



Service Manual

High-efficiency wall-hung gas boiler

Quinta Ace
30 - 45 - 55 - 65 - 90 - 115
HMI T-control

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1 About this manual

1.1 Symbols used in the manual

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

**Danger**

Risk of dangerous situations that may result in serious personal injury.

**Danger of electric shock**

Risk of electric shock that may result in serious personal injury.

**Warning**

Risk of dangerous situations that may result in minor personal injury.

**Caution**

Risk of material damage.

**Important**

Please note: important information.

The symbols mentioned below are of lower importance, but they can help you navigate or give useful information.

**See**

Reference to other manuals or pages in this manual.



Helpful information or extra guidance.



Direct menu navigation, confirmations will not be shown. Use if you are familiar with the system.

2 Description of the product

2.1 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.

Take the boiler resistance and system resistance into account when selecting a pump.

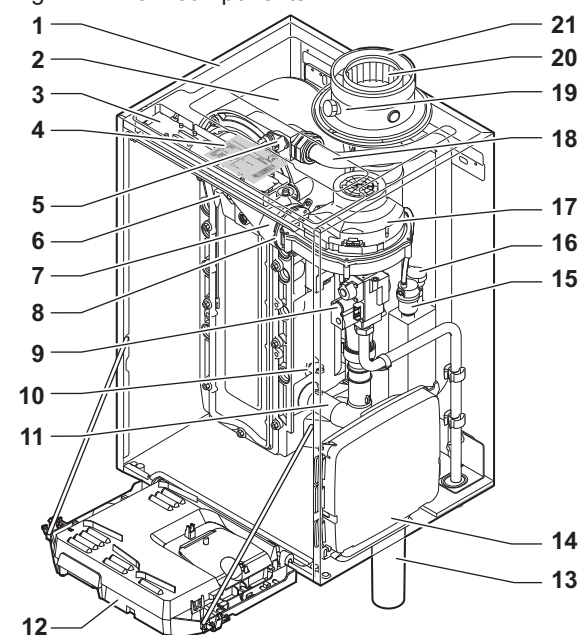
**Caution**

The pump may have a maximum input of 200 W. Use an auxiliary relay for a pump with greater power.

If possible, install the pump directly under the boiler on the return connection.

2.2 Main components

Fig.1 Main components



- 1 Casing/air box
- 2 Heat exchanger (CH)
- 3 Interior light
- 4 Type plate
- 5 Flow sensor
- 6 Ionisation/ignition electrode
- 7 Mixing tube
- 8 Non-return valve
- 9 Combined gas valve unit
- 10 Return sensor
- 11 Air intake silencer
- 12 Instrument box
- 13 Siphon

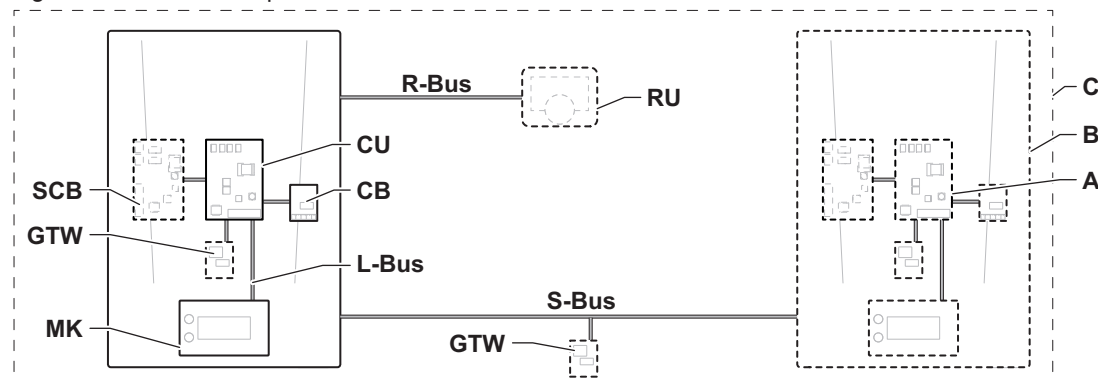
- 14 Expansion box for the control PCBs
(= accessory)
- 15 Automatic air vent
- 16 Hydraulic pressure sensor
- 17 Fan
- 18 Supply line
- 19 Flue gas measuring point
- 20 Flue gas discharge
- 21 Air supply
- ▶ (III) Heating circuit flow
- (III) ▶ Heating circuit return

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2.3 Introduction to the e-Smart controls platform

The Quinta Ace boiler is equipped with the e-Smart controls platform. This is a modular system, and offers compatibility and connectivity between all products that make use of the same platform.

Fig.2 Generic example



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Tab.1 Components in the example

Item	Description	Function
CU	Control Unit: Control unit	The control unit handles all basic functionality of the appliance.
CB	Connection Board: Connection PCB	The connection PCB provides easy access to all connectors of the control unit.
SCB	Smart Control Board: Expansion PCB	An expansion PCB provides extra functionality, like an internal calorifier or multiple zones.
GTW	Gateway: Conversion PCB	A gateway can be fitted to an appliance or system, to provide one of the following: • Extra (wireless) connectivity • Service connections • Communication with other platforms
MK	Control panel: Control panel and display	The control panel is the user interface to the appliance.
RU	Room Unit: Room unit (for example, a thermostat)	A room unit measures the temperature in a reference room.
L-Bus	Local Bus: Connection between devices	The local bus provides communication between devices.
S-Bus	System Bus: Connection between appliances	The system bus provides communication between appliances.
R-Bus	Room unit Bus: Connection to a room unit	The room unit bus provides communication to a room unit.
A	Device	A device is a PCB, control panel or a room unit.
B	Appliance	An appliance is a set of devices connected via the same L-Bus
C	System	A system is a set of appliances connected via the same S-Bus

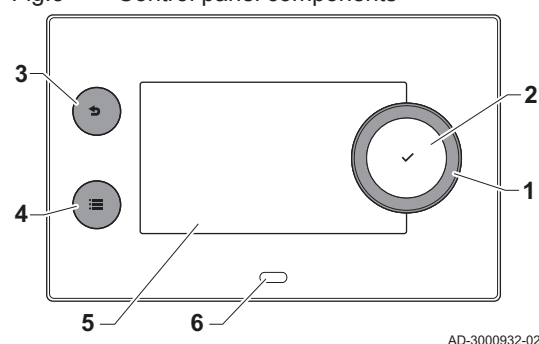
Tab.2 Specific devices delivered with the Quinta Ace boiler

Name visible in display	Software version	Description	Function
CU-GH08	1.12	Control unit CU-GH08	The CU-GH08 control unit handles all basic functionality of the Quinta Ace boiler.
MK3	1.85	Control panel HMI T-control	The HMI T-control is the user interface to the Quinta Ace boiler.
SCB-01	1.3	Expansion PCB SCB-01	The SCB-01 provides a 0-10 V connection for a PWM system pump and two potential-free contacts for status notification.

3 Use of the control panel

3.1 Control panel components

Fig.3 Control panel components



- 1 Rotary knob to select a tile, menu or setting
- 2 Confirm button ✓ to confirm the selection
- 3 Back button ↩:
 - **Short button press:** Return to the previous level or previous menu
 - **Long button press:** Return to home screen
- 4 Menu button ≡ to go to the main menu
- 5 Display
- 6 Status LED

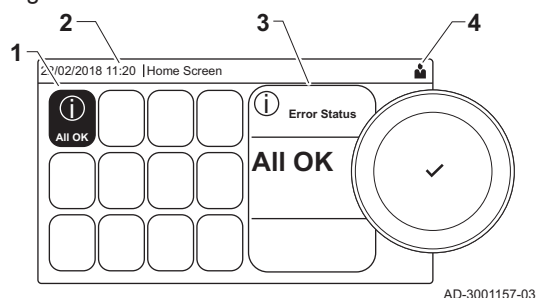
3.2 Description of the home screen

This screen is shown automatically after start-up of the appliance. The control panel automatically enters standby mode (black screen) if the buttons are not used 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 desired item and press the button  to confirm the selection.

Fig.4 Icons on home screen



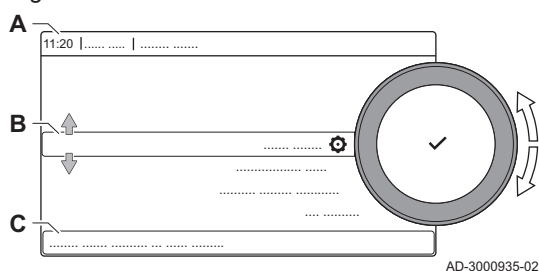
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- 1 Tiles: the selected tile is highlighted
- 2 Date and time | Name of the screen (actual position in the menu)
- 3 Information about the selected tile
- 4 Icons indicating navigation level, operating mode, errors and other information.

3.3 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.5 Items in the main menu



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

Tab.3 Available menus for the user 

Description	Icon
Enable installer access	
System Settings	
Version Information	

Tab.4 Available menus for the installer 

Description	Icon
Disable installer access	
Installation Setup	
Commissioning Menu	
Advanced Service Menu	
Error History	
System Settings	
Version Information	

3.4 Description of the icons in the display

Tab.5 Icons

Icon	Description
	User menu: user-level parameters can be configured.
	Installer menu: installer-level parameter can be configured.
	Information menu: read out various current values.
	System settings: system parameters can be configured.
	Error indicator.
	Gas boiler indicator.
	Domestic hot water tank is connected.

Icon	Description
	The outdoor temperature sensor is connected.
	Boiler number in cascade system.
	The solar calorifier is on and its heat level is displayed.
	Burner output level (1 to 5 bars, with each bar representing 20% output).
	The pump is running.
	Three-way valve indicator.
	Display of the system water pressure.
	Chimney sweep mode is enabled (forced full load or low load for O ₂ measurement).
	Energy-saving mode is enabled.
	DHW boost is enabled.
	Timer program is enabled: The room temperature is controlled by a timer program.
	Manual mode is enabled: The room temperature is set to a fixed setting.
	Temporary overwrite of the timer program is enabled: The room temperature is changed temporarily.
	The holiday program (including frost protection) is active: The room temperature is reduced during your holiday to save energy.
	Frost protection is enabled: Protect the boiler and installation from freezing in winter.
	Service notification: service needed. Installer contact details are displayed or can be filled in.

Tab.6 Icons - On/off

Icon	Description	Icon	Description
	CH operation is enabled.		CH operation is disabled.
	DHW operation is enabled.		DHW operation is disabled.
	The burner is on.		The burner is off.
	Bluetooth enabled and connected (icon is non-transparent).		Bluetooth enabled and disconnected (icon is transparent).
	Heating enabled.		
	Cooling enabled.		
	Heating/cooling enabled.		Heating/cooling disabled.

Tab.7 Icons - Zones

Icon	Description
	All zones (groups) icon.
	Living room icon.
	Kitchen icon.
	Bedroom icon.
	Study icon.
	Cellar icon.

4 Installer instructions

4.1 Accessing the user level menus

The tiles on the home screen provide quick access for the user to the corresponding menus.

Fig.6 Menu selection

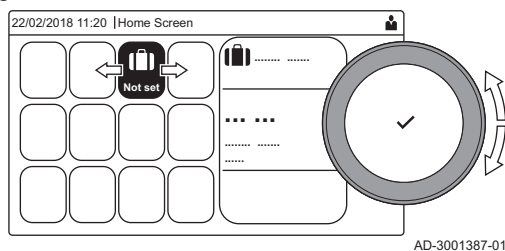
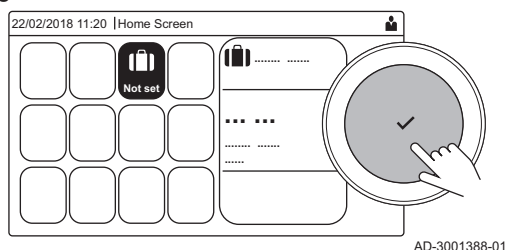


Fig.7 Confirm menu selection



1. Use the rotary knob to select the required menu.

2. Press the ✓ button to confirm the selection.

⇒ The available settings of this selected menu appear in the display.

3. Use the rotary knob to select the desired setting.

4. Press the ✓ button to confirm the selection.

⇒ All options for change will appear in the display (if a setting cannot be changed, **Cannot edit read-only datapoint** will appear in the display).

5. Use the rotary knob to change the setting.

6. Press the ✓ button to confirm the selection.

7. Use the rotary knob to select the next setting or press the ↻ button to return to the home screen.

4.2 Accessing the installer level

Some settings are protected by installer access. Enable installer access in order to change these settings.



Use the rotary knob to navigate.

Use the ✓ button to confirm your selection.

1. Access the installer level via the tile:

1.1. Select the tile [🔧].

1.2. Use code: **0012**.

⇒ The tile [🔧] shows that the installer access is **On**, and the icon in the top right of the display changes into 🔧.

Fig.8 Installer level

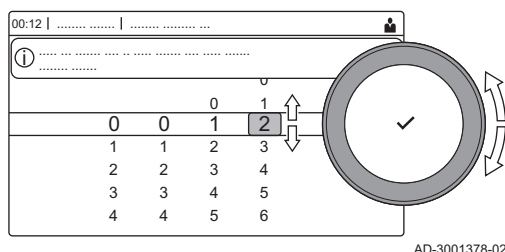
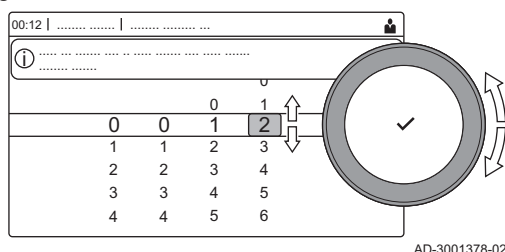


Fig.9 Installer level



2. Access the installer level via the menu:

2.1. Select **Enable installer access** from the **Main Menu**.

2.2. Use code: **0012**.

⇒ When the installer level is enabled or disabled, the status of the tile [🔧] changes into **On** or **Off**.

When the control panel is not used for 30 minutes, the installer access is disabled automatically. You can manually disable installer access by:

- Selecting the tile [🔧].
- Selecting **Disable installer access** from the **Main Menu**.

4.3 Commissioning the appliance

At first start-up of the appliance, the display will show the commissioning wizard. Depending on the appliance, some steps take a few minutes to complete, for example appliances that need to deaerate after installation or need to configure a boiler.



Use the rotary knob to navigate.

Use the ✓ button to confirm your selection.

1. Start up the appliance.

2. Follow the instructions on the display.



Important

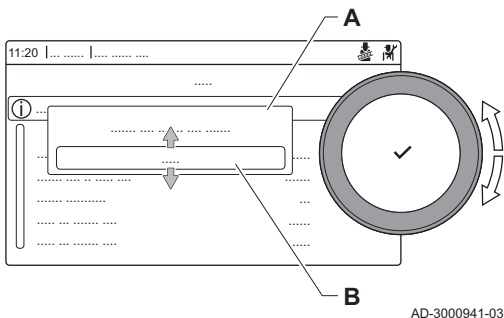
The appliance might take a few minutes during certain steps while commissioning. Do not shut off the appliance or try to bypass steps, unless stated otherwise on the display.

3. You can access individual commissioning steps:
- 3.1. Press the  button.
 - 3.2. Select **Commissioning Menu**.
 - 3.3. Select the commissioning step you wish to perform.

4.3.1 Chimney sweep menu

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

Fig.10 Load test



- A Change load test mode
- B Load test mode

Tab.8 Load tests in the chimney sweep menu 

Change load test mode	Settings
Off	No test
Low power	Part load test
Medium power	Full load test for Central Heating mode
High power	Full load test for Central Heating + Domestic Hot Water mode

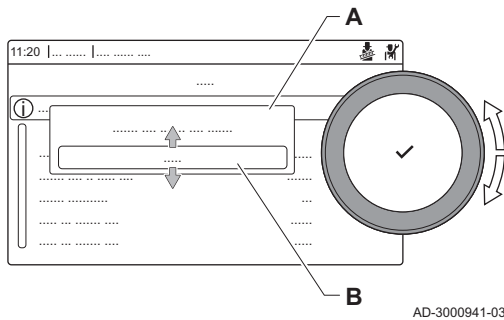
Tab.9 Load test settings

Load Test menu	Settings
Func. test status	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.

Fig.11 Full load test



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2. Select the test **Medium power**.

- A Change load test mode
- B Medium power

⇒ 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.

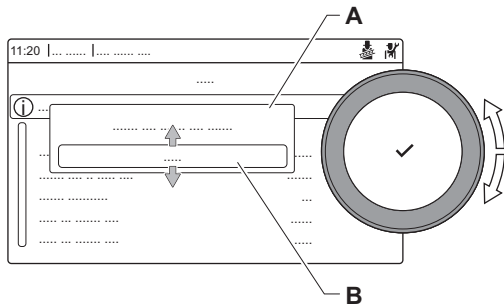
■ Performing the low load test

1. If the full load test is still running, press the button to change the load test mode.
2. If the full load test was finished, select the tile to restart the chimney sweep menu.

- A Change load test mode
- B Low power

3. Select the **Low power** test in the menu **Change load test mode**.
- ⇒ The low 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 low load test by pressing the button.
- ⇒ The message **Running load test(s) stopped!** is displayed.

Fig.12 Low load test



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4.3.2 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.

▶▶ > **Advanced Service Menu** > **Save as commissioning settings**



Use the rotary knob to navigate.
Use the button to confirm your selection.

1. Press the button.
2. Select **Advanced Service Menu**.
3. Select **Save as commissioning settings**.
4. 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**.

