



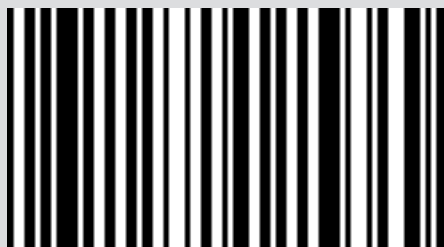
PELLET BOILER

**PERFORMA 15Q EASYCLEAN H1**  
**PERFORMA 20Q EASYCLEAN H1**  
**PERFORMA 25Q EASYCLEAN H1**  
**PERFORMA 30Q EASYCLEAN H1**

**PART 2 - OPERATION AND CLEANING**

Instructions in English

**RED**  
HEATING



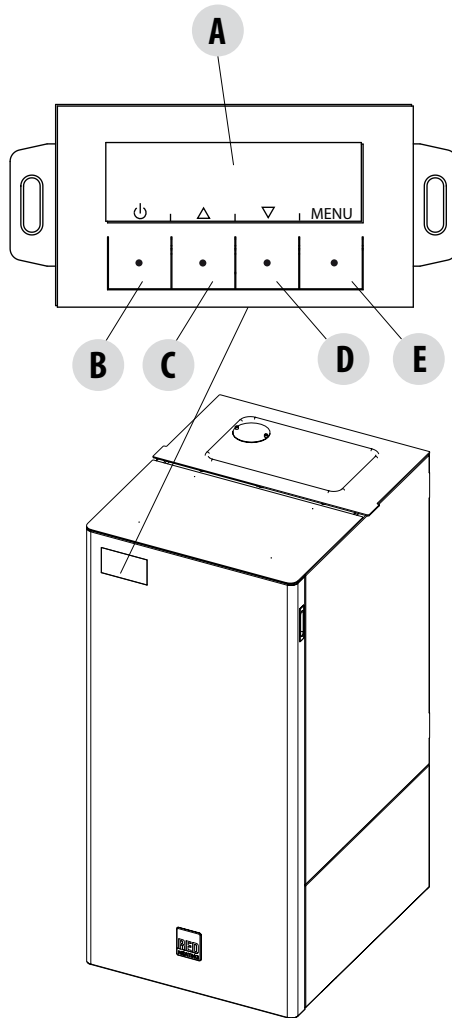
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## 9-CONTROL PANEL

### CONTROL PANEL DISPLAY



### KEY

A - DISPLAY; indicates a series of information on the boiler, as well as the identification code of any malfunction.

B - Function selection key indicated by the upper display (i.e. start-up/shutdown)

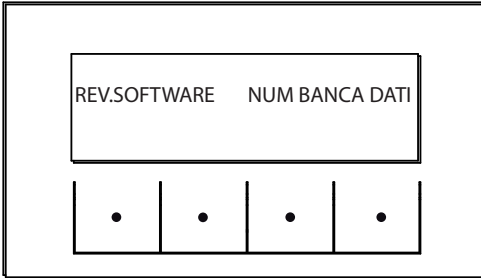
C - Function selection key indicated by the upper display (i.e. increase/scrolling)

D - Function selection key indicated by the upper display (i.e. decrease/scrolling)

E - Function selection key indicated by the upper display (i.e. menu)

# 10-FIRST START-UP

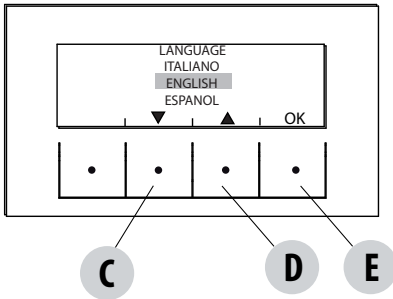
## FIRST START-UP



At initial start-up, after connecting the power cable and pressing the I/O button, the boiler display will show wording for the software version and database number (after a few seconds it will move on to the next screen). If the language has already been set, the next screen will be OFF, otherwise one enters the following parameter.

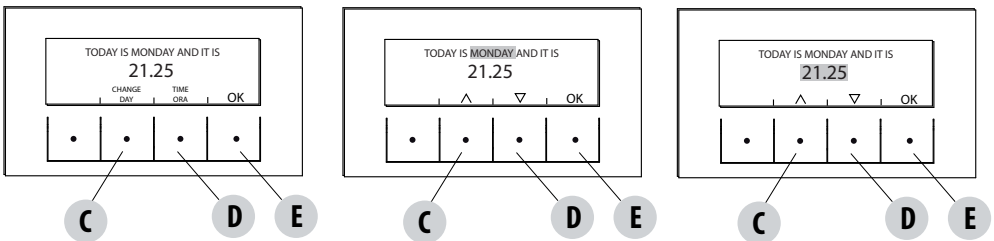
## SELECT LANGUAGE

At initial start-up, if it has never been set, the LANGUAGE choice screen appears. The system displays all possible languages. Using the arrow keys (C, D) scroll the languages and confirm the desired language using the "E" (OK) key.



## SETTING TIME AND DAY

The keys that are active for this function are: "C", "D", "E". The C-D keys are used to choose time or day while the E key is used to confirm.

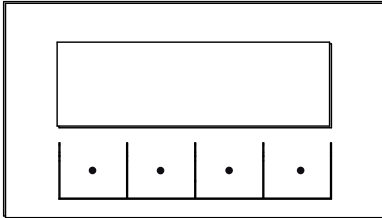


# 10-FIRST START-UP

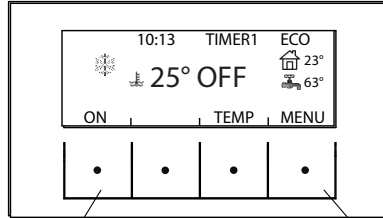
## SCREEN OFF

If a LANGUAGE has already been set, the display will go to OFF.

By pressing any one of the keys (B, C, D, E) the first screen will appear with the wording OFF displayed. From this screen, pressing keys "B" and "E" (respectively corresponding to ON and MENU) will make it possible to access the panel or the menu. If no key is pressed, the display will once again show OFF after 5 seconds.

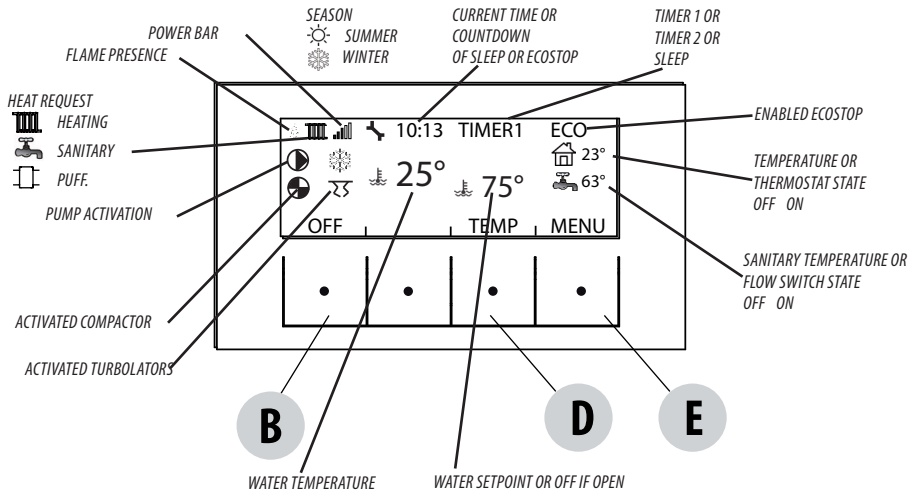


OFF-DISPLAY OFF



OFF-DISPLAY ACTIVE

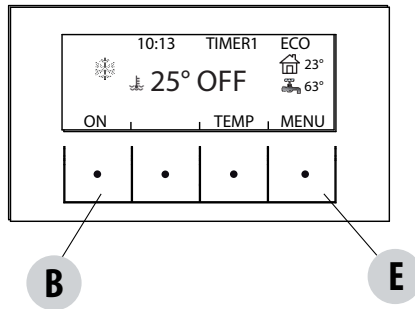
## SCREEN ON



## 10-FIRST START-UP

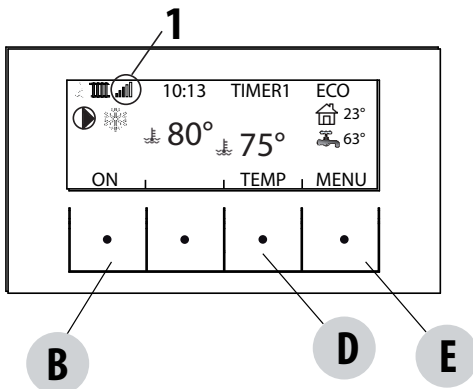
### Start-up

To switch on the boiler, keep the "B" (ON) key on the panel pressed. The boiler starts an ignition procedure that brings the flame to a suitable level to Supply Power.



### Supplying power

The power supply of the boiler is indicated by "power level bars": one bar corresponds to minimum power, 5 bars to maximum power; this level is determined by the heating system heat requirements, the boiler adjusts pellet loading parameters, fumes extraction, and combustion air flow to comply with this requirement.



UPPER BAR: active requirements, active programmes, power bar, functions

CENTRAL BAR: room temperature, room set, room fan bar

LOWER BAR/KEYS: shut-off "B", temperature set modify "C" and fan set "D", menu "E"

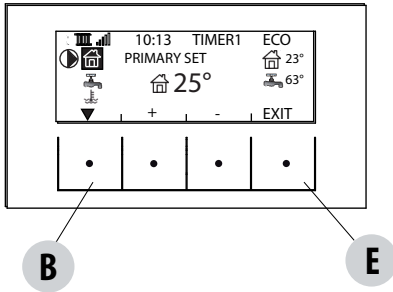
1 = power level bars

## 10-FIRST START-UP

### TEMPERATURE

Press the "D" TEMP button (see the image on the previous page) to set the temperature of the heating and possibly the domestic water (if the storage cylinder with probe is configured - see the menu settings input aux).

Select what is to be set and then using the C and D keys increase/decrease the temperature, use the E key to confirm while the B key is used to exit and return to the main MENU.



### FUNCTIONS

The FUNCTIONS menu lets you:

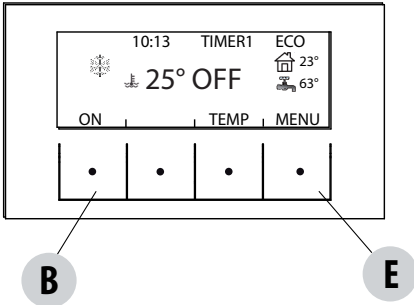
- Enable or disable the DHW
- Set the season (summer/winter)

If the summer season is set, the boiler will not receive any heat requests from the heater.

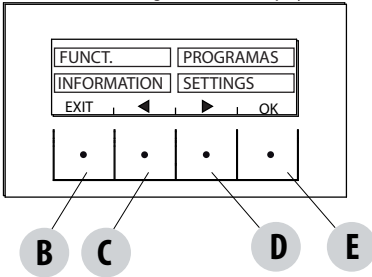
# 11-MENU STRUCTURE

## MENU STRUCTURE

To enter MENU press the "E" key (MENU).



Next, this screen with the following functions is displayed:



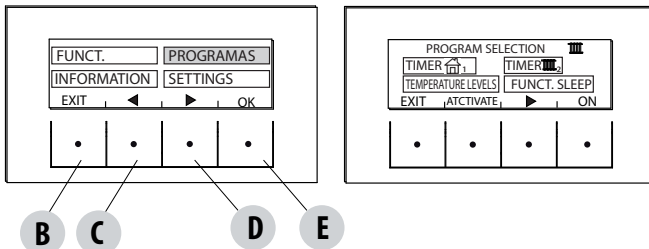
**Sub-menu**  
FUNCTIONS  
PROGRAMMES  
INFORMATION  
SETTINGS

## PROGRAMMES

In this case it is possible to choose the programme to be set.

Programme selection makes it possible to choose between one of the following options (one choice excludes the other):

- TIMER 1 - TIMER WITH REFERENCE TO THE AMBIENT TEMPERATURE
- TIMER 2 - TIMER WITH REFERENCE TO THE DELIVERY WATER TEMPERATURE
- MANUAL
- TEMP. LEVELS
- SLEEP FUNCT.



