

PELLET BOILER

SELECTA 15HQ S1 SELECTA 20HQ S1 SELECTA 25HQ S1 SELECTA 25HQ ACS S1

PART 2 - OPERATION AND CLEANING

Instructions in English





8902106500

CONTENTS

CONTENTS	2
IO - FIRST START-UP	
I1 - MENU ITEMS AND FUNCTION	7
12 - SAFETY DEVICES AND ALARMS	
13-RECOMMENDATIONS FOR SAFE USE	
14 - MAINTENANCE AND CLEANING	29
15 - TROUBLESHOOTING	37
16 - ELECTRICAL PLAN	

BEFORE START-UP GENERAL PRECAUTIONS

Remove all parts that may burn from the brazier and the product's tank (manual, various adhesive labels or any polystyrene).



The first start-up may not be successful as the feed screw is empty and does not always manage to load the brazier with the required amount of pellets in time to light the flame.



CANCEL THE FAILED IGNITION ALARM. REMOVE THE PELLETS LEFT IN THE BRAZIER AND REPEAT THE START-UP.

If after repeated attempts, the flame fails to ignite, despite a regular flow of pellets in the brazier, verify that the brazier is assembled correctly and must be **clean without any ash incrustations.** If no anomaly is found during this inspection, there may be a problem with the product components or installation may not be correct.



REMOVE THE PELLETS FROM THE BRAZIER AND CONTACT AN AUTHORISED TECHNICIAN.



Do not touch the boiler during the first lighting, as it is during this phase that the paint sets; if you touch the paint, you may expose the steel surface.

If necessary, touch up the paint with the aerosol spray in the original colour (see "Accessories for pellet boilers").



It is good practice to guarantee effective ventilation in the room during the initial start-up, as the boiler will emit some smoke and smell of paint.



ATTENTION!

Please ensure the brazier is clear of ALL pellets and ash build up following any failed ignitions. Failure to clear out the brazier prior to resetting may result in further failed ignitions or in certain conditions an explosive ignition.

Do not stand close to the boiler and ventilate the room as described. The smoke and smell of paint will disappear after about an hour of operation, however, they are not harmful in any case.

The boiler will be subject to expansion and contraction during the stages of lighting and cooling down, and may therefore make slight creaking noises.

This is absolutely normal as the structure is made of laminated steel and must not be considered a defect.

It is extremely important to make sure the boiler does not reach high temperatures straight away, but to increase the temperature gradually using low power at first.

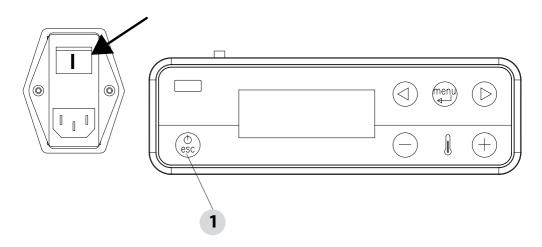


DO NOT EXPECT HEATING EFFICIENCY IMMEDIATELY!!! ATTENTION!

If during operation or initial ignition you encounter combustion smoke spillage in to the room from the appliance or the flue then please switch off the appliance, ventilate the room and contact the installation / service technician immediately.

SETTINGS TO BE CARRIED OUT BEFORE THE INITIAL START-UP

After connecting the power cable to the electrical socket, turn the power switch to the (I) position. To turn the boiler on or off, press button 1 on the control panel for a few seconds.



Switch-on is signalled on the display by the text ON and the flame icon flashing. The stove goes to power-on, flame standby and start-up status.

When the time required for the power on stages has elapsed, the stove goes to work mode. When the stove reaches the work mode, the user can set the various SETTINGS available.

6-LOADING THE PELLETS

The pellets can be loaded either manually or automatically. The empty tank can contain up to 100 litres or 65 kg of pellets.

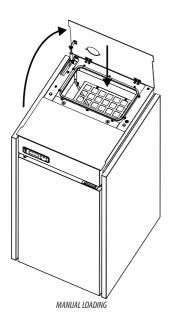
Manual Loading:

• Open the top door "C" of the boiler directly and pour in the pellets.

Automatic loading (with remote tank of 200/400 or 300 kg - optional - see accessories):

Remove the "V" cap and insert the pellet supply pipe coming from the remote tank.

If the remote tank is topped up using a cistern, the boiler must be switched off at least one hour before being topped up.





À

Never remove the protective grate from inside the tank. When loading pellets, keep the bag from coming into contact with hot surfaces.



We point out the installation of the pneumatic extractor/external feed screw (optional) to move the pellets make the combustible tank lose its airtight features in environments where this is required. Installation of these accessories could change performance of the boiler respect to that declared by the manufacturer.

SAFETY

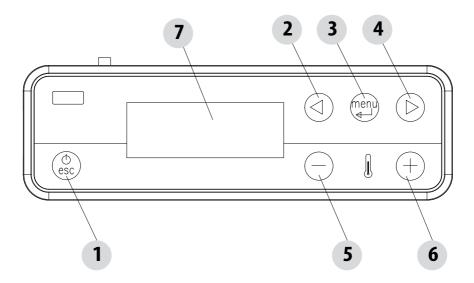
WHAT TO DO IF SMOKE LEAKS INTO THE ROOM OR IN CASE OF EXPLOSION DAMAGING THE DEVICE: SWITCH IT OFF, VENTILATE THE ROOM AND IMMEDIATELY CONTACT THE INSTALLER/TECHNICIAN IN CHARGE OF ASSISTANCE.

User Training

In ALL cases, the technician in charge of installation and first-start-up MUST carry out a thorough handover of the appliance to the homeowner / end user. The following elements should be covered to the satisfaction of the end user. Failure to do this may result in unsafe use of the appliance:

- •
- Explanation of the appliance and how it works
- Necessity to maintain ventilation to the appliance and the issues that may arise otherwise
- Fuel usage and supply
- · How to light the appliance safely
- What to do in the event of failed ignitions
- What to do in the event of alarms (in particular those generated when the appliance runs out of fuel)
- How to maintain the appliance correctly and the importance of carrying out these tasks each month
- It is good practise to agree a date for the first annual service
- Discuss the use of secondary heating systems if applicable
- · Explain how the remote control or room stats operate and their optimal positioning

CONTROL PANEL DISPLAY Menu options



KEY

- 1. Switching on/switching off the boiler
- 2. Scrolling down through the programming menu
- 3. Menu
- 4. Scrolling up the programming menu

- 5. Decrease set temperature / programming functions.
- 6. Increase set temperature / programming functions.
- 7. Display.

MAIN MENU

Press key 3 (menu) to access. The options accessed are:

- 1. Date and Time
- 2. Timer
- 3. Sleep (only when boiler is on)
- 4. Settings
- 5. Info
- 6. Wi-Fi/Ble

1. Date and time configuration

Configure the time and date as follows:

- Press the "menu" key.
- Select "Date and Time".
- Press "menu" to confirm.
- Scroll through with the arrow keys and select the variables to be edited one at a time: Day, Hour, Min, Num. day, Month, Year.
- Press "menu" to confirm
- Use the + and keys to edit.
- Finally, press "menu" to confirm and "esc" to exit.

2. PROGRAMMED MODE (TIMER) - Main menu

The current time and date must be configured to ensure correct operation of the timer.

There are six configurable TIMERS; for each one, the user can select a start and stop time and the days of the week when it is in use. When one or more programs are active, the status of the boiler and the TIMER "n" alternate on the display. "n" is the number of timer programs in use, separated by dashes.