4.4 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.10

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

Tab.11 Configuring a zone or function of CU-GH08

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

4.4.1 Changing the control panel settings

You can change the control panel settings within system settings.

▶▶ ≡ > **System Settings**



Use the rotary knob to navigate.

Use the ✓ button to confirm your selection.

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

Tab.12 Control panel 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. When enabled daylight saving time will update the systems internal time to correspond with summer and winter time.
Installer Details	Read out 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

4.4.2 Setting the installer details

You can store your name and phone number in the control panel to be read by the user. When an error occurs these contact details will be displayed.

▶▶ ≡ > **System Settings > Installer Details**



Use the rotary knob to navigate.

Use the ✓ button to confirm your selection.

1. Press the ≡ button.
Enable installer access if it is not enabled.
 - 1.1. Select **Enable installer access**.
 - 1.2. Use code **0012**.
2. Select **System Settings** ⚙️.
3. Select **Installer Details**.
4. Enter the following data:

Installer name	Your company's name
Installer phone	Your company's phone number

4.4.3 Setting the parameters

You can change the settings of the control unit and the connected expansion boards, sensors etc. to configure the installation. The factory settings support the most common heating systems. The user or the installer can optimise the parameters as required.

**Important**

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



≡ > **Installation Setup** > select zone or device > **Parameters, counters, signals** > **Parameters**



Use the rotary knob to navigate.

Use the ✓ button to confirm your selection.

1. Press the ≡ button.
2. Select **Installation Setup**.
3. Select the zone or device you want to configure.
4. Select **Parameters, counters, signals**.
5. Select **Parameters**.

A - **Parameters**

- **Counters**

- **Signals**

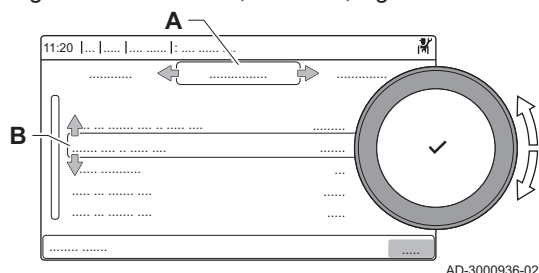
B List of settings or values

⇒ The list of available parameters is displayed.

**See also**

List of parameters, page 23

Fig.13 Parameters, counters, signals



4.4.4 Setting the heating curve

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



Select zone > **Heating Curve**

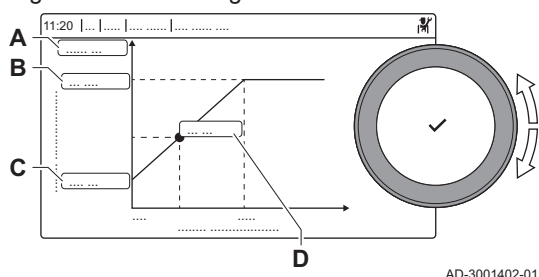


Use the rotary knob to navigate.

Use the ✓ button to confirm your selection.

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.
5. Adjust the following parameters:

Fig.14 The heating curve



Tab.13 Settings

A	Slope:	Slope of the heating curve: • Underfloor 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.

4.4.5 Increasing the domestic hot water temperature temporarily

You can temporary increase the hot water temperature when the time program is active with the reduced temperature setpoint. Use this to deviate from the time program or testing of the hot water production.

►► ≡ > **Installation Setup** > **Internal DHW** > **Hot water boost** > **Duration of temporary overwrite**



Use the rotary knob to navigate.
Use the ✓ button to confirm your selection.

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

You can abort the temporary increase by selecting **Reset**.

4.5 Maintaining the installation

4.5.1 Viewing the service notification

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



Use the rotary knob to navigate.
Use the ✓ button to confirm your selection.

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

4.5.2 Reading out measured values

The appliance continually registers various measured values from the system. You can read these values on the control panel.

►► ≡ > **Installation Setup** > select zone or device > **Parameters, counters, signals** > **Counters** or **Signals**



Use the rotary knob to navigate.
Use the ✓ button to confirm your selection.

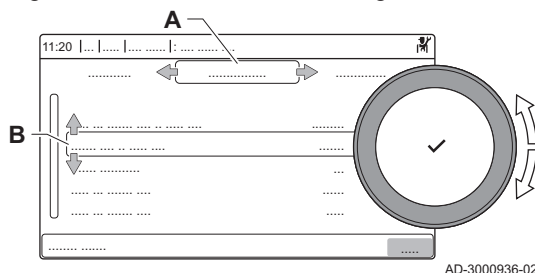
1. Press the ≡ button.
2. Select **Installation Setup**.
 - Enable installer access if **Installation Setup** is not available.
 - 2.1. Select **Enable installer access**.
 - 2.2. Use code **0012**.
3. Select the zone or device you want to read out.
4. Select **Parameters, counters, signals**.
5. Select **Counters** or **Signals** to read out a counter or signal.

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



See also
List of measured values, page 29

Fig.15 Parameters, counters, signals



4.5.3 Viewing production and software information

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

►► ≡ > **Version Information**



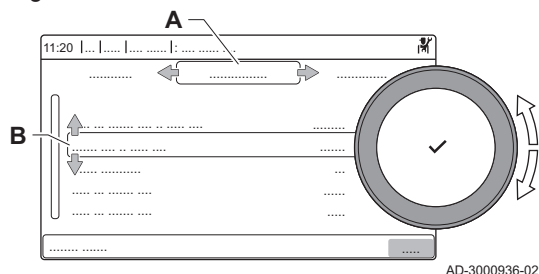
Use the rotary knob to navigate.
Use the ✓ button to confirm your selection.

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.16 Version information



4.5.4 Manual deaeration

You can manually deaerate your appliance.

►► ≡ > **Commissioning Menu > Deaeration program**



Use the rotary knob to navigate.
Use the ✓ button to confirm your selection.

1. Press the ≡ button.
2. Select **Commissioning Menu**.
3. Select **Deaeration program**.
⇒ The manual de-aeration menu opens.
4. Follow the instructions on the display.



You can press and hold ↺ to abort the procedure.

4.6 Resetting or re-establishing the parameters

4.6.1 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.



Important

All custom settings will be erased when the configuration numbers are reset. Depending on the appliance, there can be factory set parameters to enable certain accessories.

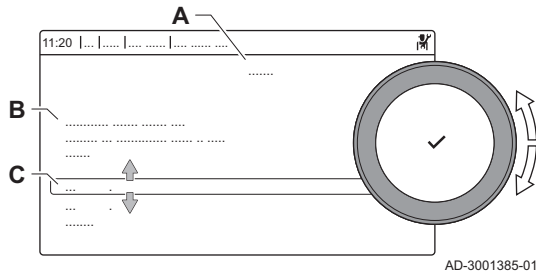
- Use the saved commissioning settings to restore these settings after the reset.
- If no commissioning settings were saved, write down custom settings before resetting. Include all relevant accessory related parameters.

►► ≡ > **Advanced Service Menu > Set Configuration Numbers**



Use the rotary knob to navigate.
Use the ✓ button to confirm your selection.

Fig.17 Configuration numbers



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

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

4.6.2 Carrying out an auto detect

The auto detect-function scans the installation for devices and other appliances connected to the L-Bus and S-Bus. You can use this function when a connected device or appliance has been replaced or removed from the installation.

- ▶▶ > **Advanced Service Menu** > **Auto Detect**



Use the rotary knob to navigate.
Use the button to confirm your selection.

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

4.6.3 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.

- ▶▶ > **Advanced Service Menu** > **Revert commissioning settings**



Use the rotary knob to navigate.
Use the button to confirm your selection.

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

4.6.4 Resetting to factory settings

You can reset the appliance to the default factory settings.

- ▶▶ > **Advanced Service Menu** > **Reset to Factory Settings**



Use the rotary knob to navigate.
Use the button to confirm your selection.

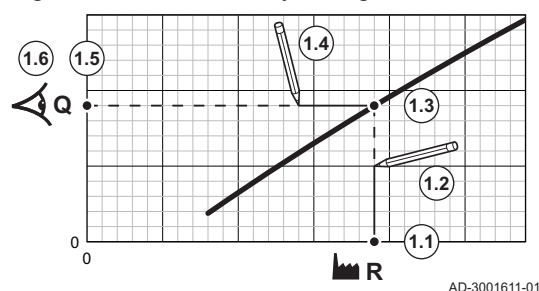
1. Press the button.
2. Select **Advanced Service Menu**.
3. Select **Reset to Factory Settings**.
4. Select **Confirm** to restore the factory settings.

4.7 Advanced settings

4.7.1 Setting the maximum input for central heating operation

Use the graph to see the relationship between fan rotation speed and input.

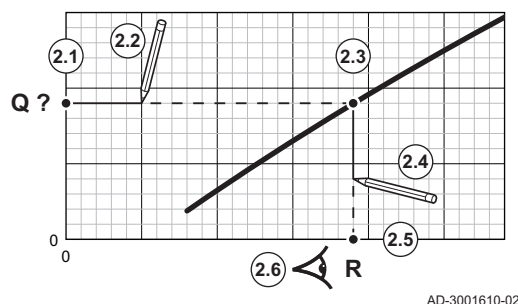
Fig.18 Fill-in the factory setting



1. Use the table to fill-in the graph for your boiler type:
 - 1.1. Select the fan rotation speed on the horizontal axis of the graph.
 - 1.2. Draw a vertical line from the selected fan rotation speed.
 - 1.3. Stop when the line intersects with the curve.
 - 1.4. Draw a horizontal line from the intersection point with the curve.
 - 1.5. Stop when the line intersects with the vertical axis of the graph.
 - 1.6. Read the value where the horizontal line intersects with the vertical axis of the graph.

⇒ This value is the input (factory setting) for the selected fan rotation speed.

Fig.19 Fill-in the desired input

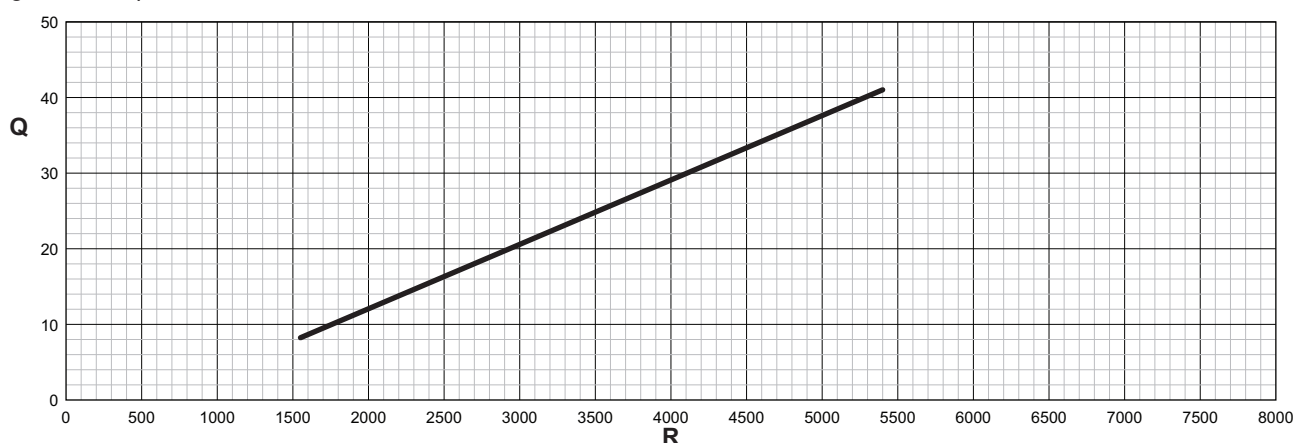


2. Use the graph to select the desired input and resulting fan rotation speed:
 - 2.1. Select the desired input on the vertical axis of the graph.
 - 2.2. Draw a horizontal line from the selected input.
 - 2.3. Stop when the line intersects with the curve.
 - 2.4. Draw a vertical line from the intersection point with the curve.
 - 2.5. Stop when the line intersects with the horizontal axis of the graph.
 - 2.6. Read the value where the vertical line intersects with the horizontal axis of the graph.

⇒ This value is the fan rotation speed for the desired input.

3. Change parameter **GP007** to set the desired maximum input.

Fig.20 Graph for Quinta Ace30 - 45



AD-3001799-01

Q Input (Hi) (kW)

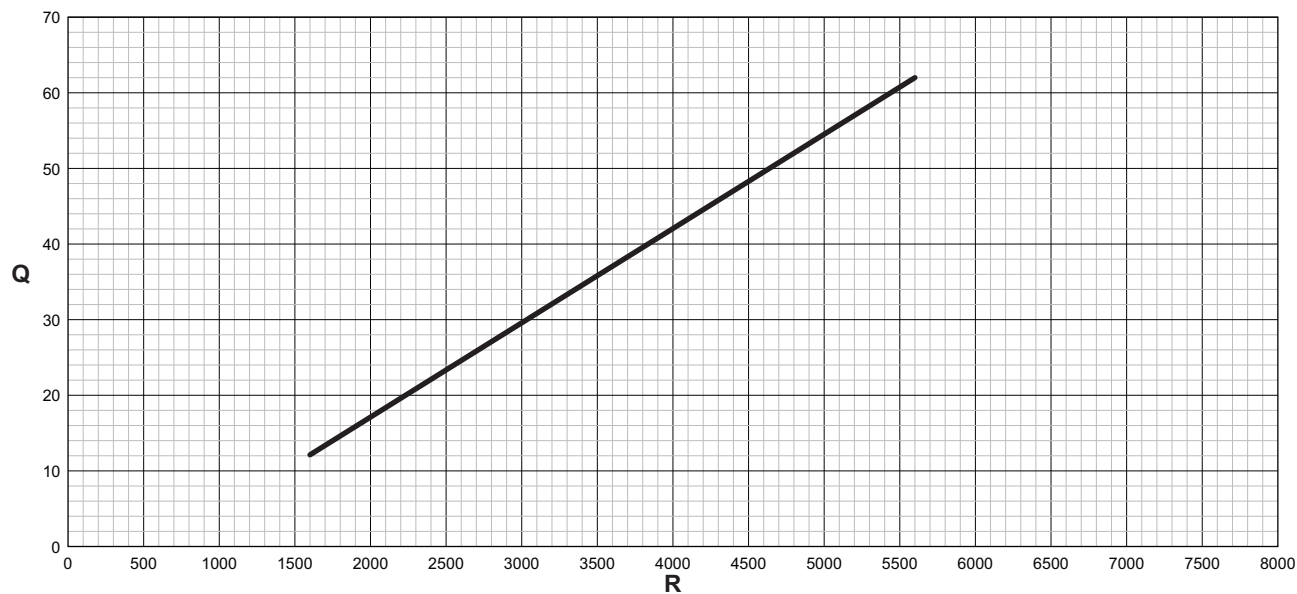
R Fan rotation speed

Tab.14 Fan rotation speeds

Boiler type	Minimum input	Factory setting ⁽¹⁾	Maximum input
Quinta Ace30	1550	4100	4100
Quinta Ace45	1550	5400	5400

(1) Parameter **GP007**.

Fig.21 Graph for Quinta Ace55 - 65



AD-3001800-01

Q Input (Hi) (kW)

R Fan rotation speed

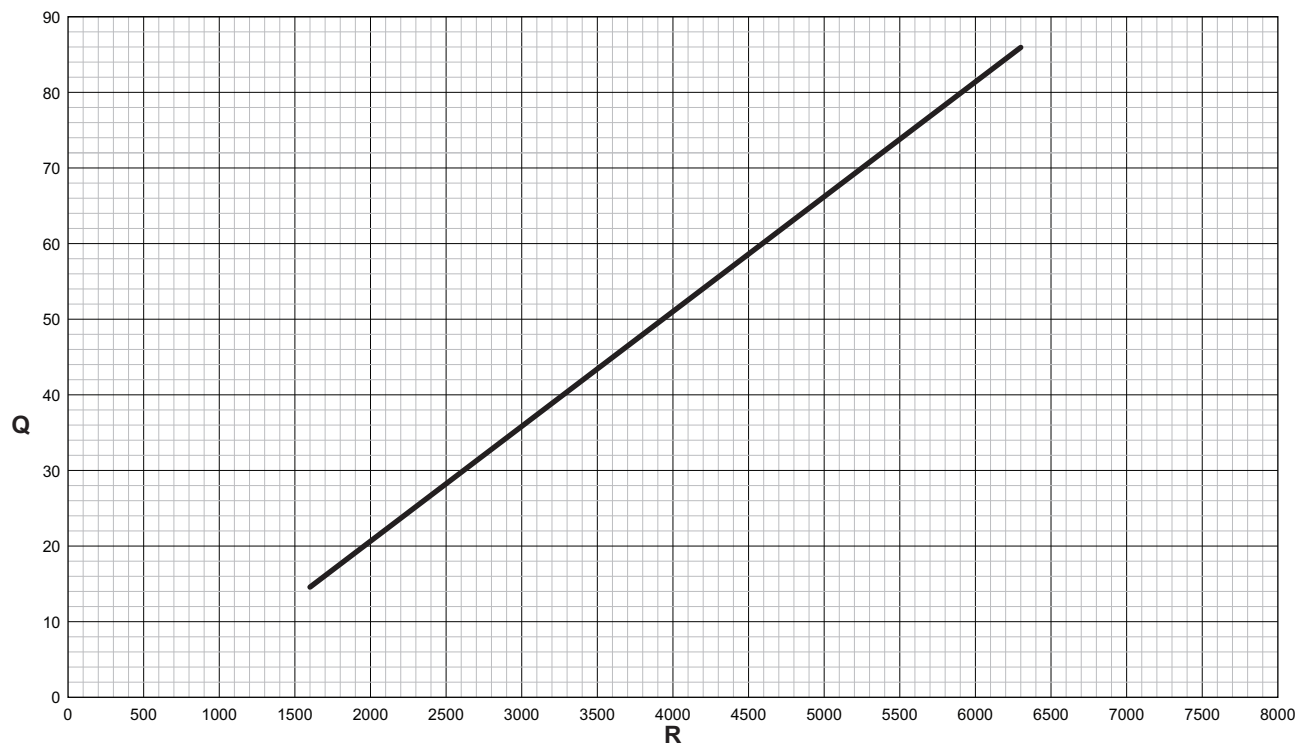
Tab.15 Fan rotation speeds

Boiler type	Minimum input	Factory setting ⁽¹⁾	Maximum input
Quinta Ace55 ⁽²⁾	1600	5100	5100
Quinta Ace65	1600	5600	5600

(1) Parameter **GP007**.

