



Service manual

Control panel & High-efficiency wall-hung gas boiler

Quinta Ace 30 - 45 - 55 - 65 - 90 - 115

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1 Safety

1.1 Liabilities

1.1.1 Manufacturer's liability

Our products are manufactured in compliance with the requirements of the various Directives applicable. They are therefore delivered with the CE marking and any documents necessary. In the interests of the quality of our products, we strive constantly to improve them. We therefore reserve the right to modify the specifications given in this document.

Our liability as manufacturer may not be invoked in the following cases:

- Failure to abide by the instructions on installing and maintaining the appliance.
- Failure to abide by the instructions on using the appliance.
- Faulty or insufficient maintenance of the appliance.

1.1.2 Installer's liability

The installer is responsible for the installation and initial commissioning of the appliance. The installer must observe the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Install the appliance in compliance with prevailing legislation and standards.
- Carry out initial commissioning and any checks necessary.
- Explain the installation to the user.
- If maintenance is necessary, warn the user of the obligation to check the appliance and keep it in good working order.
- Give all the instruction manuals to the user.

1.1.3 User's liability

To guarantee optimum operation of the system, you must abide by the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Call on a qualified professional to carry out installation and initial commissioning.
- Get your installer to explain your installation to you.

- Have the required inspections and maintenance carried out by a qualified installer.
- Keep the instruction manuals in good condition close to the appliance.

2 About this manual

2.1 Additional documentation

The following documentation is available in addition to this manual:

- Installation, user and service manual
- Water quality instructions

2.2 Symbols used in the manual

This manual contains special instructions, marked with specific symbols. Please pay extra attention when these symbols are used.

**Caution**

Risk of material damage.

**Important**

Please note: important information.

**See**

Reference to other manuals or pages in this manual.

3 Description of the product

The Quinta Ace boiler is delivered with a combination of the control panel, control unit and extension PCB. The contents of this manual are based on the following software and navigation information:

Tab.1 Software and navigation information

	Name visible in display	Software version
Boiler Quinta Ace	CU-GH08	1.4
Control panel HMI T-control	MK3	1.29

3.1 General description

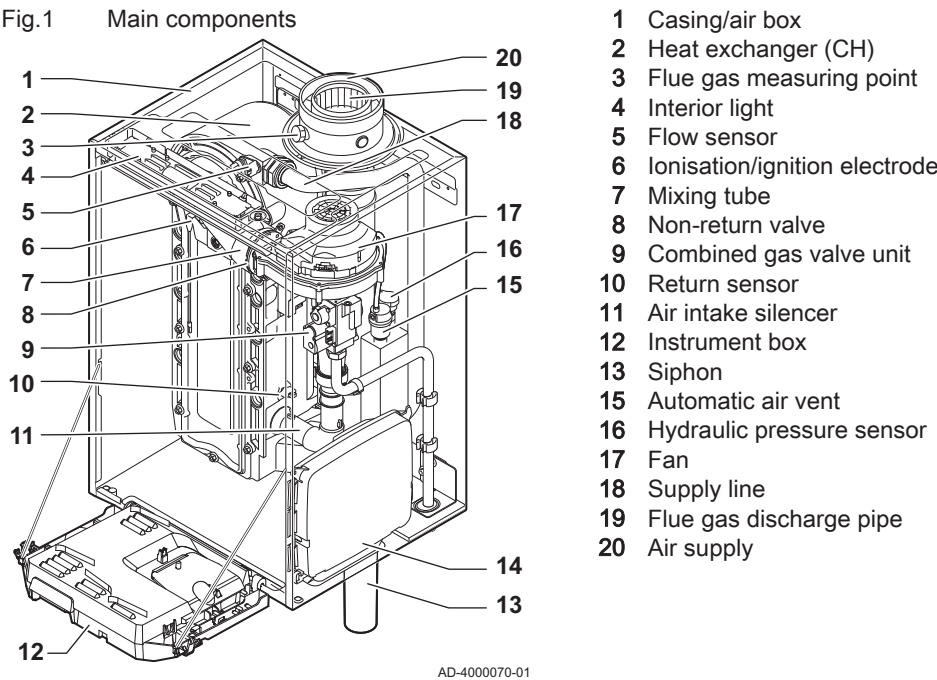
The Quinta Ace boiler is a high-efficiency wall-hung gas boiler with the following properties:

- High-efficiency heating.
- Limited emissions of polluting substances.
- Ideal choice for cascade configurations.

All Quinta Ace boiler models are supplied without a pump, but with the required pump connection cables.

3.2 Main components

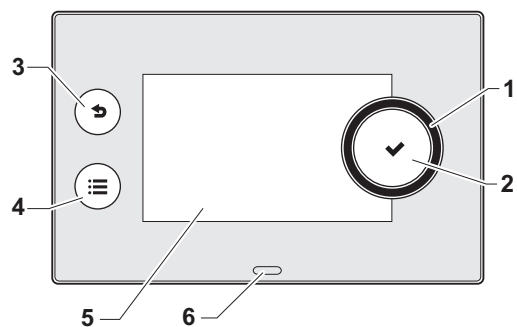
Fig.1 Main components



3.3 Control panel description

3.3.1 Description of the components

Fig.2 Components of the control panel




AD-3000932-01

- 1 Rotary knob to select a tile, menu or setting
- 2 Button ✓ to confirm the selection
- 3 Back button ↩ to return to the previous level or previous menu
- 4 Menu button ≡ to return to the main menu
- 5 Display
- 6 LED for status indication:
 - continuous green = normal operation
 - flashing green = warning
 - continuous red = shutdown
 - flashing red = lockout

4 Use of the control panel

4.1 Description of the home screen

This screen is shown automatically after start-up of the appliance. The control panel goes automatically in standby mode (black screen) if the screen is not touched for 5 minutes. Press one of the buttons on the control panel to activate the screen again.

You can navigate from any menu to the home screen by pressing the back button  for several seconds.


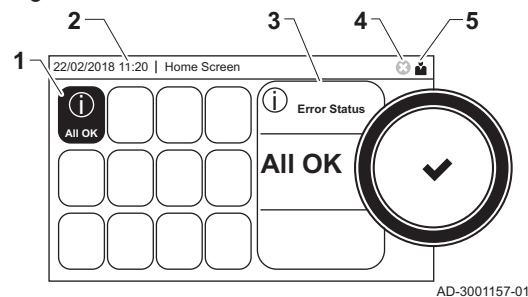




The tiles on the home screen provide quick access to the corresponding menus. Use the rotary knob to navigate to the menu of your choice and press the button  to confirm the selection.

Fig.3 Icons on home screen



- 1 Tiles: the selected tile is highlighted
- 2 Date and time | Name of the screen (actual position in the menu)
- 3 Information about the selected tile
- 4 Error indicator (only visible if an error has been found)
- 5 Icon showing the navigation level:

- : Chimney sweeper level
- : User level
- : Installer level

The installer level is protected by an access code. When this level is active, the status of the tile  changes from **Off** into **On**.

4.2 Description of the main menu


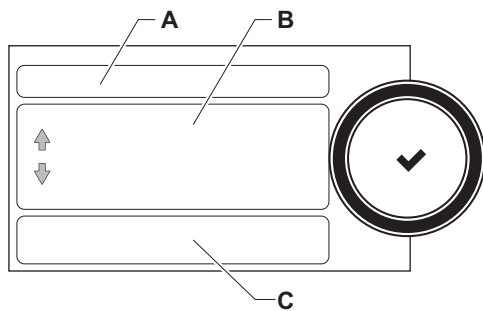

You can navigate from any menu directly to the main menu by pressing the menu button . The number of accessible menus depends on the access level (user or installer).

Fig.4 Items in the main menu








- A Date and time | Name of the screen (actual position in the menu)
- B Available menus
- C Brief explanation of the selected menu

Tab.2 Available menus for the user

Description	Icon
System Settings	
Version Information	i

Tab.3 Available menus for the installer






























Description	Icon
Installation Setup	
Commissioning Menu	
Advanced Service Menu	
Error History	
System Settings	
Version Information	i

4.2.1 Meaning of the icons in the display

Tab.4 Icons

	User level	i	Information
	Installer level		Error display














4 Use of the control panel

	Chimney sweeper level		System settings
	Service		Water pressure
	Timer program		DHW 1
	Temporary overwrite of the timer program		DHW 2
	Holiday program		DHW boost on
	Manual		Gas boiler
	Energy-saving mode		Burner output level (1 to 5 bars, with each bar representing 20% output)
	Frost protection		Burner on
	Central heating on		Outside temperature sensor
	All zones (groups)		DHW tank
	Living room ⁽¹⁾		Solar calorifier
	Kitchen ⁽¹⁾		Cascade
	Bedroom ⁽¹⁾		Pump
	Study ⁽¹⁾		Three-way valve
	Cellar ⁽¹⁾		
(1) Adjustable icon for heating zone			








5 User instructions








5.1 Home screen


Tab.5 Selectable menus for the user

Tile	Submenu	Settings
	Holiday	Set the start and end date of your holiday to lower the room and domestic hot water temperatures of all zones.
	Central heating on/off	Switch the heating function of the boiler on or off
	Auto Filling	Shows the water pressure. Top up the installation manually when the water pressure is too low.
     	Heating circuit set-up	Configure the settings per heating circuit
	DHW setup	Configure the domestic hot water temperatures
	Outdoor sensor setup	Configure the temperature regulation using the outdoor sensor
 - button > 	System Settings	Configure the display settings

5.2 Heating circuit configuration

Tab.6 Select the heating circuit you want to configure by selecting the tile , , , , ,  or 

Icon	Zone Quick Select	Settings
	Scheduling	Set the scheduling mode and choose the timer program already created
	Manual	Set the manual mode; the room temperature is set to a fixed setting
	Short temperature change	Set the temporary mode; the room temperature is changed temporarily
	Holiday	Set the start and end date of your holiday to lower the room temperatures
	Antifrost	Set the antifrost mode; the minimum room temperature protects your system from freezing
	Set Heating Activity Temperatures	Set the room temperature for each activity of the timer program. See: Timer program to control the room temperature, page 14
	Zone configuration	Access the settings for the configuration of the heating circuit (see table below)








Tab.7 Extended menu to configure a heating circuit  **Zone configuration**

Zone configuration menu	Settings
Short temperature change	Change the room temperature temporarily, if required
OperatingZoneMode	Select the heating operating mode: Scheduling, Manual or Antifrost
Manu ZoneRoomTempSet	Set the room temperature manually to a fixed setting
Heating Schedule	Create a timer program (up to 3 programs allowed). See: Creating a timer program to control the room temperature, page 14
Set Heating Activity Temperatures	Set the room temperature for each activity of the timer program
ZoneTimeProg Select	Select a timer program (3 options)
Holiday Mode	Set the start and end date of your holiday and the reduced temperature for this zone
Zone friendly Name	Create or change the name of the heating circuit

Zone configuration menu	Settings
Icon display zone	Select the icon of the heating circuit
OperatingZoneMode	Read the current operating mode of the heating circuit

5.3 Domestic hot water settings



Tab.8 Configure the domestic hot water (DHW) settings by selecting the tile 

Icon	DHW Quick Select menu	Settings
	Scheduling	Set the timer program to control the DHW temperature
	Manual	Set the manual mode; the DHW temperature is a fixed setting
	Hot water boost	Set the temporary mode: change the DHW temperature temporarily
	Holiday	Set the start and end date of your holiday to lower the domestic hot water temperature
	Antifrost	Activate the antifrost mode to protect your system from freezing
	DHW comfort setpoint	Set the maximum DHW temperature for the timer program
	Zone configuration	Configure the settings of the DHW circuit

Tab.9 Extended menu to configure the domestic hot water circuit  **Zone configuration**

Zone configuration menu	Settings
Hot water boost	Change the DHW temperature temporarily, if required
DHW Schedule	Create a timer program (up to 3 programs allowed)
Domestic Hot Water Setpoints	Set the DHW temperatures for the timer program
DHW timeprog. select	Select a timer program (3 options)
Holiday Mode	Set the start and end date of your holiday
DHW mode	Select the DHW operating mode: Scheduling, Manual or Antifrost

5.4 Display settings

Tab.10 Configure the display settings by pressing the -button and selecting **System Settings** 

System Settings menu	Settings
Set Date and Time	Set the current date and time
Select Country and Language	Select your country and language
Daylight Saving Time	Enable or disable daylight saving to save energy during summer
Installer Details	Enter the name and phone number of the installer
Set Heating Activity Names	Create the names for the activities of the timer program
Set Screen Brightness	Adjust the brightness of the screen
Set click sound	Enable or disable the click sound of the rotary knob

5.5 Customizing the control panel

5.5.1 Changing the display settings

1. Press the  button.
2. Select **System Settings** .
3. Perform one of the operations described in the table below:

Tab.11 Display settings

System Settings menu	Settings
Set Date and Time	Set the current date and time
Select Country and Language	Select your country and language
Daylight Saving Time	Enable or disable daylight saving time
Installer Details	Enter the name and phone number of the installer
Set Heating Activity Names	Create the names for the activities of the timer program
Set Screen Brightness	Adjust the brightness of the screen
Set click sound	Enable or disable the click sound of the rotary knob
License Information	Read out detailed license information from the device platform application

5.5.2 Changing the name and symbol of a zone

You can change the name and symbol of a zone.

1. Select the tile of the zone you want to change.
2. Select **Zone friendly Name**
⇒ A keyboard with letters, numbers and symbols is shown.
3. Change the name of the zone (20 characters maximum):
 - 3.1. Press the rotary knob ✓ to repeat a letter, number or symbol.
 - 3.2. Select ← to delete a letter, number or symbol.
 - 3.3. Select ▢ to add a space.
4. Select the ✓ sign on the screen when the name is complete.
5. Press the rotary knob ✓ to confirm the selection.
6. Select **Icon display zone**.
7. Change the symbol of the zone.

5.5.3 Changing the name of an activity

You can change the names of the activities in the timer program.

1. Press the ≡ button.
2. Select **System Settings** ⚙.
3. Select **Set Heating Activity Names**.
⇒ A list of 6 activities and their standard names is shown:

Activity 1	Sleep
Activity 2	Home
Activity 3	Away
Activity 4	Morning
Activity 5	Evening
Activity 6	Custom

4. Select an activity.
⇒ A keyboard with letters, numbers and symbols is shown.
5. Change the name of the activity:
 - 5.1. Press the rotary knob ✓ to repeat a letter, number or symbol.
 - 5.2. Select ← to delete a letter, number or symbol.
 - 5.3. Select ▢ to add a space.
6. Select the ✓ sign on the screen when the name is complete.
7. Press the rotary knob ✓ to confirm the selection.






5.6 Changing the room temperature of a zone

5.6.1 Changing the operating mode of a zone

To regulate the room temperature of the different areas of the house, you can choose from 5 operating modes:

- 1. Select the tile of the zone you want to change.
⇒ The **Zone QuickSelect** menu opens.
- 2. Select the desired operating mode:

Tab.12 Operating modes

Icon	Mode	Description
	Scheduling	The room temperature is controlled by a timer program
	Manual	The room temperature is set to a fixed setting
	Short temperature change	The room temperature is changed temporarily
	Holiday	The room temperature is reduced during your holiday to save energy
	Antifrost	Protect the boiler and installation from freezing in winter


5.6.2 Changing the room temperature temporarily

Regardless of the operating mode selected for a zone, it is possible to change the room temperature for a short period. After this period has elapsed, the selected operating mode resumes.



Important

The room temperature can only be adjusted in this way if a room temperature sensor/thermostat is installed.

- 1. Select the tile of the zone you want to change.
- 2. Select  **Short temperature change**.
- 3. Set the duration in hours and minutes.
- 4. Set the temporary room temperature.
⇒ The **Short temperature change** menu shows the duration and the temporary temperature.

5.6.3 Timer program to control the room temperature

■ Creating a timer program to control the room temperature

A timer program allows you to vary the room temperature per hour and per day. The room temperature is linked to the activity of the timer program.



Important

You can create up to three timer programs per zone. For example, you can create a program for a week with normal working hours and a programme for a week when you are at home most of the time.


