BOSCH

Operating instructions for users

Gas condensing boiler

Condens 7000 F

GC7000F 75...300

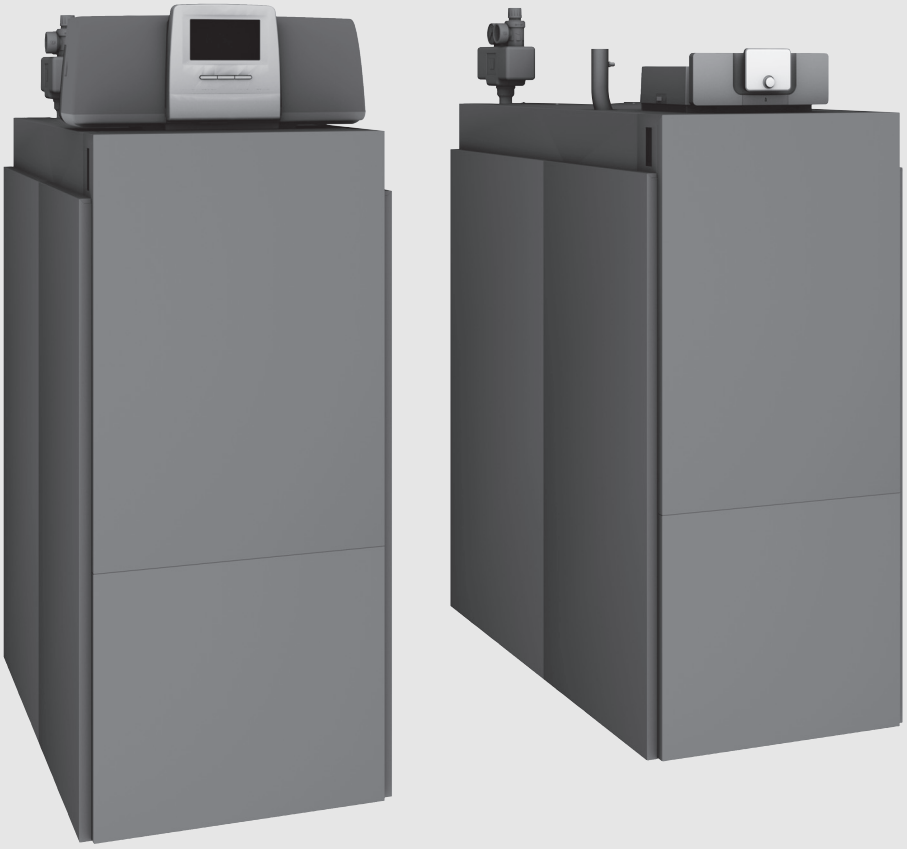

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Table of contents

1 Explanation of symbols and safety instructions 3
- 1.1 Explanation of symbols 3
- 1.2 General safety instructions 3

2 Product Information 6
- 2.1 Declaration of Conformity 6
- 2.2 Product data for energy consumption 6
- 2.3 Water quality (fill and top-up water) 7
- 2.4 Product overview 7
- 2.4.1 Product Description 7
- 2.4.2 The heating system is operated and monitored via App or Web Portal 9

3 Product description of optional control units 9
- 3.1 Product description of optional control units 9
- 3.2 Switching on the boiler at the control unit 9

4 MX25 control unit 10
- 4.1 MX25 control unit 10
- 4.2 Overview of control elements 11
- 4.3 Switching on the boiler 11
- 4.4 Switching the heating on or off 11

5 CC8313 control unit 12
- 5.1 Control elements of the control unit and the user interface 12
- 5.2 Function buttons and system status 12
- 5.2.1 ResetReset key 12
- 5.2.2 Flue gas inspector key (flue gas test) 13
- 5.2.3 Key for manual operation, emergency operation 13
- 5.3 Operating and display elements of the touch screen 13
- 5.4 Operating the appliance 14
- 5.4.1 Control system 14
- 5.4.2 Switch on and enable control unit 15
- 5.4.3 Lock screen 15
- 5.4.4 Calling up menu levels or functions 15
- 5.4.5 Calling up submenus 16
- 5.4.6 Information menu 16

6 Commissioning 17
- 6.1 Checking the operating pressure, topping up the heating water and venting the system 17
- 6.1.1 Checking the operating pressure 17
- 6.1.2 Topping up the heating water and venting the system 17
- 6.2 Switching on the heating system 17

7 Shutting down the heating system 17
- 7.1 Shutting down the heating system via the control unit 17
- 7.2 Shutting down the heating system in an emergency 17

8 Environmental protection/disposal 18

9 Inspection and maintenance 18
- 9.1 What makes regular service important? 18
- 9.2 Cleaning and care 18

10 Troubleshooting 18
- 10.1 Recognising the operating condition and clearing faults 18

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 minimising danger are not taken.

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

DANGER:

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

WARNING:

WARNING indicates that severe to life-threatening personal injury may occur.

CAUTION:

CAUTION indicates that minor to medium personal injury may occur.

NOTICE:

NOTICE 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

⚠ Instructions for the target group

These operating instructions are intended for the heating system user.

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

- ▶ Read and retain the operating instructions (heat source, heating controller, etc.) prior to operation.
- ▶ Observe the safety instructions and warnings.