(2) Boiler 45 configured at 35 kW.

Fig.22 Graph for Quinta Ace90



AD-3001801-01

Q Input (Hi) (kW)

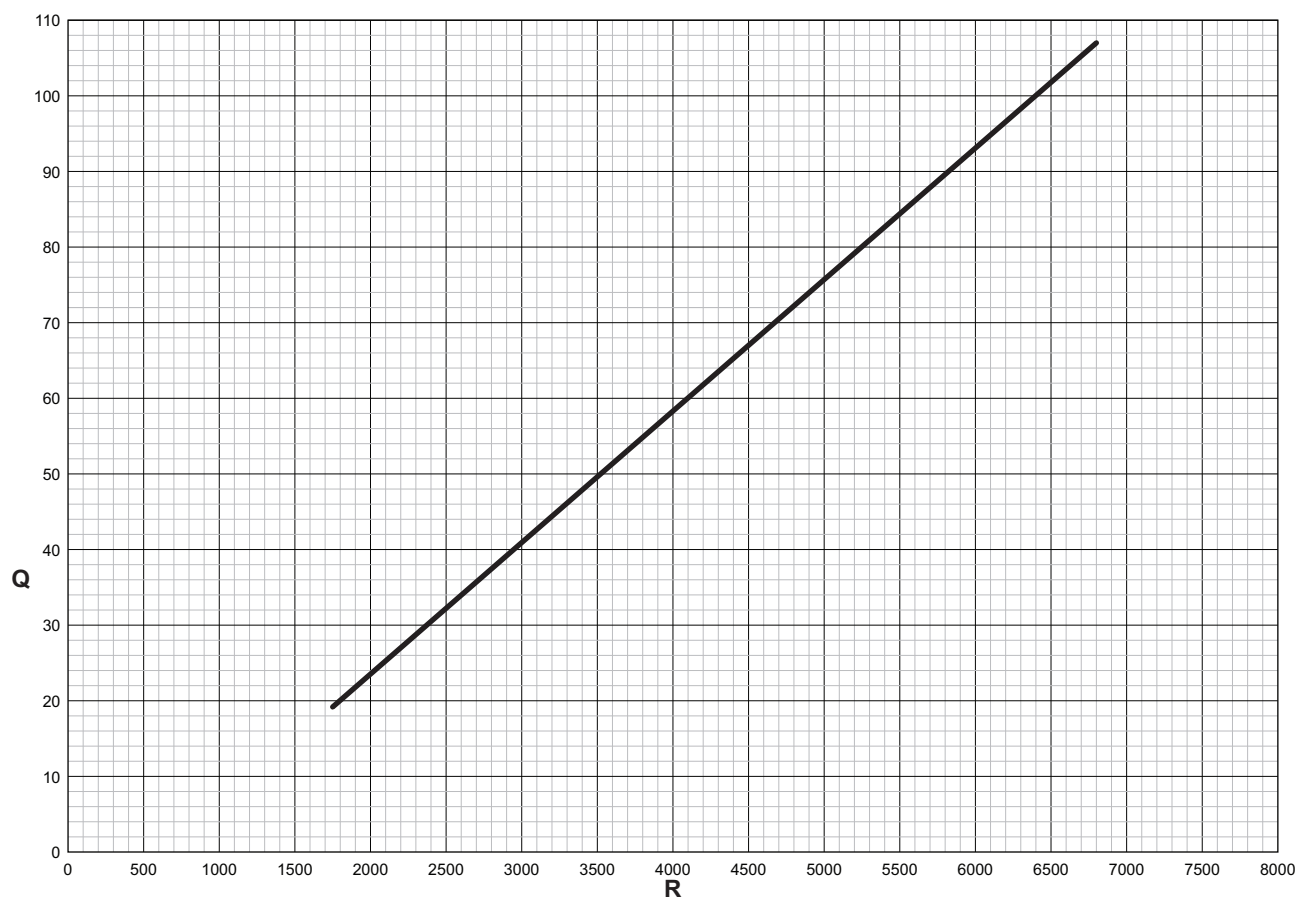
R Fan rotation speed

Tab.16 Fan rotation speeds

Boiler type	Minimum input	Factory setting ⁽¹⁾	Maximum input
Quinta Ace90	1600	6300	6300

(1) Parameter **GP007**.

Fig.23 Graph for Quinta Ace115



AD-3001802-01

Q Input (Hi) (kW)

R Fan rotation speed

Tab.17 Fan rotation speeds

Boiler type	Minimum input	Factory setting ⁽¹⁾	Maximum input
Quinta Ace115	1750	6800	6800
(1) Parameter GP007.			

4.7.2 Setting for process heat application



Important

The service life of the boiler may be reduced if it is used for process heat applications.

For this application, adjust the following parameters:

1. Set parameter **DP140** to **Process heat**.
2. Set parameters **DP005** and **DP070** to the required value for this installation.
3. If using a DHW sensor; set parameters **DP006** and **DP034** to the required value for this installation.

4.7.3 Changing the default ΔT setting

The ΔT can be increased with a parameter setting. When increasing the ΔT , the control unit limits the flow temperature to a maximum of 80 °C.

1. Set parameter **GP021** to the required temperature.

Tab.18 Increasing default ΔT setting

Boiler type	Default ΔT setting	Maximum ΔT setting
Quinta Ace 30 Quinta Ace 45 Quinta Ace 55 Quinta Ace 65 Quinta Ace 90	25 °C	40 °C
Quinta Ace 115	20 °C	35 °C

2. If a PWM-controlled central heating-pump is controlled by the boiler control unit; set parameter **PP014** to 2 °C.

4.7.4 Settings for open-vented application

For this application, adjust the following parameter:

1. Set parameter **DP006** to 0,0 bar.
2. Set parameter **GP021** to 20°C.

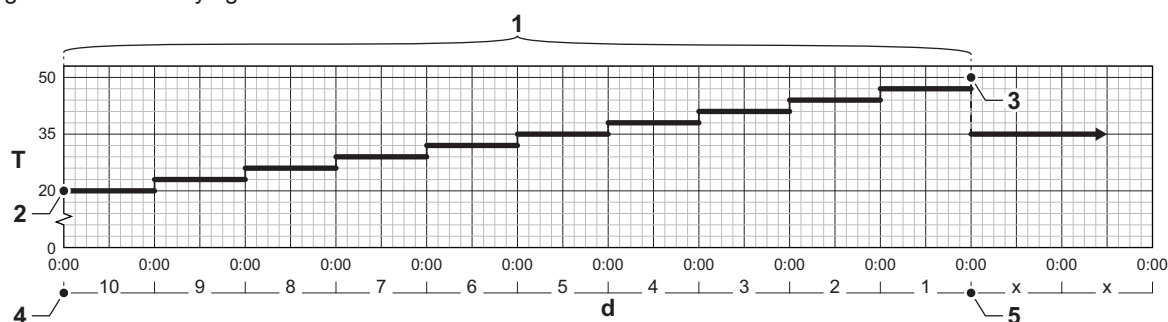
4.7.5 Screed drying

The screed drying function is used to force a constant flow temperature or a series of successive temperature levels to accelerate screed drying on underfloor heating.

i Important

- The settings for these temperatures must follow the screed layer's recommendations.
- Activation of this function via the parameter **CP470** forces the permanent display of the screed drying function and deactivates all other regulator functions.
- When the screed drying function is active on one circuit, all other circuits and the domestic hot water circuit continue to run.
- It is possible to use the screed drying function on circuits A and B. The parameter settings must be made on the PCB that controls the circuit concerned.

Fig.24 Screed drying curve



AD-3001406-01

- | | |
|--|--|
| d Number of days | 3 Screed drying stop temperature (parameter CP490) |
| T Heating set point temperature | 4 Start of the screed drying function |
| 1 Number of days on which the screed drying function is activated (parameter CP470) | 5 End of the screed drying function, back to normal running |
| 2 Screed drying start temperature (parameter CP480) | |

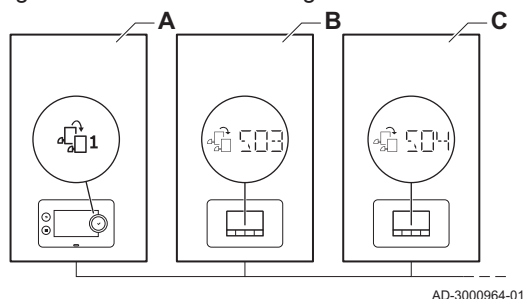
i Important

Every day at midnight, the screed drying start temperature set point is recalculated and the remaining number of days on which the screed drying function is running decreases.

4.7.6 Cascade control

With the HMI T-control mounted in the master boiler it is possible to manage up to 7 boilers in cascade. The system sensor is connected to the master boiler. All the boilers in the cascade are connected by an S-BUS cable. The boilers are automatically numbered:

Fig.25 Cascade numbering



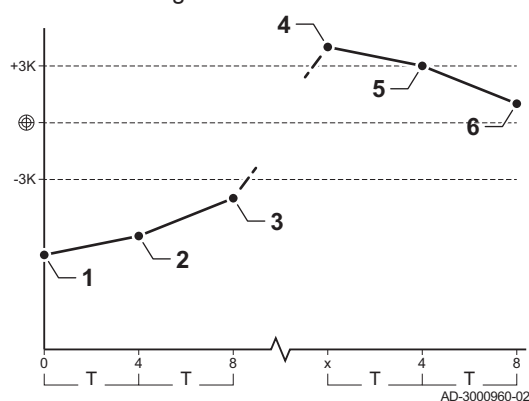
- A The master boiler is number 1.
- B The first slave boiler is number 3 (number 2 does not exist).
- C The second slave boiler is number 4; and so on.

There are two options for cascade control management:

- Adding supplementary boilers successively (traditional control).
- Adding supplementary boilers simultaneously (parallel control).

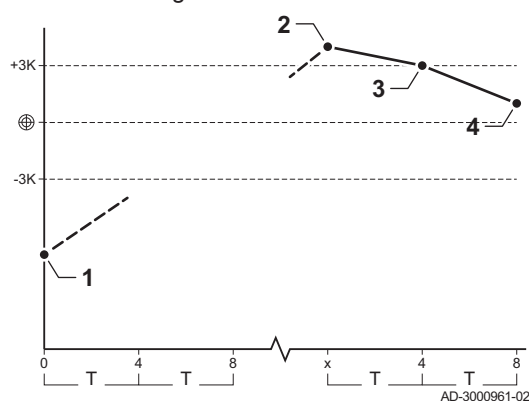
The cascade control management can be changed with parameter **NP006**.

Fig.26 Traditional cascade control management



- 1 First boiler starts running when system temperature is 3°C below set point.
- 2 After 4 minutes the second boiler starts running if $\Delta T < 6K$ and the system temperature is still more than 3°C below set point.
- 3 After 8 minutes the third boiler starts running if $\Delta T < 6K$ and the system temperature is still more than 3°C below set point.
- 4 First boiler stops running when system temperature is 3°C above set point.
- 5 After 4 minutes the second boiler stops running if $\Delta T < 6K$ and the system temperature is still more than 3°C above set point.
- 6 After 8 minutes the third boiler stops running if $\Delta T < 6K$ and the system temperature is still more than 3°C above set point.
- T Duration between start and stop of boilers can be changed with parameter **NP009**.

Fig.27 Parallel cascade control management



- 1 All boilers in cascade start running when system temperature is 3°C below set point.
- 2 First boiler stops running when system temperature is 3°C above set point.
- 3 After 4 minutes the second boiler stops running if $\Delta T < 6K$ and the system temperature is still more than 3°C above set point.
- 4 After 8 minutes the third boiler stops running if $\Delta T < 6K$ and the system temperature is still more than 3°C above set point.
- T Duration between start and stop of boilers can be changed with parameter **NP009**.

Temperature type cascade algorithm; the setpoint sent to the running boiler is:

- Output; requested by the zones.
- Temperature; output setpoint requested by the zones + error calculation.

Output type cascade algorithm; the setpoint sent to the running boiler is:

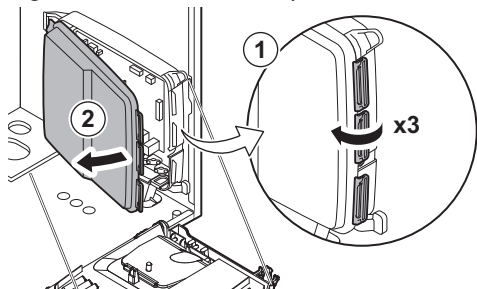
- Output; according to PI algorithms.
- Temperature; -90°C

The type of cascade algorithm can be changed with parameter **NP011**.

5 Installation examples

5.1 Access to the expansion box

Fig.28 Access to the expansion box



AD-4000062-01

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

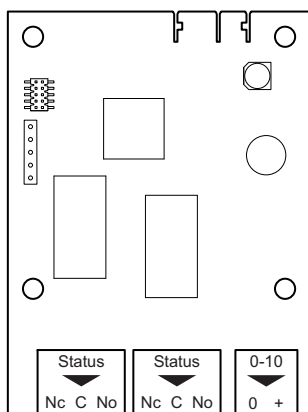
1. Unclip the housing cover.
2. Remove the cover.
3. Install the expansion PCB in accordance with the instructions supplied.

The following is installed in the expansion box:

- **SCB-01 PCB.**

5.2 The SCB-01 expansion PCB

Fig.29 SCB-01 PCB



AD-3001514-01

The SCB-01 has the following features:

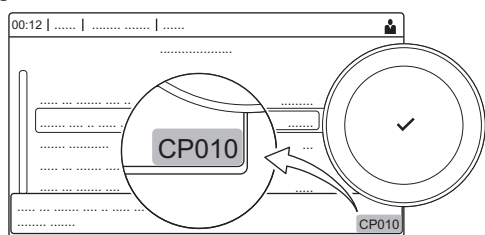
- Two potential free contacts for status notifications
- 0–10 V output connection for a PWM system pump

Expansion PCBs are automatically recognised by the control unit of the boiler. If expansion PCBs are removed, the boiler will show an error code. To resolve this error, an auto-detect must be carried out after removal.

6 Settings

6.1 Introduction to parameter codes

Fig.30 Code on a HMI T-control



AD-3001373-02

The controls platform makes use of an advanced system to categorise parameters, measurements and counters. Knowing the logic behind these codes, makes it easier to identify them. The code consists of two letters and three numbers.

Fig.31 First letter

CP010

AD-3001375-01

The first letter is the category the code relates to.

- A** Appliance: Appliance
- C** Circuit: Zone
- D** Domestic hot water: Domestic hot water
- G** Gas fired: Gas-fired heat engine
- P** Producer: Central heating

Category D codes are appliance controlled only. When the domestic hot water is controlled by an SCB, it is handled like a circuit, with C-category codes.

Fig.32 Second letter

CP010

AD-3001376-01

The second letter is the type.

P Parameter: Parameters
C Counter: Counters
M Measurement: Signals

Fig.33 Number

CP010

AD-3001377-01

The number is always three digits. In certain cases, the last of the three digits relates to a zone.

6.2 Searching the parameters, counters and signals

You can search and change data points (Parameters, counters, signals) of the appliance, connected control boards and sensors.

▶▶ ≡ > **Installation Setup** > **Search datapoints**



Use the rotary knob to navigate.

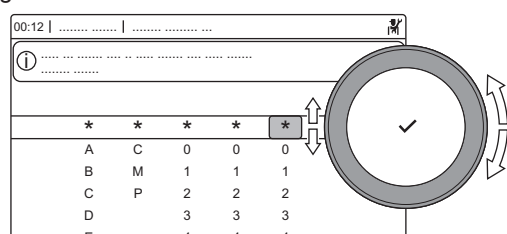
Use the ✓ button to confirm your selection.

1. Press the ≡ button.
2. Select **Installation Setup**.
3. Select **Search datapoints**.
4. Select the search criteria (code):
 - 4.1. Select the first letter (datapoint category).
 - 4.2. Select the second letter (datapoint type).
 - 4.3. Select the first number.
 - 4.4. Select the second number.
 - 4.5. Select the third number.



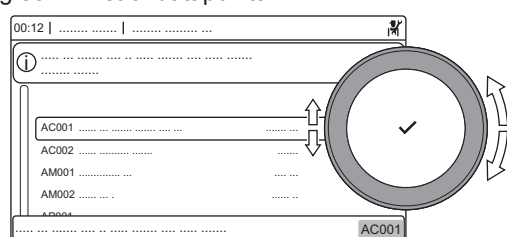
The * symbol can be used to indicate any character within the search field.

Fig.34 Search



AD-3001916-01

Fig.35 List of datapoints



AD-3001917-01

⇒ The list of datapoints appears in the display. Only the first 30 results are shown when searching.