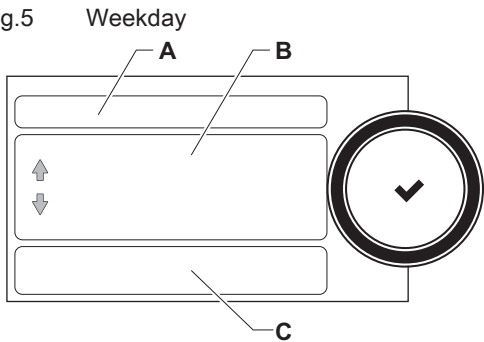
- 1. Select the tile of the zone you want to change.
- 2. Select  **Zone configuration > Heating Schedule**.
- 3. Select the timer program you want to modify: **Schedule 1, Schedule 2** or **Schedule 3**.
⇒ Activities scheduled for Sunday are displayed. The last scheduled activity of a day is active until the first activity of the next day. At initial start-up, all weekdays have two standard activities; **Home** starting at 6:00 and **Sleep** starting at 22:00.
- 4. Select the weekday you want to modify.
 - A Weekday
 - B Overview of scheduled activities
 - C List of actions
- 5. Perform the following actions, if necessary:
 - 5.1. **Edit** the start time and/or activity of a scheduled activity.
 - 5.2. **Add** a new activity.
 - 5.3. **Delete** a scheduled activity (select the activity **Delete**).
 - 5.4. **Copy** the scheduled activities of the weekday to other days.
 - 5.5. **Change the temperature** linked to an activity.

Fig.5



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**For more information, see**

Changing the domestic hot water temperature temporarily, page 23

Activating a timer program, page 15

■ Activating a timer program

In order to use a timer program, it is necessary to activate the operating mode **Scheduling**. This activation is done separately for each zone.

1. Select the tile of the zone you want to change.
2. Select **Scheduling**.
3. Select timer program **Schedule 1**, **Schedule 2** or **Schedule 3**.

**For more information, see**

Creating a timer program to control the room temperature, page 14

5.7 Changing the domestic hot water temperature

5.7.1 Changing the domestic hot water operating mode

For hot water production, you can choose from 5 operating modes:

1. Select the tile .
⇒ The **DHW QuickSelect** menu opens.
2. Select the desired operating mode:

Tab.13 DHW operating modes

Icon	Mode	Description
	Scheduling	The domestic hot water temperature is controlled by a timer program
	Manual	The domestic hot water temperature is set to a fixed setting
	Hot water boost	The domestic hot water temperature is increased temporarily
	Holiday	The domestic hot water temperature is reduced during your holiday to save energy
	Antifrost	Protect the boiler and installation from freezing in winter

5.7.2 Increasing the domestic hot water temperature temporarily

Regardless of the operating mode selected for domestic hot water production, it is possible to increase the domestic hot water temperature for a short period. After this period the hot water temperature decreases to the **Reduced** setpoint.

**Important**

The domestic hot water temperature can only be adjusted in this way if a domestic hot water sensor is installed.

1. Select the tile .
2. Select **Hot water boost**.
3. Set the duration in hours and minutes.
⇒ The temperature is increased to the **DHW comfort setpoint**.

5.7.3 Changing the comfort and reduced hot water temperature

You can change the comfort and reduced hot water temperature in the timer program.

1. Select the tile .
2. Select **Zone configuration** > **Domestic Hot Water Setpoints**.

3. Select the DHW setpoint you want to change:
 - 3.1. **DHW comfort setpoint:** The DHW temperature when the hot water production is switched on.
 - 3.2. **DHW reduced setpoint:** The DHW temperature when the hot water production is switched off.
4. Change the temperature of the selected setpoint

5.7.4 Timer program to control the DHW temperature

■ Creating a timer program to control the domestic hot water temperature

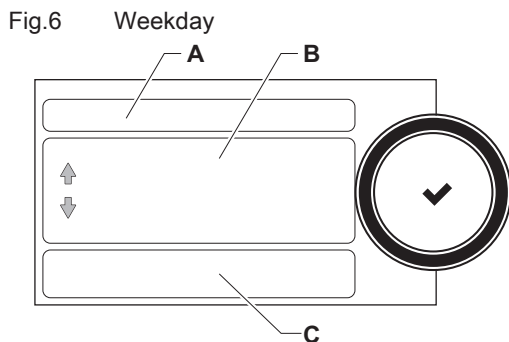
A timer program allows you to vary the domestic hot water temperature per hour and per day. The hot water temperature is linked to the activity of the timer program.



Important

You can create up to three timer programs. For example, you can create a program for a week with normal working hours and a programme for a week when you are at home most of the time.

1. Select the tile [🏠].
2. Select ⚙️ **Zone configuration > DHW Schedule**.
3. Select the timer program you want to modify: **Schedule 1**, **Schedule 2** or **Schedule 3**.
 - ⇒ Activities scheduled for Sunday are displayed. The last scheduled activity of a day is active until the first activity of the next day. The scheduled activities are shown. At initial start-up, all weekdays have two standard activities; **Comfort** starting at 6:00 and **Reduced** starting at 22:00.
4. Select the weekday you want to modify.
 - A** Weekday
 - B** Overview of scheduled activities
 - C** List of actions
5. Perform the following actions, if necessary:
 - 5.1. **Edit** the start time and/or activity of a scheduled activity.
 - 5.2. **Add** a new activity.
 - 5.3. **Delete** a scheduled activity (select the activity **Delete**).
 - 5.4. **Copy** the scheduled activities of the weekday to other days.
 - 5.5. **Change the temperature** linked to an activity.



■ Activating a DHW timer program

In order to use a DHW timer program, it is necessary to activate the operating mode **Scheduling**. This activation is done separately for each zone.

1. Select the tile [🏠].
2. Select ⚙️ **Scheduling**.
3. Select DHW timer program **Schedule 1**, **Schedule 2** or **Schedule 3**.

5.8 Activating all holiday programs

If you go on holiday, the room temperature and domestic hot water temperature can be reduced to save energy. With the following procedure you can activate the holiday mode for all zones and domestic hot water temperature.

1. Select the tile [🏠].


2. Set the following parameters:

Tab.14 Holiday program settings

Parameter	Description
Start date holiday	Set the start time and date of your holiday
End date holiday	Set the end time and date of your holiday
Wished room zone temperature on holiday period	Set the room temperature for the holiday period
Reset	Reset or cancel the holiday program



5.9 Switching the central heating on or off

You can switch off the central heating function of the boiler to save energy, for example during the summer period.

1. Select the tile .
2. Select **CH function on**.
3. Select the following setting:
 - 3.1. **Off** to switch off the central heating function.
 - 3.2. **On** to switch the central heating function on again.

5.10 Reading the installer's name and phone number

The installer can set his name and phone number in the control panel. You can read this information when you want to contact the installer.

1. Press the  button.
2. Select **System Settings**  > .Installer Details
 - ⇒ The installer's name and phone number is shown.




6 Installer instructions

6.1 Initial start-up

Commissioning menu	Message	Setting
Automatic display after initial installation and start-up of the boiler	Select country	Country where boiler is installed
	Select language	Preferred language
	Enable Daylight Saving Time	Off
	Set Date and Time	Year/Month/Day


6.2 Accessing the installer level

Some parameters that may affect the operation of the boiler are protected by an access code. Only the installer is allowed to modify these parameters.



1. Select the tile [].
2. Enter code: 0012
⇒ When the installer level is active, the status of the tile [] changes from **Off** into **On**.
3. To leave the installer level, select the tile [] > **Confirm**.

When the control panel is not used for 30 minutes, the installer level is left automatically.

6.3 Configuring the installation at installer level

Configure the installation by pressing the [≡]-button and selecting **Installation Setup** . Select the control unit or circuit board you want to configure:

Tab.15 CU-GH08


Icon	Zone or function	Description
	CIRCA / CH	Central heating circuit
	Gas fired appliance	Gas boiler

Tab.16 Configuring a zone or function of CU-GH08 or

Parameters, counters, signals	Description
Parameters	Set the parameters at installer level
Counters	Read the counters at installer level
Signals	Read the signals at installer level
Adv. Parameters	Set the parameters at advanced installer level
Adv. Counters	Read the counters at advanced installer level
Adv. Signals	Read the signals at advanced installer level

6.3.1 Setting the installer details


You can store your name and phone number in the control panel to be read by the user.

1. Press the ≡ button.
2. Select **System Settings**  > **Installer Details**.
3. Enter the following data:

Installer name	Name of the installer
Installer phone	Phone number of the installer

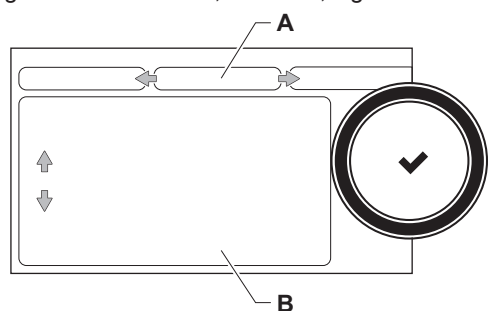
6.3.2 Setting the parameters

You can change the parameters and settings of the appliance and the connected control boards, sensors etc. to configure the installation.

1. Press the  button.
2. Select **> Installation Setup**.
3. Select the zone or device you want to configure.
4. Select **Parameters, counters, signals > Parameters** to change a parameter.
5. If available, select **Adv. Parameters** to change a parameter at the advanced installer level.

- A** - **Parameters**
 - **Counters**
 - **Signals**
 - **Adv. Parameters**
 - **Adv. Counters**
 - **Adv. Signals**
- B** List of settings or values

Fig.7 Parameters, counters, signals



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Caution

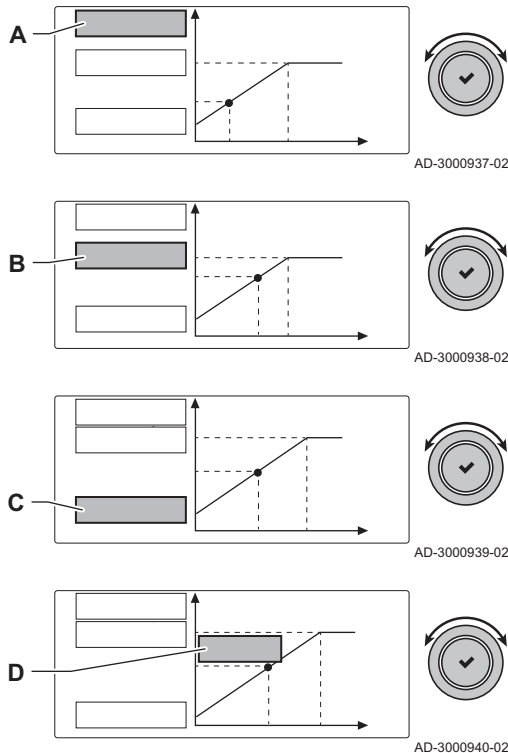
Changing the factory settings may adversely affect the operation of the boiler.

6.3.3 Adjusting the heating curve

When an outside temperature sensor is connected to the installation, the relation between the outside temperature and the central heating flow temperature is controlled by a heating curve. This curve can be adjusted to the requirements of the installation.

1. Select the tile of the zone you want to configure.
2. Select **Control strategy**.
3. Select the setting **Outdoor Temp. based** or **Outdoor & room based**.
 ⇒ The option **Heating Curve** appears in the **Zone setup** menu.
4. Select **Heating Curve**.
 ⇒ A graphic display of the heating curve is shown.

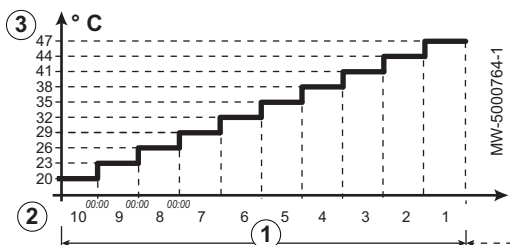
Fig.8 Changing the heating curve



5. Adjust the following parameters:

A	Slope:	Slope of the heating curve: • Floor heating circuit: slope between 0.4 and 0.7 • Radiator circuit: slope at approximately 1.5
B	Max:	Maximum temperature of the heating circuit
C	Base:	Ambient temperature setpoint
D	xx°C ; xx°C	Relationship between the heating circuit flow temperature and the outdoor temperature. This information is visible throughout the slope.

Fig.9 Screed drying program



6.3.4 Activating the screed drying program

The screed drying program reduces the drying time of a freshly poured screed floor. Every day at midnight, the temperature setpoint is recalculated and the number of days is decremented.

1. Select the tile of the zone with the screed floor.
2. Select **Set Screed Drying**
3. Set the following parameters:

1	Zone screed drying	Number of days needed for drying
2	ScreedStartTemp	Start temperature of the screed drying program
3	ScreedStopTemp	End temperature of the screed drying program

⇒ The screed drying program will start and continue for the selected number of days.

6.4 Commissioning the installation

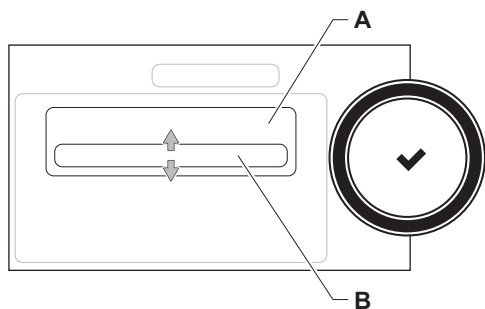
The commissioning menu shows submenus and tests needed for the commissioning of the appliance.

1. Press the button.
2. Select **Commissioning Menu**.
3. Select the submenu with settings you want to change or the test you want to perform.

6.4.1 Chimney sweep menu

Select the tile to open the chimney sweep menu. The **Change load test mode** menu will appear:

Fig.10 Load test



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A Change load test mode

B Load test mode


Tab.17 Load tests in the chimney sweep menu 

Change load test mode	Settings
Off	No test
MinimumPower	Part load test
MaximumPowerCH	Full load test for Central Heating mode
MaximumPowerDhw	Full load test for Central Heating + Domestic Hot Water mode

Tab.18 Load test settings

Load Test menu	Settings
ChimneyModeStatus	Select the load test to start the test.
System Flow Temp	Read the central heating flow temperature
T return	Read the central heating return temperature
Actual fan RPM	Read the actual fan speed
Actual flame current	Read the actual flame current
Fan RPM Max CH	Adjust the maximum fan speed during Central Heating mode
Fan RPM Min	Adjust the minimum fan speed during Central Heating + Domestic Hot Water mode
Fan RPM Start	Adjust the start fan speed

■ Performing the full load test

1. Select the tile .
 - ⇒ The **Change load test mode** menu appears.
2. Select the test **MaximumPowerCH**.

A Change load test mode

B MaximumPowerCH


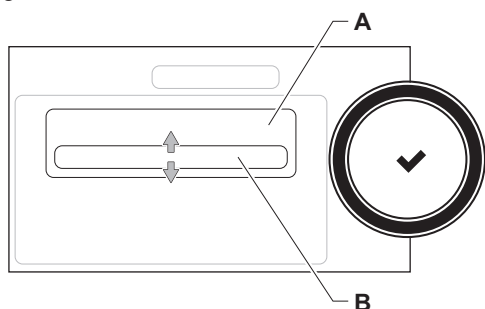
- ⇒ The full load test starts. The selected load test mode is shown in the menu and the icon  appears in the top right of the screen.
3. Check the load test settings and adjust if necessary.
 - ⇒ Only the parameters shown in bold can be changed.

Fig.11 Full load test



AD-3000941-02

■ Performing the part load test


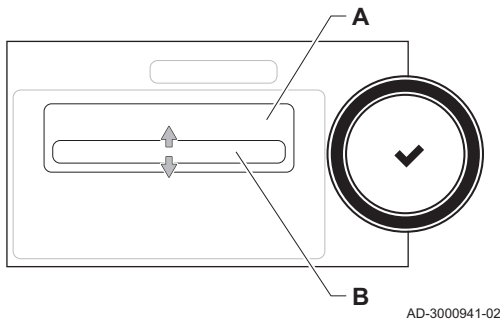
1. If the full load test is still running, press the  button to change the load test mode.

Fig.12 Part load test



2. If the full load test was finished, select the tile [🔧] to restart the chimney sweep menu.

A Change load test mode

B MinimumPower

3. Select the **MinimumPower** test in the menu **Change load test mode**.
⇒ The part load test starts. The selected load test mode is shown in the menu and the icon 🧹 appears in the top right of the screen.
4. Check the load test settings and adjust if necessary.
⇒ Only the parameters shown in bold can be changed.
5. End the part load test by pressing the ⏹ button.
⇒ The message **Running load test(s) stopped!** is displayed.

6.4.2 Saving the commissioning settings

You can save all current settings on the control panel. These settings can be restored if necessary, for example after replacement of the control unit.

1. Press the ≡ button.
2. Select > **Advanced Service Menu** > **Save as commissioning settings**.
3. Select **Confirm** to save the settings.