⚠ 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.

⚠ Additional important notes

- ▶ 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 the heating system.
- ▶ The flue system must be checked annually. 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 a contractor replace any parts that show signs of damage through corrosion or other causes.

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 Declaration of Conformity

The design and operation of this product conform to European Directives and the supplementary national requirements. Its conformity is demonstrated by the CE designation.

You can view the Declaration of Conformity on the internet (→ back cover).

2.2 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	el_{max}	kW	0.083	0.156	0.250	0.234	0.298	0.336
At part load	el_{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

2.3 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.

2.4 Product overview

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

2.4.1 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:

- 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.

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.

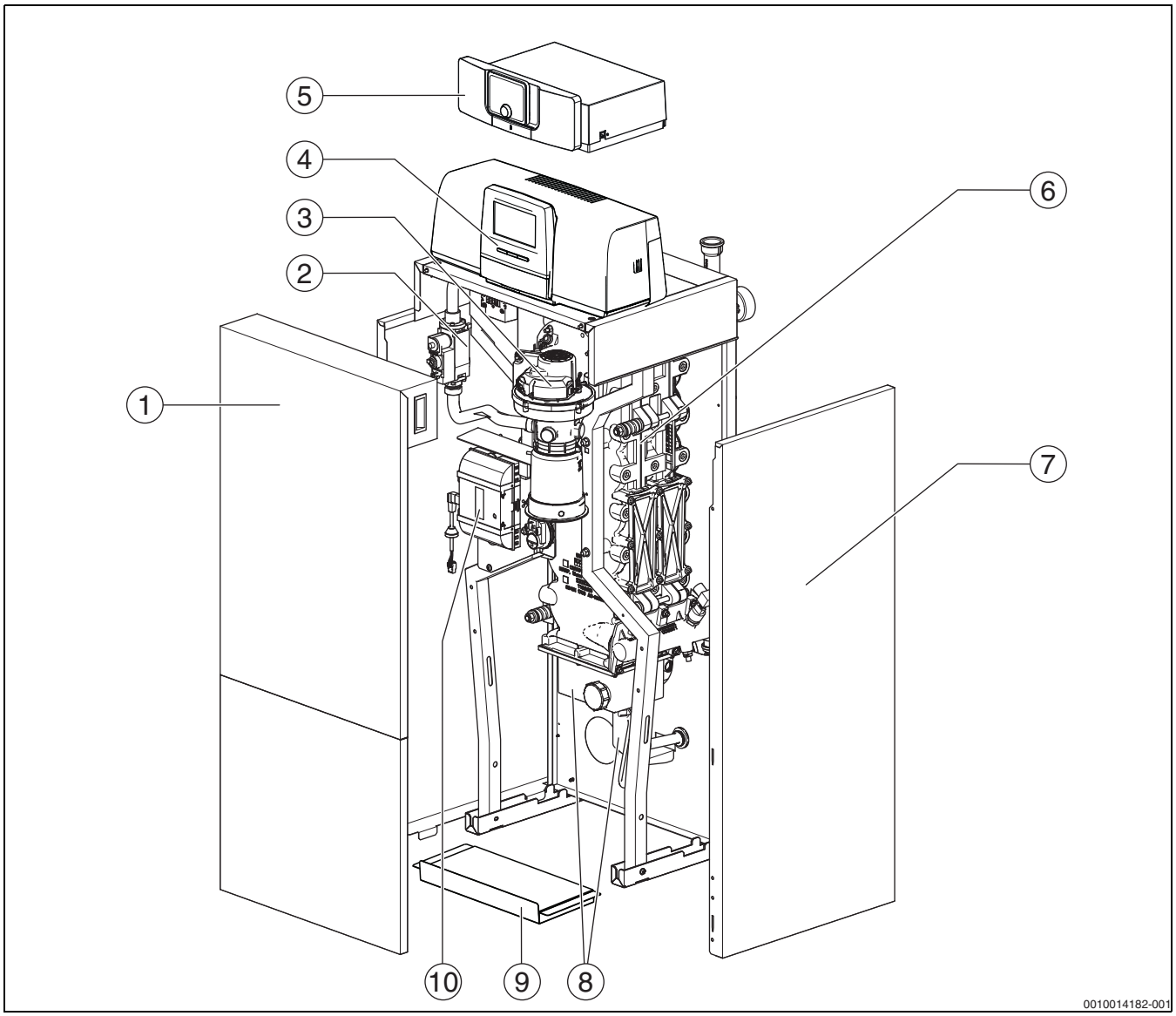

Fig. 1 Condens 7000 F, 75...100 kW main components (shown: right-hand version; cleaning cover and flow and return are located on the right)

