England
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Installation and user manual

Control panel

HMI S-Control

remeha the comfort innovators

Dear Customer,

Thank you very much for buying this appliance.

Please read through the manual carefully before using the product, and keep it in a safe place for later reference. In order to ensure continued safe and efficient operation we recommend that the product is serviced regularly. Our service and customer service organisation can assist with this.

We hope you enjoy years of problem-free operation with the product.

Contents

1 Safety

1.1 Liabilities

1.1.1 Manufacturer's liability

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

Our liability as manufacturer may not be invoked in the following cases:
- Failure to abide by the instructions on installing the appliance.
- Failure to abide by the instructions on using the appliance.
- Faulty or insufficient maintenance of the appliance.

1.1.2 Installer's liability

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

1.1.3 User's liability

To guarantee optimum operation of the system, you must abide by the following instructions:
- Read and follow the instructions given in the manuals provided with the appliance.
- Call on a qualified professional to carry out installation and initial commissioning.
- Get your installer to explain your installation to you.
- Have the required inspections and maintenance carried out by a qualified installer.
- Keep the instruction manuals in good condition close to the appliance.

2 About this manual

2.1 Additional documentation

This manual forms part of the documents pack supplied with the boiler.

2.2 Symbols used

2.2.1 Symbols used in the manual

This manual uses various danger levels to draw attention to special instructions. We do this to improve user safety, to prevent problems and to guarantee correct operation of the appliance.

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

Danger of electric shock
Risk of electric shock.

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

Caution
Risk of material damage.

Note
Please note: important information.

See
Reference to other manuals or pages in this manual.

3 Technical specifications

3.1 Homologations

3.1.1 Directives

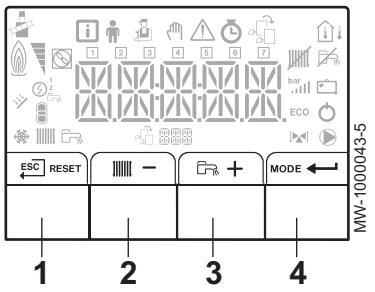
This product complies with the requirements of the following European Directives and Standards:

- 2006/95/EC Low Voltage Directive
- 2004/108/EC Electromagnetic Compatibility Directive

4 Control panel description

4.1 Description of the keys

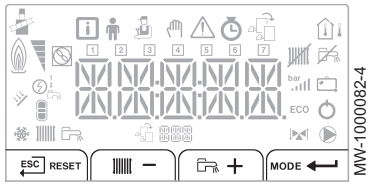
Fig.1 Control panel keys



1 **ESC** (ESC) or **RESET** key
2 Heating temperatures ||||| or − key
3 Domestic hot water temperatures or + key
4 **MODE** or **VALIDATION** (⟵) key

4.1.1 Key functions

Fig.2 Function keys



ESC Back to the previous level without saving the modifications made
RESET Manual reset
||||| Accessing the heating parameters
− Lowering the value
Accessing the domestic hot water parameters
+ Raising the value
MODE MODE display
⟵ Accessing the menu selected or confirming the value modification

4.1.2 Meaning of the symbols on the display

Tab.1 Symbols on the display

	Chimney sweep mode: forced full or part load for O_2/CO_2 measurement.		Central heating operation is switched off.
	Information menu: read out various current values.		DHW operation is switched off.
	User menu: settings for user level parameters can be changed.		The solar boiler is on and the heat level of the boiler displayed.
	Service menu: settings for installer level parameters can be changed.	bar	Displaying the system water pressure.
	Manual mode: boiler is in manual mode.		Holiday program on.
	Error menu: boiler errors can be read out.		The boiler is running for frost protection.
	Operating hour counter/Timer program/Time display menu.	|||||	The boiler is running for central heating.
	Menu for reading out (optional) control PCBs.		The boiler is running for DHW.
	Outside temperature sensor connected.		Displaying the selected PCB.
	Room temperature sensor connected.		Three-way valve connected.
	Burner output level.		The circulation pump is turning.
	A heat pump is on.	**ECO**	The boiler is running in ECO mode.
1 - 7	Days of the week.		Switch the boiler off and on again.

5 Commissioning

5.1 Switching on the control panel

The HMI S-control control panel is ready for use as soon as the power to the boiler is switched on.

The start-up program starts and cannot be interrupted.

5.2 Start program

Various short items of information appear on the screen during start-up.

These items of information are displayed one after the other.

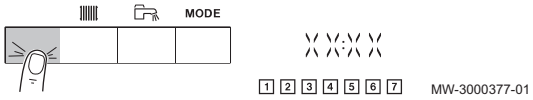
- Display control panel version (Init Fxxxx).
- Search for connected options (SCAN).
- Load information from CU board (LOAD).
- Display of CU board software version (Fxxxx).
- Display of CU board parameter version (Pxxxx).
- After the program starts, the menu display appears with the day number and current time.
- If a fault occurs during start-up, the ⚠ symbol appears with a flashing error code on the display. The meaning of the error codes can be found in the error table.

6 Operation

6.1 Use of the control panel

6.1.1 Browsing in the menus

Fig.3 Activating the screen



1. Press any key to activate the screen.
   The main display with time and day number appears.

Fig.4 Accessing the menus

2. Press the two keys on the right simultaneously to access the menu level.

Tab.2 Possible menu choices

ⓘ	**Information** menu
🧍	**User** menu
	Installer menu
	Setting manual mode
⚠	**Failure** menu
⏱	**Hour Run Meters / Timer Program / Clock** menu
	The icon is displayed only if an optional PCB has been installed

To select the required menu, keep pressing the + or − key until the required menu flashes.

Fig.5 Moving the cursor to the right

3. Press the + key to move the cursor to the right.

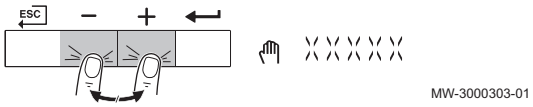
Fig.6 Moving the cursor to the left

4. Press the − key to move the cursor to the left.

Fig.7 Confirming the menu or parameter

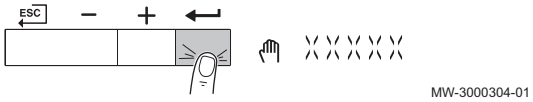
5. Press the ↵ key to confirm selection of the required menu or parameter.