Example:

TIMER 1 Timer 1 program active.

TIMER 1-4 Timer 1 and 4 programs active.

TIMER 1-2-3-4-5-6 All timer programs active.

EXAMPLE OF PROGRAMMING

With the boiler on or off:

- access the MENU,
- scroll to the TIMER item using the <> arrows.
- press the "Menu" key
- the system shows "P1" (Press the <> keys to move through the timers P2, P3, P4, P5, P6)
- Press the "Menu" key to activate "P1".
- press + and select "ON"
- press the "Menu" key to confirm

At this point the start time is 00:00. Press the + - key to set the start time and press the "menu" key to confirm.

Next, the proposed stop time is 10 minutes later than the configured start time: press the + key and edit the stop time, and press the "menu" key to confirm.

Next, you are asked to set the days of the week when the configured timer is to be enabled or disabled. Press the - or + keys to select the day you want to activate the time. It will light up white, then confirm with the "menu" key. If no day is selected for enabling the timer, the timer program is no longer enabled on the status window.

Next, program the other days or press "ESC" to exit. Repeat this procedure to program the other timers.

EXAMPLES OF PROGRAMMING

	P1			P2	
on	off	day	on	off	day
08:00	12:00	mon	11:00	14:00	mon
Boiler on between 08:00 and 14:00					

	P1			P2	
on	off	day	on	off	day
08:00	11:00	mon	11:00	14:00	mon
Boiler on between 08:00 and 14:00					

	P1			P2	
on	off	day	on	off	day
17:00	24:00	mon	00:00	06:00	tue
Boiler on between 17:00 on Monday to 06:00 on Tuesday					

NOTES ON USE OF THE TIMER

- The timer always starts the boiler with the last temperature and ventilation settings (or with the default settings at 20°C and V3 if they have never been altered).
- The start time can be between 00:00 and 23:50
- If the stop time has not yet been saved, the program proposes a start time at +10 minutes.
- If a timer program turns off the boiler at 24:00 on one day and another program starts it up at 00:00 on the next day: the boiler remains on.
- A program has a start-up and/or shut-down time that overlap the times of another program: if the boiler is already on, the start has
 no effect while OFF turns off the boiler.
- When the boiler is on and the timer is active, pressing the OFF key turns off the boiler; the boiler then restarts automatically at the next time of the timer.
- When the boiler is off and the timer is active, pressing the ON key turns on the boiler; the boiler then stops automatically at the next time of the timer.

3. SLEEP FUNCTION (main menu)

Sleep may be activated only when the boiler is on and allows you to quickly set a time for the product to turn off.

To set the Sleep function, proceed as follows:

- Enter the MENU
- Scroll to the SLEEP item with the <> arrows
- Press Menu
- Set the turn-off time you want using the + and keys.

The panel shows a default time of 10 minutes after the current time, which can be adjusted with key 4 up to the following day (i.e. the turn-off can be delayed for a maximum of 23 hours and 50 minutes).

If the SLEEP function is active with the TIMER active, the former has priority, therefore the boiler will not turn off at the time set in the timer program but at the time set by the sleep function, even if it comes after the time set by the timer.

ADJUSTMENTS MENU

To access the menu, proceed as follows:

- Press the + keys
- Scroll with the <> arrows and select "Set Amb. T" or "Set Water T" or "Exchanger Speed"
- Press "menu" to enter the option selected.
- Change with the + keys.
- Press "menu" to confirm and "esc" to exit.

4. SETTINGS MENU

The SETTINGS menu is for configuring use of the boiler:

- a. Language.
- b. ADAPTIVE mode
- c. Cleaning (shown only when boiler is off).
- d. Feed screw loading (shown only when boiler is off).
- e. Tones.
- f. External thermostat (activation).
- g. Auto Eco (activation).
- h. Eco Turn-off T (default 10 minutes)
- i. Pump on T (default 50°C).
- j. Auxiliary boiler (default deactivated).
- k. Pellet recipe.
- I. Smoke rpm var
- m. Maximum power (1-5 default 5).
- n. Component test (shown only when boiler is off).
- o. "Test Performance" function (can be enabled only when boiler is on, for checking emissions in field).
- p. System configuration (factory settings: system 02).
- q. Season
- r. Technical menu.

NOTE: Some of the options listed above cannot be enabled in certain "system configurations".

a - Language

Select the language as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "language".
- Press "menu" to confirm.
- Use the + keys to select the required language (IT/EN/DE/FR/ES/NL/PL/DA)
- Press "menu" to confirm and "esc" to exit.

b - ADAPTIVE mode

When you access the "Adaptive Mode" menu, you are prompted to enter a password (00 - ZERO/ZERO).

- Press the "menu" key
- the text Only for technicians appears (only in English)
- It is preferable that this mode be activated under the supervision of a qualified technician.
- press "menu"
- scroll with the arrows until the "ON" function activates
- press "menu" to confirm

When this menu is activated, an icon "A" representing the active status of this function must appear on the display (main screen).

c - Cleaning

Allows you to enable/disable the smoke extractor.

Select "Cleaning" (only with boiler off-OFF) as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Cleaning"
- Press "menu" to confirm.
- Use the + kevs to select "On".
- Press "menu" to confirm and "esc" to exit.

d - Load feed screw

This is for filling the pellet loading system. This can be enabled only when the boiler is off. A 180" countdown appears. The feed screw stops automatically at the end of the countdown and the menu closes.

To select "Load feed screw" (only with boiler off-OFF) proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Load auger".
- Press "menu" to confirm.
- With the + keys, select "Enable".
- Press "menu" to confirm and "esc" to exit.

e - Tones

Allows you to enable or disable the buzzer when pressing the buttons.

This function is disabled by default. To enable it proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Tones"
- Press "menu" to confirm.
- Use the + keys to select "On".

f - External thermostat

EXTERNAL THERMOSTAT (not included with the boiler, it must be provided by the user)

The temperature of the boiler can also be controlled by an external thermostat in the room. It should be positioned centrally in the room where the boiler is installed. It provides a closer match between the heating temperature requested of the boiler and the actual room temperature it provides.

Connect the wires of the external thermostat to points 1-2 of the terminal block on the boiler.

Once the thermostat has been connected it needs to be enabled.

To do this, proceed as follows:

- Press the "menu" key.
- Scroll with the arrows to "Settings".
- Press "menu" to select.
- Now use the arrows to scroll to "External thermostat".
- Press "menu" to select.
- Press the + kevs.
- Select "On" to activate the external thermostat.
- Press the "menu" key to confirm.
- Press the "esc" key to exit.

g - Auto-Eco activation

To select the Auto-Eco function, proceed as follows:

- · Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Auto-Eco".
- Press "menu" to confirm.
- Use the + keys to select "On".
- Press "menu" to confirm and "esc" to exit.

h - Eco Switch-off T

To select the Eco Stop T function, proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "T Eco off".
- Press "menu" to confirm.
- Enter the minutes with the + keys.
- Press "menu" to confirm and "esc" to exit.

AUTO ECO MODE

For activation of the "Auto Eco" mode and time settings, see paragraphs 8 f and 8 g respectively.

The "ECO stop T" can be adjusted to ensure correct operation in the various environments in which the boiler can be installed and to avoid constant stopping and starting when the room temperature is subject to sudden change (drafts, poorly insulated rooms, etc.).