[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

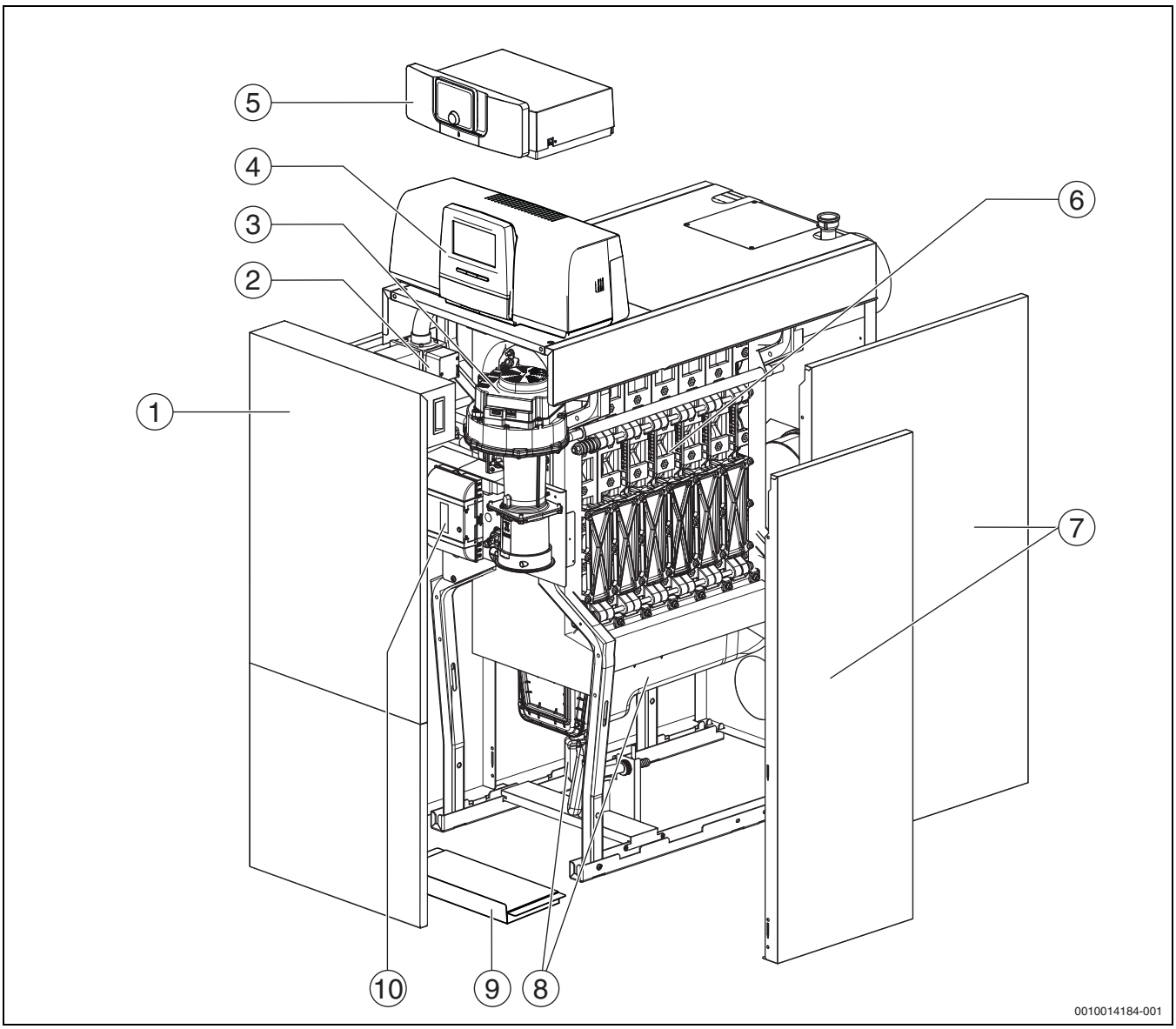

Fig. 2 Condens 7000 F, 150...300 kW main components (shown: right-hand version; cleaning cover and flow and return are located on the right)

[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.

