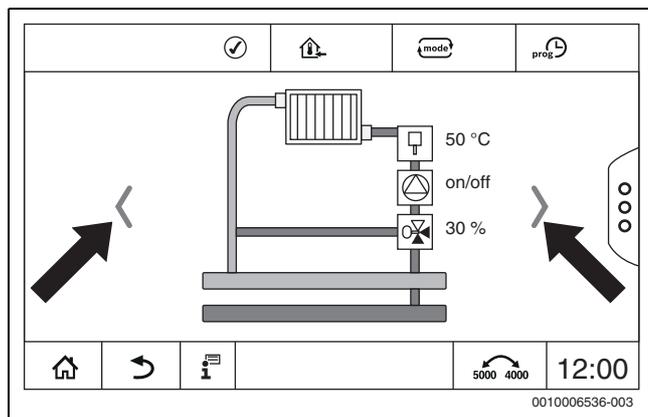


Fig. 16 Scrolling

-or-

- ▶ Swipe to the left or right across the display with your finger.

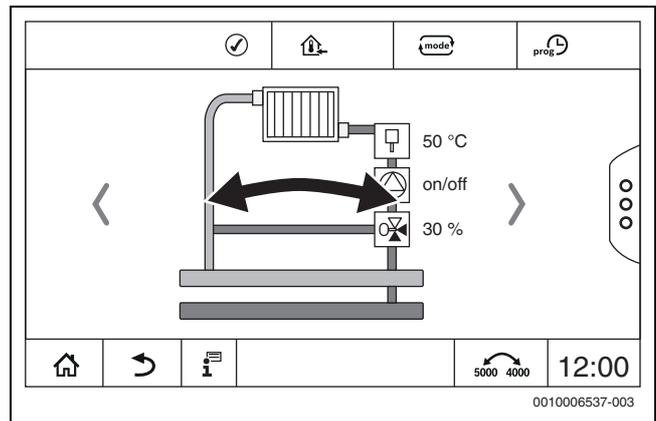


Fig. 17 Swipe

Display of heating circuits

The designation assigned to the heating circuits depends on the slot of the heating circuit module. The heating circuits are numbered according to the sequence of slots (from the left to the right). This means that the heating circuits at slot 1 appear in the display as heating circuit 01 and 02. The heating circuits at slot 2 are displayed as 03 and 04. If a different module is inserted at a slot, these heating circuits numbers are omitted. If a name has been assigned to the heating circuit, this is displayed.

5.7.2 Calling up submenus



Observe technical documentation of the installed control unit.

5.7.3 Information menu

To display information about the installation or the system:

- ▶ Tap symbol.
- ▶ Tap the required area in the Info menu.

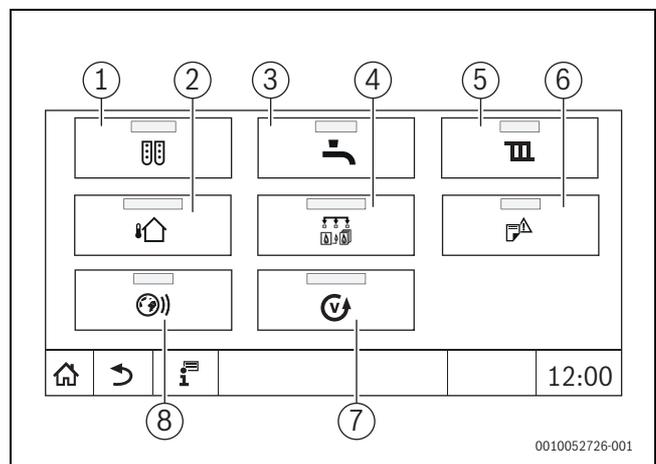


Fig. 18 Overview Information menu

- [1] **Module configuration**
- [2] **Outside temperature**
- [3] **Domestic hot water**
- [4] **Heat production**
- [5] **Heating circuit data**
- [6] **Fault display**
- [7] **Version**
- [8] **Connectivity**

Depending on the area, the following information is for example displayed:

- **Remaining time party / pause mode**
- Statuses of safety equipment
- Temperatures
- Operating modes
- Status of components
- Hours run

5.8 Connectivity

To establish an Internet connection, the Internet connections in the control unit must be established by an electrician.

WARNING

Danger to life from electric shock!

- ▶ Installation and commissioning as well as maintenance must only be carried out by an approved and qualified heating contractor.
- ▶ Electrical work may only be carried out by an authorised qualified person.

i Observe corresponding technical documentation for the control unit and user interface.

6 Commissioning

6.1 Checking the operating pressure, topping up the heating water and venting the system

6.1.1 Checking the operating pressure

Your heating contractor will have set the red needle of the pressure gauge [1] to the required operating pressure (at least 1 bar) and will have recorded this value in table 8, page 14.

- ▶ Check that the pressure gauge needle [2] is within the green band [3].
- ▶ If the pressure gauge needle drops below the green band, top up the heating water.

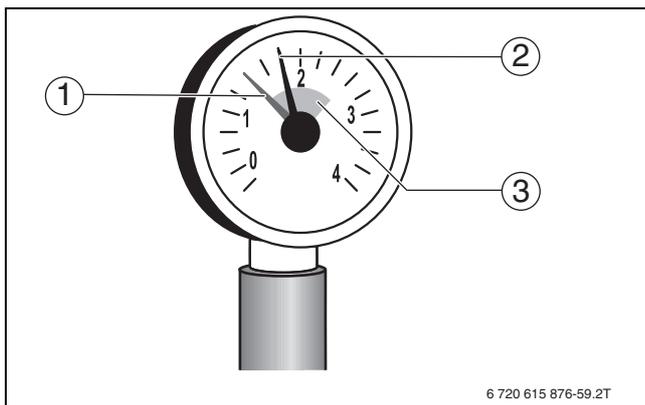


Fig. 19 Pressure gauge for sealed systems

- [1] Red needle
- [2] Pressure gauge needle
- [3] Green marking

| Operating pressure | |
|--|-----------|
| Set operating pressure (optimum value) | _____ bar |

Table 3 Operating pressure (entered by the heating contractor)

6.1.2 Topping up the heating water and venting the system

CAUTION

Health risk through contaminated drinking water!

