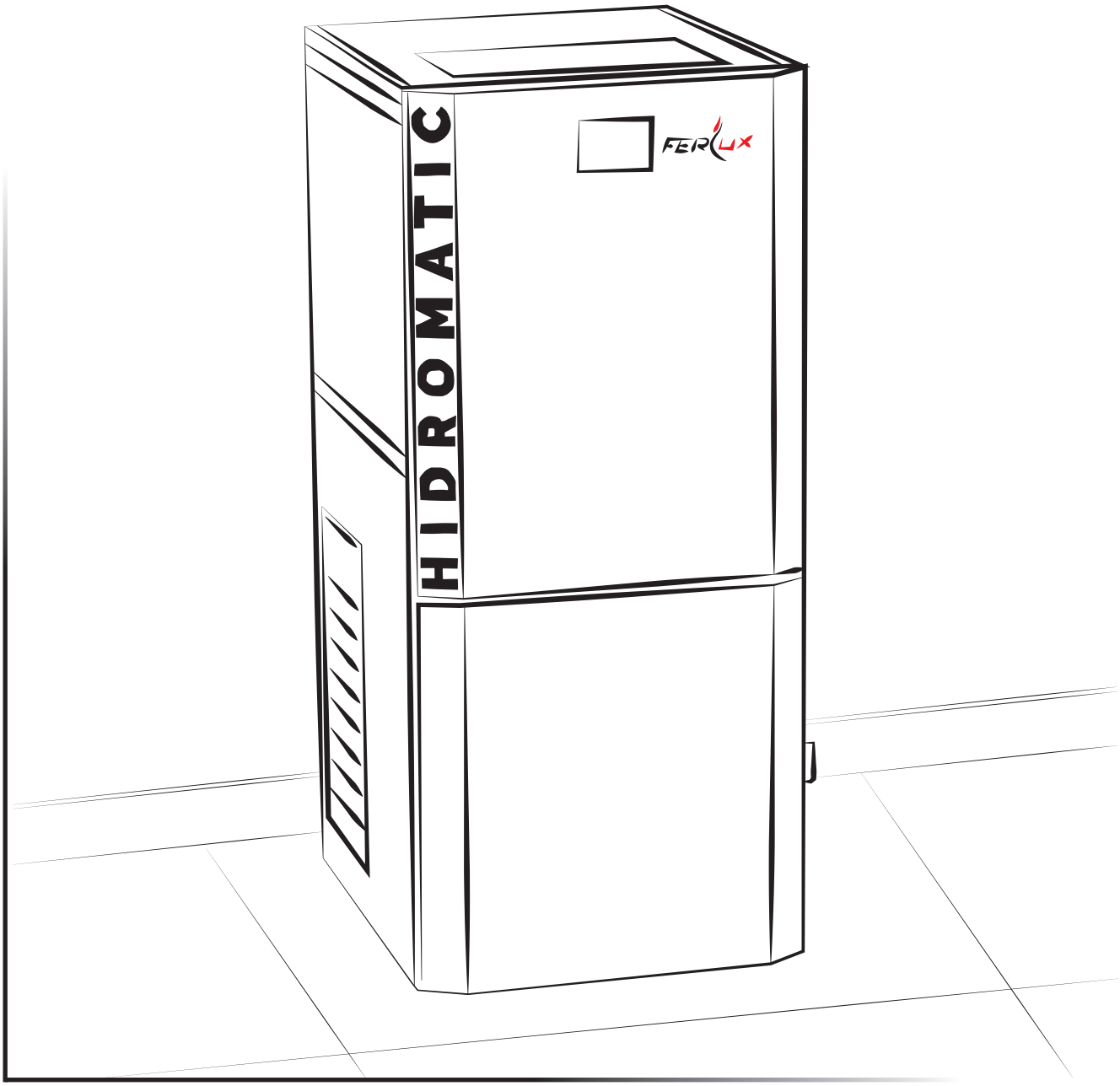
FERLUX®
CHIMENEAS Y BIOMASA

Calidez de Vida

HIDROMATIC

AUTOMATIC PELLET BOILER



COD. 0503 R1 INGLÉS

Thank you for choosing us

Thank you very much and congratulations for choosing our product. Before using it, please read this manual carefully in order to take full advantage of all the features in safe conditions.
The Hidromatic pellet boiler from Ferlux is a heating system, manufactured with the most advanced technology and a high level of quality, which will allow you to enjoy the extraordinary feeling of warmth in complete safety.

- Please read this manual carefully, as it contains important instructions regarding safety in installation, use and maintenance.
- This manual, together with all the documentation provided, must be kept in a place of quick and easy access.
- The installation of FERLUX boilers must be carried out only by authorized personnel, following the manufacturer's instructions and in accordance with current regulations.
- The manufacturer is not responsible for any damage that may occur due to the incorrect installation or handling of the device

INDICE

1. CARE OF THE MANUAL AND HOW TO CONSULT IT

Keep this manual and keep it in an accessible place near the equipment.

In the event that the manual is lost or is in unfavorable conditions ask the installer for a copy or directly to the manufacturer, specifying the identification data of the product.

The proper functioning of the boiler depends, to a large extent, on the user knowing its operation and knowing at all times what to do. In this manual you have an index on pages 4 and 5 so that you can easily find the section to consult to solve the questions and doubts that may arise.

When we read or consult this manual, we will consider that:

Special attention should be paid to texts written in “bold”

In some cases, capital letters and/or increased font size can be used to draw attention to the paragraph.

The text in “italics”, is used when we mention other paragraphs of this manual, or for further clarifications.

In some cases, two or more of the above resources could even be combined. This would be the case when we refer to the reading of other chapters to complement or consult information:

Example: (see chapter **“7. OPERATION AND USE OF THE BOILER”**)

SYMBOLS

SYMBOL	MEANING	TYPE OF INFORMATION SHOWN
	INFORMATION	This is used to provide information that will be very useful to the user, help them improve the functionality of their heater, and/or better understand certain situations and know how to react.
	ATTENTION	This is used to provide information regarding something obligatory or prohibited and when failing to do something may have serious consequences.

2. GENERAL WARNINGS AND SAFETY

The installation must be executed by authorized personnel, that must provide the buyer with a declaration for the installation in which he will assume full responsibility for the final installation, since due to the absence of direct control over the installation of his boiler, FERLUX neither guarantees nor assumes the responsibility that could arise from damages caused by misuse or bad installation.

The calorific calculation of the installation must be carried out by a qualified heater.

Similarly, the commissioning of the product and maintenance must also be carried out by authorized personnel, and the buyer must be provided with a document of commissioning for the product, in which full responsibility will be assumed for the definitive installation and operation of the installed device.

FERLUX S.A will not be responsible in the event of non-compliance with these precautions.

All national and local regulations, and European standards, must be complied with when the equipment is being installed.
All national and local regulations, and European standards, must be complied with during the operation of the equipment.
FERLUX S.A. is not responsible in the case of non-compliance with such precepts.

Our devices are manufactured and tested by controlling all their parts, following the safety directives of the European Union, in order to protect, both the user and the installer, against possible accidents.

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

This boiler should only be used for what it has been expressly intended for.

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

For your safety it should be borne in mind that:

- The user of the boiler must be an adult and responsible person. This device is not intended to be used by people with limited physical, sensory, or psychic disabilities or without any experience or knowledge. Children should be monitored and educated to ensure that they do not play with the equipment or come in to contact with hot work surfaces.
- The mains connector and its corresponding power outlet must be always easily accessible. It is strictly forbidden to operate the devise with a damaged cable. If the cable is damaged, it must be replaced immediately.
- Do not disconnect the mains plug with the devise turn on.
- The boiler door must always remain closed when it is in operation.
- Avoid contact with areas of the devise that tend to reach a high temperature during operation.
- After a long period of inactivity, before turning on the devise, check that there are no obstructions in the smoke evacuation duct.
- In extreme cases or breakdown, security systems could intervene. In this case, contact the Technical Assistance Service. DO NOT DISABLE SECURITY SYSTEMS.
- The boiler should never operate without water in the circuit. Dry ignition will seriously damage the boiler.

ATTENTION!!!
THE INSTALLATION MUST BE EXECUTED BY AUTHORIZED PERSONNEL, WHO MUST LEAVE THE BUYER A DECLARATION OF CONFORMITY OF THE INSTALLATION, IN WHICH HE WILL ASSUME FULL RESPONSIBILITY FOR THE FINAL INSTALLATION AND THEREFORE THE PROPER FUNCTIONING OF THE INSTALLED PRODUCT. FERLUX SHALL NOT BE LIABLE IN THE EVENT OF FAILURE TO COMPLY WITH SUCH PRECAUTIONS.

2.1 LEGAL WARRANTEE

A user, to enjoy the legal warrantee, according to the EEC Directive 1994/44CE must carefully comply with the requirements indicated in this manual, and in particular:

- Always act within the limits of use of the boiler.
- Always perform constant and careful maintenance.
- Authorize the use of the boiler to people of proven capacity, attitude and timely trained for this purpose.

The manufacturer is not responsible, civil, or criminal, directly or indirectly for:

- Installation not in accordance with the regulations in force in the country and the safety directives.
- Non-compliance by unqualified and/or unskilled personnel.
- Use not in accordance with security policies.
- Modifications and repairs not authorized by the Manufacturer performed to the equipment.
- Use of non-original or unspecified spare parts for that specific model.
- Insufficient maintenance.
- Exceptional events.

2.2 TECHNICAL ASSISTANCE

FERLUX can provide solutions to any technical problem regarding the use and maintenance in the entire life cycle of the equipment.

2.3 SPARE PARTS

Use only original spare parts. Do not wait for the components to be damaged before proceeding to their replacement. Replacing a deteriorated component before its breakage favors the prevention of accidents due precisely to the sudden breakage of the components, which could harm people or objects.

3. TECHNICAL DATA

The data plate or label is located on the back of the equipment and presents all the characteristic data of the machine, including the manufacturer's data, the serial number and the CE marking. The lack of label complicates the installation and maintenance tasks since it is not possible to identify the product. In the case of being damaged, request a duplicate of it from the Technical Service.

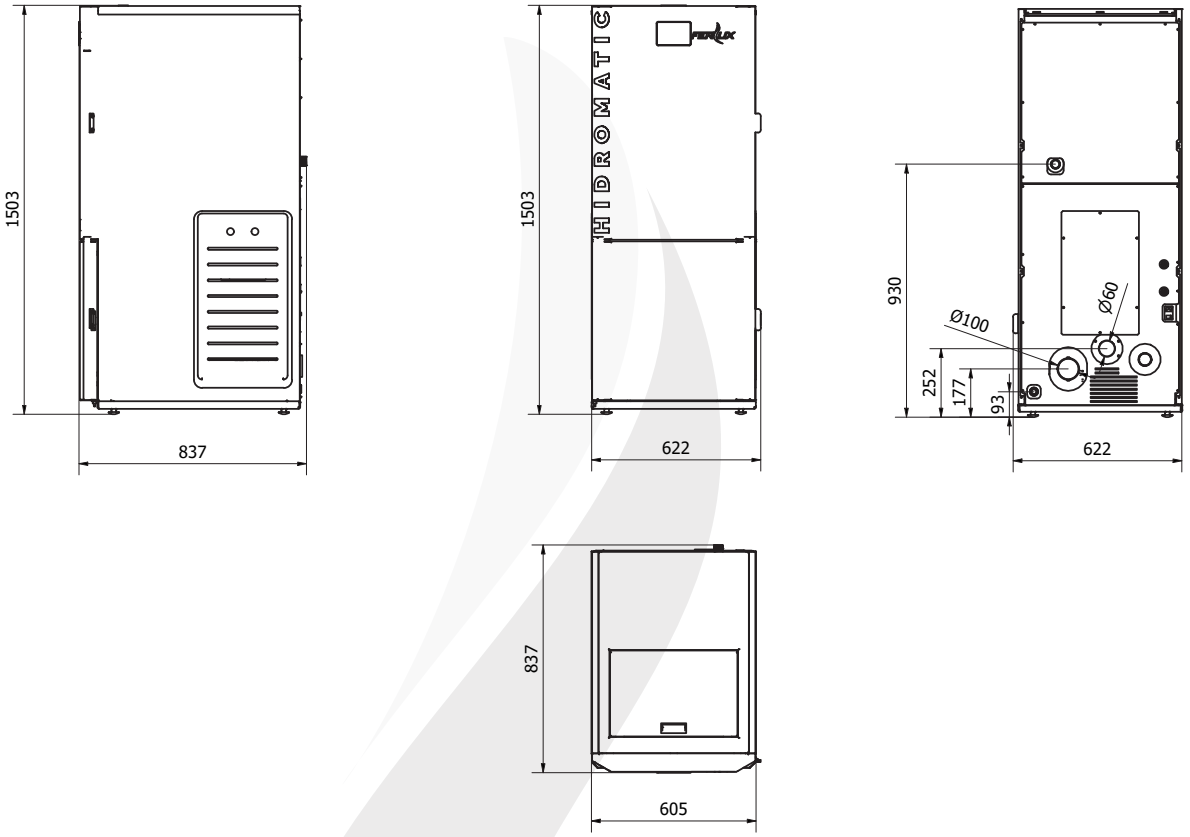
TECHNICAL CHARACTERISTICS ACCORDING TO EN 303-5:2012			
		HIDROMATIC 12	HIDROMATIC 18
Weight	Kg	340	340
Dimensions (width x height x depth)	mm	622 x 1503 x 837	622 x 1503 x 837
Fuel tank capacity	Kg	90	90
Smoke outlet diameter	mm	80 *(1)	80 *(1)
Primary air in diameter	mm	60	60
Volume of water in the body	l	38	38
Operating autonomy	h	129-33 horas	82-23 horas
Heated volume*	m^3	250	350
Nominal useful power	kW	12,14	18,26
Minimum useful power	kW	3,62	5,86
Smoke temperature	ºC	94	96
Boiler class (according to UNE EN 303-5)	-	Clase 5	Clase 5
Performance at rated useful power	%	95	95
Fuel consumption (p.c.i. 5 kW/Kg-humidity<10%)	Kg/h	2,7	4
CO concentration at 10%O2 at rated power	mg/m^3N	98,76	114,33
OGC concentration at 10%O2 at rated power	mg/m^3N	11,99	5,21
Average concentration of particles at 10% OR2 at rated power	mg/m^3N	15,79	17,07
Performance at minimum useful power	%	96	96
CO concentration at 10%O2 at minimum power	mg/m^3N	123,43	173,15
OGC concentration at 10%O2 at minimum power	mg/m^3N	12,98	7,44
			‘
Maximum operating pressure of the water	bar	2	2
Maximum working pressure	bar	2,5	2,5
Test pressure	bar	4,5	4,5
Minimum water return temperature	ºC	55	55
Maximum working temperature	ºC	80	80
Chimney shot	mbar	0,12	0,12
Pressure loss for ΔT=20 K (water side)	mbar	-89	-89
Drive connection	“	1”	1”
Return connection	“	1”	1”
Power	V/Hz	230V / 50Hz	230V / 50Hz
Maximum power consumption in ignition	W	450	450
Maximum power consumption at minimum power	W	30	30
Maximum power consumption at rated power	W	90	90
Power consumption in stand-by mode	W	1	1
General power protection	-	3,15 A	3,15 A
Electronic card protection	-	Fusible T5,0 A	Fusible T5,0 A