5. Select the desired datapoint.

6.3 List of parameters

6.3.1 CU-GH08 control unit parameters

All tables show the factory setting for the parameters.



Important

The tables also list parameters that are only applicable if the boiler is combined with other equipment.

Tab.19 Navigation for basic installer level

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

Tab.20 Factory settings at basic installer level

Code	Display text	Description	Adjustment range	Subme- nu	30	45	55	65	90	115
AP016	CH function on	Enable central heating heat demand processing	0 = Off 1 = On	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	1	1	1	1	1	1
AP073	Summer Winter	Outdoor temperature: upper limit for heating	10 - 30 °C	Outdoor temperature	22	22	22	22	22	22
AP074	Force summer mode	The heating is stopped. Hot water is maintained. Force Summer Mode	0 = Off 1 = On	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	0	0	0	0	0	0
AP089	Installer name	Name of the installer		Mandatory bus master	None	None	None	None	None	None
AP090	Installer phone	Telephone number of the installer		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	Mandatory bus master	2	2	2	2	2	2
CP000	MaxZoneT-FlowSet-point	Maximum Flow Temperature setpoint zone	0 - 90 °C	CIRCA	80	80	80	80	80	80
CP080 CP081 CP082 CP083 CP084 CP085	User T.Room Activity	Room setpoint temperature of the user zone activity	5 - 30 °C	CIRCA	16 20 6 21 22 20	16 20 6 21 22 20	16 20 6 21 22 20	16 20 6 21 22 20	16 20 6 21 22 20	16 20 6 21 22 20
CP200	Manu ZoneRoom-TempSet	Manually setting the room temperature setpoint of the zone	5 - 30 °C	CIRCA	20	20	20	20	20	20
CP320	Operating-ZoneMode	Operating mode of the zone	0 = Scheduling 1 = Manual 2 = Off	CIRCA	1	1	1	1	1	1
CP510	Temporary Room Setp	Temporary room setpoint per zone	5 - 30 °C	CIRCA	20	20	20	20	20	20
CP550	Zone, fire place	Fire Place mode is active	0 = Off 1 = On	CIRCA	0	0	0	0	0	0
CP660	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	CIRCA	3	3	3	3	3	3
DP060	DHW time-prog. select	Time program selected for DHW.	0 = Schedule 1 1 = Schedule 2 2 = Schedule 3	Internal DHW	0	0	0	0	0	0

Code	Display text	Description	Adjustment range	Submenu	30	45	55	65	90	115
DP070	DHW comfort setpoint	Comfort temperature setpoint for the Domestic Hot Water tank	40 - 65 °C	Internal DHW	60	60	60	60	60	60
DP080	DHW reduced setpoint	Reduced temperature setpoint from the Domestic Hot Water tank	7 - 50 °C	Internal DHW	15	15	15	15	15	15
DP200	DHW mode	DHW primary mode current working setting	0 = Scheduling 1 = Manual 2 = Off	Internal DHW	1	1	1	1	1	1
DP337	DHW holiday setpoint	Holiday temperature setpoint from the Domestic Hot Water tank	10 - 60 °C	Internal DHW	10	10	10	10	10	10

Tab.21 Navigation for installer level

Level	Menu path
Installer	≡ > Installation Setup > CU-GH08 > Submenu ⁽¹⁾ > Parameters, counters, signals > Parameters > General
(1) See the column "Submenu" 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	Adjustment range	Submenu	30	45	55	65	90	115
AP001	BL function	BL input function selection	1 = Full blocking 2 = Partial blocking 3 = User reset locking	Gas fired appliance	1	1	1	1	1	1
AP003	Flue valve wait time	Heat generator wait time to open the flue gas	0 - 255 Sec	Gas fired appliance	0	0	0	0	0	0
AP006	Min. water pressure	Appliance will report low water pressure below this value	0 - 6 bar	Gas fired appliance	0.8	0.8	0.8	0.8	0.8	0.8
AP008	Release wait time	Waiting time after closing the release contact to start the heat generator.	0 - 255 Sec	Gas fired appliance	0	0	0	0	0	0
AP009	Service hours	Number of heat generator operating hours for raising a service notification	0 - 51000 Hours	Gas fired appliance	6000	6000	6000	6000	6000	6000
AP010	Service notification	Select the type of service notification	0 = None 1 = Custom notification 2 = ABC notification	Gas fired appliance	2	2	2	2	2	2
AP011	Service hours mains	Hours powered to raise a service notification	0 - 51000 Hours	Gas fired appliance	3500 0	3500 0	3500 0	3500 0	3500 0	3500 0
AP013	Release function	Function of the release input contact	0 = Disabled 1 = Full blocking 2 = Central heat blocked	Gas fired appliance	1	1	1	1	1	1
AP018	Sets release input	Configuration of the release input contact (normally open or normally closed)	0 = Normally open 1 = Normally closed	Gas fired appliance	0	0	0	0	0	0
AP079	Building Inertia	Inertia of the building used for heat up speed	0 - 15	Outdoor temperature	3	3	3	3	3	3

Code	Display text	Description	Adjustment range	Submenu	30	45	55	65	90	115
AP080	Frost min out temp	Outside temperature below which the antifreeze protection is activated	-60 - 25 °C	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	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	0	0	0	0	0	0
AP098	BL1 contact config.	BL1 input contact configuration	0 = Open 1 = Closed	Gas fired appliance	1	1	1	1	1	1
AP108	OutsideSensorEnabled	Enable the function Outside Sensor	0 = Auto 1 = Wired sensor	Outdoor temperature	0	0	0	0	0	0
CP020	Zone Function	Functionality of the zone	0 = Disable 1 = Direct	CIRCA	1	1	1	1	1	1
CP060	RoomT. Holiday	Wished room zone temperature on holiday period	5 - 20 °C	CIRCA	6	6	6	6	6	6
CP070	MaxReduceRoomT.Lim	Max Room Temperature limit of the circuit in reduced mode, that allows switching to comfort mode	5 - 30 °C	CIRCA	16	16	16	16	16	16
CP210	Zone HCZP Comfort	Comfort footpoint of the temperature of heat curve of the circuit	15 - 90 °C	CIRCA	15	15	15	15	15	15
CP220	Zone HCZP Reduced	Reduced footpoint of the temperature of heat curve of the circuit	15 - 90 °C	CIRCA	15	15	15	15	15	15
CP230	Zone Heating Curve	Heating curve temperature gradient of the zone	0 - 4	CIRCA	1.5	1.5	1.5	1.5	1.5	1.5
CP340	TypeReducedNight-Mode	Type of reduced night mode, stop or maintain heating of circuit	0 = Stop heat demand 1 = Continue heat demand	CIRCA	1	1	1	1	1	1
CP470	Zone screed drying	Setting of the screed drying program of the zone	0 - 30 Days	CIRCA	0	0	0	0	0	0
CP480	ScreedStart-Temp	Setting of the start temperature of the screed drying program of the zone	20 - 50 °C	CIRCA	20	20	20	20	20	20
CP490	ScreedStop-Temp	Setting of the stop temperature of the screed drying program of the zone	20 - 50 °C	CIRCA	20	20	20	20	20	20
CP570	ZoneTime-Prog Select	Time Program of the zone selected by the user	0 = Schedule 1 1 = Schedule 2 2 = Schedule 3	CIRCA	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	CIRCA	3	3	3	3	3	3

Code	Display text	Description	Adjustment range	Submenu	30	45	55	65	90	115
CP740	Zone cool down speed	Selection of cool down speed of the zone	0 = Slowest 1 = Slower 2 = Normal 3 = Faster 4 = Fastest	CIRCA	2	2	2	2	2	2
CP750	MaxZone Preheat time	Maximum zone preheat time	0 - 240 Min	CIRCA	90	90	90	90	90	90
CP780	Control strategy	Selection of the control strategy for the zone	0 = Automatic 1 = Room Temp. based 2 = Outdoor Temp. based 3 = Outdoor & room based	CIRCA	0	0	0	0	0	0
DP004	Legionella calor.	Legionella mode protection calorifier	0 = Disabled 1 = Weekly 2 = Daily	Internal DHW Tank DHW	1	1	1	1	1	1
DP007	Dhw 3wv Standby	Position of three way valve during standby	0 = CH position 1 = DHW position	Tank DHW	0	0	0	0	0	0
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 Gas fired appliance	1	1	1	1	1	1
DP160	DHW Anti-Leg Setpoint	Setpoint for DHW anti legionella	50 - 90 °C	Internal DHW	70	70	70	70	70	70
DP410	DHW anti-leg runtime	Duration of the DHW anti-legionella program	0 - 600 Min	Internal DHW	60	60	60	60	60	60
DP430	Start day anti-leg	Day to start the DHW anti-legionella program	1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday 6 = Saturday 7 = Sunday	Internal DHW	6	6	6	6	6	6
DP440	Start time anti-leg	Starting time for the DHW anti-legionella program	0 - 143 HoursMinutes	Internal DHW	18	18	18	18	18	18
PP015	CH Pump postrun time	Central heating pump post run time	0 - 99 Min	Gas fired appliance	1	1	1	1	1	1

Tab.23 Navigation for advanced installer level

Level	Menu path
Advanced installer	 > Installation Setup > CU-GH08 > Submenu ⁽¹⁾ > Parameters, counters, signals > Parameters > Advanced
(1) See the column "Submenu" 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	Adjustment range	Subme- nu	30	45	55	65	90	115
AP002	Manual Heat Demand	Enable manual heat demand function	0 = Off 1 = With setpoint	Gas fired appliance	0	0	0	0	0	0
AP026	Setpoint manual HD	Flow temperature setpoint for manual heat demand	10 - 90 °C	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	1	1	1	1	1	1
AP102	Boiler Pump function	Configuration of the boiler pump as zone pump or system pump (feed low-loss header)	0 = No 1 = Yes	Gas fired appliance	0	0	0	0	0	0
CP010	Tflow setpoint zone	Zone flow temperature setpoint, used when the zone is set to a fixed flow setpoint.	0 - 90 °C	CIRCA	90	90	90	90	90	90
CP130	T.Outdoor-ToZone	Assigning the outdoor sensor to zone ...	0 - 4	CIRCA	0	0	0	0	0	0
CP240	ZoneRoomUnitInfl	Adjustment of the influence of the zone room unit	0 - 10	CIRCA	3	3	3	3	3	3
CP250	CalSondeAmbZone	Calibration of Zone Room Unit	-5 - 5 °C	CIRCA	0	0	0	0	0	0
CP770	Zone Buffered	The zone is after a Buffer tank	0 = No 1 = Yes	CIRCA	0	0	0	0	0	0
DP003	Abs. max fan DHW	Maximum fan speed on Domestic Hot Water	1400 - 7500 Rpm	Gas fired appliance	4100	5400	5100	5600	6300	6700
DP005	Calorifier Tf offset	Flow setpoint offset for loading calorifier	0 - 50 °C	Tank DHW	20	20	20	20	20	20
DP006	Hyst calorifier	Hysteresis to start heating calorifier	2 - 15 °C	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 - 99 Sec	Gas fired appliance	10	10	10	10	10	10
DP034	DhwCalorifierOffset	Offset for calorifier sensor	0 - 10 °C	Tank DHW	2	2	2	2	2	2
GP007	Fan RPM Max CH	Maximum fan speed during Central Heating mode	1400 - 7500 Rpm	Gas fired appliance	4100	5400	5100	5600	6300	6800
GP008	Fan RPM Min	Minimum fan speed during Central Heating + Domestic Hot Water mode	1000 - 4000 Rpm	Gas fired appliance	1550	1550	1600	1600	1600	1750
GP009	Fan RPM Start	Fan speed at appliance start	1400 - 4000 Rpm	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	0	0	0	0	0	0
GP021	Temp diff Modulating	Modulate back when delta temperature is larger than this threshold	10 - 40 ⁽¹⁾ °C	Gas fired appliance	25	25	25	25	25	20
GP082	Chimney over DHW	Enable the DHW circuit during chimney sweep	0 = Off 1 = On	Gas fired appliance	0	0	0	0	0	0

Code	Display text	Description	Adjustment range	Submenu	30	45	55	65	90	115
PP014	ChPumpD-TReduction	Reduction of temperature delta modulating for pump modulation	0 - 40 °C	Gas fired appliance	18	18	18	18	18	18
PP016	Max. CH pump speed	Maximum central heating pump speed (%)	30 - 100 %	Gas fired appliance	100	100	100	100	100	100
PP017	ChPump-SpeedMax-Factor	Maximum central heating at minimum load as percentage of max pump speed	0 - 100 %	Gas fired appliance	100	100	100	100	100	100
PP018	Min CH pump speed	Minimum central heating pump speed (%)	30 - 100 %	Gas fired appliance	30	30	30	30	30	30
(1) For the Quinta Ace115, this value is 35°C										

6.3.2 SCB-01 expansion PCB parameters

All tables show the factory setting for the parameters.



Important

The tables also list parameters that are only applicable if the boiler is combined with other equipment.

Tab.25 Navigation for installer level

Level	Menu path
Installer	≡ > Installation Setup > SCB-01 > Submenu ⁽¹⁾ > Parameters, counters, signals > Parameters > General
(1) See the column "Submenu" in the following table for the correct navigation. The parameters are grouped in specific functionalities.	

Tab.26 Factory settings at installer level

Code	Display text	Description	Adjustment range	Submenu	Default setting
EP028	Function 10V-PWM	Selects the function of the 0-10 Volt output	0 = 0-10V 1 (Wilo) 1 = 0-10V 2 (Gr. GENI) 2 = PWM signal (Solar) 3 = 0-10V 1 limited 4 = 0-10V 2 limited 5 = PWM signal limited 6 = PWM signal (UPMXL)	0-10 volt or PWM out	0-10V 1 (Wilo)
EP029	Source 10V-PWM	Selects the source signal for the 0-10 Volt output	0 = PWM 1 = Requested power 2 = Actual power	0-10 volt or PWM out	PWM

6.4 List of measured values

6.4.1 CU-GH08 control unit counters

Tab.27 Navigation for basic installer level

Level	Menu path
Basic installer	≡ > Installation Setup > CU-GH08 > Submenu ⁽¹⁾ > Parameters, counters, signals > Counters > General
(1) See the column "Submenu" in the following table for the correct navigation. The counters are grouped in specific functionalities.	

Tab.28 Counters at basic installer level

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

Tab.29 Navigation for installer level

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

Tab.30 Counters at installer level

Code	Display text	Description	Range	Submenu
AC001	Hours on mains	Number of hours that the appliance has been on mains power	0 - 4294967295Hours	System Functionality
AC002	Service run hours	Number of hours that the appliance has been producing energy since last service	0 - 131068Hours	Gas fired appliance
AC003	Hours since service	Number of hours since the previous servicing of the appliance	0 - 131068Hours	Gas fired appliance
AC004	Starts since service	Number of heat generator starts since the previous servicing.	0 - 4294967294	Gas fired appliance
AC026	Pump running hours	Counter that shows the number of pump running hours	0 - 65534Hours	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 - 65534Hours	Tank DHW Gas fired appliance
DC004	DHW starts	Number of starts for domestic hot water	0 - 65534	Tank DHW Gas fired appliance
DC005	DHW run hours	Total number of hours that the appliance has been producing energy for domestic hot water	0 - 65534Hours	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 - 4294967294kW	Gas fired appliance
PC002	Total starts	Total number of heat generator starts. For heating and domestic hot water	0 - 4294967294	Gas fired appliance
PC003	Heat gen run hrs	Total Number of hours that the appliance has been producing energy for central heating and DHW	0 - 65534Hours	Gas fired appliance
PC004	Burner flame loss	Number of burner flame loss	0 - 65534	Gas fired appliance

6.4.2 SCB-01 expansion PCB counters

Tab.31 Navigation for basic installer level

Level	Menu path
Basic installer	☰ > Installation Setup > SCB-01 > Submenu ⁽¹⁾ > Parameters, counters, signals > Counters > General
(1) See the column "Submenu" in the following table for the correct navigation. The counters are grouped in specific functionalities.	

Tab.32 Counters at basic installer level

Code	Display text	Description	Range	Submenu
AC001	Hours on mains	Number of hours that the appliance has been on mains power	0 - 4294967295Hours	System Functionality

6.4.3 CU-GH08 control unit signals

Tab.33 Navigation for basic installer level

Level	Menu path
Basic installer	☰ > Installation Setup > CU-GH08 > Submenu ⁽¹⁾ > Parameters, counters, signals > Signals > General
(1) See the column "Submenu" in the following table for the correct navigation. The signals are grouped in specific functionalities.	

