FERLUX®
CHIMENEAS Y BIOMASA

Calidez de Vida

TECHNICAL MANUAL

1. GENERAL WARNINGS AND SAFETY

The installation must be carried out by authorised personnel, who must provide the purchaser with an installation declaration in which they assume full responsibility for the final installation.

Likewise, the commissioning of the product must also be carried out by authorised personnel, who must provide the purchaser with a product commissioning declaration, in which they assume full responsibility for the final installation and operation of the installed appliance.

FERLUX shall not be held liable in the event of failure to comply with these precautions.

All national and local regulations and European standards must be complied with when the appliance is being installed. All national and local regulations and European standards must be complied with during operation of the appliance. FERLUX, S.A. accepts no liability in the event of non-compliance with these regulations.

Our appliances are manufactured and tested controlling all their parts, following the European Union safety directives, with the purpose of protecting both the user and the installer against possible accidents. The technical staff is urged to pay special attention to the connections, wiring and electrical voltage at the time of each operation on the appliance.

Any liability of the manufacturer, whether contractual or extra-contractual, for damage caused to persons, animals or things due to installation, adjustment and/or maintenance errors is excluded.

This heater must only be used for its intended purpose.

Certain extreme weather conditions, such as strong winds, hailstorms or risk of frost, may cause the chimney draught to be insufficient. Due to the potential risk of smoke backfire, it is not recommended to use the appliance in such circumstances. This cannot be considered as a defect or malfunction of the appliance.

For your safety it should be noted that:

- The user of the cooker must be an adult and responsible person. This appliance is not intended for use by persons with limited physical, sensory or mental capabilities or without any experience or knowledge. Children should be supervised and instructed to ensure that they do not play with the appliance or come into contact with hot work surfaces..
- The mains plug and the mains socket must be easily accessible at all times. It is strictly forbidden to operate the appliance with a damaged mains cable. If the mains cable is damaged, it must be replaced immediately.
- Do not disconnect the mains plug from the mains when the appliance is switched on..
- The door on the heater must always remain closed when the heater is in operation.
- Evitar el contacto con las zonas del aparato que tienden a alcanzar una alta temperatura durante su funcionamiento, especialmente con el cristal y la puerta.
- Avoid coming into contact with areas of the unit that reach a high temperature when in operation, especially with the glass and the door.
- Following an extended period of disuse, before turning the unit on, check that there are no obstructions in the smoke extraction ducting [1].

[1] In extreme cases or breakdown, safety systems may intervene. In this case, contact the Technical Support Service. DO NOT DEACTIVATE THE SAFETY SYSTEMS.

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¡¡¡ATENTION!!!
THE INSTALLATION MUST BE CARRIED OUT BY AN AUTHORISED PERSON WHO MUST PROVIDE THE PURCHASER WITH A DECLARATION OF CONFORMITY FOR THE INSTALLATION IN WHICH THEY ACCEPT FULL RESPONSIBILITY FOR THE FINAL INSTALLATION AND, CONSEQUENTLY, THE PROPER OPERATION OF THE INSTALLED UNIT. FERLUX SHALL NOT BEAR ANY RESPONSIBILITY IN THE EVENT THAT THESE PRECAUTIONS ARE SHOWN TO HAVE NOT BEEN MET

1.1 LEGAL WARRANTY

In order to be able to enjoy the legal warranty in accordance with EEC Directive 1994/44EC, a user must fully comply with all of the instructions contained in this manual, and especially:

- Must always act within the limits of use of the heater.
- Must always perform ongoing and thorough maintenance.
- Must authorise the use of the heater only to persons of proven capacity, attitude, and who are properly trained for such a task.

The manufacturer accepts no responsibility, legal or penal, directly or indirectly, for:

- An installation that is not in full compliance with the regulations in force in the country as well as safety directives.
- Non-compliance on the part of unqualified and/or untrained personnel.
- Usage not in compliance with safety directives.
- Modifications and repairs not authorised by the Manufacturer and made to the unit.
- Use of spare parts that are not original or are not specified for that specific model of heater.
- Insufficient maintenance.
- Exceptional circumstances.

1.2 SPARE PARTS

Only use original spare parts.
Do not wait for parts to be damaged before proceeding to replace them. Replacing a worn component before it breaks helps prevent accidents caused by the sudden breaking of these components, which could cause harm to people or objects.

2. INSTRUCTIONS FOR INSTALLATION

The installation of FERLUX wood pellet heaters must be performed solely by qualified personnel who follow the instructions from the manufacturer and in accordance with any and all regulations in force that may be applicable. Failing this, FERLUX is not responsible in the event of any accident.

The heater should be positioned in such a way that the route to the vertical flue connection is as short as possible..

2.1 PREVENTION OF DOMESTIC FIRES

- The manufacturer's instructions for installation and use of the heater must be observed, and all relevant safety regulations and standards must also be complied with. Otherwise, FERLUX accepts no liability in the event of an accident..
- It is recommended to keep any combustible or flammable elements such as wooden beams, furniture, curtains, flammable liquids, etc. away from the heat source (at least 1.5m away). A protective layer of insulating and non-combustible material should be placed in the area of the heat source where flammable or heat-sensitive coatings are present.
- It is necessary to carry out regular cleaning of the heater and of the smoke ducting, since soot and other accumulated combustion residue could end up entering the combustion area
- In the event that the chimney catches fire, use the appropriate fire extinguishing systems to put out the fire or call the fire service for their intervention.

2.1.1 PROTECTING THE FLOOR

f your flooring is flammable (parquet, floating platform) or sensitive to heat, it is necessary to place a protective layer that separates the heater from the floor.
This protection must be make of a material that is resistant to fire, such as marble, steel plating, slabs, etc. This material must be capable of bearing load without being deformed or broken by the weight of the heater.
This protection must be at least two mm thick and must project at lea.

2.1.2 MINIMUM SAFETY DISTANCES

	Safety distances to flammable material	Safety distances to non-flammable material
A Distance from the wall to the smoke outlet	200 mm	100 mm
B Distance from heater to side wall	200 mm	100 mm
C Distance to flammable materials	1500 mm	750 mm
D Flue-to-ceiling distance	500 mm	200 mm

2.1.3 MEASUREMENTS TO PIERCE BUILDING ENVELOPES

	Thickness of insulation [mm]	Diameter of holes to be made (mm) for an outlet pipe measuring Ø80 mm
Wall of flammable wood, or with flammable parts	100	280
Wall or ceiling of cement	50	180
Wall or ceiling of bricks	30	140

2.2 SMOKE DUCTING OR CHIMENEY

When installing the flue pipe, the following points must be taken into account:

- **The flue system must be unique for each heater** (smoke evacuation in common with other appliances is not allowed).
- The smoke evacuation route shall always be as short as possible (never exceeding 2 metres horizontally) and always aiming for maximum verticality.
- The internal section of the flue pipe should be uniform and preferably circular. In the case of a square or rectangular cross-section, the edges should be rounded with a minimum radius of 20 mm, the curves should be regular and without discontinuities, ensuring that the deviations of the layout with respect to the axis do not exceed 45°.
- The installation of valves or closures that may obstruct the passage of smoke is strictly prohibited.
- Horizontal chimney sections should be avoided, as this causes a loss of load as well as fouling and requires more frequent cleaning of the flues. Where this is unavoidable, a minimum upward slope should be given and “elbow with register” should be installed at changes of direction to allow access for cleaning without having to dismantle the whole installation. The installation must be carried out in such a way as to ensure periodic cleaning without the need to dismantle the entire flue.
- For the installation of the flue pipe, the applicable national and local safety regulations and minimum distances as well as the European standards must be observed.

LIMITATIONS	CON TUBO Ø 80 mm	CON TUBO Ø 100 mm
Horizontal stretches with a minimum incline of 5%	2 m	2 m
Minimum length (obligatory in vertical stretches)	2 m	3 m
Maximum length (with two 90° bends)	3 m	8 m

If the installation has more than 3 metres of Ø 80 mm flue pipe, an extension from Ø 80 mm to at least Ø 100 mm would have to be made.

It is recommended that this extension for these vertical metres be made if possible even before the 3 metres are reached..

2.3 SMOKE OUTLET TERMINATION

The smoke outlet must always end vertically and will have a device at the top which we call the end cap and which must comply with the following requirements:

- The flue cap must prevent rain, snow or foreign bodies from entering the chimney, otherwise it could lead to **Er02** or **Er41**.
- In addition, the coping must be windproof and above the ridge to ensure the dispersion and dilution of the combustion products. If it is not installed according to these indications, it can cause **Er02** or **Er41**.
- The installation of horizontal outlet hoods or deflectors, especially those used for gas boilers, is strictly forbidden, as they may cause combustion problems, the installation of which could result in **Er02** or **Er41**.

It is strictly forbidden to cover the chimney with bird netting or similar.

2.4 VENTILATION AND AIR INTAKE

- In the room where the cooker is installed, we must ensure that the necessary air is available at all times to guarantee good combustion, as well as optimum conditions of habitability inside the room.
- Wherever possible, the outside air inlet should be connected to the room where the heater is installed. It must be ensured that the outside air inlet cannot be obstructed.
- Two heater, a fireplace and a heater, should not be used in the same environment ... as the draught from one could interfere with the operation of the other.
- Collective ventilation ducts are prohibited.
- The combustion air inlet may not be connected to any air installation, nor is it recommended to take air directly from the wall inlet.

  If there is no other way than to connect the primary air intake directly to the wall intake, it should be of a larger diameter, in order to avoid all the problems caused by the lack of primary air intake. The air inlet in the wall should not have any type of mosquito netting or similar, as this reduces the primary air intake to the appliance with the consequences that this has on the ignition and operation of the appliance (**Er41**)

  The extensions to be made are:

  - When the primary air inlet on the appliance is Ø 40 mm, it must be extended to Ø 90 mm.
  - When the primary air inlet on the appliance is Ø 60 mm, it must be extended to Ø 110 mm.

IN CASE OF DUCTING, AVOID ANY KIND OF ELBOW.

THE INSTALLATION OF COAXIAL TUBING IN ANY FERLUX APPLIANCE IS STRICTLY FORBIDDEN.

2.5 ELECTRICAL CONNECTION

For the installation of the heater we need to have a 230V socket with earth connection, capable of supporting at least 450W of power for ignition and with its own differential.

