

# Instruction Manual

## Models

**Square D 9kW**

**Square V 9kW**



FOGO MONTANHA



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# 1. Important aspects

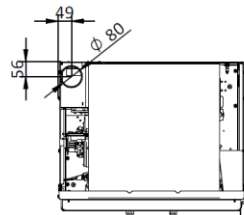
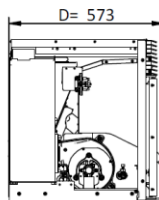
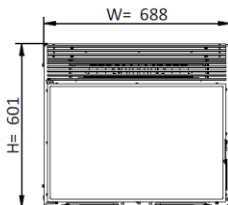
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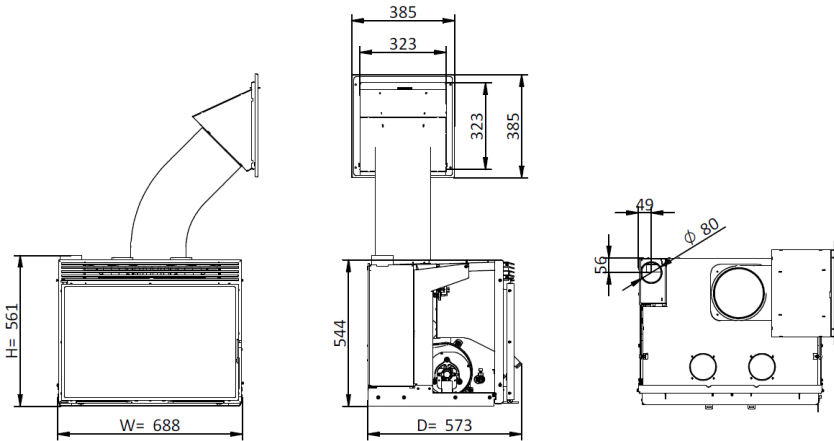
- Thank you for purchasing a Fogo Montanha Free Stand Fire unit.
- The manufacturer of Fogo Montanha Free Standing Fire units hereby represents that they are the sole responsible for the compliance of all manufactured models with the general safety requirements. Any changes made to the product without the previous written consent from the manufacturer will void the above statement.
- Please read these instructions carefully before installing, using and servicing the unit and keep them at hand for future reference.
- This instruction manual is provided with the product. Please keep it near the unit.
- All products comply with the EU's Construction Products Directive (EU Reg. No. 305/2011) and are approved for the EC compliance marking. This product has been manufactured according to the 14785:2008 EN standards.
- This product may only be installed by authorized people, who must provide the buyer a statement of compliance regarding the installation, taking full responsibility for the final installation and, consequently, for the proper operation of the unit. Fogo Montanha manufacturer disclaims all liability for any damages occurring to the equipment if installed by non-qualified people.
- All local regulations, including any applicable national and European standards, must be observed when installing, operating and servicing the unit.
- To get technical assistance, please contact the unit supplier or installation staff. You should have the unit serial number ready. This number can be found on the identification plate located on the top lid or on the label attached to the plastic cover of this manual.
- Any technical assistance procedures must be performed by the unit provider or installer, except in special situations and after assessment by the installer or assistance engineer who may then decide to contact Fogo Montanha, if necessary.
- This unit must be used according to its intended purpose pursuant to the manufacturer's specification. All contractual and non-contractual responsibilities of the manufacturer are hereby excluded for damages caused to people, animals or property resulting from the misuse or faulty installation or servicing of the unit.
- All the components that make part of the unit's assembly and that together guarantee its operation and energetic efficiency must only be replaced with original parts provided by an authorised technical assistance centre.
- The unit must be serviced at least once a year or every 600-800 kg of pellets consumed, by the installation engineer.

## 2. Features

Features	Square D 9kW	Square V 9kW	Units
Weight	114	115,5	kg
Height	601	561	mm
Width	688	688	mm
Depth	573		mm
Diameter of the fume discharge pipe	80		mm
Reservoir capacity	15		kg
Maximum heating capacity	188		m <sup>3</sup>
Maximum overall thermal power	8,3		kW
Minimum thermal power	3,2		kW
Minimum fuel consumption	0,7		kg/h
Maximum fuel consumption	1,9		kg/h
Rated electrical current	100		W
Electric power at start-up (<10 min.)	350		W
Rated voltage	230		V
Nominal frequency	50		Hz
Thermal yield at rated thermal power	90,1		%
Thermal yield at reduced thermal power	95,9		%
Max. smoke temperature	154,1		°C
Min. smoke temperature	66,3		°C
CO emissions at rated thermal power	0,01		%
CO emissions at reduced thermal power	0,035		%
Combustion gas mass flow nominal / reduced	6,3 / 2,7		g/s
Draught in the chimney	12		Pa
Fan Flow	48,2		dB(A)

*Square D 9kW*





### 3. Fuel

- To operate this unit do not use pellets other than those certified in compliance with the EN14961-2 standard, grade A1.

Parame	EN plus – A1	Units
Diameter	Between 5 and 7	mm
Length	$3,15 \leq W \leq 30$	mm
Density	$\geq 600$	kg / dm <sup>3</sup>
Heating capacity	$\geq 5,32$	KWh / kg
Mechanical strength	$\geq 97,5$	% (mass)
Ash	$\leq 0,5$	% (mass)
Humidity	$\leq 10$	% (mass)
Sulphur percentage	$< 0,05$	% (mass)
Chlorine percentage	$< 0,02$	% (mass)
Nitrogen percentage	$< 0,3$	% (mass)
Copper	$\leq 10$	mg/kg
Chromium	$\leq 10$	mg/kg
Arsenic	$\leq 1,0$	mg/kg
Lead	$\leq 10$	mg/kg
Cadmium	$\leq 0,5$	mg/kg
Mercury	$\leq 0,1$	mg/kg
Nickel	$\leq 10$	mg/kg
Zinc	$\leq 100$	mg/kg

- We recommend that you use only pellets that are certified in compliance with the EN 14961-2 standard, grade A1.
- The physical and chemical properties of the pellets (namely, calibre, friction, density and chemical composition) may vary within specific tolerance ranges and across manufacturers. Please note that this may cause changes to the feeding process and, consequently, the need for different doses (more or less pellet quantity).
- The unit allows for a  $\pm 25\%$  adjustment to the pellet dosage at start-up and at power levels.
- The CE certification tests that were run used wood pellets I with a heating capacity of 4,6 kWh/kg.

## 4. Installing ducts and fume extraction systems

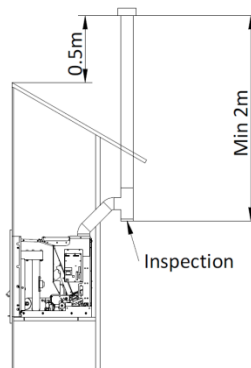
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- The exhaust pipe must have been designed for and dedicated to this purpose, in compliance with local requirements and any applicable regulations.
- Important! An inspection-T with an airtight lid must be attached to the exit of the unit's exhaust pipe to allow for the regular inspection of the system or discharge of heavy dust and condensates.
- As shown, the exhaust duct should be assembled in a way that allows for the cleaning and servicing using the insert of the inspection points.
- Under normal operating conditions, the combustion gas exhaustion must create a draught of 12 Pa, one meter above the fume exit.
- The unit must not share the chimney with other equipment.
- The pipes installed outside the household must have double stainless-steel insulation and an internal diameter of 80 mm.
- The fume exhaust pipe may generate condensation, so we recommend that the appropriate systems for collecting condensates are installed.

### 4.1 Installing without a chimney

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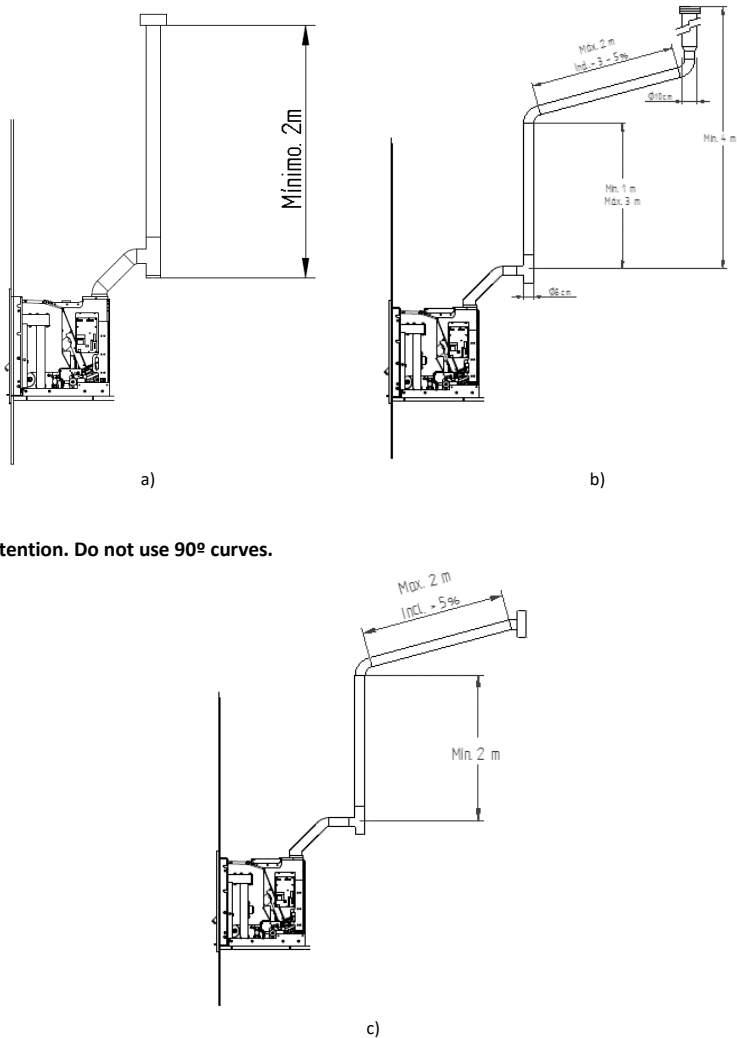
- The installation of this unit without a chimney must be made by bringing the fume exhaust pipe (with minimum internal diameter of 80 mm) directly out and over the top of the roof at approximately 0,5 m higher (Figure 1).
- Double-walled stainless-steel insulated pipes must be used and properly attached to avoid condensation.
- A T-connection must be installed at the base of the pipe to allow for periodic inspections and annual maintenance, as illustrated in the following figure.



**Figure 1 - Side view of the installation without chimney, example of the inspection point**



- In Figure 2, the basic requirements for installing the insert are shown.



**Figure 2 - Examples of installations**

**!** FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY PREVENT THE CORRECT OPERATION OF THE UNIT (PLEASE OBSERVE ALL OF THE INSTRUCTIONS PRESENTED ON THE DIAGRAMS).

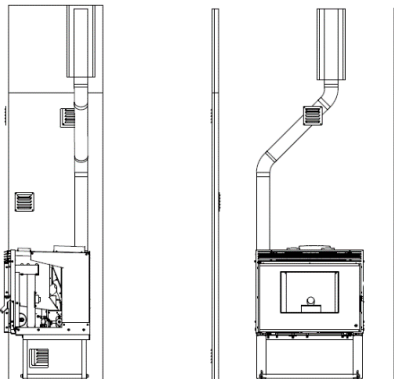
**!** Insert operate with the combustion chamber in draught, which is why it is absolutely necessary that they include a fume exhaust duct to adequately extract combustion gases.

- **Fume duct material:** The tubing to be used for this installation must consist of 0,5 mm thick rigid stainless steel, with fitting bindings attaching the different sections and accessories.
- **Insulation:** The fume ducts must be double-walled and insulated to make sure that fumes do not cool down going outwards, which would cause an inadequate circulation and condensation that might damage the unit.
- **Output T connection:** Always attach a "T-tube" with damper to the output of the unit.
- **Swing type check valve:** Always install this system to avoid fumes backflow.
- **Draught in the chimney:** The figure below shows three standard diagrams, specifying the adequate lengths and diameters. Any other type of installation must guarantee a draught of 12 Pa (0,12 mbars) measured when hot and at the maximum power.
- **Ventilation:** For the optimal operation of the unit, the assembly site **must have air inlet installed with a minimum cross section of 100 cm<sup>2</sup>, preferably at the back of the unit.**
- **If the house is equipped with air exhaust system (e.g. kitchen extractor fan), a top ventilation section must be installed, suitable to accommodate the different air exhaust systems existing in the household.**
- **Installing the unit in locations near kitchen exhaust fans or fume extractors may prevent the correct operation of the unit and, in certain situations, may cause the inversion of the chimney draught flow which will expel the fumes into the room where the unit is installed.**

## 4.2 Installing with a chimney

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- As shown in figure 3, the installation of the pellet insert brings the exhaust pipe (ø 80 mm) directly into the chimney. If the chimney is too large, it is recommended to pipe the gas outlet with a pipe with a minimum internal diameter of 80 mm.
- Provide a "T" for the periodic inspections and the annual maintenance, as shown in figure 2.



**Figure 3 - View installation with chimney**

- When atmospheric conditions are so adverse that they cause a significant disturbance in the drawability of the insertable gases (in particular very strong winds), it is advisable not to use the insert.
- If the equipment is not used for an extended period of time, the user must ensure that there is no blockage in the chimney tubes prior to lighting.

## 5. Package content

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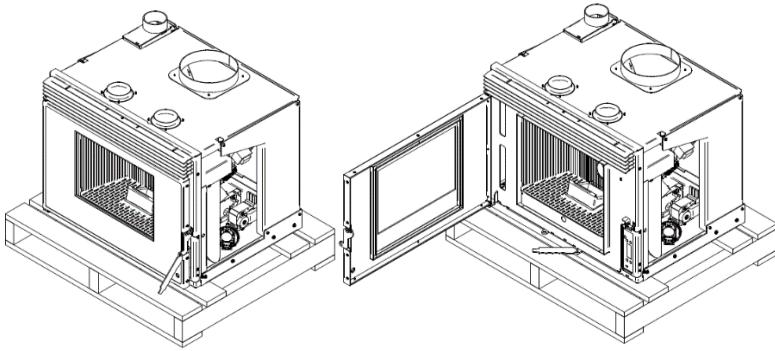
The packaging of the equipment has the following contents:

- Pellet Insert Square D or Square V;
- Handle for opening the door and extracting the equipment;
- Warranty statement;
- Power cable;
- Infrared remote control;
- Display 2 Ways 2 by radio;
- Performance statement
- In the case of the Square D insert, handle for inserting the pellet.
- Before unpacking the unit, check if the package is in perfect conditions, and report to the installer or reseller if the package evidences signs of damage or defect.
- After unpacking the unit, please check if the contents are complete and undamaged. If not, please contact the reseller where the unit was purchased.

### 5.1 Unpacking the insert

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- To unpack the equipment, you must first remove the retractable bag that surrounds the carton box. Then remove the box by lifting it up and removing the bag wrapping the insert and the Styrofoam plates.
- The insert has a fixed part and a movable part which can be separated. To separate the two parts, first open the two safety latches under the door, use the accessory to make it easier to open.



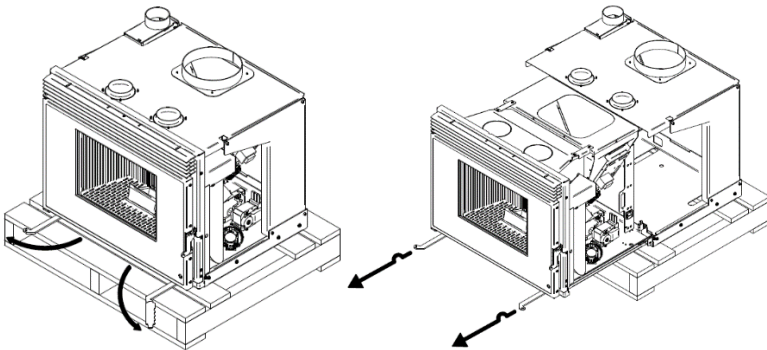
**Figure 4 - Open safety latches**

- With the two latches open, use them as pullers to separate the movable part from the fixed part attached to the pallet.



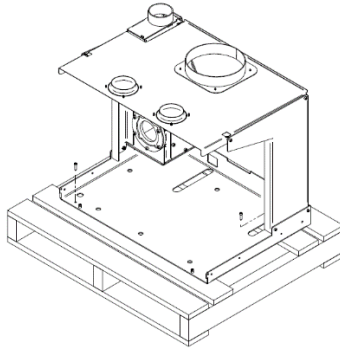
Notice. When you open the runner system to the limit, you notice a ledge that locks the moving part, as the ledge passes, the slides are released and the equipment may fall. You have to be careful that this does not occur. The movable part of the fixed part is then separated.

- The surfaces on which the parts are supported must be protected.



**Figure 5 - Separate moving and fixed parts**

- With the help of a star wrench PZ2 remove the two screws securing the fixed part to the pallet, the equipment is thus completely unpacked.



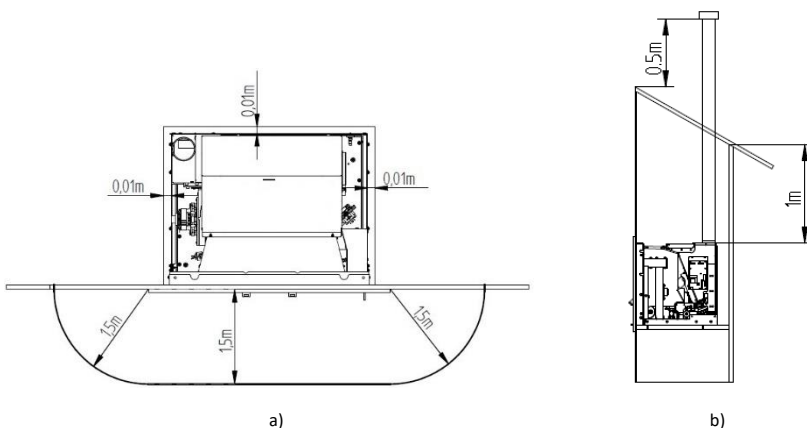
**Figure 6 - Separate parts**

## **6. Safety precautions**

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- Make sure you fully read and understand the instructions contained in this manual before using the pellet insert as a biomass heating unit.
- The pellet insert is not intended for use by children or people physically and/or mentally challenged, or that are inexperienced or unfamiliar with using the unit, except when under supervision or after receiving proper training. Cleaning and maintenance intended for the end user must not be carried out by children without supervision (EN 60335-1).
- Do not touch the pellet insert when barefoot or if any part of your body is wet or humid.
- Do not tamper with the safety devices or adjustment features without the SOLZAIMA SA manufacturer's authorization.
- Use only the replacement parts recommended by SOLZAIMA S.A.
- It is prohibited to cover or reduce the size of the ventilation openings of the installation.
- The pellet insert is an equipment that requires air to have a proper combustion, the possible Airtightness of the place where the equipment is located or the existence of other sources of air extraction in the house can prevent the correct functioning of the equipment.
- The existence of vents is a requirement for proper combustion.
- Please keep the packing materials away from children.
- During normal operation, DO NOT open the door of the unit; You must always work in the closed position and with the safety latches locked.
- Some parts may overheat during normal operation, so the direct contact with hot parts such as the door handle and glass should be avoided.

- Check for the existence of any obstructions to the fume duct before turning on the unit after a long idle period.
- The pellet insert is designed to work inside a protected environment. Safety systems may be used to turn off the insert. If this happens, contact the after-sales service and never in any situation disarm the safety systems.
- The pellet insert must not be installed in very small rooms or in explosive atmospheres.
- The pellet insert is a biomass heating unit equipped with an electric fume extractor. The occurrence of a power failure during its use may prevent the fume to be extracted, consequently causing the room to be filled with smoke. For this reason, a natural fume extraction system, like a chimney, is recommended.
- NEVER turn off an operating Free-Standing Pellet Fire unit by disconnecting the electric plug. The fume extractor on the Free-Standing Pellet Fire unit is a powered feature, so disconnecting the power plug will prevent the extraction of combustion fumes.
- The unit must be disconnected from the mains power before any maintenance procedures can be performed. Please allow the unit to cool down completely before any maintenance operation (if operating before).
- Never touch the interior of the unit without disconnecting it from the power mains.
- Do not place pellets directly in the firing basket, it may cause overloads that produce bad combustion.
- Respect the minimum installation distances shown in the following figures.



**Figure 7 - Minimum distances of all surfaces: a) top view of the installation of the equipment; b) side view of the equipment installation**

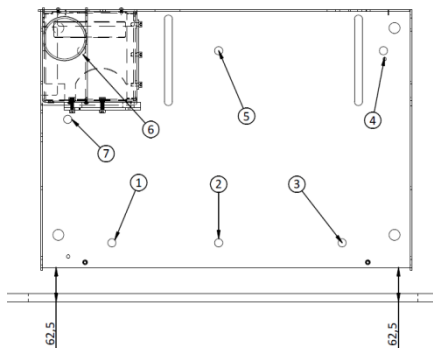
## 7. Installing the free-standing pellet fire

### 7.1 Installing and fixing the Square 9 kW

- Before you begin the installation, perform the following actions:
- The recommended measures for installing the pellet insert are as follows:



Model	Width (mm)	Height (mm)	Depth (mm)
<i>Square D 9kW</i>	695	610	550
<i>Square V 9kW</i>	695	550	550

- As can be seen in Figure 8 the inserts have finishing frames to cover bigger holes, giving greater versatility to the insert. There are two different widths, one of 44 mm and one of 74 mm to finish the equipment's installation (see point 7.7).
- The surface where the base of the equipment is to be fixed must be levelled and have the necessary strength to support the entire weight of the equipment and its subsequent movements to load pellets.
- The base of the equipment has 7 holes to attach to the support.

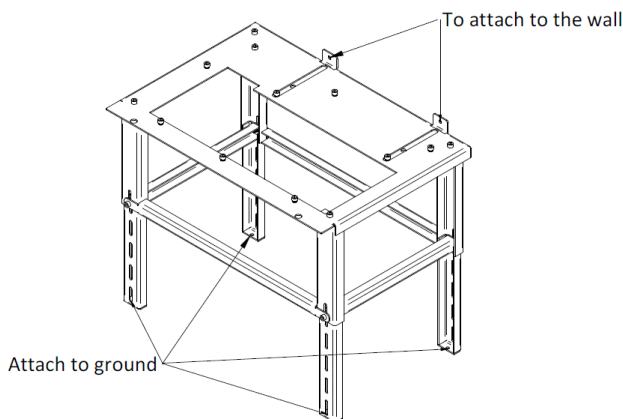


**Figure 8 - Fixing base equipment**

- As can be seen in Figure 8, a distance of 62,5 mm from the base to the front of the wall must be left (it must be perfectly parallel).
- The equipment has an approximate weight of 115 kg and when it is extracted to the pellet / maintenance position, it exerts a high force on the base, during installation it is necessary to use anchoring material suitable for the type of base, soil and wall (In the case of extending table), recommendations:

Material	Type of attachment	Image
Massive (slab, stone)	FMS M8x60 Ø10 Metallic	
Massive and non-massive (brick)	FIP M8x60 Ø10 Chemical	

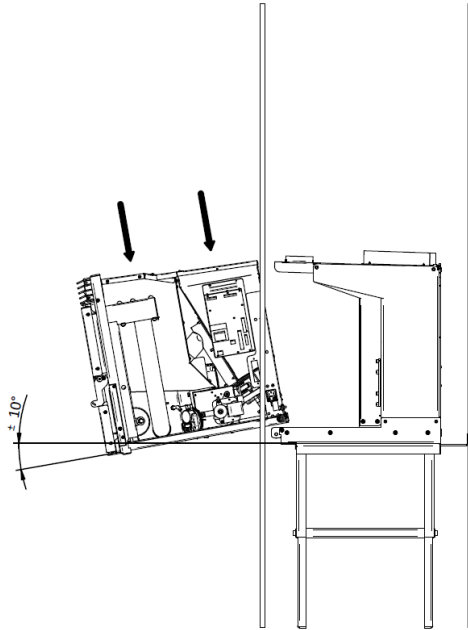
- It is very important that the base where the insert is installed is completely horizontal.
- If you do not have a base, the optional extendable table is available. This table is a metal structure that must be fixed to the floor and to the wall. The table can be adjustable in height between 300 mm (minimum) and 545 mm (maximum), it is very important to ensure that the top is perfectly horizontal for the correct operation of the equipment. Together with the extendable table, screws are delivered to secure the base of the insert to the table, with the same 7 screws, it is possible to attach the equipment to an existing base.