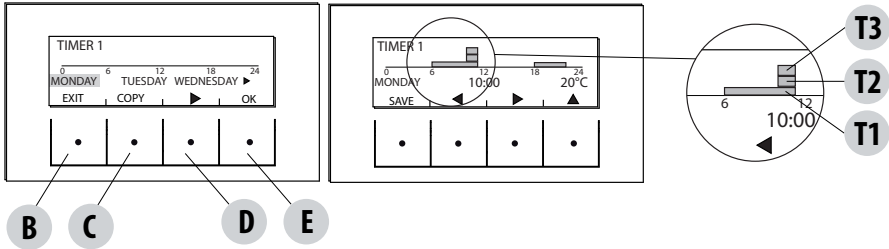


## 11-MENU STRUCTURE

In the MENU screen, move the cursor with arrows “C”-“D” and select PROGRAMS, press ok “E” to confirm. Next select the programme you wish to set.

**Once completed, always press “ACTIVATE” to confirm the choice of programme.**

The TIMER 1 and 2 programs are freely programmable for each 1/2 hour of the day on three different temperature indicators (T1-T2-T3) and in different ways for each day of the week. The OFF level requires that the boiler is switched off in that interval.



### Example of temperature programming for Monday.

Select the TIMER 1 item from the PROGRAM menu and press the ENTER “E” key, using arrow “D” highlight Monday and press OK (“E”) to enter programming.

Using the centre arrow keys “C” and “D” select the half hour interval to be selected and use the “E” key to set the temperature T1-T2-T3 (depending on whether the key is pressed 1-2-3 times, the corresponding temperature can be read in the bottom right of the display). Once temperature programming for Monday is complete press the “B” SALVA (SAVE) key. If the same temperature scale of Monday is desired for other weekdays, after saving (“E” key) press the “C” key (COPIA-COPY), select the day where the programme is to be copied using the “D” key and press the “C” key (INCOLLA-PASTE). Repeat the same procedure until the programmes for all weekdays are complete. At this point the boiler is programmed according to your temperature needs, which can be modified at any time.

### ATTENTION:

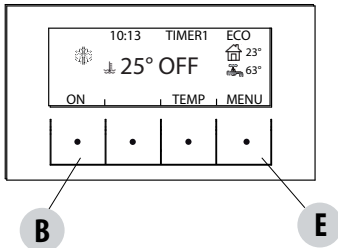
In order to facilitate using the boiler, RED provides Timer 1 with preset weekly temperatures and times (according to the table below), whereas Timer 2 is empty. In any case, it is possible to change times and temperatures of Timer 1 at any time.

### PANEL OFF DISPLAY FROM TIMER

When timer 1 (for example) has no set temperature, the panel highlights that the boiler is in OFF.

If the boiler is off from the MANUAL command, the timer will have no effect.

For the boiler to come on with the timer, the panel must display the image shown on the side; if this should not be the case, it may be necessary to press the ON (“B”) key.



## 11-MENU STRUCTURE

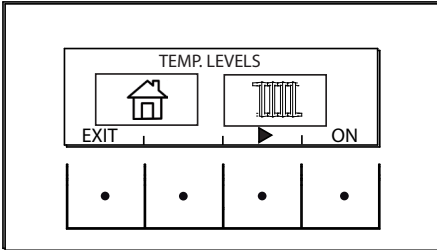
### MANUAL

This function can be activated from the menu PROGRAMME by pressing the key "C" ACTIVE. When this function is activated, the boiler no longer follows time programming of TIMER 1 or 2 programs, but it keeps the temperature set in the main screen throughout the 24-hour time period. It is possible to switch to programmes at any time.

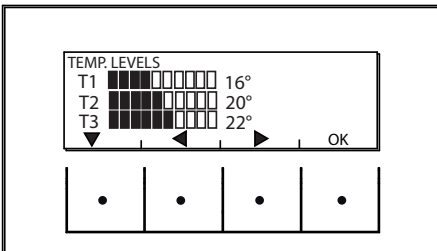
### TEMPERATURE LEVELS

It is possible to change the 3 temperature levels referenced by timers in this menu.

From the PROGRAMS menu use arrow key "D" to move and select TEMP LEVELS, press the "E" key, and enter the temperature settings screen. Choose which temperature you want to set: AMBIENT or DELIVERY WATER.



With the centre arrow keys "C" and "D", it is possible to increase/decrease the temperature value, while the "B" key is used to move to the next temperature. With the "E" key (OK), the set values are confirmed.



### SLEEP FUNCTION

The sleep function is only activated when the boiler supplies power and makes it possible to programme a boiler shut-off time. Shut off can be delayed up to a maximum of 8 hours from current time and with a 10-minute resolution.

To activate, enter the PROGRAM menu, scroll using arrow key "D" up to Funct. SLEEP press the ATTIVA (ACTIVATE) "C" key. In the next screen, using keys "C" and "D", increase or decrease the minutes (10 minutes each time the key is pressed) and press OK ("E" key) to confirm the boiler shut off time.

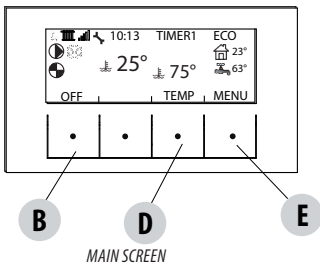
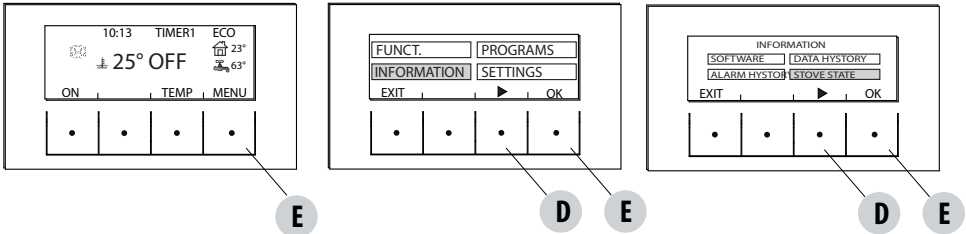
NOTE: If the boiler is not supplying power the display shows the wording "NOT AVAILABLE".

## 12-INFORMATION MENU

### INFORMATION

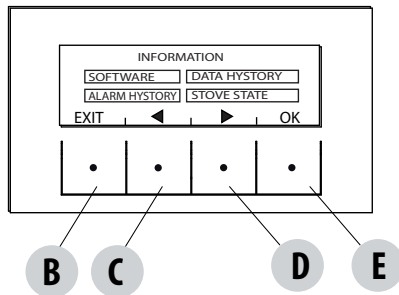
To enter the INFORMATION menu, proceed as follows:

from the main/initial screen, press the "E" Menu button, scroll using the "D" arrow key, up to the Information item, press the "E" ok key, scroll again using the "D" arrow key up to software/data memory/all.memory/boiler state and select the desired item, press OK using the "E" key to enter the chosen information menu.



The available information is:

- Software
- Data memory
- All. memory
- Boiler state

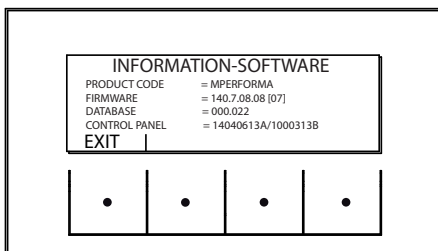


### SOFTWARE INFORMATION

The available data in this function are:

CODE  
FIRMWARE  
DATABASE  
INTERFACE

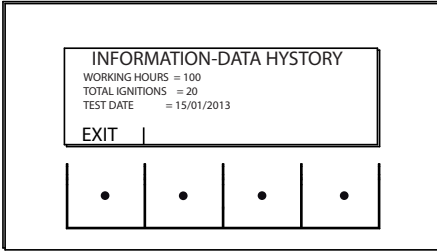
It is information that can be used to identify the electronic part of the boiler.



EXAMPLE

## 12-INFORMATION MENU

### DATA MEMORY-INFORMATION



The available data in this function are:

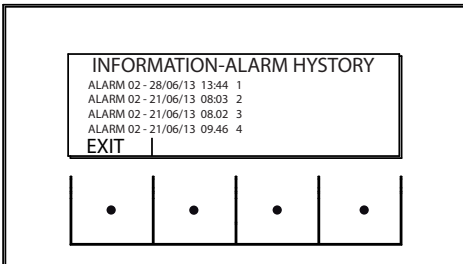
WORKING HOURS

TOTAL IGNITIONS

TEST DATE

### ALARM MEMORY-INFORMATION

It gives information about the last alarms detected.



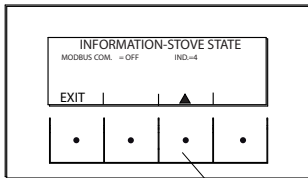
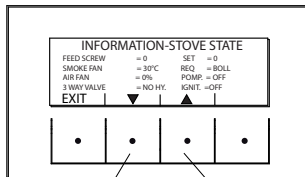
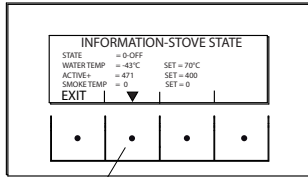
## 12-INFORMATION MENU

### BOILER STATE-INFORMATION

This menu is particularly useful if you want to verify the boiler's working condition (State).

From the OFF screen, press the "E" Menu button, scroll with the "D" arrow key, up to the Information item, press the ok "E" key, scroll again with the "D" arrow key up to boiler state, press OK with the "E" key and one enters the boiler State-information menu.

The items available within BOILER-STATE INFORMATION can be viewed using the "C" and "D" arrow keys and are:



<i>state</i>	
<i>water temp.</i>	<i>set</i>
<i>aux sensor</i>	<i>set</i>
<i>active+</i>	<i>set</i>
<i>fumes fan</i>	<i>set</i>
<i>feed screw</i>	<i>set</i>
<i>fumes temp.</i>	<i>req</i>
<i>relay aux</i>	<i>spark plug</i>
<i>modbus com</i>	<i>add.</i>

- The main boiler states that can be read on the display are:

STATE 1-9 various ignition phases

STATE 20-40 work state (power supply)

STATE 60-79 alarm state

STATE 80-84 shut off/cooling/autoeco state

STATE 85-93 auxiliary functions

STATE 94-95 cleaning state

- WATER TEMP.: Water temperature detected by the probe inside the boiler and related SET
- AUX: PROBE: detects the value measured by the aux sensor (external/storage cylinder/puffer)
- ACTIVE+.: Value read by the Active Plus system and related SET
- FAN FUMES: Number of fumes fan revolutions and related SET
- FEED SCREW: number of feed screw revolutions and related SET
- FUMES TEMP.: temperature value read by the probe inside the boiler
- REQ: (Heating/Domestic) signals if system requires heat
- AIR FAN: Room fan operation level
- PUMP: signals if the boiler's internal pump is turned on (ON) or turned off (OFF)
- AUX: RELAY: signals activation (ON) or the OFF state of Auxa relay
- SPARK PLUG: Signals if spark plug is turned on or off
- MODBUS COM. External interface communication state
- ADD.: Address for communicating with modbus

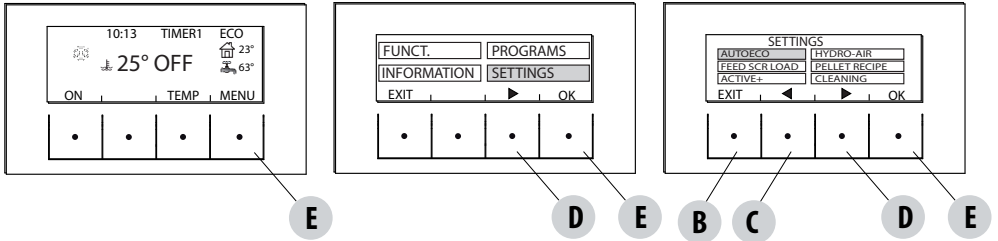
## 13-SETTINGS MENU

### SETTINGS

To enter the menu SETTINGS, proceed as follows:

from the OFF screen, press the "E" Menu key, scroll with the "D" arrow key up to Settings item, press the ok "E" key, scroll again with the "D" and/or "C" arrow key up to the chosen setting, press OK with the "E" key to enter the chosen menu.