When you have saved the commissioning settings, the option **Revert commissioning settings** becomes available in the **Advanced Service Menu**.

6.5 Maintaining the installation

6.5.1 Viewing the service notification

When a service notification appears on the display, you can view the details of the notification.

1. Select the tile [🔧].
⇒ The **View Service Notification** menu opens.
2. Select the parameter or value you want to view.

6.5.2 Reading out measured values

The control unit continually registers various values from the boiler and the connected sensors. These values can be read on the control panel of the boiler.

1. Press the ≡ button.
2. Select > **Installation Setup**.
3. Select the zone or device you want to read out.
4. Select **Parameters, counters, signals** > **Counters** or **Signals** to read out a counter or signal.
5. If available, select **Adv. Counters** or **Adv. Signals** to read out counters or signals at the advanced installer level.

A - Parameters

- Counters

- Signals

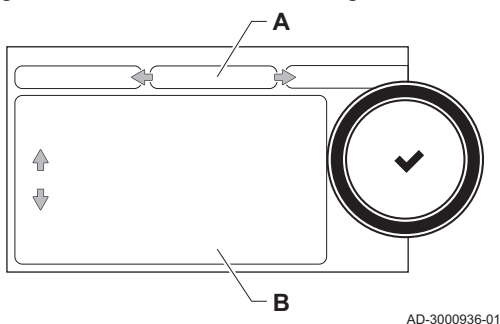
- Adv. Parameters

- Adv. Counters

- Adv. Signals


B List of settings or values

Fig.13 Parameters, counters, signals



6.5.3 Viewing production and software information

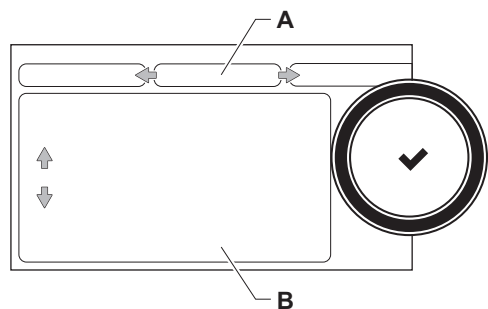
You can read details about the production dates, hardware and software versions of the appliance and all connected devices.

1. Press the  button.
2. Select **Version Information**.
3. Select the appliance, control board or any other device you want to view.

- A** Select the appliance, control board or device
B List of information

4. Select the information you want to view.



Fig.14 Version information



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6.5.4 Updating the control panel firmware

You can update the firmware of the control panel when you have received an USB stick with a new firmware version.

1. Remove the HMI T-control control panel from the appliance.
2. Locate the USB port at the bottom of the control panel's PCB.
3. Place the USB stick with the new firmware on the USB port.
4. Press the  button.
5. Select System Settings  > **Firmware Update**.
 ⇒ The message **Available Files:** appears on the screen.
6. Select the appropriate file.
 ⇒ The firmware update starts.
7. Wait till the update is finished.
 ⇒ The control panel is automatically restarted and the main display appears.
8. Do not switch off the power of the appliance for at least 5 minutes to ensure that the firmware update is stored correctly.

6.5.5 Changing the domestic hot water temperature temporarily

When the timer program is active with a reduced domestic hot water temperature, you can temporarily increase the hot water temperature for e.g. testing of the hot water production.

1. Press the  button.
2. Select **Installation Setup > Internal DHW > Hot water boost**.
3. Select **Duration of temporary overwrite**.
4. Set the duration in hours and minutes.
 ⇒ The hot water temperature is increased to the **DHW comfort setpoint**.

You can delete or abort the temporary overwrite by selecting **Reset**.



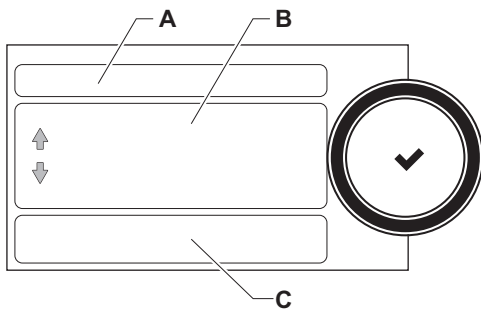
For more information, see

Creating a timer program to control the room temperature, page

14

6.6 Resetting or restoring settings

Fig.15 Configuration numbers



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6.6.1 Resetting the configuration numbers CN1 and CN2

The configuration numbers must be reset when indicated by an error message or when the control unit has been replaced. The configuration numbers can be found on the data plate of the appliance.

- A Select the control unit
- B Extra information
- C Configuration numbers

1. Press the ≡ button.
2. Select **Advanced Service Menu > Set Configuration Numbers**.
3. Select the control unit you want to reset.
4. Select and change the **CN1** setting.
5. Select and change the **CN2** setting.
6. Select **Confirm** to confirm the changed numbers.

6.6.2 Carrying out an auto-detect for the CAN matrix

When a control board has been replaced or removed from the boiler, this function must be used to detect all devices connected to the CAN bus.

1. Press the ≡ button.
2. Select **Advanced Service Menu > Auto Detect**.
3. Select **Confirm** to carry out the auto-detect.

6.6.3 Restoring the commissioning settings

This option is only available when the commissioning settings were saved on the control panel and allows you to restore these settings.

1. Press the ≡ button.
2. Select **Advanced Service Menu > Revert commissioning settings**.
3. Select **Confirm** to restore the commissioning settings.

6.6.4 Resetting to factory settings

You can reset the boiler to the default factory settings.

1. Press the ≡ button.
2. Select **Advanced Service Menu > Reset to Factory Settings**.
3. Select **Confirm** to restore the factory settings.

7 Settings

7.1 Changing the parameters

The boiler's control unit is set for the most common central heating systems. These settings will ensure that virtually every central heating system operates effectively. The user or the installer can optimise the parameters as required.



Caution

Changing the factory settings may adversely affect the operation of the boiler.

7.2 List of parameters

The code of the parameters always contain two letters and three numbers. The letters stand for:

- AP** Appliance related parameters
- CP** Zone related parameters
- DP** Domestic hot water related parameters
- GP** Gas-fired heat engine related parameters
- PP** Central heating related parameters



Important

All possible options are indicated in the adjustment range. The display of the boiler only shows the relevant settings for the appliance.

7.2.1 Description of parameters CU-GH08 control unit



Important

- All tables show the factory setting for the parameters.
- The tables also list parameters that are only applicable if the boiler is combined with other equipment such as an outdoor sensor.
- All possible options are indicated in the adjustment range. The display of the boiler only shows the relevant settings for the appliance.

Tab.19 Navigation for user level

Level	Menu cascade
User / Installer	≡ > Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Parameters
(1) See the column "Navigation" in the following table for the correct navigation. The parameters are grouped in specific functionalities.	

Tab.20 Factory settings at user level

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
AP016	CH function on	Enable central heating heat demand processing	0 - Off 1 - On	Gas fired appliance	Gas fired appliance	1	1	1	1	1	1
AP017	DHW function on	Enable domestic hot water heat demand processing	0 = Off 1 = On	Gas fired appliance	Gas fired appliance	1	1	1	1	1	1
AP073	Summer Winter	Outdoor temperature: upper limit for heating	10 °C - 30 °C	Outdoor temperature	Outdoor temperature	22	22	22	22	22	22

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
AP074	Force summer mode	The heating is stopped. Hot water is maintained. Force Summer Mode	0 = Off 1 = On	Outdoor temperature	Outdoor temperature	0	0	0	0	0	0
AP083	Enable master func	Enable the master functionality of this device on the S-Bus for system control	0 = No 1 = Yes	Mandatory bus master	Mandatory bus master	0	0	0	0	0	0
AP089	Installer name	Name of the installer		Mandatory bus master	Mandatory bus master	None	None	None	None	None	None
AP090	Installer phone	Telephone number of the installer		Mandatory bus master	Mandatory bus master	0	0	0	0	0	0
AP107	Color display Mk2	Color display Mk2	0 = White 1 = Red 2 = Blue 3 = Green 4 = Orange 5 = Yellow 6 = Violet	Mandatory bus master	Mandatory bus master	2	2	2	2	2	2
CP010	Tflow setpoint zone	Zone flow temperature setpoint, used when the zone is set to a fixed flow setpoint.	0 °C - 90 °C	Direct zone	Direct zone	90	90	90	90	90	90
CP080	User T.Room Activity	Room setpoint temperature of the user zone activity	5 °C - 30 °C	Direct zone	Direct zone	16	16	16	16	16	16
CP081	User T.Room Activity	Room setpoint temperature of the user zone activity	5 °C - 30 °C	Direct zone	Direct zone	20	20	20	20	20	20
CP082	User T.Room Activity	Room setpoint temperature of the user zone activity	5 °C - 30 °C	Direct zone	Direct zone	6	6	6	6	6	6
CP083	User T.Room Activity	Room setpoint temperature of the user zone activity	5 °C - 30 °C	Direct zone	Direct zone	21	21	21	21	21	21
CP084	User T.Room Activity	Room setpoint temperature of the user zone activity	5 °C - 30 °C	Direct zone	Direct zone	22	22	22	22	22	22
CP085	User T.Room Activity	Room setpoint temperature of the user zone activity	5 °C - 30 °C	Direct zone	Direct zone	20	20	20	20	20	20
CP200	Manu ZoneRoomTempSet	Manually setting the room temperature setpoint of the zone	5 °C - 30 °C	Direct zone	Direct zone	20	20	20	20	20	20
CP320	OperatingZoneMode	Operating mode of the zone	0 = Scheduling 1 = Manual 2 = Antifrost 3 = Temporary	Direct zone	Direct zone	1	1	1	1	1	1
CP510	Temporary Room Setp	Temporary room setpoint per zone	5 °C - 30 °C	Direct zone	Direct zone	20	20	20	20	20	20
CP550	Zone, fire place	Fire Place mode is active	0 = Off 1 = On	Direct zone	Direct zone	0	0	0	0	0	0

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
CP6 60	Icon display zone	Choice icon to display this zone	0 = None 1 = All 2 = Bedroom 3 = Livingroom 4 = Study 5 = Outdoor 6 = Kitchen 7 = Basement 8 = Swimming Pool 9 = DHW Tank 10 = DHW Electrical Tank 11 = DHW Layered Tank 12 = Internal Boiler Tank 13 = Time Program	Direct zone	Direct zone	3	3	3	3	3	3
DP0 60	DHW timeprog. select	Time program selected for DHW.	0 = Schedule 1 1 = Schedule 2 2 = Schedule 3 3 = Cooling	Internal DHW	Internal DHW	0	0	0	0	0	0
DP0 70	DHW comfort setpoint	Comfort temperature setpoint from the Domestic Hot Water tank	40 °C - 65 °C	Internal DHW	Internal DHW	60	60	60	60	60	60
DP0 80	DHW reduced setpoint	Reduced temperature setpoint from the Domestic Hot Water tank	7 °C - 50 °C	Internal DHW	Internal DHW	15	15	15	15	15	15
DP2 00	DHW mode	DHW primary mode current working setting	0 = Scheduling 1 = Manual 2 = Antifrost 3 = Temporary	Internal DHW	Internal DHW	1	1	1	1	1	1
DP3 37	DHW holiday setpoint	Holiday temperature setpoint from the Domestic Hot Water tank	10 °C - 60 °C	Internal DHW	Internal DHW	10	10	10	10	10	10

Tab.21 Navigation for installer level

Level	Menu cascade
User / Installer	≡ > Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Parameters
(1) See the column "Navigation" in the following table for the correct navigation. The parameters are grouped in specific functionalities.	

Tab.22 Factory settings at installer level

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
AP00 1	BL input setting	Blocking input setting (1: Full blocking, 2: Partial blocking, 3: User reset locking)	1 = Full blocking 2 = Partial blocking 3 = User reset locking 4 = Backup Relieved 5 = Heat Pump Relieved 6 = HP & backup relieved 7 = High, Low Tariff 8 = Photovoltaic HP Only 9 = PV HP And backup 10 = Smart Grid ready 11 = Heating Cooling	Gas fired appliance	Gas fired appliance	1	1	1	1	1	1
AP00 3	Flue Valve Wait Time	Wait time after burner command to open flue gas valve	0 Sec - 255 Sec	Gas fired appliance	Gas fired appliance	0	0	0	0	0	0
AP00 6	Min. water pressure	Appliance will report low water pressure below this value	0 bar - 6 bar	Gas fired appliance	Gas fired appliance	0,8	0,8	0,8	0,8	0,8	0,8
AP00 8	Time release signal	The appliance will wait x sec (0=off) for the release contact to close in order to start the burner	0 Sec - 255 Sec	Gas fired appliance	Gas fired appliance	0	0	0	0	0	0
AP00 9	Service hours burner	Burning hours before raising a service notification	0 Hours - 51000 Hours	Gas fired appliance	Gas fired appliance	6000	6000	6000	6000	6000	6000
AP01 0	Service notification	The type of service needed based on burn and powered hours	0 = None 1 = Custom notification 2 = ABC notification	Gas fired appliance	Gas fired appliance	2	2	2	2	2	2
AP01 1	Service hours mains	Hours powered to raise a service notification	0 Hours - 51000 Hours	Gas fired appliance	Gas fired appliance	3500 0	3500 0	3500 0	3500 0	3500 0	3500 0
AP06 3	CH Set Max System	Maximum flow temperature setpoint for burning at central heating	20 °C - 90 °C	Gas fired appliance	Gas fired appliance	90	90	90	90	90	90
AP07 9	Building Inertia	Inertia of the building used for heat up speed	0 - 15	Outdoor temperature	Outdoor temperature	3	3	3	3	3	3

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
AP080	Frost min out temp	Outside temperature below which the antifreeze protection is activated	-60 °C - 25 °C	Outdoor temperature	Outdoor temperature	-10	-10	-10	-10	-10	-10
AP082	Enable daylight save	Enable daylight saving for the system to save energy during winter	0 = Off 1 = On	Mandatory bus master	Mandatory bus master	1	1	1	1	1	1
AP091	Outside Sens. Source	Type of outside sensor connection to be used	0 = Auto 1 = Wired sensor 2 = Wireless sensor 3 = Internet measured 4 = None	Outdoor temperature	Outdoor temperature	0	0	0	0	0	0
AP108	OutsideSensorEnabled	Enable the function Outside Sensor	0 = Auto 1 = Wired sensor 2 = Wireless sensor 3 = Internet measured 4 = None	Outdoor temperature	Outdoor temperature	0	0	0	0	0	0
CP000	MaxZoneFlowSetpoint	Maximum Flow Temperature setpoint zone	0 °C - 90 °C	Direct zone	Direct zone	80	80	80	80	80	80
CP020	Zone Function	Functionality of the zone	0 = Disable 1 = Direct 2 = Mixing Circuit 3 = Swimming pool 4 = High Temperature 5 = Fan Convactor 6 = DHW tank 7 = Electrical DHW 8 = Time Program 9 = ProcessHeat 10 = DHW Layered 11 = DHW Internal tank 12 = DHW Commercial Tank 31 = DHW FWS EXT	Direct zone	Direct zone	1	1	1	1	1	1

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
CP060	RoomT. Holiday	Wished room zone temperature on holiday period	5 °C - 20 °C	Direct zone	Direct zone	6	6	6	6	6	6
CP070	MaxReducedRoomT.Lim	Max Room Temperature limit of the circuit in reduced mode, that allows switching to comfort mode	5 °C - 30 °C	Direct zone	Direct zone	16	16	16	16	16	16
CP210	Zone HCZP Comfort	Comfort footpoint of the temperature of heat curve of the circuit	15 °C - 90 °C	Direct zone	Direct zone	15	15	15	15	15	15
CP220	Zone HCZP Reduced	Reduced footpoint of the temperature of heat curve of the circuit	15 °C - 90 °C	Direct zone	Direct zone	15	15	15	15	15	15
CP230	Zone Heating Curve	Heating curve temperature gradient of the zone	0 - 4	Direct zone	Direct zone	1,5	1,5	1,5	1,5	1,5	1,5
CP340	TypeReducedNightMode	Type of reduced night mode, stop or maintain heating of circuit	0 = Stop heat demand 1 = Continue heat demand	Direct zone	Direct zone	1	1	1	1	1	1
CP470	Zone screed drying	Setting of the screed drying program of the zone	0 Days - 30 Days	Direct zone	Direct zone	0	0	0	0	0	0
CP480	ScreedStart Temp	Setting of the start temperature of the screed drying program of the zone	20 °C - 50 °C	Direct zone	Direct zone	20	20	20	20	20	20
CP490	ScreedStop Temp	Setting of the stop temperature of the screed drying program of the zone	20 °C - 50 °C	Direct zone	Direct zone	20	20	20	20	20	20
CP570	ZoneTimeProg Select	Time Program of the zone selected by the user	0 = Schedule 1 1 = Schedule 2 2 = Schedule 3 3 = Cooling	Direct zone	Direct zone	0	0	0	0	0	0
CP730	Zone Heat up speed	Selection of heat up speed of the zone	0 = Extra Slow 1 = Slowest 2 = Slower 3 = Normal 4 = Faster 5 = Fastest	Direct zone	Direct zone	3	3	3	3	3	3
CP740	Zone cool down speed	Selection of cool down speed of the zone	0 = Slowest 1 = Slower 2 = Normal 3 = Faster 4 = Fastest	Direct zone	Direct zone	2	2	2	2	2	2