Tab.34 Signals at basic installer level

Code	Display text	Description	Range	Submenu
AM001	DHW active	Is the appliance currently in domestic hot water production mode?	0 = Off 1 = On	Tank DHW 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.	 See Status and sub-status, page 35	System Functionality
AM014	Sub status Appliance	Current sub status of the appliance.	 See Status and sub-status, page 35	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 - 150°C	Tank DHW Producer Generic Gas fired appliance
AM018	T return	Return temperature of appliance. The temperature of the water entering the appliance.	-25 - 150°C	Tank DHW Gas fired appliance
AM019	Water pressure	Water pressure of the primary circuit.	0 - 4bar	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 - 60°C	Outdoor temperature Gas fired appliance

Code	Display text	Description	Range	Submenu
AM033	Next Service Ind.	Next service indication	0 = None 1 = A 2 = B 3 = C 4 = Custom	Gas fired appliance
AM036	Flue gas temperature	Temperature of the exhaust gas leaving the appliance	0 - 250°C	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 - 250°C	Gas fired appliance
AM046	Internet T.Outside	Outside temperature received from an internet source	-70 - 70°C	Outdoor temperature
AP078	Out sensor detected	Outside sensor detected in the application	0 = No 1 = Yes	Outdoor temperature
BM000	Dhw Temperature	Dhw Temperature depending on load-type this is TankTemperature or DhwOutTemperature	-25 - 150°C	Gas fired appliance
CM030	Zone RoomTemperature	Measure of the room temperature of the zone	0 - 50°C	CIRCA
CM190	Zone Troom setpoint	Wished room temperature setpoint of the zone	0 - 50°C	CIRCA
CM210	ZoneTout temp	Current outdoor temperature of the zone	-70 - 70°C	CIRCA
CM280	ZoneRTC TcalcRoomStp	Internal room temperature setpoint calculated by the room temperature controller of the zone	0 - 100°C	CIRCA
DM009	Auto/Derog DHWstatus	Automatic/derogation status of Domestic Hot Water mode	0 = Scheduling 1 = Manual 2 = Off 3 = Temporary	Tank DHW
GM001	Actual fan RPM	Actual fan RPM	0 - 12000Rpm	Gas fired appliance
GM002	Fan RPM setpoint	Actual fan RPM setpoint	0 - 12000Rpm	Gas fired appliance
GM008	Actual flame current	Actual flame current measured	0 - 25µA	Gas fired appliance

Tab.35 Navigation for installer level

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

Tab.36 Signals at installer level

Code	Display text	Description	Range	Submenu
AM006	Release input	Current status of the release input	0 = Open 1 = Closed 2 = Off	Gas fired appliance
AM024	Actual rel. Power	Actual relative power of the appliance	0 - 100%	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 - 250°C	Gas fired appliance
CM070	Zone Tflow Setpoint	Current Flow temperature setpoint of zone	0 - 150°C	CIRCA

Code	Display text	Description	Range	Submenu
CM110	ZoneTRoomUnit setp	Room Unit temperature setpoint of zone	0 - 35°C	CIRCA
CM130	ZoneCurrent activity	Current activity of the zone	0 = Off 1 = Reduced 2 = Comfort 3 = Anti legionella	CIRCA
CM140	ZoneOTContr present	OpenTherm controller is connected to the zone	0 = No 1 = Yes	CIRCA
CM150	ZoneState Heatdemand	State of On Off heat demand per zone	0 = No 1 = Yes	CIRCA
CM160	Zone Mod HeatDemand	Presense of modulating heat demand per zone	0 = No 1 = Yes	CIRCA
CM180	Zone RU present	Presense of Room Unit in this zone	0 = No 1 = Yes	CIRCA
DM001	DHW tank temp bottom	Domestic Hot Water tank temperature (bottom sensor)	-25 - 150°C	Tank DHW
DM005	DhwSolarTank-Temp	Domestic Hot Water solar tank temperature	-25 - 150°C	Tank DHW
GM025	STB status	High limit status (0 = open, 1 = closed)	0 = Open 1 = Closed 2 = Off	Gas fired appliance
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 12 = Poor combustion 13 = Solar T above stop T	Gas fired appliance
PM002	CH Setpoint	Central heating setpoint of the appliance	0 - 250°C	Gas fired appliance
PM003	ChTflowAverage	Actual average flow temperature	-25 - 150°C	Gas fired appliance

Tab.37 Navigation for advanced installer level

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

Tab.38 Signals at advanced installer level

Code	Display text	Description	Range	Submenu
AM004	Blocking code	The current blocking code	0 - 255	System Functionality
AM005	Locking code	The currently active locking code.	0 - 255	System Functionality

Code	Display text	Description	Range	Submenu
AM091	SeasonMode	Seasonal mode active (summer / winter)	0 = Winter 1 = Frost protection 2 = Summer neutral band 3 = Summer	Outdoor temperature
CM120	ZoneCurrentMode	Zone Current Mode	0 = Scheduling 1 = Manual 2 = Off 3 = Temporary	CIRCA
CM200	ZoneCurrentHeat-Mode	Displaying current operating mode of the zone	0 = Standby 1 = Heating 2 = Cooling	CIRCA
CM220	ZoneTout aver short	Outdoor temperature average short time per zone	-70 - 70°C	CIRCA
CM240	Zone Tout connected	Outdoor temperature sensor is connected to the zone	0 = No 1 = Yes	CIRCA
CM260	Zone T Room Sensor	Measurement of the room sensor temperature of the zone	-60 - 70°C	CIRCA
DM004	DhwFlowTempSetpoint	Flow temperature setpoint Domestic Hot Water	0 - 95°C	Tank DHW
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
GM013	Blocking Input	Blocking input status	0 = Open 1 = Closed 2 = Off	Gas fired appliance

6.4.4 SCB-01 expansion PCB signals

Tab.39 Navigation for basic installer level

Level	Menu path
Basic installer	≡ > Installation Setup > SCB-01 > Submenu ⁽¹⁾ > Parameters, counters, signals > Signals > General
(1) See the column "Submenu" in the following table for the correct navigation. The signals are grouped in specific functionalities.	

Tab.40 Signals at basic installer level

Code	Display text	Description	Range	Submenu
AM012	Status Appliance	Current main status of the appliance.	 See Status and sub-status, page 35	System Functionality
AM014	Sub status Appliance	Current sub status of the appliance.	 See Status and sub-status, page 35	System Functionality

6.4.5 Status and sub-status

Tab.41 AM012 - Status

Code	Display text	Explanation
0	Standby	The appliance is in standby mode.
1	Heat Demand	A heat demand is active.
2	Generator start	The appliance starts.
3	Generator CH	The appliance is active for central heating.
4	Generator DHW	The appliance is active for domestic hot water.
5	Generator stop	The appliance has stopped.
6	Pump Post Run	The pump is active after the appliance stopped.
8	Controlled Stop	The appliance does not start because the starting conditions are not met.
9	Blocking Mode	A blocking mode is active.
10	Locking Mode	A locking mode is active.
11	Load test min	Low load test mode for central heating is active.
12	Load test CH max	Full load test mode for central heating is active.
13	Load test DHW max	Full load test mode for domestic hot water is active.
15	Manual Heat Demand	Manual heat demand for central heating is active.
16	Frost Protection	Frost protection mode is active.
17	Deaeration	The deaeration program operates.
19	Reset In Progress	The appliance resets.
21	Halted	The appliance has stopped. It must be reset manually.
200	Device Mode	The service tool interface controls the functions of the appliance.
254	Unknown	The actual state of the appliance is undefined.

Tab.42 AM014 - Sub status

Code	Display text	Explanation
0	Standby	The appliance waits for a process or an action.
1	AntiCycling	The appliance waits to restart, because there were too many consecutive heat demands (anti-short cycle).
3	ClosePump	The appliance starts the pump.
4	WaitingForStartCond.	The appliance waits for the temperature to meet the start conditions.
10	CloseExtGasValve	An external gas valve is opened, when this option is connected to the appliance. An external option board must be connected to drive the valve.
11	StartToGlueGasValve	The fan runs faster, before the flue gas valve is opened.
13	FanToPrePurge	The fan runs faster to pre-purge.
14	WaitForReleaseSignal	The appliance waits for the release input to close.
15	BurnerOnCommandToSu	A burner start command is sent to the safety core.
17	Prelgnition	Ignition starts before the gas valve opens.
18	Ignition	Ignition is active.
19	FlameCheck	The flame detection is active after the ignition.
20	Interpurge	The fan runs to purge the heat exchanger after a failed ignition.
30	Normal Int.Setpoint	The appliance operates to reach the desired value.
31	Limited Int.Setpoint	The appliance operates to reach the reduced internal desired value.
32	NormalPowerControl	The appliance operates on the desired power level.
33	GradLevel1PowerCtrl	The modulation is stopped due to a faster heat exchanger temperature change than gradient level 1.
34	GradLevel2PowerCtrl	The modulation is set to low load due to a faster heat exchanger temperature change than gradient level 2.
35	GradLevel3PowerCtrl	The appliance is in blocking mode due to a faster heat exchanger temperature change than gradient level 3.
36	ProtectFlamePwrCtrl	The burner power is increased due to a low ionisation signal.

Code	Display text	Explanation
37	StabilizationTime	The appliance is in stabilisation time. Temperatures should stabilise and temperature protections are switched off.
38	ColdStart	The appliance runs at start load to prevent cold start noise.
39	ChResume	The appliance resumes central heating after a domestic hot water interruption.
40	SuRemoveBurner	Burner demand is removed from safety core.
41	FanToPostPurge	The fan runs to purge the heat exchanger after the appliance stopped.
44	StopFan	The fan has stopped.
45	LimitedPwrOnTflueGas	The power of the appliance is decreased to lower the flue gas temperature.
48	Reduced Set Point	The desired flow temperature is reduced to protect the heat exchanger.
60	PumpPostRunning	The pump is active after the appliance stopped in order to bring the remaining heat into the system.
61	OpenPump	The pump has stopped.
63	SetAntiCycleTimer	
200	Initialising Done	Initialisation is finished.
201	Initialising Csu	The CSU is initialising.
202	Init. Identifiers	The identifiers are initialising.
203	Init.BL.Parameter	The blocking parameters are initialising.
204	Init. Safety Unit	The safety unit is initialising.
205	Init. Blocking	The blocking is initialising.
254	StateUnknown	The sub state is undefined.
255	SuOutOfResetsWait1Hr	The safety unit is blocking due to too many resets. Wait for 60 minutes or turn the power off and on again.

7 Maintenance

7.1 Maintenance regulations



Important

The boiler must be maintained by a qualified installer in accordance with local and national regulations.



Important

Adjust the frequency of inspection and service to the conditions of use. This applies especially if the boiler is:

- In constant use (for specific processes).
- Used with a low supply temperature.
- Used with a high ΔT .



Caution

- Replace defective or worn parts with original spare parts. Not doing so will void warranty.
- During inspection and maintenance work, always replace all gaskets on the parts removed.
- Check whether all gaskets have been positioned properly (absolutely flat in the appropriate groove means they are gas, air and water tight).
- During the inspection and maintenance work, water (drops, splashes) must never come into contact with the electrical parts.



Warning

Always wear safety goggles and a dust mask during cleaning work (involving compressed air).



Danger of electric shock

Ensure that the boiler is switched off.

7.2 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.

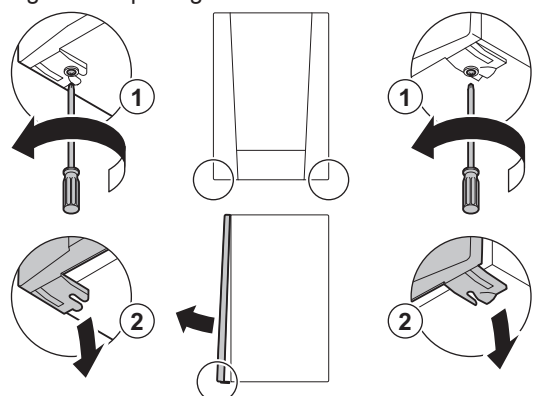


Caution

Reset the maintenance message following every service.

7.3 Opening the boiler

Fig.36 Opening the boiler



AD-3001159-01

1. Remove the two screws at the bottom of the front casing.
2. Remove the front panel.

7.4 Standard inspection and maintenance operations

For a service, always perform the following standard inspection and maintenance operations.

7.4.1 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.

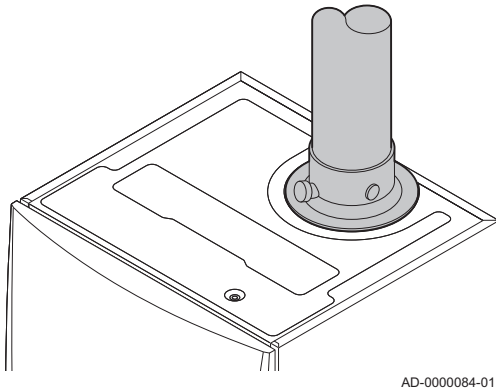
2. If necessary, top up the central heating system.

7.4.2 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.

7.4.3 Checking the flue gas outlet/air supply connections

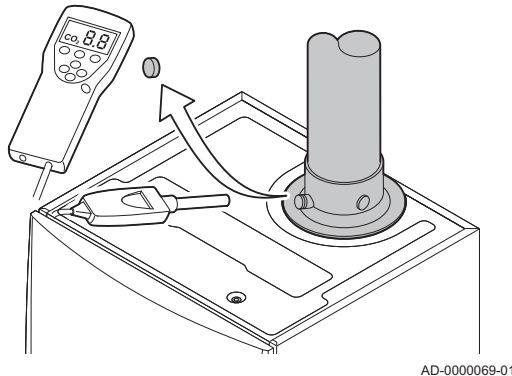
Fig.37 Checking flue gas outlet/air supply connections



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

7.4.4 Checking the combustion

Fig.38 Flue gas measuring point



Combustion is checked by measuring the O₂ percentage in the flue gas outlet duct.

1. Unscrew the cap from the flue gas measuring point.
2. Insert the probe for the flue gas analyser into the measurement opening.



Warning

During measurement, seal the opening around the sensor fully.



Important

- The flue gas analyser must have a minimum accuracy of $\pm 0.25\%$ O₂.
- The flue gas analyser must meet the requirements of BS 7927 or BS-EN 503793 and be calibrated according to the manufacturer's requirements.

3. Measure the percentage of O₂ in the flue gases. Take measurements at full load and at part load.



Important

Measurements must be taken with the front casing off.



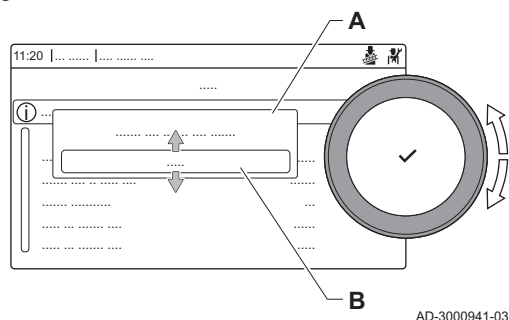
Important

- This appliance is suitable for category I_{2H} containing up to 20% Hydrogen gas (H₂). Due to variations in the H₂ percentage, the O₂ percentage can vary over time. (For example: a percentage of 20% H₂ in the gas can lead to an increase of 1,5% of O₂ in the flue gasses)
- A significant adjustment of the gas valve may be needed. Adjustment can be done using the standard O₂ values of the gas used.

■ Performing the full load test

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

Fig.39 Full load test



AD-3000941-03

2. Select the test **Medium power**.

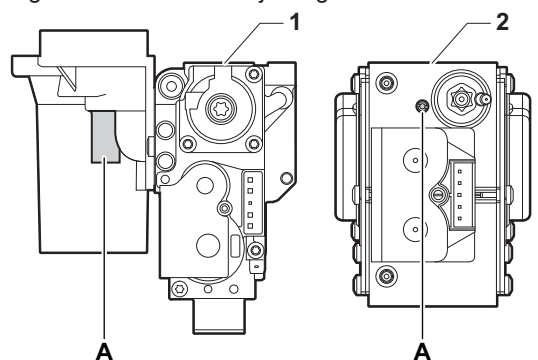
- A** Change load test mode
- B** Medium power

⇒ 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.40 Position of adjusting screw A



AD-0000067-02

■ Checking/setting values for O₂ at full load

- 1 Gas valve unit on the Quinta Ace 30 - 45 - 55 - 65 - 90
- 2 Quinta Ace 115

1. Measure the percentage of O₂ 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 for the gas type being used to the nominal value. This should always be inside the highest and lowest setting limit.

If a boiler is not suitable for a certain gas type, it is indicated with "-" in the table.

Tab.43 Checking/setting values for O₂ at full load for G20 (H gas)

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

Tab.44 Checking/setting values for O₂ at full load for BREEAM with G20 (H gas)

Values at full load for G20 (H gas)	O ₂ (%) ⁽¹⁾⁽²⁾
Quinta Ace 30	4,9 - 5,4 ⁽¹⁾
Quinta Ace 45	5,6 - 6,1 ⁽¹⁾
Quinta Ace 55	5,6 - 6,1 ⁽¹⁾
Quinta Ace 65	5,4 - 5,9 ⁽¹⁾
Quinta Ace 90	5,3 - 5,7 ⁽¹⁾
Quinta Ace 115	5,6 - 6,1 ⁽¹⁾
(1) Nominal value	
(2) These values are only applicable when the fan speeds have been set for BREEAM.	

Tab.45 Checking/setting values for O₂ at full load for G31 (propane)

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

Tab.46 Checking/setting values for O₂ at full load for BREEAM with G31 (propane)

Values at full load for G31 (propane)	O ₂ (%) ^{(1) (2)}
Quinta Ace 30	5,9 - 6,4 ⁽¹⁾
Quinta Ace 45	6,2 - 6,7 ⁽¹⁾
Quinta Ace 55	6,2 - 6,7 ⁽¹⁾
Quinta Ace 65	6,6 - 6,9 ⁽¹⁾
Quinta Ace 90	6,3 - 6,6 ⁽¹⁾
Quinta Ace 115	6,1 - 6,6 ⁽¹⁾
(1) Nominal value	
(2) These values are only applicable when the fan speeds have been set for BREEAM.	