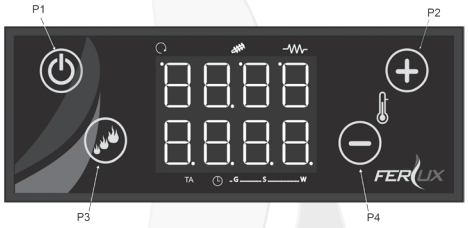
By law, the installation must be earthed and fitted with a residual current circuit breaker. It must be ensured that the power supply cable, in its final position, does not come into contact with hot parts.

The socket outlet must be single-phase with phase, neutral and earth.

If the mains voltage is not sinusoidal (e.g. generator sets or other equipment) the heater may give errors. The user will have to install the appropriate device to achieve a pure sine wave with a voltage between 220-230V

3. INSTRUCTIONS WHEN USING THE CONTROL PANEL

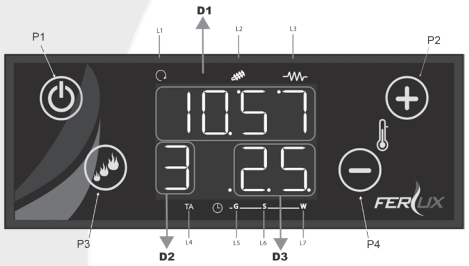
Below, an image is shown of the display that is made up of four flashing lights and two displays with four digits on each one, also including LEDs that provide information, as shown below:



KEY	FUNCTION	
	CLICK	LONG PRESS
P1	Information/Exit Menu	On / Off / Reset alarms
P2	Adjust thermostat (+) / Increase	
P3	Adjust combustion power	First screw fill
P4	Adjust thermostat (-) / Decrease	

The upper display only shows one thing, whereas the lower screen displays varying information depending on the situation. We have classified the displays at each time so that they can be seen below. Depending on the menu item that is open, the display could show the following:

- **Display D1:** Time, operational status, errors, Menu, Submenu, and values of parameters.
- **Display D2:** Power, codes of parameters (this is only shown when the heater is operating).
- **Display D3:** Room temperature.

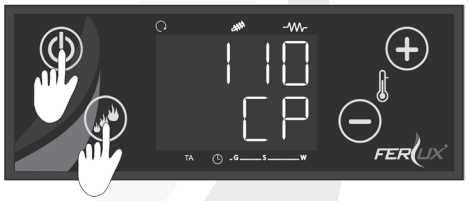


INTERPRETING THE LEDS WHEN THEY LIGHT UP			
L1			LED lit: the room fan is switched on
L2			LED lit: the screw in ON
L3			LED lit: the ignition coil is switched on
L4			LED lit: ambient temperature reached
L5		G	LED lit: daily scheduling is activated
L6		S	LED lit: weekly scheduling is activated
L7		W	LED lit: weekend scheduling is activated

If you cannot see the parameters indicated above on the display (e.g. the display does not show the time and temperature in the usual way) or the keys do not give access to the functions mentioned in this manual (e.g. you cannot use the keys (P2) or (P4)), it could be that during the manipulation of the display the setting.

THE DISPLAY CONFIGURATION IS CHANGED BY PRESSING THE SAME TIME IN THE WAY LONG (for more than 30 seconds) (P1) AND (P3).

IT WILL BE CORRECTLY CONFIGURED WHEN "110" APPEARS ON THE TOP DISPLAY, AS SHOWN IN THE IMAGE BELOW.



3.1 MENU LEVEL 1

The options that the user can access from the 'Main Screen' (the screen normally displayed when no buttons have been pressed) are known as 'MENU LEVEL 1.

3.1.1 INFORMATION

Each time you click the button, you can see the on the lower display an abbreviation for the name of a parameter, and on the upper screen, you can see its value.

The parameters displayed in the order that they appear are:

tF: temperature of the smoke (°C)

tA: room temperature (°C)

FL: primary air flow speed

UF: revolutions of the fume extraction turbine / voltage of the fume extraction turbine

Co: On time of the screw

St2: time remaining until routine maintenance (h)

FC: firmware code and revision

514: manufacturer item codeX

To return to the main screen, refrain from pressing the button (P1) to return to the main screen, refrain from pressing the button.

3.1.2 ADJUSTING THE POWER

This heater has five power levels at which it can operate, where 1 is the lowest power and 5 is the highest. These levels can be selected by the user by clicking the button (P3).

As well as being able to choose between the five power levels, the heater also gives us the choice of choosing an automatic operation mode, `A´. In this mode, the heater selects the best power level for the moment with respect to the preset temperature, modulating itself and thus achieving a more constant temperature, faster heating, and lower fuel consumption.

Push the button (P3) and the lower display D2 will begin to flash. With each click of this button, the power level is increased and finally automatic mode will appear.

In order to set the value desired, refrain from pressing the button (P3), it will then stop flashing and the power value desired shall be selected

3.1.3 REGULATING THE ROOM TEMPERATURE

Each user has the option of selecting the desired room temperature between 10 ºC and 40 ºC. When a setpoint temperature is established, the heater compares this with the temperature detected by the room probe.
As long as the setpoint temperature is above the temperature that can be measured by the room probe, the heater will operate at the selected power

When the room temperature approaches the set temperature, the heater switches to modulation. If the room probe temperature rises by more than 3°C during modulation, the heater switches off and goes into standby mode; the heater will switch back on when the room temperature falls below the desired room temperature (setpoint).

To change the setpoint temperature, click on the button (P2) or (P4), in the lower display (D3), the already selected setpoint temperature flashes, which will be increased or decreased by “clicking” on the keys (P2) or (P4) respectively. After 5 seconds without touching any buttons, the new value is saved and the display returns to the main screen.

3.1.4 RESETTING ERRORS, TURNING THE HEATER ON AND OFF

If you long press the (P1) button, the heater´s state will change from the one it was in before the button was pressed.
The following circumstances could arise:

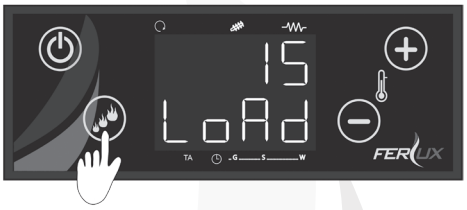
STATE BEFORE LONG PRESS	STATE AFTER LONG PRESS
STOP (no alarm) (The display shows the time and the room temperature)	ON (The display shows Chec, ON1, ON2,...)
STOP (with alarm) (The display shows Er02 [example] and ALT intermittently)	STOP (no alarm) (The display shows the time and the room temperature)
ON, NORMAL, MODULATION OR STANDBY	OFF
OFF	`rec´(Turn on recovery)
“rec” (Turn on recovery)	OFF

3.1.5 LOADING THE PELLET SCREW

This function allows you to fill the screw for the first time that the heater is going to be started up and also when, for whatever reason, the fuel tank has been completely emptied.

This is done by pressing the (P3) button, with the loading screw being activated continuously.

Whilst the lower display shows `**LoAd**´, the upper display will show for how long it has been operating. Stop loading when the pellets fall uninterrptedly into the brazier, which can be achieved by pressing any button. For safety reasons, loading is automatically interrupted after 300 seconds.



AFTER CARRYING OUT THIS OPERATION, BEFORE PROCEEDING TO TURN THE HEATER ON, IT IS NECESSARY TO EMPTY THE BURNER AND REPLACE IT CORRECTLY. IF IT IS NOT CORRECTLY REPLACED, IT COULD CAUSE DIFFICULTY WHEN TURNING THE UNIT ON

3.2 MENU LEVEL 2

The functions that can be accesed in a submenu that is reached by long pressing (P3) and (P4) (P4) are known as `MENU LEVEL 2.

The functions of this submenu are as follows:

rAir: Regulation of the fan.

Cron: Timer to programme the heater to turn on and off.

orol: Clock.

TELE: Remote control.

rCLr: Cleaning reset

TPAr: Technical menu

When you push the (P3) and (P4) buttons at the same time, the first function of `menu level 2´will appear on the upper display (D1). Using the (P2) or (P4) buttons, the user can move around and select the different functions. Once the desired function has been chosen, click on the (P3) button. If you wish to return to the main screen, press the (P1) button.

After around 40 seconds without any button being pressed, the display will return to the main screen.

3.2.1 [rAir] REGULATION OF THE FAN

This menu allows you adjust the power of the heating fan.
There are seven power levels above the default power level setting and seven levels below the default power level setting.
To access the function `**rAir**´ long press the (P3) and (P4) buttons until `**rAir**´, inmmediately after this, press the (P3) button and figure `0´. Press the (P3) button again and the `0´ will flash. With the (P2) or (P4) buttons, select the desired power for the fan, either faster or slower than the default power level setting.

3.2.2 **[Cron]** PROGRAMMING SCHEDULES

This function allows on/off times to be set for the heater.

This function has two sections, one to choose the scheduling mode that you wish to activate (ModE), and the other for programming the schedules for each one of the modes (ProG).

In order to access this function, long press the (P3) and (P4) buttons. `rAir´ will appear on the upper display (D1), then press the (P2) button and `Cron´ will appear, meaning that this function has now been accessed. Now, immediately press the (P3) button, enter into the programming mode that was mentioned previously (ModE) or (ProG), which can be navigated with the (P2) or (P4) button and then selected with (P3) button..

(ModE): This allows the **"Cron"** function to be deactivated or for a choice between three options:

Mode	LED
Gior: Daily Scheduling	G S W
SEtt: Weekly scheduling	G S W
FiSE: Weekend scheduling	G S W
OFF: The heater does not have any schedule activated	G S W

When entering (ModE), press the (P3) button and on the upper display (D1), the option that is currently active will be shown (which could be: Gior, SEtt, FiSE or OFF). In order to change which option is active, press the (P3) button again to make the option begin to flash, use the (P2) or (P4) buttons to select the desired option, press the (P3) button again, and the option currently flashing will be selected. Press the (P1) button repeatedly to return to the main screen.
If you accidentally press the (P1) button without having confirmed the option or if no button is pressed for a certain time, the display will return to the main screen and the option that was previously selected will remain active.

(ProG): This function allows scheduling of the three modes offered by the electronic control board, with up to three time slots that can be scheduled (three on as well as three off) each day:

Daily (**Gior**): each day of the week is scheduled independently.