It is possible to set the listed parameters from this screen. Each parameter has an info key to obtain brief information about the chosen function.

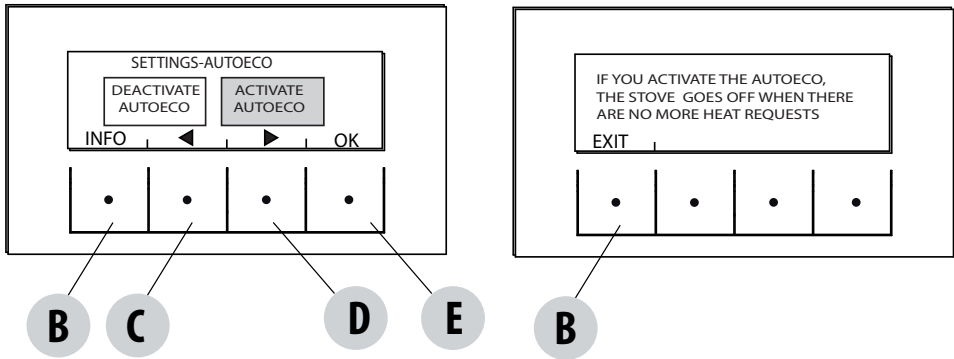


#### • SETTINGS

- Auto Eco (default activated)
- Feed screw loading
- Pellet recipe
- Active +
- Cleaning cycle
- Language
- date - time
- Aux Input
- aux output
- Room Input
- T. on Pump
- Pump pwm
- Antifreeze function
- Plt sensor (not available)
- Modbus com. (not available)
- Display
- Technical menu (accessible by a specialised RED technician - password required)
  - Active +
  - Fume Analysis F
  - Calib.Active
  - Calib.S.fumes
  - Diagnostics
  - Parameters
  - Boll advance
  - Hour reset

# 13-SETTINGS MENU

## AUTOECO (factory activated)

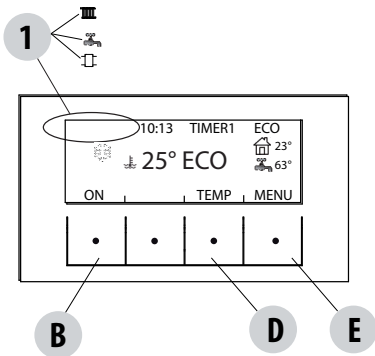


The Auto eco mode turns the boiler off when heating the system does not require heat, depending on the menu-settings-input aux configuration.

### AUTO ECO ACTIVE

The AutoEco active parameter (factory settings) is shown on the top right on the control panel display in the main screen. If heat is not required, the boiler turns off after the set time, switching to Auto Eco (State 84 - it is possible to see Auto eco in the Information Menu, boiler state).

NOTE: With the boiler off, if T is set less than T room, or other heat request settings are fulfilled, the boiler does not turn on.



1 = no heat request ( $T_{room} > T_{set}$ )  
 heat request:  
 heating  
 sanitary  
 puffer

### AUTO ECO DEACTIVATED

With the boiler on, if Auto eco is deactivated and there are no heat requests (different based on menu-settings-aux input settings) the boiler operates at minimum power.

The required condition for restarting is for there to be heat request for at least consecutive 10"; it is possible to restart if:

- at least 5 s have elapsed from when shutdown began
- the  $TH_2O$  in the boiler is  $< T_{set} H_2O$

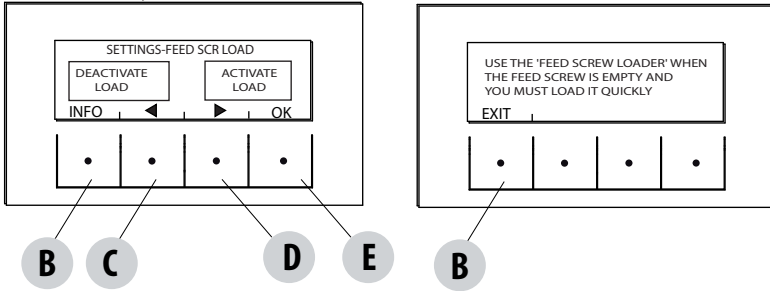
### To modify the function:

from the Settings menu - using the arrow keys, select the AUTOECO function, press ok (E key) and press D or C key (arrow key) and select: Activate = to modify the set time from 0 to 30 minutes (factory default 5 minutes)

Deactivate = to deactivate Auto Eco

## 13-SETTINGS MENU

### FEED SCREW LOADING (only with the boiler off)



This function is for filling the pellet loading system. It can only be activated with the boiler off.

To enter the function:

from the Settings menu - press ok (E key), press the D key (arrow key) and scroll up to load feed screw, press OK (E key) and activate/deactivate the function, press ok ("E" key) to confirm.

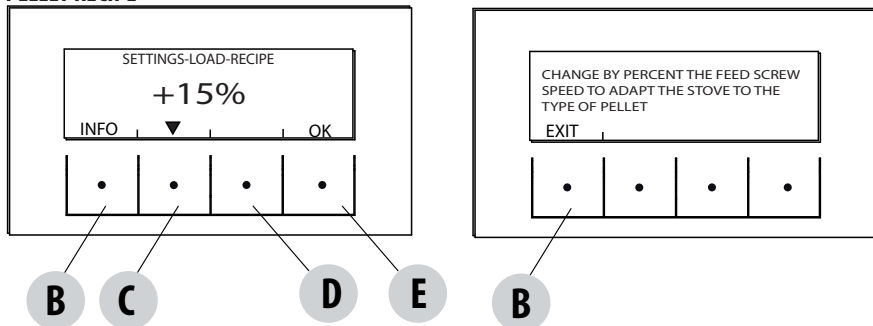
### MAXIMUM POWER

This feature allows you to set the maximum power percentage at which the boiler can operate.



## 13-SETTINGS MENU

### 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, boiler operation can vary considerably according to the quality of the fuel. When the pellets clog up the brazier due to excess loading of fuel, vice-versa if the flame has a tendency to shut-off, it is possible to decrease/increase the amount of pellets in the brazier:

The available values compared to factory settings are:

+15% +10% +5%; 0%; -10% -20% -30%

To modify the pellet recipe, in sequence, press:

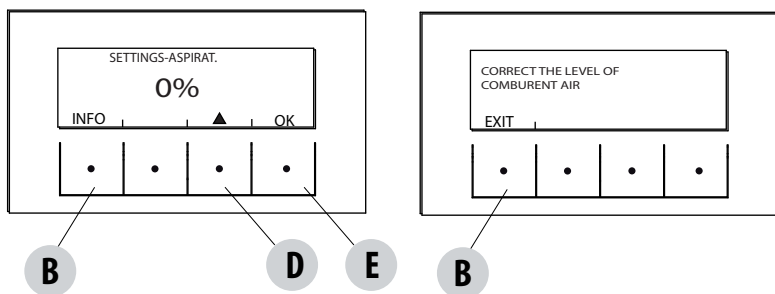
from the Settings menu- press ok (E key), press the D key (arrow key) scroll up to pellet recipe and press OK (E key) and enter the function, using the "C" and "D" keys to modify the parameter and press Ok ("E" key).

### ACTIVE +

The pellet type is not a problem because the stoves are equipped with the Active system and automatically adapt to pellet of any length with a diameter of 6-8 mm. Effective and efficient combustion is independent from any type of connection to the flue which, with traditional systems, may constitute a problem during the installation phase.

Thanks to an internal sensor, the boiler is extremely reliable and precise, combustion air is constantly adjusted based on the quantity of pellets present in the brazier, thus guaranteeing an effective and efficient combustion that is translated into decreased consumption, emissions, and less frequent cleaning.

Thanks to Active plus, it is possible to control and communicate with the boiler, even by way of Smartphone and tablet. Since it is possible to manage more evolved gear motors (with continuous operation), the new pellet stoves equipped with active plus are more silent.



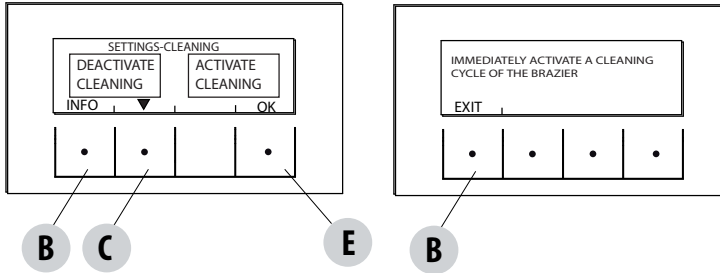
This function is used to adjust combustion air if the flame is too high or too low.

It can be activated from the SETTINGS menu, scroll using the "D" arrow key up to the "Ricetta Aria" (Air recipe) function, press OK using the "E" key, and, using the "D" arrow key modify the parameter and press "ok" "E" key.

The fixed parameters that can be set are: +10; +5; -5; -10

## 13-SETTINGS MENU

### CLEANING CYCLE



This function can only be activated with the boiler in OFF supply:  
from the Settings menu- press ok (E key), press the D key (arrow key), scroll up to the “ciclo pulizia” (cleaning cycle) press OK (E key)- Activate/deactivate cleaning.

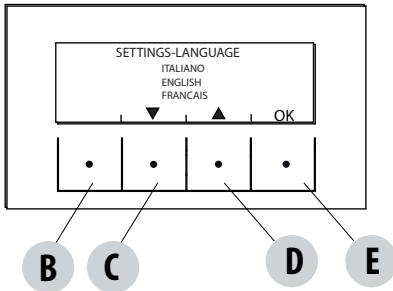
This procedure activates the fumes extraction fan at the maximum level in order to clean the brazier and expel soot.  
This function also activates: mechanical cleaning of the brazier, turbolators and compactor.

### LANGUAGE

This function is used to choose the desired language among those set in the control panel.

To enter the function, from the Settings menu - press ok (E key), press the D key (arrow key) and scroll up to language item, press OK (E key) and choose the language among the various ones set and finally press Ok (“E” key) to confirm.

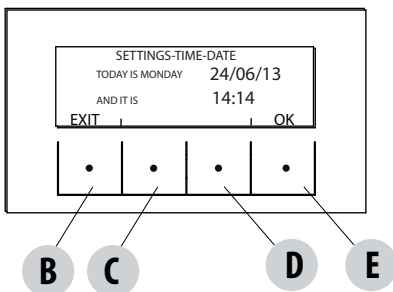
The available languages are: Italian/English/French/German/Spanish/Dutch/Danish



### TIME-DATE

This function is used to set date and time.

To enter the function, from the Settings menu - press ok (E key), press the D key (arrow key) and scroll up to the date-time item, press OK (E key) to enter the function. Next, press the “E” (ok) key again to modify day/month/year/hour and minutes. To modify the parameters, use the “C” and “D” (arrow keys) keys and press the “E” key to confirm.



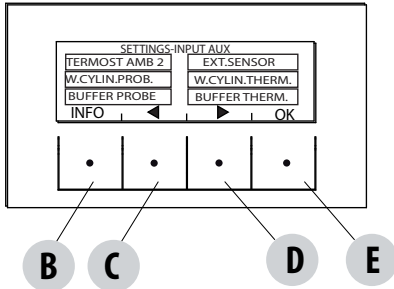
## 13-SETTINGS MENU

### AUX INPUT (using one of the following parameters excludes the other)

The auxiliary input allows you to choose the system configuration type based on which the boiler is connected.

To enter the function press:

from the Settings menu- press ok (E key), press the D (arrow) key and scroll up to the Aux Input item and press OK (E key). Using the "C" and "D" keys select the desired heating system type and press ok with the "E" key.



It is possible to connect the following to the auxiliary input:

**Room thermostat 2**

**External probe**

**Storage cylinder probe**

**Storage cylinder thermostat**

**Puffer probe**

**Puffer Thermostat**

**None**

Note: The storage cylinder probe/thermostat choice implies the three-way aux output designation.