**Figure 9 - Optional extendable table**

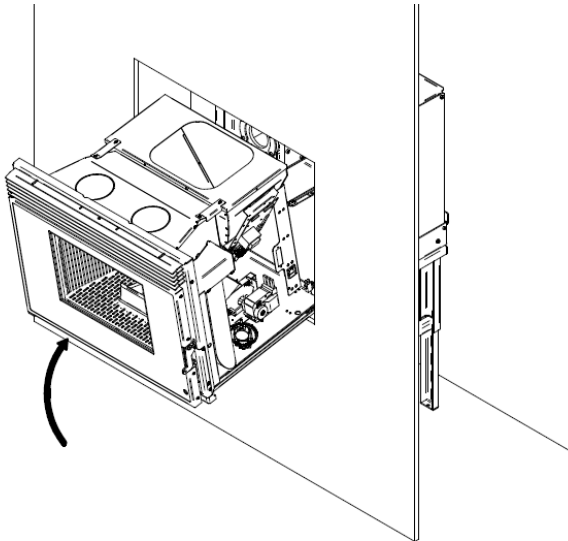
- Connect the 80 mm diameter pipe between the flue gas outlet and the flue outlet to the outside of the building (e.g. fireplace) in accordance with the installation drawings.
- After securing the base of the equipment and the chimney being installed place the moving part of the equipment as shown in Figure 10.





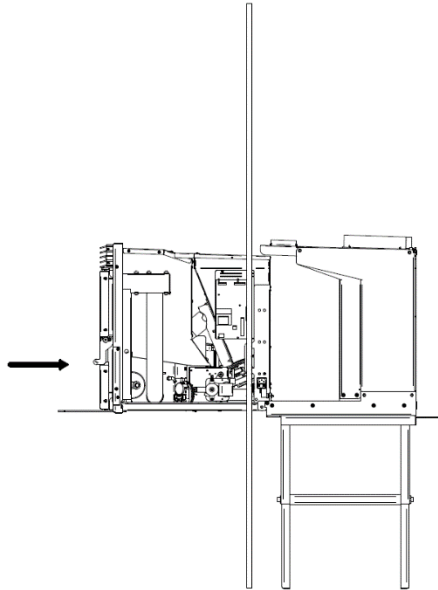
**Figure 10 – Installation**

- Then do a rotating motion to bring the equipment to the horizontal.



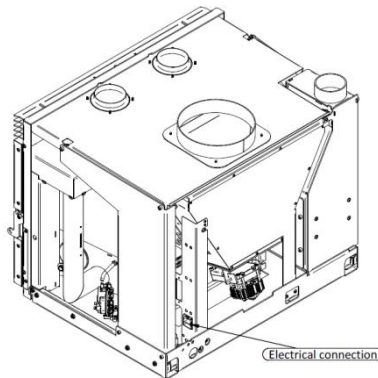
**Figure 11 - Installation**

- Push the movable part to the wall so that it slides on the rails. Check the correct sliding and that everything is properly attached before continuing with the installation. Move the equipment to the end of runner system with open safety latches and once in position, close them to ensure that the equipment is properly placed in the working position.



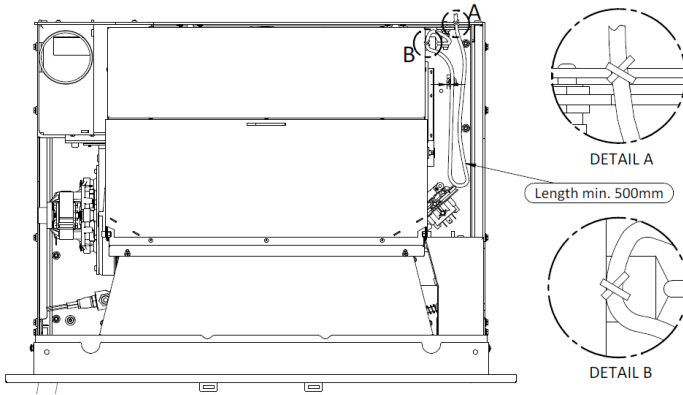
**Figure 12 - Installation**

- Connect the power cord to a 230V 50Hz grounded outlet.



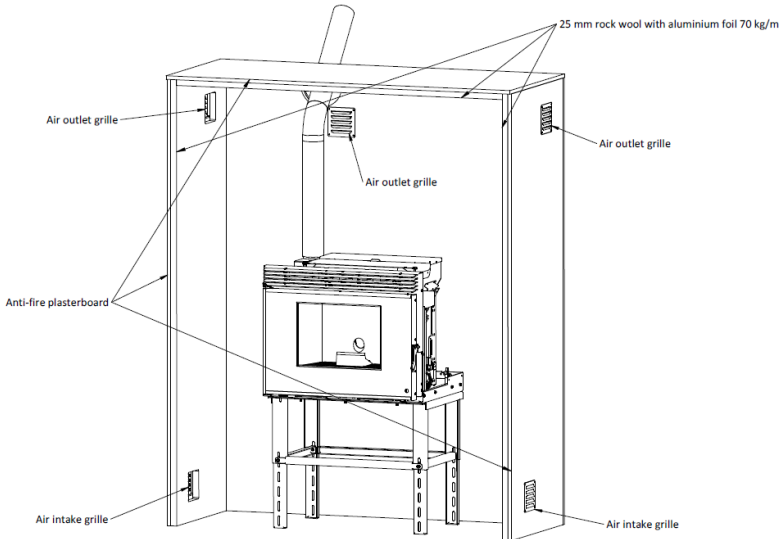
**Figure 13 - Electrical connection**

- After connecting the power cable to the silo column, it is necessary to attach the cable to the same column and the base, making sure to leave enough cable length, so that the equipment can make the entire route in the rails (500 mm), without the cable being stressed or touching the hot parts (Figure 14).



**Figure 14 - Electrical connection**

## 7.2 Installing the Square D 9 kW



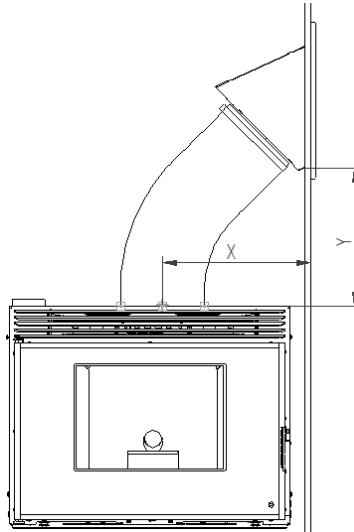
**Figure 15 – Installation**

## 7.3 Installing the Square V 9 kW

- In case of the Square V 9kW it will be necessary to install the pellet feeding system. To install this loading system, it is necessary to open a 330x330 mm hole.
- The position of the loading system has to maintain a ratio where X is always less than  $Y = X \times 0,7$  (Figure 16), so that we can ensure that the slope is sufficient so that the pellets are not trapped in the tube connecting the loading mouth with the top of the insert structure. The

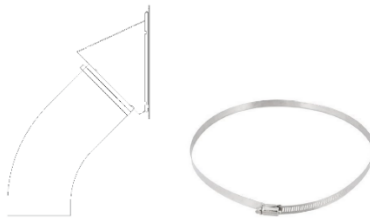
loading mouth can be installed in any of the walls that form the surroundings where the equipment is installed, either to the right or to the left, as in the front or rear, if the layout of the house allows it. It is always necessary to respect the minimum distances  $X = 390 \text{ mm}$ ,  $Y = 275 \text{ mm}$ .

- The tube used to attach to the loading mouth and top of the insert chassis must have an internal diameter of 200 mm and must be rigid enough not to deform when the pellets fall inside. It is recommended to apply flexible aluminium tube.
- To attach the drop tube of the pellets to the loading mouth of the top of the insert chassis it is recommended to use metal clamps. This type of clamps provides good clamping and sealing, and it is possible to open or close the clamp when necessary.



**Figure 16 - Feeding system installation**

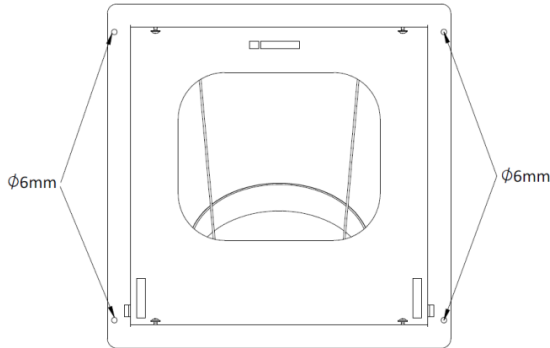
- The easiest way to install the tube will be to perform the following steps:
  1. Using the metal clamp, attach the pre-cut tube with the appropriate size and shape onto its final position in the loading mouth.



**Figure 17 - Installation of the loading tube and metal clamp**

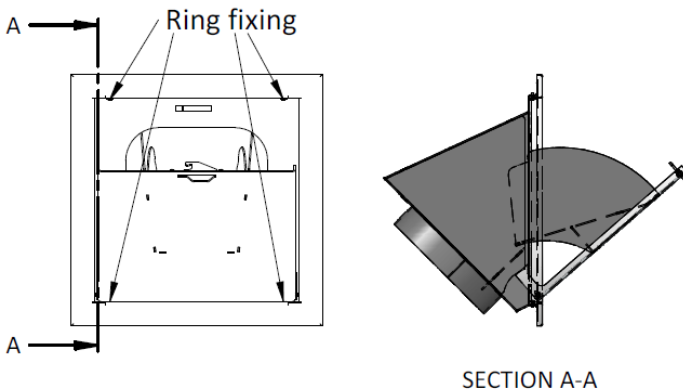
2. Insert the assembly through the hole made in the wall with the above-mentioned measurement  $330 \times 330 \text{ mm}$ , respecting the dimensions for its positioning indicated above, it is necessary to fix the loading mouth.

- To be fixed to the wall, the loading system has four 6 mm holes in diameter. It is recommended to use 8 mm SX bushings for brick walls with 4,5 or 5,5 bolts and 8 mm HM bushes for plasterboard walls (Pladur) with the corresponding screws.



**Figure 18 - Mouthpiece installation**

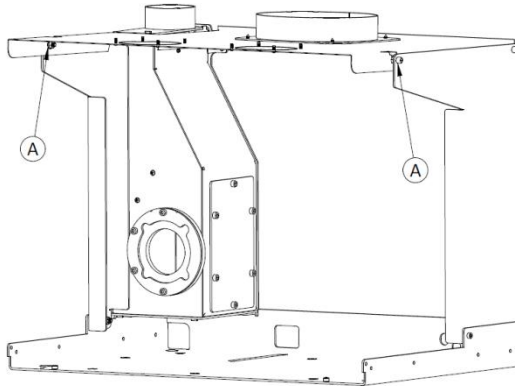
- After fastening the loading piece, place the finishing frame with the cover. Fix the frame by tightening the 4 load screws on the wall. The cover has a pin limiting its the opening, as can be seen in the following figure, with a cut of the base assembly, finishing ring and loading cover.



**SECTION A-A**

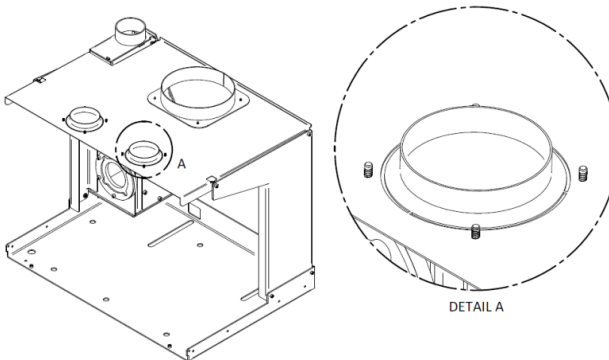
**Figure 19 - Equipment installation**

- When opening the lid, the inner parts are positioned to facilitate the loading of the pellets, for this reason it is very important that the cargo mouth is always placed in the position shown in Figure 19.
- As shown in Figure 20, the Square V version has a top chassis attached to the side columns by means of DIN 912 M6 screws and DIN 934 nuts. Unscrew without completely removing the front screws (marked with the letter "A"), the cap rotates over the rear screws, making the top cover accessible to facilitate attachment of the flexible tube to the pellet gargle. It is necessary to join the tube leaving the loading mouth with the cap through a metal clamp, it is necessary to make sure that the tube has no curves where they can accumulate pellets. Finally, place the cover in its original position and fix the screws again.



**Figure 20 - Installation of the pellet insert**

- The option to install a system to channel the air is only available for the version of Square V, due to its construction, designed with superior load. To install the system, you must follow the following steps:
  1. Ensure that the fixed part of the insertable pellets is in its definitive place.
  2. The pellet loading tube installation must be carried out in the same way. Add a pipe to channel the air (aluminium tube 100 mm in diameter) with the grid to be fixed to the wall. It is recommended to make this union with a metal clamp. The length of the aluminium tube should be sufficient to reach the air outlet, located on the top of the chassis. It is necessary to repeat this step to place the second tube.
  3. To access the top of the cover (Figure 21). It can be observed that the upper part comes with the installation of 2 air outlets of 100 mm, with a pliers cut the micro joints to install the tubes for the ducted hot air.

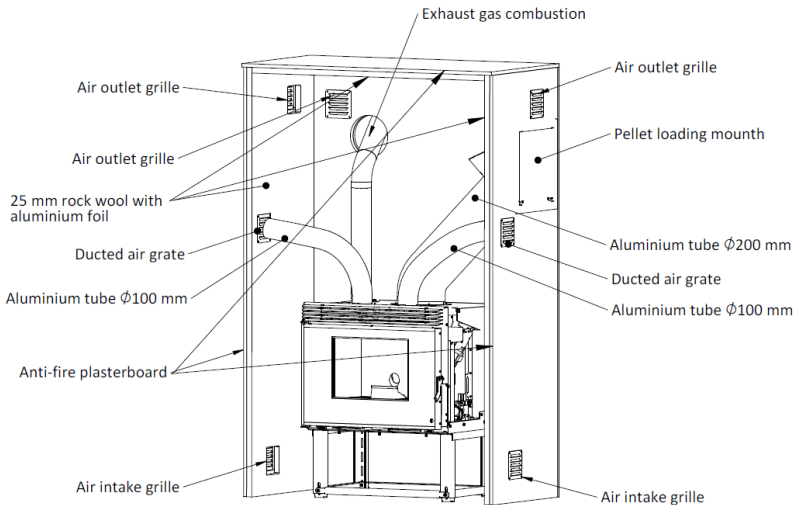


**Figure 21 - Installation of the pellet insert**

4. It is important that the bolts or rivets used to secure the air outlets be fixed from the bottom up so that a minimum height is allowed inside the insert to not interfere with the proper extraction of the equipment during maintenance, see Figure 21.

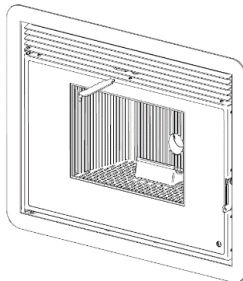
5. Once the grilles are fitted, the ducted air pipes are attached to them. The use of metal cable clamps is recommended. It is important to ensure that the air pipes are not in contact with the exhaust pipe or pellet duct to prevent noise or vibration during operation of the insert.

- Example of a ducted air installation:



**Figure 22 - Installation of the pellet insert**

- In the installation example (Figure 22), it can be verified that the pipes are placed to channel the hot air outlet to the room where the insert is installed, but could be installed to carry hot air to neighbouring rooms. The maximum length of pipes without installing an air extraction box is 3-4m.
- The amount of air flowing to the front of the equipment and that flows through the tubes to channel the hot air can be adjusted using the accessory to open the door and the safety latches. Put the back part of the accessory between the grate in its central part as shown in Figure 23, you can check that there is a piece that fits perfectly and is able to rotate and move a deflector that causes the air to be directed towards the Front or to the air pipes. For safety, there is always a minimum amount of air that has to come out in front of the equipment. After adjusting the position, you must remove the accessory to keep it cool.

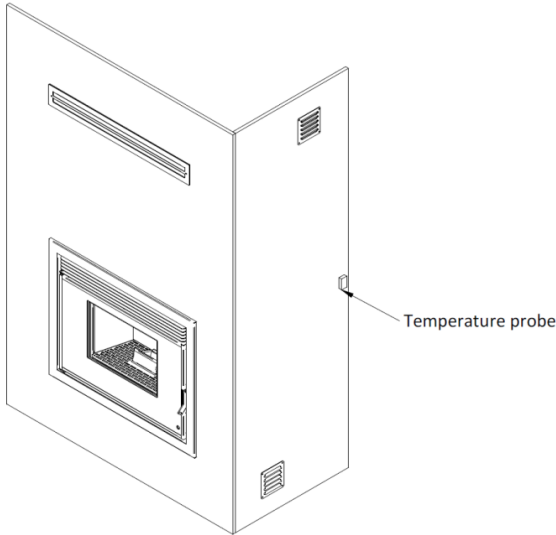


**Figure 23 - Installation of the pellet insert**

## 7.4 Temperature probe installation

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- The pellet inserts have a probe to measure the ambient temperature. For a correct reading of the ambient temperature, this probe must be located on the exterior in a place where it does not receive direct radiation or hot air from the equipment. It is sufficient to drill a hole in the wall and fix the box screwed or glued, leaving the end of the probe inside. Sufficient length of cable must be left so that the moving part of the equipment can be removed without causing strain on the cable and does not interfere with the movement of the equipment guides.

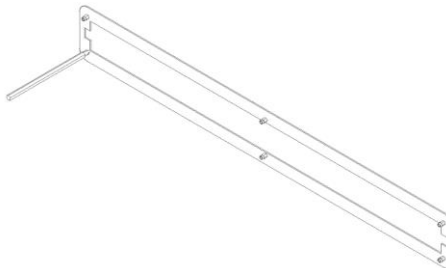


**Figure 24 - Placement of ambient temperature probe**

## 7.5 Installation of ventilation grille

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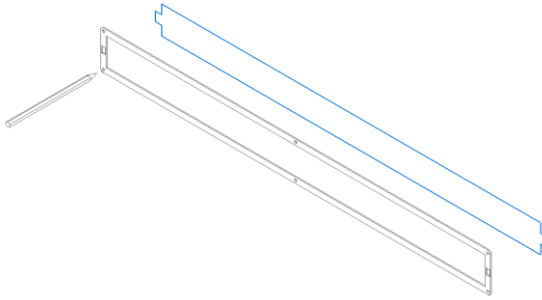
1. The grate must be installed at the top of the wall where the equipment is installed to allow the exit of the hot air that accumulates inside the walls, and together with lower grates allows a natural circulation that will cool the interior walls.
2. Once you have chosen the place where the grill will be placed, you should drill a hole in the wall with the help of the plate that will support the back. It should be placed on the wall making sure that it is level, with the help of a pencil mark the hole as shown in the figure.



**Figure 25 - Installation ventilation grille**

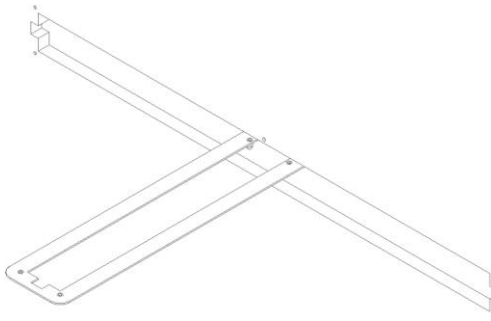


3. The outer support plate is placed making it coincide with the markings done previously as showed in the figure then mark the 6 holes.



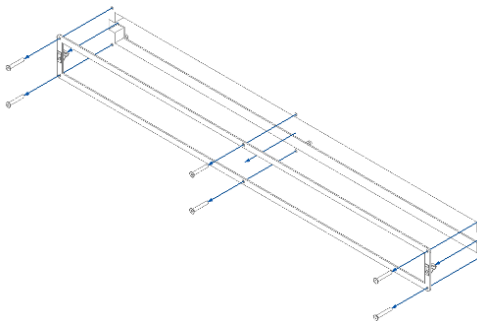
**Figure 26 - Installation ventilation grille**

4. The next step is to place the rear support plate to be fixed from the interior of the wall.



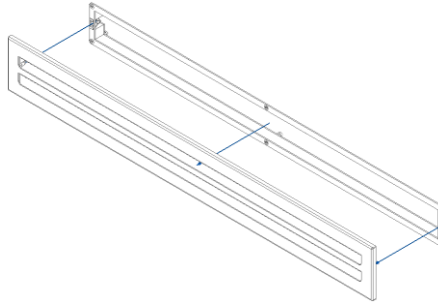
**Figure 27 - Installation ventilation grille**

5. On the outside, place the front support plate to match the holes previously opened, insert the screws 4x30mm DIN 7991 until it is fully threaded, leaving the two pieces together and the wall between them.



**Figure 28 - Installation ventilation grille**

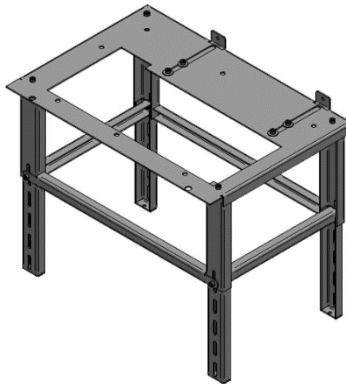
6. Finally, you can place the grate on the wall by fitting the bolts into the fixing springs as shown.



**Figure 29 - Installation ventilation grille**



## 7.6 Auxiliary table installation

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**Figure 30 - Auxiliary table installation**



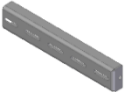
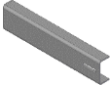




- To perform a root installation. A height adjustable table is available to facilitate the installation of the equipment. The table is adjustable in height and has 2 components to regulate the depth and be able to fix it to the back wall. It also has holes in the lower legs to facilitate fixation to the floor.
- It is very important that the table is levelled, both in depth and width, this will facilitate the extraction of the equipment on the guides and so increasing their life span. To level the table, it is necessary to adjust the legs in height.
- The attachment to the wall and to the floor will depend on the material from which they are made. The fastening must be very firm because the insert has a weight of about 115 kg, for this reason, the following configurations are recommended according to the material where the table will be fixed:

Material	Type of attachment	Image
Massive (slab, stone)	FMS M8x60 Ø10 Metallic	
Massive and non-massive (brick)	FIP M8x60 Ø10 Chemical	

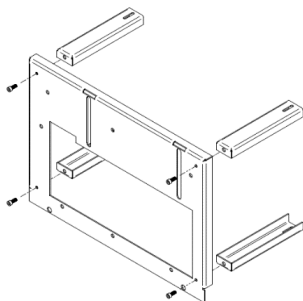
- You should select the type of configuration that best suits your needs and use the proper tools and security measures for the installation.

To assemble the table components, you need a 6 mm hex key.