The ECO stop procedure is activated automatically when all the power recall devices included in the "system configuration" are satisfied: room temperature probe/external thermostat (configurations 1-2-3), flow switch (configuration 2), thermostat/ntc ($10 \text{ k}\Omega \text{ B}3435$) puffer (configuration 4-5) or thermostat/ntc ($10 \text{ k}\Omega \text{ B}3435$) boiler (configuration 2-3). If all the devices present are satisfied, the time begins to decrease "T ECO stop" (10 minutes default, can be changed in the "Settings" menu). During this phase, the panel alternates between displaying 0N with a small flame and Crono (if active) – Eco active. The minutes counting down to the Eco Stop are shown at the top of the display. The flame moves to P1 and remains there until the set "T Eco Stop" time reaches zero, and if the conditions are still satisfied, turns off the boiler. The ECO stop count is cancelled if one of the devices recalls power.

When the boiler begins to turn off, the panel shows: Off - Eco Active - flashing small flame.

When the boiler turns off, OFF-ECO appears on the display with the flame symbol off.

The following conditions have to be met simultaneously for the ECO to restart:

- Power recall
- 5 minutes have passed since shut-down.
- TH₂0 < TSetH₂0.
- If the power is recalled by the domestic hot water (DHW), the 5' are ignored and the boiler starts up as required.

NOTE: In configuration 4 - 5 the Auto Eco mode is enabled automatically. Also when in configuration 2 - 3, with the 'summer' function set, it is enabled automatically. Where it is prescribed that it should be enabled, the mode cannot be disabled.

i - T Pump On

This option enables adjustment of the pump activation temperature.

Select the Pump On T function as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"

- Press "menu" to confirm.
- Scroll with the arrows and select "T Pump On".
- Press "menu" to confirm.
- Use the + keys to change the °C.
- Press "menu" to confirm and "esc" to exit.

j - Auxiliary boiler

An additional module (optional) must be installed to allow the start-up of an auxiliary boiler when the main boiler is off or has been stopped due to an alarm. The default settings have this function disabled. To enable the function, go to the settings menu.

k - Pellet Recipe

This function is for adapting the boiler to the type of pellet in use. As there are many types of pellet available on the market, the operation of the boiler can vary considerably according to the quality of the fuel. When the pellets clog up the brazier due to excess loading of fuel or when the flames are high even at low power, or when the flames are low, it is possible to decrease/increase the amount of pellets in the brazier:

Available values:

- -3 = A decrease of 30% on the factory setting.
- -2 = A decrease of 20% on the factory setting.
- -1 = A decrease of 10% on the factory setting.

0 = No changes.

- 1 =An increase of 5% on the factory setting.
- 2 = An increase of 10% on the factory setting.
- 3 = An increase of 15% on the factory setting.

Edit the recipe as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- · Press "menu" to confirm.
- Scroll with the arrows and select "Pellet recipe"
- Press "menu" to confirm.
- Alter the % with the + keys.
- Press "menu" to confirm and "esc" to exit.



Attention! The parameters that can be set with this menu substantially modify operation of the boiler. These settings allow you to improve operation of the boiler based on the pellets used, but, if set incorrectly, it could endanger safety.

I - Fumes rpm % ventilation

In the event the installation presents problems in extracting smoke (lack of draft or even pressure in the duct), it is possible to increase the smoke and ash extraction speed. This change resolves all the potential problems related to pellets clogging in the brazier and deposits forming at the bottom of the brazier itself caused by poor quality fuel or fuel that produces a lot of ash. The extraction speed may be altered between -30% to +50%, with increments of 10 percent at a time. Negative variation can be necessary if the flame is too low.

To alter this parameter, proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- · Press "menu" to confirm.
- Scroll with the arrows and select "Fumes rpm Var."

- Press "menu" to confirm.
- Alter the % with the + keys.
- Press "menu" to confirm and "esc" to exit.



Attention! The parameters that can be set with this menu substantially modify operation of the boiler. These settings allow you to improve operation of the boiler based on the pellets used, but, if set incorrectly, it could endanger safety.

m - Maximum power

Allows you to set the maximum power limit of the flames which the boiler can use to reach the set target temperature. Modify the power as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Maximum power".
- Press "menu" to confirm.
- Change the power from 01 to 05 using the + keys.
- Press "menu" to confirm and "esc" to exit.

n - Components test

This can be done only when the boiler is off and allows you to select the components to be tested:

- Spark plug: it is turned on for a fixed test period of 1 minute during which the panel displays the countdown in seconds.
- Feed screw: it is powered for a fixed period of 1 minute during which the panel displays the countdown in seconds.
- Extractor: it is activated at 2500 rpm for a fixed period of 1 minute during which the panel displays the countdown in seconds.
- Exchanger: enables you to conduct the test in V5 for a fixed period of 1 minute during which the panel displays the countdown in seconds.
- Pump: it is activated for a fixed period of 10 seconds during which the panel displays the countdown.
- 3-way valve: the 3-way valve is activated for a fixed test period of 1 minute during which the panel displays the countdown in seconds.

Enable the "Component test" function (only with boiler off) as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Component test"
- Press "menu" to confirm.
- Use the + keys to select the test to be carried out.
- Press "menu" to confirm and "esc" to exit.

o - TEST PERFORMANCE Function

This function can only be activated when the boiler is on and power is supplied, and it forces operation with the P1 or P5 parameters. Any loading/smoke ventilation percentage corrections made remain ("Pellet recipe" menu or Smoke Rpm Var.) During this interval, the thermostat/puffer/room set point/ H20 set point adjustments are not actuated. Only the safety shut-down at 85°C remains active. The technician can stop this stage at any moment by pressing the on/off key. To activate the "Test Performance" function, proceed as follows:

Press the "menu" key.

- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Test Performance function"
- Press "menu" to confirm.
- Using the + keys, select "P1 or P5"
- Press "menu" to confirm
- Press "esc" twice to go back to the main display of the panel
- Press "esc" once to exit the "Test Performance" function

NOTE: It could take up to 5 minutes to reach the selected power (P1 or P5) (refer to power icon)

p - System configuration

This function allows you to set the type of hydraulic system that the product must manage.

To change the configuration of the system, proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "System configuration"
- Press "menu" to confirm.
- Use the + keys to modify the configuration between 01 and 05.
- Press "menu" to confirm and "esc" to exit.

a - Season

In configurations 2 and 3, enabling the "summer" function disables deviation of the 3-way valve towards the heating system to prevent the radiators from heating up, and so the flow is always towards the hot water system (DHW).

Selecting the "summer" option automatically enables the auto-eco function (cannot be deactivated). The room temperature probe/external thermostat are ignored.

Modify the function as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Season"
- Press "menu" to confirm.
- Use the + keys to select "Summer" or "Winter".
- Press "menu" to confirm and "esc" to exit.

r - Technical menu

To access the technical menu you must contact the service centre as it requires a password.

Access the "technical menu" as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Technical menu"
- Press "menu" to confirm.
- With the + keys, select "Product Type", "Service Hours", "Parameters", "DHW Parameters", "Counter memories", "Enable fan", "Puffer menu", "Adaptive Parameters" and "Max P1 Time".
- Press "menu" to confirm and "esc" to exit.

5. INFO MENU

The INFO menu gives you information on the status of the boiler.