The puffer probe/thermostat choice implies the pump aux output designation.

- **Room Therm.2**

The boiler heat request may take place from any part of the room probe or from the "Termostato Amb 2" (Room thermostat 2) installed in a room that is different from the one where the boiler is positioned and is connected to terminals 1 and 2 of the back terminal board. Closing the contact of the terminals kicks off the heat request.

Notes: Installation of this thermostat is optional, the boiler can also operate without it. Since the contact is N.O., the room probe is the only heat request command.

Possible active weekly programming does not act on Room Thermostat 2 but rather on the probe on board the boiler.



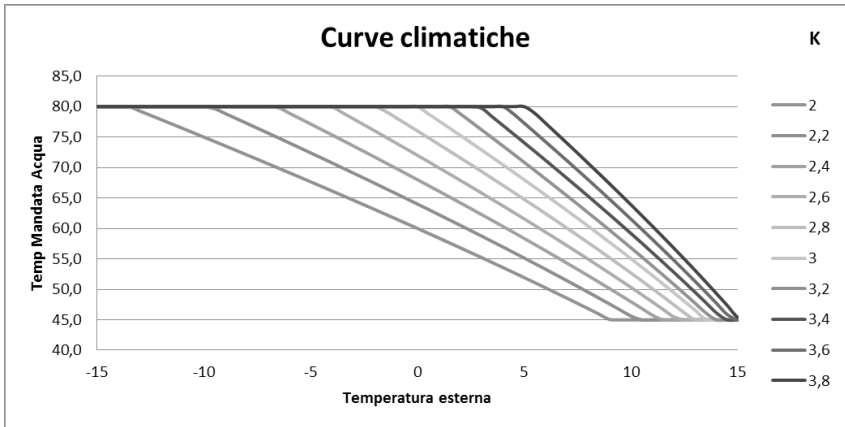
**Attention! The room input contact (contact 3-4 of the terminal block) leaves the factory bridged so that heat is always requested from the heating system.**

**If a room probe or thermostat is installed remove the jumper (see page 22 "puffer thermostat").**

## 13-SETTINGS MENU

- **External probe**

It makes it possible to work with system temperature adjustment. If installing an external probe on terminals 1 and 2 (NTC 10KOhm at 25°C b=3435) water temperature is automatically calculated by the electronics based on external temperature according to the curves shown below:



The external probe must be installed on an external wall exposed towards North or North-West. If necessary, it is possible to correct the value read by the probe by + 5 -5°C.

- **Storage cylinder probe**

To activate this option, connect a probe (NTC 10KOhm at 25°C b=3435) to points 1 and 2 of the back 9-pole terminal board.

The heat request occurs when the storage cylinder probe reads a temperature that is 2°C below the one set by the accumulation temperature marked by a tap in the temperature menu.

In this configuration the 3-way valve must be connected to contacts 10-11-12.

- **Storage cylinder thermostat**

To activate this option, connect a Normally Open (N.O.) contact thermostat to points 1 and 2 of the back 9-pole terminal board.

The heat request occurs when the storage cylinder thermostat closes the contact.

In this configuration the 3-way valve must be connected to contacts 10-11-12.

- **Puffer probe**

To activate this option, connect a probe (NTC 10KOhm at 25°C b=3435) to points 1 and 2 of the back 9-pole terminal board.

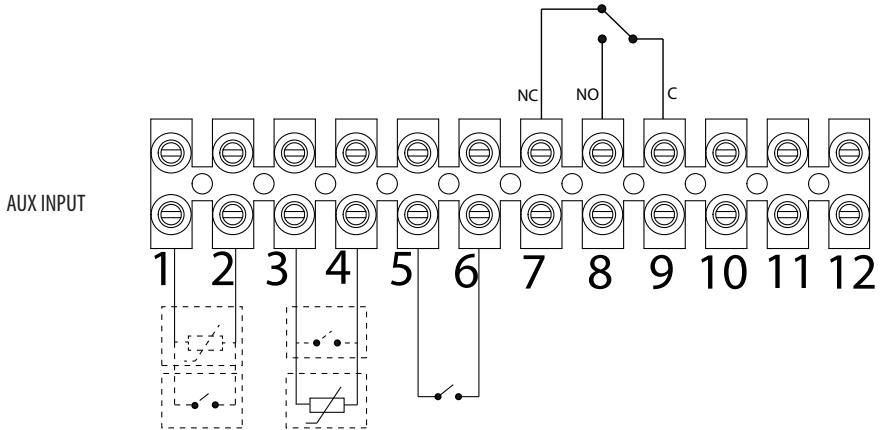
The heat request occurs when the storage cylinder probe reads a temperature that is 2°C below the one set by the accumulation temperature marked by a radiator in the temperature menu.

During installation with the puffer, boiler operation is only and exclusively determined by the puffer probe and not by the room probe. The room probe on the boiler is only to control the heating system pump controlled by the NO potential-free contact: if the system pump is activated in Aux out mode (max 5 ampere, not suitable for brushless pumps with upper start-up current) on terminals 8-9.

## 13-SETTINGS MENU

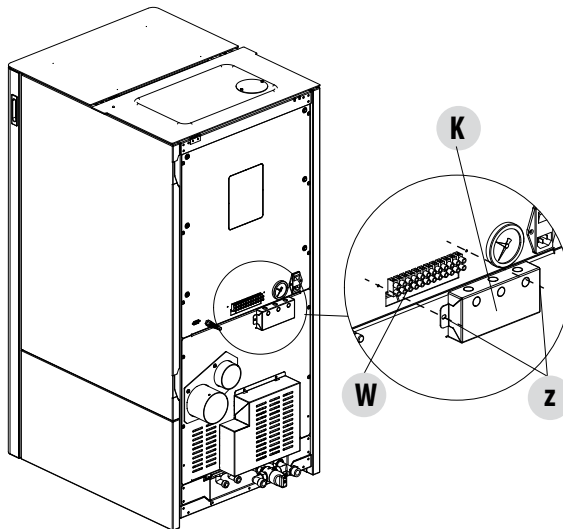
- **Puffer thermostat**

To activate this option, connect a Normally Open (N.O.) contact thermostat to points 1 and 2 of the back 9-pole terminal board. Even with this configuration the purpose of the room probe on the boiler is only to control the heating system pump controlled by the potential free contact on terminals 7-8-9, if the system pump is activated in Aux out mode.



POS.1-2 AUX INPUT EXTERNAL THERMOSTAT/THERMOSTAT/ BOILER/PUFFER BOILER PROBE/PUFFER	POS.10 - HEATING (PHASE)	3-WAY VALVE
POS.3-4 ROOM INPUT: ROOM PROBE	POS.11 - COM (NEUTRAL)	
POS.5-6 HOME AUTOMATION	POS.12 - DHW (PHASE)	
POS.7-8-9 AUX OUTPUT RELAY		

Access the "W" terminal block by removing the cap "K" and loosening the two screws "z". Perform the necessary connections and place everything back.

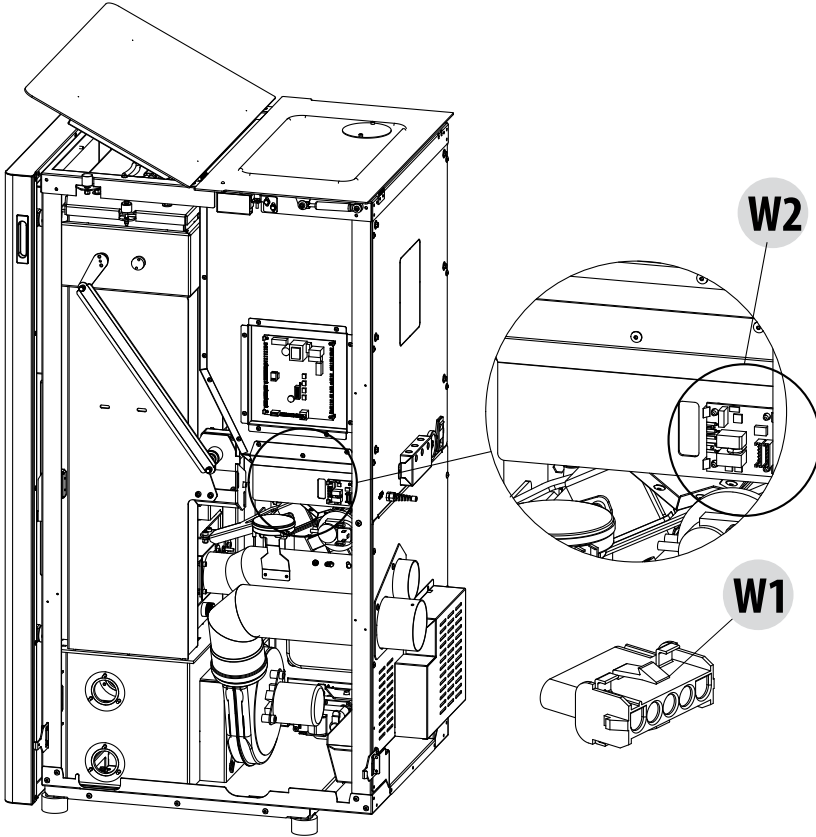


## 13-SETTINGS MENU

### CONNECTOR IF INSTALLING THE TROLLEY

If the trolley is installed (optional) the "W1" connector that will be found on the right side of the boiler must be connected to the connector available on the kit.

An additional electronic board "W2" is also provided with the trolley. All instructions concerning the installation and operation of the trolley are provided with the optional accessory.



# 13-SETTINGS MENU

## BOILER PRINCIPLE DIAGRAMS



The following diagrams are to be used only as a guideline. For proper connection, always follow the notes of the plumbing and heating installer. The plumbing system must meet local, regional, or national regulations in force. Installation and verification of operation is to be performed only by specialised, authorised personnel. The manufacturer will not be held liable for non-compliance with the provisions listed above.

### SYSTEM WITH: DIRECT PELLET BOILER

#### Adjustable setting

SET	VALUES
WATER TEMP	60°C - 80°C

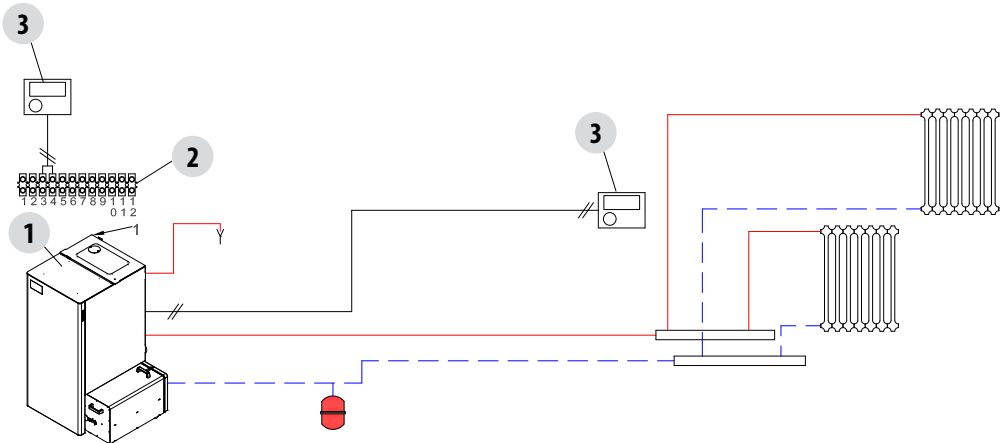
#### Parameters to be set

Settings	Value
AMB Input	Room thermostat
AUX Input	None
AUX Output	None

#### Hydraulic diagram

Num.	Description
1	Pellet Boiler
2	Rear terminal block
3	Room thermostat

u



# 13-SETTINGS MENU

## SYSTEM WITH: DIRECT PELLETT BOILER AND DHW BOILER

### Adjustable setting

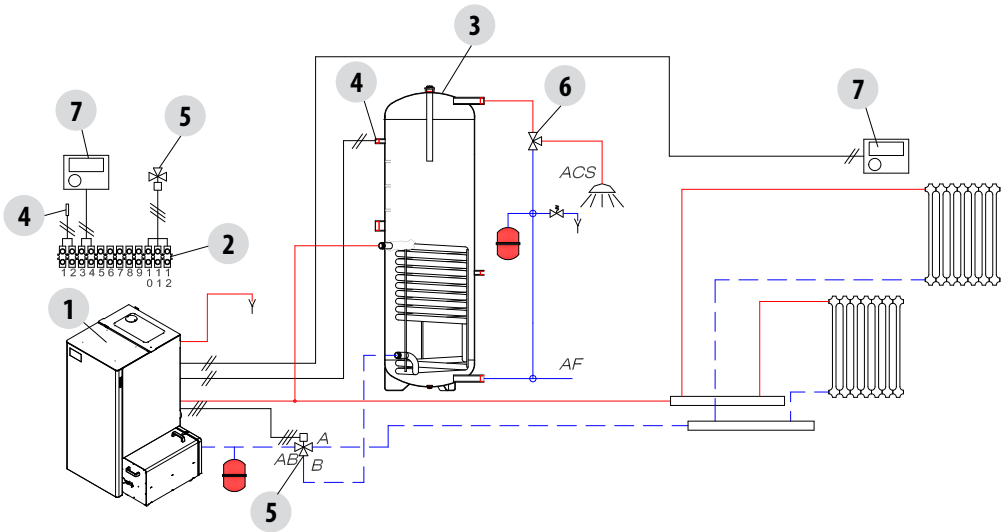
SET	VALUES
WATER TEMP	60°C - 80°C
BOILER TEMP.	10°C - 70°C