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
CP7 50	MaxZone Preheat time	Maximum zone preheat time	0 Min - 240 Min	Direct zone	Direct zone	90	90	90	90	90	90
CP7 80	Control strategy	Selection of the control strategy for the zone	0 = Automatic 1 = Room Temp. based 2 = Outdoor Temp. based 3 = Outdoor & room based	Direct zone	Direct zone	0	0	0	0	0	0
DP0 04	Legionella calor.	Legionella mode protection calorifier	0 = Disabled 1 = Weekly 2 = Daily	Tank DHW	Tank DHW	1	1	1	1	1	1
DP0 07	Dhw 3wv Standby	Position of three way valve during standby	0 = CH position 1 = DHW position	Tank DHW	Tank DHW	0	0	0	0	0	0
DP0 35	Start pump DHW calo	Start pump for Domestic Hot Water calorifier	-20 °C - 20 °C	Tank DHW	Tank DHW	-3	-3	-3	-3	-3	-3
DP1 50	DHW Thermostat	Set DHW Thermostat function On or Off	0 = Off 1 = On	Tank DHW	Tank DHW	1	1	1	1	1	1
DP1 60	DHW AntiLeg Setpoint	Setpoint for DHW anti legionella	50 °C - 90 °C	Internal DHW	Internal DHW	70	70	70	70	70	70
DP1 70	Start time holiday	Start time of holiday Time stamp		Internal DHW	Internal DHW	-	-	-	-	-	-
DP1 80	End time holiday	End time of holiday Timestamp		Internal DHW	Internal DHW	-	-	-	-	-	-
GP0 17	Max power	Maximum power percentage in kilo Watt	0 kW - 80 kW	Gas fired appliance	Gas fired appliance	71,5	71,5	104,6	103,6	124,5	140,9
GP0 50	Power Min	Minimum power in kilo Watt for RT2012 calculation	0 kW - 80 kW	Gas fired appliance	Gas fired appliance	1,6	4,7	5,1	6,7	10,8	11,4
PP01 5	CH Pump postrun time	Central heating pump post run time	0 Min - 99 Min	Gas fired appliance	Gas fired appliance	1	1	1	1	1	1

Tab.23 Navigation for advanced installer level

Level	Menu cascade
Advanced installer	≡ > Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Parameters > Adv. Parameters
(1) See the column "Navigation" in the following table for the correct navigation. The parameters are grouped in specific functionalities.	

Tab.24 Factory settings at advanced installer level

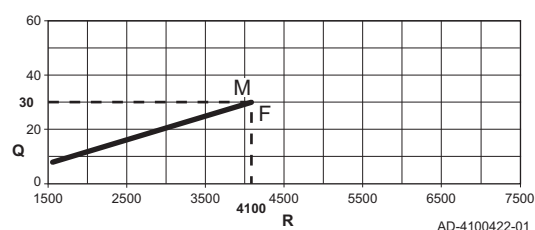
Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
AP002	Manual Heat Demand	Enable manual heat demand function	0 = Off 1 = With setpoint 2 = TOutdoor Control	Gas fired appliance	Gas fired appliance	0	0	0	0	0	0
AP026	Setpoint manual HD	Flow temperature setpoint for manual heat demand	10 °C - 90 °C	Gas fired appliance	Gas fired appliance	40	40	40	40	40	40
AP056	Outdoor sensor	Enable outdoor sensor	0 = No outside sensor 1 = AF60 2 = QAC34	Outdoor temperature	Outdoor temperature	1	1	1	1	1	1
AP102	Boiler Pump function	Configuration of the boiler pump as zone pump or system pump (feed lowloss header)	0 = No 1 = Yes	Gas fired appliance	Gas fired appliance	0	0	0	0	0	0
AP111	Can line length	Can line length	0 = < 3m 1 = < 80m 2 = < 500m	Mandatory bus master	Mandatory bus master	0	0	0	0	0	0
CP130	T.OutdoorT oZone	Assigning the outdoor sensor to zone ...	0 - 4	Direct zone	Direct zone	0	0	0	0	0	0
CP240	ZoneRoom UnitInfl	Adjustment of the influence of the zone room unit	0 - 10	Direct zone	Direct zone	3	3	3	3	3	3
CP250	CalSondeA mbZone	Calibration of Zone Room Unit	-5 °C - 5 °C	Direct zone	Direct zone	0	0	0	0	0	0
CP770	Zone Buffered	The zone is after a Buffer tank	0 = No 1 = Yes	Direct zone	Direct zone	0	0	0	0	0	0
DP003	Abs. max fan DHW	Maximum fan speed on Domestic Hot Water	1000 Rpm - 7000 Rpm	Gas fired appliance	Gas fired appliance	4100	5400	5100	5600	6300	6700
DP005	Calorifier Tf offset	Flow setpoint offset for loading calorifier	0 °C - 50 °C	Tank DHW	Tank DHW	20	20	20	20	20	20
DP006	Hyst calorifier	Hysteresis to start heating calorifier	2 °C - 15 °C	Tank DHW	Tank DHW	5	5	5	5	5	5
DP020	Postrun DHW pump/3wv	Post run time of the DHW pump/3 way valve after DHW production	0 Sec - 99 Sec	Gas fired appliance	Gas fired appliance	10	10	10	10	10	10
DP034	DhwCalorifierOffset	Offset for calorifier sensor	0 °C - 10 °C	Tank DHW	Tank DHW	2	2	2	2	2	2
DP140	DHW load type	DHW load type (0 : Combi, 1 : Solo)	0 = Combi 1 = Solo 2 = Layered cylinder 3 = Process heat 4 = External	Internal DHW Tank DHW	Internal DHW Tank DHW Gas fired appliance	1	1	1	1	1	1
GP007	Fan RPM Max CH	Maximum fan speed during Central Heating mode	1400 Rpm - 7000 Rpm	Gas fired appliance	Gas fired appliance	4100	5400	5100	5600	6300	6800

Code	Display text	Description	Range	FunctionGroup	Navigation	30	45	55	65	90	115
GP008	Fan RPM Min	Minimum fan speed during Central Heating + Domestic Hot Water mode	1400 Rpm - 4000 Rpm	Gas fired appliance	Gas fired appliance	1550	1550	1600	1600	1600	1750
GP009	Fan RPM Start	Fan speed at appliance start	1000 Rpm - 4000 Rpm	Gas fired appliance	Gas fired appliance	2500	2500	2500	2500	2500	2500
GP010	GPS Check	Gas Pressure Switch check on/off	0 = No 1 = Yes	Gas fired appliance	Gas fired appliance	0	0	0	0	0	0
GP021	Temp diff Modulating	Modulate back when delta temperature is large then this threshold	10 °C - 40 °C	Gas fired appliance	Gas fired appliance	25	25	25	25	25	20
GP022	Tfa Filter Tau	Tau factor for average flow temperature calculation	1 - 255	Gas fired appliance	Gas fired appliance	1	1	1	1	1	1
PP014	ChPumpDT Reduction	Reduction of temperature delta modulating for pump modulation	0 °C - 40 °C	Gas fired appliance	Gas fired appliance	18	18	18	18	18	18
PP016	Max. CH pump speed	Maximum central heating pump speed (%)	20 % - 100 %	Gas fired appliance	Gas fired appliance	100	100	100	100	100	100
PP017	ChPumpSpeedMaxFactor	Maximum central heating at minimum load as percentage of max pump speed	0 % - 100 %	Gas fired appliance	Gas fired appliance	100	100	100	100	100	100
PP018	Min CH pump speed	Minimum central heating pump speed (%)	20 % - 100 %	Gas fired appliance	Gas fired appliance	30	30	30	30	30	30
PP023	Start hysteresis CH	Hysteresis to start burner in heating mode	1 °C - 10 °C	Gas fired appliance	Gas fired appliance	10	10	10	10	10	10

7.2.2 Setting the maximum load for CH operation

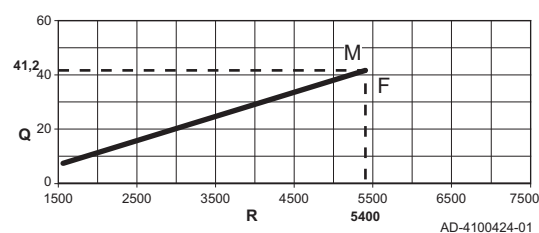
See the graphs for the relationship between load and speed for natural gas. The speed can be changed using parameter **GP007**.

Fig.16 Load Quinta Ace 30



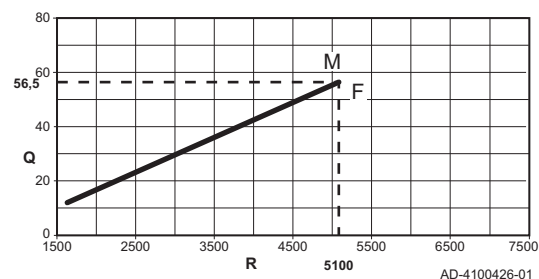
- M** Maximum heat input
- F** Factory setting
- Q** Input (Hi) (kW)
- R** Fan speed (rpm)

Fig.17 Load Quinta Ace 45



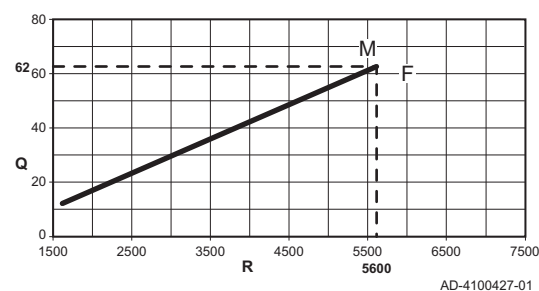
M Maximum heat input
 F Factory setting
 Q Input (Hi) (kW)
 R Fan speed (rpm)

Fig.18 Load Quinta Ace 55



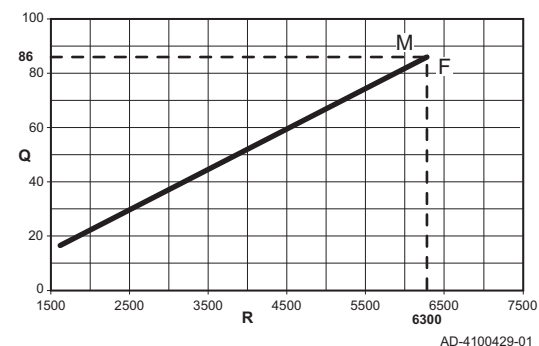
M Maximum heat input
 F Factory setting
 Q Input (Hi) (kW)
 R Fan speed (rpm)

Fig.19 Load Quinta Ace 65



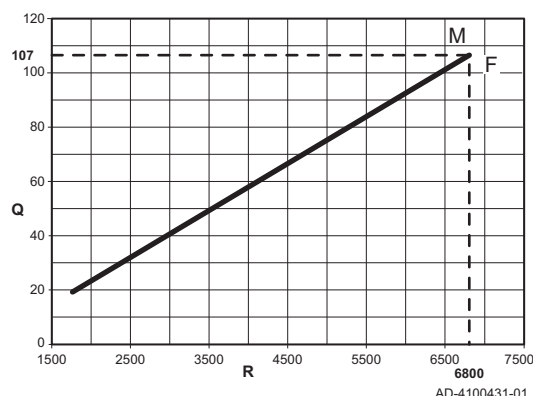
M Maximum heat input
 F Factory setting
 Q Input (Hi) (kW)
 R Fan speed (rpm)

Fig.20 Load Quinta Ace 90



M Maximum heat input
 F Factory setting
 Q Input (Hi) (kW)
 R Fan speed (rpm)

Fig.21 Load Quinta Ace 115



M Maximum heat input
F Factory setting
Q Input (Hi) (kW)
R Fan speed (rpm)

7.3 Reading out measured values

7.3.1 Reading out counters and signals

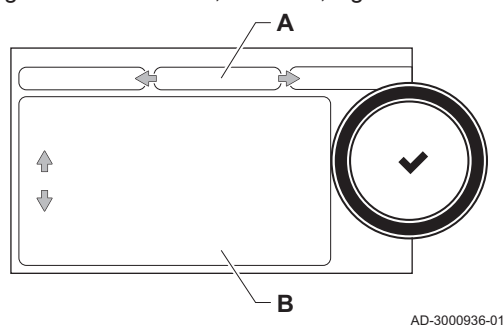
You can read out the counters and signals of the appliance and the connected control boards, sensors and so on.

1. Select On > > **Installation Setup**.
 ⇒ The programmable functions of the appliance and all connected devices are displayed.
2. Select a function, zone or device.
3. Select Parameters, counters, signals.

A Select parameters, counters or signals
B List of settings

4. Select **Counters** or **Signals**.
 ⇒ A list of available counters or signals is shown.
5. Select the counter or signal you want to view.
 ⇒ A description and the number of the counter or signal is shown.
6. If available, select **Adv. Signals** or **Adv. Counters** to view a signal or counter at the advanced installer level.

Fig.22 Parameters, counters, signals



7.3.2 Counters

Tab.25 Navigation for user level

Level	Menu cascade
User / Installer	> Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Counters
(1) See the column "Navigation" in the following table for the correct navigation. The counters are grouped in specific functionalities.	

Tab.26 Counters at user level

Code	Display text	Description	Range	Navigation
AC005	CH Energy Consumed	Energy consumed for central heating	0 kWh - 4294967294 kWh	Gas fired appliance
AC006	DHW Energy Consumed	Energy consumed for domestic hot water	0 kWh - 4294967294 kWh	Gas fired appliance

Tab.27 Navigation for installer level

Level	Menu cascade
User / Installer	> Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Counters
(1) See the column "Navigation" in the following table for the correct navigation. The counters are grouped in specific functionalities.	

Tab.28

Code	Display text	Description	Range	Navigation
AC001	Hours on mains	Number of hours that the appliance has been on mains power	0 Hours - 4294967295 Hours	System Functionality
AC002	Service Burning hrs	Number of hours that the appliance has been producing energy since last service	0 Hours - 131068 Hours	Gas fired appliance
AC003	Hours Op. Service	Number of hours since the previous servicing of the appliance	0 Hours - 131068 Hours	Gas fired appliance
AC004	Burner Starts	Number of generator startings since the previous servicing.	0 - 4294967294	Gas fired appliance
AC026	Pump running hours	Counter that shows the number of pump running hours	0 Hours - 65534 Hours	Gas fired appliance
AC027	Pump starts	Counter that shows the number of pump starts	0 - 65534	Gas fired appliance
DC002	DHW valve cycles	Numbers of Domestic Hot Water diverting valve cycles	0 - 4294967294	Tank DHW Gas fired appliance
DC003	Hrs DHW 3wv	Number of hours during which the diverting valve is in DHW position	0 Hours - 65534 Hours	Tank DHW Gas fired appliance
DC004	DHW burner starts	Number of burner starts for Domestic Hot Water	0 - 65534	Tank DHW Gas fired appliance
DC005	DHW burning hours	Number of burning hours in Domestic Hot Water	0 Hours - 65534 Hours	Tank DHW Gas fired appliance
GC007	Failed starts	Number of failed starts	0 - 65534	Gas fired appliance
PC001	ChCtrTotalPower Cons.	Total power consumption used by Central Heating	0 kW - 4294967294 kW	Gas fired appliance
PC002	Burner starts total	Total number of burner starts. For heating and domestic hot water	0 - 4294967294	Gas fired appliance
PC003	Hrs Burning total	Total number of burning hours. For heating and domestic hot water	0 Hours - 65534 Hours	Gas fired appliance
PC004	Burner flame loss	Number of burner flame loss	0 - 65534	Gas fired appliance

7.3.3 Signals

Tab.29 Navigation for user level

Level	Menu cascade
User / Installer	≡ > Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Signals
(1) See the column "Navigation" in the following table for the correct navigation. The signals are grouped in specific functionalities.	