Fig.8 Modifying a value



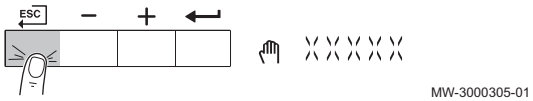
6. Press the + or − key to modify the value of the parameter.

Fig.9 Confirming a new value



7. Press the ↵ key to confirm the new parameter value.

Fig.10 Back to the main display



8. Press the ESC key to go back to the main display.

Note
The main display reappears automatically if no key is pressed for three minutes.

6.2 Setting the time and language

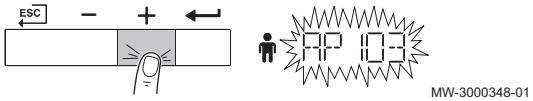
Note
First set the desired language, then the correct time, day and date before further use of the control panel.

6.2.1 Setting the language

Fig.11 Accessing the User menu

1. Navigate to the User menu.
2. Press the ↵ key to open the User menu.
   Parameter AP xxx appears.

Fig.12 AP 103 is displayed.



3. Keep pressing the + key until AP 103 is displayed.

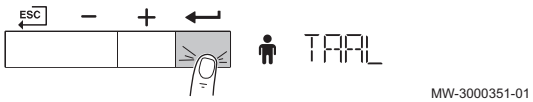
Fig.13 Confirming the parameter

4. Press the ↵ key to confirm the parameter.
   Factory setting 0 appears.

Fig.14 The language code appears.

5. Keep pressing the + key until the required language code is displayed.

Fig.15 Confirming the choice of language



6. Press the ↵ key to confirm the choice of language.

Fig.16 Going back to the main display

7. Press the ESC key twice to go back to the main display.

6.2.2 Setting the time and date

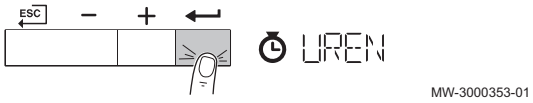
Fig.17 Accessing the Counter menu

1. Navigate to the Counter menu.
2. Press the ↵ key to open the Operating hours/Timer Program/Time display menu.

Fig.18 The Time display menu appears

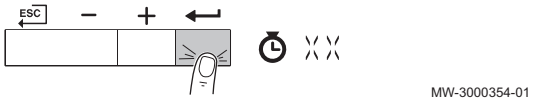
3. Keep pressing the + key until the Time display menu is displayed.

Fig.19 The hours are displayed.



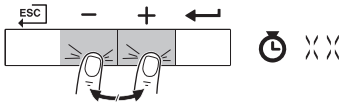
4. Press the ↵ key to access the hours.

Fig.20 The current time is displayed.



5. Press the ↵ key to access the current time.

Fig.21 Changing the time



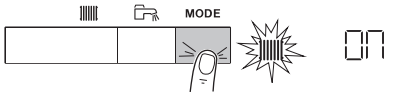
MW-3000355-01

6. Press the + or – keys to modify the time.
7. Press the ↵ key to confirm the value.
8. Press the + key repeatedly to access the following menu options.
9. Press the ESC key twice to go back to the main display.

6.3 Shutdown

6.3.1 Switching off the central heating

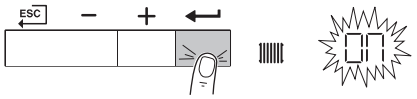
Fig.22 Selecting the central heating



MW-3000328-01

1. Press the **MODE** key for about 2 seconds.
   The flashing symbol on the display shows the current status of the central heating.

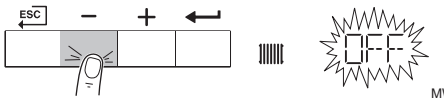
Fig.23 Status flashing



MW-3000329-01

2. Press the ↵ key to confirm the selection for the central heating.
   The symbol appears on the display and flashes to show the current status of the central heating.

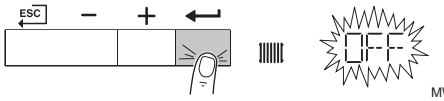
Fig.24 Changed status flashing



MW-3000330-01

3. Press the – key to change the current status.
   The symbol appears on the display and flashes to show the changed status.

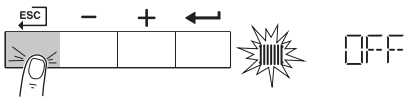
Fig.25 Confirming a new value



MW-3000331-01

4. Press the ↵ key to confirm the changed status.
   The frost protection function continues to run.
   The heating has been switched off.

Fig.26 Back to the main display



MW-3000332-01

5. To go back to the main display, press the ESC key once.

7 Settings

7.1 Parameter descriptions

Tab.3 Factory settings for user level parameters

Parameter	Description	Adjustment range	Quinta Ace160
AP002	Activate manual mode	0 = Off 1 = On (with flow temperature set point in manual mode) 2 = Weather-compensated (flow temperature in accordance with heating curve)	0
AP016	Activate CH	0 = Off 1 = On	1
AP017	Activate DHW	0 = Off 1 = On	1
AP026	Flow temperature in manual mode	7 to 90ºC	40
CP071	Reserve parameter	This parameter is part of the timer program; change only if necessary	16
CP072	Reserve parameter	This parameter is part of the timer program; change only if necessary	20
CP073	Reserve parameter	This parameter is part of the timer program; change only if necessary	6
CP074	Reserve parameter	This parameter is part of the timer program; change only if necessary	21
CP075	Reserve parameter	This parameter is part of the timer program; change only if necessary	22
CP076	Reserve parameter	This parameter is part of the timer program; change only if necessary	20
CP200	Room set point	5 to 30ºC	20
CP320	CH group control	0 = internal timer program 1 = manual control 2 = according to frost protection 3 = temporary	1
CPS70	Selected time program for CH operation	Do not change	0
AP103(1)	Setting LANGUAGE	EN, FR, DE, NL, IT, ES, PL, PT	0
AP104(1)	Setting CONTRAST	0 to 3	3
AP105(1)	Setting UNIT	0 = bar/ºC 1 = psi/ºF	0
AP106(1)	Setting SUM/WIN	0 = manual switching summer/winter time 1 = automatic switching summer/winter time	1
AP067(1)	Setting LIGHTING	0 = the background illumination for the display switches off after three minutes of inactivity 1 = the background illumination for the display remains on	0