The entries are:

- Product type
- Parameter type
- Firmware Version
- SW (time and date)
- Total hours of operation
- total number of ignitions
- Smoke Extractor Rpm
- T smoke
- exchanger voltage (air fan) if present
- feed screw loading (possibly changing the "Pellet recipe" menu)
- flame

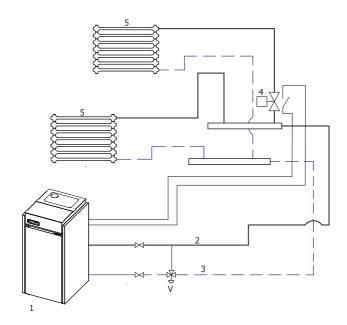
SYSTEM CONFIGURATIONS

At the time of installation, the product must be configured according to the type of system by selecting the relative parameter in the "SETTINGS" menu.

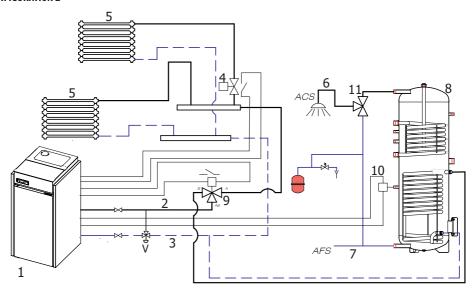
There are 5 possible configurations, described below:

Configuration	Description
1	Room temperature control via boiler's on-board probe or by enabling external thermostat FACTORY SETTING
2	Room temperature control via boiler's on-board probe or enabling external thermostat; DHW production for boiler or storage with thermostat (optional).
3	Room temperature control via boiler's on-board probe or enabling external thermostat; DHW production with NTC probe (10 k Ω B3435).
4	External Puffer controlled by thermostat.
5	External Puffer controlled by NTC probe (10 kΩ ß3435).

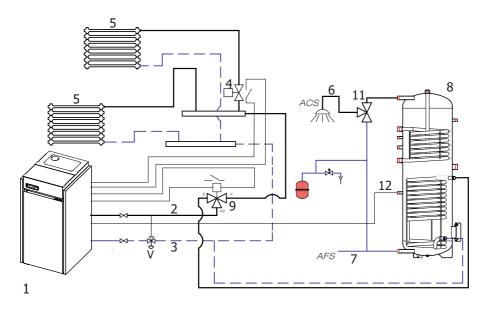
CONFIGURATION 1 (FACTORY SETTING)



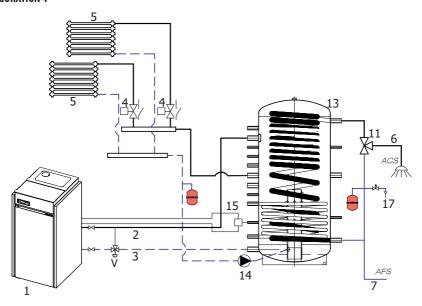
CONFIGURATION 2



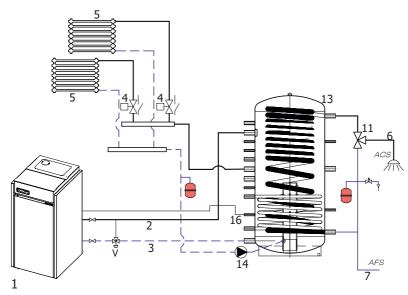
CONFIGURATION 3



CONFIGURATION 4



CONFIGURATION 5

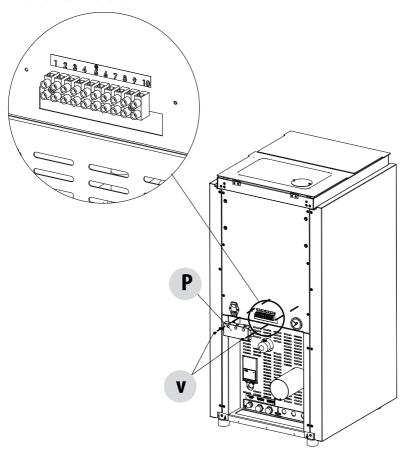


1	SELECTA 15/20/25HQ
2	HEATING DELIVERY
3	HEATING RETURN
4	ZONE VALVE
5	HEATING BODIES
6	HOT SANITARY WATER
7	DOMESTIC COLD WATER
8	SANITARY WATER BOILER
9	DIVERTER VALVE
10	BOILER THERMOSTAT
11	THERMOSTATIC MIXER VALVE
12	NTC PROBE 10 kΩ β3434 SANITARY WATER
13	HEATING PUFFER
14	HEATING SYSTEM CIRCULATOR
15	PUFFER THERMOSTAT
16	NTC PROBE 10 kΩ β3434 PUFFER
17	SAFETY VALVE
٧	THERMOSTATIC DIVERTER VALVE

OPERATING MODE

The operating mode for boilers is always AUTOMATIC (there is no manual operating mode available). Flame regulation is controlled according to the "System configuration" by the environment probe, by the external thermostat, by the temperature of the water in the boiler or by the NTC probes.

ELECTRICAL CONNECTIONS



TERMINAL BLOCK CONTACTS	
POS.1-2 EXTERNAL THERMOSTAT/PUFFER THERMOSTAT	POS.8 NEUTRAL THREE-WAY VALVE
POS.3-4 PUFFER/BOILER PROBE	POS.9 THREE-WAY VALVE PHASE (sanitary)
POS.5 EARTHING	POS.10 THREE-WAY VALVE PHASE (heating)
POS.6-7 AUXILIARY BOILER (USE ACCESSORY AUXILIARY BOILER MODULE)	

START-UP

Press key 1 (esc) to start up the appliance. The display will show ON with the flashing flame symbol. When the flame stops blinking, the boiler has reached the operating condition for "supplying power".

The default target room temperature is set at 20°C. To change this setting, follow the instructions in the adjustments menu; do the same to set the heating water temperature and the speed of the ventilation fan. To activate an external thermostat, if present, see the dedicated paragraph.

POWER SUPPLY

When start-up is complete, the panel will display ON with a constant flame at level 3 Ill. The modulation of the flame for higher or lower power is then controlled autonomously on the basis of the temperatures set in the "System configuration."

SAFETY DEVICES

The product is fitted with the following safety devices

PRESSURE SWITCH

Monitors pressure in the smoke duct. It is designed to shut down the pellet feed screw in the event of an obstructed flue or significant back-pressure (from the wind).

SMOKE TEMPERATURE PROBE

Detects the temperature of the smoke, thereby enabling start-up or stopping the product when the temperature drops below the preset value.

CONTACT THERMOSTAT IN THE FUEL TANK

If the temperature exceeds the preset safety level, it immediately shuts down the running of the boiler.

CONTACT THERMOSTAT IN THE ROLLER

If the temperature exceeds the preset safety level, it immediately shuts down the running of the boiler.

WATER TEMPERATURE SENSOR

When the water reaches the stop temperature (85°C) the probe automatically instructs the boiler to turn off"OFF Stand-by".

ELECTRICAL SAFETY

The boiler is protected against violent changes in current by a general fuse located in the control panel at the back of the boiler. Other fuses that protect the circuit boards are located on the latter.

SMOKE FAN

If the fan stops, the electronic board shuts off the supply of pellets in good time, and an alarm message is displayed.

GEAR MOTOR

If the reduction motor stops, the boiler will continue to run until the flame goes out due to lack of fuel and until a minimum level of cooling is reached.

TEMPORARY POWER CUT

When a power cut is less than 10" the boiler returns to its previous operating state; if it is more, it executes a cooling/re-ignition cycle.