Weekly (**SEtt**): a single schedule is created that is applied to every day of the week.

Weekend (**FiSE**): in this case, two schedules are created, one for Monday to Friday and another for the weekend (the latter coming into force on Saturday and Sunday.

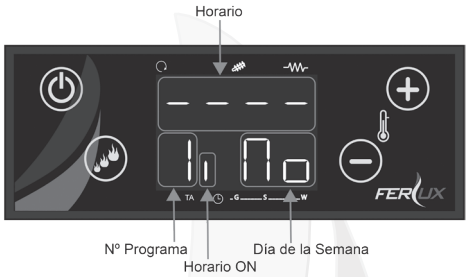
SETTING	DISPLAY
(Gior): daily scheduling	**Mo**: Monday **tu**: Tuesday **UE**: Wednesday **tH**: Thursday **Fr**: Friday **SA**: Saturday **Su**: Sunday
(SEtt): weekly scheduling	**MS**: from Monday to Sunday
(FiSE): weekend scheduling	**MF**: from Monday to Friday **SS**: Saturday and Sunday
Time on (ON)	
Time of (OFF)	

In order to configure each schedule, you have to set the ON time and the OFF time.

ON MENU SCHEDULING

1. Once you have entered the (ProG) menu, use the (P2) or (P4) buttons to choose one of the three modes that you wish to schedule and confirm the selection by pressing the (P3) button.

2. Once you have selected the mode, it will appear on the display as shown below:

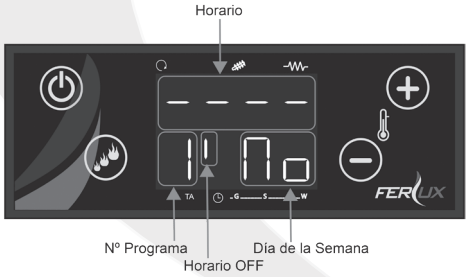


3. After this, long press the (P1) button and on the upper screen (D1), the hours and minutes of the ON state will appear as shown below:

4. To adjust the on time, click on the (P3) button and the hours will begin to flash, with the (P3) button, change from hours to minutes and viceversa. To adjust the hour and/or minute values, use the (P2) or (P4) buttons.
5. Once you have set the schedule, push the (P3) button again to save the desired value. The screen will finally be left as shown below.

OFF MENU SCHEDULING

To schedule the unit to turn off, you should proceed in the same manner as previously instructed. Once at stage two of the previous section and after having chosen the scheduling mode desired, you must press the (P2) button. After this, the display will show the following:



After this, repeat the previous procedure until point three.
For the days of the week, do the same, repeating the previous procedure.
If the mode selected was Weekly or Weekend, the method of proceeding is the same.
The minutes can be changed with intervals of one quarter of an hour (such as, for example: 17:00, 17:15, 17:30, 17:45). There is a special adjustment for times between 23:45 and 23:59, for which it is possible to make minute by minute adjustments.

EXAMPLE OF SCHEDULING
In order to keep the heater lit for two days, that is, from Monday to Tuesday, set the scheduling time slot for Monday to OFF at 23:59 and for the scheduling time slot for the following week, in this case, Tuesday, to ON at 00:00.

SCHEDULING MONDAY			
ON	17:45	OFF	23:59
SCHEDULING TUESDAY			
ON	00:00	OFF	12:30

3.2.3 [oroL] CLOCK

In this function we configure the date and time. This configuration is necessary in order to be able to program the cooker to switch on and off.
To display this menu on the screen, access submenu 2 as mentioned above.
Once the following menu is displayed on the screen, proceed as follows:

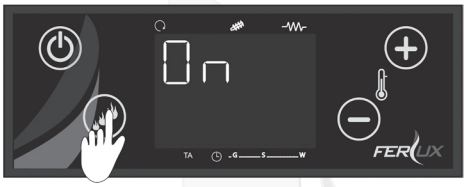
Press the (P3) button and the screen will immediately show the following:

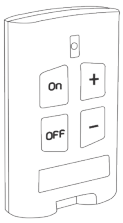
Press the (P3) button again and the hours will begin to flash. If you continue to press this button, the minutes or days of the week can be adjusted. When the hours, minutes, or days of the week are flasing, use the (P2) or (P4) buttons to adjust these values.
To exit this function, press (P1) button or wait a few seconds. If you push this button before selecting and confirming, the information will not be saved.

3.2.4 [tELE] REMOTE CONTROL

This function is used to activate and deactivate the remote-control functionality.
This menu is disabled by factory default (OFF). In order to enable remote control functionality, it is necessary to activate this function (ON).
The procedure is as follows:
1. Go to the [tELE] function and press the (P3) button, as shown below

2. After this, the following screen will appear, press the (P3) button and use the (P2) or (P4) to select the ON option to activate the remote control. To confirm, press the (P3) button again.





The control unit recognizes the remote control signal (remote control) by means of a code, which can be modified.
For a correct transmission between remote control and control card the transmission code has to be the same in both devices.
If you have other devices in the home that may cause interference in the transmission between the remote control and the control card of the stove, you must change the transmission code following the instructions given below:

ABOUT REMOTE CONTROL

1. It is possible to choose 6 combinations for the remote control signal at different frequencies.

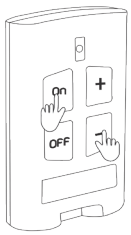
2. We start by pressing two buttons on the remote control for more than 10 seconds: we keep pressing these two buttons that can be combinations (on +), (on -), (on off), (+ -), (+ off) o (off -).

3. Then the upper red LED starts flashing rapidly (100 ms on and 100 ms off).

4. After 10 seconds, the led remains on.

5. To confirm the change, release the buttons after 5 seconds. If the buttons are not released within 5 seconds the LED goes off and the frequency change is not made.

6. Then turn off the power to the appliance, and reconnect it after about 10 seconds. When you reconnect the power to the appliance, keep any button on the remote control pressed until you hear a “beep”

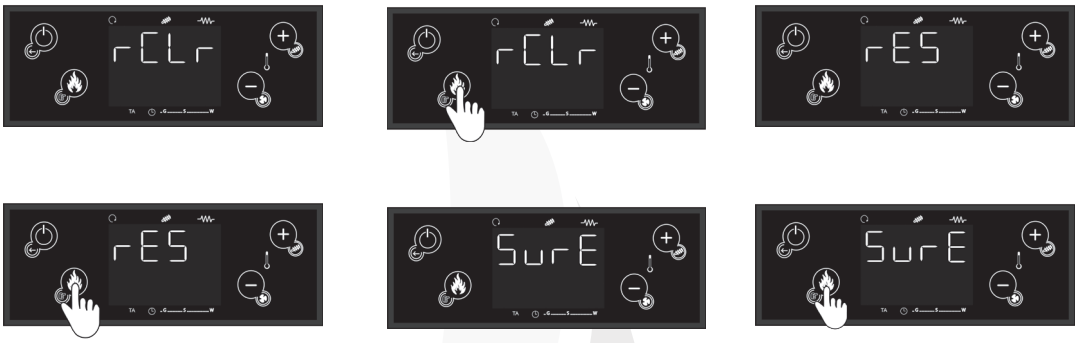


3.2.5 [rCLr] RESET DE LIMPIEZA

This function appears when the hour meter has reached the set hours for maintenance.
Cleaning the inside of the combustion chamber, accessing, cleaning and changing blankets in the cleaning registers, cleaning the flue gas outlet, etc.

Once all these tasks have been completed, go to the “rCLr” menu, click on the (P3) button, the message “rES” appears on the upper display, press the button again (P3) and “SurE” appears flashing, press the button again (P3) the counter is reset to zero and the message disappears “CLr”.

To return to the main screen, we press the button (P1) repeatedly.
The following is a sequence of what the procedure would look like:



3.2.6 [tPAr] TECHNICAL MENU 2

This function corresponds to the technical menu.
Access to this menu is password-protected, so it is necessary to proceed as follows:

PASSWORD: 1357
Once we are in the “tPAr” menu, we press the button (P3), then the top display shows scripts, as shown in the second image.

Press the button (P3), appears “0---” in the first digit on the left and with the buttons (P2) or (P4) set the number 1, then press the button again (P3) and we get “10--”, again with the buttons (P2) or (P4) we put the number 3, as shown below.

Press the button again (P3) and we get “130-”, with the buttons (P2) or (P4) set the number 5 and press the button again (P3),1350” is finally displayed on the upper display with the buttons (P2) or (P4)we set the number 7 and finally we press the button (P3) this unlocks the technical menu and displays the parameter blocks that manage the device.

The following is a description of the parameters to which you have access as a service technician:

tP03 MENU FAN HEATING (TANGENTIAL)

PARAMETERS	*DESCRIPTION*	*MAX.*	*MÍN.*
F01	Volt. tangential turbine at Power 1	230	100
F02	Volt. tangential turbine at Power 2	230	100
F03	Volt. tangential turbine at Power 3	230	100
F04	Volt. tangential turbine at Power 4	230	100
F05	Volt. tangential turbine at Power 5	230	100

tP04 MENU THERMOSTATS

PARAMETERS	*DESCRIPTION*	*MAX.*	*MÍN.*
Th07	Excess smoke temp. modulation	900	5
Th08	Safety shutdown due to excess smoke temperature (Er05)	900	5

tP05 MENU TIMERS

PARAMETERS	*DESCRIPTION*	*MAX.*	*MÍN.*
T10	Intervention time of the safety pressure switch	900	1

tP08 MENU ALLOTMENTS

PARAMETERS	*VALUE*	
A01	1	Once the ambient temperature is reached, it enters Normal/Modulac. (It never goes to standby, it always remains in modulating mode).
	2	Once room temperature is reached, it enters modulation. If the setpoint temperature exceeds 3ºC, it enters Standby mode
A64	0	Auger and fan calibration not enabled
	1	Auger and fan calibration enabled
P25	0	Management of fume extraction turbine without encoder
	2	Management of fume extraction turbine with auto encoder
	If P25=2 the system works with encoder. In case of failed regulation or lack of encoder signal, the system enters in lockout with Er07/Er08. If it enters Er07 by resetting the alarm, the system can be restarted in P25=0 mode and would work without encoder	

tP11 MENU COUNTERS

CODE	*DESCRIPTION*	
Co.04	Number of ignition attempts made	
Co.05	Number of failed ignitions	
Co.03	Heat hours produced by the cooker in the normal, modulating and safety states	cientos de horas 0002 37 horas 57 minutos
rES	Reset all counters: resets all counters to zero	
rSvC	Menu to reset the function “Maintenance 1 System”	

tP12 MENU EXIT TEST

CODE	*DESCRIPTION*	
To.01	Test auger motor	Off - On
To.02	Test tangential turbine (fan heater)	0 - 230 V
To.03	Smoke extraction turbine test (on voltage, encoder deactivated)	Off - On (V)
	Smoke extraction turbine test (with activated encoder)	200 - 3000 (rpm)
To.22	Ignition resistance test	Off - On