Caution

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

■ Performing the low load test

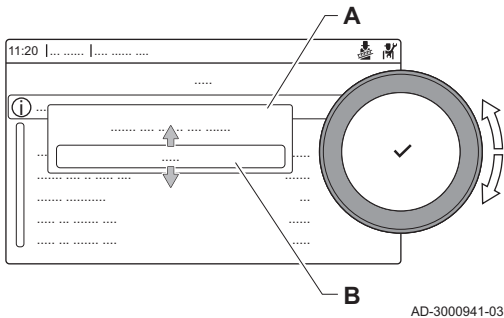
1. If the full load test is still running, press the ✓ button to change the load test mode.
2. If the full load test was finished, select the tile [👤] to restart the chimney sweep menu.

A Change load test mode

B Low power

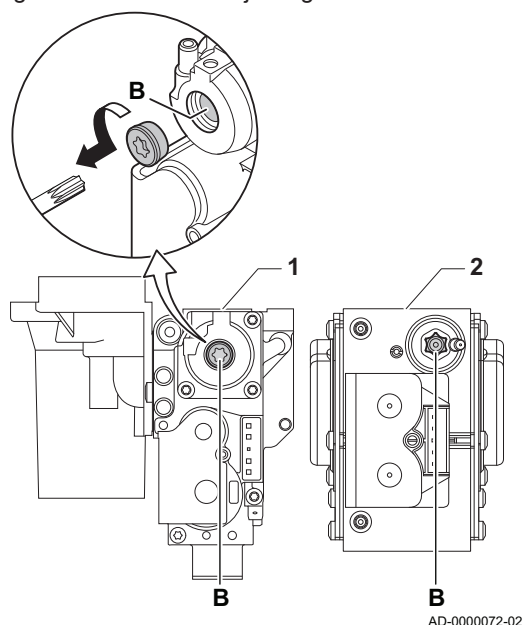
3. Select the **Low power** test in the menu **Change load test mode**.
⇒ The low load test starts. The selected load test mode is shown in the menu and the icon 👤 appears in the top right of the screen.
4. Check the load test settings and adjust if necessary.
⇒ Only the parameters shown in bold can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

Fig.41 Low load test



AD-3000941-03

Fig.42 Position of adjusting screw B



■ Checking/setting values for O₂ at part load

- 1 Gas valve unit on the Quinta Ace 30 - 45 - 55 - 65 - 90
- 2 Quinta Ace 115

1. Measure the percentage of O₂ 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 **B**, adjust the percentage of O₂ for the gas type being used to the nominal value. This should always be inside the highest and lowest setting limit.
 5. Set the boiler back to the normal operating status.
- If a boiler is not suitable for a certain gas type, it is indicated with "-" in the table.

Tab.47 Checking/setting values for O₂ at part load for G20 (H gas)

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

Tab.48 Checking/setting values for O₂ at part load for BREEAM with G20 (H gas)

Values at part load for G20 (H gas)	O ₂ (%) ⁽¹⁾⁽²⁾
Quinta Ace 30	6,1 ⁽¹⁾ - 6,6
Quinta Ace 45	6,5 ⁽¹⁾ - 7,0
Quinta Ace 55	6,1 ⁽¹⁾ - 6,6
Quinta Ace 65	5,9 ⁽¹⁾ - 6,4
Quinta Ace 90	5,7 ⁽¹⁾ - 6,1
Quinta Ace 115	6,1 ⁽¹⁾ - 6,6
(1) Nominal value	
(2) These values are only applicable when the fan speeds have been set for BREEAM.	

Tab.49 Checking/setting values for O₂ at part load for G31 (propane)

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

Tab.50 Checking/setting values for O₂ at part load for BREEAM with G31 (propane)

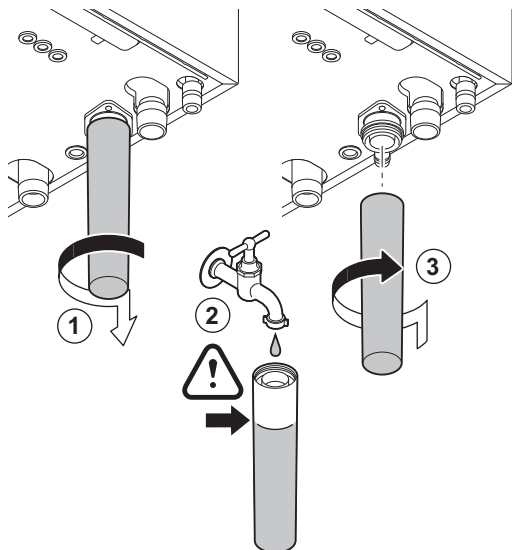
Values at part load for G31 (propane)	O ₂ (%) ⁽¹⁾⁽²⁾
Quinta Ace 30	6,7 ⁽¹⁾ - 7,2
Quinta Ace 45	7,1 ⁽¹⁾ - 7,6
Quinta Ace 55	6,7 ⁽¹⁾ - 7,2
Quinta Ace 65	6,9 ⁽¹⁾ - 7,2
Quinta Ace 90	7,4 ⁽¹⁾ - 7,7
Quinta Ace 115	6,9 ⁽¹⁾ - 7,4
(1) Nominal value (2) These values are only applicable when the fan speeds have been set for BREEAM.	

**Caution**

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

7.4.5 Cleaning the siphon

Fig.43 Cleaning the siphon



AD-0000086-01

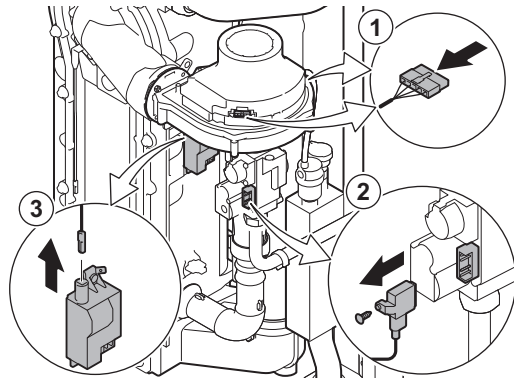
**Danger**

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.

7.4.6 Checking the burner and cleaning the heat exchanger

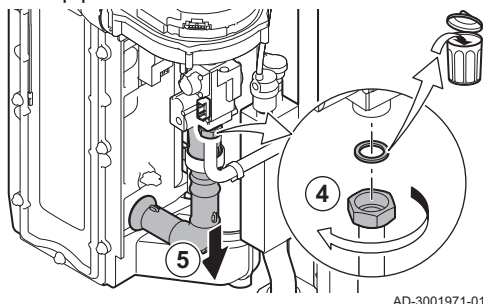
Fig.44 Disconnecting the fan



AD-3001178-02

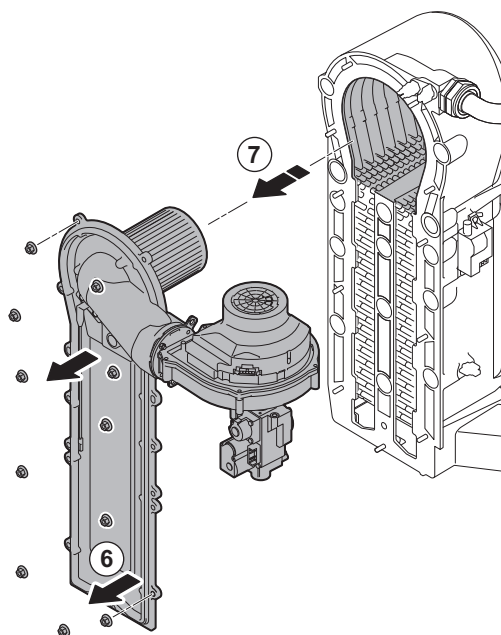
1. Disconnect the two fan plugs on the front and rear.
2. Remove the screwed-on plug from the gas control valve.
3. Remove the ignition electrode plug from the ignition transformer.

Fig.45 Removing the gas and air supply pipes



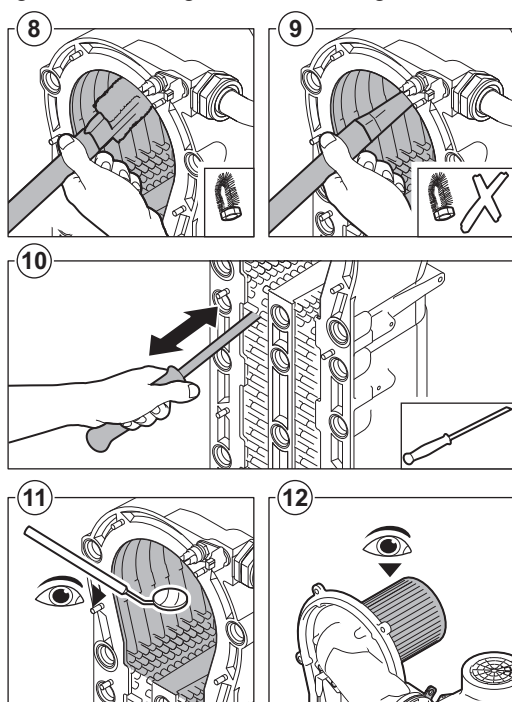
AD-3001971-01

Fig.46 Removing the front plate, fan and burner



AD-3001179-01

Fig.47 Cleaning the heat exchanger



AD-3001180-02

4. Unscrew the nut of the gas valve unit.
5. Remove the air inlet pipe from the venturi.

6. Unscrew the front plate nuts.
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 end piece (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.

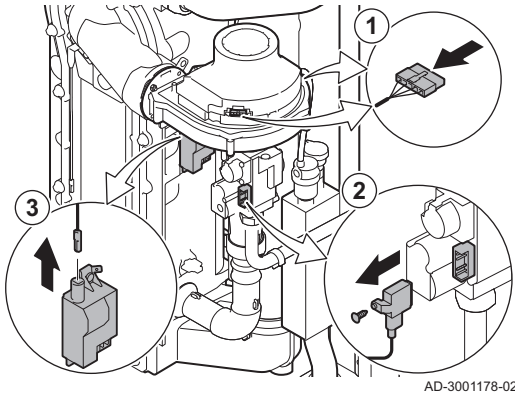
**Caution**

- 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.
- Remember to reconnect the fan plugs.
- Tighten the nut on the gas valve unit with a torque of 27.5 N·m.
- Tighten the front plate nuts with a torque of 10 N·m.

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

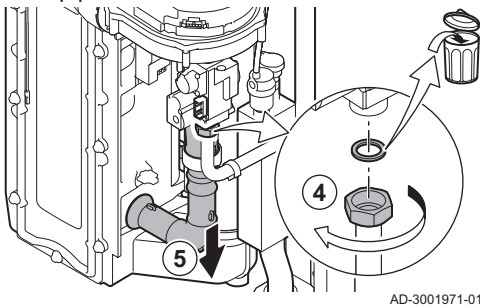
7.4.7 Checking the non-return valve

Fig.48 Disconnecting the fan



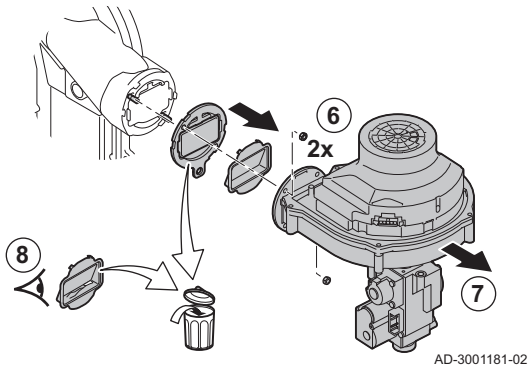
1. Disconnect the two fan plugs on the front and rear.
2. Remove the screwed-on plug from the gas control valve.
3. Remove the ignition electrode plug from the ignition transformer.

Fig.49 Removing the gas and air supply pipes



4. Unscrew the nut of the gas valve unit.
5. Remove the air inlet pipe from the venturi.

Fig.50 Checking the non-return valve



6. Unscrew the two fan nuts.
7. Remove the fan together with the gas control valve.
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.


Caution

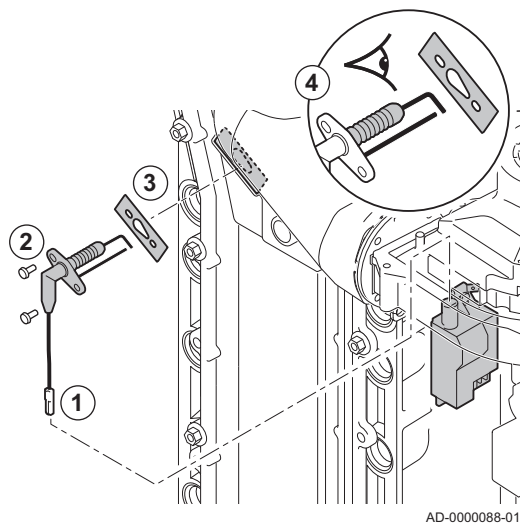
- Remember to reconnect the fan plugs.
- Tighten the nut on the gas valve unit with a torque of 27.5 N·m.
- Tighten the two fan nuts with a torque of 3.8 N·m.

7.5 Specific maintenance work

Perform the specific maintenance work if this proves to be necessary following the standard inspection and maintenance work. To conduct the specific maintenance work:

7.5.1 Replacing the ionisation/ignition electrode

Fig.51 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.



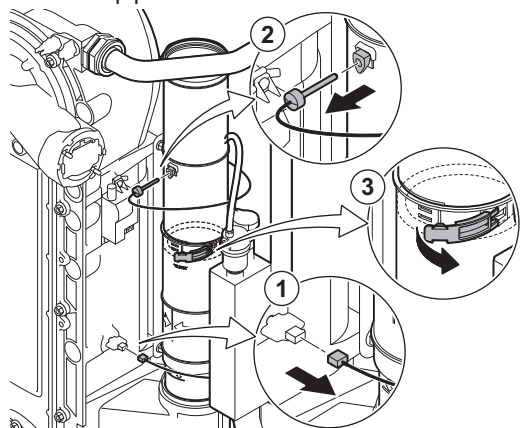
Important

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.

7.5.2 Cleaning the condensate collector

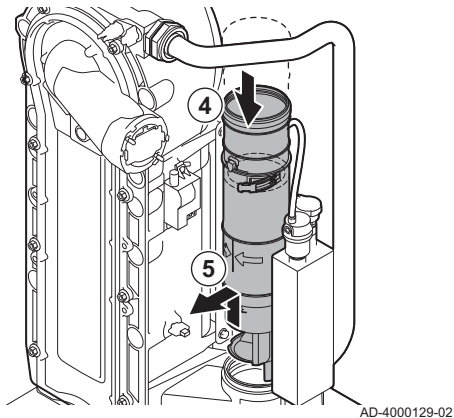
Fig.52 Open the clicker on the flue gas pipe



To clean the condensate collector, the internal flue gas pipe must be removed first. Proceed as follows:

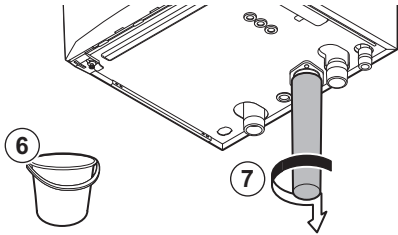
1. Remove the return sensor connector.
2. Remove the flue gas temperature sensor (if connected)
3. Open the clicker on the flue gas pipe.

Fig.53 Remove flue gas pipe



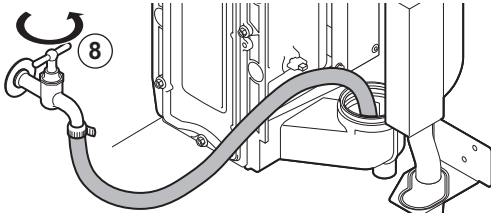
4. Push the upper part of the telescopic flue gas pipe down as far as possible.
5. Pull up the flue gas pipe and remove it.

Fig.54 Remove the siphon



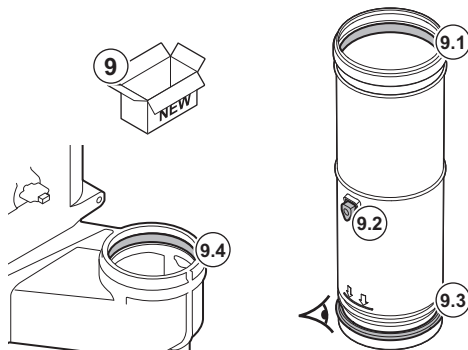
AD-4000130-02

Fig.55 Flush the condensate collector



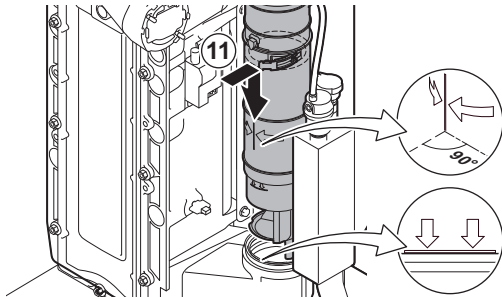
AD-4000131-02

Fig.56 Place new gaskets



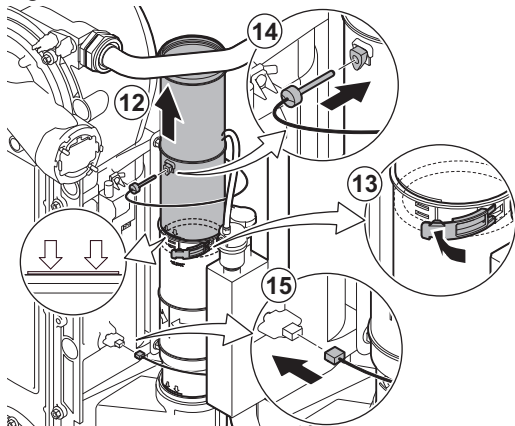
AD-4000132-03

Fig.57 Place the flue gas pipe



AD-4000133-02

Fig.58 Re-assemble



AD-3001966-01

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

8. Gently flush the condensate collector with water, via the opening of the flue gas pipe.



Caution

When flushing, prevent water from getting into the boiler.