FAILED START-UP

If the fuel fails to ignite during the start-up phase, the boiler will go into alarm status.

ANTI-FREEZE FUNCTION

If the probe in the boiler detects a water temperature of less than 5° C, the circulation pump is automatically activated to keep the system from freezing.

PUMP ANTI-SEIZURE FUNCTION

If the pump is not used for prolonged periods, it is activated periodically for a few seconds to keep it from seizing up.



TAMPERING WITH THE SAFETY DEVICES IS PROHIBITED

If the product is NOT used as described in this instruction manual, the manufacturer declines all liability for any damage caused to persons and property. In particular:

- All the necessary measures and/or precautions must be adopted when performing maintenance, cleaning and repairs.
- Do not tamper with the safety devices.
- Do not remove the safety devices.
- Connect the product to an efficient smoke expulsion system.
- First, check that the environment where it is to be installed is properly ventilated.

Only after eliminating the cause of the intervention of the safety system is it possible to start the product back up. This manual will help you understand which anomaly has occurred, and explain how to intervene according to the alarm message displayed on the appliance.

Boiler stop

The following conditions may cause the product to be stopped:

- Overheating of the structure and pellet tank
- Overheating of the water in the boiler
- High pressure of the outlet fumes (read on the pressure switch) and possible obstruction of the outlet.

The control panel will indicate the cause of the alarm and sound an acoustic warning.

In this situation, the automatic shut-down sequence is activated.

When this sequence is initiated, any attempt to restart the system will be ineffective.

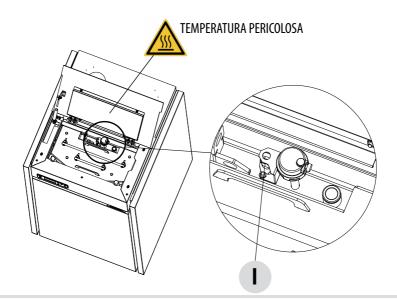
Safety thermostat with manual rearming at 85°C

The boiler enters a state of safety ALARM called "A03" Thermostat alarms, caused by high water temperature. To cancel the alarm status, the thermostat must be rearmed manually.

Therefore only open the front door and reset the thermostat when the boiler is cold.



Attention! Hot parts, use the supplied glove



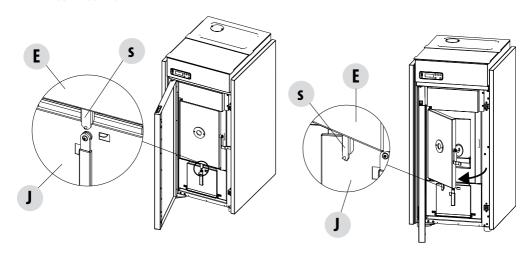
ALARM SIGNALLING

When a condition occurs other than the one expected for regular operation of the boiler, an alarm is triggered.

The reason for the alarm is given on the control panel. The sound signal is not enabled for alarms A01-A02 in order not to disturb the user when there is an absence of pellets in the night tank.

Panel signalling	type of problem	Solution
A01	The fire does not ignite.	Check the level of pellets in the hopper. Check that the brazier is correctly positioned in its seat and has no build-up or unburned material. Make sure the spark plug warms up. Thoroughly empty and clean the brazier before restarting.
A02	The fire goes out abnormally.	Check the level of pellets in the tank.
AO3 Thermostats alarm		Wait until the end of the cooling phase, stop the alarm and re-ignite the boiler setting the supply of fuel to minimum (SETTINGS menu - pellet recipe). If the alarm persists, contact the service centre.
A04	Smoke overtemperature.	The set smoke threshold has been exceeded. Reduce the load of pellets (SETTINGS menu - Pellet recipe).
A05 Pressure switch alarm	Fumes pressure switch intervention or water pressure insufficient.	Check for chimney obstructions / door open or the pressure of the hydraulic system.
A08	Anomalous operation of smoke fan.	If the alarm persists, contact the service centre.
A09 Fault with the smoke sensor.		If the alarm persists, contact the service centre.
A12	TRIAC feed screw failure	If the alarm persists, contact the service centre.
A18	Water overtemperature	Triggers when the water temperature exceeds 92°C, the product will shut down.
A19	Fault with water sensor.	Water sensor detached / interrupted / defective / not recognised.
A20	Puffer probe alarm.	Puffer probe detached / interrupted / defective / not recognised.
A21	Fault to electronic supply system of the feed screw motor	Cancel the alarm. If it repeats itself, contact an authorised service centre.
Service	Routine maintenance warning (does not seize)	When this blinking message appears upon start-up, it means it is time to carry out scheduled maintenance. Call the service centre.

ALARM A05 TRIGGERED



A bracket "s" is fastened below the door of the firebox "E" preventing the lower door "J" from opening if the firebox door "E" is closed. The firebox door "E" has a control device that blocks operation of the boiler if the door remains open. The alarm AO5 is activated.

ALARM RESET



NEVER open the stove door whilst it is either in the initial start-up or on its shut down cycle, pellets will still be smoldering or therefore volatiles may be present.

ATTENTION!

If during operation or initial ignition you encounter combustion smoke spillage in to the room from the appliance or the flue then please switch off the appliance, ventilate the room and contact the installation / service technician immediately.

To reset the alarm, press and hold key 1 (ESC) for a few seconds. The boiler checks whether the cause of the alarm is ongoing. In the first case, the alarm continues to be displayed, in the second case it turns OFF. If the alarm persists, contact a service centre.

NORMAL SHUTDOWN (on the panel: OFF with flashing flame symbol)

When the shutdown key is pressed, or when there is an alarm signal, the boiler enters the thermal extinguishing phase which involves automatic execution of the following phases:

- · Stop pellet loading
- The smoke extractor fan is activated at maximum speed and remains on for a fixed period of 10 minutes, at the end of which if the
 smoke T has dropped below the stop threshold, the fan stops, otherwise it will continue to operate at minimum speed until the
 temperature drops below the threshold.
- If the boiler has been shutdown regularly but, due to thermal inertia, the smoke temperature exceeds the threshold again, the shutdown phase will be repeated at minimum speed until the temperature falls.

BLACKOUT with boiler ON

In the event of a blackout, the boiler does the following:

- Power failure of less than 10": continues the work in progress;
- After a loss of power of more than 10" which occurred when the boiler was on, or during ignition, you can restore the boiler to its
 previous operating condition when power returns as follows:
- 1. Cool the boiler by activating the smoke extractor at minimum speed for 10' then proceed to the next step;
- 2. Restore the boiler to the operating condition prior to the blackout.

During phase 1, the panel shows ON BLACK OUT.

During phase 2, the panel shows Start-up.

If during phase 1 the system receives manual user commands from the control panel, it stops the blackout restoration sequence and begins the start-up or shutdown commanded by the user.

BLACKOUT OF MORE THAN 10" DURING EXTINCTION OF BOILER

If there is a power loss EXCEEDING 10" while the boiler is shutting down, when power is restored the boiler will automatically turn on in shutdown mode, even if the smoke temperature has fallen below 45°C in the meantime. This phase can be skipped by pressing key 1 (esc) (skips to start-up) and pressing it again (recognises that the boiler is off).