### Parameters to be set

Settings	Value
AMB Input	Room thermostat
AUX Input	Boiler Probe
AUX Output	None

### Hydraulic diagram

Num.	Description	Num.	Description
1	Pellet Boiler	5	3-way diverter valve
2	Rear terminal block	6	DHW thermostatic valve
3	DHW boiler	7	Room thermostat
4	Storage cylinder probe		





# 13-SETTINGS MENU

## SYSTEM WITH: PELLET BOILER, PUFFER AND BOOSTER PUMP

### Adjustable setting

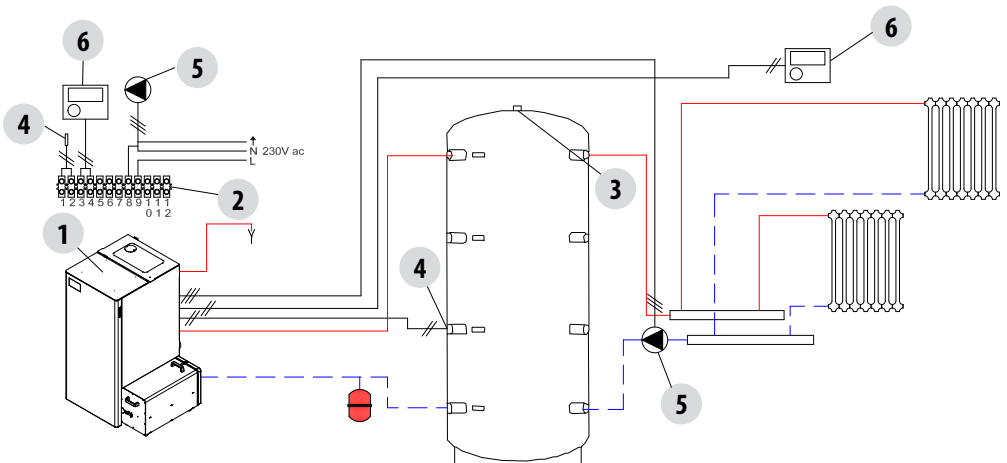
SET	VALUES
STORAGE TEMP.	50°C - 80°C

### Parameters to be set

Settings	Value
AMB Input	Room Thermostat
AUX Input	Puffer Probe
AUX Output	Puffer Pump

### Hydraulic diagram

Num.	Description	Num.	Description
1	Pellet Boiler	4	Puffer Probe
2	Rear terminal block	5	Booster Pump
3	Puffer	6	Room Thermostat



# 13-SETTINGS MENU

## SYSTEM WITH: PELLET BOILER, PUFFER AND EMERGENCY BOILER (WALL-MOUNTED)

### Adjustable setting

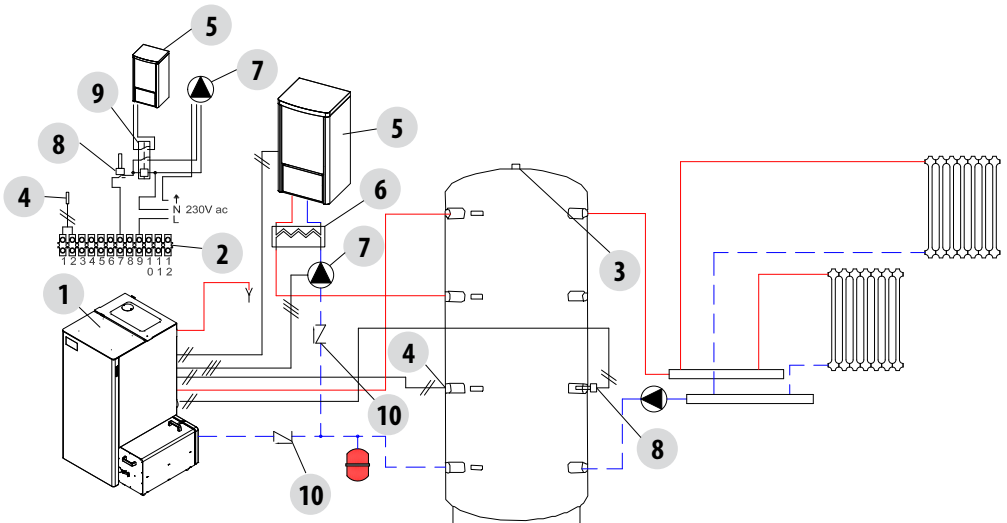
SET	VALUES
STORAGE TEMP.	50°C - 80°C

### Parameters to be set

Settings	Value
AMB Input	None
AUX Input	Puffer Probe
AUX Output	Auxiliary boiler

### Hydraulic diagram

Num.	Description	Num.	Description
1	Pellet Boiler	6	Plate heat exchanger
2	Rear terminal block	7	Booster Pump
3	Puffer	8	Emergency Boiler Thermostat
4	Puffer Probe	9	Activation relay
5	Emergency boiler	10	Non-return valves



# 13-SETTINGS MENU

## SYSTEM WITH: PELLLET BOILER, PUFFER AND DHW BOILER

### Adjustable setting

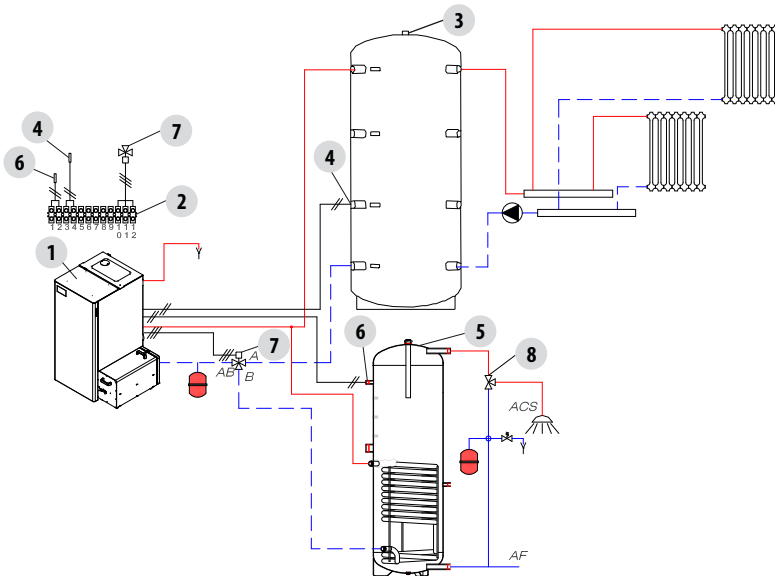
SET	VALUES
STORAGE TEMP.	50°C - 80°C
BOILER TEMP.	10°C - 70°C

### Parameters to be set

Settings	Value
AMB Input	Puffer Probe
AUX Input	Boiler Probe
AUX Output	None

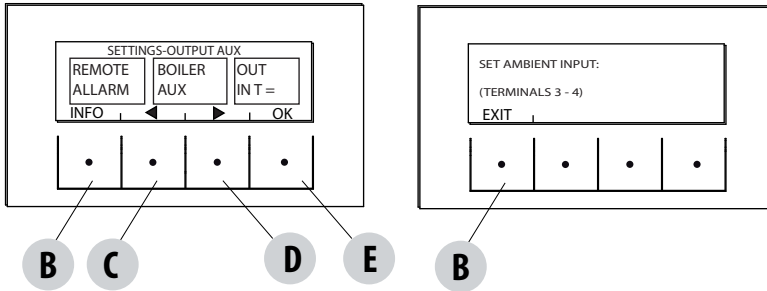
### Hydraulic diagram

Num.	Description	Num.	Description
1	Pellet Boiler	5	DHW boiler
2	Rear terminal block	6	Boiler Probe
3	Puffer	7	3-way diverter valve
4	Puffer Probe	8	DHW Thermostatic Valve



## 13-SETTINGS MENU

### OUTPUT AUX



The AUX output makes it possible to use a relay contact, based on the system configuration type chosen in the Aux Input menu. It acts on contact 7-8-9 of the external terminal board:

- Remote alarm (9-8=C-NO)
- Auxiliary boiler (9-7=C-NC)
- Auxiliary output in temperature (9-8-7=C-NO-NC)
- System pump (9-8=C-NO)

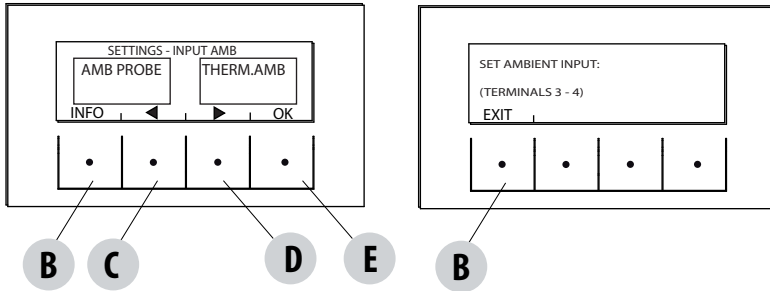
To enter the function press:

from the Settings menu- press ok (E key), press the D (arrow) key and scroll up to the Aux Output item and press OK (E key). Using the "C" and "D" keys to select the Remote Alarm/Aux boiler/Output in temp and press OK ("E" key).

- If the Aux output is set on Remote Alarm, the NO contact is closed when an alarm is present.
- If the Aux output is set to Auxiliary Boiler, the NC contact remains closed in all alarm states, in 0 "OFF" state, in 80 "Shutdown" state, and in 51 "COOL" state. Under all conditions it remains open.
- Output temperature: the NO contact closes when the Boiler temperature exceeds the value set by the user. It can be set from 30 to 60, it is used, for example, to disconnect the aux boiler above a certain temperature (using the NC contact) or to start an external pump at temperature (using the NO contact)

## 13-SETTINGS MENU

### INPUT AMB



The room input is used to set the probe or the thermostat at terminals 3-4 of the back terminal board of the boiler.

The boiler has the room probe set as default factory settings.

By selecting the thermostat, it is possible to replace the probe on the boiler with a thermostat that requests heat when the contact is closed.

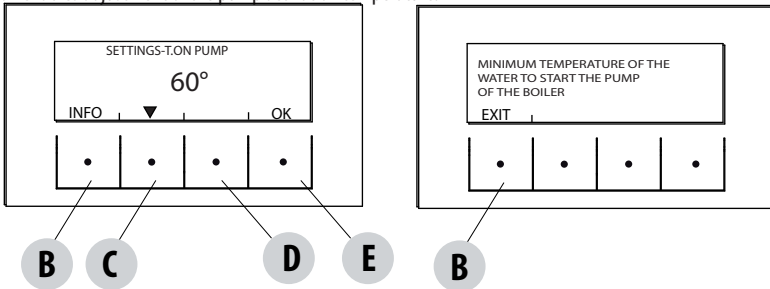
To enter the function press:

from the Settings menu - press ok (E key), press the D key (arrow) and scroll up to Room Input, press OK (E key) and select room thermostat, press E key to confirm.