***(1) : MANDATORY INCREASE FROM 80 TO 100 mm**

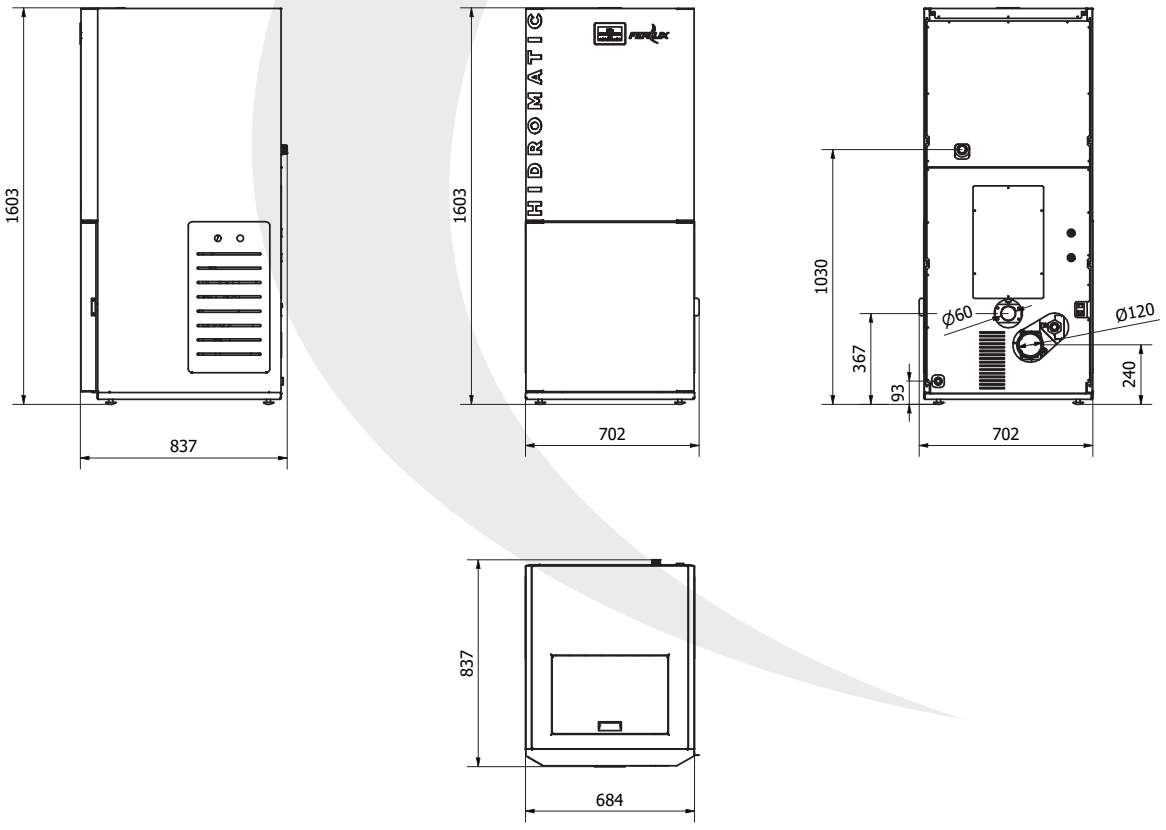
TECHNICAL CHARACTERISTICS ACCORDING TO EN 303-5:2012				
		HIDROMATIC 24	HIDROMATIC 30	HIDROMATIC 35
Weight	Kg	370	370	370
Dimensions (width x height x depth)	mm	702 x 837 x 1603	702 x 837 x 1603	702 x 837 x 1603
Fuel tank capacity	Kg	103	103	103
Smoke outlet diameter	mm	100 *(2)	100 *(2)	100 *(2)
Primary air in diameter	mm	60	60	60
Volume of water in the body	l	46	46	46
Operating autonomy	h	69-19 horas	54-15 horas	47-13 horas
Heated volume*	m^3	500	600	700
Nominal useful power	kW	24,11	31,29	35,58
Minimum useful power	kW	7,97	9,16	10,76
Smoke temperature	ºC	99	92	104
Boiler class (according to UNE EN 303-5)	-	Clase 5	Clase 5	Clase 5
Performance at rated useful power	%	94	96	95
Fuel consumption (p.c.i. 5 kW/Kg-humidity<10%)	Kg/h	5,4	6,8	8,0
CO concentration at 10%O2 at rated power	mg/m^3N	133,22	128,54	128,29
OGC concentration at 10%O2 at rated power	mg/m^3N	10,92	10,39	7,42
Average concentration of particles at 10% OR2 at rated power	mg/m^3N	19,11	19,88	18,88
Performance at minimum useful power	%	95	97	96
CO concentration at 10%O2 at minimum power	mg/m^3N	169,40	184,44	165,69
OGC concentration at 10%O2 at minimum power	mg/m^3N	11,76	12,06	12,18
Maximum operating pressure of the water	bar	2	2	2
Maximum working pressure	bar	2,5	2,5	2,5
Test pressure	bar	4,5	4,5	4,5
Minimum water return temperature	ºC	55	55	55
Maximum working temperature	ºC	80	80	80
Chimney shot	mbar	0,12	0,12	0,12
Pressure loss for ΔT=20 K (water side)	mbar	-89	-89	-89
Drive connection	“	1”	1”	1”
Return connection	“	1”	1”	1”
Power	W	230V / 50Hz	230V / 50Hz	230V / 50Hz
Maximum power consumption in ignition	W	450	450	450
Maximum power consumption at minimum power	W	30	30	30
Maximum power consumption at rated power	W	90	90	90
Power consumption in stand-by mode	W	1	1	1
General power protection	-	3,15 A	3,15 A	3,15 A
Electronic card protection	-	Fusible T5,0 A	Fusible T5,0 A	Fusible T5,0 A

***(2): MANDATORY INCREASE FROM 80 TO 100 mm**

MODEL HIDROMATIC 12-18 KW



MODEL HIDROMATIC 24-30-35 KW



4. FUEL

The FERLUX pellet boiler has been designed to burn wood pellets that meet the requirements established in the UNE-EN ISO 17225:2014 Solid Biofuels Standard and in the ÖNORM M 7135 standard.

4.1 WHAT IS PELLET?

The pellet is a combustible material that is manufactured by pressing dry natural sawdust, it is easy to be compacted and lignin itself is a binder, so no glue or other substance is needed. This process gives it a shiny appearance as if it were varnished and makes it denser.
They are very small cylinders of a few millimeters in diameter, their humidity level is very low, and they also require little storage space (to produce the same heat, the stored pellet occupies about three times less in volume than firewood).

4.2 PELLET CHARACTERISTICS

In the market there are several types of pellets which change according to the quality, characteristics of elaboration and types of wood used.
FERLUX recommends burning wood pellets with DIN plus certificate (marked obtained according to Austrian standard Önorm
M 7135) or ENplus (marked obtained according to UNE- EN ISO 17225-2:2004).
DINplus is a voluntary mark issued by an institute certifying that the pellet complies with the Austrian standard Önorm M7135, one of the most restrictive standards on the market.
ENplus is also issued by an institute that certifies that the pellet complies with the EN-14961-2 standard.

Main requirements of these regulations mentioned above:

Characteristics of the pellet according to DINplus and ENplus standard				
Requirement	Unit of measurement	DINplus	ENplus A1	ENplus A2
Diameter	mm	4 ≤ D < 10	D06: 6 ± 1	
			D08: 8 ± 1	
Longitude	mm	≤ 5 x D	3,15 ≤ L ≤ 40	
Calorific value inferior	MJ/kg (b.h)	Q ≥ 18 (MJ/kg en b.s.)	16,5 ≤ Q ≤ 19	16,3 ≤ Q ≤ 19
Humidity	% (b.h)	≤ 10		
Ashes	% (b.s)	≤ 0,5	≤ 0,7	≤ 1,5

A pellet certified under either of these two standards is the best guarantee for the proper functioning of the boiler PELLET FERLUX.
If the pellet is not properly marked, the corresponding certificate should be requested.

PELLETS SHOULD NOT BE >45 mm AND ONLY 1% MAY BE LONGER THAN 40 mm.

In the event of an unidentified pellet or that due to various circumstances we consider that the characteristics have been able to change, we can apply a series of criteria to know if it is suitable or not for its use, in which we will follow the below tips:

- DO NOT USE pellets of dimensions other than those indicated in the table above.
- DO NOT USE pellets that show granules of colors not typical of wood, or excessively dark.
- DO NOT USE wet pellet.
- DO NOT USE pellets containing mixed sawdust powder, resins or chemicals, binders, or additives.

THE USE OF FUELS SUCH AS CHIPS, CHOPPED FIREWOOD, BRANCHES IN GENERAL IS PROHIBITED. THE USE OF UNAUTHORIZED FUELS CAN HARM THE BOILER AND COMPROMISE ITS PERFORMANCE LEADING TO THE CANCELLATION OF THE WARRANTY AND THE END OF THE MANUFACTURER'S LIABILITY FOR THE PRODUCT.

The use of inadequate fuel causes:

- Accumulation of pellet in the burner.
- Dirt on the burner and smoke evacuation ducts.
- Bad combustion.
- Decreased boiler performance.
- Increased fuel consumption.
- The normal operation of the boiler is not guaranteed.
- Need to do more cleaning and maintenance in the boiler.

4.3 PELLET STORAGE

To ensure a smooth combustion, it is necessary to keep the pellets in a dry environment and not too cold. Wet and/or cold pellets reduce fuel power and efficiency and require greater cleaning maintenance of the burners, body and chimney.
Take special care in the storage of the pellets, as well as in their displacement, avoiding the formation of sawdust and that the bags break, since if this happened it could increase the humidity and the proportion of sawdust and the calorific characteristics of the fuel would possible decrease
características caloríficas del combustible.

THE USE OF PELLETS THAT DO NOT COMPLY WITH THE BEFORE MENTIONED REGULATIONS MAY HARM THE BOILER AND COMPROMISE ITS PERFORMANCE, LEADING TO THE CANCELLATION OF THE WARRANTY AND THE END OF THE MANUFACTURER'S RESPONSIBILITY FOR THE PRODUCT.

5. INSTALLATION INSTRUCTIONS

The installation of the FERLUX Hidromatic pellet boiler must be carried out only by qualified personnel, following the manufacturer's instructions and in accordance with all applicable rules and regulations in force. Otherwise, FERLUX is not responsible in case of any accident.

We must choose the location of the boiler in such a way that the route to the vertical connection of the smoke outlet is as short as possible.