4. USE AND FUNCTIONALITY OF THE HEATER

4.1 ADVICE AND CAUTIONS

- Before turning the device on, make sure that there is no flammable material inside or near the heater that could enter the combustion process.
- Use fuel that is recommended by the manufacturer.
- Do not use the unit as an incinerator or for any other use apart from the use for which it has been designed.
- The external surfaces of the heater, especially the glass, reach high temperatures when touched, meaning that it is necessary to take the proper precautions to avoid burns.
- Consult this instruction manual if you are uncertain about any point. Do not manipulate the display until you are sure which procedure you must follow.
- Pay special attention to the alarms and messages that are shown on the display. It is even recommended to make a note of them, which will make the work of the Technical Support Service easier in the event that they are involved.
- Before turning on the heater, make sure that: nothing is obstructing the air inlet pipe, the burner is properly positioned and clean, the ashtray is in place, and the front door that provides access to the combustion chamber is properly closed. The door must only be opened when the heater is stopped and cold.
- It is absolutely forbidden to remove the protective grille that is located in the tank.
- Do not touch the heater with wet hands because it is an electrical device.

DURING OPERATION, THE APPLIANCE UNDERGOES CONSIDERABLE EXPANSION PHENOMENA BETWEEN HEATING AND COOLING, SO THAT IT IS ABSOLUTELY NORMAL TO HEAR THE CLICKING SOUND PRODUCED BY THE STEEL BODY.
IN NO CASE CAN THIS BE CONSIDERED AS A DEFECT OF THE APPLIANCE.

4.2 FIRST LIGHTING

I. Make sure that the heater is properly connected to the mains power supply.
II. Following this, turn on the general switch on the heater, which is located on the rear part of the heater next to the connection for the cold air intake.
III. After this, the time sill appear on the upper display (D1) and the temperature on the lower display (D3).

IV. At this time, the error Er11 could also appear on the display, which means that the time and date are not updated, which can occur after a long period of not being connected to a mains power supply. See chapter 9 `ERRORS AND SOLUTIONS´ in order to find out how to continue, because if there is an error on the screen, the unit cannot be properly started up.
V. To turn on the heater, hold the (P1) button pressed down until a beep is heard. At this point, the display will show the following.

At this time, the electronic control board will perform a “ChEc” test on the heater, during which it will carry out a range of verifications. If the control board detects any anomaly, it will not start up and will instead give the corresponding error message. If everything is correct, the heater will begin the process of starting up.

DURING OPERATION AT THE FIRST IGNITION, YOU MAY SEE “SMOKE” COMING OUT OF THE COOKER INSIDE THE ROOM WHERE IT IS INSTALLED, THIS IS DUE TO THE DRYING OF THE SOLVENTS AND VARNISHES CONTAINED IN THE PAINT. AFTER A FEW HOURS IT WILL DISAPPEAR. IT IS RECOMMENDED TO KEEP THE ROOM WELL VENTILATED DURING THIS TIME.

4.3. STATES OF OPERATION

4.3.1 LIGHTING

When the heater changes from being off to standby or operation, this stage is known as the lighting stage.
This stage can be subdivided into the following steps: Checking, Pre-heating, Pre-loading, Fixed lighting, Variable lighting, and Stabilisation. During these stages, the user will be able to see the following messages on the upper display:

Checking

Pre-heating

Pre-loading

Fixed lighting

Variable lighting

Stabilisation

4.3.2 HEATER DURING NORMAL OPERATION

The heater enters this stage when it has finished the entire process of lighting.
The time will appear on the upper display, and the operating power and room temperature on the lower display. The upper LEDs will also indicate the elements that are operating, such as the room fan, the screw, and the ignition coil.

4.3.3 HEATER OFF

The heater can be found in this state when the general switch is turned on or after extinguishing.
The time will be displayed on the upper display with the room temperature on the lower display.

4.3.4 MODULATION (“MOD”)

This phase occurs during normal operation when the desired room temperature set by the user has been reached. When the heater is in modulation mode, the word ‘Mod’ will appear flashing on the upper display, as shown below:
The heater detects that the heat generated cannot be fully exchanged, meaning that modulation mode is initiated to ensure maximum exchange, maximum performance, and fuel saving:

4.3.5 STANDBY

If the room temperature continues to rise during the modulation stage, the heater enters the standby stage. It first switches off and remains in this state. It will automatically switch on again when it falls one degree below the set temperature. This ensures greater comfort and lower fuel consumption.
If the customer decides that he does not want the device to go to standby even if the temperature in the passenger compartment continues to rise, this can be changed.
In the menu tP08, parameter A01 the factory setting is 2. To override the stanby mode change this value to 1 (see parameter section).

4.3.6 “OFF”

This phase can be initiated for a variety of reasons, as shown below:
Pressing the ON/OFF button, which forces the unit to turn off.
The heater enters the standby stage.
An error message appears.
The heater is in the ignition recovery stage.
During the switch-off phase, the upper display will show the word `OFF´, as been below:

4.3.7 RECOVERY OF THE IGNITION (`REC´)

This stage cuses the heater to turn itself off whilst the word `rEc´ will appear in flashing letters on the upper display.
When the turning-off process concludes, the heater will automatically turn itself on.
The heater can enter this stage due to the following reasons:

- If during the process of turning the heater off (`OFF´), the user pushes the ON/OFF button again to turn it back on.
- If the heater is in a normal operation stage and a power cut occurs in the mains power supply and if the heater is still hot when the mains power supply comes back online.

5. MAINTENANCE AND CLEANING

It is necessary to carry out certain maintenance tasks in order to keep the heater functioning properly. The frequency of these maintenance tasks will depend largely on the hours of operation and the quality of the fuel that is being burned. Some of these maintenance tasks must be carried out daily and others can be carried out on a seasonal basis.
A table of the tasks that require carrying out is shown below.

IT IS THE OBLIGATION OF THE TECHNICAL SERVICE OR OFFICIAL DISTRIBUTOR TO EXPLAIN TO THE USER ALL THE MAINTENANCE TASKS TO BE CARRIED OUT BY THE USER.

Below is a table of the tasks to be carried out both by the user and by the Official Technical Service or Authorised Official Dealer.

CHORES	DAILY	WEEKLY	MONTHLY	QUARTERLY	ANNUAL	USER	TECHNICIAN
Cleaning the brazier, cleaning the holes in the brazier, and removing ashes	✓					✓	
Removal of ashes from the burner	✓					✓	
Use of the scrapers	✓					✓	
Empty ashtray and vacuum the grate and housing		✓				✓	
Clean the inspection “T”			✓			✓	
Internal cleaning of the combustion chamber (depending on fuel quality)				✓	✓	✓	✓
Door cord decompression			✓			✓	✓
Extraordinary cleaning					✓		✓

AN ASH VACUUM CLEANER IS REQUIRED TO CLEAN THE HEATER

GENERALLY, IT IS NECESSARY TO CLEAN THE BRAZIER AFTER 10-12 HOURS OF CONTINUOUS OPERATION, ALTHOUGH A HIGHER FREQUENCY COULD BE REQUIRED IF INFERIOR PELLETS ARE USED

BEFORE TURNING ON THE HEATER, MAKE SURE THAT THE BRAZIER IS PROPERLY SEATED IN POSITION

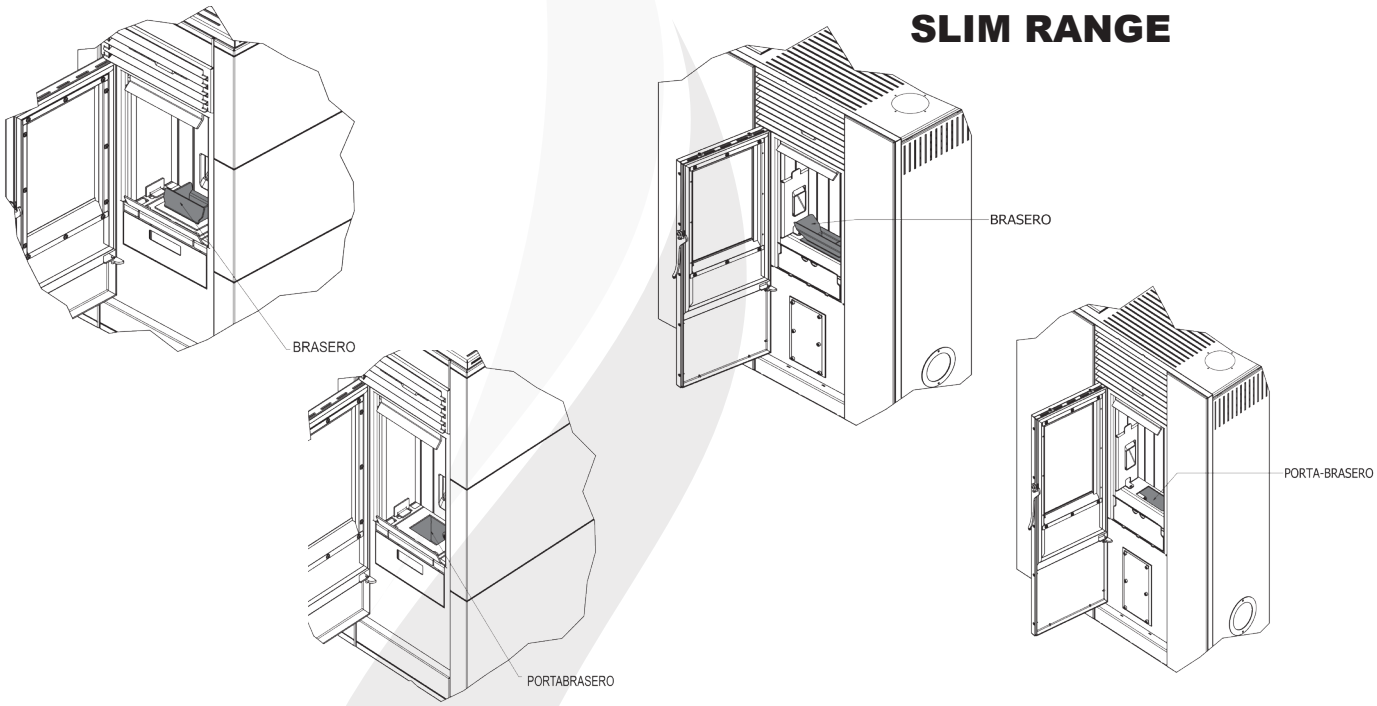
TO CARRY OUT THE CLEANING AND MAINTENANCE TASKS, IT IS NECESSARY THAT THE HEATER BE DISCONNECTED FROM THE MAINS POWER SUPPLY, FULLY TURNED OFF, AND COLDNECESSARY THAT THE HEATER BE DISCONNECTED FROM THE