9. Place the new gaskets:

- 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).



Warning

Make sure to place this gasket in the bottom groove.

- 9.4. The gasket in the condensate collector.

10. Place the upper part of the flue gas pipe into the lower part and push it down as far as possible.

11. Place the flue gas pipe into the condensate collector up to the mark. The vertical line between the two arrows must face forward.

12. Pull up the upper part of the telescopic flue gas pipe exactly to the mark.
13. Close the clicker on the flue gas pipe.
14. Place the flue gas temperature sensor (if connected).
15. Place the return sensor connector.

7.6 Finalising work

1. Fit all removed parts in the reverse order, but do not close the casing yet.



Caution

During inspection and maintenance operations, always replace all gaskets on the parts removed.

2. Fill the siphon with water.
3. Put the siphon back in place.
4. Carefully open all system and supply valves which were closed to carry out the maintenance.
5. Fill the central heating system with water if necessary.
6. Vent the central heating system.
7. Top up with more water if necessary.
8. Check the tightness of the gas and water connections.
9. Put the boiler back into operation.
10. Carry out an auto-detect when a control board has been replaced or removed from the boiler.
11. Set the boiler to full load and carry out a gas leak detection and a thorough visual check.
12. Set the boiler to normal operation.
13. Close the casing.

7.7 Disposal and recycling

Fig.59



Important

Removal and disposal of the boiler must be carried out by a qualified person in accordance with local and national regulations.

To remove the boiler, proceed as follows:

1. Cut the power supply to the boiler.
2. Shut off the gas supply.
3. Shut off the water supply.
4. Drain the system.
5. Remove the siphon.
6. Remove the air supply/flue gas outlet pipes.
7. Disconnect all pipes on the boiler.
8. Remove the boiler.

8 Troubleshooting

8.1 Error codes

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

Tab.51 Error codes are displayed at three different levels

Code	Type	Description
A .00.00 ⁽¹⁾	Warning	The controls continue to operate, but the cause of the warning must be investigated. A warning can change into a blocking or lock-out.
H .00.00 ⁽¹⁾	Blocking	The controls will stop normal operation, and will check with set intervals if the cause of the blocking still exists. ⁽²⁾ Normal operation will resume when the cause of the blocking has been rectified. A blocking can become a lock-out.
E .00.00 ⁽¹⁾	Lock out	The controls will stop normal operation. The cause of the lock-out must be rectified and the controls must be reset manually.
(1) The first letter indicates the type of error. (2) For some blocking errors, this checking interval is ten minutes. In those cases, it may seem that the controls do not start automatically. Wait ten minutes before resetting.		

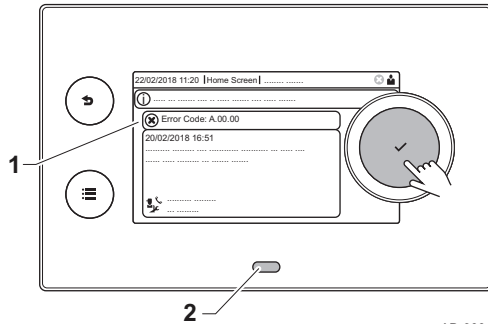
The meaning of the code can be found in the various error code tables.

**Important**

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

8.1.1 Display of error codes

Fig.60 Error code display on HMI T-control



AD-3001379-01

When an error occurs in the installation, the control panel will show the following:

- 1 The display will show a corresponding code and message.
- 2 The status LED of the control panel will show:

- Continuous green = Normal operation
- Flashing green = Warning
- Continuous red = Blocking
- Flashing red = Lock out

When an error occurs, proceed as follows:

1. Press and hold the ✓ button to reset the appliance.
⇒ The appliance starts up again.
2. If the error code reappears, correct the problem by following the instructions in the error code tables.

**Important**

Only qualified professionals are authorised to work on the appliance and system.

⇒ The error code remains visible until the problem is solved.

3. Note the error code when the problem cannot be solved and contact your installer.

8.1.2 Warning

Tab.52 Warning codes

Code	Display text	Description	Solution
A.00.34	TOutside Missing	Outside temperature sensor was expected but not detected	Outdoor sensor not detected: • Outdoor sensor is not connected: Connect the sensor • Outdoor sensor is not connected correctly: Connect the sensor correctly
A.00.42	WaterPressureMissing	Water pressure sensor was expected but not detected	Water pressure sensor not detected • Water pressure sensor is not connected: connect the sensor • Water pressure sensor is not connected correctly: connect the sensor correctly
A.01.23	Poor Combustion	Poor combustion	Configuration error: No flame during operation: • No ionisation current: - 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.
A.02.06	Water Press Warning	Water Pressure Warning active	Water pressure warning: • Water pressure too low; check the water pressure

Code	Display text	Description	Solution
A.02.18	OBD Error	Object Dictionary Error	Configuration error: Reset CN1 and CN2  See The data plate for the CN1 and CN2 values.
A.02.33	AF top comm err	Auto filling top communication has exceeded feedback time	The maximum time for refilling the system automatically has been exceeded: - No or low water pressure in the supply line: check that the main water valve is fully open. - Water leakage from the boiler or system: check the system for leaks. - Check that the maximum time for refilling is suitable for the system: Check parameter AP069. - Check that the maximum water pressure for refilling is suitable for this system: Check parameter AP070.  Important The pressure difference between the minimum (parameter AP006) and maximum (parameter AP070) water pressure must be high enough to prevent there being too short a time between two filling attempts. - The valve on the automatic (re)filling unit is faulty: Replace the unit.
A.02.34	AF min inter err	Auto filling minimum interval time has not been reached between two requests	The system must be refilled too quickly by the automatic (re)filling unit: - Water leakage from the boiler or system: check the system for leaks. - Latest refill ended just above the minimum water pressure because it was interrupted by the user, or because the water pressure in the supply line was (temporarily) too low.
A.02.36	Funct device lost	Functional device has been disconnected	SCB not found: - Bad connection: check the wiring and connectors - Faulty SCB: Replace SCB
A.02.37	Uncritic device lost	Uncritical device has been disconnected	SCB not found: - Bad connection: check the wiring and connectors - Faulty SCB: Replace SCB
A.02.45	Full Can Conn Matrix	Full Can Connection Matrix	SCB not found: Carry out an auto-detect
A.02.46	Full Can Device Adm	Full Can Device Administration	SCB not found: Carry out an auto-detect
A.02.48	Funct Gr Conf Fault	Function Group Configuration Fault	SCB not found: Carry out an auto-detect
A.02.49	Failed Init Node	Failed Initialising Node	SCB not found: Carry out an auto-detect
A.02.55	Invalid or miss SerNR	Invalid or missing device serial number	Contact your supplier.
A.02.69	Fair mode active	Fair mode active	Contact your supplier.

Code	Display text	Description	Solution
A.02.76	Memory full	The reserved space in memory for custom parameters value is full. No more user changed possible	Configuration error: • Reset CN1 and CN2 • Faulty CSU: Replace CSU • Replace the CU-GH
A.02.80	Missing Cascade Ctrl	Missing Cascade controller	Cascade controller not found: • Reconnect the cascade master • Carry out an auto-detect
A.08.02	Shower Time Elapsed	The time reserved for the shower has elapsed	Adjust parameter DP357 to the desired shower time.

8.1.3 Blocking

Tab.53 Blocking codes

Code	Display text	Description	Solution
H.00.81	RoomTempMissing	Room Temperature sensor was expected but not detected	Room temperature sensor not detected: • Room temperature sensor is not connected: Connect the sensor • Room temperature sensor is not connected correctly: Connect the sensor correctly
H.01.00	Comm Error	Communication Error occurred	Communication error with the security kernel: • Restart the boiler • Replace the CU-GH
H.01.05	Max Delta TF-TR	Maximum difference between flow temperature and return temperature	Maximum difference between the flow and return temperature exceeded: • No flow or insufficient flow: - Check the flow (direction, pump, valves) - Check the water pressure - Check the cleanliness of the heat exchanger • Sensor error: - Check that the sensors are operating correctly - Check that the sensor has been fitted properly
H.01.08	CH Temp Grad. Level3	Maximum CH temperature gradient level3 exceeded	Maximum heat exchanger temperature increase has been exceeded: • No flow or insufficient flow: - 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: - Check that the sensors are operating correctly - Check that the sensor has been fitted properly
H.01.09	Gas Pressure Switch	Gas Pressure Switch	Gas pressure too low: • No flow or insufficient flow: - Make sure that the gas valve is fully opened - Check the gas supply pressure - If a gas filter is present: Make sure that the filter is clean • Wrong setting on the gas pressure switch: - Make sure that the switch has been fitted properly - Replace the switch if necessary

Code	Display text	Description	Solution
H.01.14	Max Tflow	Flow temperature has exceeded the maximum operating value	Flow temperature sensor above normal range: • Bad connection: check the wiring and connectors • No flow or insufficient flow: - Check the circulation (direction, pump, valves) - Check the water pressure - Check the cleanliness of the heat exchanger
H.01.15	Max Tflue Gas	Flue gas temperature has exceeded the maximum operating value	Maximum flue gas temperature exceeded: • 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
H.01.21	Dhw Temp GradLevel3	Maximum Dhw Temperature Gradient Level3 Exceeded	The flow temperature has risen too fast: • Check the flow (direction, pump, valves) • Check that the pump is operating correctly
H.02.00	Reset In Progress	Reset In Progress	Reset procedure active: • No action
H.02.02	Wait Config Number	Waiting For Configuration Number	Configuration error or unknown configuration number: • Reset CN1 and CN2
H.02.03	Conf Error	Configuration Error	Configuration error or unknown configuration number: • Reset CN1 and CN2
H.02.04	Parameter Error	Parameter Error	Factory settings incorrect: • Parameters are not correct: - Restart the boiler - Reset CN1 and CN2 - Replace the CU-GH PCB
H.02.05	CSU CU mismatch	CSU does not match CU type	Configuration error: • Reset CN1 and CN2
H.02.09	Partial block	Partial blocking of the device recognized	Blocking input active or frost protection active: • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H.02.10	Full Block	Full blocking of the device recognized	Blocking input is active (without frost protection): • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H.02.12	Release Signal	Release Signal input of the Control Unit from device external environment	Waiting time release signal has elapsed: • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H.02.31	AF needed	Device requires Auto filling of the water system due to low pressure	Refill the central heating system using the automatic (re)filling unit.
H.02.38	No water hardness	No hardness of water	-
H.02.70	HRU test error	External heat recovery unit test failed	Heat recovery unit non-return valve check failed: • Check the external heat recovery unit non-return valve.
H.03.00	Parameter Error	Safety parameters level 2, 3, 4 are not correct or missing	Parameter error: security kernel • Restart the boiler • Replace the CU-GH
H.03.01	CU to GVC data error	No valid data from CU to GVC received	Communication error with the CU-GH: • Restart the boiler

Code	Display text	Description	Solution
H.03.02	Flame loss detected	Measured ionisation current is below limit	No flame during operation: • No ionisation current: - 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
H.03.05	Internal blocking	Gas Valve Control internal blocking occurred	Security kernel error: • Restart the boiler • Replace the CU-GH
H.03.17	Safety check	Periodically safety check ongoing	• Restart the boiler • Replace the CU-GH

8.1.4 Locking

Tab.54 Locking codes

Code	Display text	Description	Solution
E.00.04	TReturn Open	Return temperature sensor is either removed or measures a temperature below range	Return temperature sensor open: • Bad connection: check the wiring and connectors • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor
E.00.05	TReturn Closed	Return temperature sensor is either shorted or measures a temperature above range	Return temperature sensor short-circuited: • Bad connection: check the wiring and connectors • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor
E.00.06	TReturn Missing	Return temperature sensor was expected but not detected	No connection to temperature return sensor: • Bad connection: check the wiring and connectors. • Faulty sensor: replace the sensor
E.00.07	dTReturn Too High	Return temperature difference is too large	Difference between the flow and return temperatures too great: • No circulation: - 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: - Check that the sensors are operating correctly - Check that the sensor has been fitted properly • Faulty sensor: replace the sensor if necessary

Code	Display text	Description	Solution
E.00.16	DHW sensor Open	Domestic Hot Water tank temperature sensor is either removed or measures a temperature below range	Calorifier sensor open: • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E.00.17	DHW sensor Closed	Domestic Hot Water tank temperature sensor is either shorted or measures a temperature above range	Calorifier sensor short-circuited: • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E.00.44	TcombiDhwOutOpen	Domestic hot water outlet temperature sensor is either removed or measures a temperature below range	DHW temperature sensor open: • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E.00.45	DHWoutSens shorted	Domestic hot water outlet temperature sensor is either shorted or measures a temperature above range	DHW temperature sensor short-circuited: • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E.01.04	5x Flame Loss Error	5x Error of unintended Flame Loss occurrence	Flame loss occurs 5 times: • 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
E.01.11	Fan Out Of Range	Fan speed has exceeded normal operating range	Fan fault: • 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
E.01.12	Return Higher Flow	Return temperature has a higher temperature value than the flow temperature	Flow and return reversed: • 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
E.01.24	Combustion Error	Several combustion errors occurs with 24 hours	Low ionisation current: • 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.
E.02.13	Blocking Input	Blocking Input of the Control Unit from device external environment	Blocking input is active: • External cause: remove external cause • Wrong parameter set: check the parameters

Code	Display text	Description	Solution
E.02.15	Ext CSU Timeout	External CSU Timeout	CSU time out: • Bad connection: check the wiring and connectors • Faulty CSU: Replace CSU
E.02.17	GVC CommTimeout	Gas Valve Control unit communication has exceeded feedback time	Communication error with the security kernel: • Restart the boiler • Replace the CU-GH
E.02.32	AF comm err	Auto filling installation communication has exceeded feedback time	Refilling the central heating system takes too long: • Check the system for leaks. • Check the water pressure in the system. • Check that the inlet gas valve is fully open. • Check that the main water valve is fully open. • Check the operation of the pressure sensor. • Check the operation of the safety valve.
E.02.35	Safety device lost	Safety critical device has been disconnected	Communication fault • Carry out an auto-detect
E.02.39	AF low pressure rise	No sufficient rise of pressure after autofilling	The water pressure in the system has not risen sufficiently during the automatic filling procedure: • Check the system for leaks. • Check the water pressure in the system. • Check that the inlet gas valve is fully open. • Check that the main water valve is fully open. • Check the operation of the pressure sensor. • Check the operation of the safety valve.
E.02.47	Failed Conn Funct Gr	Failed Connecting Function Groups	Function group not found: • Carry out an auto-detect • Restart the boiler • Replace the CU-GH
E.04.00	Parameter error	Safety parameters Level 5 are not correct or missing	Replace the CU-GH.
E.04.01	TFlow Closed	Flow temperature sensor is either shorted or measuring a temperature above range	Flow temperature sensor short circuited: • Bad connection: check the wiring and connectors • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor
E.04.02	TFlow Open	Flow temperature sensor is either removed or measuring a temperature below range	Flow temperature sensor open: • Bad connection: check the wiring and connectors • Faulty sensor: replace the sensor
E.04.03	Max Flow temp	Measured flow temperature above safety limit	No flow or insufficient flow: • Check the circulation (direction, pump, valves) • Check the water pressure • Check the cleanliness of the heat exchanger
E.04.04	TFlue Closed	Flue temperature sensor is either shorted or measuring a temperature above range	Flue gas temperature sensor short-circuited: • Bad connection: check the wiring and connectors • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor
E.04.05	TFlue Open	Flue temperature sensor is either removed or measuring a temperature below range	Flue gas temperature sensor open: • Bad connection: check the wiring and connectors • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor

Code	Display text	Description	Solution
E.04.06	Max Flue temp	Measured flue temperature above limit	-
E.04.07	TFlow Sensor	Deviation in flow sensor 1 and flow sensor 2 detected	Flow temperature sensor deviation: • Bad connection: check the connection • Faulty sensor: replace the sensor
E.04.08	Safety input	Safety input is open	Air pressure differential switch activated: • Bad connection: check the wiring and connectors • Pressure in flue gas duct is or was too high: - Non-return valve does not open - Siphon blocked or empty - Check that the air supply inlet and flue gas outlet are not blocked - Check the cleanliness of the heat exchanger
E.04.09	TFlue Sensor	Deviation in flue sensor 1 and flue sensor 2 detected	Flue gas temperature sensor deviation: • Bad connection: check the connection • Faulty sensor: replace the sensor
E.04.10	Unsuccessful start	5 Unsuccessful burners starts detected	Five failed burner starts: • No ignition spark: - 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: - 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: - 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.
E.04.11	VPS	VPS Gas Valve proving failed	Gas leakage control fault: • Bad connection: check the wiring and connectors • Gas leakage control VPS faulty: Replace the valve proving system (VPS) • Gas valve unit faulty: Replace the gas valve unit
E.04.12	False flame	False flame detected before burner start	False flame signal: • 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

Code	Display text	Description	Solution
E.04.13	Fan	Fan speed has exceeded normal operating range	Fan fault: • 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
E.04.15	FlueGas Pipe Blocked	The flue gas pipe is blocked	Flue gas outlet is blocked: • Check that the flue gas outlet is not blocked • Restart the boiler
E.04.17	GasValve Driver Err.	The driver for the gas valve is broken	Gas valve unit fault: • Bad connection: check the wiring and connectors • Faulty gas valve unit: Replace the gas valve unit
E.04.23	Internal Error	Gas Valve Control internal locking	• Restart the boiler • Replace the CU-GH
E.04.250	Internal error	Gas valve relay error detected	Internal error: • Replace the PCB.