13-RECOMMENDATIONS FOR SAFE USE



ONLY CORRECT INSTALLATION AND APPROPRIATE MAINTENANCE AND CLEANING OF THE APPLIANCE CAN GUARANTEE CORRECT OPERATION AND SAFE USE OF THE PRODUCT

We would like to inform you that we are aware of cases of malfunctioning of domestic pellet-fuelled heating products, mainly due to incorrect installation and inappropriate maintenance.

We would like to assure you that all of our products are extremely safe and certified according to European standards of reference. The ignition system has been tested with the utmost attention to enhance ignition efficiency and to prevent any type of problem, even in the worst operating conditions. In any case, like for any other pellet-fuelled product, our appliances must be installed correctly and undergo regular periodical cleaning and maintenance to guarantee safe operation. Our studies show us that malfunctioning is mainly due to the combination of part or all of the following factors:

- Brazier holes obstructed or brazier deformed, due to lack of maintenance and conditions which can cause delayed ignitions, generating an anomalous production of unburned gases.
- Insufficient combustion air due to a reduced or clogged air inlet duct.
- Use of smoke ducts nonconforming to regulatory installation requirements, failing to guarantee an adequate draught.
- Partially clogged chimney, due to lack of maintenance, reducing the draught and making ignition difficult.
- End chimneypot nonconforming to the indications of the instruction manual, and therefore not suitable to prevent potential inverse
 draught.
- This factor is crucial when the product is installed in especially windy areas, such as coastal regions.

The combination of one or more of these factors could generate important malfunctioning conditions.

To keep this from occurring, it is fundamental to guarantee that the product is installed in compliance with standards in force. Furthermore it is of the utmost importance to respect the following simple rules:

- Every time the brazier is removed for cleaning, it must always be put back properly in the work position before using the product, completely removing any residual filth left on the support base.
- Pellets must never be loaded in the brazier manually, either before ignition or during operation.
- The accumulation of unburned pellets ensuing a failed ignition must be removed before repeating ignition. Also check that they are fed correctly and that the combustion air inlet/smoke outlet are regular.
- If ignition fails repeatedly, immediately suspend use of the product and contact a qualified technician to check its operation.

Compliance with these indications is absolutely sufficient to guarantee proper operation and to avoid any type of problems with the product.

If the above-mentioned precautions are not taken, and during ignition the brazier is overloaded with pellets thus generating anomalous smoke in the combustion chamber, carefully follow the indications below:

- Do not disconnect electrical power to the product for any reason whatsoever: this would stop the smoke extractor, releasing smoke into the environment.
- Take the precaution of opening the windows to ventilate the installation room from any smoke in the environment (the chimney might not work properly).
- Do not open the fire door: this would compromise regular operation of the smoke extraction system to the chimney.
- Just switch the boiler off by acting on the on-off button on the control panel (not the rear power supply socket button!) and move
 away until smoke has completely evacuated.
- Before attempting re-ignition, clean the brazier and its air passage holes completely of all deposits and unburned pellets. Put the
 brazier back in place, removing any residue from its support base. If ignition fails repeatedly, immediately suspend use of the product
 and contact a qualified technician to check its operation and the chimney.



Disconnect the product from the 230V power supply before performing any maintenance operations.

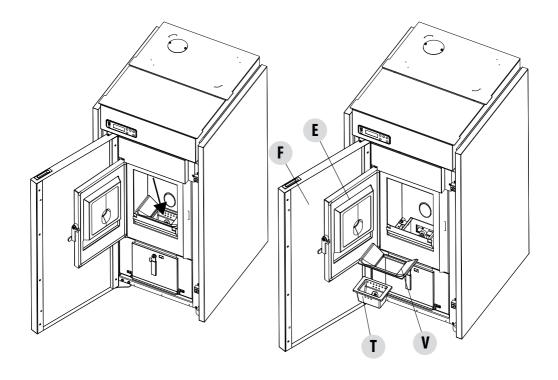
DAILY OR WEEKLY CLEANING PERFORMED BY THE USER

If the pellets in the tank run out, unburned pellets may accumulate in the brazier. Check the status of your brazier every 15 days.



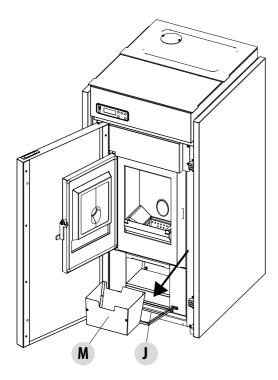
REMEMBER THAT ONLY A BRAZIER THAT IS CLEANED CORRECTLY CAN GUARANTEE SAFE IGNITION AND OPTIMAL OPERATION OF YOUR PELLET PRODUCT. IN CASE OF FAILED IGNITION AND AFTER ANY OTHER LOCKOUT STATUS OF THE PRODUCT, IT IS ESSENTIAL TO EMPTY THE BRAZIER BEFORE STARTING IT BACK UP AGAIN.

For the brazier to be cleaned properly, remove the ash from its housing and thoroughly clean all the holes and the grate on the bottom. If you use good quality pellets, you will normally only need to use a brush to restore the component to perfect condition. For tougher incrustations, use the steel tool provided as standard with the boiler.



CLEANING THE ASH PAN

You must remove the ash pan "M" of the boiler and empty the ash at least every two weeks. To do so you must open the door of the boiler, open the lower door "J", remove the ash pan "M" and empty it. Wipe away any ash residue and reinsert the pan. Vacuum also the lower compartment. The quality of the pellets used and user experience will determine the required cleaning frequency.



CLEAN THE EXCHANGER AND THE COMPARTMENT BENEATH THE BRAZIER EVERY 2/3 DAYS

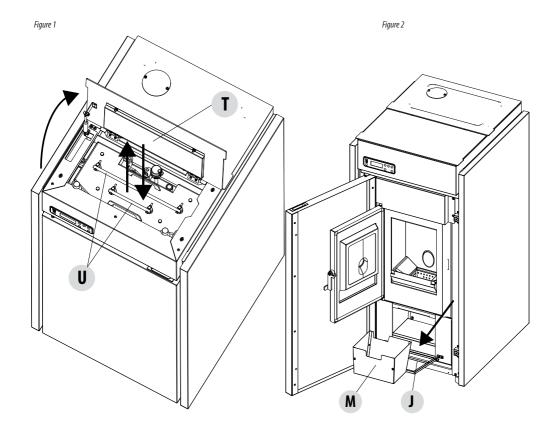
Cleaning the exchanger and the compartment beneath the brazier is a simple operation but very important if the boiler is to maintain optimal performance.

We therefore recommend cleaning the internal exchanger every 2-3 days, performing these simple operations in sequence:

- Activate the "CLEANING" function with the boiler off press menu, select "Settings", with the arrows <> select "Cleaning", confirm with the "Menu" key, activate the cleaning "ON" with the + keys. This procedure starts the smoke extractor on the maximum setting to expel the soot that becomes dislodged when the exchanger is cleaned.
- Clean the pipe unit Using the handles "U" vigorously shake the rods under the front cover of the boiler 5-6 times. This should remove the soot that has deposited on the smoke ducts of the exchanger during normal use of the boiler (fig.1).
- Deactivate the "CLEANING" function this function is deactivated automatically after two minutes. If you need to stop the function sooner, press the "Esc" key.
- Clean the smoke conveyor compartment (fig.2) The boiler is equipped with a removable ash drawer "M" which collects any
 accumulations of soot and ash.
- When done cleaning, close the cover and ash tray.



If the cleaning is not done every 2-3 days, the boiler could go into alarm caused by ash clogging after several hours of operation.