The components that make up the table are as follows:

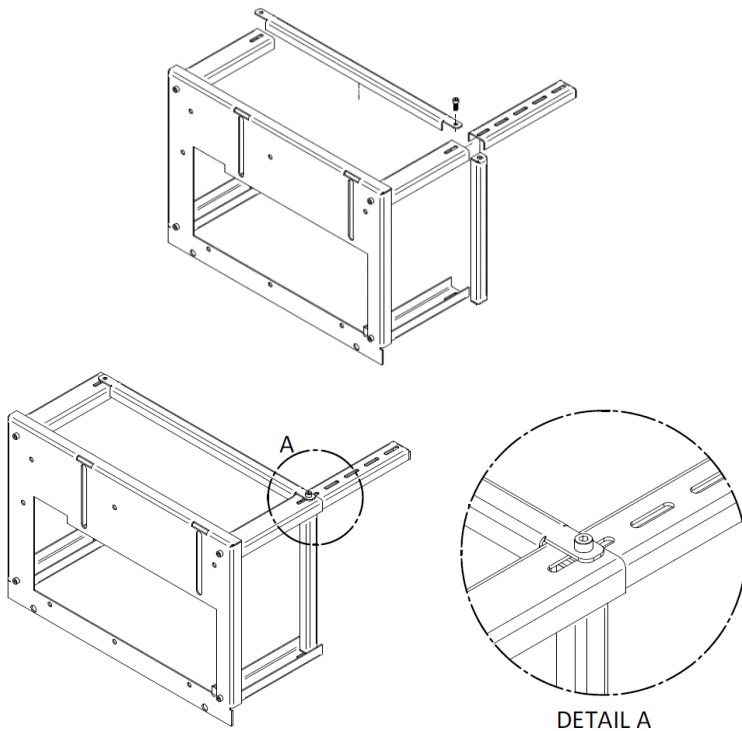
Component drawing	Quant.	Description
	19	Screw DIN 912 M8x20mm
	4	Washers DIN 9021 M8
	4	Extension for leg
	4	Table leg
	2	Long locking
	2	Short locking
	1	Table
	2	Fixing brackets

- Protect the surface on which you are going to work. The four legs of the table should be attached by hand with four DIN 912 M8x20mm screws as shown in Figure 31. The rest of the assembly will be easier to perform. As indicated in Figure 31.



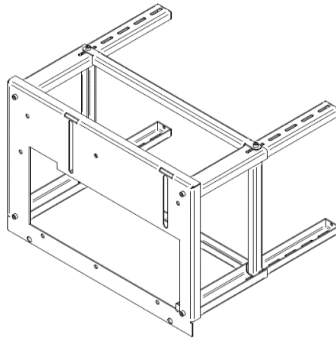
**Figure 31 - Auxiliary table assembly**

- Place one of the short locks on the inside of one of the leg extensions and insert between the two leg extensions on one side, as can be seen in the image below. Place one of the long interlocks on the outside and secure the assembly with a DIN 912 M8x20mm bolt. Do not tighten the bolt tightly to make the rest of the assembly easier. The leg extensions have 5 holes, you must select which to apply as well as the total height of the table.



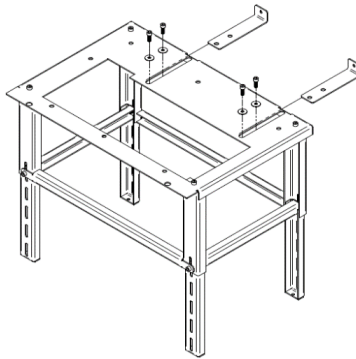
**Figure 32 - Auxiliary table assembly**

- One must repeat the process for the other three legs.



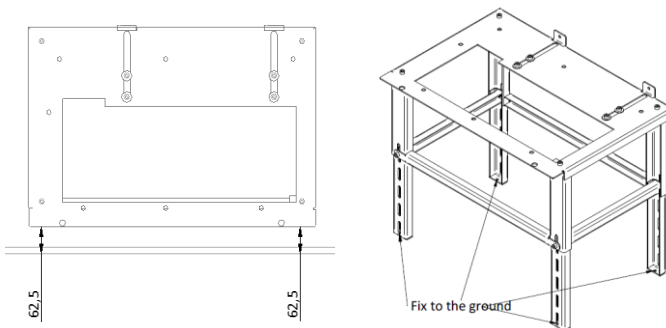
**Figure 33 - Auxiliary table assembly**

- Place the two set-squares through the opening on the table and put a screw and washer in each. Do not tighten the bolts completely, just enough to allow displacement of the brackets.



**Figure 34 - Auxiliary table assembly**

- To place the auxiliary table in its final position, remember that the table has to be installed 62,5 mm from the front wall, as shown in the image. Then mark the four holes of the legs on the floor, drill the holes, you must use the necessary means of fixing as indicated previously. At the end the table should be fixed to the floor.

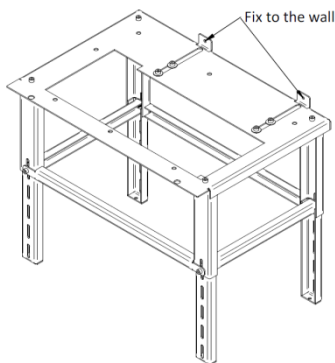


**Figure 35 - Auxiliary table assembly**

- You should level the table as accurately as possible with the help of a level. Tighten all screws with a 6mm umbrako wrench. Move the squares on the back wall and mark the holes. Remove

the brackets, if necessary, remove the screws and remove the assembly to make it easier to drill holes in the wall. Once done is put the necessary components to fix, place the brackets in place. Check that the table is level and that it respects the height of 62,5 millimetres. The screws that secure the table brackets must be tightened with a 6 mm umbrako table.

- Before finishing installation check that the table is level if necessary, to correct.



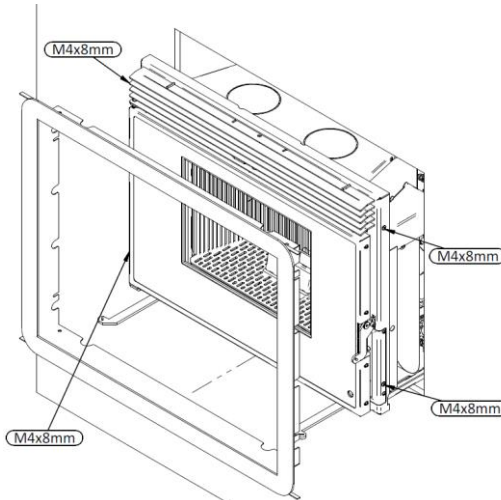
**Figure 36 - Auxiliary table assembly**

## 7.7 Installing the frame

- Before installing the frame, it must be immediately verified that the packaging is complete and in perfect condition, any damage or lack of components must be reported before installation.
- After having removed the package, make sure that the contents are intact and complete. If the contents of the package do not correspond to those indicated above, contact the retailer from whom you purchased the appliance.
- On this equipment it is possible to install different finishing frames.
- To install the frame, you must first check that the frame is compatible with the insert.

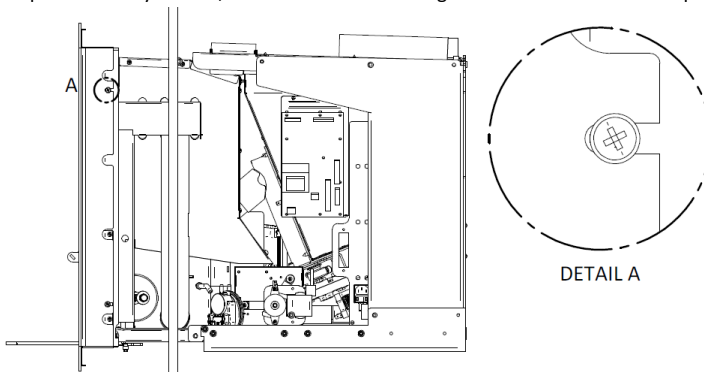
Equipment	Reference	Model Frame	Dimension (mm)
Square D	MO2070P096	Square D – 4L – 44 mm	773 x 684
	MO2070P100	Square D – 4L – 74 mm Round	833 x 744
	MO2070P098	Glass Square D – 4L – 50 mm	779 x 690
	MO2070P102	Glass Square D – 4L – 74 mm Round	833 x 744
Square V	MO2070P095	Square V – 4L – 44 mm	773 x 624
	MO2070P099	Square V – 4L – 74 mm Round	833 x 684
	MO2070P097	Glass Square V – 4L – 50 mm	779 x 630
	MO2070P101	Glass Square V – 4L – 74 mm Round	833 x 684

- With the insert installed and the frame prepared, the next step is to connect the two.
- First the insertable must be removed about 250 mm to be able to work.
- On the sides of the equipment there are 2 screws (DIN 967 M4x8mm) the same should be loosened about 3 mm.



**Figure 37 - Locating the screws to attach the frame to the insert**

- Install the frame so that the screws of the insert match the openings in the frame.
- Press the frame to the bottom and point the screws not tightening to the end position.
- Place the insert in its final position by closing the safety locks and check the position of the frame in relation to the wall making sure that they are perfectly parallel.
- If the wall is sensitive, colour, or material, it is advisable to leave the frame between 1 and 2 mm.
- Re-open the safety latches, remove the insert and tighten the screws to the end position.



**Figure 38 - Installing the frame**

## 8. Replenishment of pellets

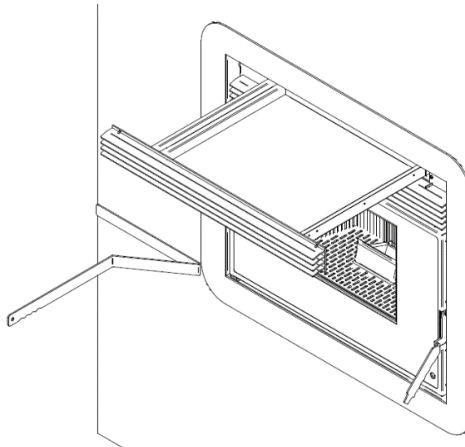
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- Depending on the type of insert, refuelling will be done in one of the following ways:

### 8.1 Insert with refill per load drawer

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- This charging system can be used with the equipment in operation, but always with care as you will be close to sources of heat.
- To refill the tank, open the cargo drawer by pulling the upper grate completely. Pour the pellets into the drawer and with the aid of the accessory the pellets should be pushed to the back of the drawer. The pellets will fall into the tank. When the pellets stop falling and begin to accumulate in the drawer stop loading.
- The tank has a maximum capacity of about 15 kg (depending on its size and density).



**Figure 39 - Replenishment drawer**

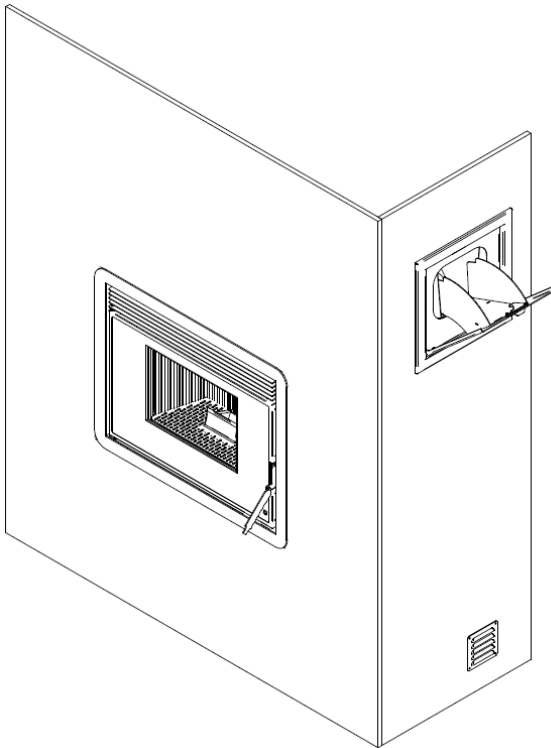
### 8.2 Insert with top-load refuelling

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- This top loading system can be used with the equipment in operation because it does not interfere with the normal operation of the insert and depending on where the loading mouth is placed it will not be near the heat source.
- To replenish the tank, open the loading drawer by pulling the top grille fully. Drop the pellets into the drawer and push the pellets to the rear of the drawer with the aid of the accessory. The pellets will fall into the tank. When the pellets stop falling and start to accumulate in the drawer, the drawer must not be loaded anymore and the drawer must be closed.
- The tank has a maximum capacity of about 15 kg (depending on its size and density).
- The installation of the equipment is restricted to the height and distance to install the respective loading mouth.



- The mouth can be installed on the right, left, forward or, if possible, evenly distributed through the back of the equipment. To load the pellets simply open the loading door, the door has stops that will open the door in a certain position to facilitate loading, causing a ramp effect for the pellets to enter the tube into the tank. When checking that the pellets are about to reach the loading mouth, do not put more and you should close the door.



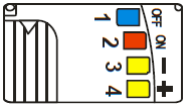


**Figure 40 - Loading head for refuelling**






## 9. Command and display



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- The equipment contains 2 displays, one incorporated in the equipment, the other wireless (radio remote control) which manage various functions and allow programming and interaction with the equipment.
- The internal display may only be used in the event of a fault (display without battery) of the external radio display/command.
- There is also an infrared control that allows remote access to some features of the device.

Device	Function
	<ul style="list-style-type: none"> <li>• Internal display</li> <li>• Viewing and interacting with device parameters and functions.</li> </ul>
	<ul style="list-style-type: none"> <li>• External radio display/command.</li> <li>• Viewing and interacting with device parameters and functions</li> <li>• Serves as a wireless thermostat (preferred device for greenhouse control)</li> <li>• Has 4xbatteries AA 1,5V LR6.</li> </ul>
	<ul style="list-style-type: none"> <li>• The infrared control allows you to switch the device on and off. It also increases or decreases the power level of the equipment.</li> </ul>

- In points 16, 17, 18, 19, 20 and 21 of this manual all the functions of the pellet insert and its location will be explained.
- The following table describes the touch screen display and the operation of each menu item.

Button	Function
	<ul style="list-style-type: none"> <li>• View user info menus.</li> <li>• Exit the menu (1 touch).</li> <li>• Turning the unit on and off (3s).</li> <li>• Resetting errors (3s).</li> </ul>
	<ul style="list-style-type: none"> <li>• Modification of combustion power.</li> <li>• Save data.</li> <li>• Load of pellets (3s).</li> </ul>
	<ul style="list-style-type: none"> <li>• Modification of the thermostat.</li> <li>• Data increment.</li> <li>• Correction of pellets recipe.</li> </ul>
	<ul style="list-style-type: none"> <li>• Modification of the thermostat.</li> <li>• Data increment.</li> <li>• Recipe correction of combustion air.</li> </ul>
	<ul style="list-style-type: none"> <li>• Turning the appliance on and off (3s).</li> <li>• Error reset (3s).</li> <li>• Double click when radio command in standby reactivates it.</li> </ul>
<p><b>ESC</b></p>	<ul style="list-style-type: none"> <li>• Function exit.</li> </ul>
<p><b>SET</b></p>	<ul style="list-style-type: none"> <li>• Enter in Menu, Submenu and save data.</li> </ul>

	<ul style="list-style-type: none"> <li>• Radio Room thermostat modify.</li> <li>• Run on submenu and menu.</li> </ul>
	<ul style="list-style-type: none"> <li>• Put the radio remote on Standby (3s).</li> <li>• It sets the command in Sleep mode.</li> <li>• Remove the radio remote control from sleep mode.</li> </ul>

## 10. Activation

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- Before operating the unit, please make sure that the pellet feeder channel is filled with pellets. To do this, with the unit turned off enable the pellet feeder function. The unit will be ready for operation when the first pellets start to fall into the burner. Disable the function.
- To start operating the unit you need to press the start/stop key for 3 seconds. The display will show the message "Check Up" during the lighting phase until completion.
- The pellets travel through the pellet feeder channel onto the burning basket (combustion chamber), where they will be ignited by means of a heat resistor. This process may take between 5 to 10 minutes, depending on whether the worm screw has been previously loaded with pellets or not. Upon completion of the ignition phase, "Normal" should appear on the display.
- The heating power can be adjusted at any time by accessing the Combustion Management Menu in the "Menu Personalisation" menu.
- You can choose between five pre-set power levels. The selected power is indicated on the display. The initial power setting at each start-up will correspond to the power level set during the last cycle operation.
- The unit will be hot during operation, so you should be careful when touching the glass, the door lock and the heat exchanger damper.



**THE INSERT SHOULD ALWAYS BE DISABLING BY THE SAME METHOD THAT WAS ACTIVE. DURING THE ACTIVATION PROCESS, THE EQUIPMENT MUST NEVER BE DISCONNECTED.**

## 11. Disabling

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- The turn off sequence is performed by pressing the start/stop key for 3 seconds.
- Until completion of this phase the display will show the message “Disable”. The extractor will remain active until a fume temperature of 40°C minus the delta of 2 °C is reached, to ensure that all the fuel is completely burned.

## 12. Recommendations on using this unit

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- Ensure that the unit is properly connected to the power mains using the 230V AC power cable.



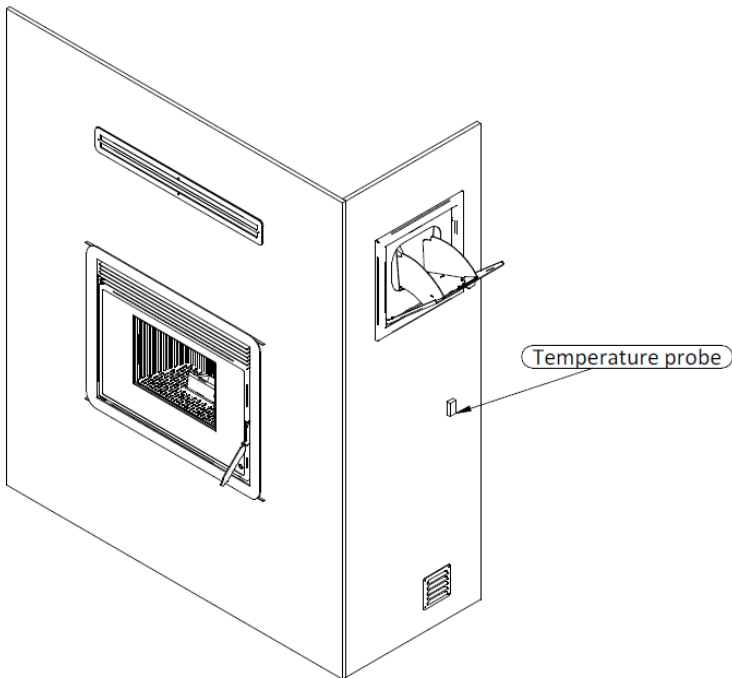
**Figure 41 - Power connection plug**

- Check if the pellet reservoir is supplied with pellets. Inside the pellet reservoir is a safety grid to prevent users from reaching the worm screw.
- Always check if the burner is not obstructed before igniting the unit.

**THE UNIT'S COMBUSTION CHAMBER IS MADE OF IRON PLATE COATED WITH HIGH TEMPERATURE RESISTANT PAINT, WHICH RELEASES FUMES DURING THE FIRST BURNING SESSIONS DUE TO THE CURING OF THE PAINT.**

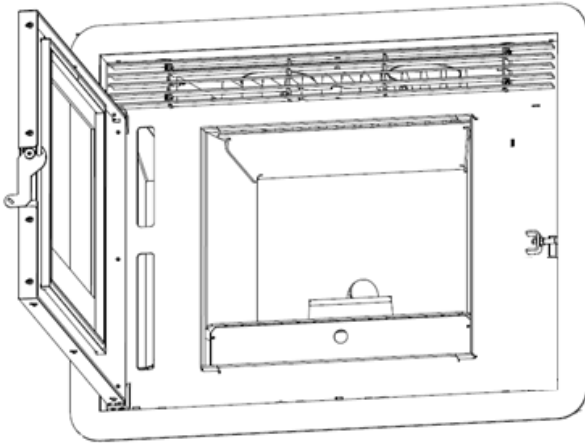
- Please make sure the room where the unit is installed has adequate air circulation; otherwise, the unit will not work properly. For this reason, you should consider if there are other air-consuming heating appliances in the room (e.g. gas units, braziers, extractors, etc.) as these should not be used simultaneously with this unit.
- You should not turn the stove off and on intermittently, as this could damage the unit's electronic and electric components.
- Even though the unit is grounded, do not touch the unit with wet hands; the improper handling of the unit may cause an electric discharge. If you notice any electrical problems, please contact your person who performed the installation.

- The unit should only be disconnected after its full stop. Make sure that the display shows "Off" before disconnecting the unit. If necessary, unplug the power cable from the power socket.
- Never open the door when the unit is still connected to the power socket or during its operation. If you need to open the door, disconnect the unit and allow it to cool down completely.
- The units have a probe to measure the room temperature. This probe is attached to the grid at the rear panel. For a good reading of the room temperature, avoid the contact between the end of the probe and the unit chassis. If you want, you may secure the probe to the wall near the unit.



**Figure 42 - Preferred location of the ambient probe**

- Before starting up the unit, check to determine if the deflector plate is correctly positioned.



**Figure 43 - Deflector plate position**

## **13. Cleaning and maintenance**

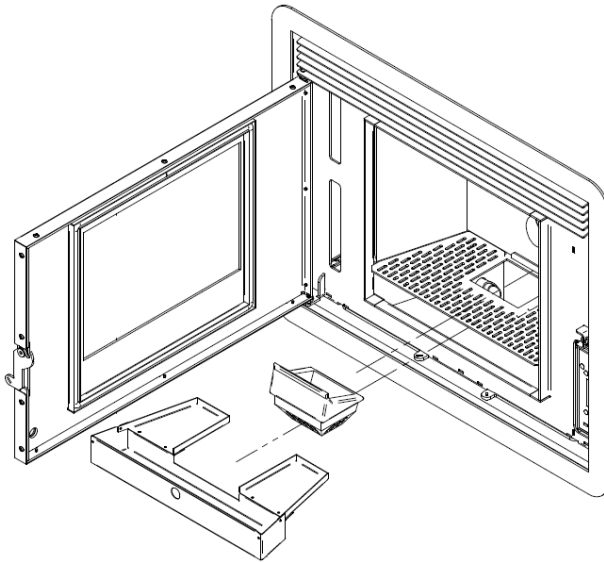
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- In order to achieve an optimal operating performance, it's essential to carry out a set of cleaning and maintenance procedures. To do so in a convenient way, use y a household vacuum cleaner.
- The cleaning operation should be carried out after each burn of approximately 30 kg. To prevent any accidents, the cleaning and maintenance operations must be performed with the disconnected from the power socket and after complete cool down.
- You can use an ash vacuum cleaner for this task.
- The deterioration of parts due to the lack of cleaning will void the warranty provided by Fogo Montanha.

### **13.1 Daily cleaning - Firing basket, grate and ash basket**

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- By opening the door using the accessory, you have access to the inside of the equipment. As a first operation you should remove the grate, if there is any ash accumulated in it, you should tilt the grate still inside the equipment in order to ensure that the ash falls into the ash drawer.



**Figure 44 - Removal of burner basket, grate and ash basket components**

- Then remove the firing basket and brush or vacuum it so that the holes in the workpiece are unobstructed.
- Clean the place where the basket is placed to avoid obstructing the passage of combustion air and return the components to their proper places.

### 13.2 Cleaning the glass

- The glass can only be cleaned after the complete cool down of the unit. Use an appropriate cleaning product by following the product's instructions for use and avoiding contact of the product with the rope gasket and the metallic painted parts, to avoid unwanted oxidation. The rope gasket is glued, so it should not be exposed to moisture from water or cleaning products.