- ▶ Observe all country-specific regulations and standards regarding the prevention of drinking water contamination.
- ▶ In Europe, observe standard EN 1717.

NOTICE

Material damage due to thermal stresses!

When topping up a hot boiler with cold heating water, thermal stresses can lead to cracking due to internal stress.

- ▶ Only fill the heating system when cold. Maximum flow temperature 40 °C.

NOTICE

System damage due to frequent topping up!

If you have to top up the heating water frequently, the heating system may suffer damage through corrosion or scaling, depending on the water quality.

- ▶ Ask a certified heating contractor if the local water can be used untreated or whether it needs to be treated.
- ▶ Notify your heating contractor if you frequently need to top up your heating system.

i Topping up heating water is different for individual heating systems. Therefore, ask your approved contractor to advise you accordingly.

i The refill quantities must be documented in the operator's log.

6.2 Switching on the heating system

i Observe technical documentation of the installed control unit.

Before switching on (→Chapter 3.1), ensure that:

- the operating pressure is high enough,
- the fuel supply has been turned on at the main shut-off valve, and
- the heating system emergency stop switch is switched on.

7 Shutting down the heating system

7.1 Shutting down the heating system via the control unit

NOTICE

Frost damage!

If the heating system is not standing in a frost-proof room and is not in operation, it may freeze up when exposed to frost. In summer mode or if heating mode is blocked, only the device frost protection remains active.

- ▶ Leave the heating system switched on at all times whenever possible, and set the flow temperature to at least 30 °C,
-or-
- ▶ Protect the heating system against frost by having the heating and DHW pipes drained by a contractor from the lowest point.

- ▶ Shutting down the heating system via the ON/OFF switch at the control unit (→ Chapter 3.1).

7.2 Shutting down the heating system in an emergency



Only use the boiler room circuit breaker or heating system emergency stop switch to switch off the heating system in an emergency.

- ▶ Never risk your own life. Your own safety is paramount.
- ▶ Close off the fuel supply installed on site.
- ▶ Isolate the heating system from the mains power supply via the heating system emergency stop switch or the main circuit breaker.

8 Environmental protection and disposal

Environmental protection is a fundamental corporate strategy of the Bosch Group.

The quality of our products, their economy and environmental safety are all of equal importance to us and all environmental protection legislation and regulations are strictly observed.

We use the best possible technology and materials for protecting the environment taking account of economic considerations.

Packaging

Where packaging is concerned, we participate in country-specific recycling processes that ensure optimum recycling. All of our packaging materials are environmentally compatible and can be recycled.

Used appliances

Used appliances contain valuable materials that can be recycled. The various assemblies can be easily dismantled. Synthetic materials are marked accordingly. Assemblies can therefore be sorted by composition and passed on for recycling or disposal.

Old electrical and electronic appliances



This symbol means that the product must not be disposed of with other waste, and instead must be taken to the waste collection points for treatment, collection, recycling and disposal.

The symbol is valid in countries where waste electrical and electronic equipment regulations apply, e.g. "(UK) Waste Electrical and Electronic Equipment Regulations 2013 (as amended)". These regulations define the framework for the return and recycling of old electronic appliances that apply in each country.

As electronic devices may contain hazardous substances, it needs to be recycled responsibly in order to minimize any potential harm to the environment and human health. Furthermore, recycling of electronic scrap helps preserve natural resources.

For additional information on the environmentally compatible disposal of old electrical and electronic appliances, please contact the relevant local authorities, your household waste disposal service or the retailer where you purchased the product.

You can find more information here:

www.bosch-homecomfortgroup.com/en/company/legal-topics/weee/

Batteries

Batteries must not be disposed together with your household waste. Used batteries must be disposed of in local collection systems.

9 Inspection and maintenance

9.1 What makes regular service important?

Heating systems should be regularly serviced for the following reasons:

- To maintain a high level of efficiency and to operate the heating system economically (low fuel consumption)
- To achieve a high level of operational reliability
- To maintain the cleanest possible combustion

NOTICE

Material damage due to a lack of or incorrect cleaning and service.

- ▶ Have the heating system inspected, maintained and cleaned once a year by a certified heating contractor.
- ▶ We recommend you enter a contract covering an annual inspection and demand-based maintenance.

9.2 Cleaning and care

To clean the boiler:

- ▶ Do not use abrasive or aggressive cleaning agents.
- ▶ Clean the casing with a damp cloth (soapy solution).

10 Troubleshooting

10.1 Recognising the operating condition and clearing faults

NOTICE

Frost damage!

If the heating system is not standing in a frost-proof room and is not in operation, it may freeze up when exposed to frost. In summer mode or if heating mode is blocked, only the device frost protection remains active.

- ▶ Leave the heating system switched on at all times whenever possible, and set the flow temperature to at least 30 °C,
-or-
- ▶ Protect the heating system against frost by having the heating and DHW pipes drained by a contractor from the lowest point.

If a fault has developed, the fault code flashes on the control unit display.

For more information on rectifying the problem or on possible faults, refer to the corresponding technical documentation of the installed control unit.

If the fault cannot be cleared:

- ▶ Note down the fault message and notify a heating contractor.







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