Tab.30 Signals at user level

Code	Display text	Description	Range	Navigation
AM001	DHW active	Is the appliance currently in domestic hot water production mode?	0 = Off 1 = On	Gas fired appliance
AM010	Pump speed	The current pump speed	0 % - 100 %	Gas fired appliance
AM011	Service required?	Is service currently required?	0 = No 1 = Yes	Gas fired appliance
AM012	Status Appliance	Current main status of the appliance.	DeviceState	System Functionality

Code	Display text	Description	Range	Navigation
AM014	Sub status Appliance	Current sub status of the appliance.	DeviceSubStatus	System Functionality
AM015	Pump running?	Is the pump running?	0 = Inactive 1 = Active	Gas fired appliance
AM016	System Flow Temp	Flow temperature of appliance.	-25 °C - 150 °C	Producer Generic Gas fired appliance
AM018	T return	Return temperature of appliance. The temperature of the water entering the appliance.	-25 °C - 150 °C	Gas fired appliance
AM019	Water pressure	Water pressure of the primary circuit.	0 bar - 4 bar	Gas fired appliance
AM022	On / Off heat demand	On / Off heat demand	0 = Off 1 = On	Gas fired appliance
AM027	Outside temperature	Instantaneous outside temperature	-60 °C - 60 °C	Outdoor temperature Gas fired appliance
AM033	Next Service Ind.	Next service indication	0 = None 1 = A 2 = B 3 = C 4 = Custom	Gas fired appliance
AM037	3 way valve	Status of the three way valve	0 = CH 1 = DHW	Gas fired appliance
AM040	Control temperature	Temperature used for hot water control algorithms.	0 °C - 250 °C	Gas fired appliance
AM046	Internet T.Outside	Outside temperature received from an internet source	-70 °C - 70 °C	Outdoor temperature
AP078	Out sensor detected	Outside sensor detected in the application	0 = No 1 = Yes	Outdoor temperature
GM001	Actual fan RPM	Actual fan RPM	0 Rpm - 12000 Rpm	Gas fired appliance
GM002	Fan RPM setpoint	Actual fan RPM setpoint	0 Rpm - 12000 Rpm	Gas fired appliance
GM008	Actual flame current	Actual flame current measured	0 µA - 25 µA	Gas fired appliance

Tab.31 Navigation for installer level

Level	Menu cascade
User / Installer	≡ > Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Signals
(1) See the column "Navigation" in the following table for the correct navigation. The signals are grouped in specific functionalities.	

Tab.32 Signals at installer level

Code	Display text	Description	Range	Navigation
AM024	Actual rel. Power	Actual relative power of the appliance	0 % - 100 %	Gas fired appliance
AM036	Flue gas temperature	Temperature of the exhaust gas leaving the appliance	0 °C - 250 °C	Gas fired appliance
AM043	Pwr dwn reset needed	A power down reset is needed	0 = No 1 = Yes	Gas fired appliance
AM101	Internal setpoint	Internal system flow temperature setpoint	0 °C - 250 °C	Gas fired appliance
GM025	STB status	High limit status (0 = open, 1 = closed)	0 = Open 1 = Closed 2 = Off	Gas fired appliance

Code	Display text	Description	Range	Navigation
GM027	Flame Test Active	Flame test 1=active, 0=inactive	0 = Inactive 1 = Active	Gas fired appliance
GM044	ControlledStopReason	Possible reason for Controlled Stop	0 = None 1 = CH Blocking 2 = DHW Blocking 3 = Wait for burner 4 = TFlow > absolute max 5 = TFlow > start temp. 6 = Theat exch. > Tstart 7 = Avg Tflow > Tstart 8 = TFlow > max setpoint 9 = T difference too big 10 = TFlow > stop temp. 11 = Anti cycle on off HD	Gas fired appliance
PM002	CH Setpoint	External winning Central Heating setpoint	0 °C - 250 °C	Gas fired appliance
PM003	ChTflowAverage	Actual average flow temperature	-25 °C - 150 °C	Gas fired appliance

Tab.33 Navigation for advanced installer level

Level	Menu cascade
User / Installer	≡ > Installation Setup > CU-GH08 > Navigation ⁽¹⁾ > Parameters, counters, signals > Signals > Adv. Signals
(1) See the column "Navigation" in the following table for the correct navigation. The signals are grouped in specific functionalities.	

Tab.34 Signals at advanced installer level

Code	Display text	Description	Range	Navigation
AM004	Blocking code	The current blocking code	0 - 255	System Functionality
AM005	Locking code	The currently active locking code.	0 - 255	System Functionality
AM091	SeasonMode	Seasonal mode active (summer / winter)	0 = Winter 1 = Frost protection 2 = Summer neutral band 3 = Summer	Outdoor temperature
GM003	Flame detection	Flame detection	0 = Off 1 = On	Gas fired appliance
GM004	Gas valve 1	Gas valve 1	0 = Open 1 = Closed 2 = Off	Gas fired appliance
GM006	GPS status	Gas Pressure Switch status	0 = Open 1 = Closed 2 = Off	Gas fired appliance
GM007	Ignite	Appliance is igniting	0 = Off 1 = On	Gas fired appliance
GM010	Power available	Available power in % of maximum	0 % - 100 %	Gas fired appliance
GM011	Power setpoint	Power setpoint in % of maximum	0 % - 100 %	Gas fired appliance
GM012	Release Input	Release signal for the CU	0 = No 1 = Yes	Gas fired appliance
GM013	Blocking Input	Blocking input status	0 = Open 1 = Closed 2 = Off	Gas fired appliance

7.3.4 Status and sub-status

The status and sub-status are only shown if applicable.

Tab.35 Status numbers

Status	Description
1	Heat Demand
2	Burner Start
3	Burning CH
4	Burning DhW
5	Burner Stop
6	Pump Post Run
8	Controlled Stop
9	Blocking Mode
10	Locking Mode
11	Load test min
12	Load test CH max
13	Load test DHW max
15	Manual Heat Demand
16	Frost Protection
17	DeAiration
19	Reset In Progress
21	Halted
200	Device Mode
254	Unknown

Tab.36 Sub-status numbers

Sub-status	Description
0	Standby
1	AntiCycling
2	CloseHydraulicValve
3	ClosePump
4	WaitingForStartCond.
10	CloseExtGasValve
11	StartToGlueGasValve
12	CloseFlueGasValve
13	FanToPrePurge
14	WaitForReleaseSignal
15	BurnerOnCommandToSu
16	VpsTest
17	PreIgnition
18	Ignition
19	FlameCheck
20	Interpurge
30	Normal Int.Setpoint
31	Limited Int.Setpoint
32	NormalPowerControl
33	GradLevel1PowerCtrl
34	GradLevel2PowerCtrl
35	GradLevel3PowerCtrl
36	ProtectFlamePwrCtrl
37	StabilizationTime
38	ColdStart

Sub-status	Description
39	ChResume
40	SuRemoveBurner
41	FanToPostPurge
42	OpenExtFlueGasValve
43	StopFanToFlueGVRpm
44	StopFan
45	LimitedPwrOnTflueGas
60	PumpPostRunning
61	OpenPump
62	OpenHydraulicValve
63	SetAntiCycleTimer
200	Initialising Done
201	Initialising Csu
202	Init. Identifiers
203	Init.BL.Parameter
204	Init. Safety Unit
205	Init. Blocking
254	StateUnknown
255	SuOutOfResetsWait1Hr

8 Operation

8.1 Frost protection



Caution

- Drain the boiler and central heating system if you are not going to use your home or the building for a long time and there is a chance of frost.
- The frost protection does not work if the boiler is out of operation.
- The built-in boiler protection is only activated for the boiler and not for the system and radiators.
- Open the valves of all the radiators connected to the system.

Set the temperature control low, for example to 10°C.

If there is no heat demand, the boiler will only switch on to protect itself against frost.

If the temperature of the central heating water in the boiler drops too low, the built-in boiler protection system is activated. This system works as follows:

- At a water temperature lower than 7°C, the heating pump starts.
- If the water temperature is lower than 4°C, the boiler switches on.
- If the water temperature is higher than 10°C the boiler switches off and the circulation pump continues to run for a short time.

To prevent the system and radiators freezing in frost-sensitive areas (e.g. a garage), a frost thermostat or outside sensor can be connected to the boiler.

8.2 Shutdown

If the central heating is not due to be used for a long period of time, it is recommended that the boiler be disconnected from the power supply.

1. Turn off the boiler using the on/off switch.
2. Shut off the gas supply.
3. Keep the area frost-free.

9 Maintenance

9.1 General

The boiler does not require a lot of maintenance. Nevertheless, the boiler must be inspected and maintained periodically. To determine the best time for servicing, the boiler is equipped with an automatic service message. The control unit determines when this service message appears.



Caution

- Maintenance operations must be completed by a qualified installer.
- Replace defective or worn parts with original spare parts.
- An annual inspection is mandatory.

9.2 Maintenance message

The boiler display will clearly indicate that a service is required at the appropriate time. Use the automatic maintenance message for preventive maintenance, to keep faults to a minimum. The service messages show which service kit must be used. These service kits contain all parts and gaskets that are required for the relevant service. These service kits (A, B or C) put together by Remeha are available from spare parts suppliers.



Important

Maintenance messages must be followed up within 2 months.



Important

If the iSense or eTwist modulating thermostat is connected to the boiler, this thermostat can also display the maintenance message. Consult the thermostat manual.



Caution

Reset the maintenance message following every service.


9.2.1 Configuration options for the maintenance message

The maintenance message is configurable using parameter **AP010**:

- 0 = no maintenance message; with this setting you will never see a maintenance message on the display.
- 1 = set your own; with this setting a maintenance message will appear on the display based on the number of hours the burner has been running (configurable with parameter **AP009**) or based on the number of hours connected to the mains (configurable with parameter **AP011**). Whichever amount of hours is reached sooner, will trigger the maintenance message.
- 2 = ABC; with this setting a maintenance message, A, B or C, will appear on the display, based on a set factory algorithm. It follows the cycle: A, B, A, C, A, and so on. This setting is therefore not to be influenced by parameters **AP009** or **AP011**.

9.2.2 Viewing the service notification

When a service notification appears on the display, you can view the details of the notification.

1. Select the tile .
 - ⇒ The **View Service Notification** menu opens.
2. Select the parameter or value you want to view.

9.3 Standard inspection and maintenance operations

9.3.1 Checking the water pressure

1. Check the water pressure.



Important

The recommended water pressure is between 1.5 bar and 2 bar.

⇒ The water pressure must be at least 0.8 bar.

2. If necessary, top up the central heating system.

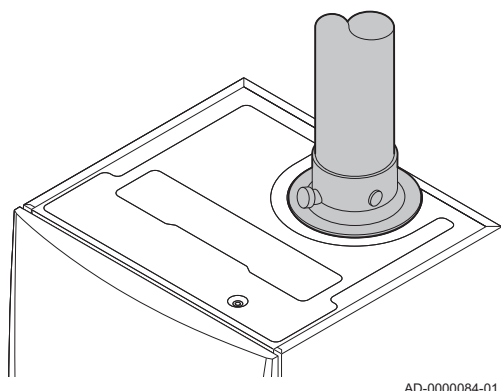
9.3.2 Checking the ionisation current

1. Check the ionisation current at full load and at low load.
⇒ The value is stable after 1 minute.
2. Clean or replace the ionisation/ignition electrode if the value is lower than 4 μA .

9.3.3 Checking the flue gas outlet/air supply connections

1. Check the flue gas outlet and air supply connections for condition and tightness.

Fig.23 Checking flue gas outlet/air supply connections



9.3.4 Checking the combustion

Combustion is checked by measuring the O_2/CO_2 percentage in the flue gas outlet duct.

■ Performing the full load test

1. Select the tile [🔧].
⇒ The **Change load test mode** menu appears.
2. Select the test **MaximumPowerCH**.

A Change load test mode

B MaximumPowerCH

⇒ The full load test starts. The selected load test mode is shown in the menu and the icon 🔧 appears in the top right of the screen.

3. Check the load test settings and adjust if necessary.
⇒ Only the parameters shown in bold can be changed.

Fig.24 Full load test

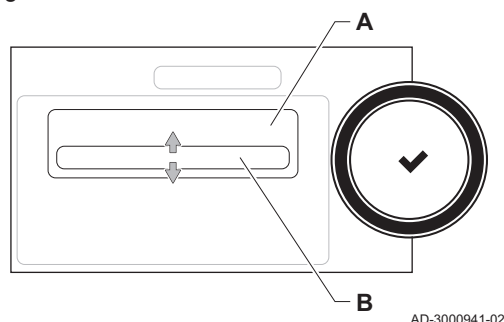
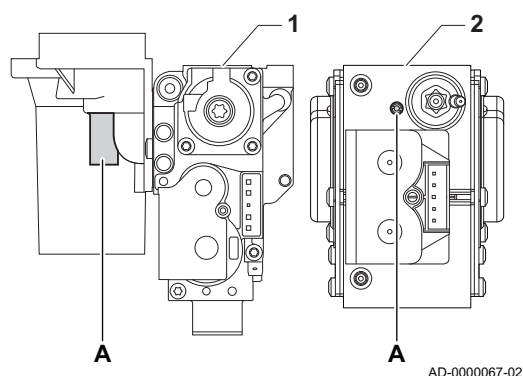


Fig.25 Position of adjusting screw A



AD-0000067-02

■ Checking/setting values for O₂/CO₂ at full load

- 1 Quinta Ace 30 - 45 - 55 - 65 - 90
- 2 Quinta Ace 115

1. Measure the percentage of O₂/CO₂ in the flue gases.
2. Compare the measured value with the checking values in the table.
3. If the measured value is outside of the values given in the table, correct the gas/air ratio.



Warning

Only a qualified installer may carry out the following operations.

4. Using adjusting screw A, adjust the percentage of O₂/CO₂ for the gas type being used to the nominal value. This should always be inside the highest and lowest setting limit.

Tab.37 Checking/setting values for O₂/CO₂ at full load for G20 (H gas)

Values at full load for G20 (H gas)	O ₂ (%) ⁽¹⁾	CO ₂ (%) ⁽¹⁾
Quinta Ace 30	4,3 - 4,8 ⁽¹⁾	9,0 ⁽¹⁾ - 9,3
Quinta Ace 45	4,3 - 4,8 ⁽¹⁾	9,0 ⁽¹⁾ - 9,3
Quinta Ace 55	4,3 - 4,8 ⁽¹⁾	9,0 ⁽¹⁾ - 9,3
Quinta Ace 65	4,3 - 4,8 ⁽¹⁾	9,0 ⁽¹⁾ - 9,3
Quinta Ace 90	4,3 - 4,7 ⁽¹⁾	9,1 ⁽¹⁾ - 9,3
Quinta Ace 115	4,2 - 4,7 ⁽¹⁾	9,1 ⁽¹⁾ - 9,4
(1) Nominal value		

Tab.38 Checking/setting values for O₂/CO₂ at full load for G31 (propane)

Values at full load for G31 (propane)	O ₂ (%) ⁽¹⁾	CO ₂ (%) ⁽¹⁾
Quinta Ace 30	4,4 - 4,9 ⁽¹⁾	10,5 ⁽¹⁾ - 10,8
Quinta Ace 45	4,4 - 4,9 ⁽¹⁾	10,5 ⁽¹⁾ - 10,8
Quinta Ace 55	4,1 - 4,6 ⁽¹⁾	10,7 ⁽¹⁾ - 11,0
Quinta Ace 65	4,6 - 4,9 ⁽¹⁾	10,5 ⁽¹⁾ - 10,7
Quinta Ace 90	4,9 - 5,2 ⁽¹⁾	10,3 ⁽¹⁾ - 10,5
Quinta Ace 115	4,9 - 5,4 ⁽¹⁾	10,2 ⁽¹⁾ - 10,5
(1) Nominal value		



Caution

- The O₂ values at full load must be lower than the O₂ values at part load.
- The CO₂ values at full load must be higher than the CO₂ values at part load.