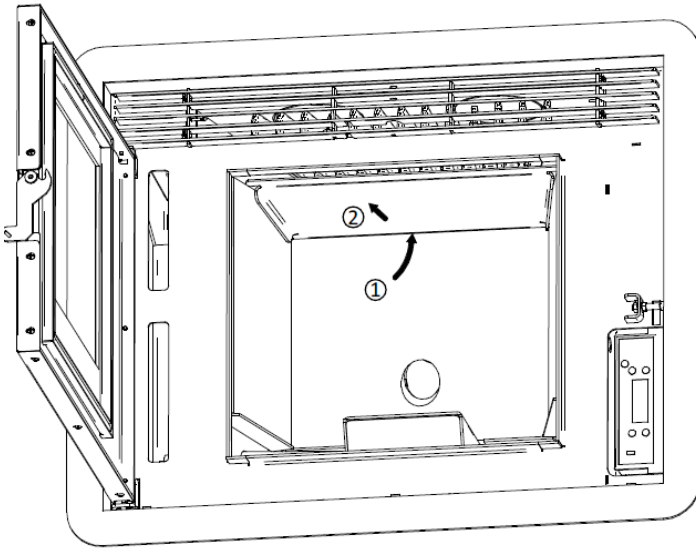


**Figure 45 - Glass cleaning**

### 13.3 Additional cleaning

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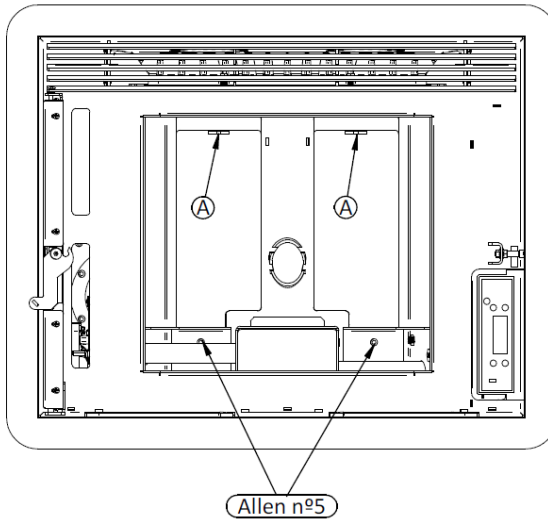
- **ADDITIONAL CLEANING SHOULD BE CARRIED OUT FOR EVERY 600-800 KG OF PELLETS CONSUMED.**
- Begin cleaning for the tasks described in 13.1. and disconnect the equipment from electrical power.
- Once the 3 pieces have been removed, continue removing the baffle plate.
- To remove the baffle plate that is installed in the upper part of the combustion chamber, it will be necessary to move the first one slightly upwards (movement 1 of Figure 46) in the anterior part of it, then sliding it over the vermiculite.



**Figure 46 - Removal of the baffle plate**

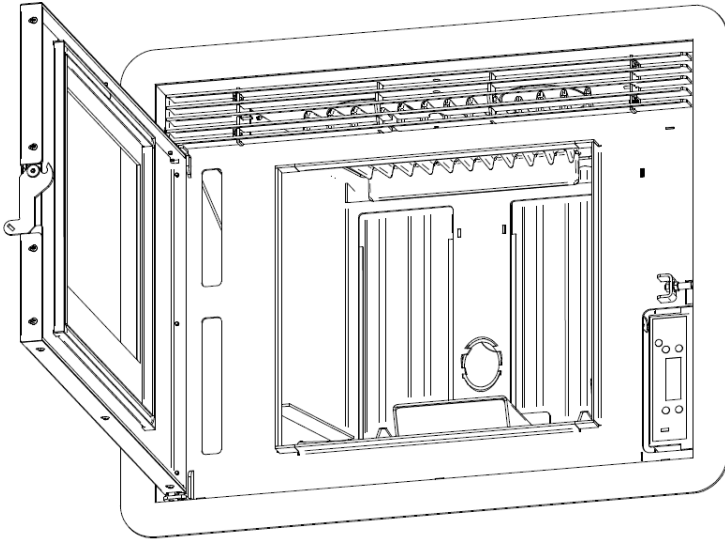
- When the baffle plate is removed, the vermiculite plates are released and can be removed.
- Start removing from the sides and only then remove the back plate. Here you can see the plates that separate from the rear smoke passage.





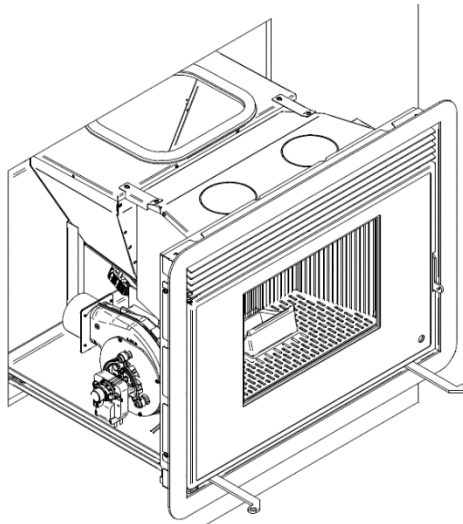
**Figure 47 - Removing rear plates**

- Remove the DIN 912 M6x12 screws that hold the bottom plates with the help of a hexagon socket wrench n° 5.
- Once the lower plates have been removed, it is possible to remove the upper plates by pushing the plate at point A described earlier in Figure 47.
- This last action will cause the plates to be released at the bottom and by letting them lower you can remove them.
- In this way it is possible to check the entire smoke passage surface of the combustion chamber.
- Using a vacuum cleaner and a steel brush, clean the entire combustion chamber.
- For an effective cleaning you should develop it following this order: First heat exchanger in casting, all the walls, the place of installation of the firing basket and the entire lower surface of the combustion chamber.



**Figure 48 - Overview combustion chamber**

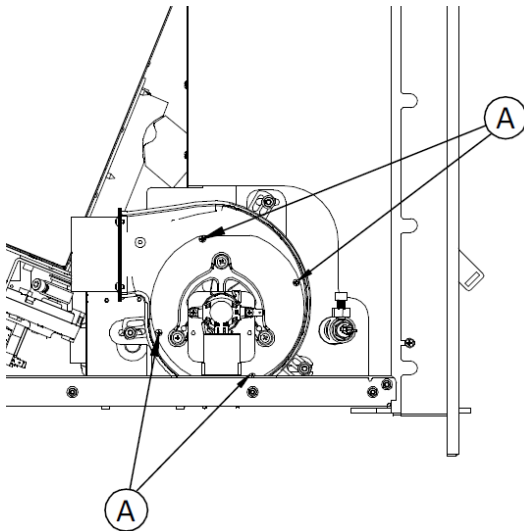
- Then remove the safety locks and remove the equipment to the outside of the pladur for easy access.
- The smoke extractor is located on the left side of the equipment (Figure 49).



**Figure 49 - Extractor position**

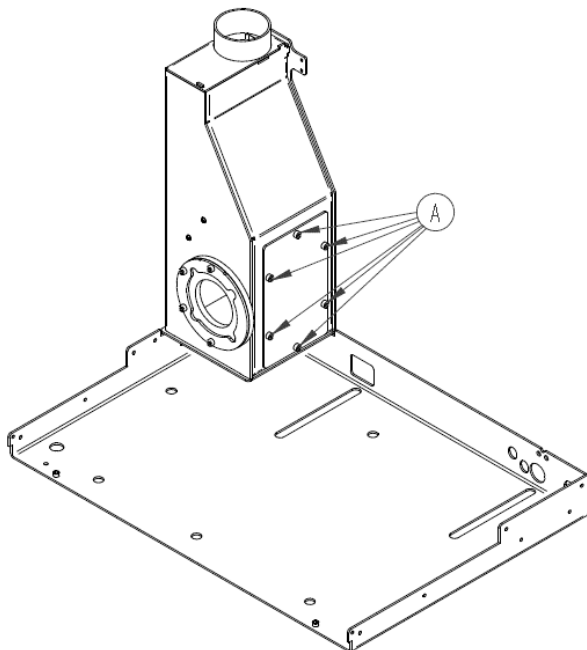
- It's mainly composed of two parts, the body and the motor.

- To clean the extractor it is necessary to remove the cap with the motor, remove the screws (Figure 50) with a Phillips screwdriver PH2 (be careful not to injure the seal gasket - CO120602000003 VFC1-120 extractor gasket). You can use a brush and a vacuum cleaner to remove any dirt from the extractor walls and propellers.



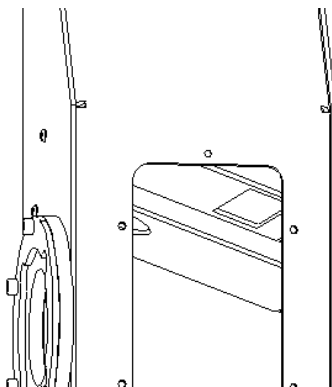
**Figure 50 - Checking the PH2 screws**

- To proceed with the cleaning, it is necessary to remove the equipment completely from the guides (do not forget the procedure initially requested to disconnect the equipment from the electrical power).
- Then raise the device approximately 1 palm on the front so that the rails can be detached from the fixed guide rails.
- Afterwards and with the help of another person (weight of the equipment about 115 kg) remove the equipment completely and place it on a stable horizontal surface that allows to receive the weight of the equipment.
- After the previous point it is possible to access the fixed part of the equipment.
- The smoke box is located at the rear left of the equipment (Figure 51). The gasket between the fume box and the extractor can be checked in this fume box. The condition of this red gasket must be checked during maintenance. It must be free of cracks or cuts and must maintain its elasticity (it must not be rigid). If it is not in good condition, it must be replaced (CO0510000750000).
- The smoke box (Figure 51) referred to in the previous point has a side cover (right side from the front) fixed with 6 DIN 912 M6x12 screws. It can be accessed using an Allen key 5.
- After removing the screws and using an ash vacuum cleaner, clean all surfaces.



**Figure 51 - Smoke box cover**

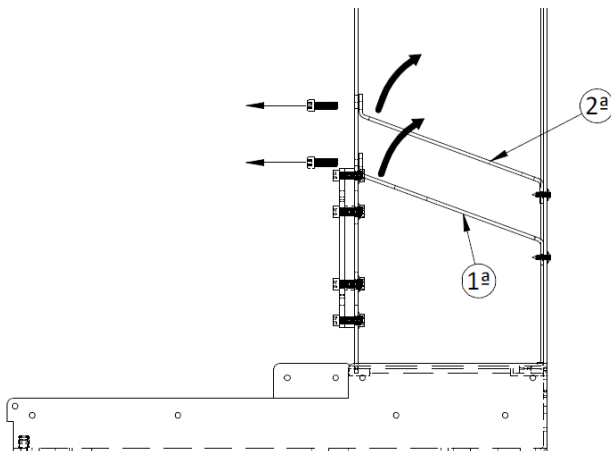
- Inside the box there are two smoke deflectors, positioned as shown in Figure 52, to carry out a proper cleaning it is necessary to remove them.



**Figure 52 - Smoke box cover**

- To remove the baffles, you first have to remove 2 M6x20 DIN 912 screws as shown (Figure 53).
- First remove the bottom plate as shown below (Figure 53) by turning the plate slightly and removing it through the right-side cover.

- Repeat the above process for the top plate and clean all interior surfaces of the smoke box.



**Figure 53 - Smoke box defectors**

- To complete the maintenance task, repeat the reverse process by placing all parts back in place.
- Do not forget to close the safety locks.

**NOTICE!** The frequency of maintenance tasks depends on the quality of the pellets.

### **13.4 Review after a long period of inactivity**

---

- Check that the gas outlet or combustion air inlet is not obstructed by elements outside the installation, e.g. nests, or by any type of infiltration.

# ATTENTION

### WELCOME TO YOUR PELLET STOVE - AIR / HYDRO

This is a quick start guide. You will find further information in the instruction manual. This guide does not replace the careful reading of the instruction manual.

**1** **MANUAL**  
Read the instruction manual in its entirety before the first use.

**2** **PELLETS**  
Use the EN pellets with pellets. All other pellets are not suitable for this structure. EN 14961-2.

**3** **START (STOP)**  
To start the stove, press the ON/OFF button for **3 seconds**.

**4** **ADVANCED**  
For advanced settings, press the ON/OFF button for 5 seconds. See the reduction manual.

**5** **ALARM**  
Any alarm indicates an error. Read the instructions in the reduction manual for solutions of the equipment.

**6** **LIST OF ALARMS**  
You can see the list of alarms in the reduction manual.

**7** **ALARMA\* RESET**  
With the heating shut off, press the ON/OFF button for **10 seconds** until you hear the alarm.

**8** **CLEANING**  
Please follow the cleaning instructions in the cleaning guide.

### MAINTENANCE AND CLEANING GUIDE

Some of the tasks can be done by yourself and others by a technician\*.

USER	TECHNICIAN	AF	HYDRO	DAILY**	WEEKLY**	800 kg**	ANNUAL
Clean burner		●	●	✓			
Put into filters covers and scrape over the top		●	●	✓			
Clean the boiler compartment		●	●	✓			
Clean ash container		●	●	✓			
Clean smoke duct and turbochargers		●	●	✓	✓	✓	✓
Vacuum pellet tank separator		●	●	✓	✓	✓	✓
Check pressure of the oxygen sensor		●	●				✓
Check safety valve 3 bar		●	●				✓
Check the fuel on the hydraulic circuit		●	●				✓
Clean the smoke extractor		●	●				✓
Check and clean the fluegas duct T		●	●				✓
Clean chimney		●	●				✓

\* When changing a technician it might be necessary to adjust construction permits. If necessary, please call a technician. \*\* Depends on the fuel used. \*\*\* 1 = 800 kg of pellets burned. \*\*\*\* To perform this operation please call your technician. Operation not covered by warranty.

Figure 54 - Maintenance guide label

**Note:** The safety warnings sticker label is attached from factory to the unit's pellet lid, in the Portuguese language. Attached to the manual you will find other language versions of the sticker labels (Spanish, English, French and Italian). If necessary, remove the Portuguese language label and replace it with the label in your country's language.



## 14. Internal display




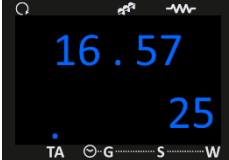
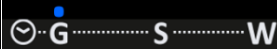

- The internal display should only be used in case of failure (display without battery) of the external radio display/command (in this case the control of the equipment goes through the thermostat temperature defined in the internal display and reading of the ambient probe).
- When connecting the device to electricity, the display of the device shows the current time and ambient temperature.



- In the entry menu by pressing the key:
  - “B1” View user info menus. Exit menus and submenus (1 touch). Switch the device on and off (3s) and reset/unlock the errors (3s).
  - “B2” Modification of combustion power. Save data. Automatic loading of pellets (3s).
  - “B3” Modification of the thermostat. Data increment.
  - “B4” Modification of the thermostat. Data increment.



<u>Symbol</u>	<u>Meaning</u>
H	<ul style="list-style-type: none"> <li>• Time indicator</li> </ul>
m	<ul style="list-style-type: none"> <li>• Minute indicator</li> </ul>
T amb	<ul style="list-style-type: none"> <li>• Ambient temperature indicator</li> </ul>

<u>Led</u>	<u>Meaning</u>
	<ul style="list-style-type: none"> <li>• When the LED indicator of this symbol is active, it means that the ambient fan is active.</li> </ul>
	<ul style="list-style-type: none"> <li>• When the LED indicator of this symbol is active, it means that the worm gear is active.</li> </ul>

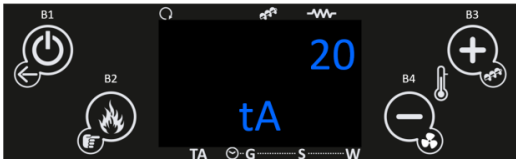


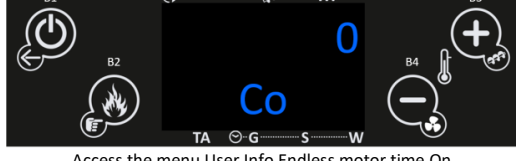
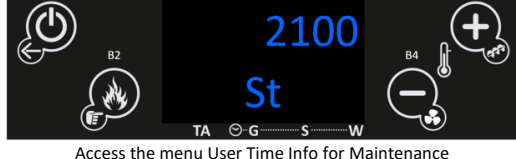

	<ul style="list-style-type: none"> <li>When the LED indicator of this symbol is active, it means that the ignition resistor is active.</li> </ul>	
	<ul style="list-style-type: none"> <li>When the LED indicator of this symbol is active, it means that the device has reached the requested set point value.</li> </ul>	
	<ul style="list-style-type: none"> <li>When an LED indicator of the displayed symbols is active, it means that the unit has an active chrono program.</li> </ul>	

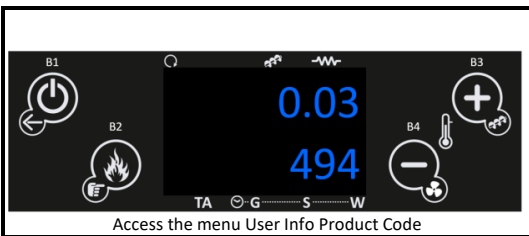
**⚠ THE EQUIPMENT MUST ALWAYS BE DISACTIVATED BY THE SOME METHOD THAT I AM ACTIVE. DURING THE ACTIVATION PROCESS, THE DEVICE MUST NEVER BE DISCONNECTED.**

### 14.1 Customer menu

Function Info Menu	Procedure
 <p>Access the menu Settings Info Menu</p>	<ul style="list-style-type: none"> <li>From the initial menu, press the B1 key to access the User Info Menu;</li> <li>Clicking on successive times allows you to check the entire user info menu.</li> </ul>
 <p>Access the menu User Info Smoke Temperature</p>	<ul style="list-style-type: none"> <li>The first variable of the menu is the Smoke Temperature;</li> <li>Press B1 to continue checking the user information menu, or, do not touch the display to exit.</li> </ul>



 <p>Access the menu User Info Ambient Temperature</p>	<ul style="list-style-type: none"> <li>• The second variable in the menu is Ambient Temperature;</li> <li>• Press B1 to continue checking the user information menu, or, do not touch the display to exit.</li> </ul>
 <p>Access the menu User Info Primary Airflow</p>	<ul style="list-style-type: none"> <li>• The third variable in the menu deals with the Primary Airflow;</li> <li>• Press B1 to continue checking the user information menu, or, do not touch the display to exit.</li> </ul>
 <p>Access the menu User Info Extractor Speed in rpm</p>	<ul style="list-style-type: none"> <li>• The fourth variable of the menu deals with the extractor speed in revolutions per minute;</li> <li>• Press B1 to continue checking the user information menu, or, do not touch the display to exit.</li> </ul>
 <p>Access the menu User Info Endless motor time On</p>	<ul style="list-style-type: none"> <li>• Variable fifth of the menu treats endless motor time in seconds;</li> <li>• Press B1 to continue checking the user information menu, or, do not touch the display to exit.</li> </ul>
 <p>Access the menu User Time Info for Maintenance</p>	<ul style="list-style-type: none"> <li>• The sixth variable of the menu is the pending time for maintenance (maximum time, being that, the maintenance should be evaluated by the type of pellet and kilos of pellets burned);</li> <li>• Press B1 to continue checking the user information menu, or, do not touch the display to exit.</li> </ul>
 <p>Access the menu User Info Firmware Code and Revision</p>	<ul style="list-style-type: none"> <li>• Seventh variable of the menu is display firmware and version/revision of the same);</li> <li>• Press B1 to continue checking the user information menu, or, do not touch the display to exit.</li> </ul>



Access the menu User Info Product Code

- The eighth variable in the menu is the product code;
- Press B1, or, do not touch the display to exit.

- The following table explains the meaning of each variable.

<b>tF</b>	Exhaust Temperature [°C]	Read in degrees Celsius (°C) reports the exhaust temperature monitored by the thermocouple.
<b>tA</b>	Room Temperature [°C]	Read in degrees Celsius (°C) reports the ambient temperature monitored by the outdoor NTC probe.
<b>FL</b>	Primary air flow speed	Read in dimensionless quantity informs the flow of air entering the unit.
<b>UF</b>	Extractor [RPM]	Read in revolutions per minute informs about the rotational speed of the extractor.
<b>Co</b>	Auger Motor [s]	Read in seconds informs time within 4 seconds that the auger motor is active and feeds pellets to the burner.
<b>St</b>	Service [h]	Read in hours reports the number of missing hours to report malfunctions for lack of maintenance. These must be checked by the technical service during maintenance. The period for maintenance must respect the kilos of burnt pellets.
	Working time [h]	Read in hours reports the number of hours in On, modelling and security.
<b>FC</b>	Firmware	Firmware Code and Revision
	Cod. Artic.	Product Code

- In the following table, the code of each product is explicit.

Cod. Artic. 494-1	Stove Fogo Montanha T300
Cod. Artic. 494-2	Stove Fogo Montanha T400
Cod. Artic. 494-3	Pellet Insert Fogo Montanha PI700

## Function Power Selection Menu

## Procedure



Access the menu Selection of Combustion Power

- In the initial menu, press the B2 key to access the Power Selection Menu;
- The power value is flashing.



Access the menu Selection of Combustion Power

- Clicking on successive times it is possible to change the combustion power between automatic (controlled by ambient temperature) and manual and in the latter between 1 and 5 being 1 the lowest power and 5 the highest power;
- Do not touch the display for 5 seconds to exit and save the new value.

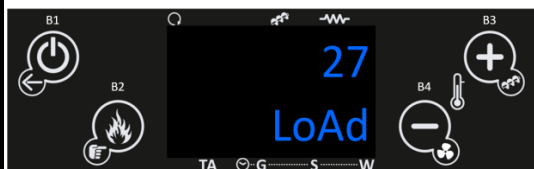
## Function Pellet Load Menu

## Procedure



Access the menu Pellet Load

- In the initial menu, press the B2 key for 3 seconds to activate the pellet load.

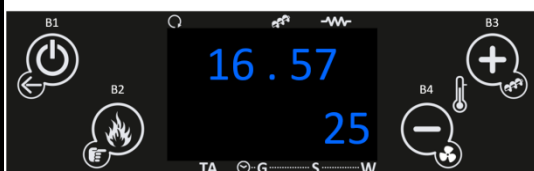


Access the menu Pellet Load

- The status count can be checked in seconds on the screen;
- Press B1 or do not touch the display for 300 seconds to exit.

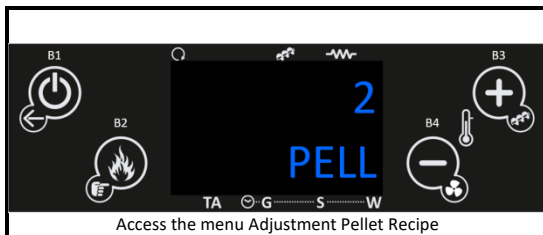
## Function Pellet Recipe Adjustment Menu

## Procedure



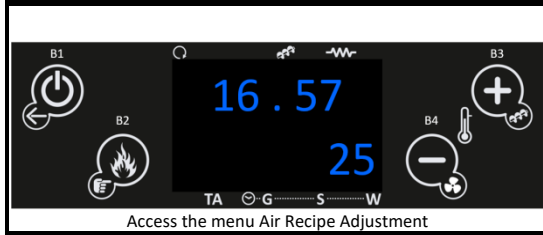
Access the menu Adjustment Pellet Recipe

- In the initial menu, press key B3 for 3 seconds to activate access/view the current pellet recipe;
- The current recipe can be checked on the screen;
- Press B3 for 3 seconds to correct the pellet recipe, or do not touch the display for 5 seconds to exit.

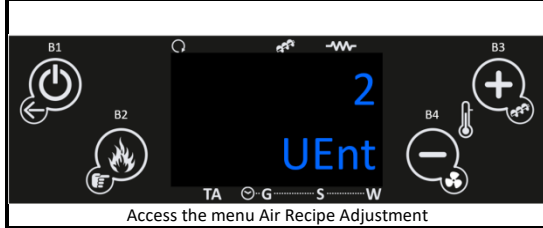


- To correct and after previous action the value will flash and with B3 and B4 adjust to the new desired value;
- In this menu with B3 and B4 you can adjust the amount of pellets to feed between -7 (-25%) and 7 (+25%), or do not touch the display for 5 seconds to exit.

**Function Recipe Air Adjustment Menu** **Procedure**

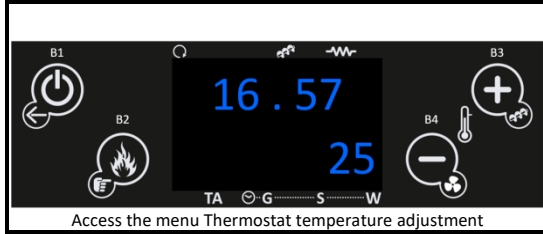


- In the initial menu press key B4 for 3 seconds to activate access/display the current air recipe;
- The current recipe can be checked on the screen;
- Press B4 for 3 seconds if you want to correct the pellet recipe, or do not touch the display for 5 seconds to exit.