(1) If parameter AP103 is set to a language, the display shows written text. If parameter AP103 is set to 0, the display shows the parameter code

Tab.4 Factory settings for installer level parameters

Parameter	Description	Adjustment range	Quinta Ace160
AP001	Blocking input function	0 = Not in use 1 = Shutdown without frost protection 2 = Shutdown with frost protection 3 = Lockout with frost protection (pump only)	1

Parameter	Description	Adjustment range	Quinta Ace160
AP006	Minimum water pressure WPS	0 - 7 bar 0 = No minimum	0.7
AP008	Release waiting time	0 to 255 seconds	0
AP009	Service burning hours	0 - 51,000	17,400
AP010	Maintenance message	0 = maintenance message off 1 = maintenance message on 2 = maintenance message A, B, C	2
AP011	Service operating hours	0 - 51,000	17,400
AP073	Outside temperature; upper limit for heating	15 to 30.5ºC	22
AP074	Forced summer mode	0 = Off 1 = On	0
AP079	Reserve parameter	Do not change	0
AP080	Start frost protection on basis of outside temperature	-3 to 3 ºC	0
AP102	Start boiler pump	0 = pomp on for each heat demand 1 = pomp on for heat demand directly to boiler	0
CP000	Reserve parameter	Do not change	90
CP010	Maximum flow temperature for CH operation	0 to 90ºC	80
CP020	Reserve parameter	Do not change	1
CP060	Holiday set point for CH operation	5 to 20ºC	6
CP070	Night time set point for CH operation	5 to 30ºC	16
CP210	Comfort base point for CH operation	15 to 90ºC	15
CP220	Night time base point for CH operation	5 to 90ºC	15
CP230	Heating curve gradient	0 to 4 (only with outside sensor)	2.5
CP300	Reserve parameter	Do not change	101
CP340	Reserve parameter	Do not change	0
CP470	Reserve parameter	Do not change	0
CP480	Reserve parameter	Do not change	20
CP490	Reserve parameter	Do not change	20
DP003	Maximum speed for DHW operation	rpm	6800
DP010	DHW hysteresis	0 to 60 ºC	7
DP011	DHW offset temperature	0 to 60 ºC	5
DP015	Hysteresis load	0 to 60 ºC	0
DP016	DHW extra offset temperature	0 to 60 ºC	0
DP056	Reserve parameter	Do not change	50
DP211	Reserve parameter	Do not change	20
EP014	0-10 V input signal	0 = Off 1 = temperature regulator 2 = Heat output control	1
GP007	Fan speed for CH (maximum)	rpm	6800
GP008	Fan speed for CH (minimum)	rpm	1900
GP009	Fan start up speed for CH	rpm	2200
GP010	Gas pressure control GPS	0 = not connected 1 = connected	0
GP021	ΔT modulate down	5 to 25 ºC	25
GP022	Average flow temperature factor	0 - 255 seconds	1

Parameter	Description	Adjustment range	Quinta Ace160
GP024	Gas leakage control VPS	0 = not connected 1 = connected	0
PP007	Minimum anti-cycle time of burner	0 to 20 minutes	3
PP012	CH part load time	5 to 180 seconds	30
PP015	Post-circulation of the pump (CH)	1 to 98 minutes 99 = Continuous	1
PP016	Maximum pump speed for CH	2 - 10 (x 10%)	100
PP018	Minimum pump speed for CH	2 - 10 (x 10%)	20
PP023	CH hysteresis	1 to 25ºC	10
CONF	Factory setting	To restore the factory settings or when replacing the control unit, enter the values CN1 and CN2 from the data plate for parameters CN1 and CN2	CN1 CN2
AD	Detection of (optional) PCBs connected (auto-detect)	Carry out an auto-detect after removing a PCB	-

Tab.5 Factory settings for PCB SCB-01 parameters

Parameter	Description	Adjustment range	Quinta Ace160
EP018	Relay 1 status message	0 = Off 1 = Switched if boiler is locked out 2 = Switched if boiler is not locked out 3 = Switched if boiler is running 4 = Switched if boiler is not running 5 = Reserve setting 6 = Reserve setting 7 = Switched in the event of boiler maintenance message 8 = Switched if boiler is running for CH 9 = Switched if boiler is running for DHW 10 = Switched if CV pump is running 11 = Switched if boiler is locked out or shuts down	0
EP019	Relay 2 status message	0 = Off 1 = Switched if boiler is locked out 2 = Switched if boiler is not locked out 3 = Switched if boiler is running 4 = Switched if boiler is not running 5 = Reserve setting 6 = Reserve setting 7 = Switched in the event of boiler maintenance message 8 = Switched if boiler is running for CH 9 = Switched if boiler is running for DHW 10 = Switched if CV pump is running 11 = Switched if boiler is locked out or shuts down	0
EP029	0–10V signal function	0 = pump modulation signal (set parameter EP028 to 0, 1 or 2; depending on the pump used) 1 = required boiler power (set parameter EP028 to 0) 2 = current boiler power (set parameter EP028 to 0) 3 to 9 = No signal	0
EP028	0-10 V signal function for PWM pump or GBS (building management system)	0 = 0-10 V linear or Wilo pump 1 = 0-10 V offset or Grundfos pump 2 = PWM pump 3 = Do not use 4 = Do not use 5 = Do not use 6 = Do not use 7 to 9 = No signal	0

7.2 Setting the parameters

7.2.1 Changing user parameters

The parameters in the User menu can be modified by the user to meet central heating and domestic hot water comfort requirements.

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

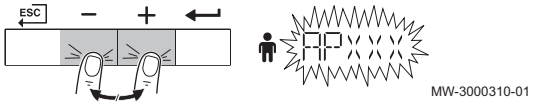
1. Navigate to the User menu.
2. Press the ↵ key to open the User menu.

Note
The User menu is available only if the 👤 icon flashes.

Fig.27 Accessing the User menu

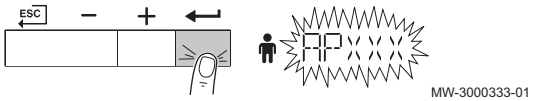
3. Keep pressing the + or − key until the required parameter is displayed.
   The parameters available to the User are displayed.