■ Performing the part load test

1. If the full load test is still running, press the ✓ button to change the load test mode.

Fig.26 Part load test

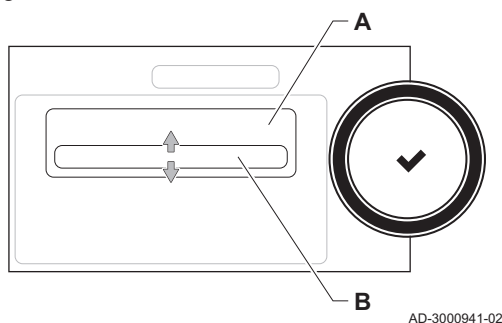
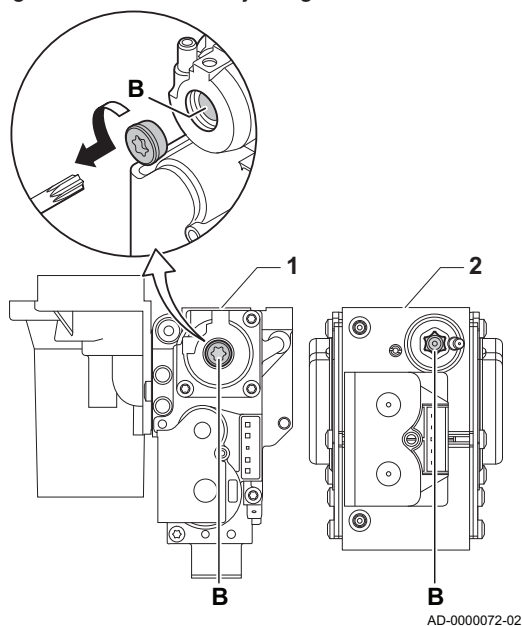


Fig.27 Position of adjusting screw B



- If the full load test was finished, select the tile [🧹] to restart the chimney sweep menu.

A Change load test mode

B MinimumPower

- Select the **MinimumPower** test in the menu **Change load test mode**.
⇒ The part load test starts. The selected load test mode is shown in the menu and the icon 🧹 appears in the top right of the screen.
- Check the load test settings and adjust if necessary.
⇒ Only the parameters shown in bold can be changed.
- End the part load test by pressing the ⏹ button.
⇒ The message **Running load test(s) stopped!** is displayed.

■ Checking/setting values for O₂/CO₂ at part load

- Quinta Ace 30 - 45 - 55 - 65 - 90
- Quinta Ace 115

- Measure the percentage of O₂/CO₂ in the flue gases.
- Compare the measured value with the checking values in the table.
- If the measured value is outside of the values given in the table, correct the gas/air ratio.



Warning

Only a qualified installer may carry out the following operations.

- Using adjusting screw **B**, adjust the percentage of O₂/CO₂ for the gas type being used to the nominal value. This should always be inside the highest and lowest setting limit.
- Set the boiler back to the normal operating status.

Tab.39 Checking/setting values for O₂/CO₂ at part load for G20 (H gas)

Values at part load for G20 (H gas)	O ₂ (%) ⁽¹⁾	CO ₂ (%) ⁽¹⁾
Quinta Ace 30	5,7 ⁽¹⁾ - 6,2	8,2 - 8,5 ⁽¹⁾
Quinta Ace 45	5,7 ⁽¹⁾ - 6,2	8,2 - 8,5 ⁽¹⁾
Quinta Ace 55	4,8 ⁽¹⁾ - 5,3	8,7 - 9,0 ⁽¹⁾
Quinta Ace 65	4,8 ⁽¹⁾ - 5,3	8,7 - 9,0 ⁽¹⁾
Quinta Ace 90	5,2 ⁽¹⁾ - 4,8	9,0 - 8,8 ⁽¹⁾
Quinta Ace 115	5,6 ⁽¹⁾ - 6,1	8,3 - 8,6 ⁽¹⁾
(1) Nominal value		

Tab.40 Checking/setting values for O₂/CO₂ at part load for G31 (propane)

Values at part load for G31 (propane)	O ₂ (%) ⁽¹⁾	CO ₂ (%) ⁽¹⁾
Quinta Ace 30	5,4 ⁽¹⁾ - 5,9	9,9 - 10,2 ⁽¹⁾
Quinta Ace 45	5,7 ⁽¹⁾ - 6,2	9,7 - 10,0 ⁽¹⁾
Quinta Ace 55	5,1 ⁽¹⁾ - 5,6	10,1 - 10,4 ⁽¹⁾
Quinta Ace 65	5,4 ⁽¹⁾ - 5,7	10,0 - 10,2 ⁽¹⁾
Quinta Ace 90	5,7 ⁽¹⁾ - 5,4	10,2 - 10,0 ⁽¹⁾
Quinta Ace 115	5,8 ⁽¹⁾ - 6,3	9,6 - 9,9 ⁽¹⁾
(1) Nominal value		

**Caution**

- The O₂ values at part load must be higher than the O₂ values at full load.
- The CO₂ values at part load must be lower than the CO₂ values at full load.

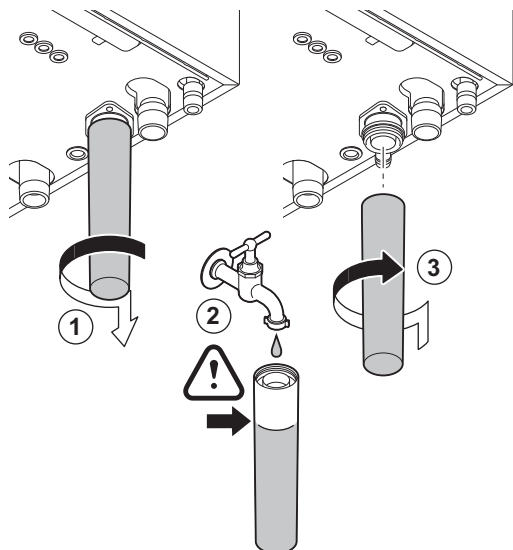
9.3.5 Cleaning the siphon

**Danger**

The siphon must always be sufficiently filled with water. This prevents flue gases from entering the room.

1. Dismantle the siphon and clean it.
2. Fill the siphon up with water.
3. Fit the siphon.

Fig.28 Cleaning the siphon



AD-0000086-01

9.4 Specific maintenance operations

9.4.1 General

**Danger**

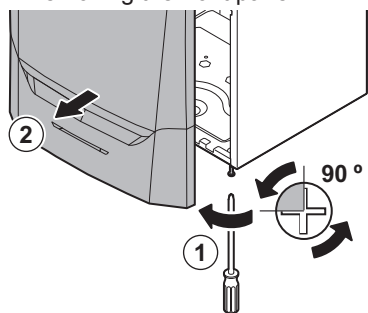
- Disconnect the boiler's electricity supply.
- Shut off the gas supply.

**Caution**

During inspection or maintenance work, always replace all gaskets of the disassembled parts.

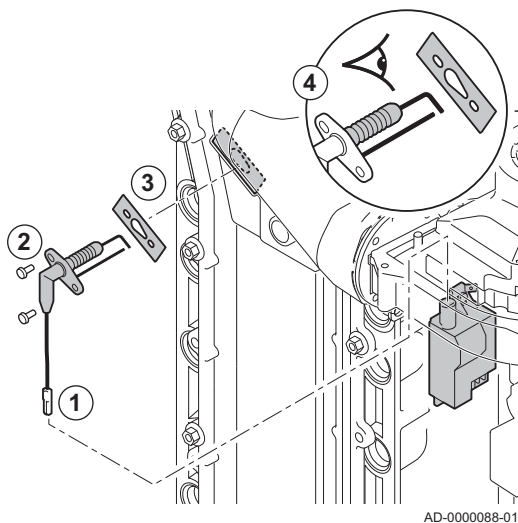
9.4.2 Removing the front panel

Fig.29 Removing the front panel



AD-4000071-01

Fig.30 Replacing the ionisation/ignition electrode



AD-0000088-01

9.4.3 Replacing the ionisation/ignition electrode

The ionisation/ignition electrode must be replaced if:

- The ionisation current is $< 4 \mu\text{A}$.
- The electrode is damaged or worn.
- The electrode is included in the service kit.

1. Remove the plug of the electrode from the ignition transformer.

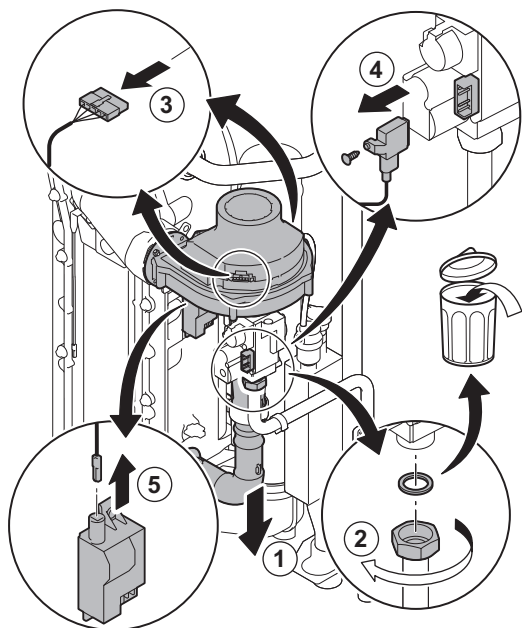


Important

The ignition cable is fixed to the electrode and therefore may not be removed.

2. Remove the two screws.
3. Remove the entire component.
4. Fit the new ionisation/ignition electrode.
5. Reassemble the unit in the reverse order.

Fig.31 Removing the fan

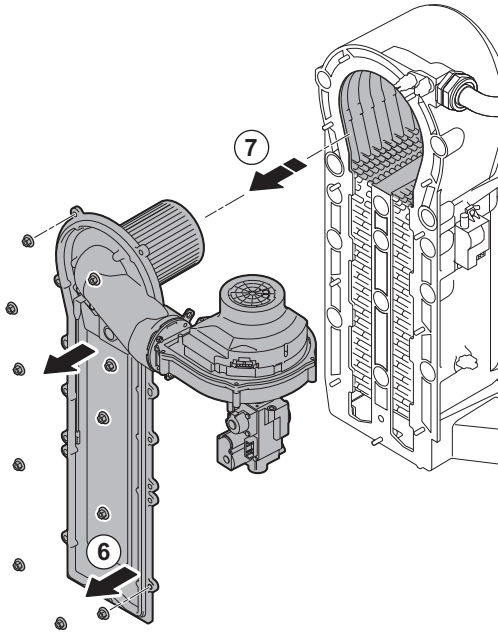


AD-3001178-01

9.4.4 Checking the burner and cleaning the heat exchanger

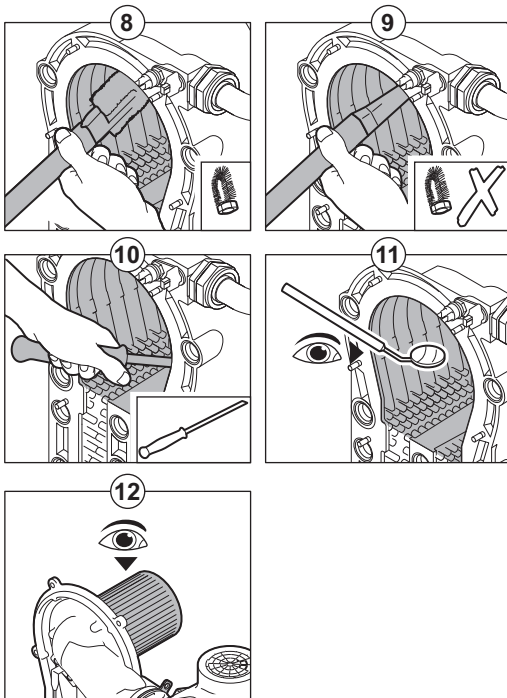
1. Remove the air inlet flue on the venturi.
2. Loosen the gland on the gas valve unit.
3. Disconnect the fan plugs (on the front and rear).
4. Remove the screwed-on plug from the gas valve unit.
5. Remove the ignition electrode plug from the ignition transformer.

Fig.32 Removing the front plate, fan and burner



AD-3001179-01

Fig.33 Cleaning the heat exchanger



AD-3001180-01

6. Remove the front plate from the heat exchanger.
7. Carefully lift the front plate, including the burner and fan, away from the heat exchanger.

8. Use a vacuum cleaner fitted with a special endpiece (accessory) to clean the top part of the heat exchanger (combustion chamber).
9. Vacuum again without the top brush on the end piece.
10. Clean the lower section of the heat exchanger with the special cleaning blade (accessory).
11. Check (e.g. using a mirror) whether any visible contamination has been left behind. If it has, remove it with the vacuum cleaner.
12. Check that the burner cover of the dismantled burner is free from cracks and/or damage. If not, replace the burner.
⇒ Servicing the burner is usually not necessary, it is self-cleaning. Use compressed air to carefully blow away any dust.
13. Reassemble the unit in reverse order.



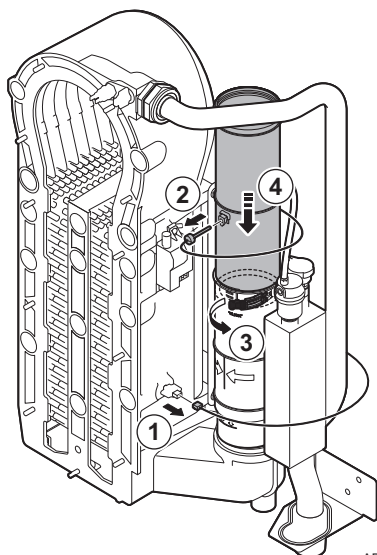
Caution

- Remember to reconnect the fan plug.
- Check that the gasket is correctly positioned between the mixing elbow and the heat exchanger (the gasket must lie absolutely flat in the appropriate groove to ensure that no gas can leak).

14. Open the gas supply and switch the power supply to the boiler back on.

9.4.5 Cleaning the condensate collector

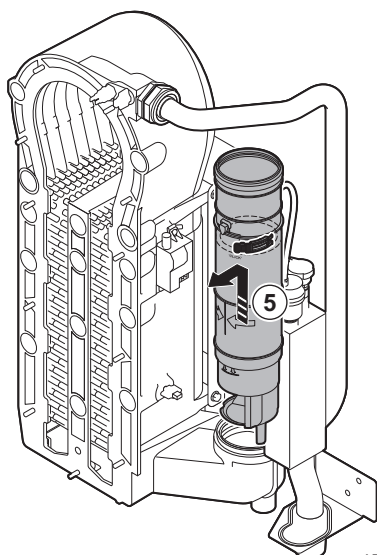
Fig.34 Open clicker flue gas pipe



AD-4000128-01

1. Remove the return sensor connector.
2. Remove the flue gas temperature sensor (if connected)
3. Open the clicker from the flue gas pipe.
4. Push the upper part of the telescopic flue gas pipe down as far as possible.

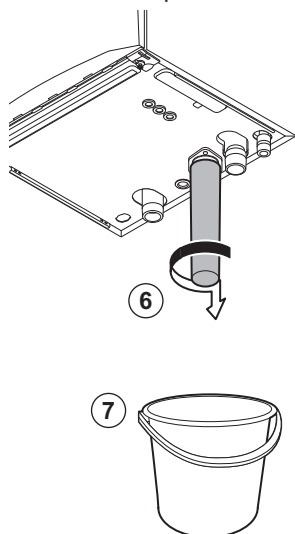
Fig.35 Remove flue gas pipe



AD-4000129-01

5. Pull up the flue gas pipe and remove it.

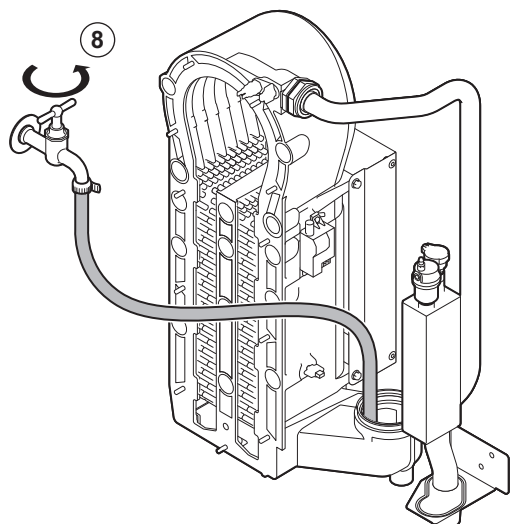
Fig.36 Remove siphon



AD-4000130-01

6. Remove the siphon.
7. Place a bucket under the boiler.

Fig.37 Flush the condensate collector



AD-4000131-01

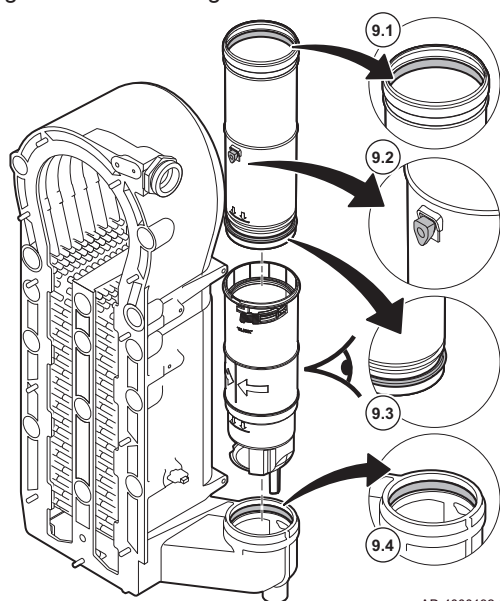
8. Flush the condensate collector gently with water, via the opening of the flue gas pipe.