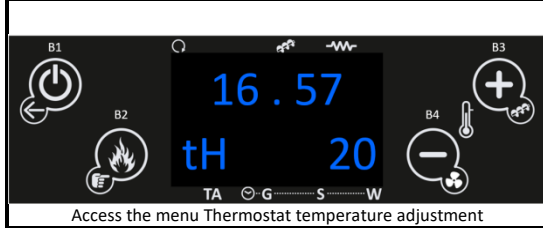


- To correct and after previous action the value will flash and with B3 and B4 adjust to the new desired value;
- In this menu with B3 and B4 you can adjust the amount of combustion air to feed between -7 (-25%) and 7 (+25%), or, do not touch the display for 5 seconds to exit.

**Function Thermostat Temp. Adjustment Menu** **Procedure**





- In the initial menu, press key B4 to display the temperature selected for thermostat temperature;
- The selected temperature can be checked on the screen.


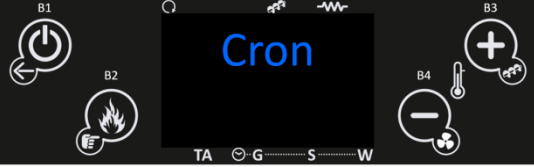


- Since this model is always supplied with the external radio display/command, this temperature does not influence the operation of the device;
- Do not touch the display for 5 seconds to exit.

- The internal display also has a sub-menu although limited to access to some control variables.

Function Sub-menu Air	Procedure
 <p data-bbox="232 416 471 435">Access the menu Sub-menu Air</p>	<ul style="list-style-type: none"> <li>• In the initial menu, press B2 and B4 at the same time;</li> <li>• The first sub-menu "Air" heating power can be checked on the screen.</li> </ul>
 <p data-bbox="165 647 538 663">Access the menu Ambient Fan Speed Adjustment</p>	<ul style="list-style-type: none"> <li>• Press B2 to access the Air menu and change the power/speed of the ambient tangential fan between automatic, or manual and in the latter between 1 to 5 with 1 the lowest speed and 5 the highest speed;</li> <li>• Press B2 to validate and then B1, or do not touch the display for 5 seconds to exit.</li> </ul>

- The device is equipped with a time switch for switching the device on and off. The same can be Daily (**Gior** - possible to select the desired day of the week and set up to 3 different times for the respective day), Weekly (**Sett** - possible to select up to 3 times during one day, the same program will be applied every day of the week) and Week/weekend (**Fise** - possible to select 3 times during the day for weekdays and weekends). After analysing the available options select the desired mode.


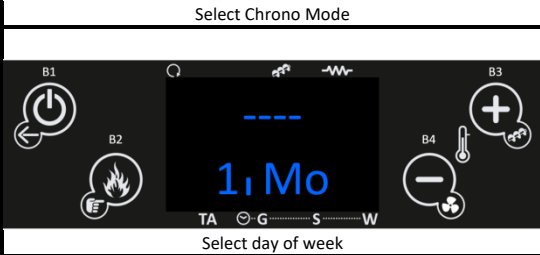
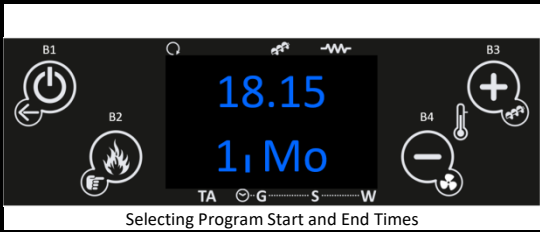
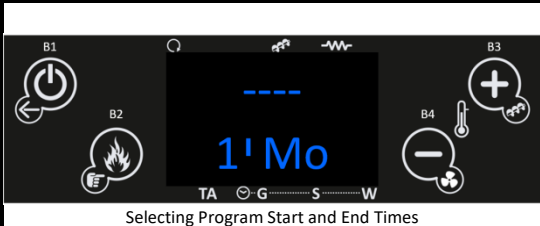
Function Sub-menu Chrono	Procedure
 <p data-bbox="213 1181 486 1200">Access the menu Sub-menu Chrono</p>	<ul style="list-style-type: none"> <li>• In the initial menu, press B2 and B4 at the same time;</li> <li>• The first sub-menu "Air" heating power can be checked on the screen.</li> </ul>
 <p data-bbox="258 1412 445 1428">Access the menu Chrono</p>	<ul style="list-style-type: none"> <li>• In the sub-menu with B3 and B4 select the Sub-menu "Cron" Chrono;</li> <li>• Press B2 to validate.</li> </ul>

<p>Access the menu Mode</p>	<ul style="list-style-type: none"> <li>• In the menu " Chronograph " with B3 and B4 select the Sub-menu "Mode" Mode;</li> <li>• Press B2 to validate.</li> </ul>
<p>Select Mode and activate Chrono</p>	<ul style="list-style-type: none"> <li>• In the "Mode" menu Mode with B1 enable choice;</li> <li>• In the "Mode" menu with B3 and B4 select the desired mode Daily (Gior), Weekly (Sett) and Week/Weekend (Fise). After selecting confirm with B2;</li> <li>• The corresponding LED in the general menu is activated by indicating the selection made.</li> </ul>

**AFTER THE DEFINITION OF THE CHRONOLOGICAL MODALITY INTENDED TO DEVELOP THE RESPECTIVE PROGRAMS.**

**THE FOLLOWING IS AN EXAMPLE OF THE CREATION OF A DAILY SCHEDULE, IN THIS CASE, MONDAY.**

<p><b><u>Function Sub-menu Chrono</u></b></p>	<p><b><u>Procedure</u></b></p>
<p>Access the menu Sub-menu Chrono</p>	<ul style="list-style-type: none"> <li>• In the initial menu, press B2 and B4 at the same time;</li> <li>• The first sub-menu "Air" heating power can be checked on the screen.</li> </ul>
<p>Access the menu Chrono</p>	<ul style="list-style-type: none"> <li>• In the sub-menu with B3 and B4 select the Sub-menu "Cron" Chrono;</li> <li>• Press B2 to validate.</li> </ul>
<p>Access the menu Program Chrono</p>	<ul style="list-style-type: none"> <li>• In the menu " Chron" Chronograph with B3 and B4 select the Sub-menu "Prog" (Program Chronograph);</li> <li>• Press B2 to validate.</li> </ul>

 <p>Select Chrono Mode</p>	<ul style="list-style-type: none"> <li>• In the menu "Chron" Chronograph Program with B3 and B4 select Daily, weekly, or Weekend (you must respect the mode already selected);</li> <li>• In this case the daily program is exemplified;</li> <li>• Press B2 to validate.</li> </ul>
 <p>Select day of week</p>	<ul style="list-style-type: none"> <li>• In the " Daily " menu with B3 and B4 select the desired day of the week;</li> <li>• Press B1 for 3 s to validate and enter the programming for that day.</li> </ul>
 <p>Selecting Program Start and End Times</p>	<ul style="list-style-type: none"> <li>• In the menu of the selected day, press B2 to activate selection mode;</li> <li>• With B3 and B4 and with the times flashing, select the start time;</li> <li>• Press B2 to validate;</li> <li>• Repeat previous procedure for minutes (it is possible to increment every 15 minutes, except for the possibility to choose 23:59).</li> </ul>
 <p>Selecting Program Start and End Times</p>	<ul style="list-style-type: none"> <li>• Repeat process for End Time and other available times if applicable.</li> </ul>

- Repeat the previous process for all desired days.
- When programs are developed around midnight in order to start operating the day before and end the operation the next day will be relevant:
  - Finish the last program the day before at 23:59;
  - Start the first program the next day at 00:00.

**IN THE WEEK AND WEEK/WEEKEND MODALITIES THE IMPLEMENTATION OF PROGRAMMES FOLLOWS THE SAME LOGIC EXEMPLIFIED ABOVE.**

## Function Sub-menu Date and Time

## Procedure



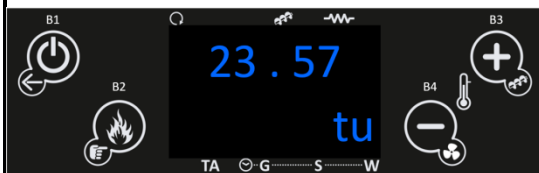
Access the menu Sub-menu Chrono

- In the initial menu, press B2 and B4 at the same time;
- The first sub-menu "Air" heating power can be checked on the screen.



Access the menu Date and Time

- In the advanced menu with B3 and B4 select the Sub-menu "oroL" Date and Time;
- Press B2 to validate.



Access the menu Date and Time

- In the "oroL" menu Date and Time with B1 activate change and select Correct time;
- Press B2 to validate and move to minutes;
- Repeat previous action for day of week and press B2;
- Do not touch the display for 5 seconds to exit.

- If there is other equipment at the place of installation that uses radio frequency for communication and in case of incompatibility there may be need to change the code of the External controller.
- In this situation it will be necessary to access the menu learn Menu in the advanced menu and pair both controllers (internal and external).

## Function Sub-menu Synchronize Code

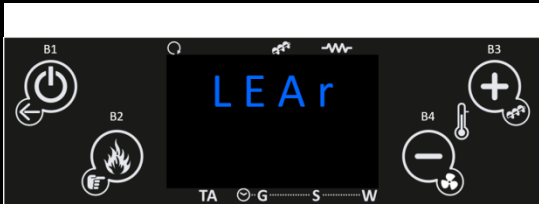

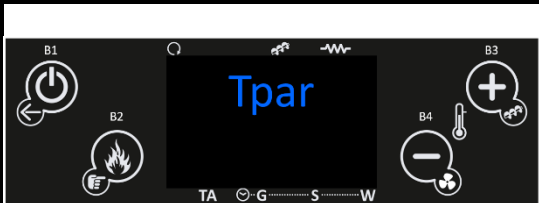
## Procedure



Access the menu Sub-menu Chrono

- In the initial menu, press B2 and B4 at the same time;
- The first sub-menu "Air" heating power can be checked on the screen.



 <p>Access the menu Sub-menu Synchronize Code</p>	<ul style="list-style-type: none"> <li>• In the sub-menu with B3 and B4 select the Sub-menu "LEAr" synchronize code;</li> <li>• Press B2 to validate;</li> <li>• See page 62 first.</li> </ul>
 <p>Wait for pairing</p>	<ul style="list-style-type: none"> <li>• In the "LEAr" menu, learn Code and simultaneously with the setting of the new code in the external control with B1 activate pairing;</li> <li>• If the system returns Yes the new pairing has been performed successfully;</li> <li>• If the system returns, it is not necessary to perform pairing again.</li> </ul>
	<ul style="list-style-type: none"> <li>• The system menu (TPAR) within the sub-menu is a menu of exclusive access to the technical service requiring a password for such.</li> </ul>

## 15. Troubleshooting

Troubleshooting
<ul style="list-style-type: none"> <li>• Sond – Failure to check the probes during the check-up process.</li> </ul>
<ul style="list-style-type: none"> <li>• Blocked Ignition/OFF dEL – When an external device (e.g. App, or, Remote Chrono) tries to deactivate the equipment during the ignition process. The System will only stop when it reaches the Run Mode phase by displaying the message Ignition Block.</li> </ul>
<ul style="list-style-type: none"> <li>• Link Error – When there is no communication between the motherboard and the display board.</li> </ul>
<ul style="list-style-type: none"> <li>• Cleaning/PCLr – Cyclical period of cleanliness.</li> </ul>
<ul style="list-style-type: none"> <li>• Horas a Piscar – Wrong time and date in case of prolonged power outage.</li> </ul>

### THE ANOMALIES DO NOT CAUSE THE EQUIPMENT TO SHUT DOWN

- In order to switch off the device in case of emergency, you must shut down the device normally. To do this, press the off button for 3 seconds and allow the deactivation until the word off appears in the display.

## 16. List of Alarms / Failures / Recommendations

- All alarms cause the machine to deactivate with error information and activation of the alarm LED. The alarm must be "reset" and reset. To reset the machine, press the "On/Off" button for 3 to 4 seconds until you hear the beep, accompanied by a message "Reset alarms in progress".
- If the alarm reset is successful, new information is checked - Reset alarms Successful.
- In the Off state, if for any reason the smoke temperature rises above 85°C (Th01) the oven enters the deactivation mode.

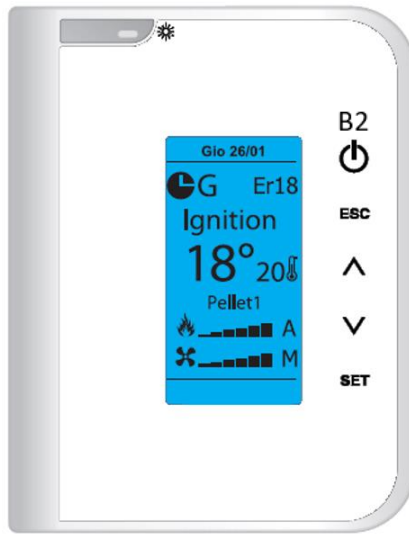
Alarm	Code		Cause and Resolution
High temperature in pellet tank	Er01	110 °C, even with the equipment in off mode	<ul style="list-style-type: none"> <li>- Ambient fan does not work - call for service</li> <li>- Thermostat defective - call for service</li> <li>- Machine with poor ventilation</li> </ul>
Pressostat alarm	Er02	Door open, no draught or extractor fault for 60 sec. Only visible if extractor on On	<ul style="list-style-type: none"> <li>- Close the door and clear the error message</li> <li>- Obstruction on the exhaust pipe or faulty extractor</li> </ul>
No flame or insufficient quantity of pellets	Er03	Temperature under: 55°C (Th03)	<ul style="list-style-type: none"> <li>- The pellet reservoir is empty</li> <li>- Faulty thermostat</li> <li>- Worm drive channel empty</li> </ul>
Fume temperature above the limit	Er05	Over 300 °C	<ul style="list-style-type: none"> <li>- The ventilator does not work or is at a low power level – increase the power level to maximum power (if the problem persists, call for assistance)</li> <li>- Insufficient extraction</li> <li>- Excess quantity of pellets</li> <li>- Fume probe damaged</li> </ul>

Fume extractor failure	Er07	No rpm signals. Allows to unblock and work by voltage provisionally P25=0	<ul style="list-style-type: none"> <li>- Check connection</li> <li>- Check that the fan is not blocked</li> <li>- After fault correction, select operating mode P25=2 again</li> </ul>
Fume extractor encoder error	Er08	Encoder shows signal but has failed to control. Allows temporary unlocking and voltage operation P25=0	<ul style="list-style-type: none"> <li>- Exhaust pipe obstruction or puller defective</li> <li>- After correction of the malfunction it is necessary to select operating mode P25=2 again</li> </ul>
Ignition failure	Er12	Maximum time: 900 s and Fumes Temperature under 50°C	<ul style="list-style-type: none"> <li>- Empty worm channel - start up again</li> <li>- Firing burnt resistance - replace resistance</li> <li>- Firing basket incorrectly placed</li> <li>- Smoke temperature has not exceeded the value set on activation</li> </ul>
Supply voltage cut-off	Er15	Power cut for a time longer than 50 min.	<ul style="list-style-type: none"> <li>- Check the supply voltage with the power supplier</li> <li>- Check the simultaneous use of electrical appliances</li> <li>- In the event of a short power failure (&lt;10s), the salamander continues to operate normally</li> <li>- If the system was ON and the power failure occurs for more than 10s and less than 50 min, the salamander develops a light after blackout</li> </ul>
Communication failure with LCD command	Er16		<ul style="list-style-type: none"> <li>- Check connection between plate and display</li> </ul>
Damaged pressure differential sensor	Er39	The combustion regulation is stopped and the oven will work with the factory standard values entering into stand by up to T fumes <85°C (Th28)	<ul style="list-style-type: none"> <li>- Check connection between plate and differential pressure sensor</li> <li>- Check differential pressure reading</li> <li>- Check possible clogging or strangulation of the measuring jacks</li> </ul>

Open door error	Er44	Door open for 60 sec	<ul style="list-style-type: none"> <li>- Close the door - remove the error</li> <li>- Air mass sensor defective</li> </ul>
Service	Service	Maximum hours 2100 hr (T66) planned for maintenance achieved	- Contact your installer or repairer for timely preventive maintenance of the equipment

**THE MAINTENANCE ANOMALY (SERVICE MESSAGE IN THE DISPLAY) SIGNIFY THAT THE MACHIBE HAS MORE THAN 2100 HOURS OF SERVICE. THE CUSTOMER MUST MAINTAIN THE EQUIPMENT AND ONLY THEN RESET THE HOUR METER TO ELIMINATE THE MALFUNCTION MESSAGE. THIS DOES NOT INFLUENCE THE NORMAL OPERATION OF THE EQUIPMENT; IT IS ONLY A WARNING.**

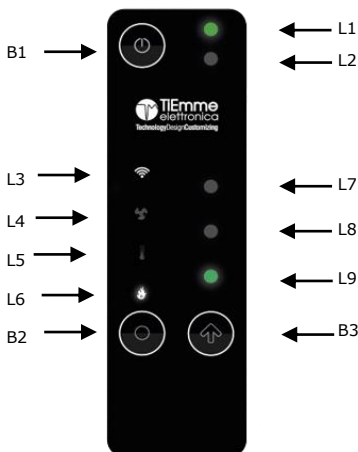




- The alarms on the remote control can be reset by pressing the B2 key for 3s.

## 17. Internal display

- The internal display must be used only in case of failure (display without battery) of the external display/command via radio (in this case the control of the equipment goes through the thermostat temperature set on the internal display and the ambient probe reading).



Led	Significado
L1	Blue LED - System OFF Green LED - System ON Flashing Green LED - Ignition or extinguishing system Red LED alternating with green and blue colors - System in Error
L2	Maintenance
L3	Led on - Connected to WiFi Led flashing - WiFi setting
L4	Visualization of the heating power on LEDs L7, L8 and L9 (see following table)
L5	Visualization of the local room thermostat on LED values L7, L8 and L9 (see table below)
L6	Visualization of the combustion power in leds L7, L8 and L9 (see following table)
L7 / L8 / L9	Display of the selected parameter's value (minimum, average, maximum)
B1	Press for 3 seconds - switches the heating system on / off
B2	Selection of the parameter to be displayed (heating power, room thermostat, combustion power). If pressed for 3 seconds, enters the WIFI LAN configuration mode (L7, L8, L9 flash).
B3	Allows you to modify the selected parameter (the led corresponding to the parameter, blinks, while the leds L7, L8, L9 show its value). If the key is pressed again, the parameter value is modified. If pressed during the local WIFI network configuration mode, allows you to start the configuration process, and if pressed for a few seconds, allows you to restart the configuration.

**Change the value of a parameter:**

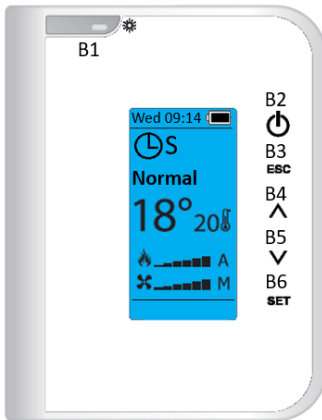
- Select the parameter to be modified with the B2 key.
- Press the K3 key to enter and modify the value, the led corresponding to the parameter, blinks while the L7, L8 and L9 leds show its value.
- Press B3 again to change the value. The data will be saved after 5 seconds if no key is pressed or if you move to the next parameter by pressing B2.

Led	0	Mínimo	Médio	Máximo	Auto <small>(apenas para potências)</small>
L7	●	○	○	●	●
L8	○	○	●	●	●
L9	○	●	●	●	●

- **NOTE:** The user can, via a 2WAYS2+ device, set the minimum, average and maximum value of the local room thermostat.

## 18. External display

- The external display should preferably only be used in the event of a fault (e.g. display without battery).
- When the external controller is switched on by means of the Standby button (B1), the display of the device shows the date and time ambient temperature, whether there is a set time clock and its mode, target temperature Wireless room thermostat, combustion power and ambient ventilation level, status of the device (including any errors that may exist) and status of the controller battery.



Symbol	Meaning
	Time and day of the week
	Battery level
	Active hourly chrono
	Ambient temperature
	Target temperature
	Combustion power
	Ventilation level

### Start menu

- In the start menu by pressing the key:
  - "B1" Removes radio remote control from sleep mode. Puts the remote control into sleep mode. Set the radio remote control to Standby (3s).
  - "B2" Switch On/Off by pressing the button for 3 seconds. Error reset (3s). Double click when radio control in standby reactivates it.
  - "B3" Exit from menus.
  - "B4" and "B5" Power setting when not in menu. Scroll through menu and submenu, increase and decrease values.
  - "B6" Enter submenu, modify values, save data.




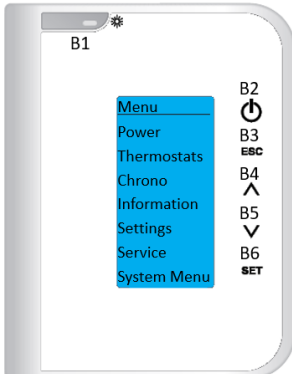
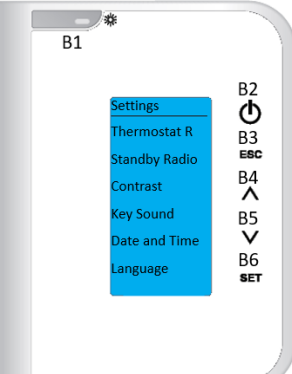
**EQUIPMENT MUST ALWAYS BE OFF FOR THE SINGLE METHOD THAT I AM ON. DURING THE ACTIVATION PROCESS THE EQUIPMENT MUST NEVER BE DISCONNECTED.**

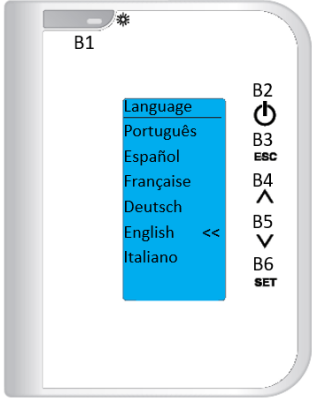
### 18.1 Settings Menu

- The Settings Menu allows you to manage the thermostat of the external controller, enable, disable the standby function, adjust Date and Time, test the radio communication, change the communication code, adjust the contrast and keypad sound. Below is a detailed display of the change in Language and Date and Time, and the rest of the functions of this menu are explained later.