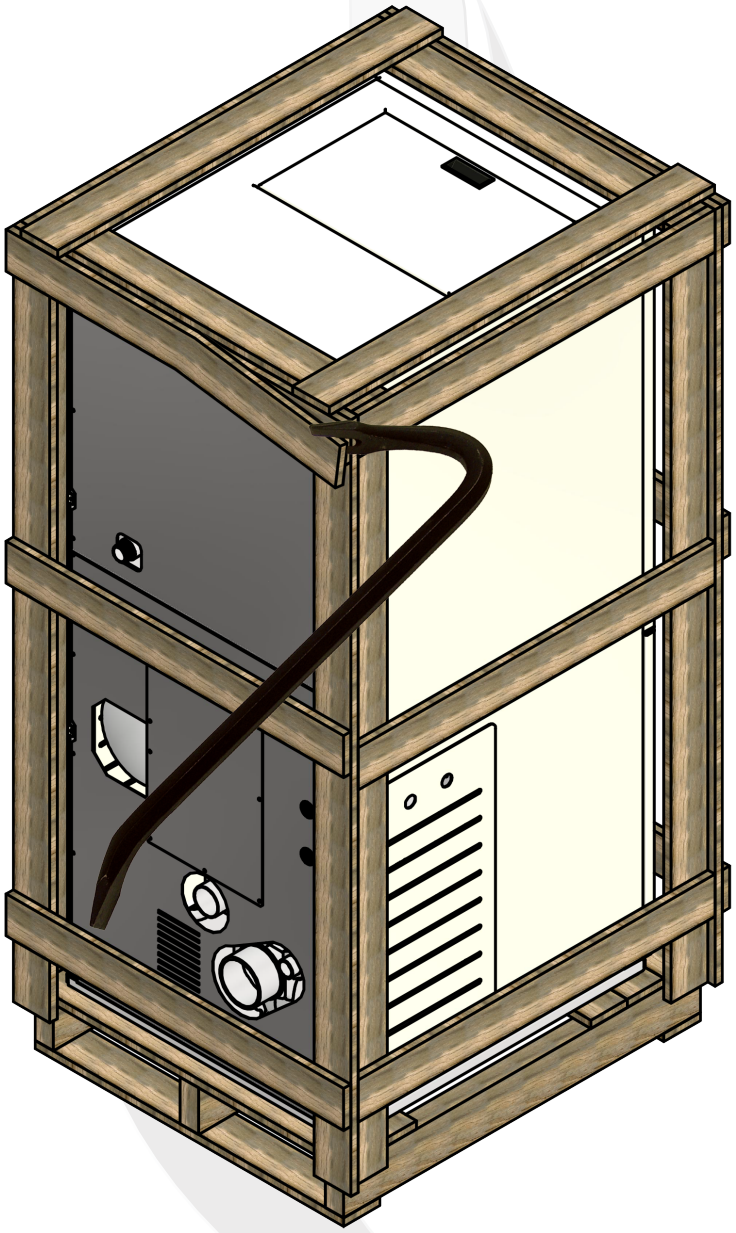
Both in the device and in the smoke ducts we can have high temperatures, so you must follow the manufacturer's instructions to prevent possible fires and dangerous situations. (See section 5.4 HOME FIRE PREVENTION.)

We must also consider the supply of air for combustion, as well as maintain adequate environmental conditions within the enclosure. (See section 5.6 VENTILATION AND AIR INTAKE.)

THE HIDROMATIC BOILER MUST ALWAYS BE INSTALLED BY AUTHORIZED PERSONNEL. ITS IMPLEMENTATION WILL BE CARRIED OUT BY THE AUTHORIZED SAT OF FERLUX.

5.1 UNPACKING

To unpack the product, follow the instructions here below.
Packaging materials are non-toxic and non-harmful. Therefore, they do not require special disposal processes. It is the responsibility of the end user, in accordance with the relevant laws, to store, dispose of and eventually recycle the packaging.



5.2 LOCATION

The boiler will be installed so that it is not necessary to move it from his position in cleaning operations, maintenance and revisions, repairs, etc.
It is also necessary to have adequate access for cleaning the smoke connector and the chimney duct.

It is advisable to support it on a level, firm and fire-resistant base, or baseboard.
For the correct combustion it is essential that the fuel is dry, so an adequate storage of it is recommended, which will have to be at a safe distance from the boiler (at least 1 meter) or in a different room. **In no case should it be stored behind the boiler.**
It will have a drain and sump connected to the drainage network.
The boiler should not be installed in rooms or areas where flammable or explosive products can be stored.
The installation of the boiler must ensure that the hydraulic circuit incorporates the necessary safety measures against the increase in temperature and water pressure.
Any deficiencies in the electrical installation must be repaired.

A DRAIN COCK WILL HAVE TO BE INSTALLED IN THE HEATING CIRCUIT, LOCATED AT THE LOWEST POINT AND AS CLOSE AS POSSIBLE TO THE BOILER.

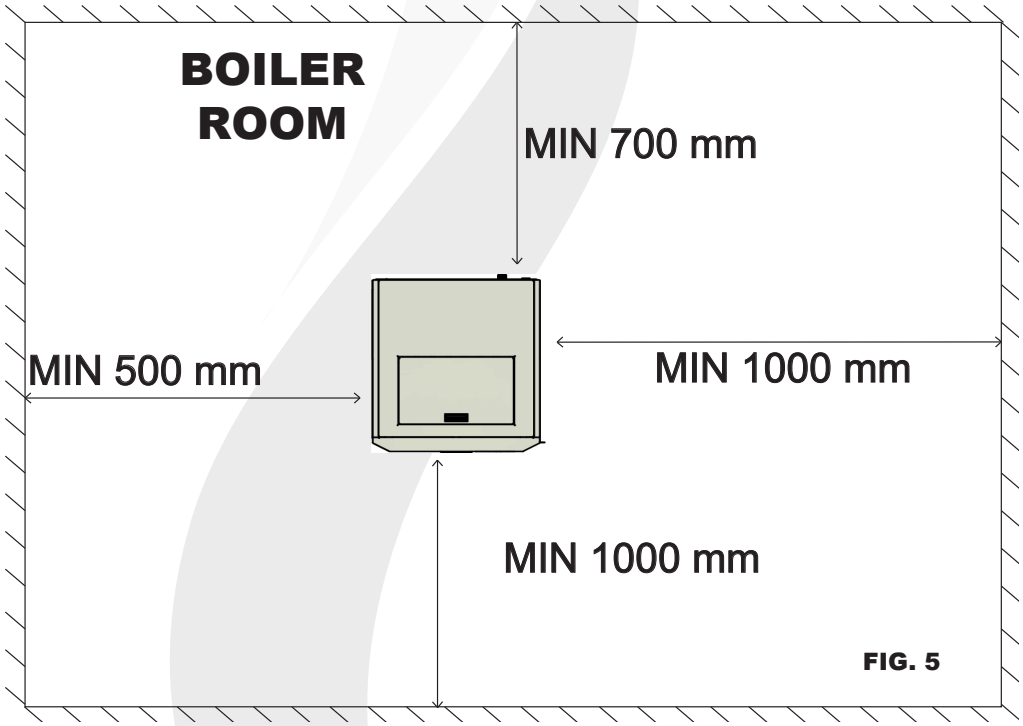


FIG. 5

5.4 HOME FIRE PREVENTION

- The manufacturer's instructions for both the installation and use of the boiler must be complied with, in addition to all the corresponding safety regulations and regulations must also be complied with. Otherwise, FERLUX is not responsible in the event of any accident.

- It is recommended to have out of the heat focus (at least 1.5m away) any combustible or flammable element such as wooden beams, furniture, curtains, flammable liquids, etc. A protective layer of insulating and non-combustible material should be placed in the heat focus area where flammable or heat-sensitive coatings are in place.

- Periodic cleaning of the boiler and the smoke ducts must be carried out since the soot and other accumulated combustion residues could enter into combustion.

- In the event of a chimney fire, use the appropriate extinguishing systems to put out the fire, or contact the firefighters for their intervention.

- If fumes occur during the operation of the boiler, ventilate the room, and check the tightness of the elements of the same and the chimney. Once verified if the problem persists consult with the SAT to adopt a solution.

- In the case of having a flammable floor (parquet type, floating flooring.) or heat-sensitive soils, it is necessary to place a protection that separates the stove from the ground. This protection should be of a fire-resistant material such as marble, sheet steel, tiles, etc. This material has to be able to resist without breaking due to the weight of the boiler. It shall be at least 2 mm and shall be at least 150 mm from the boiler on the sides and rear and 300 mm from the front of the stove.

- Below is a table with the minimum safety distances that must always be guaranteed on a mandatory basis

	Safety distances to flammable material	Distancias de seguridad al material no inflamable
A		Safety distances to non-flammable material
B	200 mm	100 mm
C	1500 mm	750 mm
D	500 mm	200 mm

5.4.1 MEASURES TO CROSS ENCLOSURES

The smoke duct must cross one or more enclosures of the premises depending on where the device is going to be installed.
The size of the holes that need to be opened depends on the diameter of the duct and the enclosure to be crossed. Once the tube has passed the remaining space must be filled with insulation (rock wool, ceramic fiber.)

	Insulating thickness [mm]	Diameter of holes to be made [mm] for an outlet tube Ø80 mm
Wall in flammable wood, or with flammable parts	100	280
Cement wall or ceiling	50	180
Brick wall or ceiling	30	140

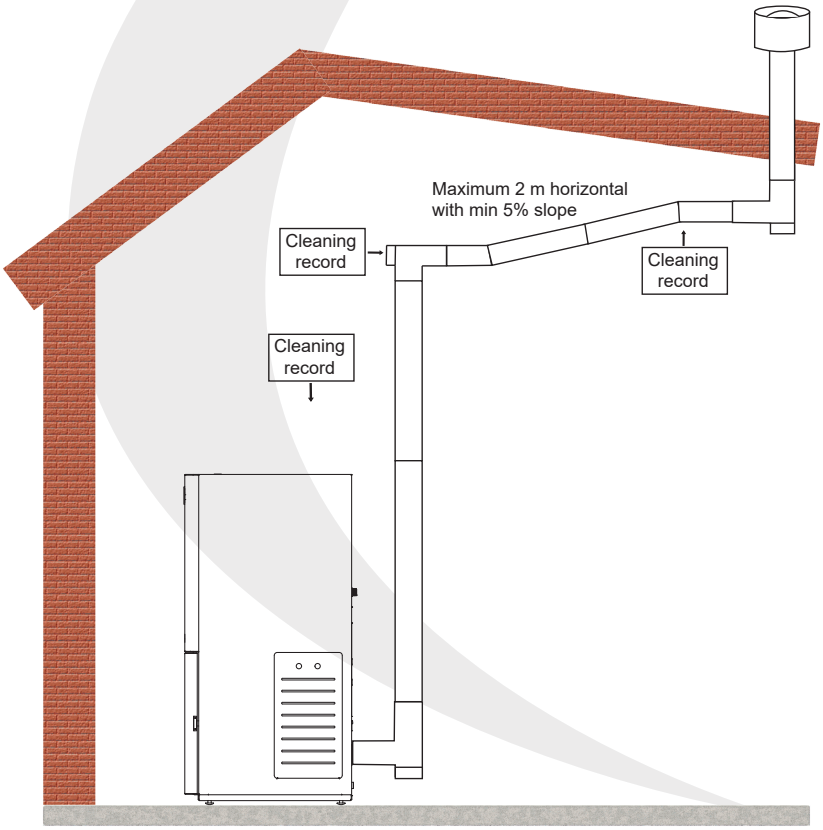
5.5 FLUE OR CHIMNEY

We will use a flue or chimney to be able to remove the gases that are produced in the boiler during combustion to the outside.
The responsibility for the works carried out for the flue is from the installer, so FERLUX recommends that the installation be carried out by qualified personnel (who are in possession of the installer's card), which will be asked to perform the checks relating to the smoke duct, air intake, etc. In addition, all the safety regulations provided for by the specific legislation in force in the country where it is installed must be respected.

5.5.1 GENERAL FUNDAMENTALS

For the installation of the flue, the following points must be considered:

- **The smoke evacuation system must be unique for each boiler** (smoke outlet evacuations in common with other appliances are not allowed).
- The smoke evacuation route will always be as short as possible and always looking for maximum verticality.
- The internal section of the smoke evacuation duct should be uniform and preferably circular. In the event that we had a square or rectangular section, the edges should be rounded with a minimum radius of 20 mm, the curves will be regular and without discontinuities, ensuring that the deviations of the path refarding the axis are not greater than 45°.
- It is strictly forbidden to install valves or closures that may obstruct the passage of fumes.
- It is necessary to avoid horizontal sections of chimney, since this most likely will get it dirty and requires a more frequent cleaning of the ducts, in the event that it is inevitable there will be a minimum of upward inclination and "T" will be installed in the changes of direction to provide cleaning access without having to disassemble all the installation. The installation must be carried out in such a way as to ensure regular cleaning without the need to dismantle the entire flue.
- For the installation of the smoke duct, safety standards and minimum distances must be respected.



5.5.2 CALCULATION OF THE SMOKE OUTLET DUCT

For the layout of the chimney, we will consider the following indications:

- AISI 316 stainless steel tubes, varnished aluminized steel tubes of minimum thickness of 1.5 mm, porcelain tubes of minimum thickness 0.5 mm.
- Flexible tubes are allowed if they meet the specifications set by the law (stainless steel with smooth inner wall), the clamps must have a minimum length of 50 mm.

Below is a table in which you can find the limitations for installation:

LIMITATIONS	WITH DOUBLE WALL TUBE Ø 120 mm	WITH DOUBLE WALL TUBE Ø 150 mm
Horizontal sections with min. 5%	2 m	2 m
Minimum length (mandatory vertically)	2 m	2 m
Maximum length (with 2 90 ° bends)	5 m	7 m

The maximum length allowed for vertically installed duct has been calculated, with a maximum of two 90 ° bends and practically no horizontal section (only to cross the wall if necessary).
If the installation is different from the one indicated above, the "equivalent head loss" of the installation must be calculated.