LACK OF CLEANING CAN AFFECT THE SAFETY AND CORRECT OPERATION OF THE HEATER

AFTER A LONG PERIOD OF DISUSE, EMPTY THE PELLET TANK OF ANY REMAINING PELLETS SINCE THESE COULD HAVE ABSORBED MOISTURE FROM THE AIR, CHANGING THEIR ORIGINAL PROPERTIES AND MAKING THEM UNSUITABLE FOR USE

5.1 CLEANING THE BRAZIER AND BRAZIER HOLDER

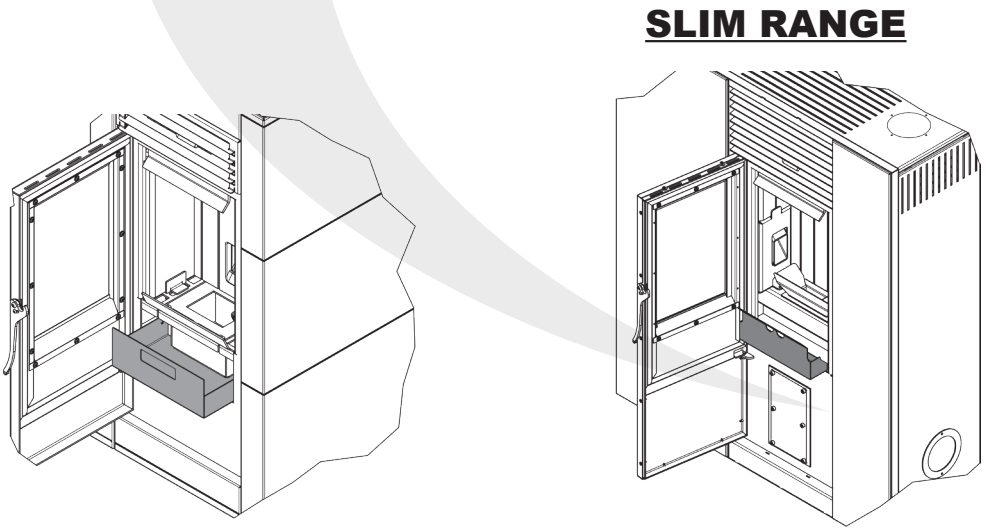
Depending on the quality of the fuel, crusts may form that prevent the heater from working properly, so they must be removed from the brazier.
We lift the brazier and clean these crusts and remove the ash, always bearing in mind that the clogged holes must remain free.



With an ash vacuum cleaner, remove the ashes that have accumulated in the chamber and inside the brazier holder.

5.2 CLEANING THE ASH DRAWER

The ash collection drawer surrounds the brazier holder, which must be regularly emptied to prevent it overflowing with ashes.
The ashes must be placed in a metal container with a sealed lid until the ashes are wholly and completely extinguished.
The closed contained must be placed on a non-flammable base or the ground and well away from flammable materials.
Once the ash drawer has been emptied, put it back in its position.



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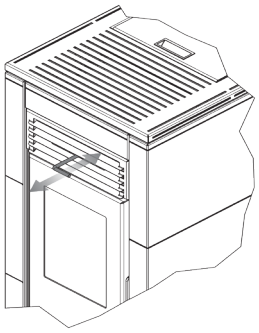
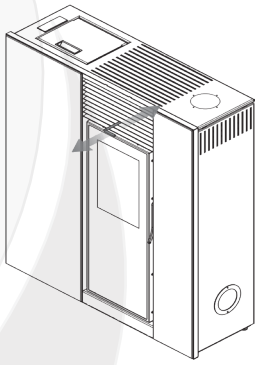
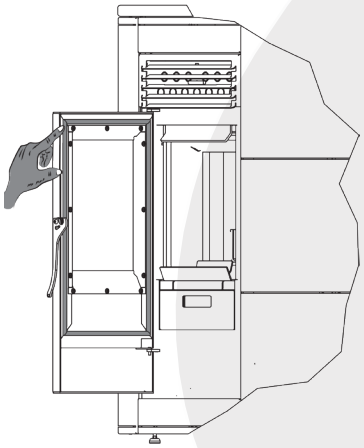


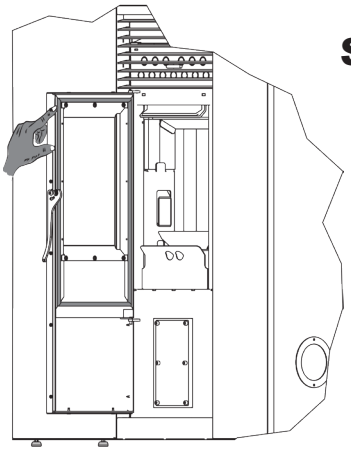


SLIM RANGE

5.4 UNPRESS THE DOOR CLOSURE CORD

It is advisable that the cord be stretched monthly in the months of use of the device to avoid problems when not being properly flattened due to use, causing problems of not adjusting the door correctly when closing, causing problems such as lack of flow for startup or during operation.
By running your finger and releasing the cord a bit both from the top and the bottom we will avoid these possible incidents caused by the use of the device.

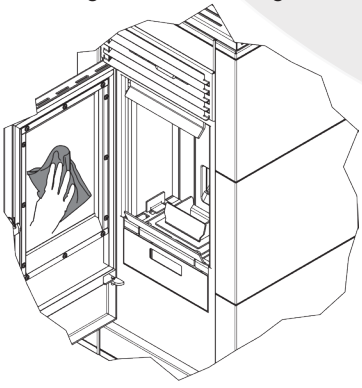


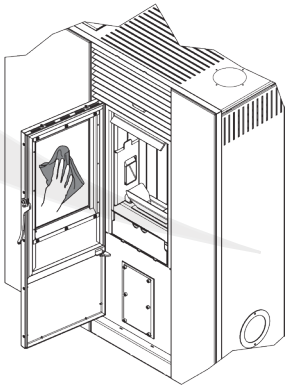


SLIM RANGE

5.5 CLEANING THE GLASS

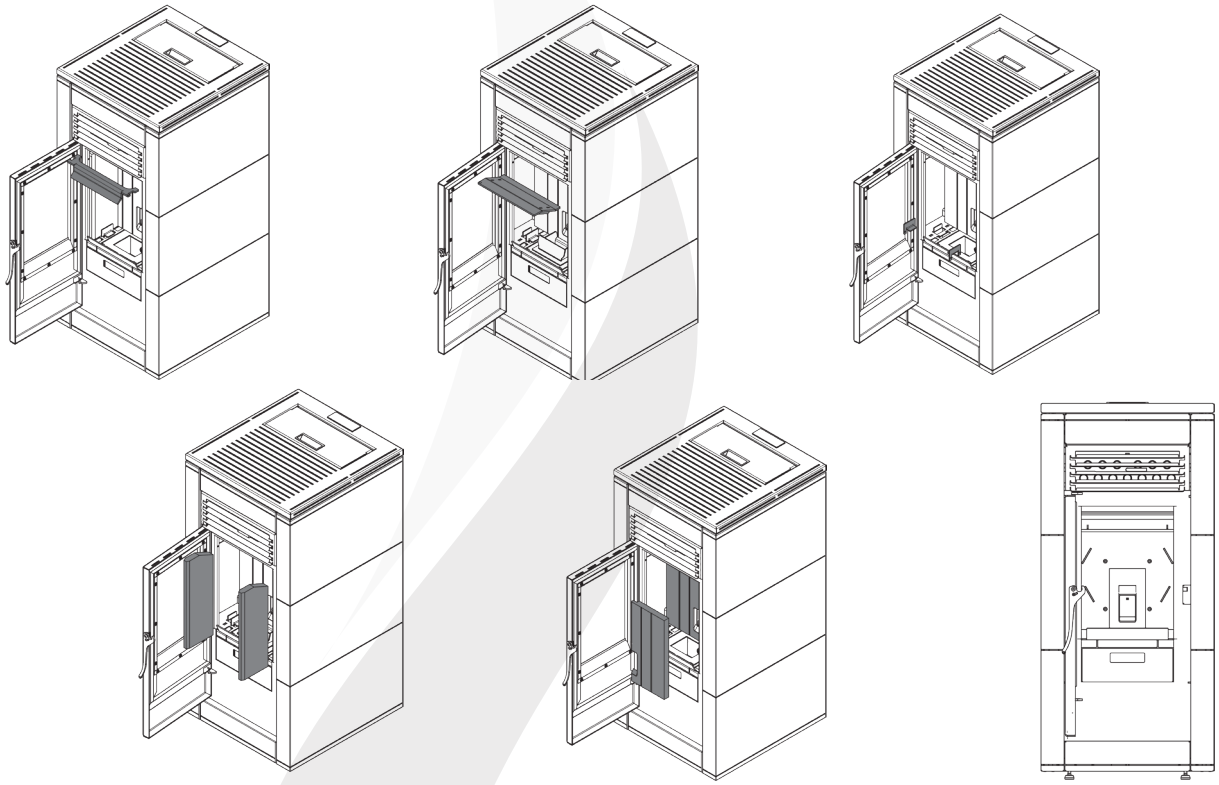
Regularly clean the glass door of the heater with a degreasing product (not one that is corrosive or abrasive).
If the glass is still warm, leave the door open before cleaning for as long as the heater requires to cool down. Do not use materials that could damage or scratch the glass.