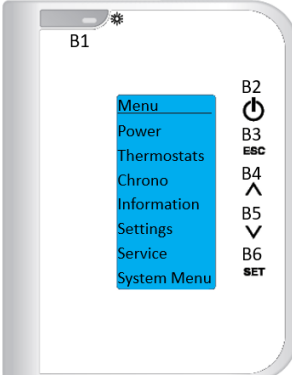


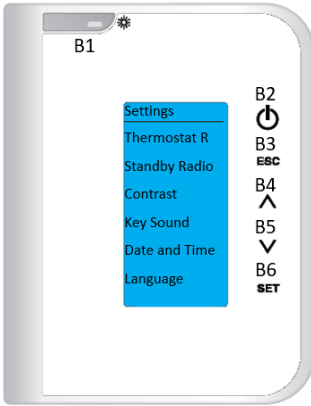
## 18.1.1 Menu Settings – Language

Select Language Function	Procedure
 <p>The image shows a control panel screen with a blue background. At the top left, there is a 'B1' label and a power icon. The main display area shows 'Wed 09:14' at the top, a 'Normal' mode indicator, and a temperature of '18° 20°'. Below the temperature are two bar graphs labeled 'A' and 'M'. On the right side of the screen, there is a vertical list of function keys: B2 (power), B3 (ESC), B4 (up arrow), B5 (down arrow), and B6 (SET).</p> <p>Access the Client Menu</p>	<ul style="list-style-type: none"><li>• Press key B1 to exit Sleep mode;</li><li>• In the initial menu, press key B6 and the Menu appears.</li></ul>
 <p>The image shows the same control panel screen as above, but with a blue menu box overlaid on the left side. The menu items are: Menu, Power, Thermostats, Chrono, Information, Settings, Service, and System Menu. The 'Menu' item is highlighted. The function keys B2 through B6 are listed on the right side of the screen.</p> <p>Access the Language Menu</p>	<ul style="list-style-type: none"><li>• In the Menu with B4 and B5 select "Settings" and press "Set".</li></ul>
 <p>The image shows the same control panel screen as above, but with a blue menu box overlaid on the left side. The menu items are: Settings, Thermostat R, Standby Radio, Contrast, Key Sound, Date and Time, and Language. The 'Settings' item is highlighted. The function keys B2 through B6 are listed on the right side of the screen.</p> <p>Access the Language Menu</p>	<ul style="list-style-type: none"><li>• In the Settings menu with B4 and B5 select "Language" and press "Set".</li></ul>

 <p style="text-align: center;">Choose Language</p>	<ul style="list-style-type: none"> <li>In the "Language" menu with B4 and B5 select the desired language and press "Set" to validate.</li> </ul>
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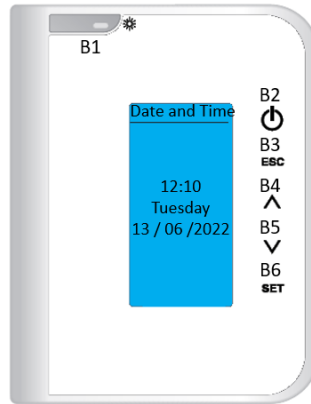
## 18.1.2 Menu Settings – Date and Time

<u>Select Date and Time function</u>	<u>Procedure</u>
 <p style="text-align: center;">Access the Client Menu</p>	<ul style="list-style-type: none"> <li>Press key B1 to exit Sleep mode;</li> <li>In the initial menu, press key B6 and the Menu appears.</li> </ul>
 <p style="text-align: center;">Access the Settings Menu</p>	<ul style="list-style-type: none"> <li>In the Menu with B4 and B5 select "Settings" and press "Set".</li> </ul>



Accessing the Date and Time Menu

- In the Settings menu with B4 and B5 select "Date and Time";
- Press "Set" and the "Date and Time" menu appears.
- In the Settings menu with B4 and B5 select "Language" and press "Set".

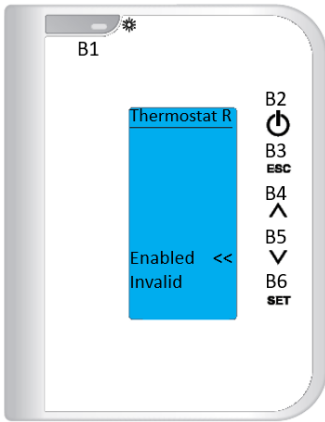


Choose Date and Time

- In the "Date and Time" menu with B4 and B5 select Time and press "Set" and the Time menu appears in editable mode with the Time flashing;
- With B4 and B5 select the correct Hour and press "Set" to validate.
- With B4 and B5 select Minutes and press "Set", the Minutes menu appears in editable mode with Minutes flashing;
- With B4 and B5 select the correct Minutes and press "Set" to validate.
- Repeat the previous steps for the day, month, and year.

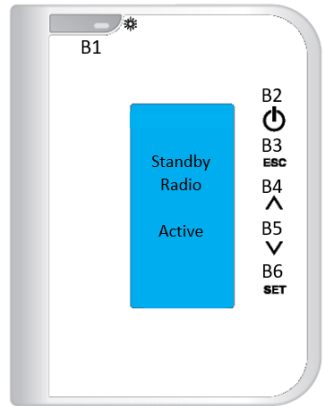
**THE DAY OF THE WEEK (SUNDAY TO SATURDAY CHANGES ACCORDING TO THE DAY OF THE WEEK SELECTED).**

Function Settings	Procedure
<p data-bbox="199 603 380 624">Access the Client Menu</p>	<ul style="list-style-type: none"> <li>• Press key B1 to exit Sleep mode;</li> <li>• In the initial menu, press key B6 and the Menu appears.</li> </ul>
<p data-bbox="191 1038 388 1059">Access the Settings Menu</p>	<ul style="list-style-type: none"> <li>• In the Menu with B4 and B5 select "Settings" and press "Set".</li> </ul>
<p data-bbox="163 1485 418 1506">Accessing the Settings Submenus</p>	<ul style="list-style-type: none"> <li>• In the "Settings" menu with B4 and B5 select the desired submenu;</li> <li>• Press "Set" and the selected menu appears.</li> </ul>



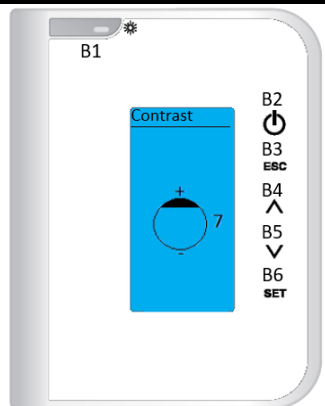
Accessing the Radio Thermostat Menu

- In the "Settings" menu with B4 and B5 select "Radio Thermostat";
- Press "Set" and the menu "Radio Thermostat" appears;
- In this menu with B4 and B5 you can set whether you want to activate or deactivate the Thermostat for the external display, choosing between Activated or Invalid;
- By default this option is active, so that the equipment is controlled by the temperature measured by the thermostat of the external controller;
- When you deactivate the choice option on the main screen by using the B4, or, B5 keys, it is also inactive.



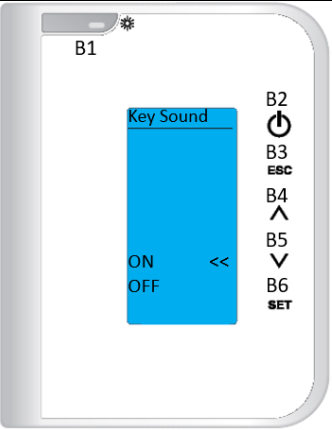
Activate Standby Mode

- In the "Settings" menu with B4 and B5 select "Standby Radio";
- Press "Set" and the "Radio Standby" menu appears;
- In this menu with set (B6) you can alternatively activate the Standby mode of the external controller.
- To reactivate the external control you must press B1 followed by a double-click on B2.



Access the Contrast Change Menu

- In the "Settings" menu with B4 and B5 select "Contrast";
- Press "Set" and the "Contrast" menu appears;
- In this menu with B4 and B5 you can set the desired contrast between 0 and 30 for your display.


 <p>Accessing the Key Sound Menu</p>	<ul style="list-style-type: none"> <li>• In the "Settings" menu with B4 and B5 select "Key Sound";</li> <li>• Press "Set" and the "Key Sound" menu appears;</li> <li>• In this menu with B4 and B5 you can set whether you want to activate or deactivate the keyboard tones by choosing Enabled or Disabled.</li> </ul>
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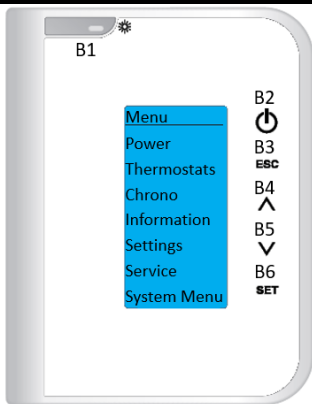
## 18.2 General Menu

- The General Menu gives access to the Power, Thermostats, Chrono, Information, Settings, Service and System Menu submenus. It allows you to control combustion, control heating, develop a chrono program, observe the various operating variables on the monitor, and manually load pellets. The remaining menus are of exclusive access to the technical service and require a password to do so.

### 18.2.1 General Menu – Power Menu

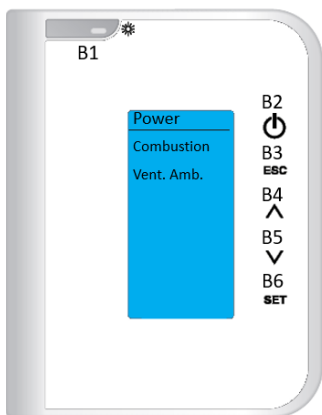
- Pressing B6 gives access to the following menus, Power, Thermostats and Chrono. With the keys B4 and B5 you must select the desired menu and then press B6 to validate the choice, in this case the Power menu.

General Menu Functions	Procedure
 <p>Access the Client Menu</p>	<ul style="list-style-type: none"> <li>• Press key B1 to exit Sleep mode;</li> <li>• In the initial menu, press key B6 and the Menu appears.</li> </ul>



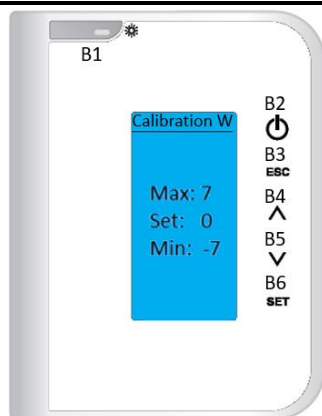
Access the different Sub-Menus

- In the "Menu" menu with B4 and B5 select the desired sub-menu;
- Press "Set" and the selected menu appears.



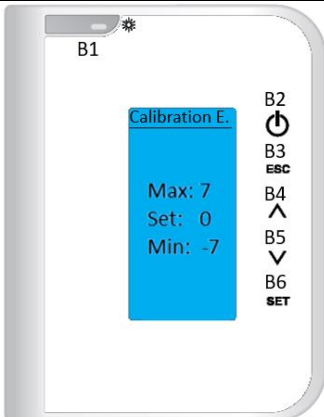
Access the Combustion Power Menu

- In the "Menu" menu with B4 and B5 select "Combustion" and press "Set";
- In the "Combustion" menu with B4 and B5 select the "Power" sub-menu;
- In this menu with B4 and B5 you can set the equipment's operating mode between Auto and Menu mode, and in this between power 0 to 5.



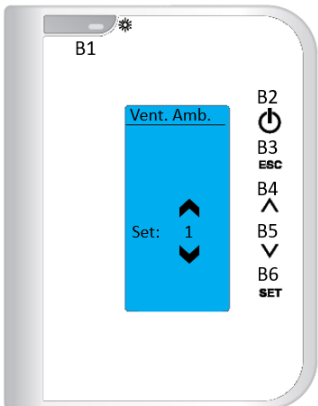
Go to the Combustion Management Menu  
Worm Motor Calibration

- In the "General Menu" menu with B4 and B5 select "Combustion" and press "Set";
- In the "Combustion" menu with B4 and B5 select submenu "Endless Calibration";
- In this menu with B4 and B5 you can adjust the amount of pellets to be fed between -7 (-25%) and 7 (+25%).



Access the Combustion Management Menu  
Calibration Extractor Velocity


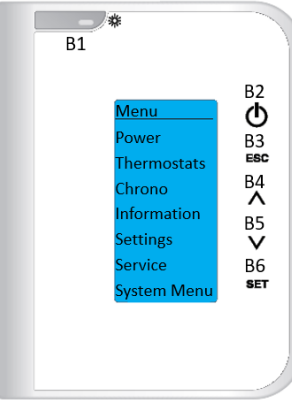
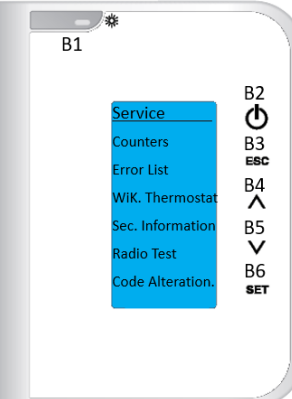
- In the General menu with B4 and B5 select "Combustion" and press "Set";
- In the "Combustion" menu with B4 and B5 select submenu "Extractor Calibration";
- In this menu with B4 and B5 you can adjust the fume extractor speed between -7 (-25%) and 7 (+25%).

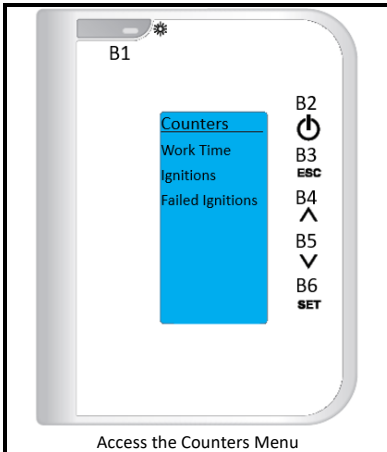


Access the Room Ventilation Speed Menu

- In the General menu with B4 and B5 select "Vent. Amb." and press "Set";
- In this menu with B4 and B5 select submenu "Vent. Amb.";
- Here with B4 and B5 set the operating mode of the fan between Auto and Menu mode (between power 0 to 5).

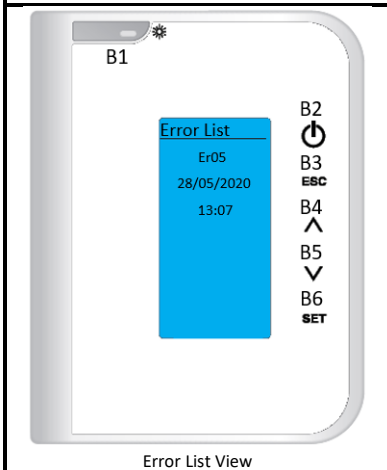


General Menu Functions	Procedure
 <p>Access the Client Menu</p>	<ul style="list-style-type: none"> <li>• Press key B1 to exit Sleep mode;</li> <li>• In the start menu, press key B6 and the Client Menu appears.</li> </ul>
 <p>Access the different sub-menus</p>	<ul style="list-style-type: none"> <li>• In the "Menu" menu with B4 and B5 select the desired submenu;</li> <li>• Press "Set" and the selected menu appears.</li> </ul>
 <p>Accessing the Service Menu</p>	<ul style="list-style-type: none"> <li>• In the Service menu with B4 and B5 select the required submenu.</li> <li>• Press B6 to go to the desired submenu.</li> </ul>



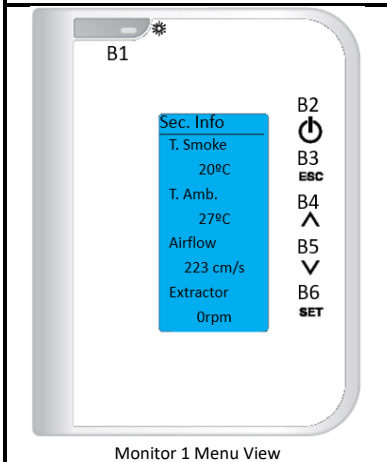
Access the Counters Menu

- Select Counters by pressing B6 to validate the entry in this submenu.
- This function allows you to consult the working hours, the number of ignitions and the number of failed ignitions.
- With keys B4 and B5 select the submenu that you want to consult and press B6 to validate. To return to the Service menu press B3.



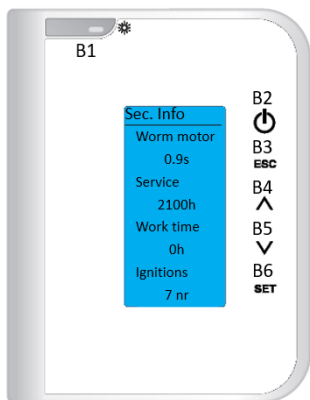
Error List View

- In the Service menu with B4 and B5 select the submenu Error List, pressing B6 to validate.
- This submenu shows the last 10 errors that occurred, on each line the error code and the date and time when it occurred are displayed. To return to the Service menu, press B3.



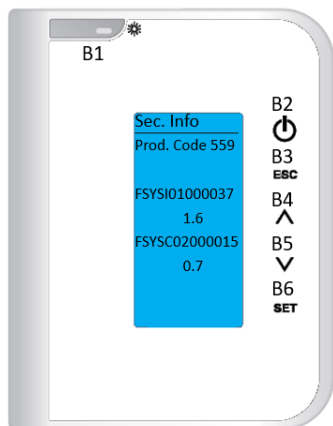
Monitor 1 Menu View

- In the Service menu, select the Secondary Information submenu with B4 and B5, and then press B6.
- In the "Information" menu with B4 and B5 scroll through the menu to check the different variables;
- The value displayed is the value measured On-Line.



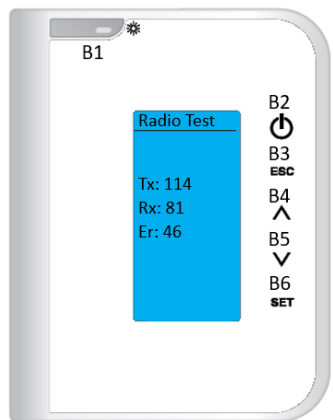
Monitor 2 Menu View

- In the "Information" menu with B4 and B5 scroll down to check the different variables;
- The value displayed is the value measured On-Line.



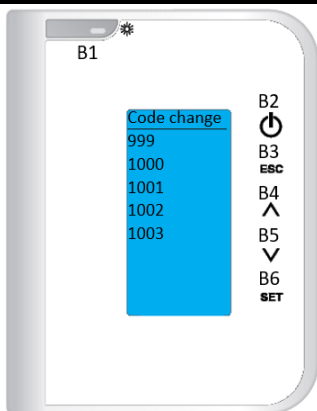
Monitor 3 Menu View

- In the "Information" menu with B4 and B5 scroll down to check the different variables;
- The value displayed is the value measured On-Line.



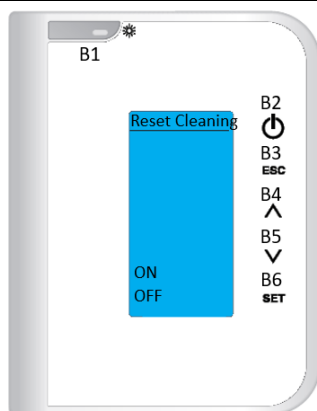
Enable Signal Test Mode

- In the "Menu Service" menu with B4 and B5 select "Test Radio";
- Press "Set" and the "Radio Test" menu appears;
- In this menu you can check the quality of the signal and its level of electromagnetic pollution. The external controller, develops a set of communications monitoring the errors that occurred.



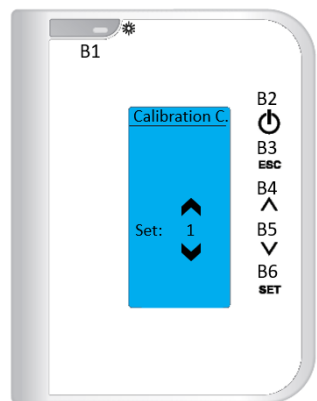
Access the Code Change Menu

- In the "Service Menu" menu with B4 and B5 select "Code Change";
- Press "Set" and the "Code change" menu appears;
- In this menu and keeping the learn code option active on the internal display you can change the communication frequency in order to mitigate communication errors caused by other devices.



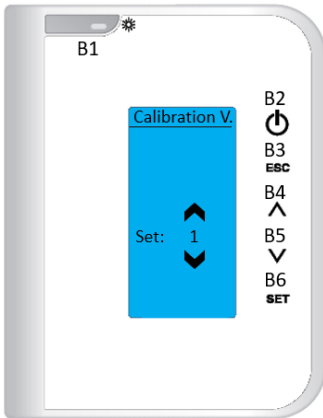
Access the Reset Cleaning Menu

- In the "Service Menu" menu with B4 and B5 select "Reset Cleaning";
- In this function you can turn this function on or off. To return to the Service menu press B3.



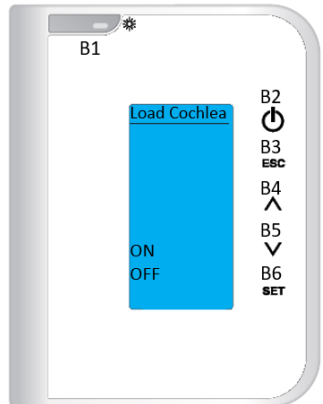
Access the Cochlea Calibration Menu

- In the Service menu with B4 and B5 select the Squeeze Calibration submenu, pressing on B6 to validate.
- In this submenu with the keys B4 and B5 you can adjust the quantity of pellets to feed, between -7 (-14%) and 7 (+14%). To return to the Service menu press B3.



Accessing the Fan Calibration Menu

- In the Service menu with B4 and B5 select the submenu Fan Calibration by pressing on B6.
- In this submenu with keys B4 and B5 you can adjust the fan speed, between -7 (-21%) and 7 (+21%). To return to the Service menu press B3.



Access the Cochlear Charge Menu

- Select Load Pellet, with the B6 key, to validate the entry in this submenu.
- This function activates manual pellet loading.
- Pressing the B3 key twice will take you back to the main menus, Settings, Keypad, Service and System Menu.

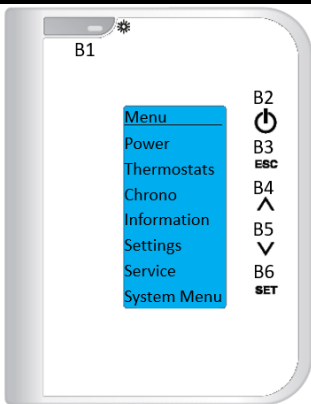
Functions Thermostats Menu	Procedure
<p>Access the Client Menu</p>	<ul style="list-style-type: none"> <li>• Press key B1 to exit Sleep mode;</li> <li>• In the start menu, press key B6 and the Client Menu appears.</li> </ul>
<p>Access the different sub-menus</p>	<ul style="list-style-type: none"> <li>• In the "Menu" menu with B4 and B5 select the submenu Thermostats;</li> <li>• Press "Set" and the selected menu appears.</li> </ul>
<p>Access the Thermostats Menu</p>	<ul style="list-style-type: none"> <li>• In the "Thermostats" menu with B4 and B5 select the Environment Sub-Menu.</li> <li>• Press "Set" to validate.</li> </ul>

	<ul style="list-style-type: none"> <li>You can set the target comfort temperature between 10 and 40°C, with keys B4 and B5.</li> <li>Press B6 to save your changes and use B3 to go back.</li> </ul>
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### 18.2.4 General Menu – Chrono Menu

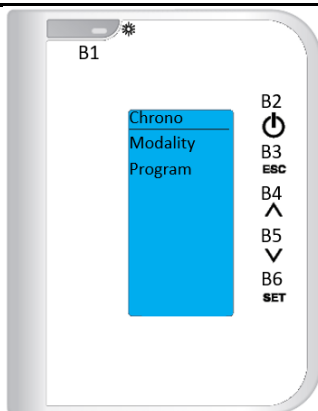
- The insertable has a time switch that is used to turn the insertable on and off. It can be Daily (you can select the day of the week you want and set up to 3 different schedules for the respective day), Weekly (you can select up to 3 schedules during a day, the same program will be applied every day of the week), and Weekend (you can select 3 schedules during the day for weekdays and weekends). After analyzing the available options select the desired modality.

General Menu Functions	Procedure
	<ul style="list-style-type: none"> <li>Press key B1 to exit Sleep mode;</li> <li>In the start menu, press key B6 and the Client Menu appears.</li> </ul>



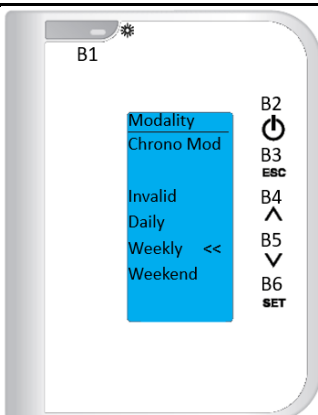
Access the different sub-menus

- In the "Menu" menu with B4 and B5 select the desired submenu;
- Press "Set" and the selected menu appears.




Access the Modality Menu

- In the "Chrono" menu with B4 and B5 select the Sub-Menu Mode.
- Press "Set" to validate.