PERIODIC CLEANING PERFORMED BY A QUALIFIED TECHNICIAN CLEANING THE EXCHANGER AND PIPE UNIT

CLEANING THE UPPER COMPARTMENT

When the boiler has cooled down lift the front cover; undo the two screws "I" on the cover "H". Remove the two screws "L" and take off the cover "H" using the two side handles.

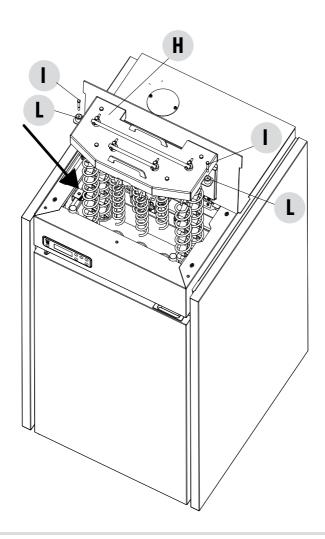
Remove the two turbulators and, using a stiff rod or a bottle brush, clean the internal pipe unit and the turbulators, removing all the accumulated ash.

Check the cover seal and replace it if necessary.

After having cleaned the heat exchanger clean the lower compartment.



ATTENTION: It is obligatory to have an authorised and skilled technician perform the periodic end-of-season cleaning in order to replace any worn qaskets.

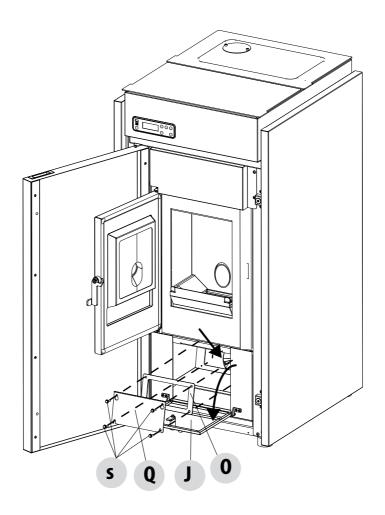


CLEANING THE SMOKE EXTRACTOR COMPARTMENT

In the area behind ash pan "M", there is the smoke cap "E", which must be removed to clean the smoke extractor. Therefore:

- loosen the screws "s"
- remove cap "E"

Now, use the nozzle of a vacuum cleaner, remove any ash and soot that may have built up in the lower exchanger indicated by the arrow. Before putting cap "E" back, we recommend changing gasket "F".



CLEANING THE SMOKE EXPULSION SYSTEM AND GENERAL CHECKS

Clean the smoke outlet system, especially around the "T" joints, elbows and any horizontal sections of the smoke duct. For information on periodically cleaning the flue, contact a skilled chimney sweep. If necessary, order new replacement gaskets from the retailer or contact an authorised service centre to carry out the operation.



ATTENTION:

The frequency with which the smoke exhaust system must be cleaned depends on the use of the boiler and the type of installation.

We recommend relying on an authorized service centre for end-of-season cleaning and maintenance, they will carry out all of the previously mentioned work and make a general check of the stove's components.

SHUTDOWN (end of season)

At the end of each season, before switching the product off, it is recommended to remove all the pellets from the hopper with a vacuum cleaner with a long pipe.

We recommend removing the unused pellet from the tank because it can retain moisture. Disconnect any combustion air ducting that can lead moisture inside the combustion chamber but, above all, ask the specialised technician to refresh the paint inside the combustion chamber with the special silicone spray paints (available at any store or CAT) during the necessary annual end of season scheduled maintenance operations. This way the paint will protect the inner parts of the combustion chamber, blocking any type of oxidative process. When not in use the appliance must be disconnected from the mains power supply. It is recommended to remove the power cable for additional safety, especially in the presence of children.

The service fuse may have to be replaced if the control panel display does not switch on when the product is switched on again by pressing the main switch on its side.

There is a fuse compartment on the back of the product, under the power socket. After having disconnected the plug from the socket, use a screwdriver to open the cover of the fuse compartment and, if necessary, replace them (3.15 A delayed).

CHECKING THE INTERNAL COMPONENTS



ATTENTION!

The internal electromechanical components must only be checked by qualified personnel whose technical expertise includes combustion and electricity.

We recommend that an annual maintenance service is carried out (with a scheduled service contract). This service is essentially a visual and functional inspection of the internal components. The following is a summary of the checks and/or maintenance that are essential for the correct operation of the product.

- Gear motor
- Smoke extractor fan
- Smoke probe
- Ignition spark plug
- Automatic rearm pellet thermostat
- Manual rearm water thermostat
- Room/water temperature probe
- Motherboard
- Fuses protecting panel-motherboard
- WIRING

REPLACING THE OVERPRESSURE DISCHARGE FOR THE COMBUSTION CHAMBER

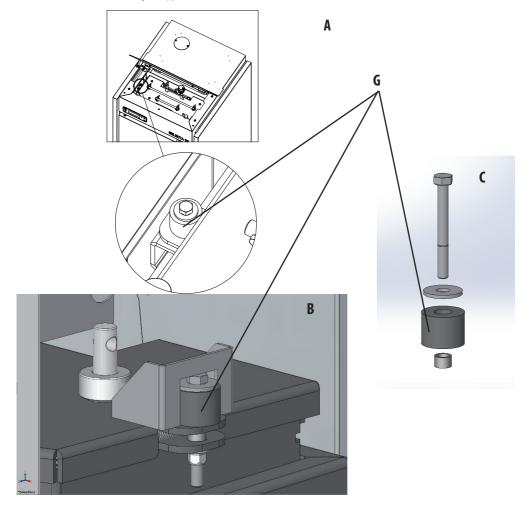
Overpressure rubber bushing "G" of the combustion chamber (fig. A) may get worn and/or damaged, it is therefore necessary to replace it once a year to ensure correct system operation.

To replace it, follow the instructions below

- Remove the top
- Remove the first ceramic panel of the side cladding or the steel panel (depending on the type of stove)
- Unscrew the screw-washer-rubber bushing-roller shown in figure A/C (on both sides of the cover). It is now possible to assemble the new kit:
- Prepare the screw-washer-rubber bushing-roller aligned as shown in fig. C and screw them into the structure.
- Tighten the screw all the way.

Now ensure that the compression of the rubber bushing is correct using the template supplied with the kit:

• Place the template on the cover (fig. B); the head of the screw must be touching the element above it. If necessary, tighten or loosen the screw so that it is touching the upper element.



CHECKING THE INTERNAL COMPONENTS



ATTENTION!

The internal electromechanical components must only be checked by qualified personnel whose technical expertise includes combustion and electricity.

We recommend that an annual maintenance service is carried out (with a scheduled service contract). This service is essentially a visual and functional inspection of the internal components. The following is a summary of the checks and/or maintenance that are essential for the correct operation of the product.

Cleaning under the user's responsibility

PARTS/INTERVAL	2/3 DAYS	15 DAYS	90 DAYS
Brazier	•		
Ash pan		•	
Lower compartment			•
Fire door porthole		•	
Turbulators	•		

Cleaning performed by the qualified Technician

PARTS/INTERVAL	1 YEAR
Complete exchanger	•
Smoke duct	•
Door gasket	•
Internal parts	•
Flue	•
Circulation pump	•
Plate heat exchanger	•
Plumbing components	•
Electro-mechanical components	•
Overpressure silicon damper for combustion chamber	•

CLEANING THE CONTROL PANEL DISPLAY



ATTENTIONII

THE PANEL DISPLAY IS VERY DELICATE, IT IS SUPPLIED WITH A PROTECTIVE FILM.