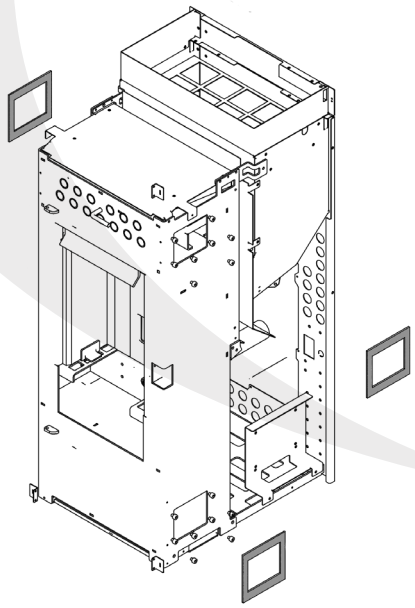
5.6 CLEANING THE INTERIOR OF THE COMBUSTION CHAMBER

Follow the steps as indicated in the following images, take special care with the insulator that you will find behind the front vermiculite, this is an insulating material, which should be replaced if it is not in optimal condition.



5.7 CLEANING OF INTERNAL FLUE REGISTERS

This task should only be carried out by the authorised TAS, who should follow the steps as shown in the following pictures. Remove the 3 manhole covers, vacuum clean the entire interior and replace the insulation blanket.



IF THE GLASS OF THE DOOR IS ACCIDENTALLY BROKEN DURING CLEANING, DO NOT LIGHT THE HEATER AND CONTACT THE TECHNICAL SUPPORT SERVICE SO THAT THEY CAN REPLACE IT (Only an original spare part can be used since the glass has special properties)

6. PROBLEMS, MESSAGES, ERRORS AND SOLUTIONS

The heater uses messages and alarms that appear on the display to inform the user of certain situations and/or problems that hinder the correct operation of the unit.
The electronic control board, via various devices and sensors connected to it, receives data. It returns a message or alarm when the values fall outside certain ranges.
This does not mean that the heater has a problem, but rather, on many occasions, it brings issues to light regarding the fuel, installation, lack of cleaning, or something else.
Carefully read everything that is explained in this section because as well as helping you to interpret the messages and alarms that may be shown, it lists possible causes and even some remedial measures that can be taken.

THE APPEARANCE OF MESSAGES AND ALARMS IS PART OF NORMAL OPERATION, AS THEY SERVE TO WARN OF CERTAIN SITUATIONS.
THE HEATER WILL ONLY BE RESPONSIBLE FOR THE HEATER WHEN THEY ARE CAUSED BY THE MALFUNCTION OF ANY OF THE HEATER'S COMPONENTS THAT HAVE BEEN DEFECTIVE FROM THE FACTORYA

6.1 PROBLEMS

Some advice appears below so that you can make sure that everything is correct before lighting the heater and assuredly begin the start-up process:

- Check that the installation has been effected in accordance with any regulations in force and in accordance with the instructions from the manufacturer. (see chapter 5. INSTRUCTIONS FOR INSTALLATION).
- Only use fuel that is appropriate and try to keep the level in the hopper to half-full, at minimum. (see chapter 4. FUEL).
- If the fuel has spent a long time in the hopper, it is appropriate to remove it because it could have absorbed moisture from the air and no longer be suitable for use. If damp wood pellets are used, they could affect the normal operation of the heater.
- Carry out the maintenance instructed by the manufacturer, not forgetting to clean the brazier every 10-12 hours (at most) of operation. After cleaning, replace it correctly.

When the heater functions improperly, an alarm or message will normally appear, although this will not always occur. Below, we show some cases that could arise and some checks that it would be useful to do before calling the Technical Support Service:

- When the heater is connected, the breaker in the house is tripped. The first step would be to try connecting the heater to another plug. If the problem continues, there could be a moisture issue with one or more of the components inside the heater. In this case, make sure that the heater is not being affected by moisture in the environment and/or chimney and wait for a few hours before trying to light it again. If the problem persists, call the Technical Support Service.
- The display fails to turn on. Check that the voltage at the plug is correct, see if the rear switch is turned on, the fuse in the switch may be blown, etc.

ON DAYS WITH STRONG WINDS OR ADVERSE WEATHER CONDITIONS, IT IS POSSIBLE THAT COMBUSTION IN THE HEATER IS NOT IDEAL DUE TO THE CHIMNEY FLUE BEING AFFECTED. THE MANUFACTURER IS NOT LIABLE FOR THE POOR OPERATIONS

6.2 MESSAGES

MESSAGE	MESSAGE DESCRIPTION	TASKS TO BE PERFORMED	SOLUTION
Sond	Display of the status of the temperature probes or flow sensor. The message appears during the “Check up” phase, and indicates that the detected temperature or air flow is not between the minimum and maximum allowed value.	• Check the display for smoke temperature • Check ambient temperature • Check air flow • Check the condition and connection of the probes	• In case the smoke sensor shows the message “hi” or “low”, check the wiring and replace it if necessary • If the ambient sensor shows 0 ºC or no temperature reading, check the wiring and replace it if necessary • If the air flow shows “low”, check the wiring, position the flusostat (air flow meter) and if necessary replace the wiring and/or flusostat
Hi	Indicates that the ambient temperature is above 50°C	• Check the condition and connection of the ambient sensor • Check ambient temperature	• If the ambient temperature in the room is within the normal range, replace the room temperature sensor
CLr	Message indicating that the heater maintenance hours have been reached	• Carry out general cleaning of the appliance as described in chapter 5	• Reset the operating hours as indicated in point 3.2.5
OFF dEL	This message appears when the cooker has been switched off non-manually in the ignition phase (after the pre-load stage), the appliance is automatically switched off again once it reaches full capacity, i.e. exits the ignition phase and enters working power		
PCLr	Automatic self-cleaning of the burner by the heater during operation	• No action required, after the cleaning time this message disappears	

6.3 ERRORS AND SOLUTIONS

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er01	Intervention of the safety thermostat. No manual reset, i.e. it disappears when the contact is closed again after the temperature has dropped.	• Faulty safety thermostat or faulty wiring • There is excess temperature in the hopper	• Check if the temperature of the hopper is excessive, i.e. above 85°C • Once the above has been checked, if the hopper temperature is too high, we wait for it to cool down and check the tangential turbine, as this may be due to the tangential being damaged or badly wired, causing an excess temperature in the hopper • If, after checking the above, there is no excess temperature, check the continuity of the thermostat and the thermostat wiring. We can make a jumper on the thermostat outputs and check if it works. If the jumper works, the thermostat is faulty; if it does not work, there is a problem in the electronic board.
Er02	Intervention of the safety pressure switch. This device is located on the fume extraction turbine and signals an error when the contact is opened. The contact of this device opens when the draft differential is out of range 20-10 Pa.	• The chimney and/or flue is very dirty or clogged	Check the entire flue system, clean and put into operation.
		• Chimney with high pressure drop: uninsulated outer section, too much horizontal section, excessive length, insufficient diameter, too many bends, etc...	Check and correct the installation as far as possible. When the SAT comes to the home to carry out the commissioning and finds this anomaly, it must inform the user and the factory. The user should be informed in writing in the commissioning check-list of the problems to which he/she is exposed in case of having this installation.
		• Flue gas fumes from wind or low pressures	Check the installation and orientation of the installation and make sure that the cap is correct.
		• Problem with the pressure switch or its connection on the electronics board	If after checking all of the above, the Er02 still appears. Check the pressure switch rubber, check the pressure switch wiring, check the continuity of the pressure switch and, if defective, replace the pressure switch.

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er03	Low smoke temperature shutdown	• There is too little pellet in the hopper and/or the hopper starts to run out of pellets	• Even if the user detects that the flame is getting low and checks the hopper and puts pellets back in, it may be too late both to recover the flame and to recover the working temperature. This causes the error to appear and we may even find unburnt pellets in the basket/basket. The solution to this is to clean the burner, put the cooker back into operation and explain to the user why this has happened
		• The hopper has made a cave and the pellet does not reach the loading auger, as it is doing the filling process under vacuum and therefore does not collect the pellet	• Stir the pellet until the cave is broken up and put the appliance back into operation. One of the reasons why this often happens is because the pellet used is very long and harder
		• The worm is jammed and/or the geared motor is damaged and/or has come loose from the spindle and does not rotate	• First check whether the geared motor is correctly attached to the worm gear. If this is not the case, put it/place it correctly and check that it is working properly. • If we have checked that the geared motor is correctly positioned, we check whether or not it works by giving direct current. • If giving direct current the geared motor works correctly, there must be a blockage in the hopper, we must empty the hopper and clean it, fill it with pellets and start it again • If giving direct current to the geared motor does not work, the geared motor or the wiring is faulty and must be replaced
		• The flue gas temperature sensor is connected with reversed polarity	• Check smoke temperature reading tF, wiring and connection of the smoke temperature sensor and replace or replace if necessary

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er05	Excess smoke temperature shutdown	• The room becomes too hot. If the room temperature sensor is not correctly positioned, the appliance detects that the room temperature is too low and the actual temperature is too high, resulting in excessive smoke temperature	• Check that the room temperature probe is correctly positioned to measure the approximate average temperature of the room
		• The tangential turbine (ambient fan) is not working properly or has broken down	• Check the correct operation of the appliance, checking if the tangential turbine evacuates the heat correctly from the inside of the cooker. This problem together with Er01 is a clear example of problems with the tangential turbine due to the lack of heat evacuation.
		• Faulty or incorrectly connected flue gas temperature sensor. If one of the two wires is not correctly connected, the flue gas temperature value will appear on the display as “hi”. In this case we can also detect that the tangential turbine is working at maximum power • Smoke temperature sensor connected incorrectly due to polarity, in this case we will have Er03 due to lack of temperature as the thermocouple will act in reverse, instead of rising it will lower the temperature reading as the temperature rises	• Correct connection if required or change of flue gas temperature sensor.