The ***"equivalent pressure loss"*** of an installation is the result of the sum of the total meters of the installation, plus the additional losses that are derived from the following table:

TYPE OF LAYOUT OR ACCESSORY	LENGTH TO SUBTRACT FROM THE TOTAL ALLOWED
90° curve	1 m
Horizontal span 45° curve	2 m
Accessory in "T"	1 m
Diagonal section	0,5 m
45° curve	0,5 m

The sum of these losses must be less than or equal to the maximum allowable length indicated in the table of limitations. If this is not fulfilled, the diameter of the smoke duct to be installed should be increased:

LOSS OF LOAD EQUIVALENT ≤ MAXIMUM ALLOWABLE LENGTH

5.5.3 INSTALLATION IN TRADITIONAL TYPE FIREPLACES (see)

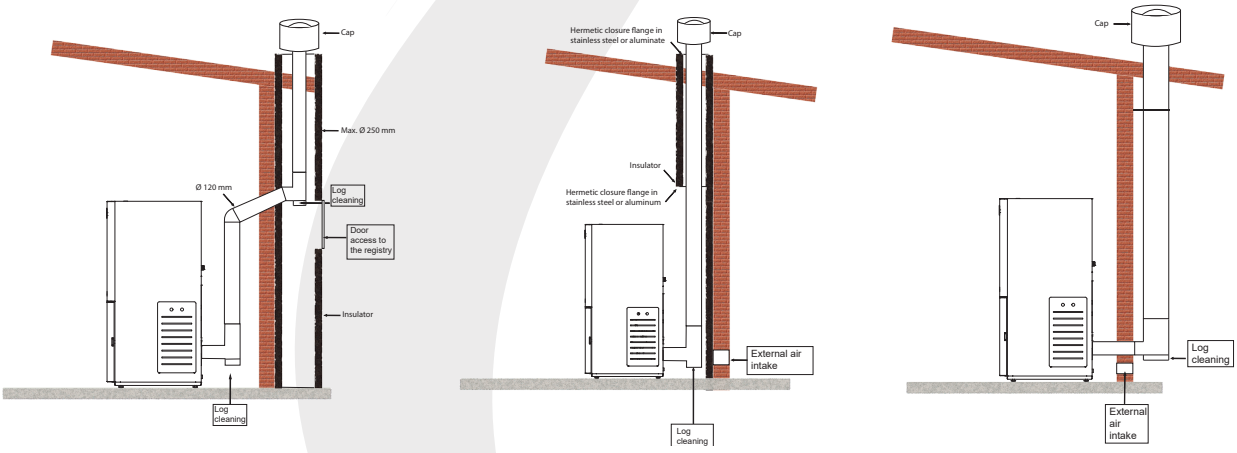
When you want to take advantage of an existing chimney it is necessary to make a control check on the tightness of it, in the event that it was not watertight it could be the case of a positive depression with respect to the atmospheric that could filter and invade inhabited environments. It is advised if it is not completely watertight that it should be re-intubated.

If the section of the chimney is excessively large, it is contemplated to pipe it with a maximum diameter of Ø150 mm, and is also advisable to insulate it.
It is MANDATORY to carry out a thorough cleaning of the smoke outlet, to reduce the risk of fire in the gas outlet

5.5.4 OUTER SECTION OF CHIMNEY (see FIG. 21)

To use the section of the exterior chimney, the following requirements must be met:

- The installation that goes to the outside must be with insulated tubes with double stainless steel wall and fixed to the building.
- This external conduit must have a register for periodic maintenance.
- The chimney must go up to the summit, and the requirements of section 5.3 must be met.



5.5.5 SMOKE OUTLET TERMINATION

The smoke outlet always has to end vertically and will have in its upper part the device that we call auction and that must comply with the following:

- It must have a useful internal section equivalent to that of the evacuation tubes.
- The useful output section must be at least twice as many as the evacuation tubes.
- The auction should prevent rain, snow or foreign bodies from entering the chimney.
- In addition, the finish must be anti-wind and overcome the ridge to guarantee the dispersion and dilution of the combustion products.
- It is completely forbidden to install hats or deflectors for horizontal output, like
- all those used for gas boilers, as they can cause problems in combustion.

It is totally forbidden to cover the chimney with anti-bird nets, meshes or similar.

5.6 VENTILATION AND AIR INTAKE

- In the cabin where the boiler is installed, we must ensure that we will have at all times the necessary air to guarantee a good combustion, in addition to optimal conditions of habitability within the enclosure.
- The outside air intake whenever possible should be connected to the room where the stove is installed. We must make sure that the entrance of outside air cannot be obstructed.
- If in the room where the stove is going to be installed we do not have enough natural ventilation, it will be essential to practice some opening, which guarantees us the necessary air from the outside (at least it should have a section of 100 cm2).
- Air can also be obtained from an adjacent room, provided that such flow can easily reach through of permanent openings, which cannot be closed and which communicate with the outside.
- The premises cannot be used as a garage, material warehouse or activities with a risk of fire.
- The ventilation of the premises must satisfy the minimum flow required according to specific regulations and the flow rate of maximum intake air of the apparatus.
- Collective ventilation ducts are prohibited.
- The air intake must be placed respecting at least 500 mm both horizontally and vertically from the smoke outlet.
- The air intake for combustion cannot be connected to any air installation, nor is it recommended to take air directly from the outlet on the wall.

In the case in which there is no other way than to connect the primary air intake directly to the outlet practiced on the wall, it should be of a larger diameter, in order to avoid all the problems caused by the lack of primary air intake. The air intake practiced on the wall will not have any type of mosquito net or similar mesh since this decreases the entry of primary air to the device with the consequences that this implies in the ignition and operation of the same (Er41, see Chapter 9 of this manual).

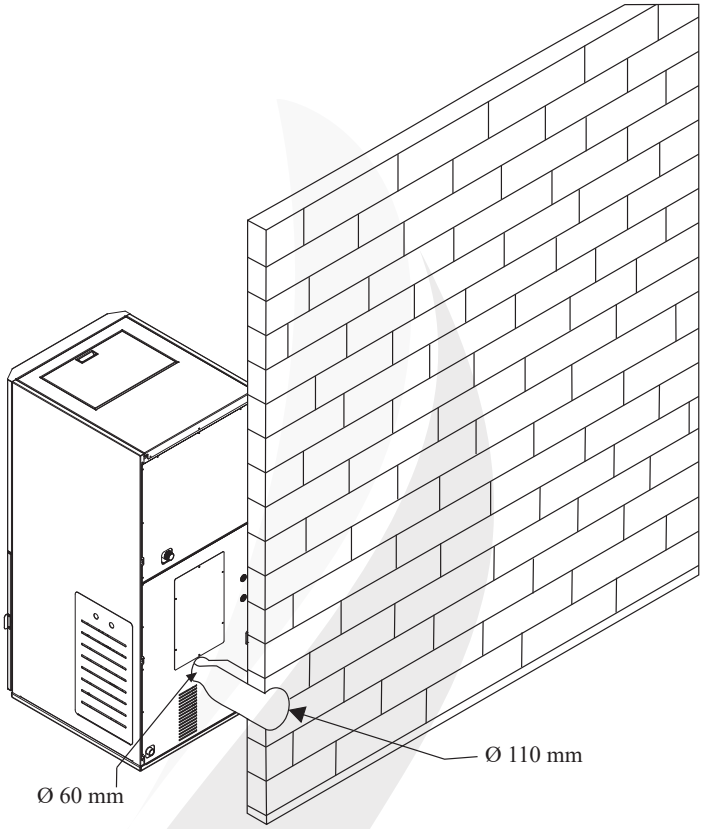
The extension is to be made as follows:

- When the primary air intake in the equipment is Ø 60 mm we must expand to Ø 110 mm

IN THE CASE OF CHANNELING, AVOID ANY KIND OF ELBOW

IT IS TOTALLY FORBIDDEN THE INSTALLATION OF A COAXIAL TUBE IN ANY FERLUX EQUIPMENTS.

SINCE COMPLIANCE WITH THE BEFORE MENTIONED IS BEYOND OUR CONTROL, FERLUX WILL NOT BE RESPONSIBLE FOR ANY INCIDENT CAUSED BY THE BREACH OF THE MENTIONED POINTS.



5.7 HYDRAULIC CONNECTION

The hydraulic installation must be carried out by qualified personnel,respecting the current installation regulations (RITE). The hydraulic connection depends on the type of installation, although there are several “rules” that are common for all types of installations.

- The installation and hydraulic connection must be done by qualified personnel who can issue the documentation of a correct installation according to the regulations in force in each country. FERLUX is not responsible for damages arising from erroneous connections or made by unqualified personnel.
  If the installation provisions are not respected, the product warranty expires and FERLUX is excluded from all liability related to damage to persons or things
- The entire range of FERLUX boilers with automatic cleaning is equipped with a closed expansion vessel.
- The expansion vessel incorporated in the boiler does NOT guarantee adequate protection from thermal expansions suffered by water throughout the installation. Therefore, it will be the qualified installer who will have to determine the need for an additional expansion vessel, depending on the type of installation planned.
- Suitable traps and devices must be placed for the proper evacuation of air from the circuit in the boiler filling phase.
- It is recommended to interspersing cutting keys between the installation and the boiler, to simplify maintenance work.
- The installation of an inertia tank (puffer) is recommended but not mandatory. This has the advantage of decoupling the boiler from sudden demands, reduces consumption and increases the efficiency of the system.
- The hot water should be “directed” differently depending on the objectives (radiators, exchanger, buffer,etc.).
- The material used in the circuit must be suitable to withstand possible excesses of temperature and pressure.

- The boiler is equipped with a safety valve at 3 bar to act on occasional increases in pressure in the installation. The installer will be in charge of verifying that the maximum pressure existing at each point of the installation does not exceed the maximum working pressure of each component. The installation of the discharge pipe of the safety valve should be carried out in such a way that it does not impede its regular operation and does not cause harm to people. It must be accessible.

- DO NOT install the boiler in a primary system with an open expansion tank.

- For the heating of possible radiant panels at low temperature an inertia tank (puffer) installed according to the manufacturer's instructions is required. Radiant panels should not directly receive water from the boiler.

- Perform the filling and filling of the system through the charging tap (not exceeding 1.8 bar).

- It is possible that in the first days of operation it is necessary to purge more than once so that all the air that may be in the installation comes out.

- Direct connection to radiators is prohibited, since their small diameter prevents proper operation of the boiler.

- The temperature of return for the water in the boiler must be higher than 50-55 ºC to avoid condensation phenomena.

- The water characteristics on the installation are very important for the proper functioning and duration of the boiler.
  One of the most notable drawbacks is the fouling on the heat exchange surfaces.
  Lime scale considerably reduces heat exchange due to its low thermal conductivity.
  The installer must decide, according to the type of water and installation if it includes water treatment, this is recommended for the following cases:

  - High water hardness
  - Very extensive facilities
  - Successive fillings due to maintenance work of the installation or produced by losses.

  For the treatment of feed water from thermal installations it is recommended to always contact an authorized installer.

- Do not remove water from the installation or empty the boiler of water except in extreme cases of maintenance or repair. In no case will the boiler water be used for domestic use.

IT IS MANDATORY, THE INSTALLATION OF AN AUTOMATIC BLEEDER TO AVOID ANY KIND OF PROBLEMS CAUSED BY AIR IN THE HEATING CIRCUIT.
THIS INSTALLATION WILL REMOVE ANY ACCUMULATED AIR FROM THE HEATING SYSTEM, THIS WILL MAKE BOTH THE BOILER AND THE RADIATOR CIRCUIT WORK CORRECTLY

IT IS MANDATORY, THE INSTALLATION OF AN ANTI-CONDENSATION VALVE AT 55 ° C TO AVOID CONDENSATION PROBLEMS.
THE INSTALLATION OF THE ANTI-CONDENSATION VALVE WILL PREVENT THE WATER RETURN FROM BEING IN TEMPERATURES LOWER THAN 55 ° C, AND THEREFORE WILL MAKE THE BOILER AND THE HYDRAULIC CIRCUIT WORK CORRECTLY.

GRUNDFOS CIRCULATION PUMP OPERATING GUIDE

>	Operating panel	Control mode
0		Automatic adaptation of proportional pressure
1		Automatic adaptation for constant pressure
2		Proportional pressure 1
3		Proportional pressure 2
4		Proportional pressure 3-max.
5		Constant pressure 1
6		Constant pressure 2
7		Constant pressure 3-max.
8		Constant curve 1
9		Constant curve 2
10		Constant curve 3-max.

Alarm status	Error
	Blocked
	Low voltage
	Electrical error

5.6 ELECTRICAL CONNECTION

For the installation of the boiler, the power outlet must be in accordance with the specific applicable legal regulations.

The boiler is supplied with power cable that must be connected to the 230V socket. We must make sure that the general switch of the boiler is at 0 and then connect the cable to the power, first behind the boiler and then to the electrical outlet.

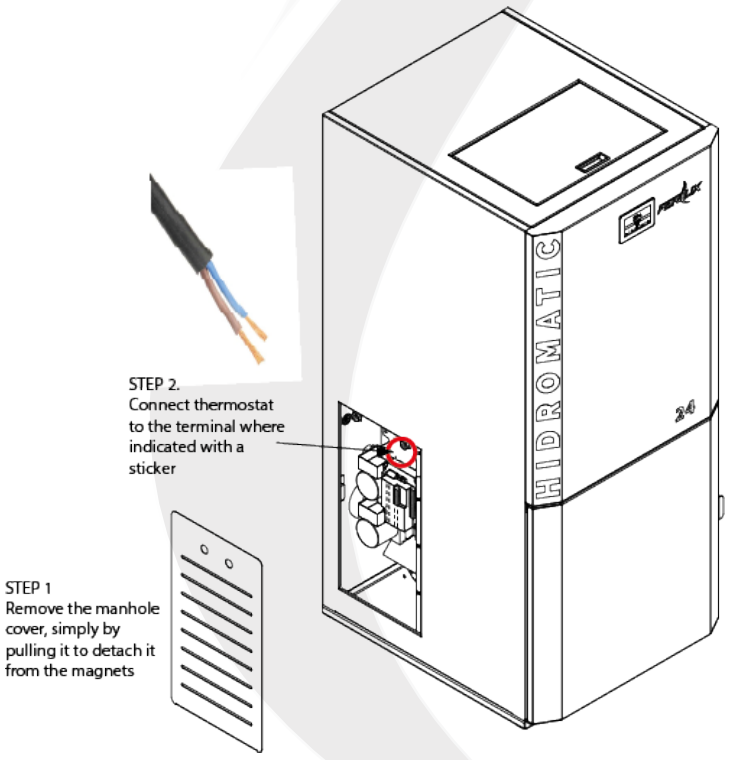
The installation of the boiler must be in accordance with the specific applicable legal regulations, with adduced amperage. We must ensure that the power cord, in its final position, does not encounter hot or sharp parts that may deteriorate it.