Fig.28 Displaying the parameters of the User menu



4. Press the ↵ key to confirm the selection.

Fig.29 Confirming the selection

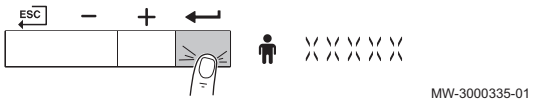


5. Press the + or − keys to modify the value of the parameter.

Fig.30 Modifying the value

6. Press the ↵ key to confirm the new value of the parameter.

Fig.31 Confirming the new value



7. Press the ESC key twice to go back to the main display.

Fig.32 Going back to the main display

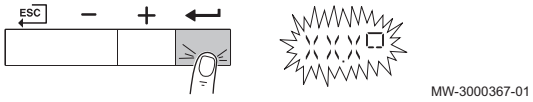
7.2.2 Changing the central heating flow temperature

1. Press the |||| key once to select the central heating flow temperature.
   The set flow temperature appears on the screen.

Fig.33 Selecting the flow temperature

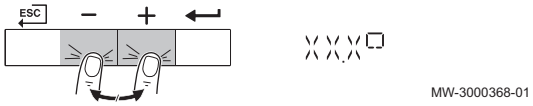
2. Press the ↵ key to access the flow temperature.
   The current value flashes on the screen.

Fig.34 Access the flow temperature.



3. Press the + or − key for the required new flow temperature.

Fig.35 Changing the central heating flow temperature



4. Press the ↵ key to confirm the new value.

Fig.36 Confirming the new value

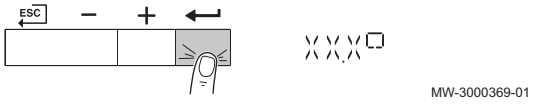
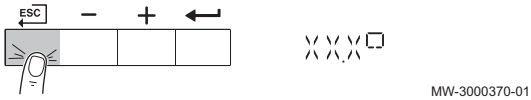


Fig.37 Return to the main display



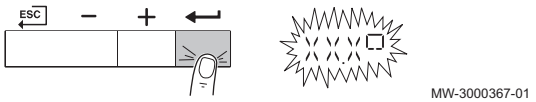
5. To go back to the main display, press the ESC key once.

7.2.3 Changing the DHW temperature

Fig.38 Selecting DHW temperature

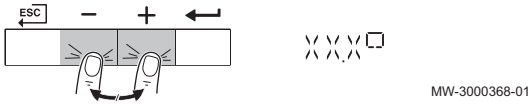
1. Press the key to select the DHW flow temperature.
   The set DHW temperature appears on the screen.

Fig.39 Access to the DHW temperature



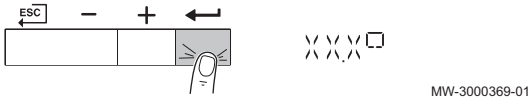
2. Press the ↵ key to access the DHW temperature.
   The current value flashes on the screen.

Fig.40 Changing required DHW temperature



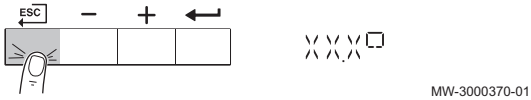
3. Press the + or – key for the required new DHW temperature.

Fig.41 Confirming the new value



4. Press the ↵ key to confirm the new value.

Fig.42 Return to the main display



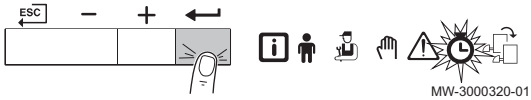
5. To go back to the main display, press the ESC key once.

7.2.4 Setting the Timer Program

Note
Activate the Timer Program by changing parameter CP320 from 1 (= manual operation) to 0 (= Timer Program).

1. Navigate to the Counter menu.
2. Press the ↵ key to open the Operating hours/Timer Program/Time display menu.

Fig.43 Accessing the Counter menu



Note
The Operating hours/Timer Program/Time Display menus can be accessed only if the ⏱ icon flashes.

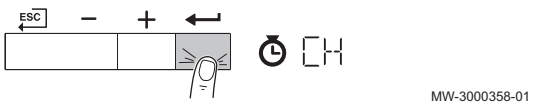
3. Press the ↵ key for the Operating hours menu or press the + key for the next menu.

Fig.44 The Counter menu appears

Fig.45 Timer Program menu appears

4. Press the ↵ key for the Timer Program menu or press the + key for the next menu.

Fig.46 Selecting the circuit

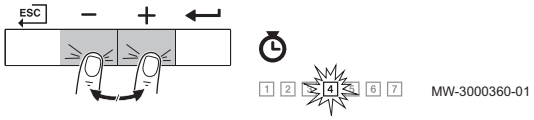


5. Select the circuit by pressing the ↵ key.

Note
At least one circuit is available:
- Heating

The icons dedicated to the days of the week all flash at the same time: 1 2 3 4 5 6 7

Fig.47 Selecting the day



6. Select the required day number by keeping the + or − key pressed until the symbol for the required day flashes. Confirm by pressing the ↵ key.

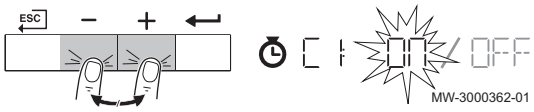
Day selected	Description
1,2, 3, 4, 5, 6, 7	Every day of the week
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday
7	Sunday

Fig.48 Setting the time

7. Set the start time **S1** by pressing the + or −key. Confirm by pressing the ↵ key.

Note
END = end of programming.
S = switching time or end of day indication (max. 6 switching times).
C = temperature setting (lower night or comfort temperature)

Fig.49 Selecting the status



8. Select status **C1** to match switching time **S1** by pressing the + or − key. Confirm by pressing the ↵ key.

Statuses C1 to C6 for the periods S1 to S6	Description
ON	Comfort temperature
OFF	Lower night temperature

9. Repeat steps 3 to 5 to define the switching times (**S1** to **S6**) and the associated status (**C1** to **C6**).
10. Press the ESC key to go back to the main display.