2.4.2 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 MX25 control unit

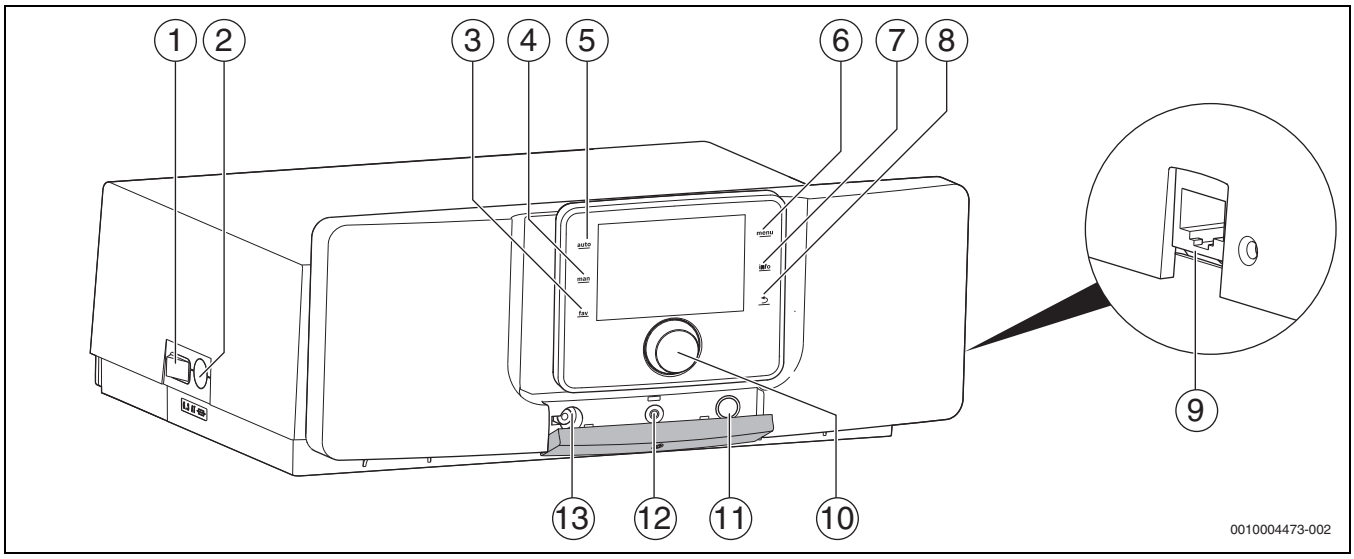

Fig. 3 Control unit MX25 with user interface – control elements

[1] Main power switch
[2] Appliance fuse 6.3 A
[3] fav key (favourites functions)
[4] man key (manual operation)
[5] auto key (automatic mode)
[6] menu key (to call up menus)
[7] info key (info menu and help)
[8] Back key
[9] Network connection
(RJ45, only available with IP inside control units)
[10] Selector
[11] Flue gas inspector, reset and emergency operation key
[12] Status-LED
[13] Service key connection

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 user interface 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.

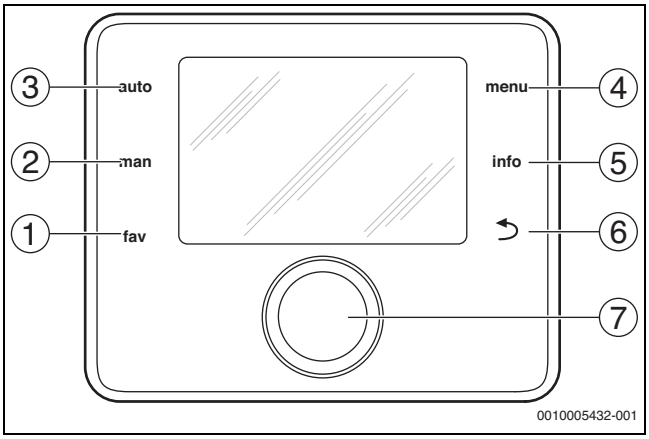

Fig. 4 Control elements

[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 on the boiler

▶ Switching on the boiler at the ON/OFF switch [1]. The display lights up and shows the appliance temperature after a short time.

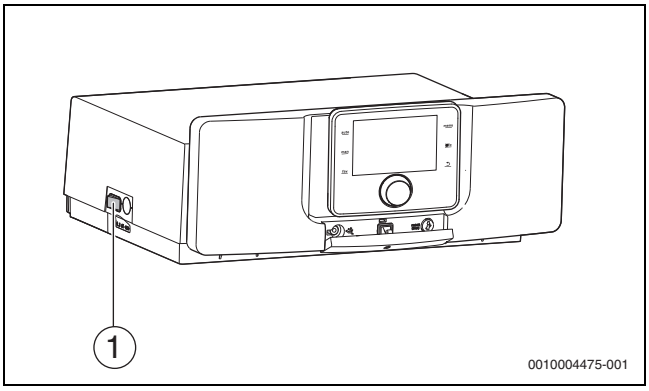

Fig. 5 Main power switch

[1] Main power 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**.

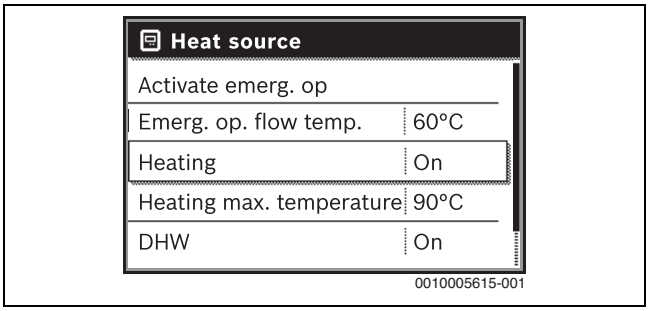

Fig. 6 Switching heating on

▶ 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 Control elements of the control unit and the user interface