<table>
<tr><th>ALARM CODE</th><th>ERROR DESCRIPTION</th><th>POSSIBLE CAUSES</th><th>SOLUTION</th></tr>
<tr><td rowspan="3">Er07</td><td rowspan="3">Board is not receiving signal from the exhaust fan speed controller</td><td>• It could be caused by fluctuations in the electricity grid</td><td>• Warn the customer that in the event of this error appearing once it is reset, the electronic board automatically changes the configuration and starts working on voltage (safety operation) so that the appliance can continue to work but the SAT must be notified so that the original configuration can be re-established.
• If this error is repeated continuously, the customer should be advised to install a UPS (Uninterruptible Power Supply) to avoid this problem, and the customer should be warned that this is not a defect in the device, but a problem in their electrical network.</td></tr>
<tr><td>• The extractor fan or one of its connections is defective</td><td>• We replace the fume extractor and then check that it is working properly</td></tr>
<tr><td colspan="2">When we go to the customer’s home and detect whether the problem has been transitory due to fluctuations in the electrical network or whether it has been a problem due to a faulty component (extractor fan), in addition to removing the Er, the following steps must be taken

tPAr-----1357-----tP01-----with the + button we move to tP08-----we confirm with the button -----we are looking for P25-----press -----with + and - we change from 0 to 2 and confirm with

P25=2 Factory default setting
P25=0 Safety operation after Er07 appears and resetting the error</td></tr>
<tr><td rowspan="4">Er08</td><td rowspan="4">The fume extractor speed controller or encoder fails to adjust the speed of the fume extractor correctly.</td><td>• It could be caused by fluctuations in the electricity grid</td><td>• Reset and restart. If, after a while, it reappears and is repeated continuously, it is advisable to install a UPS (Uninterruptible Power Supply)</td></tr>
<tr><td>• The electrical voltage to the dwelling is not good and/or is taken from a non-sinusoidal AC generator</td><td>• Both the SAT and the customer must ensure that the incoming voltage is a sine wave signal. If this is not the case, a stabiliser device should be installed and a pure sine wave signal should be returned</td></tr>
<tr><td>• The exhaust fan or one of its connections is damaged</td><td>• Once the SAT comes to the customer’s home, it must check whether the problem is transient due to fluctuations in the mains supply or an unsuitable AC generator, or whether the fume extraction fan or the wiring is faulty. In the case of the latter, the defective material must be replaced and the parameters must be reset so that the fume extraction fan can work again with the speed meter (encoder)</td></tr>
<tr><td colspan="2">ttPAr-----1357-----tP01-----with the + button we move to tP08-----we confirm with the button -----we are looking for P25-----press -----with + and - we change from 0 to 2 and confirm with

P25=2 Factory default setting
P25=0 Safety operation after Er07 appears and resetting the error</td></tr>
</table>

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er11	Updating date and time on the heater	• Appears the 1st time the heater is connected to the mains supply	• Do not go to the customer's home if called. Indicate that they should refer to the user manual and put the date and time updated. In the event that the SAT decides to go to the customer's home this is not an intervention under warranty in any case, so it will not be paid. The user will find the steps to follow to update the date and time in the manual in the section [orol] Clock.
		• It can also appear after several days disconnected from the mains	
Er12	Ignition failure When the cooker is switched on, it checks and passes through the ignition stages until it reaches the smoke temperature to enter the power or work stage. If this temperature is not reached during the time set for the ignition stage, the appliance will fail	• Incorrectly positioned brazier	• Remove the error, clean the brazier, place it in the correct position and relight it
		No pellets in the hopper Some pellets can be seen in the hopper but the auger is visible, i.e. the pellets on the hopper walls are not picked up by the auger	• Remove the unburned pellets from the brazier, fill the hopper and relight the brazier
		• Pellet cave in the hopper	• Remove the unburned pellets from the brazier, remove the cave from the hopper and relight. This problem usually occurs when the pellets used in the hopper are quite long
		• The pellet used is a wet or poor quality pellet	• Remove the unburned pellets from the brazier, empty the pellet hopper, change the pellet type and refill the brazier
		• Badly connected or damaged ignition resistor and/or wiring	• Check if the resistor is in bad condition or if the wiring is not connected correctly. If it is necessary to replace it with a new one, this part is out of warranty as it is a wear part in direct contact with fire * The customer must pay special attention to the thermostat (in the case of hydro-stoves) or to the poor sizing of the appliance in relation to the room where it is installed, as too much switching on and off in a short space of time affects the premature deterioration of the heating element
		• Auger jammed or geared motor incorrectly connected or defective	• We test the geared motor and we can find two situations: - If the geared motor rotates but does not move the auger, there is a pellet blockage, the hopper must be emptied, cleaned and the blockage removed. - If the geared motor does not rotate, check whether or not power is supplied. If the geared motor does not work but power is supplied, the geared motor is defective. If the gearmotor does not receive any current, we have to check if by giving direct current to the gearmotor it rotates and also check if the output of the plate where the gearmotor is located is live or not.

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er15	There has been a power cut	• There has been a power failure for a prolonged period of more than 5 minutes either in operation or at start-up	• If the power failure occurs for a short period of time, the cooker switches off and does a power-on recovery [rEC], no manipulation is necessary
			• If the power cut causes the Er15, there are several ways to go about it: - The switch or power wiring is not connected properly or is damaged, so it should be replaced if necessary - Accidental power failure, reset the error and restart the device (NO NEED FOR SAT ASSISTANCE) - Check that there are no frequent power cuts in the home, if there are, it is always advisable to install an Uninterruptible Power Supply System
		• In exceptional cases, Er41 may appear after a power failure in the home. This is because the membrane of the flow meter (flusostat) may have been left open by the power failure and is giving an incorrect reading	• We remove the flusostat wiring, replace it and check the FL flow measurement in OFF mode is between 180 and 210 approximately. This information can be viewed by pressing the power button several times

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er17	Airflow regulation not achieved This error occurs when there is a lack of flow during operation of the device	• Smoke outlet problem	• Check the register tee and the entire flue. Follow the same procedure as in Er02
		• Primary air inlet completely or partially clogged or the primary air inlet has been ducted and has a high pressure drop	Check the primary air inlet pipe, check the connection fittings of the flow meter (flusostat), if it is ducted, follow the instructions in the user and installation manual. If possible, remove the ducting from the primary air inlet as it is not recommended. It is also important in the case of being ducted and with the increase in diameter described in the manual that it does not have anti-bird netting
		• Dirty brazier	• If the fuel used is not in perfect condition (humidity and compound), it may leave residues in the brazier which may obstruct the air passages and eventually block them, causing the appliance to become Er17. USE SUITABLE PELLETS • If the appliance has been running for a long period of time (more than 10-12 hours) without a break, you may have ash accumulation in the brazier, resulting in a reduced airflow, causing Er17
		• Uncontrolled air intake (heater draws air from an unintended intake)	• The heater is open or not properly closed • Hopper is without pellets, this leads to an unplanned entry of air into the combustion chamber • Door cord is too tightly compressed causing poor closing of the door
		• The heater flues are very dirty	• When the heater has too much dirt in the flue passages, the air flow necessary for combustion is reduced, causing Er17 to appear. Thorough cleaning of the heater and checking for proper operation
		• The exhaust fan is out of order and/or cannot be adjusted due to mains problems	• Check that the extractor fan is working correctly by performing a test. Also check that the parameter P25=2, i.e. the extractor fan is working with encoder
		• Problems with the flow sensor or its connection	• Check that the electrical network is not subject to fluctuations and that the wave signal arrives in a sinusoidal form • The flusostat (flow sensor) is faulty and does not measure correctly. The message sond should appear in most cases and the FL flow value appears as Lo
		• **IF AFTER CHANGING THE FLOW SENSOR DEVICE (FLUSOSTAT) THE HEATER HAS THE PROBLEM AGAIN AND EVERYTHING IS OK, THE CUSTOMER/USER MUST FIT A DEVICE THAT RETURNS A PURE SINE WAVE SIGNAL**	

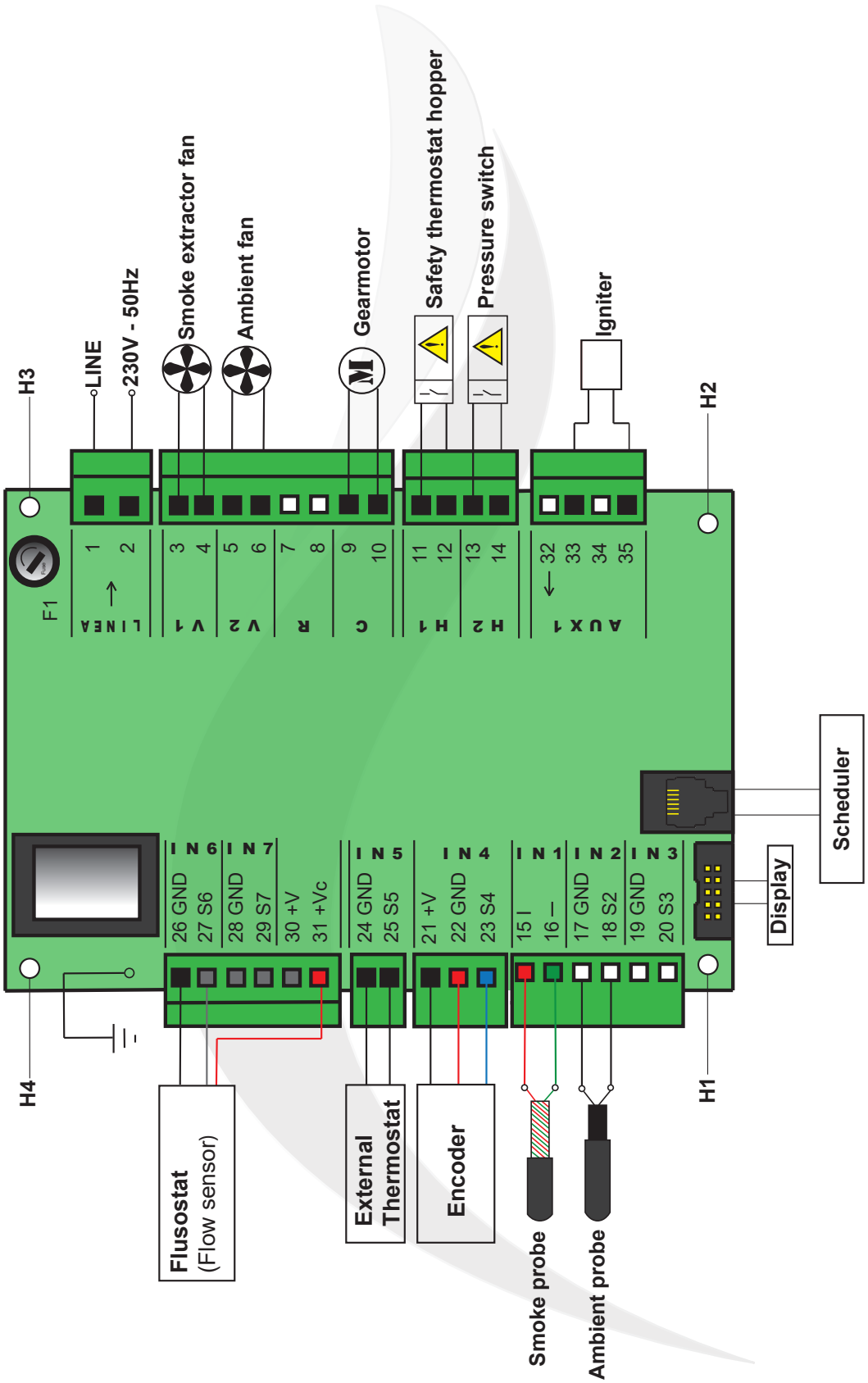
ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er39	Broken flow measurement sensor (FLUSOSTATO)	• This error appears when the cooker is switched off, if the flow meter is damaged during operation (Flusostato)	• If we remove the Er39 error and switch the cooker back on, if the flow sensor is really faulty, Er41 will now appear, otherwise, if we observe that after removing the Er39 we switch the appliance back on and it works correctly, we can continue using the cooker as it may have been a one-off error caused by fluctuations in the electrical network