Example:

Times	1 Monday	2 Tuesday	3 Wednesday	4 Thursday	5 Friday	6 Saturday	7 Sunday
06:00	S1 C1 =ON	S1 C1 =ON	S1 C1 =ON	S1 C1 =ON	S1 C1 =ON	S1 C1 =ON	S1 C1 = OFF
08:00	S2 C2 = OFF	S2 OFF	S2 C2 = OFF	S2 C2 = OFF	S2 C2 = OFF	S2 C2 = ON	S2 C2 = ON
10:00			S3 C3 = ON				S3 C3 = OFF
12:00						S3 C3 = OFF	
14:00			S4 C4 = OFF				
16:00							
18:00	S3 C3 = ON	S3 C3 = ON	S5 C5 = ON	S3 C3 = ON	S3 C3 = ON		
20:00							
22:00	S4 C4 = OFF	S4 C4 = OFF	S6 C6 = OFF	S4 C4 = OFF	S4 C4 = OFF		
23:50							

7.2.5 Changing installer parameters

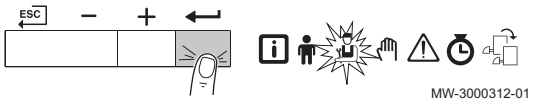
The parameters in the Installer Menu must only be changed by a qualified professional. Code 0012 must be entered in order to change some parameters.

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

1. Navigate to the Installer menu.

Note
The Installer menu is available only when the icon flashes.

Fig.50 Navigating to the Installer menu



2. Press the ↵ key to open the Installer menu.

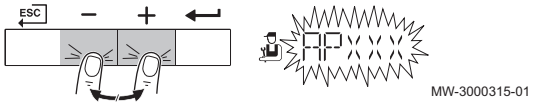
Fig.51 Entering the code

3. Keep pressing the + key until the code 0012 is displayed.

Fig.52 Confirming the Installer menu

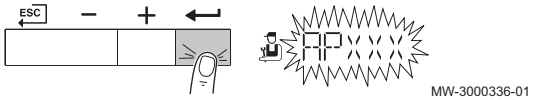
4. Press the ↵ key to confirm opening the Installer menu.
The parameters available to the Installer are displayed.

Fig.53 Selecting the parameter



5. Keep pressing the + or − key until the required parameter is displayed.

Fig.54 Confirming the selection



6. Press the ↵ key to confirm the selection.

Fig.55 Modifying the value

7. Press the + or − keys to modify the value of the parameter.

Fig.56 Confirming the new value

8. Press the ↵ key to confirm the new value of the parameter.

Fig.57 Back to the main display

9. Press the ESC key twice to go back to the main display.

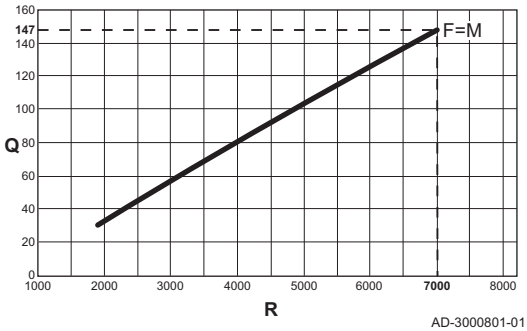
7.2.6 Setting the maximum output for central heating

See graph for the relationship between output and fan speed for gas types G20 or G25. The speed can be changed using parameter GP07 .

Change this parameter in the Installer menu.

See
Changing installer parameters, page 17

Fig.58 Output Quinta Ace - 160



M Maximum output
F Factory setting
Q Heat output (kW)
R Fan rotation speed (rpm)

7.2.7 Restoring to factory settings

1. Navigate to the Installer menu.

Note
The Installer menu is available only when the icon flashes.

Fig.59 Accessing the Installer menu

2. Press the ↵ key to open the Installer menu.

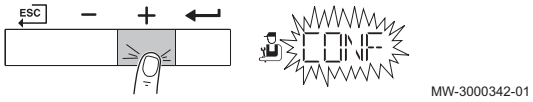
Fig.60 Entering the code

3. Keep pressing the + key until the code 0012 is displayed.

Fig.61 Confirming the Installer menu

4. Press the ↵ key to confirm opening the installer menu.
The parameters available to the Installer are displayed.

Fig.62 Selecting the factory setting



5. Keep pressing the + key until CONF is displayed.

Fig.63 First factory setting CN1

6. Press the ↵ key to open the first factory setting CN1.

Fig.64 Modifying the CN1 value

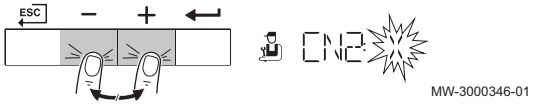
7. Press the + or − key to modify the value.

Note
Transfer the value from the corresponding data plate:
- CN1: see data plate

Fig.65 Second factory setting CN2

8. Press the ↵ key to confirm the value. The second factory setting CN2 appears on the screen.

Fig.66 Modifying the CN2 value



9. Press the + or − key to modify the value.

Note
Transfer the value from the corresponding data plate:
- CN2: see data plate

Fig.67 Confirming the reset

10. Press the ↵ key to confirm the selection.
The factory settings are reset. The display shows various information and returns to the main display after 3 minutes.

7.2.8 Resetting the maintenance message

Reset the maintenance message once the stated maintenance service has been carried out.

Fig.68 Accessing the Counter menu

1. Navigate to the Counter menu.
2. Press the ⟵ key to open the Operating hours/Timer Program/Time display menu.

Fig.69 The Counter menu appears

3. Press the ⟵ key to access the Operating hours menu.

Fig.70 Maintenance appears

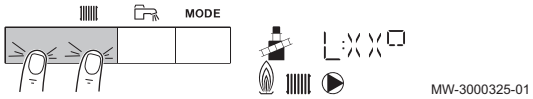
4. Keep pressing the + key until SERVICE is displayed.

Fig.71 Resetting the maintenance message

5. Press the ⟵ key to reset the maintenance message.
6. Press the ESC key twice to go back to the main display.

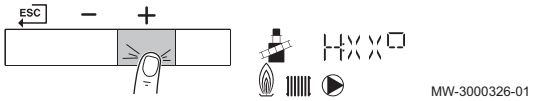
7.2.9 Activating Chimney Sweep Mode (forced part load for full load)

Fig.72 Accessing Chimney Sweep Mode



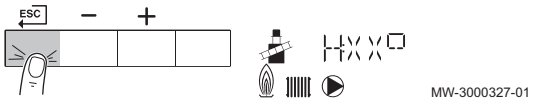
1. Press the two keys on the left simultaneously to select Chimney Sweep mode.
   The boiler is now running at part load. Wait until L: XX°C appears on the display. The chimney sweeping symbol and a flame symbol appear at the top left of the screen.