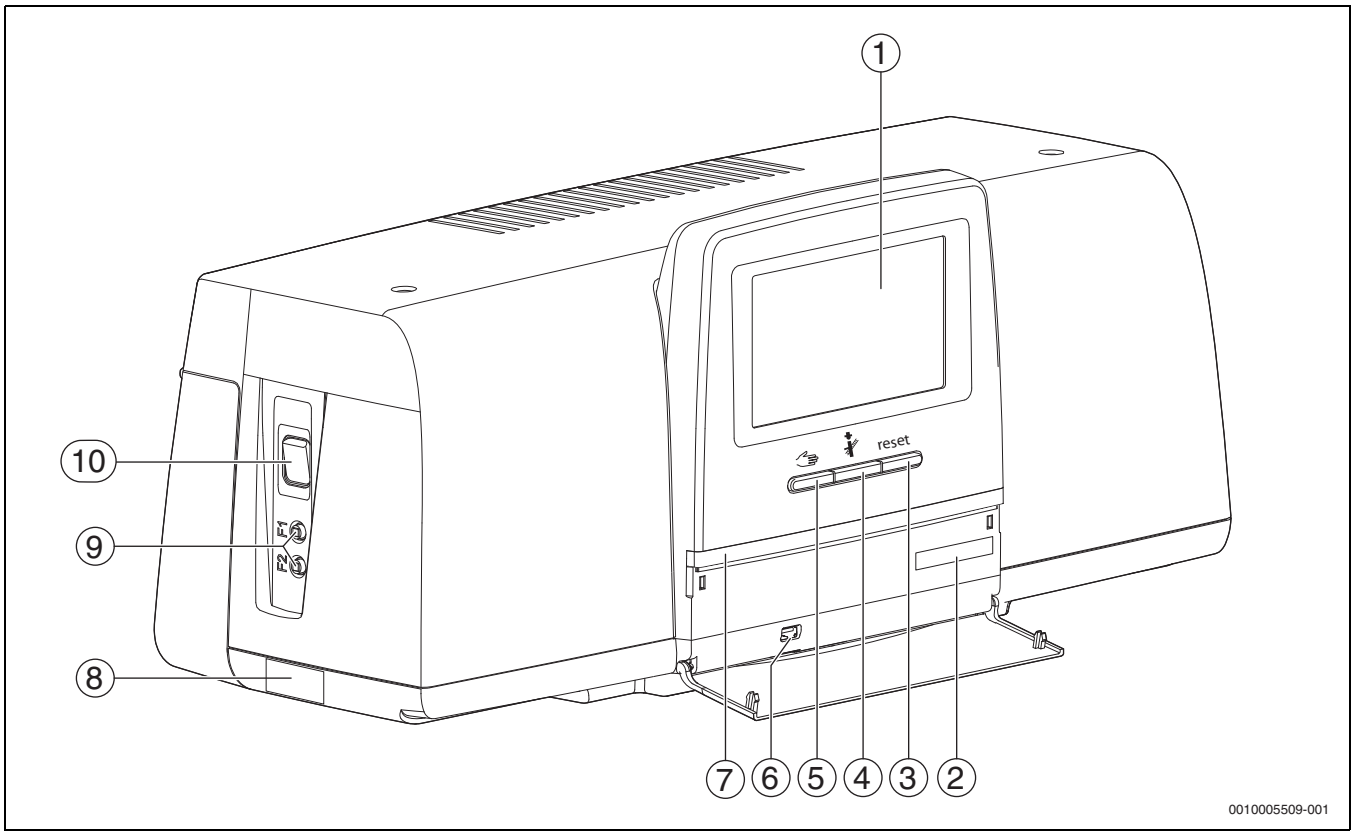

Fig. 7 Control elements

[1] Touch screen
[2] Activation Code (registration code)
[3] Reset button (e.g. high limit safety cut-out, SAFe)
[4] Flue gas inspector key (for flue gas test)
[5] Manual operation key
[6] USB interface (e.g. for service purposes)
[7] LED status display
[8] Type plate
[9] F1-, F2 circuit breaker
[10] Appliance on/off switch

5.2 Function buttons and system status

Function buttons

The function buttons enable

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

System status, function status, component status

The status of the system, the functions and system components is displayed via the Function status display (→ Fig. 9, [1], page 14), the System components status display (→ Fig. 9, [15], page 14) and the LED status display (→ Fig. 7, [7], page 12):

- Green = system in **automatic mode**
- Yellow = system in **manual mode**, **Flue gas testFlue gas test**, **Service displayService display** or **Blocking faultBlocking fault** SAFe
- Yellow flashing = Control unit couplingControl unit coupling
- Red = FaultFault

5.2.1 ResetReset key

When the key is pressed reset the locking fault is unlocked and the functions are reset (e.g. following triggering of the high limit safety cut-out or resetting of the SAFe).

To unlock a function:

▶ Key reset Hold down for 2 seconds.

5.2.2 Flue gas inspector key (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 is switched on if required at the heat source (→ Technical documentation of heat source) or at the control unit.

- ▶ Ensure heat consumption within the heating system.
- ▶ Starting from the initial position, hold the key down for several seconds.
  The flue gas test starts immediately.
  The parameters for defining the conditions under which the flue gas test is carried out are shown in the display.
- ▶ Setting parameters (e.g. modulation).
- ▶ Tap **Save**.
  The heat source is operated at the set output.

If a preset parameter (e.g. minimum boiler output) is exceeded or undercut when making the adjustment, a warning message appears that must be confirmed. The parameter remains at the previous value.

To exit the view:

- ▶ Tap **cancel**.

The flue gas test continues.