Attention!!! If room temperature is selected, weekly hourly Programming is not available.

### PUMP ON T

This function enables adjustment of the pump activation temperature.



To enter the function press:

from the Settings menu- press ok (E key), press the C-D key (arrow) and scroll up to temp.On pump, press OK (E key)- Modify the temperature using the central C and D keys, press the E key to confirm.

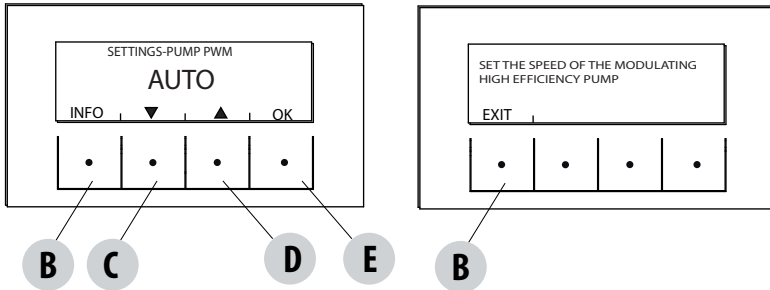
## 13-SETTINGS MENU

### PWM PUMP

This function is used to set high efficiency pump speed.

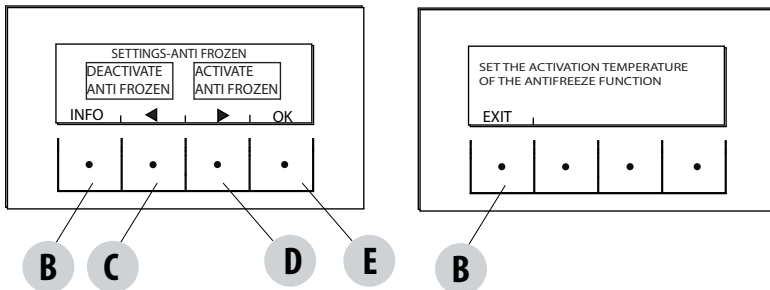
To enter the function press:

from the Settings menu- press ok (E key), press the C-D key (arrow) and scroll up to PWM Pump, press OK (E key)- Modify the percentage using the central C and D keys, press the E key to confirm.



### FUNCT. ANTI-FREEZE

It consists in activating the pump (level 1) or the boiler (level 2) and is automatically activated by the temperature read by the boiler probe and the temperature read by the external probe (if present and connected to the aux input).



The level 1 anti-freeze activation conditions (PUMP ON) are:

boiler temp < anti-freeze set +3°C

The level 2 anti-freeze activation conditions (PUMP and FLAME ON) are:

boiler temp = anti-freeze set

Anti-freeze activation conditions on external probe (if present) are:

ext\_filtered temp < anti-freeze set -3°C

To enter the function, press and adjust anti-freeze set:

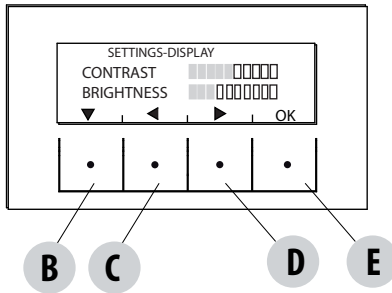
from the Settings menu- press ok (E key), press the C-D key (arrow) and scroll up to Antifreeze function and press OK (E key)- Activate and set (from 1 to 5°C) or Deactivate the function and press the E key to confirm.

### PELLET SENSOR

Optional Function.

## 13-SETTINGS MENU

### DISPLAY



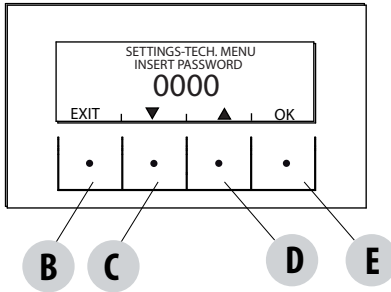
Adjust display contrast and brightness. This function is found in:  
from the Settings menu- press ok (E key), press the C-D key (arrow) and scroll up to Display, press OK (E key)- Modify the settings using the B - C - D keys and press the E key to confirm.

## 14-TECHNICAL MENU

### TECHNICAL MENU

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

To make changes in the technical menu, enter the SETTINGS menu, press the "E" (OK) key, scroll using the "C"- "D" arrows keys and select Technical menu and press OK (E key)- Enter the password and press the E key to confirm.



To enter the password:

using the C and D keys, set the numbers (1-2-3....9) with the E (OK) key confirm and move on to the next digit, once the four digits have been entered, press the E key to enter the technical menu.

The technical menu displays the following parameters:

- ACTIVE +
- FUMES ANALYSIS F.
- CALIB.ACTIVE
- CALIB.S.FUMES
- DIAGNOSTIC
- PARAMETERS
- BOLL ADVANCE
- RESET HOURS



## 15-SAFETY DEVICES AND ALARMS

### SAFETY DEVICES

The product is fitted with the following safety devices

#### ACTIVE +

Besides adjusting the boiler operation, it also guarantees that the pellet loading feed screw is blocked if unloading is blocked or there is significant back pressure.

#### 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.

#### WATER THERMOSTAT

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 carry out automatic "OFF Stand-by" shut-off.

#### 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 gear 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.

## 15-SAFETY DEVICES AND ALARMS



### TAMPERING WITH THE SAFETY DEVICES IS PROHIBITED

If the boiler is **NOT** used as described in this instruction manual, the manufacturer declines all responsibility for damage to persons and property that may arise. The manufacturer furthermore refuses to accept responsibility for damage to persons and property arising from the failure to observe all the rules contained in the manual and 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 boiler 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 re-ignite the boiler and thus restore the probe's automatic operation. This manual will help you understand which anomaly has occurred, and explain how to intervene according to the alarm message displayed on the boiler.

### Boiler stop

The following conditions may cause the boiler 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.

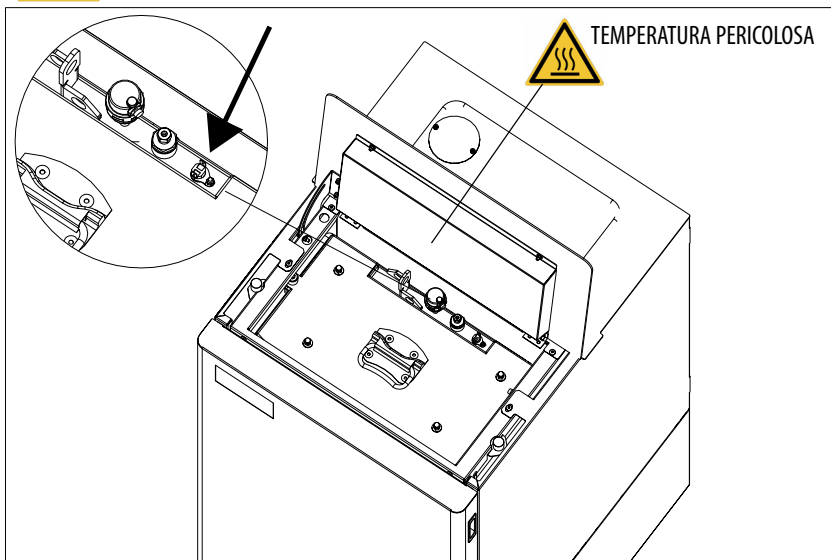
### \* H2O Safety thermostat with manual rearm (see alarm A18)

The boiler enters a safety ALARM state called "A18" Safety devices alarm, caused by high water temperature. To cancel the alarm status, the thermostat must be rearmed manually.

Then, only with the boiler cold, open the front door and remove the power cable or else turn off the switch and using a non-metallic tool and without removing the rubber cap that covers the thermostat, press the button to reset it.



**Attention! Hot parts, use the supplied glove**



## 15-SAFETY DEVICES AND ALARMS

### ALARM ALERTS

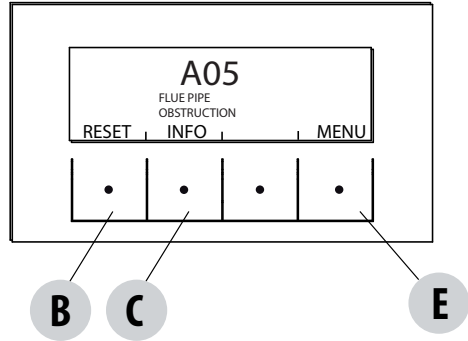
If there is an operational anomaly, the boiler enters the alarm phase displaying the problem that has taken place through a code, a brief description of the alarm type and an acoustic warning.

The following table describes the possible alarms indicated by the boiler, associated to the respective code that appears on the panel and helpful tips to solve the problem.

B = RESET (cancels alarm)

C = INFO (provides information on the alarm type)

E = MENU



WRITTEN ON THE DISPLAY	TYPE OF PROBLEM	SOLUTION
<b>A01</b> NO IGNITION	The fire does not ignite. (without acoustic alarm)	Check the level of pellets in the tank. Check that the brazier is correctly positioned in its seat and has no build-up or unburned material. Make sure the ignition plug warms up. Thoroughly empty and clean the brazier before restarting.
<b>A02</b> NO FLAME	The fire goes out abnormally. (without acoustic alarm)	Check the level of pellets in the tank. Check that the brazier rests correctly in its seat and has no visible deposits of unburned pellets.
<b>A03</b> PLT SAFETY	Pellet tank temperature is too high	Wait for the cooling phase to end, cancel the alarm and reduce pellet loading (SETTINGS MENU - Pellet recipe). If the alarm persists, contact the service centre.
<b>A04</b> FUMES TEMP	Fumes temperature is too high	Wait for the cooling phase to end, cancel the alarm and reduce pellet loading (SETTINGS MENU - Pellet recipe). If the alarm persists, contact the service centre.
<b>A05</b> OBSTRUCTION	Chimney flue clogged	Verify brazier clogging, smoke duct, lower compartment and door closing. If the alarm persists, contact the service centre.

## 15-SAFETY DEVICES AND ALARMS

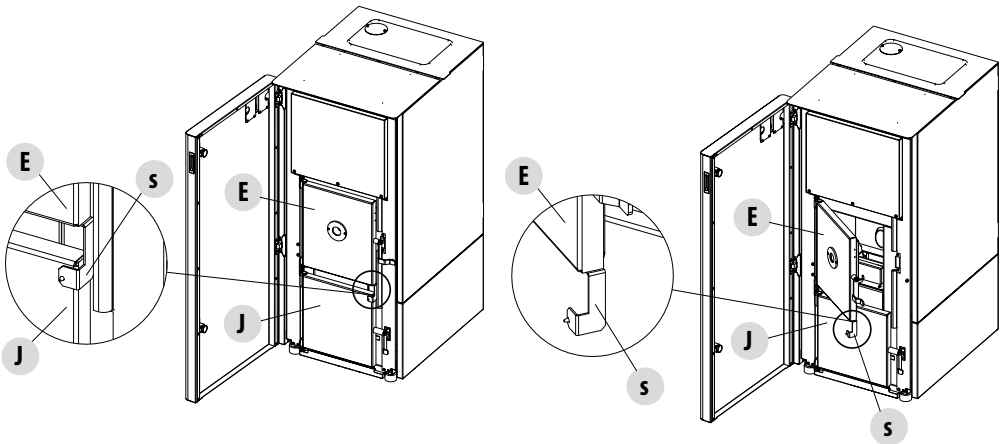
WRITTEN ON THE DISPLAY	TYPE OF PROBLEM	SOLUTION
<b>A08</b> FLUE GAS FAN	Faulty smoke fan.	Check that the lower compartment is clean (see the pages dedicated to boiler cleaning) and verify that it is not obstructed; clean it and cancel the alarm. If the alarm persists, contact the service centre.
<b>A09</b> SMOKE SENSOR	Smoke sensor fault.	Contact an authorised service centre to have the component checked and, if needed, replace the component.
<b>A11</b> GEAR REDUCER	Feed screw gear motor fault.	The component is not working regularly. Contact an authorised service centre to have the component checked and, if needed, replace the component.
<b>A13</b> BOARD TEMP	Electronic board overheating	Wait for the cooling phase to end, cancel the alarm and reduce pellet loading (SETTINGS MENU - Pellet recipe). If the alarm persists, contact the service centre.
<b>A14</b> ACTIVE SENSOR	Active sensor anomaly	Active Plus sensor operation anomaly. Contact an authorised service centre to have the component checked and, if needed, replace the component.
<b>A18</b> TRIP	Tripped safety devices	Water temperature too high, thermostat intervention (*see next page). Water pressure too low: check the pressure of the hydraulic system. Air pressure switch triggered: make sure the pellet tank and door are closed. Chimney flue clogged. If the alarm persists, contact the service centre.
<b>A19</b> WATER PROBE	Fault with water sensor.	Possible fault in the safety component. Contact an authorised service centre to have the component checked and, if needed, replace the component.
<b>A20</b> AUX PROBE	Auxiliary probe fault	Possible component fault. Check that the probe inserted in the system respects the characteristics specified in the instructions (see external probe). Contact an authorised service centre to have the component checked and, if needed, replace the component.
<b>A22</b>	Brazier not closed	Possible obstruction in the brazier. Clean. If the problem persists, contact a service centre.