Warning

When flushing, prevent water from getting into the boiler.

Fig.38 Place new gaskets



AD-4000132-02

9. Place the new gaskets:

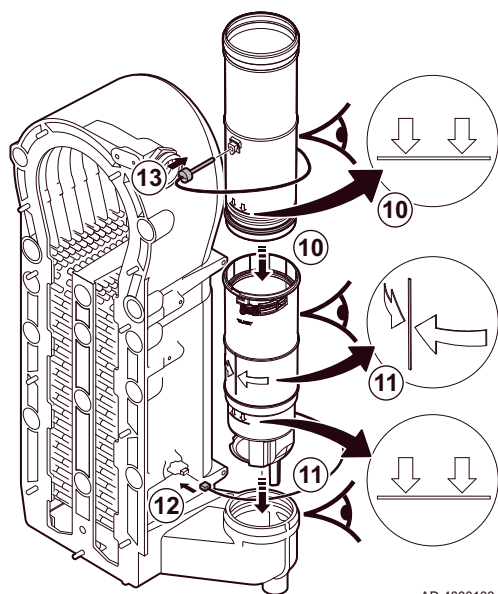


Warning

Take care to place the gasket at the clicker level in the bottom ring.

- 9.1. The gasket at the top of the flue gas pipe.
- 9.2. The grommet of the flue gas sensor (if connected).
- 9.3. The gasket in the middle of the flue gas pipe (at the clicker level).
- 9.4. The gasket in the condensate collector.

Fig.39 Re-assemble and place the flue gas pipe

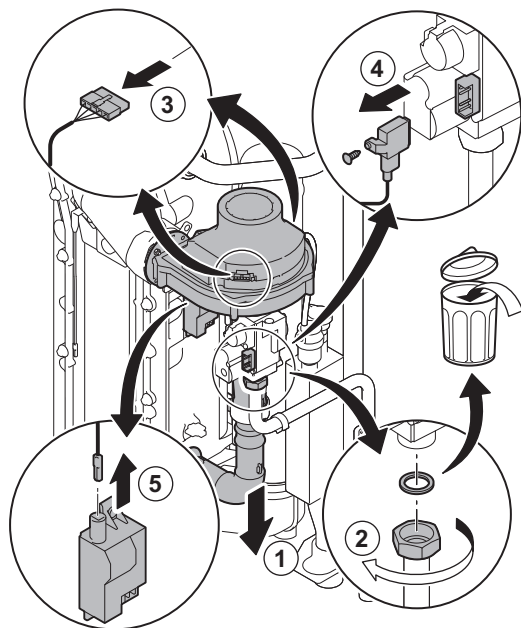


AD-4000133-01

10. Place the upper part of the flue gas pipe into the lower part up to the mark.
11. Place the flue gas pipe with the line between the two arrows facing forward into the condensate collector up to the mark.
12. Place the return sensor connector.
13. Place the flue gas temperature sensor (if connected).

9.4.6 Checking the non-return valve

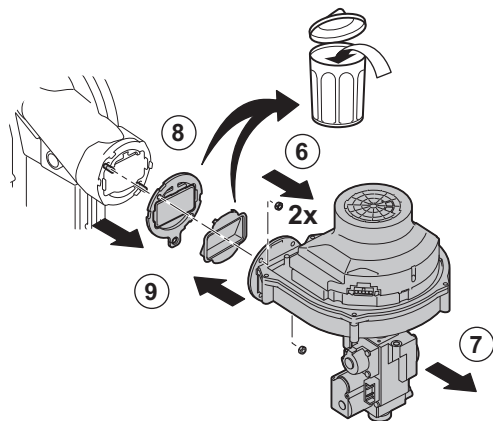
Fig.40 Disconnecting the fan



AD-3001178-01

1. Remove the air inlet pipe from the venturi.
2. Unscrew the cap nut of the gas valve unit.
3. Disconnect the fan plugs (on the front and rear).
4. Remove the screwed-on plug from the gas valve unit.
5. Remove the ignition electrode plug from the ignition transformer.

Fig.41 Checking the non-return valve



AD-3001181-01

6. Dismantle the fan.
7. Remove the fan together with the gas valve unit.
8. Inspect the non-return valve and replace it in the event of a defect or damage, or if the maintenance kit contains a non-return valve.
9. Reassemble in the reverse order.

9.4.7 Reassembling the boiler

1. Fit all removed parts in the reverse order.
2. Switch on the electricity supply to the boiler.
3. Open the gas valve.
4. Vent the installation.
5. Top up with more water if necessary.
6. Check the tightness of the gas and water connections.
7. Put the boiler back into operation.

10 Troubleshooting

10.1 Error codes

The boiler is fitted with an electronic regulation and control unit. The heart of the control is a **e-Smart** microprocessor, which controls and also protects the boiler. In the event of an error, a corresponding code is displayed.

Tab.41 Error codes are displayed at three different levels

Code	Type	Description
A00.00	Warning	The boiler continues to operate but the cause of the warning must be investigated. A warning can change into a blocking or lock-out.
H00.00	Blocking	The boiler starts up again automatically when the cause of the blocking has been rectified. A blocking can become a lock-out.
E00.00	Lock out	The boiler starts up again only when the cause of the lock-out has been rectified and reset manually.

The meaning of the code can be found in the various error code tables.



Important

The error code is needed to find the cause of the error quickly and correctly and for any support from Remeha.

10.1.1 Warning

Tab.42 Warning codes

Code	Display text	Description	Solution
A00.34	TOutside Missing	Outside temperature sensor was expected but not detected	Outside sensor not detected: <ul style="list-style-type: none"> • Outside sensor is not connected: Connect the sensor • Outside sensor is not connected correctly: Connect the sensor correctly
A00.42	WaterPressureMissing	Water pressure sensor was expected but not detected	Water pressure sensor not detected <ul style="list-style-type: none"> • Water pressure sensor is not connected: connect the sensor • Water pressure sensor is not connected correctly: connect the sensor correctly
A01.23	Poor Combustion	Poor combustion	Configuration error: No flame during operation: <ul style="list-style-type: none"> • No ionisation current: <ul style="list-style-type: none"> - Purge the gas supply to remove air. - Check whether the gas tap is properly open. - Checking the gas supply pressure. - Check the operation and setting of the gas valve unit. - Check that the air inlet and flue gas discharge flues are not blocked. - Check that there is no recirculation of flue gases.
A02.06	Water Press Warning	Water Pressure Warning active	Water pressure warning: <ul style="list-style-type: none"> • Water pressure too low; check the water pressure
A02.36	Funct device lost	Functional device has been disconnected	SCB not found: <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Faulty SCB: Replace SCB

Code	Display text	Description	Solution
A02.37	Uncritic device lost	Uncritical device has been disconnected	SCB not found: <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Faulty SCB: Replace SCB
A02.45	Full Can Conn Matrix	Full Can Connection Matrix	SCB not found: <ul style="list-style-type: none"> • Carry out an auto-detect
A02.46	Full Can Device Adm	Full Can Device Administration	SCB not found: <ul style="list-style-type: none"> • Carry out an auto-detect
A02.48	Funct Gr Conf Fault	Function Group Configuration Fault	SCB not found: <ul style="list-style-type: none"> • Carry out an auto-detect
A02.49	Failed Init Node	Failed Initialising Node	SCB not found: <ul style="list-style-type: none"> • Carry out an auto-detect
A02.55	Inval or miss SerNR	Invalid or missing device serial number	Contact your supplier.
A02.69	Fair mode active	Fair mode active	Contact your supplier.
A02.76	Memory full	The reserved space in memory for custom parameters value is full. No more user changed possible	Configuration error: <ul style="list-style-type: none"> • Reset CN1 and CN2 • Faulty CSU: Replace CSU • Replace the CU-GH
A08.02	Shower Time Elapsed	The time reserved for the shower has elapsed	Take a shorter shower or adjust parameter DP357 .

10.1.2 Blocking

Tab.43 Blocking codes

Code	Display text	Description	Solution
H00.81	RoomTempMissing	Room Temperature sensor was expected but not detected	Room temperature sensor not detected: <ul style="list-style-type: none"> • Room temperature sensor is not connected: Connect the sensor • Room temperature sensor is not connected correctly: Connect the sensor correctly
H01.00	Comm Error	Communication Error occurred	Communication error with the security kernel: <ul style="list-style-type: none"> • Restart the boiler • Replace the CU-GH
H01.05	Max Delta TF-TR	Maximum difference between flow temperature and return temperature	Maximum difference between the flow and return temperature exceeded: <ul style="list-style-type: none"> • No flow or insufficient flow: <ul style="list-style-type: none"> - Check the flow (direction, pump, valves) - Check the water pressure - Check the cleanliness of the heat exchanger • Sensor error: <ul style="list-style-type: none"> - Check that the sensors are operating correctly - Check that the sensor has been fitted properly

Code	Display text	Description	Solution
H01.08	CH Temp Grad. Level3	Maximum CH temperature gradient level3 exceeded	<p>Maximum heat exchanger temperature increase has been exceeded:</p> <ul style="list-style-type: none"> • No flow or insufficient flow: <ul style="list-style-type: none"> - Check the circulation (direction, pump, valves) - Check the water pressure - Check the cleanliness of the heat exchanger - Check that the central heating system has been correctly vented to remove air • Sensor error: <ul style="list-style-type: none"> - Check that the sensors are operating correctly - Check that the sensor has been fitted properly
H01.14	Max Tflow	Flow temperature has exceeded the maximum operating value	<p>Flow temperature sensor above normal range:</p> <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • No flow or insufficient flow: <ul style="list-style-type: none"> - Check the circulation (direction, pump, valves) - Check the water pressure - Check the cleanliness of the heat exchanger
H01.15	Max Tflue Gas	Flue gas temperature has exceeded the maximum operating value	<p>Maximum flue gas temperature exceeded:</p> <ul style="list-style-type: none"> • Check the flue gas outlet system • Check the heat exchanger to ensure that the flue gas side is not clogged • Faulty sensor: replace the sensor
H02.00	Reset In Progress	Reset In Progress	<p>Reset procedure active:</p> <ul style="list-style-type: none"> • No action
H02.02	Wait Config Number	Waiting For Configuration Number	<p>Configuration error or unknown configuration number:</p> <ul style="list-style-type: none"> • Reset CN1 and CN2
H02.03	Conf Error	Configuration Error	<p>Configuration error or unknown configuration number:</p> <ul style="list-style-type: none"> • Reset CN1 and CN2
H02.04	Parameter Error	Parameter Error	<p>Factory settings incorrect:</p> <ul style="list-style-type: none"> • Parameters are not correct: <ul style="list-style-type: none"> - Restart the boiler - Reset CN1 and CN2 - Replace the CU-GH PCB
H02.05	CSU CU mismatch	CSU does not match CU type	<p>Configuration error:</p> <ul style="list-style-type: none"> • Reset CN1 and CN2
H02.09	Partial block	Partial blocking of the device recognized	<p>Blocking input active or frost protection active:</p> <ul style="list-style-type: none"> • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H02.10	Full Block	Full blocking of the device recognized	<p>Blocking input is active (without frost protection):</p> <ul style="list-style-type: none"> • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H02.12	Release Signal	Release Signal input of the Control Unit from device external environment	<p>Waiting time release signal has elapsed:</p> <ul style="list-style-type: none"> • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H02.38	No water hardness	No hardness of water	-
H02.70	HRU test error	External heat recovery unit test failed	Check the external heat recovery system.

Code	Display text	Description	Solution
H03.00	Parameter Error	Safety parameters level 2, 3, 4 are not correct or missing	Parameter error: security kernel <ul style="list-style-type: none"> Restart the boiler Replace the CU-GH
H03.01	CU to GVC data error	No valid data from CU to GVC received	Communication error with the CU-GH: <ul style="list-style-type: none"> Restart the boiler
H03.02	Flame loss detected	Measured ionisation current is below limit	No flame during operation: <ul style="list-style-type: none"> No ionisation current: <ul style="list-style-type: none"> Vent the gas supply to remove air Check that the gas valve is fully opened Check the gas supply pressure Check the operation and setting of the gas valve unit Check that the air supply inlet and flue gas outlet are not blocked Check that there is no recirculation of flue gases
H03.05	Internal blocking	Gas Valve Control internal blocking occurred	Security kernel error: <ul style="list-style-type: none"> Restart the boiler Replace the CU-GH
H03.17	Safety check	Periodically safety check ongoing	<ul style="list-style-type: none"> Restart the boiler Replace the CU-GH

10.1.3 Locking

Tab.44 Locking codes

Code	Display text	Description	Solution
E00.04	TReturn Open	Return temperature sensor is either removed or measures a temperature below range	Return temperature sensor open: <ul style="list-style-type: none"> Bad connection: check the wiring and connectors Incorrectly fitted sensor: check that the sensor has been correctly fitted Faulty sensor: replace the sensor
E00.05	TReturn Closed	Return temperature sensor is either shorted or measures a temperature above range	Return temperature sensor short-circuited: <ul style="list-style-type: none"> Bad connection: check the wiring and connectors Incorrectly fitted sensor: check that the sensor has been correctly fitted Faulty sensor: replace the sensor
E00.06	TReturn Missing	Return temperature sensor was expected but not detected	No connection to temperature return sensor: <ul style="list-style-type: none"> Bad connection: check the wiring and connectors. Faulty sensor: replace the sensor

Code	Display text	Description	Solution
E00.07	dTReturn Too High	Return temperature difference is too large	<p>Difference between the flow and return temperatures too great:</p> <ul style="list-style-type: none"> • No circulation: <ul style="list-style-type: none"> - Vent the central heating system to remove air - Check the water pressure - If present: check the boiler type parameter setting - Check the circulation (direction, pump, valves) - Check that the heating pump is operating correctly - Check the cleanliness of the heat exchanger • Sensor not connected or incorrectly connected: <ul style="list-style-type: none"> - Check that the sensors are operating correctly - Check that the sensor has been fitted properly • Faulty sensor: replace the sensor if necessary
E00.16	DHW sensor Open	Domestic Hot Water tank temperature sensor is either removed or measures a temperature below range	<p>Calorifier sensor open:</p> <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E00.17	DHW sensor Closed	Domestic Hot Water tank temperature sensor is either shorted or measures a temperature above range	<p>Calorifier sensor short-circuited:</p> <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E01.04	5x Flame Loss Error	5x Error of unintended Flame Loss occurrence	<p>Flame loss occurs 5 times:</p> <ul style="list-style-type: none"> • Vent the gas supply to remove air • Check that the gas valve is fully opened • Check the gas supply pressure • Check the operation and setting of the gas valve unit • Check that the air supply inlet and flue gas outlet are not blocked • Check that there is no recirculation of flue gases
E01.11	Fan Out Of Range	Fan speed has exceeded normal operating range	<p>Fan fault:</p> <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors. • Faulty fan: replace the fan • Fan operates when it should not be operating: check for excessive chimney draught
E01.12	Return Higher Flow	Return temperature has a higher temperature value than the flow temperature	<p>Flow and return reversed:</p> <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Water circulation in wrong direction: check the circulation (direction, pump, valves) • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Malfunctioning sensor: check the Ohmic value of the sensor • Faulty sensor: replace the sensor