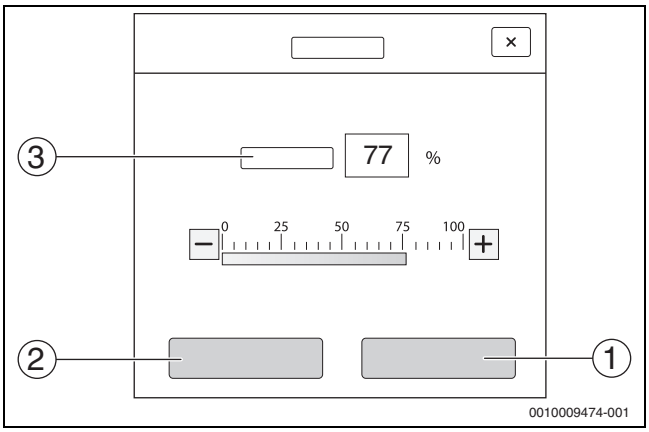

Fig. 8 Flue gas test

[1] **Save**
[2] **Cancel**
[3] **Modulation**

The LED status display (→ Fig. 7, [7], page 12) lights up yellow during the flue gas test and is accompanied by a constantly recurring pop-up window.

To conclude the flue gas test:

- ▶ Press key again.

If the flue gas test is not ended manually, it ends automatically after 30 minutes.

5.2.3 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.

5.3 Operating and display elements of the touch screen

The display and selectability of the menu items depends on which modules are inserted and which settings have been made.

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

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

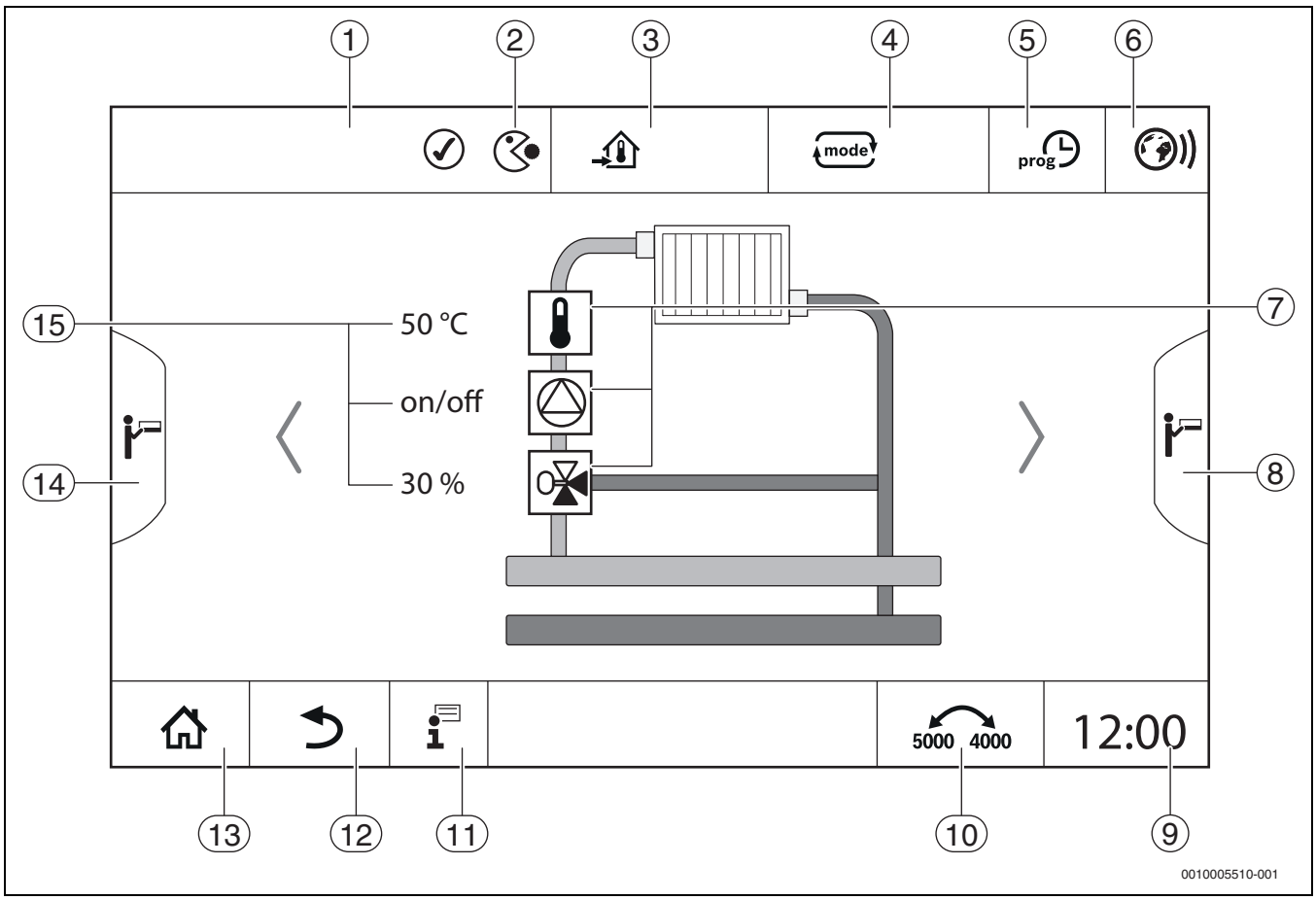

Fig. 9 Operating and display elements

[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 Internet connection
[7] Display of system components
[8] Advanced functions for heating circuit, DHW
[9] Display of time
[10] Press field to switch between display types on the display
[11] Information menu
[12] Press field to go back to the previous level/screen
[13] Press field to return to the system overview
[14] Advanced functions of the heat source
[15] Status display of system components

The symbols used are listed in → Fig. 7 on page 12, accompanied by an explanation.