Fig.73 Full load is set.



2. Press the + key twice. The boiler is now running at full load. Wait until H: XX°C appears on the display. A large triangle appears next to the flame symbol at the top left of the screen.

Fig.74 Back to the main display



3. To go back to the main display, press the ESC key once.
   Forced part load or full load is switched off.

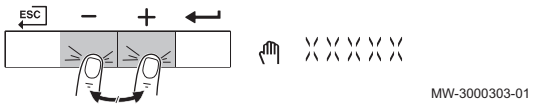
7.2.10 Activating the manual mode menu

Fig.75 Accessing manual mode menu

1. Navigate to the manual mode menu.
2. Press the ⟵ key to open the menu.

Note
Manual mode is available only when the ✋ icon flashes.

Fig.76 Changing the desired flow temperature

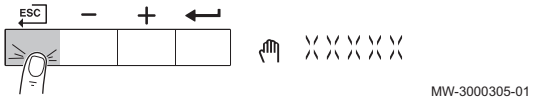


3. The current desired flow temperature in manual mode is displayed.
4. Press the + or − keys to modify the required flow temperature in manual mode.

Fig.77 Confirming a new value

5. Press the ⟵ key to confirm a new parameter value.
   The boiler is now in manual mode.

Fig.78 Back to the main display



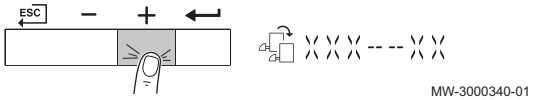
6. Press the ESC key twice to go back to the main display.
   Manual mode is switched off.

7.2.11 Changing the SCB-01 PCB parameters

1. Navigate to the icon to select the PCB connected.
2. Press the ↵ key to open the menu.
   The current PCB is displayed.

Fig.79 Navigating to the PCBs connected

Fig.80 Displaying the selected PCB



3. Keep pressing the + or − key until PCB SCB-01 is displayed.

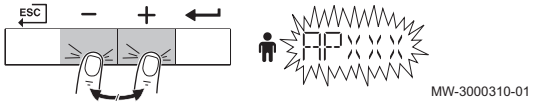
Fig.81 Confirming the PCB selection

4. Press the ↵ key to confirm the selection.
   All menu selections are displayed and flashes on the screen.
5. Press the + or − key to navigate to the User menu.

Fig.82 Accessing the User menu

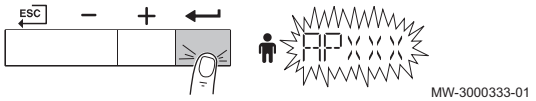
6. Press the ↵ key to open the User menu.
   The parameters of PCB SCB-01 can be modified at this level.

Fig.83 Displaying the SCB-01 parameters



7. Keep pressing the + or − key until the required parameter is displayed.

Fig.84 Confirming the selection



8. Press the ↵ key to confirm the selection.

Fig.85 Modifying the value

9. Press the + or − keys to modify the value of the parameter.

Fig.86 Confirming the new value

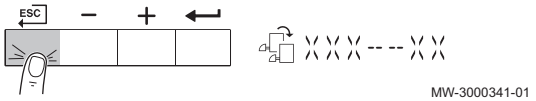
10. Press the ↵ key to confirm the new value of the parameter.
11. Press the + or − key for the next parameter.

Note
Once the desired parameters have been modified, reactivate the boiler PCB. To do so, follow these steps.

12. Press the ESC key and go back to the selection menu.
    The icon flashes.
13. Press the + or − key to navigate again to the icon.
    The current PCB is displayed.
14. Press the ↵ key to confirm the selection.
15. Keep pressing the + key Quinta Ace is displayed.
16. Press the ↵ key to confirm the selection.

Fig.87 Confirming the PCB selection

Fig.88 Going back to the main display



17. To go back to the main display, press the ESC key once.

7.2.12 Carrying out an auto-detect

Carry out an auto-detect after removing or replacing an (optional) control PCB.

1. Navigate to the Installer menu.

Note
The Installer menu is available only when the icon flashes.

Fig.89 Accessing the Installer menu

2. Press the ↵ key to open the Installer menu.

Fig.90 Entering the code

3. Keep pressing the + key until the code 0012 is displayed.

Fig.91 Confirming the Installer menu

4. Press the ↵ key to confirm opening the Installer menu.
   The parameters available to the Installer are displayed.
5. Keep pressing the + key until AT is displayed.
6. Press the ↵ key to carry out the auto-detect.
7. After a while, the main display is shown again.

7.3 Reading out current values

1. Navigate to the Information menu.
2. Press the ↵ key to open the Information menu.

Note
The Information menu is available only if the icon flashes.

Fig.92 Accessing the Information menu

Fig.93 Displaying information

3. Press the + or − key to display the required information.

Fig.94 Back to the main display

4. Press the ESC key twice to go back to the main display.

Tab.6 Current values

Value	Description	Unit
AM001	DHW active	-
AM012	Status	-
AM014	Sub-status	-
AM015	Circulation pump (0 = no pump connected)	-
AM016	Flow temperature	°C
AM017	Heat exchanger temperature	°C
AM018	Return temperature	°C
AM019	Hydraulic pressure	bar
AM022	Heat demand on/off (0 = no heat demand)	-
AM024	Output	%
AM027	Outside temperature (only if an outside temperature sensor is connected)	°C
AM028	Analogue input (0-10 V)	V
AP078	Outside temperature sensor connected	-
GM001	Fan rotation speed	rpm
GM002	Fan rotation speed (set point)	rpm
GM006	Gas pressure control GPS	-
GM008	Ionisation current	uA
GM012	Gas leakage control VPS	-

Value	Description	Unit
F00.00	Software version	-
P01.03	Parameter version	-

7.3.1 Status and Sub-status

The information menu ⓘ gives the following status and sub-status numbers:

Tab.7 Status numbers

Status	
0	Stand-by mode
1	Boiler start (heat demand)
2	Burner start
3 or 4	Burners active in CH or DHW mode
5	Burner stop
6	Boiler stop (end of heat demand)
8	Control stop
9	Blocking
10	Lock out
11 or 12 or 13	Chimney mode
15	Manual
16	Frost protection
19	Boiler reset mode

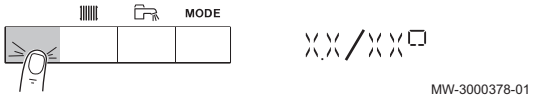
Tab.8 Sub-status numbers

Sub-status	
0	Stand-by mode
1	Anti-hunting
3	Start (external) pump
10	Open flue gas damper/external gas valve
11	Increase fan speed
13	Pre-ventilation
14	Wait for enable signal
15	Burner on
17	Pre-ignition
18	Main ignition
19	Flame detection
20	Intermediate ventilation
30	Temperature control
31	Limited temperature control (ΔT protection)
32	Output control
33	Temperature gradient protection level 1 (modulate down)
34	Temperature gradient protection level 2 (part load)
35	Temperature gradient protection level 3 (blocking)
36	Modulate up for flame control
37	Temperature stabilisation time
38	Cold start

Sub-status	
40	Burner off
41	Post ventilation
42	Close flue gas damper/external gas valve
43	Recirculation protection
44	Stop fan
45	Limited power
60	Pump post circulation
61	Pump off
63	Start anti-swing
xx	Blocking code xx
xx	Lock out code xx

7.4 Reading out the water pressure and flow temperature

Fig.95 Displaying the water pressure and flow temperature



1. Press the left-hand key once to display the current water pressure and flow temperature.
   The water pressure and flow temperature appear on the screen.
2. The main display reappears after three minutes.

7.5 Reading out connected (optional) control PCBs

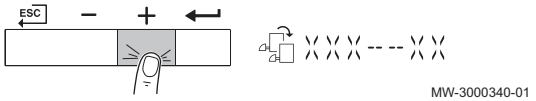
Reading (optional) PCBs connected is only possible when the icon is shown in the display.

1. Navigate to the icon to read the PCBs connected.
2. Press the ↵ key to open the menu.

Fig.96 Accessing reading of PCBs connected

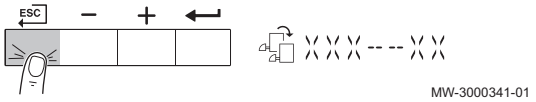
Note
- Reading PCBs connected is only possible if the icon flashes.
- The display first shows the PCB version CU--GHx

Fig.97 Getting information from the PCB connected



3. Press the + key to receive information about the (optional) connected PCB (for example: SCB-01)
4. Press the + key to receive information about the next connected PCB. This information is only displayed if several PCBs are connected.

Fig.98 Going back to the main display



5. Press the ESC key twice to go back to the main display.

7.6 Reading out the Counter menu

1. Navigate to the Counter menu.
2. Press the ↵ key to open the Operating hours/Timer Program/Time display menu.

Fig.99 Accessing the Counter menu

Fig. 100 The Counter menu appears

3. Press the ↵ key to access the Operating hours menu.
4. Press the + key to scroll through the counter list.

Parameter	Description	Unit
AC001	Number of hours boiler live	h

Parameter	Description	Unit
AC002	Number of boiler operating hours	h
AC003	Number of boiler operating hours since last service	h
AC026	Number of hours of rotation of circulation pump	h
PC003	Number of hours boiler working for central heating	h
AC004 (1)	Number of successful starts	–
AC005 (1)	Energy consumption for CH operation	kWh
AC006 (1)	Energy consumption for DHW operation	kWh
AC027 (1)	Number of circulation pump starts	–
DC002 (1)	Number of three-way valve switchings for DHW	–
DC003 (1)	Number of three-way valve switching hours for DHW	h
DC004 (1)	Number of starts for DHW	–
DC005 (1)	Number of hours working for DHW	h
GC007 (1)	Number of false starts	–
PC002 (1)	Number of burner starts	–
PC004 (1)	Number of times flame loss	–
SERVICE	Resetting service hours	–

(1) This parameter can only be read out at installer level.

8 Troubleshooting

8.1 Blocking

A (temporary) blocking mode is a boiler status, resulting from an abnormal state. The display shows a blocking code (for example H.XX.XX) together with the ⚠ symbol. The control unit makes a number of attempts to start the boiler again.

Note
The boiler automatically returns to operation once the cause of the blocking has been removed.

8.1.1 Blocking codes

Tab.9 Blocking codes

Blocking code	Description
H.01.00 (1)	**Communication error with the CU-GH PCB:** • Restart boiler
H.01.06	**Maximum difference between heat exchanger and flow temperature 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 installation 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.01.07	**Maximum difference between heat exchanger and return temperature 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 installation 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.01.08	**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 installation 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 too low:** • Gas pressure too low: - Check the gas supply pressure - Check that the gas valve is fully opened • Wiring fault: check the wiring • Faulty gas valve: check the gas valve and replace it if necessary
H.01.13	**Maximum heat exchanger temperature exceeded:** • Check the circulation (direction, pump, valves) • Check the water pressure • Check that the sensors are operating correctly • Check that the sensor has been fitted properly • Check the cleanliness of the heat exchanger • Check that the installation has been correctly vented to remove air

Blocking code	Description
H.01.14	**Flow temperature sensor above normal range (high-limit thermostat):** • Bad connection: check the wiring and connectors. • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor • 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	**Maximum flue gas temperature exceeded:** • Wait until the flue gas temperature has decreased
H.02.01(1)	**Configuration procedure active:** • No action
H.02.02(1)	**Configuration error or unknown configuration number:** • Reset CN1 and CN2
H.02.05(1)	**Configuration error:** • Reset CN1 and CN2
H.02.06	**Water pressure too low:** • Not enough water in the system: check the water pressure • Wiring fault: check the wiring
H.02.09	**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	**Blocking input is active:** • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H.02.12	**Waiting time release signal has elapsed:** • External cause: remove external cause • Wrong parameter set: check the parameters • Bad connection: check the connection
H.02.36	**Communication error with the SCB PCB:** • Bad connection with BUS: check the wiring • No PCB in boiler: reconnect PCB or retrieve from memory with Auto-detect.
H.03.02	**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
(1) These blockings are not stored in the error memory.	