## 15-SAFETY DEVICES AND ALARMS

WRITTEN ON THE DISPLAY	TYPE OF PROBLEM	SOLUTION
<b>A23</b>	Room probe failure	Possible fault in the safety component. Contact an authorised service centre to have the component checked and, if needed, replace the component.

### ALARM A18 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 A18 is activated.



### Exiting the alarm conditions



**NEVER** open the boiler 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.**

## 15-SAFETY DEVICES AND ALARMS

When the boiler enters an alarm state, an automatic cooling/shut-off phase begins, at the end of which the cause of the alarm is displayed on the small panel.

Before resetting the alarm, follow the controls indicated in the previous table, and then press the RESET key for a few seconds (or remove power to the boiler using the main ON/OFF switch on the back of the boiler).

If the indicated actions do not solve the problem, the alarm condition will occur once again with different timing based on the alarm type: in this case, contact technical assistance.

### SHUTDOWN

If the shut-down key is pressed or one of the following conditions occurs:

- power request ends (Power = 0) for Ecstop, Timer, Sleep
- an alarm condition occurs
- water overheating occurs

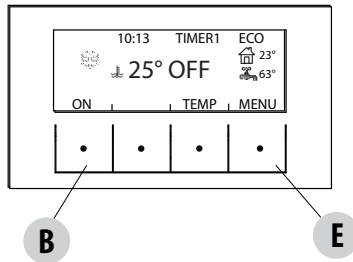
the boiler enters the shutdown and thermal cooling phase that automatically includes the execution of the following phases:

- pellet loading stops
- the room fan maintains the set speed until it cools down
- the smoke extractor is activated at maximum speed and remains on for a fixed period of 15 minutes, at the end of which the boiler off temperature is reached.
- The brazier is cleaned mechanically at the end of the cooling process

During the shutdown phase, the small panel displays the wording OFF (see screen) but if it is in shut down due to an alarm condition, the small panel displays the related code (See alarms table)

### BLACKOUT WITH BOILER ON

If power is lost for less than 10" from boiler start-up, it is repositioned in the phase where it was before the power failure.



If the loss of power exceeds 10", when the boiler is powered once again, it goes back to the previous operational condition with the following procedure it

- carries out a cooling phase, during which the panel displays OFF BLACKOUT
- restarts the boiler

If the boiler is in ignition phase when the blackout occurs, it will not turn back on once the power is restored (there is a risk that residual pellet is present in the brazier) and the panel will display OFF BLACK-OUT.

If the ON key is pressed during the cooling phase, the boiler stops executing the blackout restore state and it proceeds with ignition as requested by the command. In the same way, pressing OFF is interpreted as a shut off command.

## 16-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.

## 17-CLEANING AND MAINTENANCE



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

### **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.

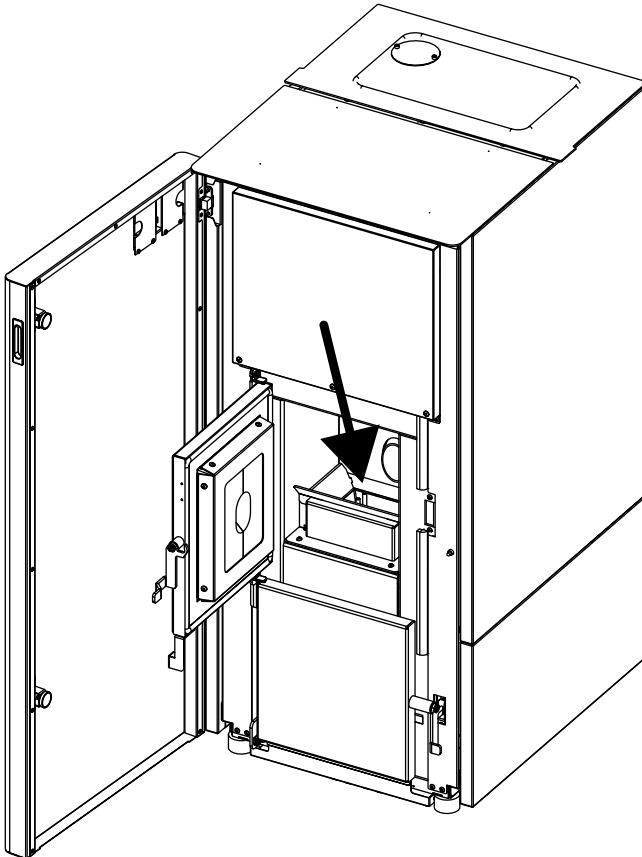
**The automatic cleaning system means you don't have to empty the brazier. However, if there are pellets with a very high ash residue this system may not be enough.**

**We therefore recommend adjusting the checks to the kind of fuel you are using. Red recommends using A1 class pellets with an ash residue of less than 0.7%.**



***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.

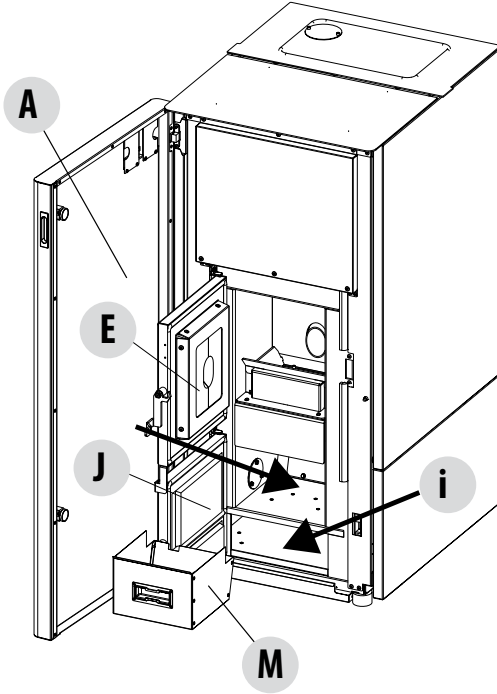




## 17-CLEANING AND MAINTENANCE

### CLEANING THE ASH PAN (if the trolley - optional - is not installed)

In the standard boiler, that is without the trolley, you must remove the ash pan "M" and empty the ash at least once a week. To do so you must open the door of the boiler "A", open the lower door "J" and grasp the ash pan "M" and empty it. Wipe away any ash residue and reinsert the pan. The quality of the pellets used and user experience will determine the required cleaning frequency. **However, it is recommended not to exceed 7 days.**



**Warning!** the lower door is to be opened with the boiler off, otherwise the alarm is triggered.

The upper door is equipped with a device that blocks operation of the boiler.

If the trolley (optional) is installed the ash pan is removed and must not be emptied.



Refer to the manual of the trolley for the emptying procedure.

*In any case, check the level of the ash deposited in the trolley every 30 days.*

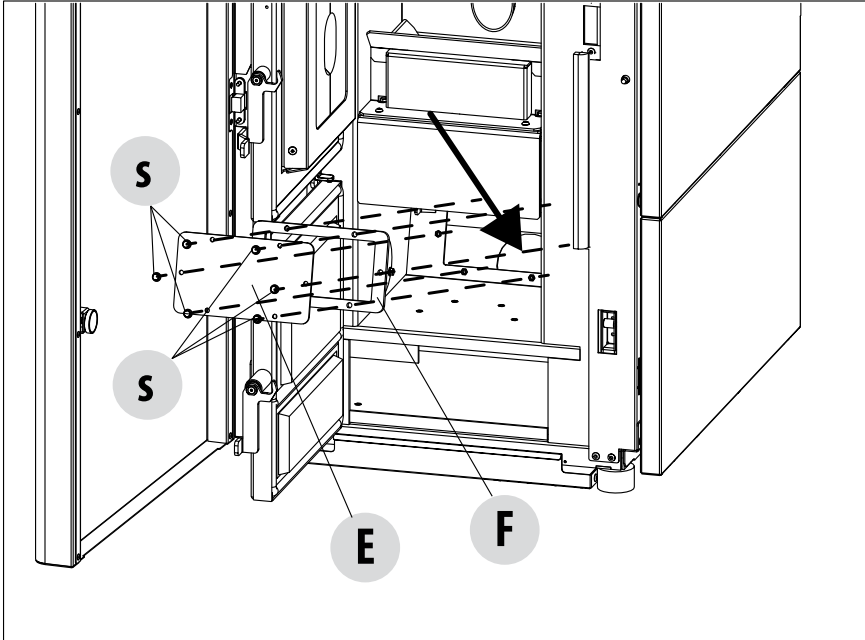
## 17-CLEANING AND MAINTENANCE

### 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".



### AUTOMATIC CLEANING

The boiler is equipped with a series of devices that facilitate the automatic cleaning operations of the product.

Please note that these devices are not substitutes to the normal routine cleaning operations (brazier cleaning, trolley - if installed - and ash pan emptying and cleaning).

During automatic cleaning, the boiler activates:

- The pipe-scraper linkage, thus cleaning the heat exchanger, keeping it always efficient (version PERFORMA 15/20 Q EASYCLEAN H1 - 2' OFF- 1' ON) (version PERFORMA 25/30 Q EASYCLEAN H1 - 120" every 60')
- The augers to remove ash inside the ash Trolley (in all versions - 120" every 60') ONLY IF THE TROLLEY IS INSTALLED, otherwise empty the ash pan and clean the adjacent areas (manually).
- Automatic cleaning device of the brazier.

Automatic cleaning is carried out with the boiler ON.

Whereas, if the boiler works for long periods without being switched off (300'), the complete cleaning cycle will occur automatically forcing the boiler off to allow for these operations. Once automatic cleaning is performed, the boiler automatically switches on again.

## 17-CLEANING AND MAINTENANCE

### CLEANING THE SMOKE EXPULSION SYSTEM AND GENERAL CHECKS

Clean the smoke extractor 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.

Check the integrity of the ceramic fibre seals on the door of the boiler. If necessary, order new replacement gaskets from the retailer or contact an authorised service centre to carry out the operation.



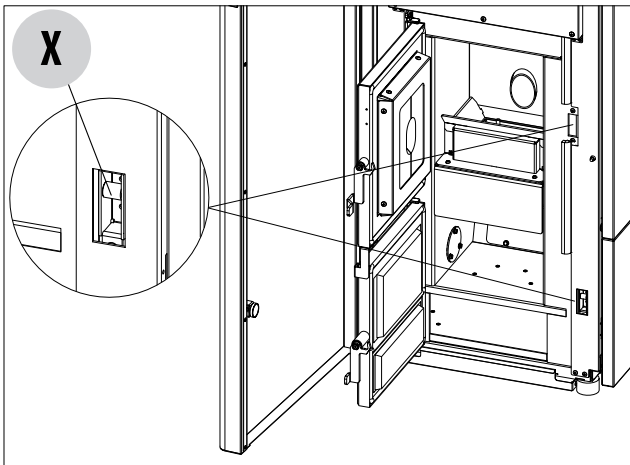
#### **ATTENTION:**

*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 authorised service centre for end-of-season cleaning and maintenance, as they will carry out all of the previously mentioned work and inspect the stove components.*

### PERIODICAL CHECK OF THE DOOR CLOSURE

Make sure the door closure ensures a correct sealing action (with the "paper sheet" test) and that when the door is closed, the closing block (X in the figure) does not protrude from the sheet metal to which it is secured. For some products it will be necessary to disassemble the cladding to be able to assess the anomalous protrusion of the block when the door is closed.