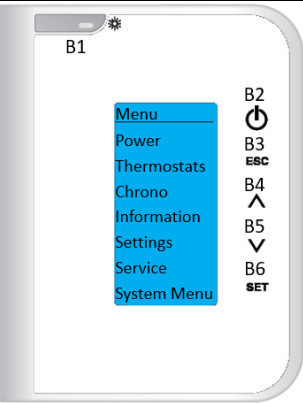
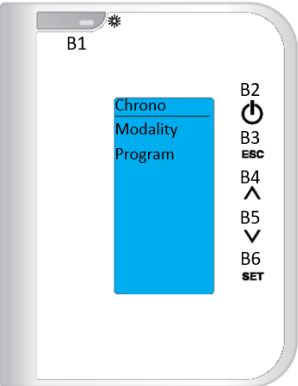


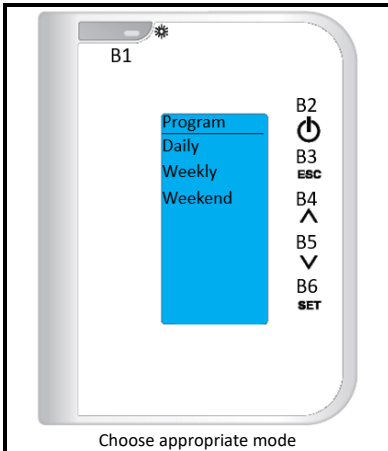
Select Mode and activate Chrono

- In the "Mode" menu with B4 and B5 select the desired mode; press "Set" to validate;
- The chosen Program will be saved and will be signaled by the symbol <<.
- The display after activation will have the led  active, also mentioning the active mode, Daily is symbolized by "D", Weekly "S", Weekend/Weekend by FS, respectively.

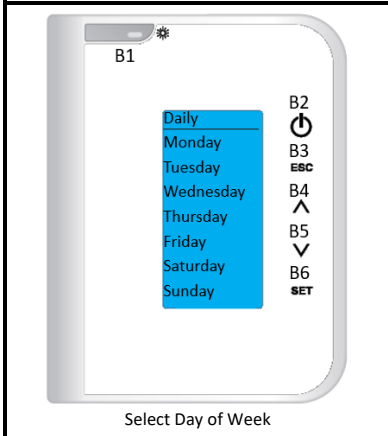


AFTER THE DEFINITION OF THE CHRONOLOGICAL MODALITY INTENDED TO DEVELOP THE RESPECTIVE PROGRAMS. THE FOLLOWING IS AN EXAMPLE OF THE CREATION OF A DAILY SCHEDULE, IN THIS CASE, MONDAY.

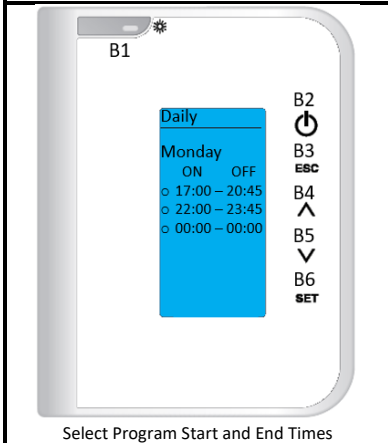
General Menu Functions	Procedure
 <p data-bbox="202 639 379 659">Access the Client Menu</p>	<ul data-bbox="529 256 949 323" style="list-style-type: none"> <li>• Press key B1 to exit Sleep mode;</li> <li>• In the start menu, press key B6 and the Client Menu appears.</li> </ul>
 <p data-bbox="185 1070 396 1090">Access the different Chrono</p>	<ul data-bbox="529 663 949 730" style="list-style-type: none"> <li>• In the "Menu" menu with B4 and B5 select the Chrono menu;</li> <li>• Press "Set" and the selected menu appears.</li> </ul>
 <p data-bbox="191 1489 390 1508">Access the Program Menu</p>	<ul data-bbox="529 1098 949 1165" style="list-style-type: none"> <li>• In the "Chrono" menu with B4 and B5 select the Program Sub-Menu.</li> <li>• Press "Set" to validate.</li> </ul>



- In the menu "Chrono Program" with B4 and B5 select Daily, Weekly, or Weekend (you must respect the mode already selected);
- In this case the daily program is exemplified
- Press "Set" to validate.



- In the "Journal" menu with B4 and B5 select the desired day of the week;
- Press "Set" to validate.



- In the "Daily" menu with B4 and B5 select start time;
- Press "Set" to edit;
- With B4 and B5 select the desired time;
- Validate with B2 the developed program line (the point "○" is filled "●");
- Repeat the process with B5 for the End Time and for the remaining available times if applicable, with the B5 key.

- Repeat the previous process for all desired days.
- When programs are developed around midnight in order to start operating the day before and end the operation the next day will be relevant:
  - Finish the last program the day before at 23:59;
  - Start the first program the next day at 00:00.

**IN THE WEEK AND WEEK/WEEKEND MODALITIES THE IMPLEMENTATION OF PROGRAMMES FOLLOWS THE SAME LOGIC EXEMPLIFIED ABOVE.**

- The following table explains the meaning of each variable.

Exhaust Temperature [°C]	Read in degrees Celsius (°C) reports the exhaust temperature monitored by the thermocouple.
Water Temperature [°C]	Read in degrees Celsius (°C) reports the ambient temperature monitored by the outdoor NTC probe.
Extractor [rpm]	Read in revolutions per minute informs about the rotational speed of the extractor.
Auger Motor [s]	Read in seconds informs time within 4 seconds that the auger motor is active and feeds pellets to the burner.
Service [h]	Read in hours reports the number of missing hours to report malfunctions for lack of maintenance. These must be checked by the technical service during maintenance. The period for maintenance must respect the kilos of burnt pellets.
Working Time [h]	Read in hours reports the number of hours in On, modelling and security.
Ignitions [nr]	Read in number of occurrences informs how many ignitions have been made since they were reset to zero.
Cod. Artic.	Product Code

## 19. List Alarms / malfunctions / recommendations

- All alarms cause the machine to shut down with information about the error and activation of the alarm led. It will be necessary to reset the alarm and restart. To reset the machine, press the "On/Off" button for 3 to 4 seconds until you hear a beep, accompanied by the message "Reset alarms in progress";
- If the reset is successful, there will be new information - Reset alarms successful
- In the Off state if for any reason the smoke temperature rises above 85°C (Th01) the stove enters the off mode.

Alarm	Code	Cause and Resolution	
Excess temperature in the pellet tank	Er01	110 °C, even when the equipment is off	<ul style="list-style-type: none"> <li>- Room fan not working - call for service</li> <li>- Thermostat defective - call for service</li> <li>- Machine with defective ventilation</li> </ul>
Smoke pressure switch alarm	Er02	Door open, no depression or extractor failure for 180 s Only visible if puller is set to On	<ul style="list-style-type: none"> <li>- Close the door and remove the faulty pressure switch error</li> <li>- Faulty exhaust pipe obstruction or extractor</li> </ul>
Exhausted flame or lack of pellets	Er03	Fume temperature below: 55°C (Th03)	<ul style="list-style-type: none"> <li>- Empty pellet tank;</li> <li>- Broken thermocouple;</li> <li>- Clogged pellet channel</li> </ul>
Excess temperature fumes	Er05	More than 300 °C	<ul style="list-style-type: none"> <li>- Room fan does not work or is at a low power level - increase the level to maximum (if the problem persists call for service)</li> <li>- Insufficient draft</li> <li>- Excessive dosage of pellets</li> <li>- Defective smoke probe</li> </ul>
Fume extractor error	Er07	No rpm signal. Allows unlocking and working by voltage in a provisional way P25=0	<ul style="list-style-type: none"> <li>- Check connection</li> <li>- Check that the fan is not blocked</li> <li>- After fault correction it is necessary to reselect operation mode P25=2</li> </ul>
Fume extractor encoder error	Er08	Encoder shows signal, but failed regulation. Allows unlocking and working by voltage temporarily P25=0	<ul style="list-style-type: none"> <li>- Exhaust pipe obstruction or extractor defective</li> <li>- After fault correction it is necessary to reselect operating mode P25=2</li> </ul>
Ignition failure	Er12	Maximum time:900 s and Fume temperature less than 50°C	<ul style="list-style-type: none"> <li>- Empty worm channel - restart</li> <li>- Burned out heating element - replace heating element</li> <li>- Firing basket incorrectly placed</li> <li>- Fume temperature did not exceed the value set at switch-on</li> </ul>

<b>Power supply voltage cut-off</b>	Er15	Power cut for time longer than 50 min	<ul style="list-style-type: none"> <li>- Check supply voltage with the electric power supplier;</li> <li>- Check simultaneous use of electrical appliances</li> <li>- In case of a short power failure (&lt;10s) the insert continues to work normally;</li> <li>- If the system was ON and the power supply failure occurs for more than 10s and less than 50 min the insertable develops an ignition after blackout</li> </ul>
<b>Faulty communication with LCD control</b>	Er16		<ul style="list-style-type: none"> <li>- Check connection between board and display</li> </ul>
<b>Pressure differential sensor damaged</b>	Er39	The combustion regulation is interrupted and the stove will work with the factory default values entering standby until Tfumos < 85°C (Th28)	<ul style="list-style-type: none"> <li>- Check connection between plate and pressure differential sensor;</li> <li>- Check pressure differential reading</li> <li>- Check possible clogging in the measurement taps, or throttling of the same</li> </ul>
<b>Open door error</b>	Er44	Door open for 60 sec	<ul style="list-style-type: none"> <li>- Close the door - remove the error</li> </ul>
<b>Service</b>	Service	Maximum 2100 hr Hours (T66) planned for maintenance achieved	<ul style="list-style-type: none"> <li>- Contact your installer or repairer for occasional preventive maintenance of the equipment.</li> </ul>

## 20. Optional safety installation – UPS connection kit

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- In general, it is always advisable to use a current stabilizer or a UPS in order to ensure the proper functioning of all electrical components.
- The use of an optional security system such as a UPS makes it possible to avoid power failure problems, thus ensuring that the fume extractor will remain in operation in the event of a power failure and until the salamander's fumes are completely exhausted, allowing the user time to develop the correct deactivation.
- The capacity for the UPS battery to be installed is at least 900 W.

## 21. For your safety we remind you that:

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- Make sure you fully read and understand this instruction manual before using the free-standing fire as a biomass heating unit.
- The free-standing fire is not intended for use by children or people physically and/or mentally disabled, or that are inexperienced or unfamiliar with using of the unit, except under the direct supervision or instruction of an adult.
- Do not touch the free-standing fire when barefoot or if any part of your body is wet or humid.
- Do not tamper with the safety devices or adjustment features without the manufacturer's authorization.
- Do not cover or reduce the size of the vents on the unit.
- The free-standing fire installation has clearance requirements for proper combustion. Rooms with air tight isolation or the existence of air extraction devices sources in the room may prevent the unit from working properly.
- A proper combustion requires the existence of ventilation holes.
- Do not leave the packing materials at the reach of children.
- During normal operation, DO NOT open the door of the free-standing fire unit;
- Some parts of the unit may overheat during normal operation, so avoid direct contact with parts such as the door handle and glass.
- Check for the existence of any obstructions in the fume duct before turning on the unit after a long period of inactivity.
- This pellet burning unit is designed for residential use in a protected environment. Safety systems may kick in, turning off the unit. If this occurs, contact the technical assistance. Under no circumstances you should attempt to interfere with the safety systems.
- The free-standing fire is a biomass heating unit equipped with an electric fume extractor. The occurrence of any power failure during its use may prevent fume extraction causing the room to be filled with smoke. For this reason, it is mandatory that you have a natural fume extraction system, like a chimney.

- Fogo Montanha offers an optional safety device (additional circuit board) which enables you to connect your Free-Standing Fire unit to a UPS system in order to allow extending the operation of the fume extractor until complete extraction of all fumes, thus avoiding fume extraction problems during a power failure.
- If you intend to use the Free-Standing Fire unit while away from home or unattended, you should use the safety device specified above for total safety during any power failure.
- During operation, NEVER turn off the free-standing fire unit by disconnecting the electric plug. The fume extractor on the free-standing fire unit is a power device so disconnecting the power plug will prevent the extraction of the combustion fumes.
- Your unit must be disconnected from the power mains before it may be subject to any maintenance procedures. Before doing this, the unit must be totally cooled down (if previously operating).
- Never touch the interior of the unit without disconnecting it from the power mains.

## 22. Life cycle of a Free-Standing Fire unit

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- About 90% of the materials used in the manufacture of these units are recyclable, thus contributing towards a reduced environmental impact and a sustainable development of our planet. End-of-life units should be returned to an authorised waste recycling processing system. We advise you to contact your local authorities for instructions.

## 23. Sustainability

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- Fogo Montanha designs and manufactures biomass solutions and biomass-fuelled equipment's as a primary energy source. This is our contribution for the sustainability of our planet – and cost-effective and environmentally-friendly alternative that applies the best practices in environmental management to ensure an efficient carbon cycle management.
- Fogo Montanha makes all efforts to learn and to know the national forest to efficiently satisfy energy demands, always concerned in maintaining its biodiversity and natural wealth essential to preserve the quality of life on our Planet.
- Fogo Montanha is a member of Sociedade Ponto Verde (the Portuguese Green Dot Scheme), which manages packaging waste of products marketed by the company. For this reason, you should take the packaging waste removed from your unit, such as plastic sheets and cardboards, to your nearest recycling point.
- Fogo Montanha is also a member of Amb3E, the entity responsible for collecting waste electrical and electronic equipment (WEEE); as such, end-of-life units with forced air ventilation systems should be shipped to the appropriate WEEE-processing location. The electrical components of your end-of-life equipment should be shipped to your nearest WEEE collection point.

## 24. Warranty

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### 24.1 Model-specific conditions

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This model requires that the unit is subject to start-up for the warranty to be activated. The start-up service can only be performed by technical services authorised by the manufacturer. This is mandatory before the unit reaches 100 service hours. The final user is responsible for any expenses related to the start-up service.

### 24.2 General warranty conditions

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#### 1. Social name and address of the producer and Object

FOGO MONTANHA  
www.fogo-montanha.com  
apoio.cliente@fogo-montanha.com  
Morada: Rua dos Outarelos; nº 111;  
3750-362 Belazaima do Chão  
Águeda - Portugal

This document does not substantiate the provision by Fogo Montanha of a voluntary warranty on its produced and marketed products (from now on mentioned as "Product (s)"), but rather a guide, intended to be enlightening for the effective activation of the legal warranty that benefits consumers (from now on mentioned as "Warranty"). This document does not affect the legal rights of warranty, emerging from the purchase agreement whose purpose is the Product(s).

#### 2. Product identification on which rests the warranty

The activation of the warranty presupposes prior and correct identification of the product object towards Fogo Montanha, being promoted by providing the Product 's packing data indicated in the purchase invoice or in the product characteristics plate (model and serial number).

#### 3. Product warranty terms

3.1 Fogo Montanha, responds to the Buyer, for the lack of conformity of the Product with the respective contract of sale, within the following periods:

3.1.1 A period of 24 months from the date of delivery of the good, in the case of domestic use of the product, save the provisions of the following number regarding the intensive use;

3.1.2 A term of 6 months from the date of delivery of the goods, in the case of professional, or industrial, or intensive use of the products – Fogo Montanha means by professional, industrial or intensive use of all products installed in industrial spaces, commercial, or whose use exceeds 1500 hours per calendar year;

3.2 A functional test of the product must be performed before finishing the installation (plaster, masonry, coatings, paintings, among others);

3.3 No equipment can be replaced after the 1st Burn without the express authorization of the



producer;

3.4 Any product must be repaired on the site of installation without causing serious inconvenience to the parties, save, if this proves impossible, or disproportionate;

3.5 In order to exercise its rights, and provided that the term indicated in 3.1 is not exceeded, the Buyer must report in writing to Fogo Montanha, the lack of conformity of the Product within a maximum period of:

3.5.1 60 (sixty) days after the date on which it has detected it in the case of domestic use of the product;

3.5.2 Thirty (30) days from the date of its detection, in the case of professional use of the Product.

3.6 In the pellet range equipments, the commissioning service is required to activate the warranty. It must be registered up to 3 months after the date of invoice, or, 100 hours of work of the product (whichever occurs first);

3.7 During the Warranty period referred to in paragraph 3.1 (and for this to remain valid), repairs to the Product must be performed exclusively by the Official Technical Services of the Brand. All services provided under this Guarantee will be performed Monday through Friday within the working time and calendar legally established in each region.

3.8 All requests for assistance must be submitted to the Fogo Montanha Customer support service, by means of a proper form present on the Website [www.fogo-montanha.com](http://www.fogo-montanha.com), or, e-mail: [support.cliente@fogo-montanha.com](mailto:support.cliente@fogo-montanha.com). At the time of the technical assistance to the Product, the Buyer must present, as proof of the Product Warranty, the purchase invoice of the same or another document demonstrating its acquisition. In any case, the document proving the acquisition of the Product must contain the identification of the Product (as mentioned in point 2 above) and its date of acquisition. Alternatively, and in order to validate the Product Warranty, the PSR - document certifying the commissioning of the machine (when applicable)).

3.9 The Product will have to be installed by a qualified professional for the purpose, in accordance with the regulations in force in each geographical area, for the installation of these Products and complying with all the regulations in force, especially regarding chimneys, as well as other applicable regulations for aspects such as water supply, electricity and / or other related to the equipment or sector and as described in the instruction manual.

A product installation that does not conform to the manufacturer's specifications and / or does not comply with the legal regulations on this subject will not give rise to the application of this Warranty. Whenever a product is installed outdoors, it must be protected against weather effects such as rain and wind. In these cases, it may be necessary to protect the appliance by means of a cabinet, or a properly ventilated protective case. Appliances should not be installed in places that contain chemicals in their atmosphere, in saline or high humidity environments, as mixing them with air may produce rapid corrosion in the combustion chamber. In this type of environment, it is especially recommended that the appliance be protected with anti-corrosion products for this purpose, especially during times of operation. As a suggestion it is indicated the application of graphite greases indicated for high temperatures with function of lubrication and anti-corrosion protection.

3.10 In equipment belonging to the pellet family, in addition to the daily and weekly maintenance contained in the instruction manual, it is also obligatory to carry out the cleaning inside and in the respective chimney

for the evacuation of fumes. These tasks should be carried out every 600-800 kg of pellets consumed, in the case of stoves (air and water) and compact boilers, and every 2000-3000 kg of pellets consumed in the case of automatic boilers. In the event that these quantities are not consumed, at least one systematic preventive maintenance must be carried out annually.

3.11 It is the Buyer's responsibility to ensure that periodic maintenance is carried out, as indicated in the instruction and handling manuals accompanying the Product. Whenever requested, it must be proved by submitting the technical report of the entity responsible for it, or alternatively by registering them in the instruction manual in the dedicated section.

3.12 In order to avoid damage to the equipment caused by overpressure, safety elements such as pressure relief valves and / or thermal discharge valves, if applicable, as well as an expansion vessel fitted to the installation, shall be ensured at the time of installation and its correct functioning must be ensured. It should be noted that: the valves referenced must have a value equal to or less than the pressure supported by the equipment; there shall be no cut-off valve between the equipment and its safety valve; provision should be made for a systematic preventive maintenance plan to attest to the correct functioning of the said safety features; irrespective of the type of appliance, all safety valves shall be channelled to drained sewage to prevent damage to the dwelling by water discharges. Product Warranty does not include damages caused by non-channelling of water discharged by said valve.

3.13 In order to avoid damage to the equipment and attached pipes by galvanic corrosion, it is advisable to use dielectric separators in the connection of the equipment to metal pipes whose characteristics of the materials applied to this type of corrosion. Product Warranty does not include damages caused by non-use of such dielectric separators.

3.14 The water or thermofluid used in the heating system (hydro toves, boilers, central heating stoves, among others) must comply with the legal requirements in force, as well as guarantee the following physical and chemical characteristics: absence of solid particles in suspension; low level of conductivity; residual hardness of 5 to 7 degrees; neutral pH, close to 7; low concentration of chlorides and iron; and absence of air inlets by depression or others. In case the installation enhances automatic water make-up, it should consider upstream a preventive treatment system composed of filtration, decalcification and preventive dosing of polyphosphates (scale and corrosion), as well as a degassing step, if necessary. If in any circumstance any of these indicators show values that are not recommended, the Warranty will cease to have effect. It is also compulsory to place a non-return valve between the automatic filling valve and the mains water supply, and that said supply always has constant pressure, even with a lack of electricity, not depending on lift pumps, autoclaves, or others.

3.15 Except as expressly provided by law, a warranty intervention does not renew the warranty period of the Product. The rights arising from the Warranty are not transferable to the purchaser of the Product.

3.16 The equipment must be installed in accessible places and without risk to the technician. The means necessary for access to them shall be made available by the Buyer, and the Buyer shall be responsible for any charges arising therefrom.

3.17 The Warranty is valid for the Products and equipment sold by Fogo Montanha solely and exclusively within the geographical and territorial zone of the country where the Product was sold by Fogo Montanha.

#### **4. Circumstances that exclude the application of the Warranty**

Excluded from the Warranty, being the total cost of the repair borne by the Buyer, the following cases:

- 4.1. Products with more than 2000 operating hours;
- 4.2. Refurbished and resold products.
- 4.3. Maintenance operations, Product settings, commissioning, cleaning, elimination of errors or anomalies that are not related to deficiencies of equipment components and replacement of the batteries
- 4.4. Components in direct contact with fire such as: vermiculite supports, deflector or protective plates, vermiculite, sealing lanyards, burners, ash drawers, wood chips, smoke registers, ash grates, whose wear is directly related to the conditions of use. Degradation of the paint, as well as corrosion due to degradation of the paint, due to overloading of fuel, use of an open drawer or excessive drainage of the installation chimney (the chimney must respect the drawing recommended in the Product Technical Data Sheet). Glass breakage due to improper handling or other reason not related to Product deficiency. In the pellet family, the ignitors are a wear part, so they are only guaranteed for 6 months, or 1000 ignitions (whichever comes first);
- 4.5. Wear considered components, such as bearings and bushes;
- 4.6. Deficiencies of components external to the Product that may affect its correct functioning, as well as material or other damages (e.g. tiles, roofing, waterproofing, pipes, or personal injury) caused by improper use of materials in the installation or by non-execution of the product installation in accordance with the rules for the installation, applicable regulations or rules of good art, in particular when the application of suitable piping to the temperature in use, expansion vessels, non-return valves, safety valves, anti-condensation valves, among others;
- 4.7. Products whose operation has been affected by failures or deficiencies of external components or by poor sizing;
- 4.8. Defects caused by the use of accessories or replacement components other than those determined by Fogo Montanha;
- 4.9. Defects arising from non-compliance with the installation, use and operation instructions or applications not conforming to the intended use of the Product, or from abnormal climatic factors, unusual operating conditions, overload or maintenance or cleaning performed improperly;
- 4.10. The Products that have been modified or manipulated by people outside the Official Technical Services of the brand and consequently without the explicit authorization of Fogo Montanha;
- 4.11. Damage caused by external agents (rodents, birds, spiders, etc.), atmospheric and / or geological phenomena (earthquakes, storms, frost, hailstorms, thunderstorms, etc.), humid or saline aggressive environments such as proximity of the sea or river, as well as those derived from excessive water pressure, inadequate power supply (voltage with variations greater than 10%, with a nominal value of 230V, or, neutral voltage greater than 5V, or absence of earth protection); pressure or supply

of inadequate circuits, acts of vandalism, urban confrontation and armed conflict of any kind, as well as derivatives;

4.12. Failure to use the fuel recommended by the manufacturer is a condition of exclusion from the Warranty.;

Explanatory note: In the case of pellet appliances the used fuel must be certified by EN 14961-2 grade A1. Also, before buying large quantity you should test the fuel to see how it behaves. In wood equipment, this moisture content must be of less than 20%.

4.13. The appearance of condensation, either by poor installation or by the use of non-virgin fuels (such as pallets or wood impregnated with paints or varnishes, salt or other components), which may contribute to the accelerated degradation of equipment and especially to your combustion chamber;

4.14. All Products, Components or damaged components in transportation or installation;

4.15. Cleaning operations carried out on the appliance or its components due to condensation, fuel quality, bad settings or other circumstances of the installation location. Also excluded from the Warranty are interventions for the decalcification of the Product (the removal of limestone or other materials deposited inside the apparatus and produced by the quality of the water supply). Also excluded from this warranty are air bleeding interventions of the circuit or unblocking of circulating pumps.