8.2 Lock out

If the blocking conditions still exist after various start attempts, the boiler goes into lockout (also called error). The boiler will also lock out if an error is signalled anywhere in the boiler. An error code will appear on the display. The error code is displayed as follows:

In a red flashing display:
- the symbol ⚠
- the symbol **RESET**
- the error code, for example, E.XX.XX

The meaning of the error codes can be found in the error table. Note the error code.

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

Press the **RESET** key for two seconds. If the error code continues to display, search for the cause in the error table and apply the solution.

Note
If the display does not show **RESET** but rather ⏻, the boiler must be switched off and then switched on again 10 seconds later before the error can be reset.

8.2.1 Error codes

Tab.10 Error codes

Error code	Description
E.00.04	**Open circuit in return temperature sensor:** • 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	**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.00.08	**Heat exchanger 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.00.20	**Open circuit in flue gas sensor:** • Bad connection: check the wiring and connectors. • Incorrectly fitted sensor: check that the sensor has been correctly fitted • Faulty sensor: replace the sensor
E.00.21	**Flue gas 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.01.04	**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.01.12	**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.01.15	**Maximum flue gas temperature exceeded:** • Check the cleanliness of the heat exchanger • Check the water pressure in the central heating system
E.02.04	**Configuration error or factory settings incorrect:** • Parameters are not correct: - Restart boiler - Reset CN1 and CN2 - Replace the control unit
E.02.13	**Blocking input is active:** • External cause: remove external cause • Wrong parameter set: check the parameters

Error code	Description
Er:50 or E.02.15	**CSU time out:** • Bad connection: check the wiring and connectors. • Faulty CSU: replace CSU
E.02.17	**Communication error with the safety PCB:** • Bad connection: check the wiring and connectors. • Control unit failure: replace the control unit
E.04.00	**Safety parameters not OK:** • Bad connection: check the wiring and connectors.
E.04.01	**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	**Flow 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.04.07	**Flow temperature sensor deviation:** • Bad connection: check the connection • Faulty sensor: replace the sensor
E.04.08	**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.04.10	**Five failed burner starts:** • No ignition spark: - Check the wiring between the PCU electronic PCB and the ignition transformer - Check that the SU electronic PCB is correctly in place - Check the ionisation/ignition electrode - Check breakdown to earth - Check the condition of the burner cover - Check the earthing - SU electronic PCB faulty: replace the electronic PCB • 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 - SU electronic PCB faulty: replace the electronic PCB • Presence of the flame but insufficient ionization (<4 µA): - 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.04.12	**False flame signal:** • The burner remains very hot: Set the O_2 • 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
E.04.13	**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

Error code	Description
E.04.17	**Gas valve fault:** • Bad connection: check the wiring and connectors. • Faulty gas valve: replace the gas valve

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8.3 Warning

If it is anticipated that a situation may develop into a fault, the boiler will first give a warning for some malfunctions. The error code is displayed as follows:

In a red flashing display:
- the symbol ⚠
- the symbol **RESET**
- the error code, for example, A.XX.XX

The meaning of the error codes can be found in the error table. Note the error code.

Press the **RESET** key for two seconds. If the error code continues to display, search for the cause in the error table and apply the solution.

8.3.1 Warning codes

Tab.11 Warning codes

Warning code	Description
A.01.03	**Flame loss:** • 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
A.02.06	**Water pressure warning:** • Water pressure too low; check the water pressure
A.02.18	**Configuration error:** • Reset CN1 and CN2
A.02.35	**SCB PCB disconnected:** • Carry out an auto-detect
A.02.45	**SCB PCB not found:** • Carry out an auto-detect
A.02.46	**SCB PCB not found:** • Carry out an auto-detect
A.02.49	**SCB PCB not found:** • Carry out an auto-detect

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8.4 Error memory

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

8.4.1 Reading out the Error memory

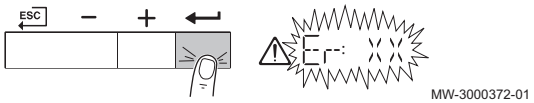
1. Navigate to the Error menu.

Fig. 101 Accessing the Failure menu

2. Press the ↵ key to open the Error menu.

Note
The Failure menu is available only if the ⚠ icon flashes.

Fig. 102 Viewing error messages



3. Press the ↵ key to view the error messages.
XX is the number of stored error messages.

Fig. 103 Displaying the error messages

4. Press the + or − key to scroll through the error messages.

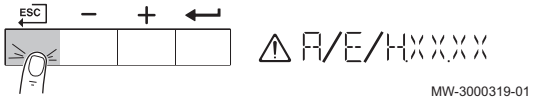
Fig. 104 Viewing details of error message

5. Press the ↵ key to view details of the error message.

Fig. 105 View next detail or go to next menu

6. Press the + key to view the next detail or on ESC to return to the previous menu.

Fig. 106 Back to the main display



7. Press the ESC key twice to go back to the main display.

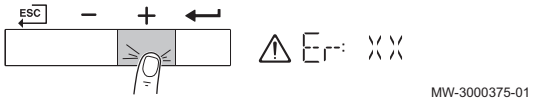
8.4.2 Clearing the error memory

1. Navigate to the Error menu.
2. Press the ↵ key to open the Error menu.

Note
The Failure menu is available only if the ⚠ icon flashes.

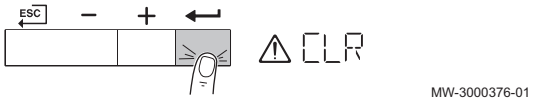
Fig. 107 Accessing the Failure menu

Fig. 108 Access to clearing the error memory.



3. Press the + key to access clearing the error memory.

Fig. 109 Clearing error messages



4. Press the ↵ key to clear all error messages from the error memory.
5. After a while the main display appears again automatically.

Remeha Commercial UK
Innovations House
3 Oaklands Business Centre
Oaklands Park
RG41 2FD Wokingham
Tel: +44 (0)118 978 3434
Fax: +44 (0)118 978 6977
Internet: www.remeha.co.uk
E-mail: boilers@remeha.co.uk

SP OpenTherm®

CE

remeha the comfort innovators

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