### 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 tank 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).

## 17-CLEANING AND MAINTENANCE

### REPLACING THE OVERPRESSURE DISCHARGE FOR THE COMBUSTION CHAMBER

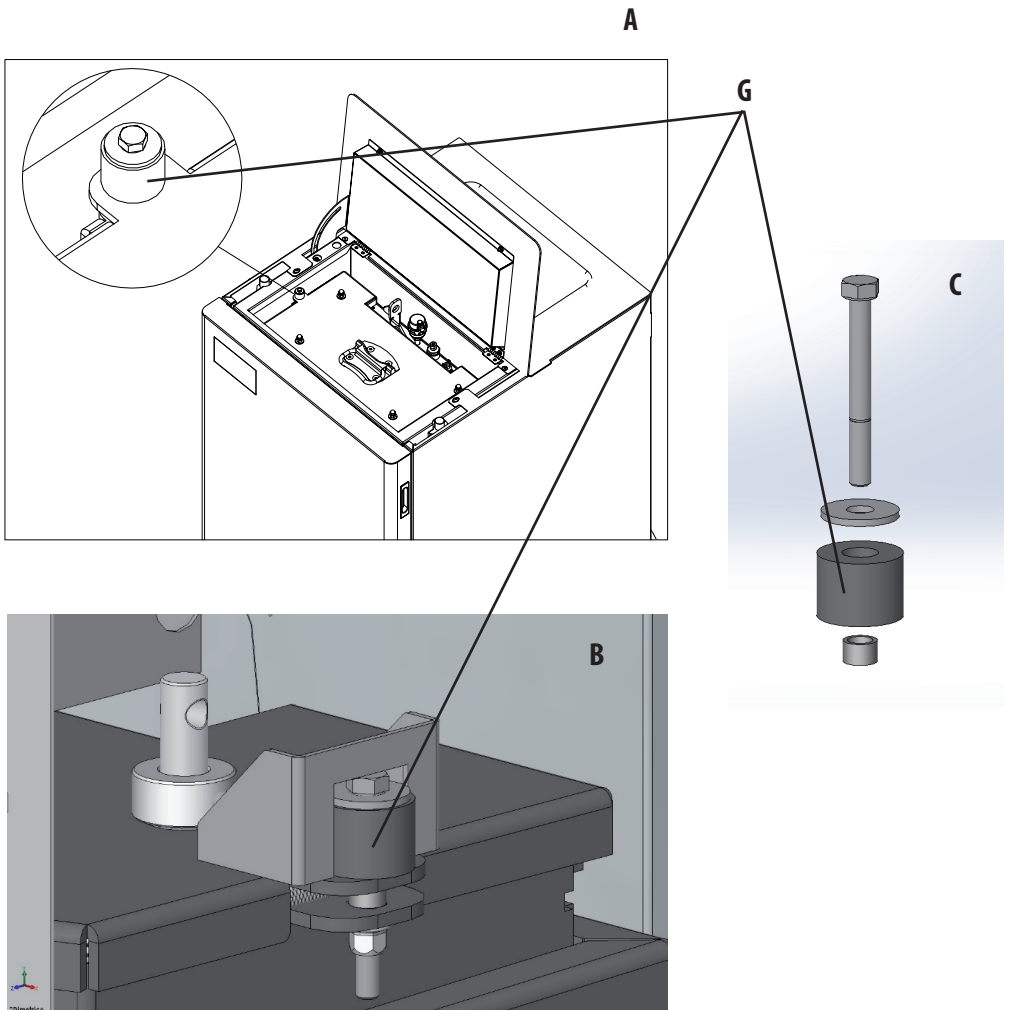
Overpressure rubber bushing "G" of the combustion chamber (fig. A) may get worn and/or damaged, it is therefore necessary to replace it once a year to ensure correct system operation.

To replace it, follow the instructions below

- Raise the front door and if necessary remove the side panel
- 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 this occurs (the image is indicative).



## 17-CLEANING AND MAINTENANCE

### 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	15 DAYS	30 DAYS	90 DAYS
Brazier	•		
Ash pan	•		
Trolley (optional)		•*	•*
Lower compartment		•*	•*

#### \*SEE PARAGRAPH "CLEANING THE TROLLEY" (in the trolley manual)

#### Cleaning performed by the Qualified technician

PARTS/INTERVAL	7 DAYS	15 DAYS	60 DAYS	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



**ATTENTION!!**

**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.

## 18-FAULTS/CAUSES/SOLUTIONS



### ATTENTION:

*All repairs must be carried out exclusively by a specialised technician, while the boiler is completely cold and the electric plug is disconnected.*

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 stove stops automatically	The pellet hopper is empty	Fill the tank with pellets
	The pellets are not fed	See the previous anomaly
	The pellet temperature safety probe has been triggered	Let the stove cool down, reset the thermostat until the problem is resolved and switch the stove back on. If the problem persists, contact technical assistance.
	Chrono active	Check if the chrono setting is active.
	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
Water tank temperature too high	Check correct operation of the water circulation pump and the hydraulic system in general.	

## 18-FAULTS/CAUSES/SOLUTIONS

ANOMALY	POSSIBLE CAUSES	SOLUTIONS
The stove runs for a few minutes and then goes out	Start-up phase is not completed	Repeat start-up
	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
Pellets accumulate in the brazier, the glass of the door gets dirty and the flame is weak	Insufficient combustion air	Make sure that the air inlet in the room is fitted and clear. Check that the combustion air filter on the Ø 5 cm air inlet pipe is not clogged. Clean the brazier and check that all the holes are clear. Perform a general cleaning of the combustion chamber and the smoke duct. Check the condition of the door gaskets.
	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 stove	Check the mains voltage and the protection fuse
	Motor block caused by clogging.	Perform a general cleaning of the combustion chamber and the smoke duct.
	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
The stove does not run	No power supply	Check that the plug is inserted and the main switch is in the "I" position.
	Pellet or water probe fault	Wait for the pellet or water tank to cool down and restart the stove
	Blown fuse	Replace the fuse.
	Faulty spark plug	Check the spark plug and replace it, if necessary

## 18-FAULTS/CAUSES/SOLUTIONS

### ANOMALIES RELATED TO THE HYDRAULIC CIRCUIT

ANOMALY	POSSIBLE CAUSES	SOLUTIONS
No increase in temperature with stove in operation	Incorrect combustion adjustment.	Check recipe
	Boiler / system dirty.	Check and clean the boiler.
	Insufficient stove power	Check that the stove is properly sized for the requirements of the system
	Poor pellet quality	Using pellets from the producer
Condensation in boiler	Incorrect boiler or pump temperature setting	Set the stove or the pump to a higher temperature
	Insufficient fuel consumption.	Check recipe
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 it is blocked.	Free up the circulator by removing the plug and turning the shaft with a screwdriver.
	Circulator does not go round.	Check the electrical connections of the circulator; replace if necessary.
	Radiators have air in them	Vent the radiators
Hot water is not provided	Circulator (pump) blocked	Free the circulator (pump)

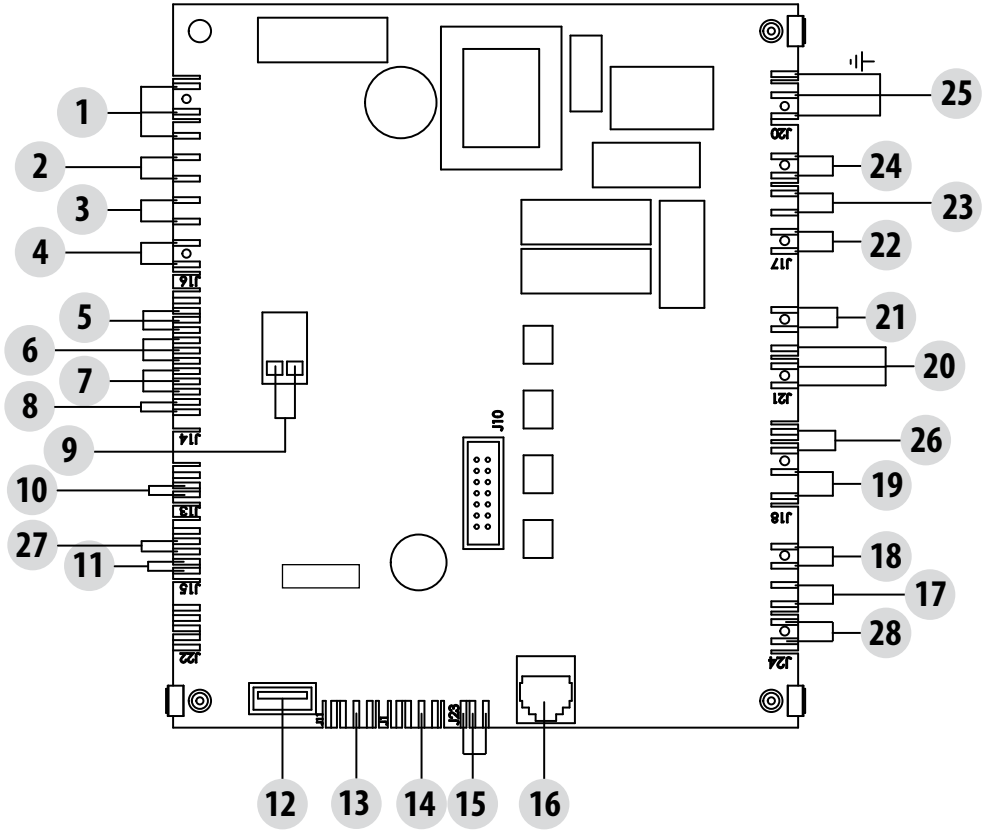


*If the stove is NOT used as described in this instruction manual, the manufacturer declines all responsibility for damage to persons and property that may arise. The manufacturer furthermore refuses to accept responsibility for damage to persons and property arising from the failure to observe all the rules contained in the manual and in particular:*

- *The operations in italics must be carried out by specialised personnel from the manufacturer*
- *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 stove to an efficient smoke expulsion system.*
- *First, check that the environment where it is to be installed is properly ventilated.*



# 19-CIRCUIT BOARD



## MOTHERBOARD WIRING KEY

- |                                    |   |
|------------------------------------|---|
| 1. AUX RELAY (C-NO-NC)             | 15. PWM PUMP CONTROL                                |
| 2. HOME AUTOMATION CONTACT         | 16. CONTROL PANEL                                   |
| 3. ROOM PROBE                      | 17. WATER TEMPERATURE OVERLOAD CUT-OUT              |
| 4. AUX INPUT                       | 18. HOPPER OVERLOAD CUT-OUT                         |
| 5. SMOKE FAN ENCODER               | 19. BRAZIER CLEANING                                |
| 6. GEAR MOTOR ENCODER              | 20. 3-WAY VALVE                                     |
| 7. PRESSURE TRANSDUCER             | 21. CLEANING PUMP SUPPLY                            |
| 8. WATER PROBE                     | 22. GEAR MOTOR                                      |
| 9. SMOKE TEMPERATURE PROBE         | 23. SMOKE FAN                                       |
| 10. PELLET LEVEL SENSOR (OPTIONAL) | 24. SPARK PLUG                                      |
| 11. AIR FAN PROBE                  | 25. SWITCH  |
| 12. SOFTWARE UPDATE                | 26. CLEANING TURBOLATORS                            |
| 13. EXPANSION                      | 27. BRAZIER CONTACT                                 |
| 14. SERIAL COMMUNICATION           | 28. THERMOSTATS / PRESSURE SWITCHES / SAFETY SWITCH |

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







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