5.4 Operating the appliance

5.4.1 Control system

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. 9, page 14) 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 9
- Functions → Chapter 3.1, from page 9
- Explanation of symbols and keys → Chapter 3.1, from page 9

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

To go back to the previous level/screen:

▶ Tap ⮌ symbol.

5.4.2 Switch on and enable control unit

▶ Switch on control unit at ON/OFF switch (→ Fig. 7, [10], page 12). The standard display appears following initialisation of the control unit, or if there has been no user activity at the display for some time.

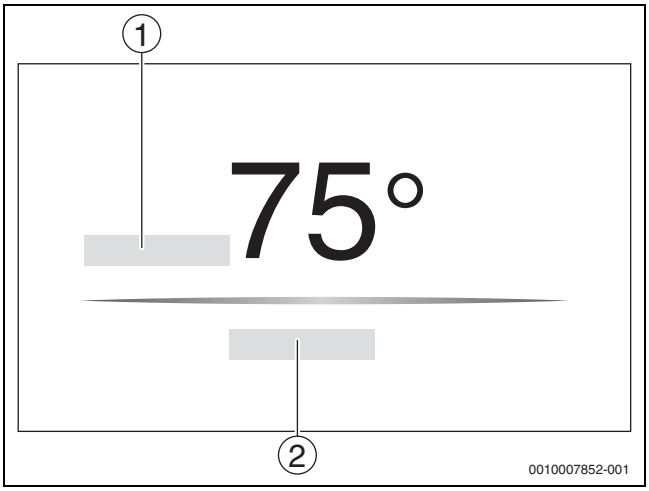

Fig. 10 Standard display

[1] **Boiler Temperature**
[2] **Continue to overview**

The boiler temperature 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 system name of the control unit series appears briefly after the display is enabled. The start page is then displayed with the system overview.

To display the system overview:

▶ Tap the display.

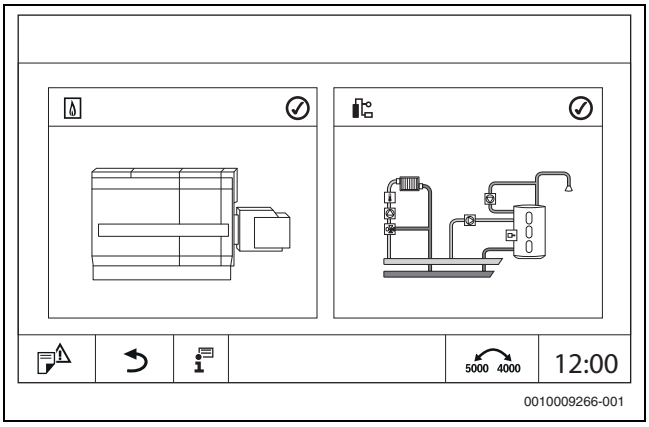

Fig. 11 System Overview

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

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

5.4.4 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.

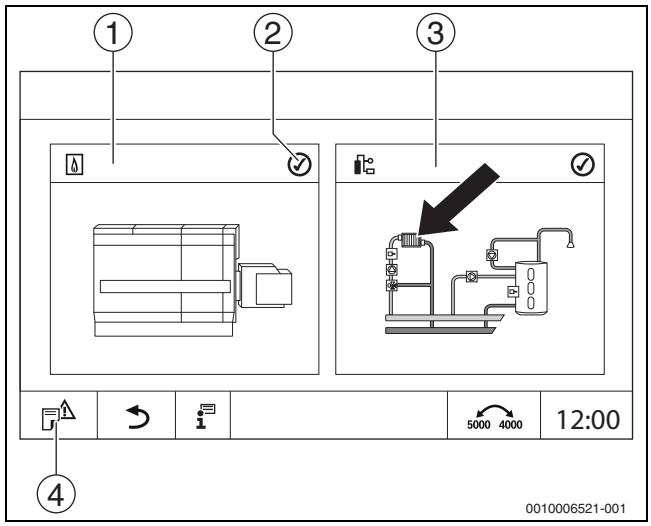

Fig. 12 Calling up a menu level or function

[1] Heat production
[2] Status display
[3] System
[4] Fault history

The next menu level or function is displayed.

Menu levels

If several menus or functions are available at one level:

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

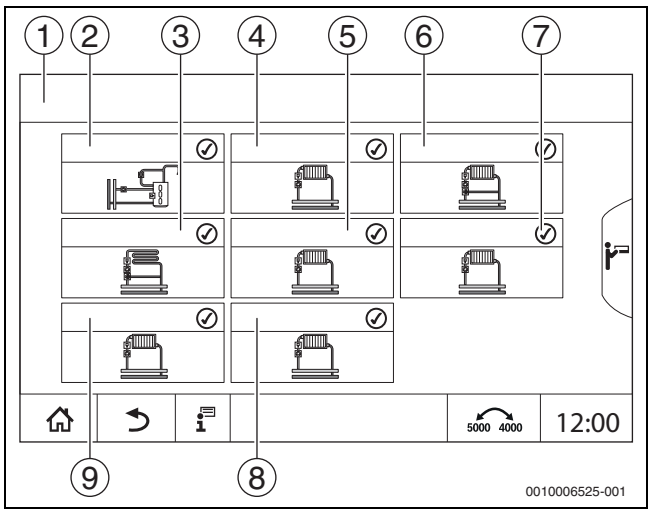

Fig. 13 Heating circuit overview (example)