8.2 Error history

The control panel has an error history that stores the last 32 errors. Specific details are stored for each error, for example:

- Status
- Sub-status
- Flow temperature
- Return temperature

These details and others can contribute to the error solution.

8.2.1 Reading out and clearing the error history

You can read out the errors on the control panel. The error history can also be cleared.

▶▶ ≡ > Error History

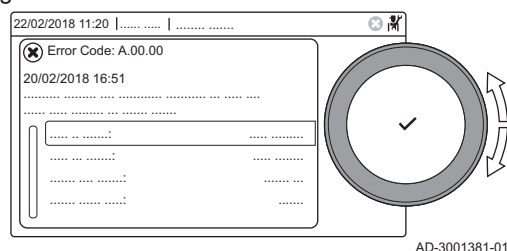


Use the rotary knob to navigate.

Use the ✓ button to confirm your selection.

1. Press the ≡ button.
2. Select **Error History**.
Enable installer access if **Error History** is not available.
 - 2.1. Select **Enable installer access**.
 - 2.2. Use code **0012**.
 - ⇒ A list up to 32 most recent errors is displayed with:
 - The error code.
 - A short description.
 - The date.
3. Select the error code you want to investigate.
 - ⇒ The display shows an explanation of the error code and several details of the appliance when the error occurred.
4. To clear the error memory, press and hold the ✓ button.

Fig.61 Error details



19	Flow sensor (NTC 10 k Ω /25°C)	BK	Black
20	Connection point for flue gas sensor (PTC <20 Ω /25°C)	BL	Blue
21	Connection point for air pressure differential switch (remove bridge)	BR	Brown
22	Fan control	GN	Green
23	Pressure sensor	GY	Grey
24	Control for PWM pump	RD	Red
25	Storage information (CSU)	WH	White
		YW	Yellow

10 Spare parts

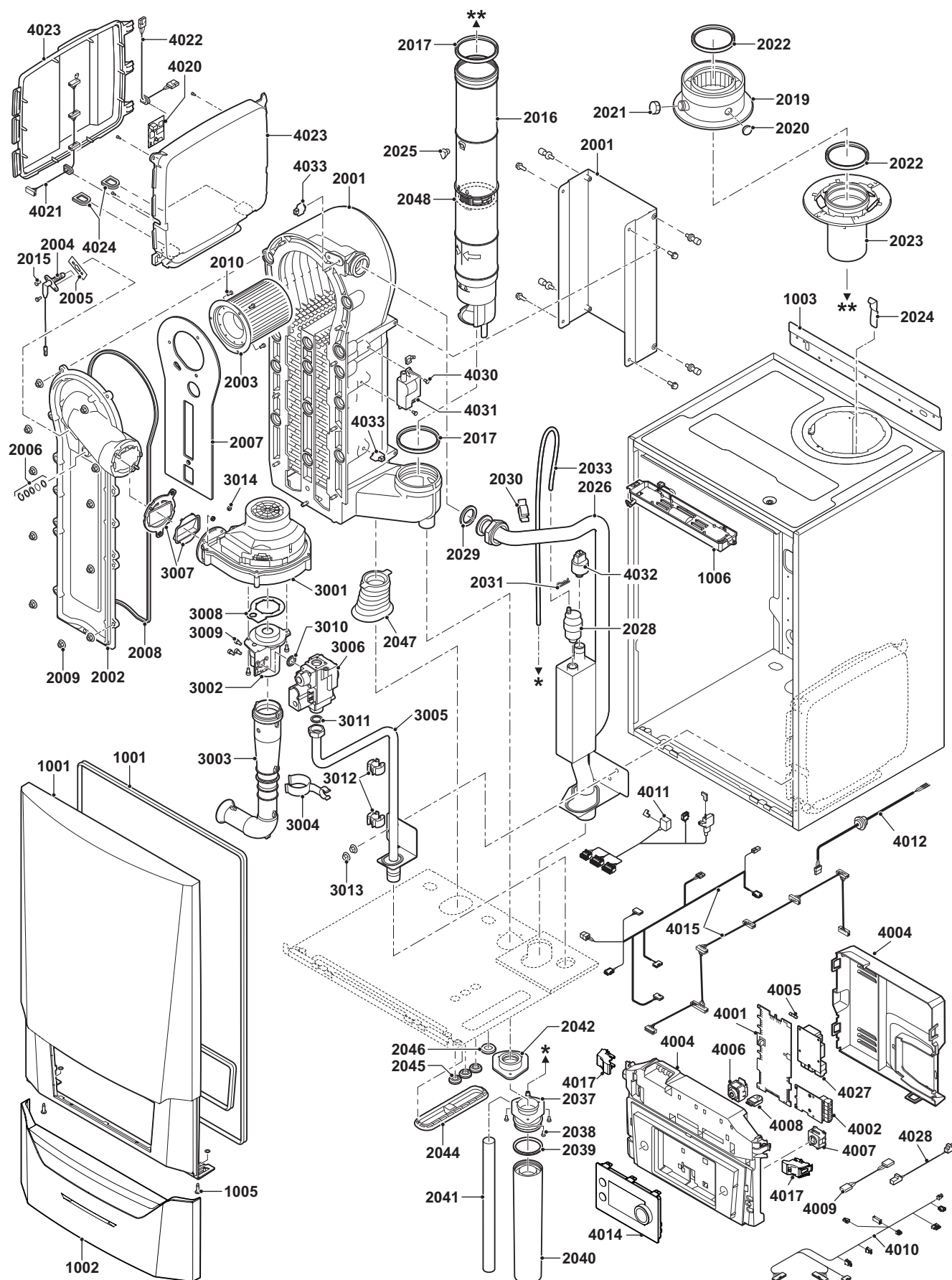
10.1 General

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).

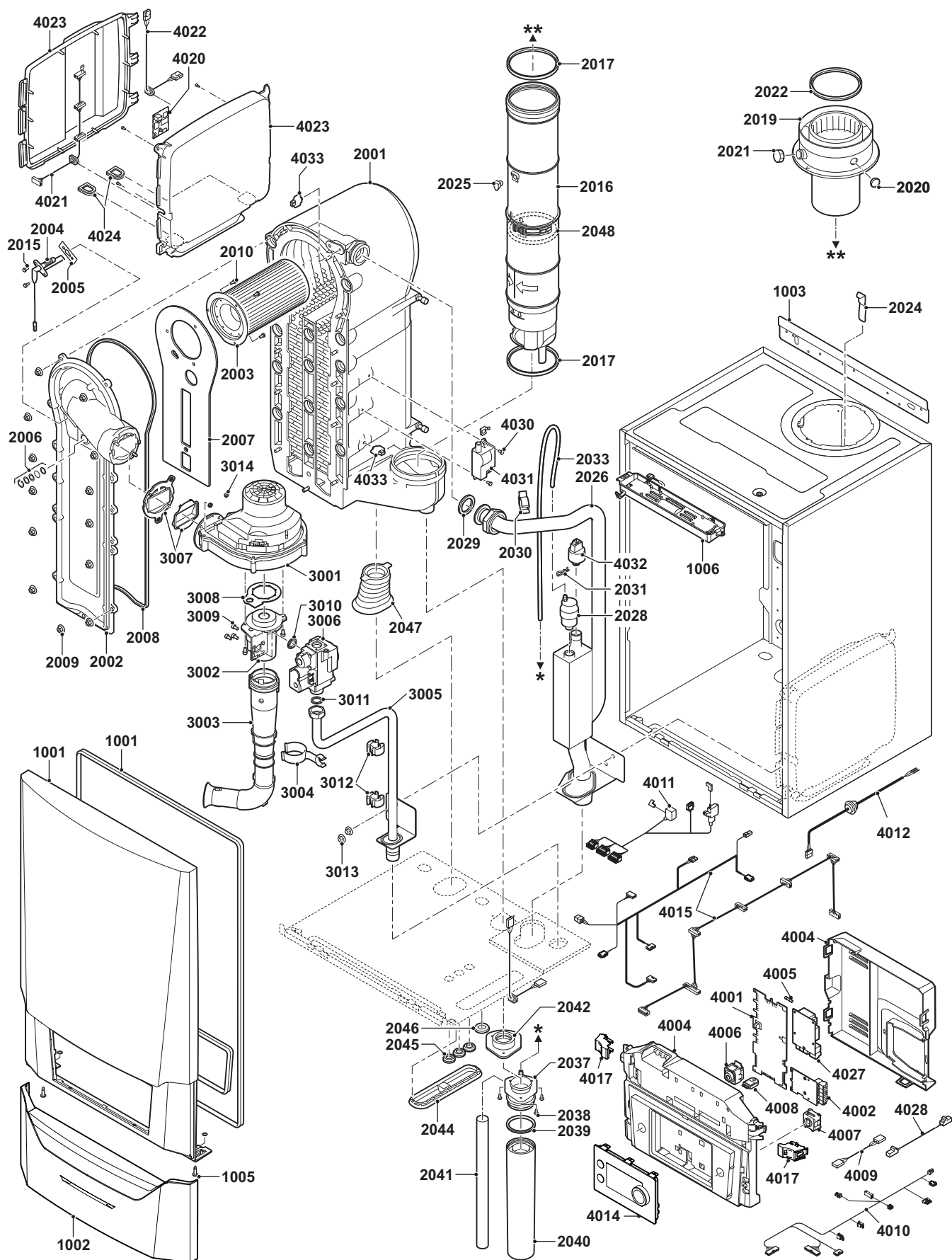
10.2 Parts

Fig.63 Quinta Ace 30 - 45



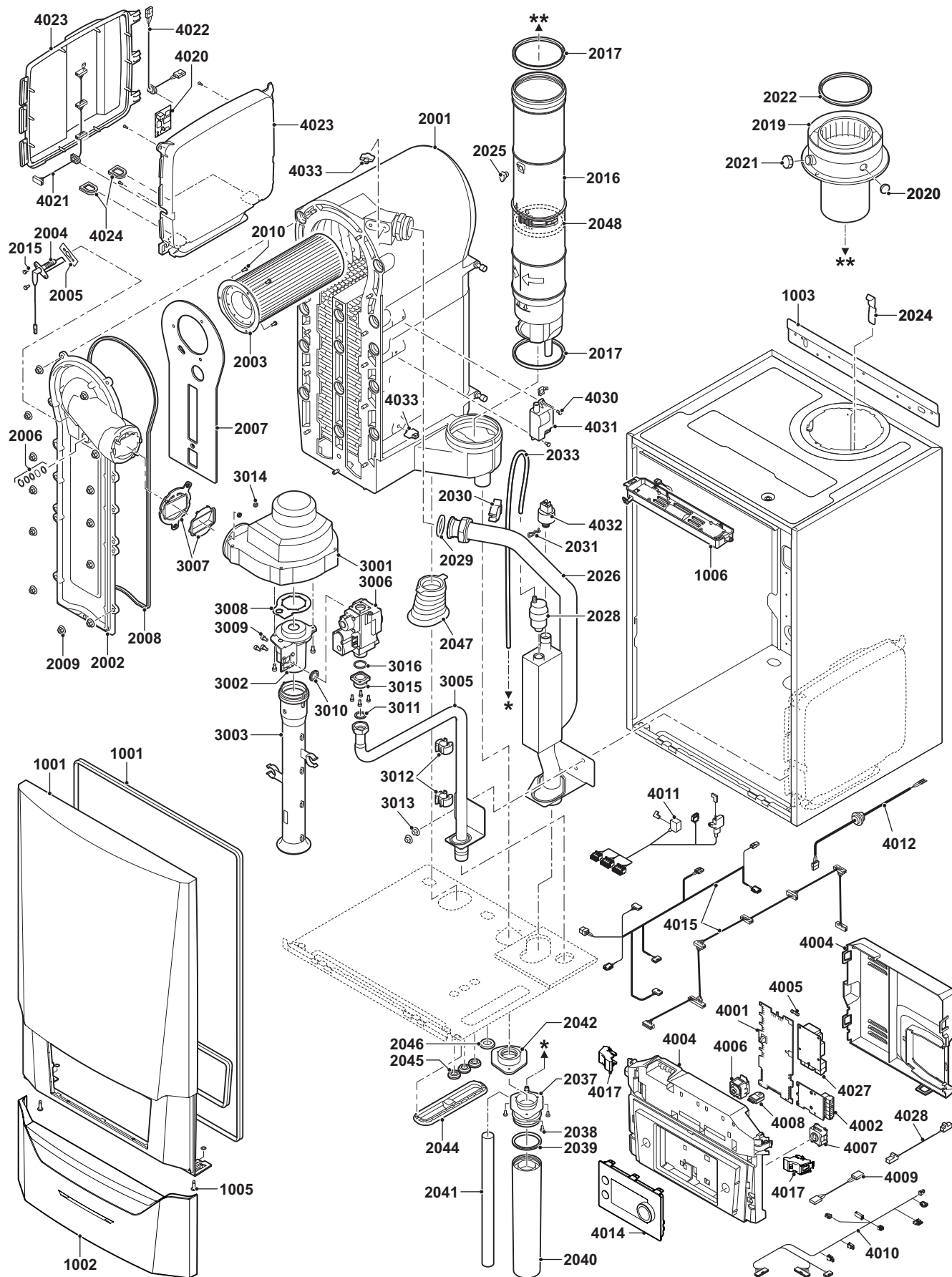
AD-0801879-02

Fig.64 Quinta Ace 55 - 65



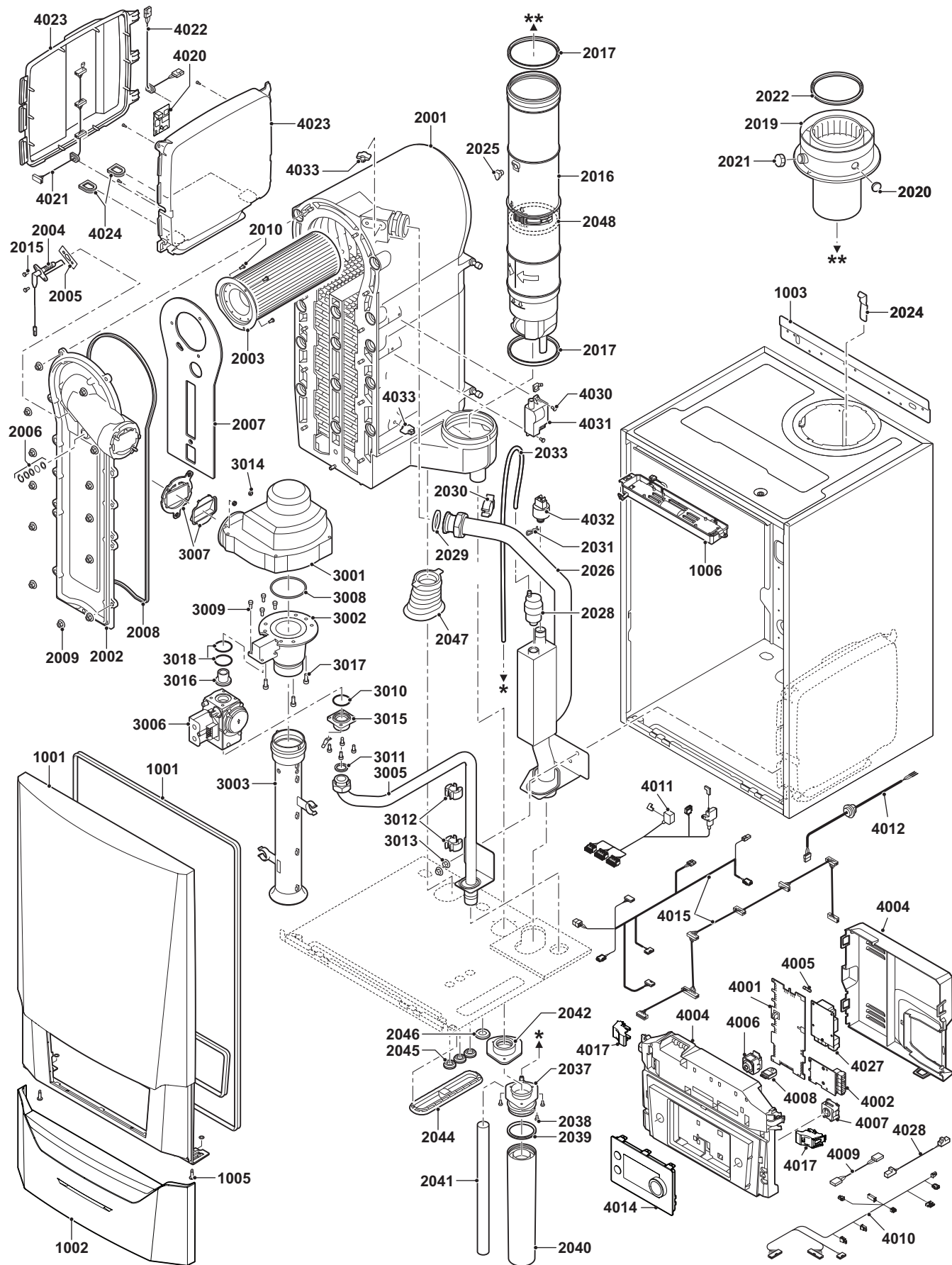
AD-0801881-02

Fig.65 Quinta Ace 90



AD-0801883-02

Fig.66 Quinta Ace 115



AD-0801885-02

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