4.16. The installation of the equipment supplied by Fogo Montanha should contemplate the possibility of their easy removal, as well as points of access to the mechanical, hydraulic and electronic components of the equipment and the installation. When the installation does not allow immediate and safe access to the equipment, the additional cost of access and security will always be borne by the Buyer. The cost of disassembling and assembling boxes of plasterboard or masonry walls, insulation or other elements such as chimneys and hydraulic connections that prevent free access to the Product (if the Product is installed inside a carton of plasterboard , masonry or other dedicated space must comply with the dimensions and characteristics indicated in the instruction manual and use accompanying the appliance).

4.17. Interventions of information or clarification at home about the use of its heating system, programming and / or reprogramming of control and regulating elements, such as thermostats, regulators, programmers, etc.;

4.18. Interventions for the adjustment of fuel receipes in pellet devices, cleaning, detection of water leaks in pipes external to the apparatus, damage caused due to the need to clean the gas evacuation machinery or flues;

4.19. Urgency interventions not included in the provision of Warranty i.e., weekend and holiday interventions because they are special interventions not included in the Guarantee coverage and which therefore have an additional cost, will be carried out exclusively on request expressed by the Buyer and upon the availability of the Producer.

## 5. Warranty Inclusion

Fogo Montanha will correct without any charge to the Buyer the defects covered by the Warranty through the repair of the Product. The replaced Products or Components shall become the property of Fogo Montanha.

**6. Responsibility of Fogo Montanha**

Notwithstanding legally established, Fogo Montanha, liability in respect of warranty is limited to that established in the present warranty conditions.

**7. Cost of Services performed outside the scope of the warranty**

The interventions carried out outside the scope of the warranty are subject to the application of the current tariff.

**8. Warranty Services performed out of scope Warranty**

The interventions carried out outside the scope of the Warranty and carried out by the official technical assistance service of Fogo Montanha have a 6-month guarantee.

**9. Warranty Spare Parts provided by Fogo Montanha**

Parts supplied by Fogo Montanha in the context of the commercial sale of spare parts, i.e. not incorporated in the equipment, do not have a warranty.

**10. Replaced Parts under the of Scope Technical Service**

From the moment they are removed from the equipment, the Parts used are considered as waste. Fogo Montanha as a producer of waste in the scope of its activity is obliged by the legislation in force to deliver them to a licensed entity that performs the proper waste management operations under the law and therefore is prevented from giving them another destination, whatever. Therefore, the customer will be able to see the used parts resulting from the assistance, but cannot keep them in their possession.

**11. Administrative expenses**

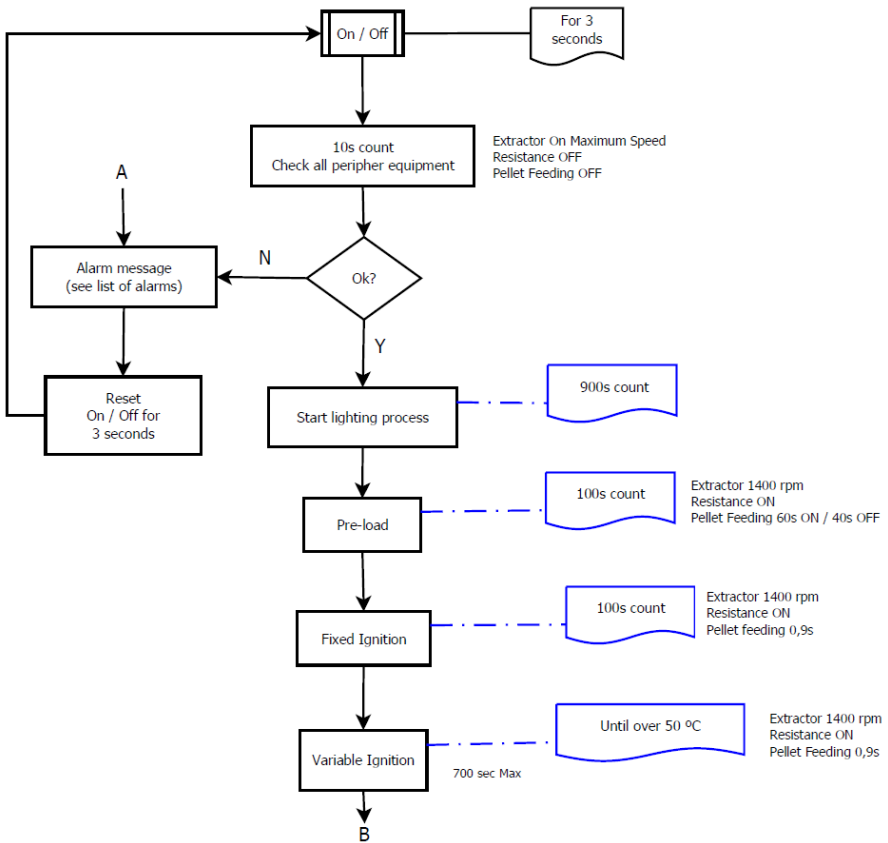
In the case of invoices for services rendered, they are not processed in any stipulated period with default interest at the maximum legal rate in force.

**12. Competent court**

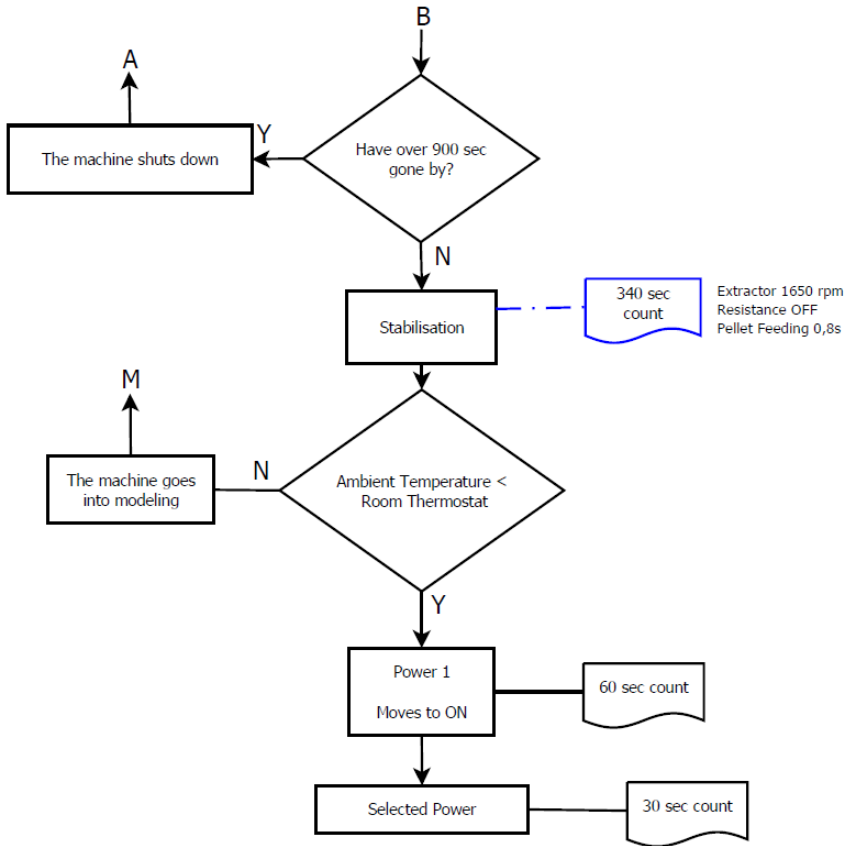
For the resolution of any dispute arising from the purchase and sale agreement having as object the products covered by the warranty, the contracting parties attribute exclusive jurisdiction to the courts of the district of Águeda, with express waiver of any other.

## 25. Annexes

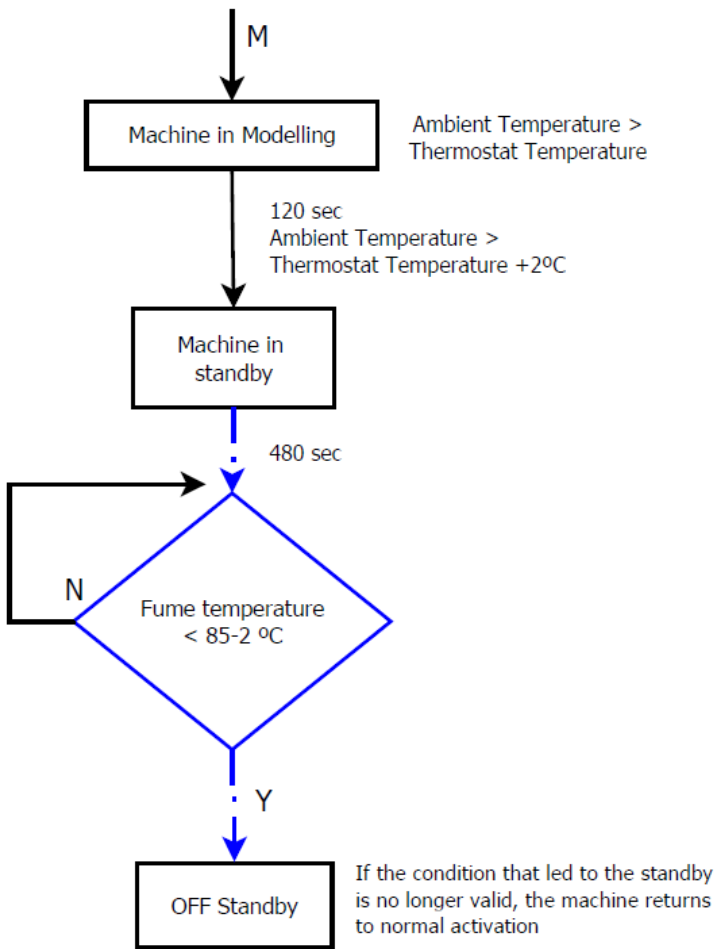
- Flow chart 1 – Normal Activation (phase 1)



- Flow chart – Norma Activation (phase 2)

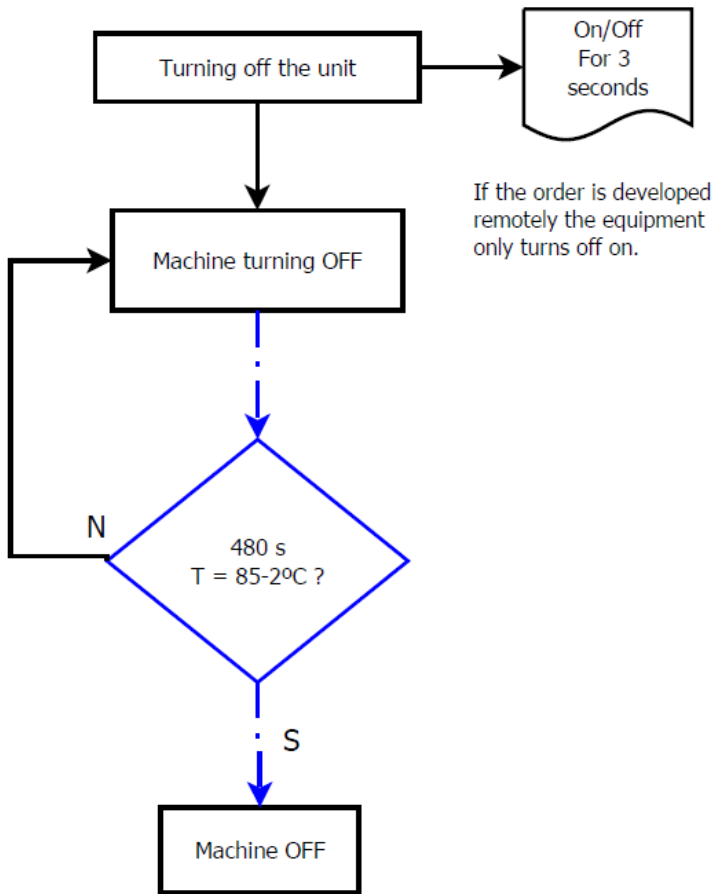


- Flow chart 2 – Disconnect the unit

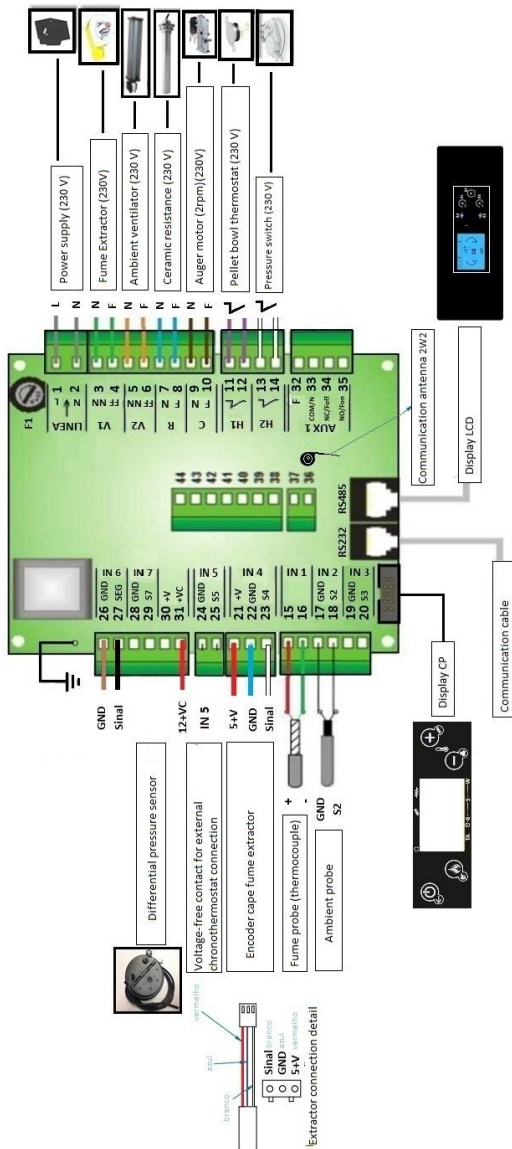




- Flow chart 2 – Disconnect the unit

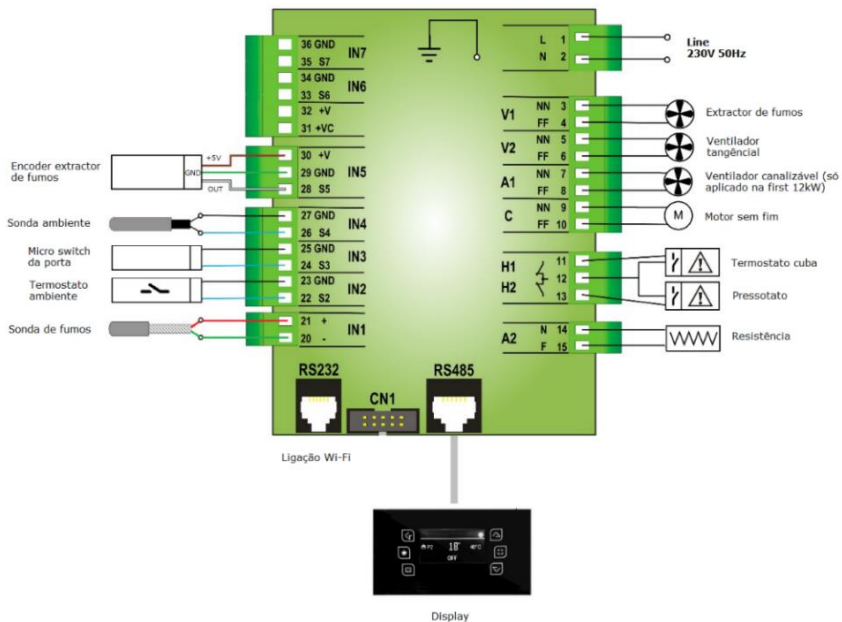


- Electrical diagram of the Free-Standing Fire unit



CO0312000000015 – MB100 2 ways 2 control

• Electrical diagram of the Free-Standing Fire unit – Columbus Electronics



CO031200000045 - Placa Elect s/prog NG01\_PW\_F

## 26. Statement of performance

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DECLARAÇÃO DE DESEMPENHO | DECLARACIÓN PRESTACIONES | DECLARATION OF PERFORMANCE | DÉCLARATION DE PERFORMANCE | DICHIARAZIONE DELLE PRESTAZIONI

Nº DD-037

1. Código de identificação único do produto-tipo | Código de identificación único del tipo de producto | Unique identification code of the product type | Le code d'identification unique du type de produit | Codice unico di identificazione del tipo di prodotto

**SQUARE D – EAN 05600990427914**

**SQUARE V – EAN 05600990442597**

2. Número do tipo, lote ou série do produto | Número de tipo, lote o serie del producto | Number of type, batch or serial product | Nombre de type, de lot ou de série du produit | Numero di tipo, di lotto, di serie del prodotto

3. Utilização prevista | Uso previsto | Intended use | Utilisation prévue | Destinazione d'uso

AQUECIMENTO DE EDIFÍCIOS DE HABITAÇÃO | CALEFACCIÓN DE EDIFICIOS RESIDENCIALES | HEATING OF RESIDENTIAL BUILDINGS | CHAUFFAGE DE BATIMENTS RESIDENTIELS | RISCALDAMENTO DEGLI EDIFICI RESIDENZIALI

4. Nome, designação comercial registada e endereço de contacto do fabricante | Nombre, marca registrada y la dirección de contacto de lo fabricante | Name, registered trade name and contact address of the manufacturer | Nom, marque déposée et l'adresse de contact du fabricant | Nome, denominazione commerciale registrata e Indirizzo del costruttore

**SOLZAIMA, SA**

**RUA DA COVA DA AREIA (E.M. 605), 695**

**3750-071 AGUADA DE CIMA – ÁGUEDA – PORTUGAL**

5. Sistema de avaliação e verificação da regularidade do desempenho do produto | Sistema de evaluación y verificación de constancia de las prestaciones del producto | System of assessment and verification of constancy of the product | Système d'évaluation et de vérification de la Constance des performances du produit | Sistema di valutazione e verifica della costanza della prestazione del prodotto

**SISTEMA 3**

6. Norma Harmonizada | Estandár armonizado | Harmonized standard | Norme harmonisée | Standard armonizzata

**EN 14785**

7. Nome e número de identificação do organismo notificado | Nombre y número de identificación del organismo notificado | Name and identification number of the notified body | Nom et numéro d'identification de l'organisme notifié | Nome e numero di identificazione dell'organismo notificato

**TÜV RHEINLAND ENERGIE UND UMWELT GMBH**  
**NB: 2456**

## K18082016T1

## 9. Desempenho declarado | Desempeño declarado | Declared performance | Performance déclarée | Dichiarazione di prestazione

Características essenciais   Características esenciales   Essencial characteristics   Caractéristiques essentielles   Caratteristiche essenziali	Desempenho   Desempeño   Performance   Prestazione	Especificações técnicas harmonizadas   Especificaciones técnicas armonizadas   Harmonized technical specifications   Spécifications techniques harmonisées   Specifiche tecniche armonizzate
Segurança contra incêndio   Seguridad contra incendios   Fire safety   Sécurité incendie   Sicurezza antincendio	<b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>K18082016T1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2, 4.3, 4.7, 4.8, 4.10, 4.11, 5.1, 5.3, 5.4, 5.5, 5.8 (EN14785)
Emissão de produtos da combustão   La emisión de productos de combustión   Emission of combustion products   Emission des produits de combustion   Emissione dei prodotti di combustione	<b>OK.</b> Caudal térmico nominal   Caudal térmico nominal   Nominal heat output   Le débit calorifique nominal   Nominal heat output   Flusso termico nominale – <b>CO:0,01%</b> <b>OK.</b> Caudal térmico reduzido   Flujo térmico reducido   Reduced thermal flow   Flux thermique réduit   Flusso termico ridotto – <b>CO: 0,035%</b>	Caudal térmico nominal   Caudal térmico nominal   Nominal heat output   Le débit calorifique nominal   Nominal heat output   Flusso termico nominale – <b>CO&lt;0,04%</b> Caudal térmico reduzido   Flujo térmico reducido   Reduced thermal flow   Flux thermique réduit   Flusso termico ridotto – <b>CO&lt;0,06%</b>
Libertação de substâncias perigosas   Emisión de sustancias peligrosas   Release of dangerous substances   Dégagement de substances   Rilascio di sostanze pericolose	<b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>K18082016T1</b>	De acordo com o Anexo ZA.1 (EN14785)   De acuerdo con lo Anexo ZA.1 (EN14785)   According to the Annex ZA.1 (EN14785)   Selons le Annexe ZA.1 (EN14785)   Secondo l'allegato ZA.1 (EN14785)
Temperatura de superfície   Temperatura de la superficie   Surface temperature   La température de surface   Temperatura superficiale	<b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>K18082016T1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2, 4.13, 5.1, 5.2, 5.4, 5.5 (EN14785)
Segurança elétrica   Seguridad eléctrica   Electrical safety   Sécurité électrique   Sicurezza elettrica	<b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>K18082016T1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 5.9 (EN14785)
Aptidão para ser limpo   Capacidad para ser limpiado   Ability to be cleaned   Possibilité d'être nettoyé   Capacità di essere puliti	<b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>K18082016T1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.5, 4.6, 4.10, 4.12 (EN14785)
Temperatura dos gases de combustão   Temperatura de los gases de combustión   Temperature of the flue gas   Température du gaz de fumée   Temperatura dato fumi	<b>OK.</b> <b>154°C</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 6.2 (EN14785)
Resistência mecânica   Resistencia mecánica	<b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de	De acordo com os requisitos   De acuerdo con los requisitos   According to

Mechanical strength   résistance   Resistenza meccanico	la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>K18082016T1</b> A cada 10 m de conduta de fumos deve ser colocado um suporte de carga   cada 10 m de la salida de humos se debe colocar un soporte de carga   every 10 m of the flue should be placed a load support   tous les 10 m de conduit de fumée doit être placé un support de charge   ogni 10 m della canna fumaria deve essere posto un supporto di carico	the requirements   Selons les exigences   Secondo i requisiti 4.2, 4.3(EN14785)
Potência térmica   Potencia térmica   Thermic output   Puissance thermique   Potenza termico	<b>OK.</b>  <b>8,3 kW</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 6.1, 6.4 – 6.10 (EN14785)
Rendimento energético   Eficiencia energética   Energy efficiency   L'efficacité énergétique   Efficienza energetica	<b>OK.</b>  <b>90,1%</b>	≥ <b>75%</b> para potência térmica nominal   de potencia térmica nominal   for rated thermal input   Pour puissance thermique nominale   di potenza termica nominale
	<b>OK.</b>  <b>95,94%</b>	≥ <b>70%</b> para potência térmica reduzida   la reducción térmica   to reduced thermal   à la réduction thermique   di potenza térmica ridotto
Durabilidade   Durabilidad   Durability   Durabilité   Durabilità	<b>OK.</b> De acordo com relatório de ensaio   De acuerdo con informe de la prueba   According to the test report   Selons le rapport d'essai   Secondo i rapporto di prova <b>K18082016T1</b>	De acordo com os requisitos   De acuerdo con los requisitos   According to the requirements   Selons les exigences   Secondo i requisiti 4.2 (EN14785)

10. O desempenho do produto declarado nos pontos 1 e 2 é conforme com o desempenho declarado no ponto 9. A presente declaração de desempenho é emitida sob exclusiva responsabilidade do fabricante identificado no ponto 4. | El funcionamiento del producto se indica en los puntos 1 y 2 es compatible con las prestaciones declaradas en el punto 9. La presente declaración se expide bajo la exclusiva responsabilidade del fabricante identificado en lo punto 4. | Performance of the product stated in points 1 and 2 is consistent with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4. | Les performances du produit indiqué dans les points 1 et 2 est compatible avec les performances declares au point 9. Cette declaration de performance est établie sous la seule responsabilité du fabricant identifié dans le point 4. | Le prestazioni dei prodotti indicati ai punti 1 e 2 è conforme alla prestazione dichiarata al punto 9. Questa dichiarazione di prestazione è rilasciata sotto l'esclusiva responsabilità del fabbricante di cui al punto 4

Nome e cargo | Nombre y cargo | Name and title | Nom et titre | Nome e titolo  
 Aguada de Cima, 15/10/2013

Nuno Sequeira (Director Geral | CEO)



FOGO MONTANHA