The power outlet must be single-phase with phase, neutral and grounding.

If the mains voltage is not sinusoidal (such as generator sets or other equipment) the boiler could give problems and operating errors.

5.7 EXTERNAL THERMOSTAT CONNECTION (Normally Closed)

If you want to connect an external ambient thermostat, it is mandatory that it has a minimum hysteresis of 2ºC to avoid unnecessary switching on and off of the boiler, leading to operating problems.



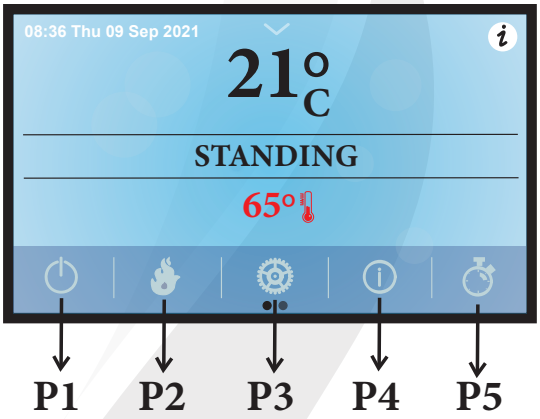
When the ambient thermostat opens contact, for the circulation pump, the boiler has a waiting time before going into standby. If the water temperature exceeds 75 °C the pump works again to cool down.
When the ambient thermostat closes the contact, the boiler has a waiting time before Starts the ignition again.

6. CONTROL PANEL INSTRUCTIONS FOR USE

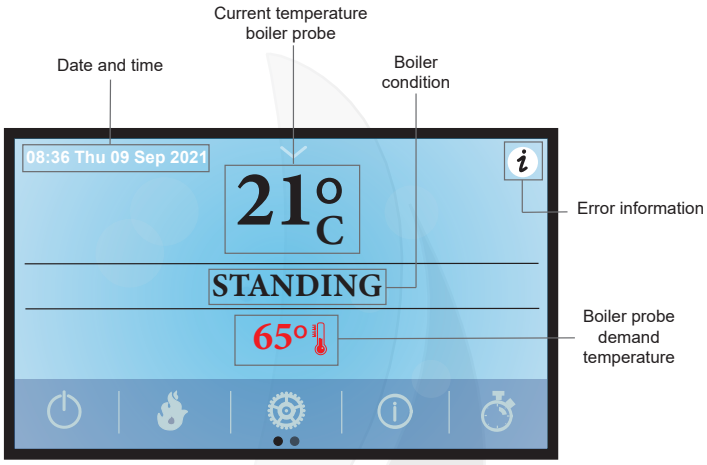
The display of the Hidromatic boiler allows you to move sliding between the different menu options which makes it easier and more intuitive to use.
The main screen consists of two home pages that we will call “display screen 1” and “display screen 2”

6.1 DISPLAY SCREEN 1

Below is the image of the main display screen, which is fully tactile



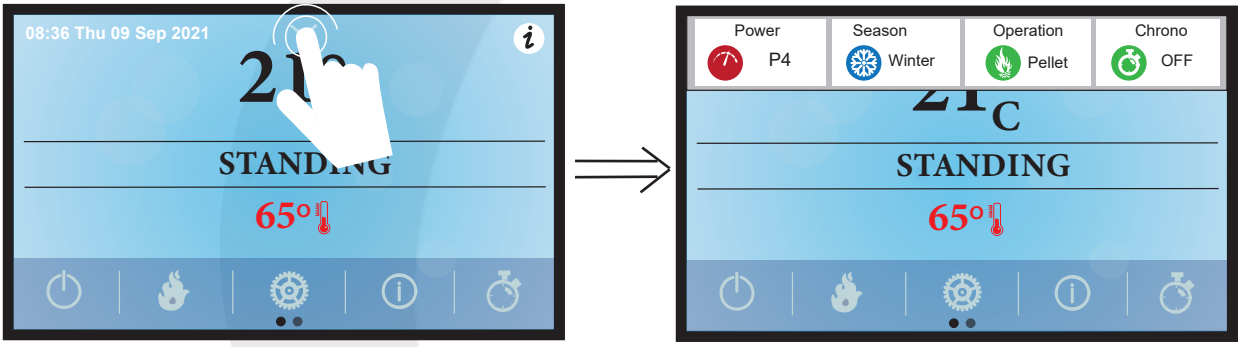
KEY	FUNCTION	DESCRIPTION
P1	ON/OFF	With this button we proceed to the on/off the boiler
P2	CONFIGURATIONS	Through this key you access the menu settings, both combustion, heating, auger loading and cleaning reset
P3	CUSTOMIZATION	This button gives access to the menu for display customization
P4	INFORMATION	This menu gives access to the information
P5	PROGRAMMING	This menu gives access to the programming, in its three modalities and with the option of establishing 3 different ones along with its 3 daily shutdowns



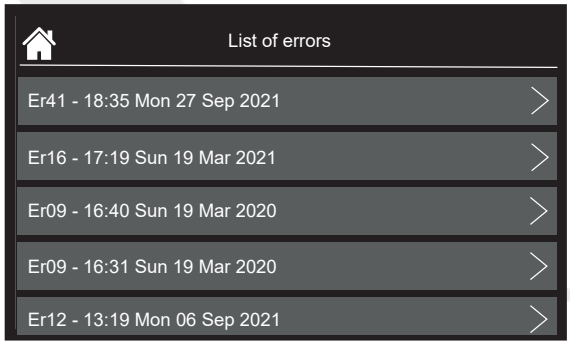
MAIN SCREEN

- Date and time
- System operating status
- Boiler body temperature read by the probe
- Boiler body temperature demanded
- Errors informations

When we slide the top arrow of the screen, the configuration we have is shown, as indicated in the images below



From this main screen if we want to see the history of errors that the boiler has, we press the Button “I” of error information as shown below:

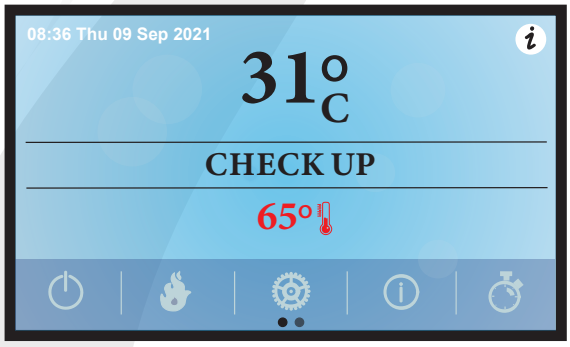


6.1.1 ON - OFF THE HYDROMATIC BOILER

With the P1 button the boiler is turned on and off as shown in the images below. The P1 button is left pressed until it appears on the screen as shown:

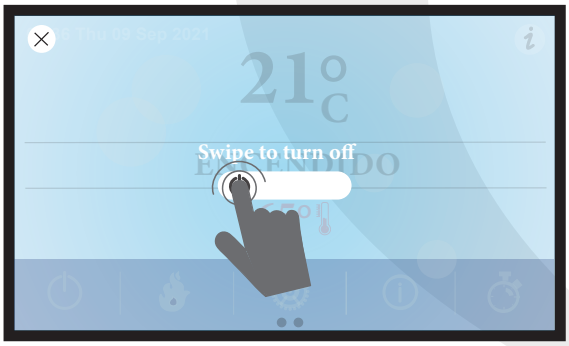
ON

Next, the device goes to the power on phase where the first screen we will see is the CHECK-UP status as indicated in the following image:



OFF

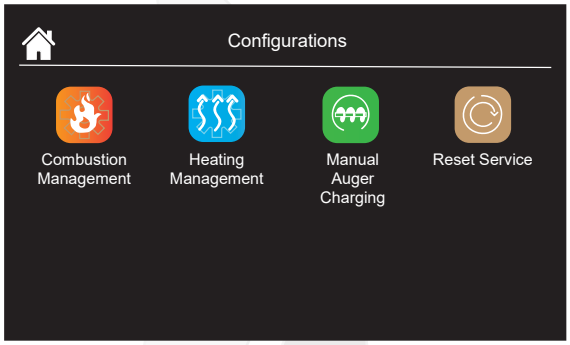
In the same way is the procedure to do the shutdown of the boiler:



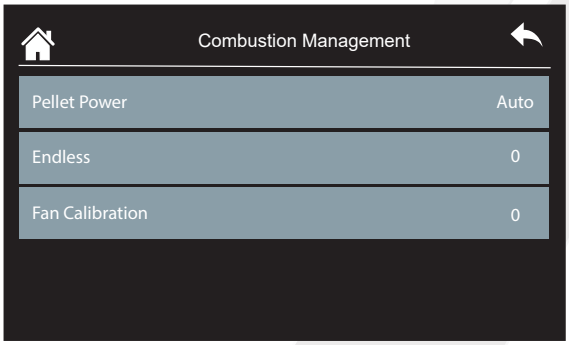
Press the P1 button for a long time, slide to the right and the boiler goes into the process of shutting down until it reaches the state of shutdown.

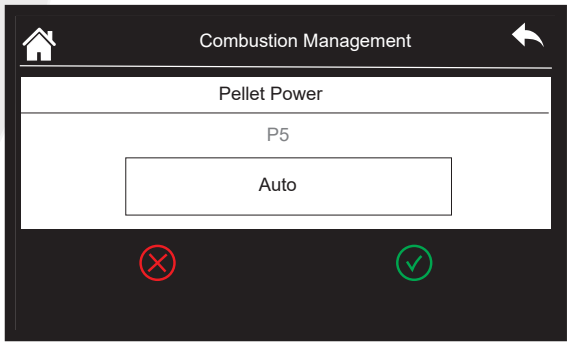
6.1.2 CONFIGURATIONS

In this section we access the configurations:



COMBUSTION MANAGEMENT

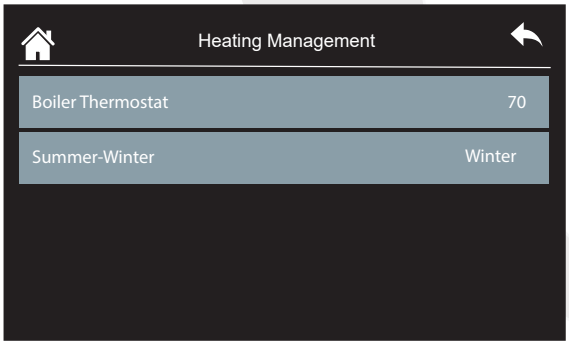


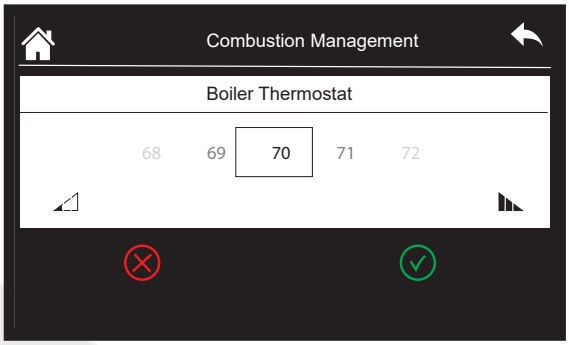


To choose in which power we want we enter the combustion management menu, we select pellet power and then the 5 powers + automatic appear. From Ferlux it is always recommended that the working power is Auto, since it is the most efficient way of working the boiler.

Endless calibration and fan calibration, are two options that we do not recommend using since the boiler is configured from the factory and designed so that by the Conforluxsystem, both the pellet fall and the revolutions of the smoke extraction turbine are automatically adjusted to offer a perfect combustion.

HEATING MANAGEMENT

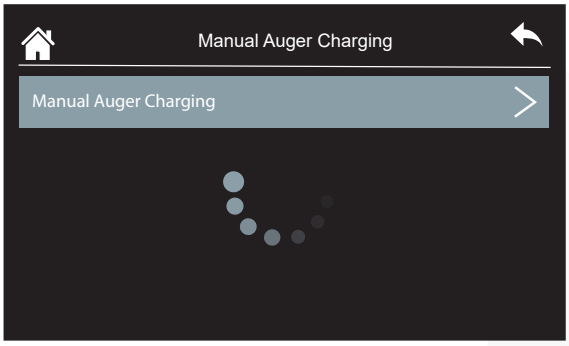


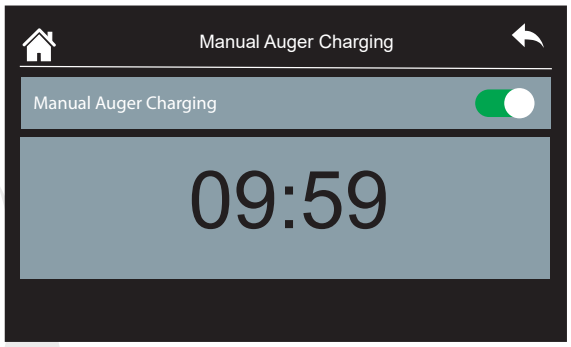


From this menu, which we also access from configurations, we manage the demand temperature of the probe of the boiler body, as shown in the images above.

As for the summer-winter option, the boiler is configured to work in winter mode. The summer option is not available.