RECOMMENDATIONS FOR CLEANING:

Clean using a soft cotton cloth, which should be dry or slightly moist. Do not use aggressive detergents or polyester materials.

Do not use abrasive sponges or powder detergents nor solvents such as alcohol and petrol, since they may damage the surface of the device.

15 - TROUBLESHOOTING

CHECKING THE INTERNAL COMPONENTS



ATTENTION:

GUIDE FOR THE USE OF THE SPECIALISED TECHNICIAN ONLY ATTENTION:

All repairs must be carried out exclusively by a specialised technician, while the boiler is completely cold and the electric plug is disconnected. The operations in bold type must be carried out by specialised personnel. The manufacturer will not be liable and the guarantee is invalidated if this condition is not respected.

ANOMALY	POSSIBLE CAUSES	SOLUTIONS
The pellets are not fed into the combustion chamber.	The pellet hopper is empty	Fill the tank with pellets
	Sawdust has blocked the feed screw	Empty the tank and remove the sawdust from the feed screw by hand
	Faulty gear motor	Replace the gear motor
	Faulty electronic board	Replace the circuit board
The fire goes out or the boiler stops automatically.	The pellet hopper is empty	Fill the tank with pellets
automatically.	The pellets are not fed	See the previous anomaly
	The pellet temperature safety probe has been triggered	Let the boiler cool down, reset the thermostat until the problem is resolved and switch the boiler back on. If the problem persists contact Technical Assistance.
	The door is not closed properly or the gaskets are worn	Close the door and replace the gaskets with original ones
	Unsuitable pellets	Change the type of pellets with those recommended by the manufacturer
	Low pellet supply	Check the flow of fuel following the instructions in the booklet.
	The combustion chamber is dirty	Clean the combustion chamber, following instructions in the manual
	Clogged outlet	Clean the smoke duct
	Faulty smoke extraction motor	Check the motor and replace it, if necessary
	Pressure switch broken or defective.	Replace the pressure switch.

15 - TROUBLESHOOTING

ANOMALY	POSSIBLE CAUSES	SOLUTIONS
The boiler runs for a few minutes and	Start-up phase is not completed	Repeat start-up
then goes out.	Temporary power cut	Wait for the automatic restart
	Clogged smoke duct	Clean the smoke duct
	Faulty or malfunctioning temperature probes	Check and replace the probes
	Faulty spark plug	Check the spark plug and replace it, if necessary
Pellets accumulate in the brazier, the glass of the door gets dirty and the flame is weak	Insufficient combustion air	Clean the brazier and check that all the holes are clear. Perform a general cleaning of the combustion chamber and the smoke duct. Check that the entry of air is not obstructed.
	Damp or unsuitable pellets	Change the type of pellets
	Faulty smoke evacuation motor	Check the motor and replace it, if necessary
The smoke evacuation motor does not work	No electrical supply to the boiler.	Check the mains voltage and the protection fuse
	The motor is faulty	Check the motor and capacitor and replace them, if necessary
	Defective motherboard	Replace the electronic board
	Control panel broken	Replace the control panel
In the automatic position the boiler always runs at full power.	Thermostat is set to minimum	Reset the temperature of the thermostat.
	Room thermostat in position that always detects cold.	Reposition of the probe
	Malfunctioning temperature probe.	Check the probe and replace it if necessary.
	Faulty or malfunctioning control panel.	Check the panel and replace if necessary.

15 - TROUBLESHOOTING

The stove does not run	No power supply	Check that the plug is inserted and the main switch is in the "I" position.
	Pellet probe stop	Cancel stoppage by changing the setting of the rear thermostat. If the problem persists, request assistance.
	Blown fuse	Replace the fuse.
	Pressure switch broken (lockout indicated).	Insufficient pressure of water in boiler
	Clogged smoke exhaust or smoke duct.	Clean the smoke outlet and/or the smoke duct.
	Water temperature sensor triggered	Call for assistance

ANOMALIES RELATED TO THE HYDRAULIC CIRCUIT

No increase in temperature with boiler in operation	Incorrect combustion adjustment.	Check recipe and parameters.
	Boiler / system dirty.	Check and clean the boiler.
	Insufficient stove power.	Check that the boiler is properly sized for the requirements of the system.
	Poor pellet quality	Use quality pellets.
Condensation in boiler	Incorrect temperature setting.	Set the boiler to a higher temperature.
	Insufficient fuel consumption.	Check the recipe and/or technical parameters.
Radiators cold in winter	Room thermostat (local or remote) set too low. If remote thermostat, check if it is defective.	Set to higher temperature or replace (if remote).
	Circulator does not run because blocked.	Free up the circulator by removing the plug and turning the shaft with a screwdriver.
	Circulator does not run.	Check the electrical connections of the circulator; replace if necessary.
	Radiators have air in them	Vent the radiators



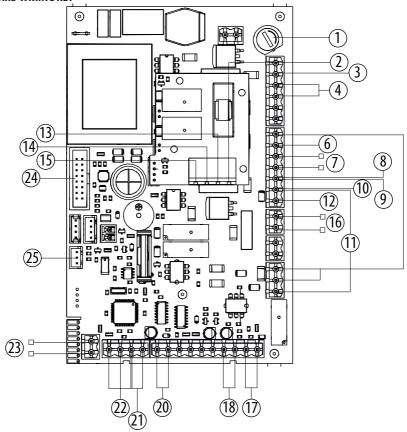
ATTENTION!

The operations in italics must be carried out by specialised personnel.

The manufacturer will not be liable and the guarantee is invalidated if this condition is not respected.

16 - ELECTRICAL PLAN

MOTHERBOARD WIRING KEY



- FUSE
- BOARD PHASE
- 3. BOARD NEUTRAL
- 4. SMOKE EXTRACTOR
- 5. -----
- WATER SAFETY THERMOSTAT
- 7. GLOW PLUG
- 8. PELLET SAFETY THERMOSTAT
- 9. AIR PRESSURE SWITCH
- 10. WATER PRESSURE GAUGE
- 11. FEED SCREW
- 12. PUMP/3-WAY VALVE NEUTRAL
- 13. PUMP PHASE

- 14. 3-WAY VALVE PHASE (DHW)
- 15. 3-WAY VALVE PHASE (HEATING)
- 16. AUXILIARY BOILER CONNECTION (TERMINAL BLOCK)
- 17. SMOKE PROBE
- 18. EXTERNAL THERMOSTAT CONNECTION (TERMINAL BLOCK)
- 19. -----
- 20. PUFFER/BOILER PROBE CONNECTION (TERMINAL BLOCK)
- 21. BOILER WATER TEMPERATURE PROBE
- 22. SMOKE EXTRACTOR FAN REV CONTROL
- 23. STORAGE CYLINDER FLOW SWITCH OR THERMOSTAT TO CONNECT TO THE HYDRAULIC KIT (ACCESSORY)
- 24. CONTROL PANEL
- 25. EASYCONNECT

PLEASE NOTE The electrical wiring of individual components is fitted with pre-wired connectors of different sizes.



Via La Croce n°8 33074 Vigonovo di Fontanafredda (PN) – ITALY Telephone: 0434/599599 a.s. Fax: 0434/599598 Internet: www.mcz.it e-mail: info.red@mcz.it