Code	Display text	Description	Solution
E01.24	Combustion Error	Several combustion errors occurs with 24 hours	Low ionisation current: <ul style="list-style-type: none"> • Vent the gas supply to remove air. • Check that the gas valve is fully opened. • Check the gas supply pressure. • Check the operation and setting of the gas valve unit. • Check that the air supply inlet and flue gas outlet are not blocked. • Check that there is no recirculation of flue gases.
E02.13	Blocking Input	Blocking Input of the Control Unit from device external environment	Blocking input is active: <ul style="list-style-type: none"> • External cause: remove external cause • Wrong parameter set: check the parameters
E02.15	Ext CSU Timeout	External CSU Timeout	CSU time out: <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Faulty CSU: Replace CSU
E02.17	GVC CommTimeout	Gas Valve Control unit communication has exceeded feedback time	Communication error with the security kernel: <ul style="list-style-type: none"> • Restart the boiler • Replace the CU-GH
E02.35	Safety device lost	Safety critical device has been disconnected	Communication fault <ul style="list-style-type: none"> • Carry out an auto-detect
E02.47	Failed Conn Funct Gr	Failed Connecting Function Groups	Function group not found: <ul style="list-style-type: none"> • Carry out an auto-detect • Restart the boiler • Replace the CU-GH
E04.00	Parameter error	Safety parameters Level 5 are not correct or missing	Replace the CU-GH.
E04.01	TFlow Closed	Flow temperature sensor is either shorted or measuring a temperature above range	Flow temperature sensor short circuited: <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor
E04.02	TFlow Open	Flow temperature sensor is either removed or measuring a temperature below range	Flow temperature sensor open: <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E04.03	Max Flow temp	Measured flow temperature above safety limit	No flow or insufficient flow: <ul style="list-style-type: none"> • Check the circulation (direction, pump, valves) • Check the water pressure • Check the cleanliness of the heat exchanger
E04.07	TFlow Sensor	Deviation in flow sensor 1 and flow sensor 2 detected	Flow temperature sensor deviation: <ul style="list-style-type: none"> • Bad connection: check the connection • Faulty sensor: replace the sensor

Code	Display text	Description	Solution
E04.10	Unsuccessful start	5 Unsuccessful burners starts detected	<p>Five failed burner starts:</p> <ul style="list-style-type: none"> • No ignition spark: <ul style="list-style-type: none"> - Check the wiring between the CU-GH and the ignition transformer - Check the ionisation/ignition electrode - Check breakdown to earth - Check the condition of the burner cover - Check the earthing - Replace the CU-GH • Ignition spark but no flame: <ul style="list-style-type: none"> - Vent the gas pipes to remove air - Check that the air supply inlet and flue gas outlet are not blocked - Check that the gas valve is fully opened - Check the gas supply pressure - Check the operation and setting of the gas valve unit - Check the wiring on the gas valve unit - Replace the CU-GH • Flame present, but ionisation has failed or is inadequate: <ul style="list-style-type: none"> - Check that the gas valve is fully opened - Check the gas supply pressure - Check the ionisation/ignition electrode - Check the earthing - Check the wiring on the ionisation/ignition electrode.
E04.12	False flame	False flame detected before burner start	<p>False flame signal:</p> <ul style="list-style-type: none"> • The burner remains very hot: Set the O₂ • Ionisation current measured but no flame should be present: check the ionisation/ignition electrode • Faulty gas valve: replace the gas valve • Faulty ignition transformer: replace the ignition transformer
E04.13	Fan	Fan speed has exceeded normal operating range	<p>Fan fault:</p> <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors. • Fan operates when it should not be operating: check for excessive chimney draught • Faulty fan: replace the fan
E04.17	GasValve Driver Err.	The driver for the gas valve is broken	<p>Gas valve unit fault:</p> <ul style="list-style-type: none"> • Bad connection: check the wiring and connectors • Faulty gas valve unit: Replace the gas valve unit
E04.23	Internal Error	Gas Valve Control internal locking	<ul style="list-style-type: none"> • Restart the boiler • Replace the CU-GH

10.2 Error memory

The control panel includes an error memory in which the last 32 errors are stored. Details of the error are stored with the error codes. Included are the status, sub-status, flow temperature, return temperature, fan rotation speed and the ionisation current.

10.2.1 Reading out and clearing the error memory

The error memory stores the details of the most recent errors.

1. Press the  button.

2. Select **Error History**.
 - ⇒ The list of the 32 most recent errors is displayed with the error code, a short description and the date.
3. Select the error code you want to investigate.
 - ⇒ The display shows an explanation of the error code and the status of the boiler when the error occurred.
4. To clear the error memory, press and hold the ✓ rotary knob.

11 Spare parts

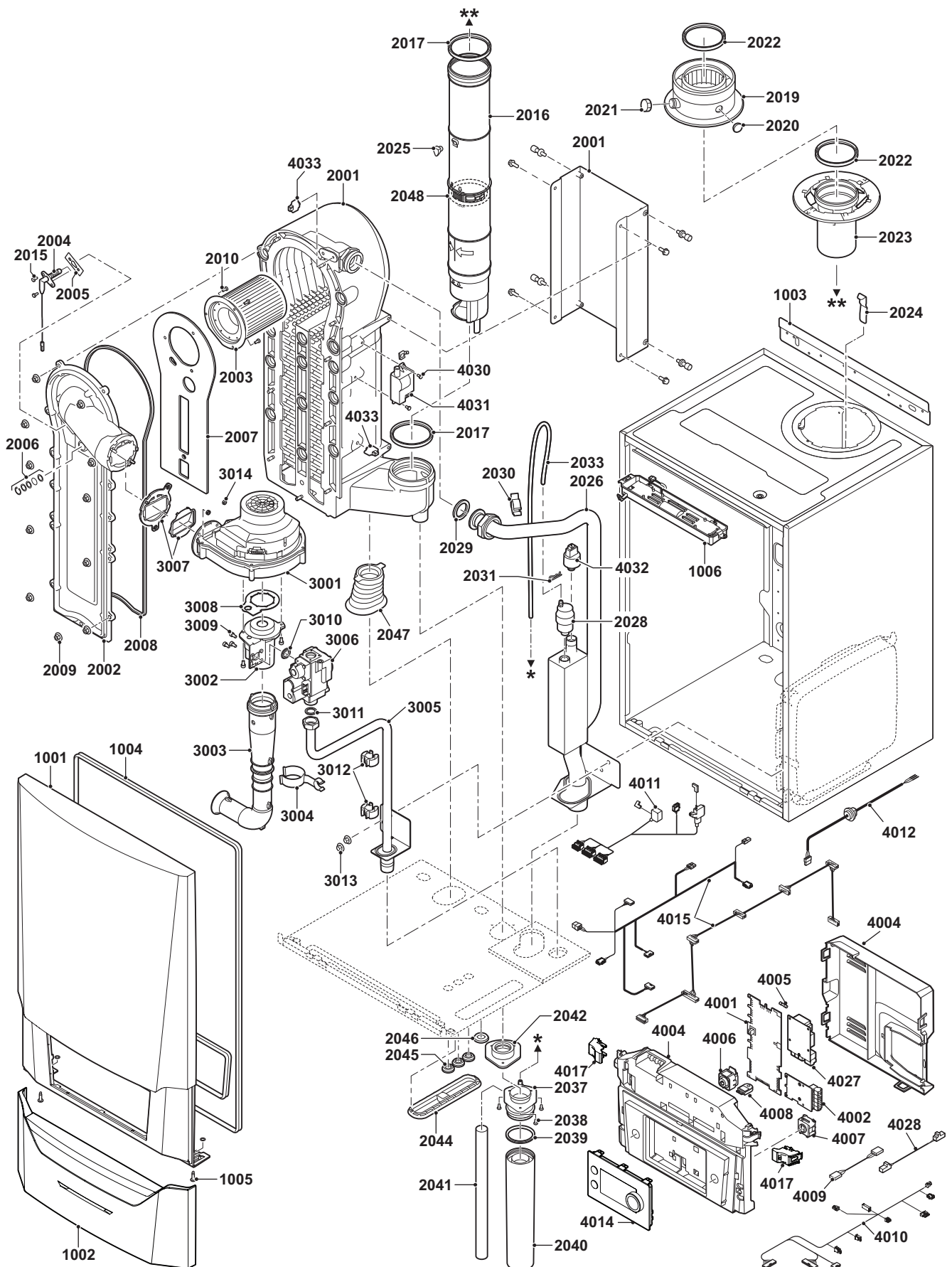
11.1 General

Only replace defective or worn boiler parts with original parts or recommended parts.

Send the part to be replaced to the Remeha Quality Control department if the relevant part is covered by the guarantee (see the General Terms of Sale and Delivery).

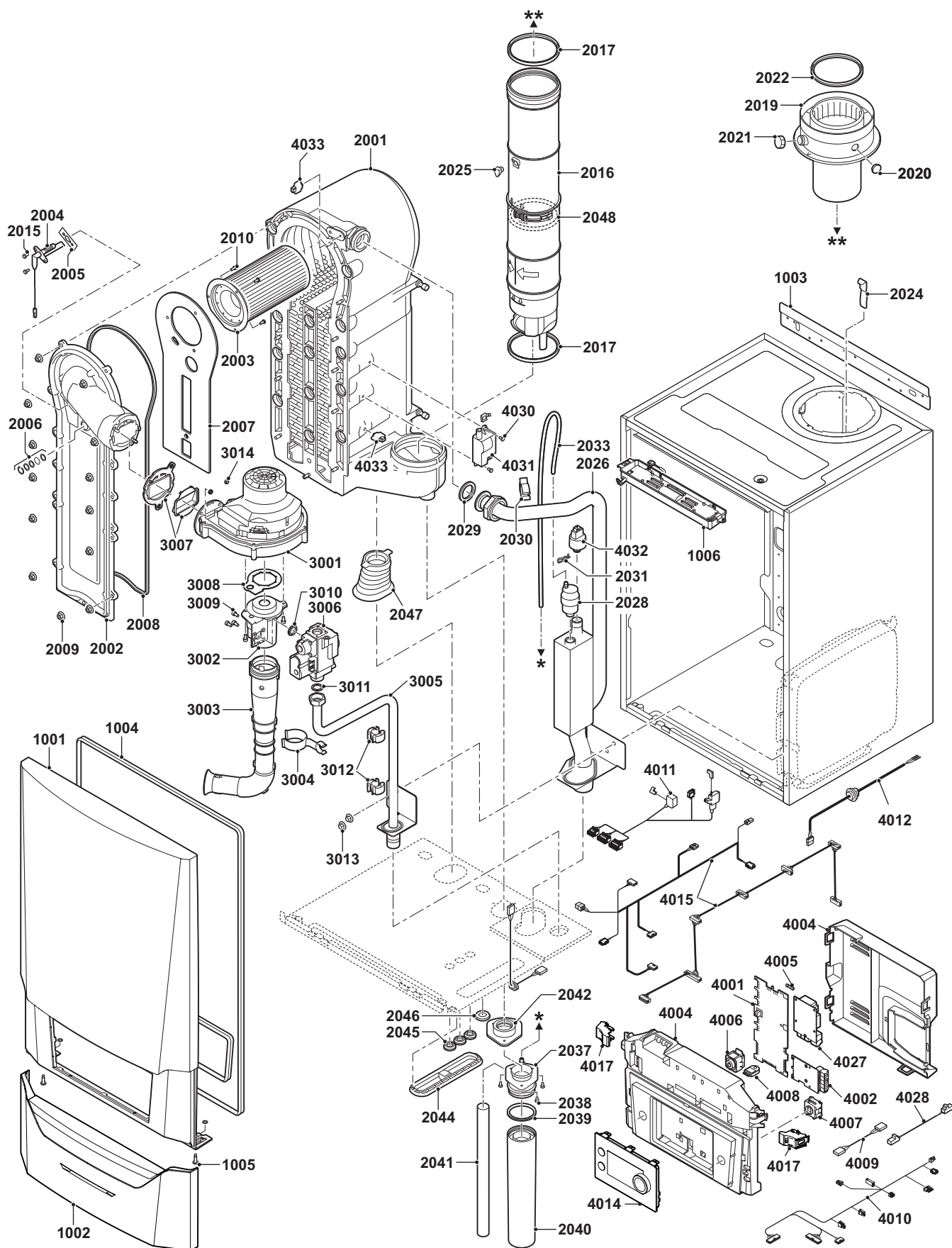
11.2 Parts

Fig.42 Quinta Ace 30 - 45



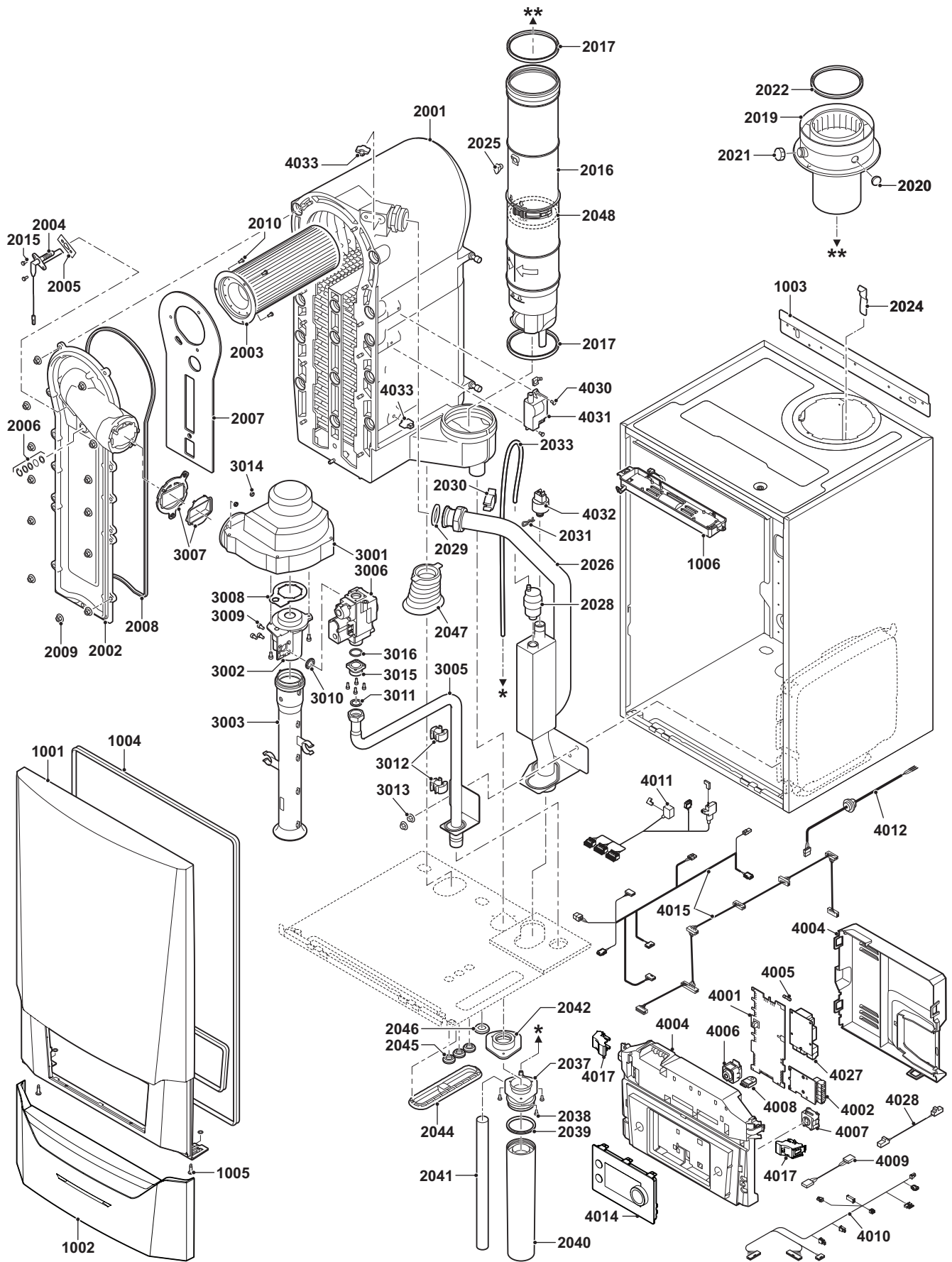
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Fig.43 Quinta Ace 55 - 65

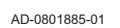


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Fig.44 Quinta Ace 90



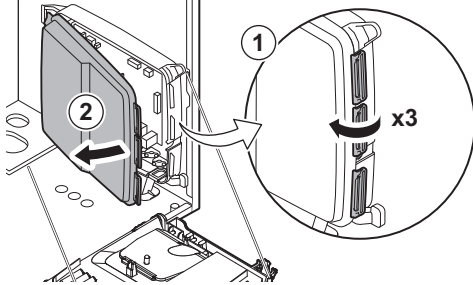
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12 Appendix

12.1 Optional electrical connections

Fig.46 Open housing for extension PCBs



AD-4000062-01

12.1.1 Electronics extension box for extension PCBs

If there is no space in the boiler's instrument box to install an (optional) extension PCB, install the PCB in the electronics extension box. This is available as an accessory.

1. Unclip the housing cover.
2. Remove the cover.
3. Install the extension PCB in accordance with the instructions supplied.

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