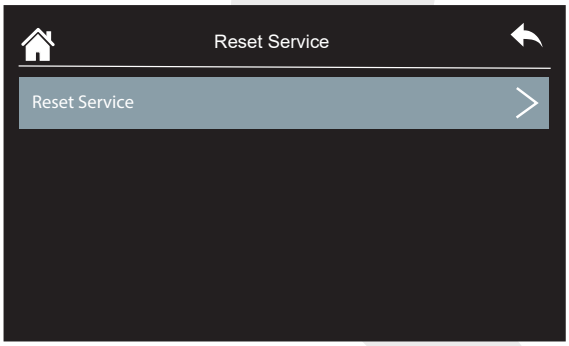
MANUAL ENDLESS LOADING

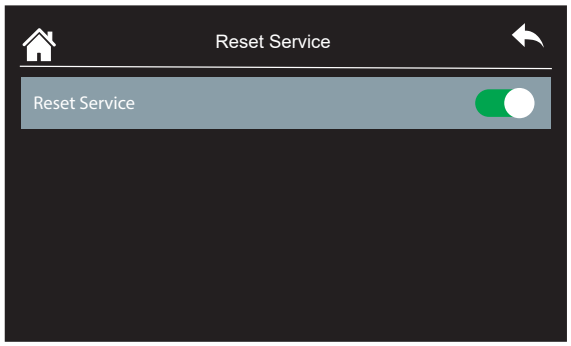




At the first ignition of the boiler, before proceeding to make the ignition, we must make a manual loading of the auger. As shown in the images above, a countdown appears that lasts up to 10 minutes to do the manual loading of the auger. Once the charge has been done, we stop the counter and proceed to the ignition.
Manual loading of the auger should also be done when the hopper has completely run out of fuel or when cleaning and maintenance is done.

RESET SERVICE

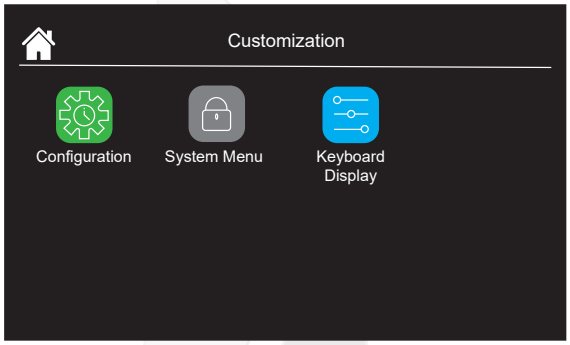




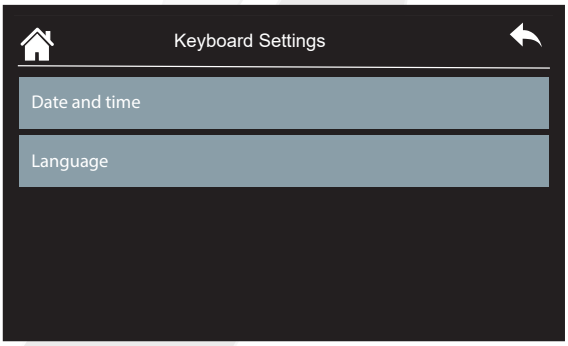
When the display screen displays “Clean” alternately or permanently at the top of the control panel. This message will appear every 150 hours and the tasks to be performed will be the cleaning of the brazier, the ash drawer and the reset in the control panel as shown above.

6.1.3 CUSTOMIZATION

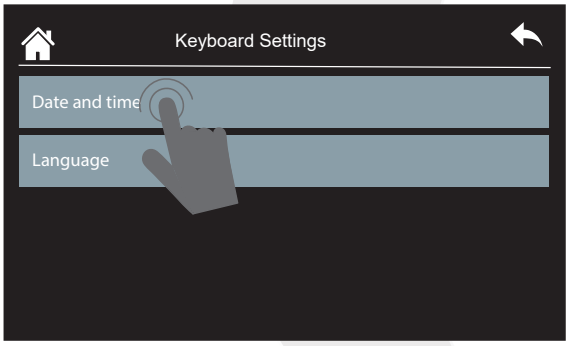
In this section we access the customization of the control panel

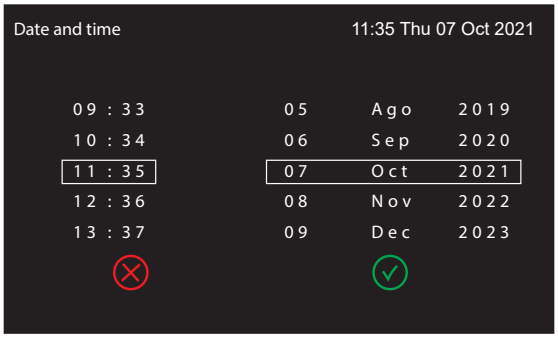


KEYBOARD SETTINGS

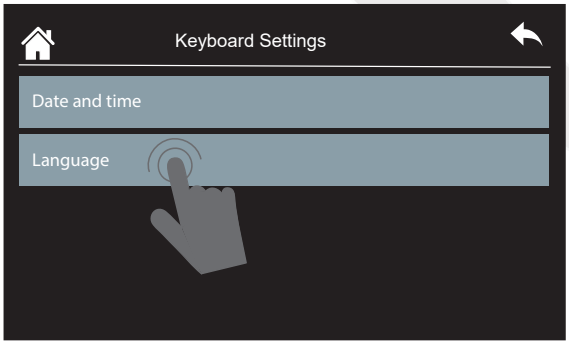


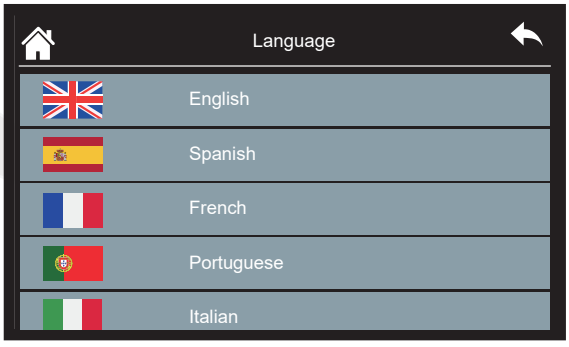
From this menu you can set up the date and time of the boiler as shown in the sequence of images below.



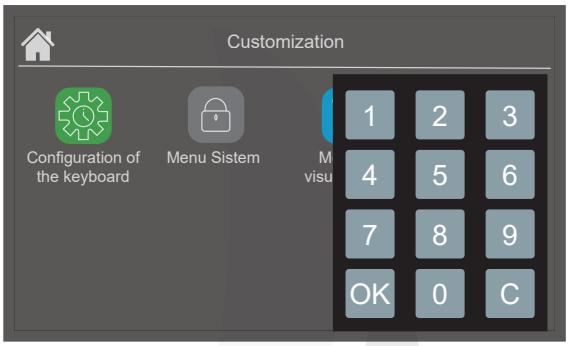


We can also set up/customize the user interface language of the control panel, in the same way as shown below.



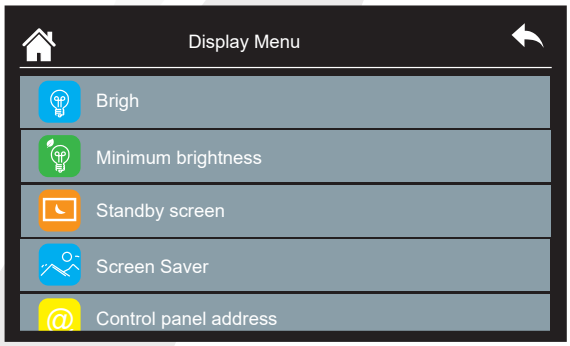


SYSTEM MENU



This menu is reserved solely and exclusively for the SAT (Authorized Technical Service) of FERLUX, no user should have access to this menu, since it could damage the operating configuration of the device and thereby cause possible damage to both the device, the installation and even personal.

DISPLAY MENU



In this screen you can set up / customize the appearance that you want our control panel to present.

6.1.4 INFORMATION

In this section we access the information offered by the boiler about its operation.

In the reading showed in the previous image, we can see the information offered: smoke temperature, water temperature, pressure, air flow, speed of the smoke extraction fan, working time of the auger, recipe applied to the configuration of the boiler and product code.

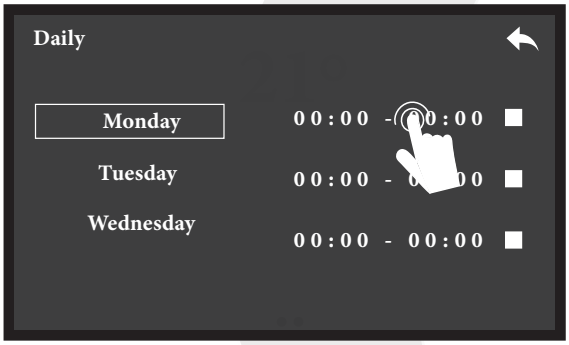
6.1.5 PROGRAMMING

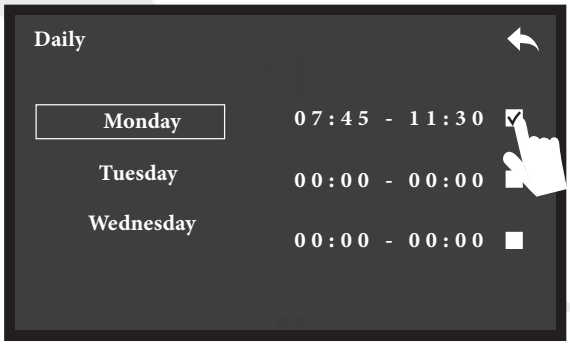
The Hidromatic pellet boiler in all its powers can be programmed for automatic switching on and off in different time slots.
It offers the possibility of programming it in daily mode, weekly mode, or weekend mode, the one that best suits to our needs.

Below we show the daily schedule, which we will choose if what we need is a different on and off for each day of the week.

DAILY PROGRAMMING: You can program the boiler for any of the week days. With the option of three non-matching time slots for the on and off, that is, three different non-matching time slots of turning on and off the boiler for each day of the week.

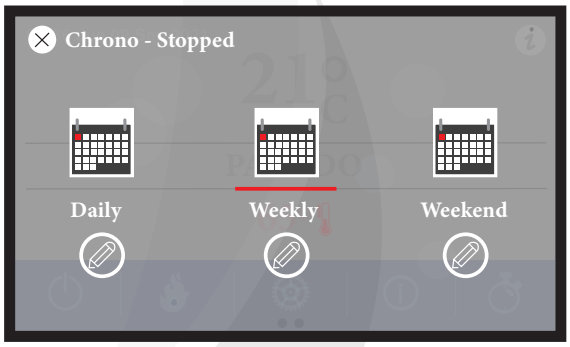
A continuation shows the steps to follow to make the daily programming of the boiler.

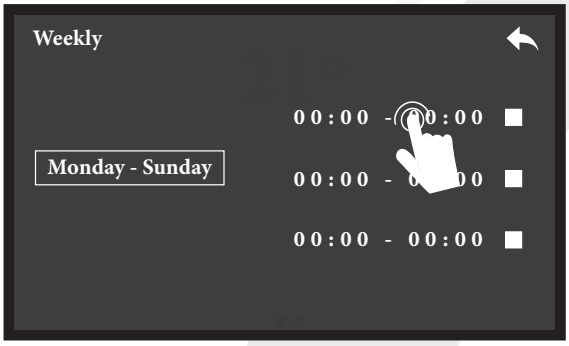


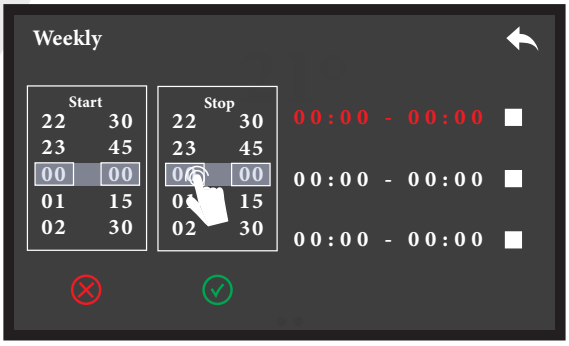


Below we show the weekly schedule, which we will choose if what we need is a time slot of on and off for all days of the week. That is, every day of the week will have the same operating hours of the boiler.

WEEKLY PROGRAMMING: The boiler can be programmed only once for all days of the week. With the option of three non-matching time slots for on and off, that is, three different non-matching time slots of turning on and off the boiler for all days of the week.
A continuation shows the steps to follow to make the weekly programming of the boiler

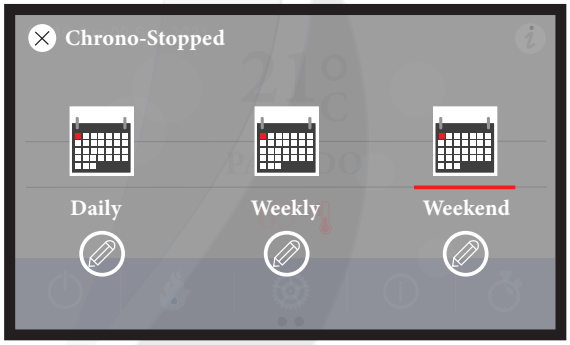


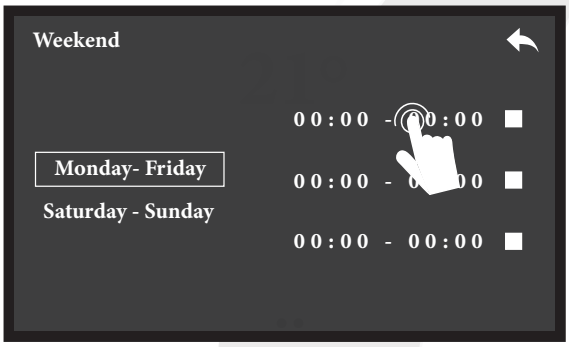


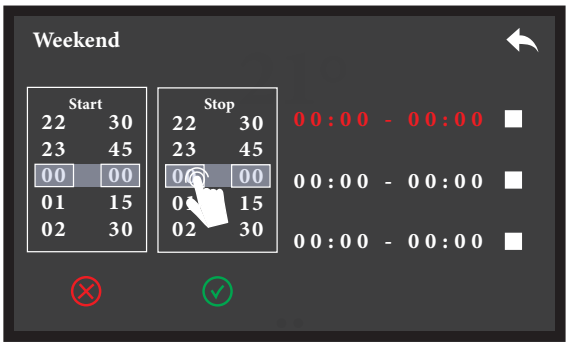


Below we show the weekend schedule, which we will choose if what we need is a time slot of on and off for the days of the week from Monday to Friday and a different one for the weekends. That is, every day of the week from Monday to Friday will have the same operating hours of the boiler and the weekend will have a different schedule. Always taking into account that we have three time slots for each modality.