[1] System > Control unit 01
[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

To select a different function within a menu level:

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

-or-

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

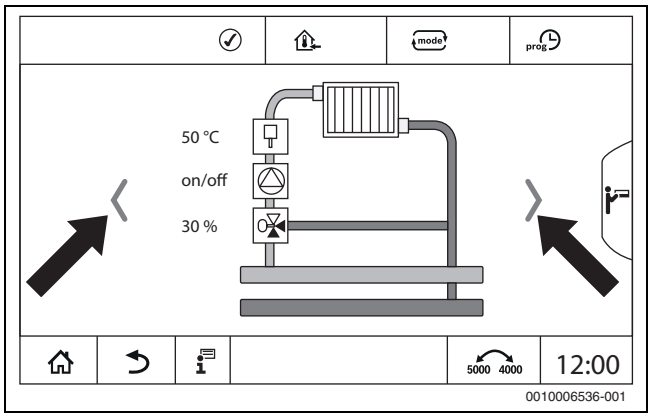

Fig. 14 Scrolling

-or-

▶ Swipe your finger across the display.

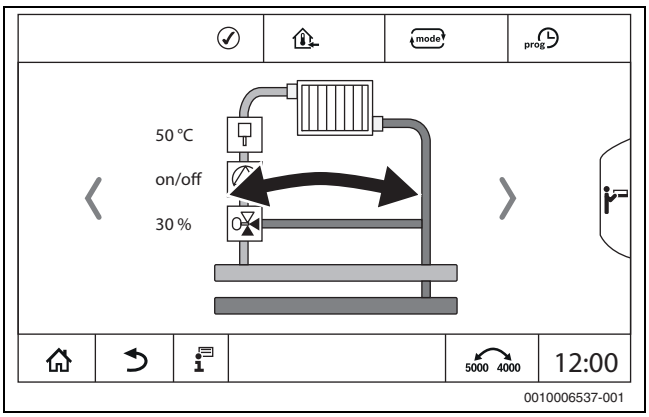

Fig. 15 Wipe

Display of heating circuits

Designations are allocated to the heating circuits depending on the slot of the heating circuit module. The heating circuits are numbered according to the sequence of slots. This means that the heating circuits at slot 1 are displayed 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 circuit numbers are omitted. If the heating circuit has been given a name, this is displayed.

5.4.5 Calling up submenus

Observe technical documentation of the installed control unit.

5.4.6 Information menu

To display information about the installation or the system:

▶ Tap symbol.

▶ Tap the required area in the Info menu.

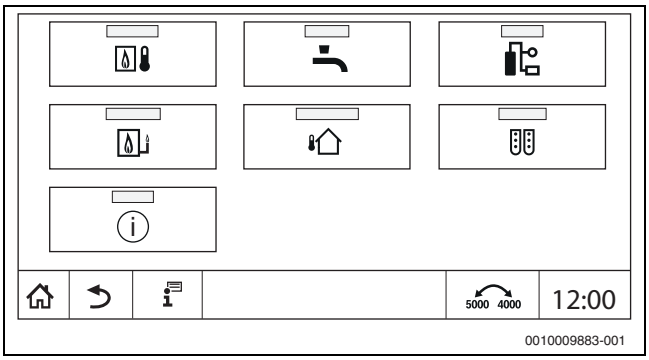

Fig. 16 Overview of Info menu

Depending on the area, the following information is e.g. displayed:

- Statuses of safety equipment
- Temperatures
- Operating modes
- Hours run

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.

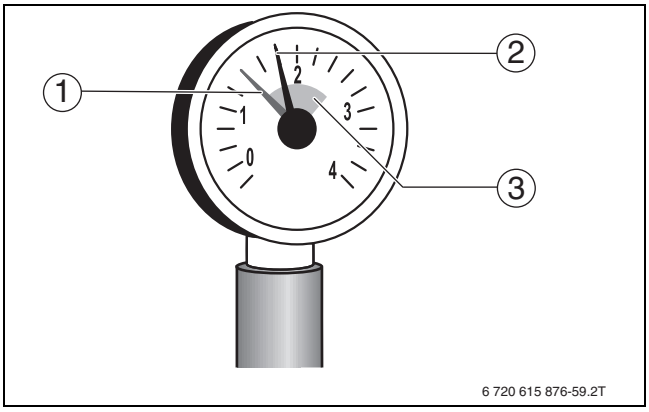

Fig. 17 Pressure gauge for sealed systems

[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.

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

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

6.2 Switching on the heating system

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/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 indicates that the product must not be disposed of with other waste, but be taken to the waste collection centers for treatment, collection, recycling and disposal procedure.

The symbol applies to countries with electronic waste regulations, for example the European Waste Electrical and Electronic Equipment Directive 2012/19/EU. These regulations determine the framework for the return and recycling of used electronic appliances as applicable within each country.

As electronic equipment 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 your electronic waste will help to conserve natural resources.

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

For additional information, please visit:
www.weee.bosch-thermotechnology.com/

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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