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er41	Failed to achieve minimum airflow during the Check stage It may also appear if the set minimum flow rate is not achieved during operation	• Dirty brazier	• If we try to start the heater with a dirty brazier, when the check detects a lack of flow because the air inlet holes in the brazier are clogged and the error appears. Clean and restart the heater.
		• Smoke outlet problem	• Check the register tee and the entire flue. Follow the same procedure as in Er02
		• Primary air inlet completely or partially clogged or the primary air inlet has been ducted and has a high pressure drop	Check the primary air inlet pipe, check the connection fittings of the flow meter (flusostat), if it is ducted, follow the instructions in the user and installation manual. If possible, remove the ducting from the primary air inlet as it is not recommended. It is also important in the case of being ducted and with the increase in diameter described in the manual that it does not have anti-bird netting.
		• Uncontrolled air intake (the heater draws air from an unintended air intake)	• The heater is open or not properly closed • Hopper is without pellets, this leads to an unplanned entry of air into the combustion chamber • Door cord is too tightly compressed causing poor closing of the door
		• The heater flues are very dirty.	• When the heater has too much dirt in the flue passages, the air flow necessary for combustion is reduced, causing Er17 to appear. Thorough cleaning of the heater and checking that it is working properly
		• The exhaust fan is out of order and/or cannot be adjusted due to mains problems.	• Check that the extractor fan is working correctly by performing a test. Also check that the parameter P25=2, i.e. the extractor fan is working with encoder.
		• Problems with the flow sensor or its connection	• Check that the electrical network is not subject to fluctuations and that the wave signal arrives in a sinusoidal form • The flusostat (flow sensor) is faulty and does not measure correctly. The message sond should appear in most cases and the FL flow value appears as Lo
	When the Er41 appears because it is at the limit of the minimum flow in the check and the appliance has just been installed, this could be due to a high pressure drop in the flue installation. Contact the factory with the flow values in order to find a solution. These values must be between 450 and 500, if they are lower than this, the problem must be one of the following (examples: the door has not been closed properly, if it is opened during operation, this error does not appear; the error also appears when the cooker is leaving the ignition stage if the set minimum flow has not been achieved; after the appliance leaves Standby mode because the inlet flow drops due to the temperature)		

ALARM CODE	ERROR DESCRIPTION	POSSIBLE CAUSES	SOLUTION
Er42	Excess airflow during the Check stage (Check)	• Excess chimney draft	• Check the flue installation and modify as far as possible
		• Forced primary air intake	• Modify the installation of the heater, i.e. air intake
		• Flow sensor (flusostat) wrongly connected, wiring wrongly connected.	• Check with the electronics board the wiring diagram provided in this manual for the connections of the electronics board.

RESETTING THE ALARMS:

- **When any alarm is generated the heater will turn itself off.**
- **The alarm cannot be reset until the heater is fully turned off.**
- **Once turned off, it is necessary to wait until `Alt´appears on the upper display and then long press so that the active alarm is reset.**
- **Once the alarm has been reset, it is advisible to turn off the heater for a few seconds with the rear switch..**


H3
LINE
230V - 50Hz
Smoke extractor fan
Ambient fan
Gearmotor
Safety thermostat hopper
Pressure switch
Igniter
H2
F1
LINEA
V1
V2
R
C
H1
H2
AUX1
IN 6
IN 7
IN 5
IN 4
IN 1
IN 2
IN 3
Scheduler
Display
H4
H1
Flusostat
(Flow sensor)
External
Thermostat
Encoder
Smoke probe
Ambient probe

GENERAL CONDITIONS OF GUARANTEE

The following document specifies the conditions of the guarantee for the consumer who purchases FERLUX, S.A. products

In the event of anomalous operation of the product, the consumer should:

1. Check the user and installation manual, checking that the issue cannot be resolved following the instructions provided.
2. Check that the anomaly is covered by the guarantee.

Otherwise the consumer will exclusively bear the cost of the repair.

3. Contact the distributor who sold product, as the seller, and the Technical Assistance Service specified in the model, the type of defect, name, address and telephone number.

■ All FERLUX products in the European Union are covered by a 36-month guarantee from the date of acquisition for all those devices purchase from 01/01/2022 on, which must be proven with the valid documentation issued by the distributor, e.g., a purchase receipt, transport document or invoice. This documentation must provide for the identification of the product acquired and the purchase and/or delivery date.

For the guarantee to be considered valid in the course of the period indicated:

- The serial number on the product must not be erased or illegible in any way whatsoever.
- The product must be installed correctly, with scrupulous respect or the instructions in the product manual and the relevant national, regional and local regulations in force.
- The installation must be exclusively completed by fully authorised personnel in accordance with the national, regional and local regulations in force.
- The consumer must be in possession of the suitable and valid declaration of compliance issued by the installer.
- The use and maintenance of the device must strictly adhere to the user and installation manual provided.
- Ordinary and extraordinary maintenance is carried out by qualified technical personnel, as provided for in the regulation in force and/or the manufacturer's instructions.
- The product is used regularly in a manner appropriate for its intended purpose.

FERLUX products are developed, certified and approved to run on the power values provided for. These values are indicated in the documentation delivered with the product.

Any continuous use at maximum or minimum power for long periods of times is not suitable for the regular use of the device.

The intervention on the part of the different subjects to FERLUX and/or Technical Assistance Services not authorised by FERLUX and the handling/modification of the product will result in the the guarantee being considered null and void.

No form of guarantee applies in the event of damages caused by negligence or use or installation no compliant with the instructions provided or the regulations in force.

■ EXCLUSIONS OF THE GUARANTEE

Excluded from the guarantee:

- The glass of the device has undergone quality testing during the manufacturing process. Its durability and resistance have been tested to withstand a temperature of 750°C, which is a temperature never reached in the combustion chamber, therefore that element is completely excluded from the guarantee in the event of breakage, only possible due to poor handling in the use of the stove.
- Coverings that constitute aesthetic parts.
- Seals, insulation layers, etc. are considered wearing components, etc. and are not included in this guarantee.
- The pieces of the fireplace in direct contact with ignition fuel, such as

cast iron grates, steel grilles, stainless brass, cast brass, deflectors, vermiculite parts, any refractory material, remote control batteries, stainless steel embellishments, etc.

- All external components subject to wear and tear and/or rust or staining caused by aggressive detergents or where the consumer can intervene directly during use and/or maintenance.
- Connections of the device to voltages and frequencies other than those indicated.
- Changes/surges in the electricity network, inductive/electrostatic discharges or caused by lightning.
- Infiltration of liquid.
- Fires of origin external to the product.
- Accidental impacts or strikes (scratches, dents, cracks, etc.).
- Surface stains or on stone coverings.
- Any other damage due to external phenomena not attributable to the product. Provided the product is connected to a hydraulic system, the following issues will not be covered by the guarantee.
- Corrosion and/or scaling, oxidation, rust, etc.
- Breakages caused by parasitic currents, condensation.
- Aggressiveness or acidity of water.
- Inappropriately performed descaling treatment.
- Lack of water.
- Deposits of sludge or limescale.

■ FERLUX, S.A., provides the consumer the protection of the guarantee established by law.

The repair or replacement of the equipment components does not extend the guarantee (both the product and the replaced component) which will remain valid in all cases until the expiry of the term established by law and which refers to the purchase date of the product according to the provisions of this document.

When the guarantee period expires, service interventions ultimately required will be performed charging for spare parts, labour and transport in accordance with the prices applied by the Technical Assistance Centre.

Considering there exist condition to apply to the legal guarantee described above, and nonetheless the exclusions indicated during the valid term, in the event that the lack of comfort of the product is checked and recognised due to possible manufacturing errors, FERLUX, S.A. Commits to remedy the defect by repair or replacement of the defective component with no charge to the user. The replacement of the product may take place ONLY in the hypothesis that the execution of technical repair activities is objectively impossible or in cases where the cost of the repair is excessive with respect to the situation as a whole.

FERLUX, S.A. Does not guarantee direct retails sales to consumers.

In the event that FERLUX, S.A. Refuses to replace or repair the defective product, but wishes to provide a refund, the corresponding sum shall be the maximum borne by the distributor for the purchase in FERLUX, S.A.

With respect to the supply chain, it shall therefore be the responsibility of the distributor who has sold to the customer to provide the refund of the invoice issued to the user.

WE RECOMMEND THAT THE CONSUMER CAREFULLY FOLLOWS ALL THE INSTRUCTIONS IN THE MANUAL AND THE WARNINGS IN RELATION TO THE INSTALLATION AND/OR USE AND/OR MAINTENANCE OF THE PRODUCT.

FERLUX®

CHIMENEAS Y BIOMASA

Chimeneas y Barbacoas FERLUX, S.A.

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