WEEKEND PROGRAMMING: You can schedule the boiler only once for all days of the week from Monday to Friday and another different schedule for the end of week. With the option of three non-matching time slots for on and off, that is, three different non-matching time slots of boiler on and off for every day of the week from Monday to Friday and three different non-matching boiler on and off time slots for Saturday and Sunday. A continuation shows the steps to follow to make the weekend programming of the boiler







6.2 DISPLAY SCREEN 2

Below is the home screen 2, which is accessed by swiping the main screen to the left. On this screen the boiler operation LEDs are shown on

7. OPERATION AND USE OF THE BOILER

7.1 TIPS AND WARNINGS

- Before turning on the boiler, make sure that inside or near the boiler there is no flammable material
- or that it could go into combustion.
- Use the fuel recommended by the manufacturer.
- Do not use the boiler as an incinerator or otherwise than the use for which it is designed.
- The external surfaces of the boiler reach high temperatures for touch, so precautions should be taken
- suitable to avoid burns.
- Refer to this manual whenever you have any questions. Do not tamper with the display until you are sure which procedure to follow.
- Pay special attention to the alarms and messages that are displayed on the display, it is even advisable to take note of them, in this way we will facilitate the work of the Technical Service in case of intervention.
- Before turning on the boiler you should check that: there is nothing obstructing the air inlet tube, the burner is clean, the ashtray in place and the front door that gives access to the combustion chamber tightly closed. **The door can only be opened when the boiler is stopped and cold.**
- Do not touch the boiler with wet hands since it is an electrical appliance.
- Whenever you have any questions, consult this manual thoroughly. Do not manipulate the display until you are sure that you have assimilated what procedure you should follow, the effect it produces on the operation and know how to reverse it if necessary.
- Poor handling of the boiler or insufficient maintenance (not as indicated in this manual), can cause harm to people, animals, etc. In that case the manufacturer shall be exempt from all civil and criminal liability.

7.2 FUEL LOADING

The fuel load will be done by the top of the hopper

The use of fuels other than those indicated and the use of the boiler as an incinerator are prohibited.

The use of pellets in poor condition or any other product not recommended can damage some components of the boiler, impairing its operation. This will result in the cessation of the warranty and the corresponding liability of the manufacturer..

It is important that the level of pellet in the fuel hopper is periodically monitored, to prevent it from emptying completely and shutting down the boiler with the error of lack of fuel.

The manufacturer recommends always having it at least half load.

.

After a long period of inactivity, it will be necessary to remove the remains of pellets from the fuel tank since these could have absorbed moisture, changing their original characteristics and may not be suitable for use.

7.3 COMMISSIONING

IN ORDER TO VALIDATE THE START-UP,

IT MUST BE CARRIED OUT BY AN OFFICIAL FERLUX TECHNICAL SERVICE.

The following should also be considered before proceeding to the first ignition of the boiler:

1. Proceed to the loading of fuel as indicated in the previous section.
2. Close the boiler door.
3. Check that the installation is filled with water.
4. Connect the boiler to the mains and turn it on from the general switch, located at the back of it right next to where the plug of the power outlet is. The “Stopped” operating status will appear on the screen.

5. Select the combustion power of the boiler as it appears in section 6.1.2 Configurations - Combustion Management.
6. Once all the previous checks have been carried out, we will proceed to the ignition of the boiler as explained in section 6.1.1 On - Off of the Hidromatic Boiler. At this time the plate performs a check of the boiler "Check" during which it will perform several verifications. If during this check the electronic board detects any anomaly it will not start and will give the corresponding error message. If everything is correct, the boiler will start with the ignition process.
7. 7. At the time of ignition, an error message may also appear. In this case we will consult the equipment 9. Problems, messages and alarms to know how to act, since while we have an error on the screen we will not be able to start the boiler.

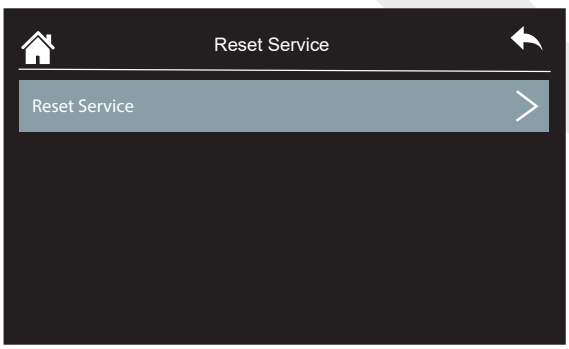
8. CLEANING AND MAINTENANCE

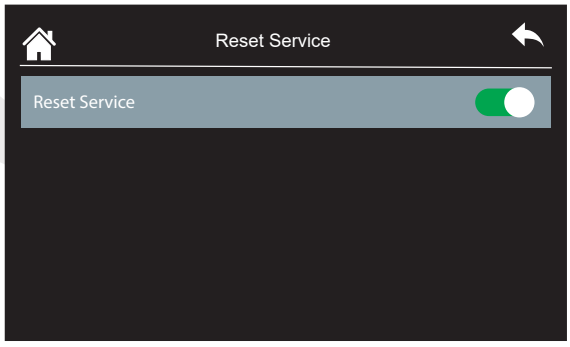
For the proper functioning of the boiler it is essential to carry out certain maintenance tasks, the frequency of which will depend mainly on the hours of operation and the quality of the fuel. Some must be done daily, while there are others that it is enough to do them once a season.

It is responsible for the user to ensure that the necessary cleaning and maintenance operations are carried out, some performing them directly, and others by notifying a professional or S.A.T. authoritative.

When the message "Clean"(Reset Service)appears on the screen, the user must perform the cleaning as shown in section 6.1.2. Settings - Reset Service. Then we show again the sequence for the reset of this message as also shown in section 6.1.2. Settings - Reset Service.

RESET SERVICE





This message will appear every 150 hours and the tasks to be performed will be the cleaning of the brazier, the ash drawer and the reset in the control panel as shown above.

When the message “Service” (Extraordinary Maintenance) appears on the screen, the user must notify a professional or S.A.T. authorized to perform IT, if they have not been recently carried out, the maintenance work that is marked in the table shown below:

LACK OF CLEANLINESS COMPROMISES THE SAFETY AND PROPER FUNCTIONING OF THE BOILER.

TASKS	150 hours	MONTHLY *	SEASON *	USER	TECHNICIAN
Cleaning and emptying of the ash drawer (message “Clean”)	✓			✓	
Burner control and cleaning	✓			✓	
Cleaning the fuel hopper			✓	✓	
Registry “T” cleaning		✓		✓	
Combustion chamber cleaning			✓		✓
Cleaning exchangers			✓		✓
Fireplace cleaning			✓		✓
Extraordinary cleanliness (message "Service")			✓		✓

9. PROBLEMS, MESSAGES AND ALARMS

Below are some tips to make sure that everything is correct before turning on the boiler, and start with the maximum guarantees: A malfunction of the boiler is usually accompanied by an alarm or even a message, although this is not always the case. Below we expose some cases that may arise, in which some checks can be made before notifying the Technical Service.

- When connecting the boiler, the differential of the house is triggered. The first thing would be to reconnect the boiler in another plug, and if the problem persists it could be humidity in any of the components of the boiler, so we should make sure that moisture does not reach the boiler through the environment and / or the chimney, wait several hours until it restarts and if the problem continues plese call the Technician.
- The screen does not turn on. Check that the voltage reaches the plug, see if the back switch is on, the switch fuse may be blown, etc.

ON DAYS OF STRONG WIND OR ADVERSE WEATHER CONDITIONS, COMBUSTION IN THE BOILER MAY NOT BE GOOD DUE TO THE INFLUENCE ON THE CHIMNEY DRAFT. THE MANUFACTURER IS NOT RESPONSIBLE FOR THE MALFUNCTION OF THE BOILER UNDER ADVERSE ATMOSPHERIC CONDITIONS.

9.2 MESSAGES

MESSAGE	MESSAGE DESCRIPTION	SOLUTION
Sond	Visualization of the status of temperature probes, flow sensor or pressure transducer. The message appears during the"Check up" phase, and indicates that the temperature, airflow, pressure transducer measurement present some anomaly.	• Check the status and connection of the probes. • Notify Technical Service if the message persists.
Clean	Ordinary maintenance: the boiler displays this message after 150 h of operation to perform ordinary maintenance by the user.	• See section 6.1.2 CONFIGURATIONS - Reset Service
Service	Extraordinary maintenance: the boiler shows this message after 2000 h of operation to perform extraordinary maintenance by the S.A.T.	• Notify the Technical Service to do the extraordinary cleaning and reset the hours of service.
Ignition Lock	This message is displayed by the boiler if it is turned off non-manually in the "On" phase (after preloading)	• The boiler finishes the ignition and turns off when the working regime is reached. Remove the message and turn it back on.

9.2 MESSAGES

MESSAGE	MESSAGE DESCRIPTION	SOLUTION
Link Error	No communication between the control panel and the electronic board.	• Remove power and turn it back on. If the error continues, notify S.A.T.

9.3 ALARMS

If the electronic board needs to give some information to the user, it does so through text messages that appear on the screen.

In this same way it will indicate when there is an anomalous situation in the operation of the boiler, showing the ErXX code in the upper right of the screen as shown below, also when it shows this code it is also accompanied by an acoustic signal. All errors send the boiler the status **"Lock".**

ALARM CODE	DESCRIPTION	POSSIBLE CAUSE	SOLUTION
Er01	Body Temperature Safety Thermostat Intervention	• There has been a prolonged power outage. • Water does not circulate correctly through the installation	Review the installation. To remove the error wait for the boiler to cool, reassemble thermostat and then reset the error. If this alarm is repeated often, or it is not possible to reset, notify the S.A.T.

ALARM CODE	DESCRIPTION	POSSIBLE CAUSE	SOLUTION
Er03	Off by smoke temperature	• There is little pellet in the hopper • A “cave” has formed in the hopper and the pellet does not reach the load auger • The load auger has been stuck and/or the charge engine does not rotate	Put pellet back in the hopper and reset the error. Make sure that the pellet reaches the auger (undo cave) and pour pellet into the hopper if necessary. If after several ignition attempts it does not fall pellet in the burner, notify the S.A.T. (Technical Service)
Er04	Off by over water temperature	• There has been a prolonged power outage • Water does not circulate correctly through the installation • Defective (or short-circuit) boiler body probe	Check the installation, pumps, keys, etc. To remove the error wait for the boiler to cool and then reset the error. If repeated often this alarm or does not get it reset, notify the S.A.T. (Technical Service)
Er05	Off due to excess smoke temperature	• The room takes a lot of temperature and this causes the smoke temperature of the boiler to increase • The boiler is very dirty and this causes it not to have the necessary exchange for its correct operation • Missing or damaged smoke probe.	Check the condition of the boiler and do cleaning if necessary. In case of repeating this alarm often and / or not being able to reset it, notify the S.A.T. (Technical Service)
Er07	The plate does not receive a signal from the exhaust fan speed controller	• It could appear sometime due to fluctuations in the power grid • The smoke fan and/or any of its connections are damaged	We reset the error and turn it back on. At this moment this error disappears and security comes into operation. Notify the Technical Service, meanwhile you can make use of the boiler. If this situation re-occurs, it is advisable to install an uninterrupted power supply (UPS)
Er08	It is not possible to correctly adjust the speed of the fan extraction of fumes	• It could appear sometime due to fluctuations in the power grid • Mains voltage is not good or taken from a non-sinusoidal alternating current generator • The smoke fan and/or any of its connections are damaged	Reset the error and turn it back on If this situation re-occurs, it is advisable to install an uninterrupted power supply (UPS) Make sure it is connected to a proper power reset the error and turn it back on. At this moment this error disappears and security comes into operation. Notify the Technical Service, in the meantime you can make use of the device.

ALARM CODE	DESCRIPTION	POSSIBLE CAUSE	SOLUTION
Er09	Low pressure in the water	• The working pressure of the boiler is below 600mbar. (This error does not appear if the hydro-stove is on lock or off and the pump is stopped)	Check boiler pressure If the problem persists for a long time call the Technical Service
Er10	High pressure in the water	• The working pressure of the boiler is above 2800mbar.	Check the boiler pressure and check that the circulation pump is working properly. If this error persists, notify Technical Service
Er11	Update DATE and TIME	• It may appear the first time the hydro- stove is connected to the network or after several days disconnected	Update time and day of the week See section 6.2.3
Er12	Power failure	IF THE BRAZIER IS PRACTICALLY EMPTY • There is little pellet in the hopper • A “cave” has formed in the hopper and the pellet does not reach the endless • • The load auger has been stuck and/or charging motor does not rotate IF THE BRAZIER HAS BEEN LEFT FULL OF PELLET (urns burned) • Wet or poor quality pellet • Damaged ignition resistance and/or connection cable	Reset the error Make sure that the pellet reaches the endless and / or throw in case of being necessary If after several attempts pellets do not fall into the burner, notify the Technical Service Empty and clean the brazier, reset the alarm and attempt a new start Check the condition and quality of the pellet If it does not start after two or three attempts, notify the Technical Service
Er15	Power outage	• A power outage has occurred for a long time while the boiler was running, or during ignition	Reset the error and restart. In case of repeating this alarm often, or not being able to reset it, notify the S.A.T. (Technical Service)
Er16	Communication error	• There has been some communication failure between board and screen	Check the cable and connections to board and display

ALARM CODE	DESCRIPTION	POSSIBLE CAUSE	SOLUTION
Er17	Air flow regulation not achieved	• We could have a problem in the smoke outlet • The air inlet is totally or partially plugged, or has been channeled and has a lot of pressure loss • Dirty brazier • The boiler takes air from an unstrained entrance: open or poorly closed door, hopper without pellet, etc. • The smoke passages of the boiler are very dirty • The smoke extractor has lost potency • • Problems with the flow sensor or its connection (Sond message appears) • Airflow sensor broken	Review all the possibilities listed in the Er02 Check the boiler and installation Check the cleanliness of the boiler and the smoke outlet In case of repeating this alarm very often or not being able to reset it, notify the Technical Service
Er23	Probe body water stove	• Defective or poorly wired probe	Notify the Technical Service
Er39	Flow meter sensor broken	• It could appear when the boiler is turned off if the flow sensor breaks down during operation	If this problem persists the Er41 will appear
Er41	The minimum airflow has not been reached during the “Check- up” check	• We could have a problem in the smoke outlet • The air inlet is totally or partially plugged, or has been channeled and has a lot of pressure loss • Dirty brazier • The boiler takes air from an unstrained entrance: open or poorly closed door, hopper without pellet, etc. • The fume passages of the boiler are dirty • The smoke extractor has lost its potency • Problems with the flow or its connection (the message Sond)	Review all the possibilities listed in the Er02 Check the boiler and installation Check the cleanliness of the boiler and the smoke outlet In case of repeating this alarm very often or not being able to reset it, notify the Technical Service
Er42	Excessive airflow during “Check-up” (Check)	• It could appear if we had an excessive shot in the chimney, or if we are forcing the air inlet for combustion.	Review and correct installation In case of repeating this alarm often, or not getting reset it, notify the Technical Service
Er52	Error module I/O 12C	• Point-in-time communication failure between the connection module and the electronic board	Disconnect a few seconds from the mains and reconnect If this is repeated often alarm, or you can not reset, notify the S.A.T. (Technical Service)

When this message is displayed in the control panel, the boiler is ready to unlock and restart. Slide as indicated on the screen and unlock.

CERTIFICADO DE GARANTÍA

COMMERCIAL WARRANTY

Nº _____

La presente Garantía Comercial se otorga sin perjuicio además de cualesquiera de los derechos reconocidos por la Ley 23/2003 y RDL 1/2007 frente al vendedor.

Para ejercitar sus derechos de conformidad con esta Garantía Comercial, el comprador deberá rellenar este certificado en el punto de venta en el momento de la compra y presentarlo junto con la factura, ticket de compra o albarán de entrega.

A presente Garantia Comercial é concedida sem prejuizo de qualquer um dos direitos reconhecidos pela Lei 23/2003 e RDL 1/2007 ao vendedor.

Para exercer os seus direitos em conformidade com esta Garantia Comercial, o comprador deverá preencher este certificado no ponto de vendas no momento da compra e apresentá-lo juntamente com a fatura, talão de compra ou nota de entrega.

This Commercial Warranty does not in any way affect the purchaser´s rights in respect of the vendor as set forth in [Spanish] Act. 23/2003 and 1/2207.

The purchser must complete this certificate at the point of sale at the time of purchase and must present it together with the invoice, purchase slip or delivery note in order to exercise his or her rights under this Commercial Warranty.

La présente Garantie Commerciale est octroyée sans préjudice en plus de tous droits reconnus par la Loi 23/2003 et RDL 1/2007 auprès du vendeur.

Pour exercer ses droits en conformité avec cette Garantie Commerciale, lácheteur devra remplir ce certificat sur le point de vente au moment de láchat et le présenter joint á la facture, ticket d´achat ou bon de livraison.

Fecha de compra (comienzo de la garantía) / Data de compra (inicio da garantia) / purchase date (beginning of the warranty) / Date de l´achat (début de la garantie).....

COMPRADOR / COMPRADOR / PURCHASER / ACHETEUR

Nombre / nome / name / nom.....

Dirección / endereço / mailing address / adresse.....

.....

Código postal / codigo postal / post code code postal.....

Población / cidade / city / ville.....

Teléfono / telefone / telephone / téléphone.....

País / pais / country / pays.....

Sello del vendedor / Carimbo do vendedor / Seller stamp / Tampon du vendeur:

VENDEDOR / VENDEDOR / SELLER / VENDEUR

Denominación del aparato / Denominação do aparelho / Equipment name / Dénomination de láppareil.....

Referencia / Referência / Reference / Référence.....

CERTIFICADO A DEVOLVERNOS DENTRO DE LOS 10 DÍAS SIGUIENTES A LA COMPRA
ESTE CERTIFICADO DEVER A SER NOS ENVIADO NO ESPAÇO DE 10 DIAS A SEGUIR A DATA DA COMPRA
CERTIFICATE TO RETURN US WITHIN TEN DAYS FOLLOWINGS THE PURCHASE
CE CERTIFICAT DEVRA NOUS ÊTRE RENVOYE DANS LES 10 JOURS SUIVANTS LA DATE DE L´ACHAT

Fecha de compra (comienzo de la garantía) / Data de compra (inicio da garantia) / purchase date (beginning of the warranty) / Date de l´achat (début de la garantie).....

COMPRADOR / COMPRADOR / PURCHASER / ACHETEUR

Nombre / nome / name / nom.....

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Teléfono / telefone / telephone / téléphone.....

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VENDEDOR / VENDEDOR / SELLER / VENDEUR

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Denominación del aparato / Denominação do aparelho / Equipment name / Dénomination de láppareil.....

Referencia / Referência / Reference / Référence.....

MUY IMPORTANTE	MUITO IMPORTANTE	VERY IMPORTANT	TRES IMPORTANT
La garantía sólo es válida: • **Si se respetan las reglas contractuales** • **Si el presente certificado está rellenado correctamente y si se ha devuelto dentro de los diez días siguientes a la fecha de compra**	**A garantia só é válida:** • **Se as regras contratuis forem respeitadas.** • **Se o presente certificado estiver correta e totalmente preenchido e tiver sido devolvido no espaço de dez dias a contar da data de compra.**	**The garantee is only valid:** • **If the contractual rules are respected.** • **If the present certificate is filled correctly and completely and if it is returned within the ten days after the purchase date.**	**La garantie est uniquement valable:** • **Si les règles contractuelles sont respectées.** • **Si e présent certificat est correctement est entièrement rempli et s´il a été renvoyé dans les dix jours qui suivent la date de l´achat.**

CONDICIONES GENERALES DE ESTE CONTRATO DE GARANTÍA COMERCIAL

1º La presente Garantía Comercial ofrece la reparación gratuita de cualquier avería por defecto de fabricación en el Servicio Técnico Autorizado, incluyendo la mano de obra y piezas de recambio. Sólo estamos obligados al cambio gratuito de los elementos reconocidos defectuosos después de haberlos inspeccionado y controlado por nuestro personal técnico y siempre que no hayan concurrido ninguna de las exclusiones de la garantía. Si el cambio de estos elementos resultase muy oneroso, la reparación efectuada no fuera satisfactoria y el objeto no revistiese las condiciones óptimas para cumplir el uso a que se estuviese destinado, el titular de la garantía tendrá derecho a la sustitución del objeto adquirido por otro de idénticas características o la devolución del precio pagado.

2º El plazo de validez, contado a partir de la fecha de compra es de: Dos años para los componentes distintos de la fundición, tales como, tornillería, resortes, ventiladores, circuitos impresos, interruptores, terminales, hilos eléctricos, funda eléctrica, etc.

3º La Garantía no será válida si no va acompañada de la correspondiente factura de compra debidamente rellenada y sellada por el establecimiento vendedor autorizado.

4º La Garantía solo es válida si el producto se utiliza según las reglas y recomendaciones indicadas en las instrucciones para la instalación y uso suministradas con la hydro-estufa o chimenea, que el comprador reconoce haber recibido y acepta ajustarse a las mismas para su seguridad.

5º Exclusiones:

- Esta Garantía no Incluye el cristal de la hydro-estufa, el cual ha sido sometido a una serie de pruebas y test de calidad durante el proceso de fabricación, quedando probada su durabilidad y resistencia, soportando una temperatura de 750°, la cual nunca ha sido alcanzada en la cámara de combustión, por lo que queda dicho elemento totalmente excluido de la garantía en el caso de ruptura, solo posible por mala manipulación en el uso o manejo de la hydro-estufa.
- Tampoco están incluidas en la garantía las juntas, que son consideradas como piezas de desgaste, así como las piezas del hogar en contacto directo con el combustible en ignición, tales como, brasero, deflector, piezas de vermiculita, resistencia de encendido, etc.
- Los daños producidos por el uso de cualquier otro combustible distinto del pellet que no serán cubiertos por la garantía.
- Esta garantía no incluye las instalaciones, las puestas en marcha, las roturas, instalación incorrecta, voltaje inadecuado o descargas atmosféricas (rayo), así como manipulaciones por personas o talleres no autorizados.
- El hecho de superar la carga por hora indicada en este manual y la instalación; anula la garantía de este equipo eximiendo al fabricante de cualquier responsabilidad.

6º La presente Garantía Comercial es válida en las condiciones indicadas durante los plazos señalados anteriormente.
FERLUX no se hace responsable en ningún caso de eventuales daños producidos a personas o cosas por manipulación indebida del aparato o por mal uso.
En todo caso, el titular de la garantía tiene todos los derechos mínimos reconocidos por la Ley.

7º FERLUX se reserva el derecho a modificar este manual sin preaviso.

8º Para ejercitar los derechos conforme a esta Garantía Comercial, el consumidor dispone de las siguientes vías de reclamación:

- E-mail: ferlux@ferlux.es
- Web: www.ferlux.es
- Dirección: Polígono el Polear, parc. 1 C.P.: 29313 Villanueva del Trabuco (MÁLAGA)

GENERAL CONDITIONS OF THIS COMMERCIAL WARRANTY AGREEMENT

1º This Commercial Warranty covers the free repair of any failure due to defective manufacture at the Official After-Sales Service, including labour and parts (the staff trip of the Authorized Technical Service is not included). Our liability is limite to free replacement of the parts that are acknowledged to be defective after inspection and checking that none of the exclusions are applicable. Should replacement of these parts prove highly onerous, or should the repair effected not prove satisfactory and the object not be in perfect condition for its intended use, the warranty holder shall be entitled to replacement of the object purchased by another of identical characteristics or to a retund of the purchase price.

2º The warranty period, commercing on the date of purchase is: Two years for parts other than cast iron, such as bolts, springs, fans, circuit boards, switches, terminals, electrical wires, electrical sheathing, etc.

3º The Warranty shall not be valid unless accompanied by proof of purchase duly completed and stamped by the authorised vendor.

4º The Warranty is only valid if the product is used in accordance with the rules and recommendations given in the instructions for installation and use supllied with the stove or chimney, which the purchaser acknowledges having received and agrees to follow for his or her own safety.

5º Exclusions:

- This Warranty does not include the glass of the stove, which has been subjected to a series of tests and quality testing at the factory that have proved its durability and resistance, including subjecting it to a temperatura of 750°, which has never been reached in the combustion chamber. Consequently, this part is totally excluded from the warranty in the event of breakage, wich can only be caused by poor use or handling of the stove.
- Gaskets are also excluded from the warranty as they are considered parts subject to wear, as are the parts of the fireplace in direct contact with the burning fuel such as the brazier, deflector, vermiculite parts, ignition resistance, etc.
- Damage caused by the use of any fuel other than wood is not covered by the Warranty.
- The Warranty does not include installations, start-ups, breakages, incorrect installation, unsuitable voltage or atmospheric discharge (lightning), or handling by unauthorised persons or businesses.
- The fact to overcome the burden of time indicated in this manual and the intallation of these models, void the warranty of this equipment exempt the manufacturer from any liability.

6º This Commercial Warranty is valid under the aforesaid conditions for the above-stated periods.
In no case shall FERLUX be liable for any damge caused to persons or things by improper handling or use of the appliance.
In all cases the warranty holder shall have all the minimum rights provided in law.

7º FERLUX reserves the right to make any modification in the manual without prior warning.

8º Consumers wishing to exercise their rights under this Commercial Warranty may lodge claims by any of the following means:

- E-mail: ferlux@ferlux.es
- Web: www.ferlux.es
- Dirección: Poligono el Polear, parc. 1 C.P.: 29313 Villanueva del Trabuco (MÁLAGA)

FERLUX®
CHIMENEAS Y BIOMASA

Chimeneas y Barbacoas FERLUX, S.A.

Parque Empresarial El Polear, Parc. 1
29313 Villanueva del Trabuco MÁLAGA (España)

www.ferlux.es / e-mail: ferlux@ferlux.es