

SOLUÇÕES DE AQUECIMENTO A BIOMASSA

Pellet Stove

English

Instruction Manual

Models

Douro 12/17/23 kW

Read these instructions carefully before installing, using and servicing the unit. This instruction manual is provided with the product.

Thank you for purchasing a SOLZAIMA appliance.

Please read this manual carefully and retain it for future reference.

* All our products fulfil the requirements of the Construction Products Directive

(Req.UE no 305/2011) and have been approved with the CE conformity mark;

* The Pellet Burning Free Standing Fires are designed according to EN 14785:2008

Standards;

* SOLZAIMA disclaims any responsibility for damages to the unit if installed by non-

qualified personnel;

 st SOLZAIMA is not responsible for any damage to units not installed and used in

compliance to the instructions included in this manual;

* All local regulations, including but not limited to national and European standards,

must be observed when installing, operating and servicing the unit;

* For assistance, please contact your unit's supplier or installer. You must have the

wood pellet stove serial number located on the identification plate on unit's back panel

and on the sticker on the plastic cover of this manual ready;

*The technical service must be performed by the unit Installer or Supplier, except on

situations where the assessment performed by the installer or service engineer

determines that SOLZAIMA should be contacted, if required.

Contacts for technical support:

www.solzaima.pt

apoio.cliente@solzaima.pt

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Table of Contents

1.	Package content	1
1.1. Unp	packing the unit	1
2.	Safety precautions 🔨	2
2.1. For	your safety, we recommend that:	2
3.	Advice on action in the event of a fire in a chimney (includes equipment)	4
4.	Technical specifications	5
5.	Installation of the free standing pellet fire unit	8
5.1. Ass	sembly of removable parts	9
5.2. Ins	tallation requirements	12
5.3. Ins	tallation of ducts and fume extraction systems	13
5.4. Ins	tallation without a chimney	13
5.5. Ins	tallation with a chimney	17
6.	Hydraulic Installation	18
6.1. Ope	erating mode for radiator/buffer tank	18
7.	Fuel	19
8.	Using the Free Standing Pellet Fire	20
9.	Remote Control	22
9.1. Ren	note control and display	22
9.2. Dis	play information summary	23
9.2.1.	Menu	23
9.2.2.	Water temperature	24
9.2.3.	Date	24
9.2.4.	Timer	27
9.2.5.	Sleep (this menu is displayed only while the unit is operating)	31
9.2.6.	Info	32
9.2.7.	Settings Menu	35
9.2.8.	Technical Menu	39
10.	Start-up	41
10.1. St	тор	41
10.2. Tu	urning Off the Unit	41

11.	Instructions for removing the side covers (Douro 17 kW and 23 kW)	. 42
11.1. Re	emove side covers	. 42
11.2. Pe	llet reservois lid	. 42
11.3. Fil	ling the pellet reservoir	. 42
12. included i	Installation and operation with the remote control (chrono-thermostat) – in free standing units	
12.1. In	structions for remote control assembly	. 45
13.	Maintenance	. 47
13.1. Da	aily Maintenance	. 47
13.2. W	eekly Maintenance	. 47
13.3. Ad	lditional cleaning	. 51
13.4. Cl	eaning the glass	. 56
14.	Alarm/ Failure / Recommendation List 📤	. 57
15.	Maintenance Plan and Log	. 59
16.	Maintenance Guide Label	. 63
17.	Installation Diagrams	. 64
18.	Electrical diagram of the Free Standing Pellet Fire unit	. 68
19.	Pump UPM3 FLEX AS 15-70 130mm	. 69
20.	Life Cycle of a Free Standing Fire Unit	. 72
21.	Sustainability	. 72
22.	Warranty	. 73
22.1. Mo	odel-specific conditions	. 73
22.2. W	arranty general conditions	. 73
23.	Annexes	. 82
23.1. Ti	mer weekly programming	. 82
23.2. Flo	ow chart Douro 12 kW	. 83
23.3. Flo	ow chart Douro 17 kW and Douro 23 kW	. 86
23.4. St	atement of Performance	. 89

Solzaima

Solzaima's vision has always been clean, renewable and more economical energy. For this reason, we have been manufacturing biomass heating equipment and solutions for more than 40 years.

Fruit of the persistence and the unconditional support of its network of partners, Solzaima is today leader in the production of biomass heating, whose best examples are the recuperators of central heating to water and its range of salamanders to pellets.

We annually equip more than 20.000 homes with biomass heating solutions. It signals that consumers are aware of the most environmentally friendly and economical solutions.

Solzaima has ISO9001:2015 Quality Certification and ISO14001:2015 Environmental Certification.

1. Package content

Solzaima ships the unit with the following components:

- Free standing pellet fire model Douro 12 kW, Douro 17 kW or Douro 23 kW;
- Side covers, top front cover and bottom front cover;
- Access to the brochure of the online manual;
- Power cable.

1.1. Unpacking the unit

When unpacking the unit, please refer to the illustrations below. First remove the retractable bag containing the cardboard box (1-a). Then pull the cardboard box out (1-b) by lifting it and remove the bag containing the free standing fire unit (1-c) and the styrofoam plates. Finally, unscrew the four parts securing the unit to the wood pallet (1-d and -e).

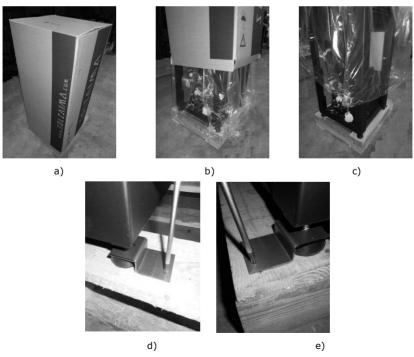


Figure 1 - Unpacking the free standing fire unit

2. Safety precautions 🗥

Solzaima is not liable for any damages to the unit if the specified precautions, warnings and operating procedures are not followed.

Units manufactured by Solzaima are easy to operate and special attention was given to their components in order to protect users and installers against accidental damages.

The units must only be installed by an authorised engineer, who should supply the client with a relevant statement of conformity and who shall be liable for the final installation and consequent product good operating conditions.

This unit must be used according to its intended use as specified by the manufacturer. The manufacturer is excluded from all liability, by contract or by tort, caused by injury to people, animals or property arising from misuse or faulty installation or servicing.

After removing the packaging, verify the contents to check their integrity and completeness. If the content of the package fails to correspond to that indicated in point 1, contact the salesperson from whom you purchased the unit.

All the unit's components guarantee its operation and energy efficiency and should only be replaced with original parts provided by an <u>authorised technical assistance centre</u>.

The unit must be serviced at least once a year by the installation engineer.

This manual is provided with the product. Please keep it close to the unit.

2.1. For your safety, we recommend that:

- Make sure you fully read and understand this instruction manual before using the free standing pellet fire as a biomass heating unit;
- Make sure that the hydraulic circuit was correctly assembled and connected to the water supply before turning on the free standing pellet fire;
- The free standing pellet fire is not intended for use by children or persons with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they are under supervision or have been instructed concerning the use of the unit;
- Do not touch the free standing fire when barefoot or if any part of your body is wet or humid;
- Do not tamper with safety or adjustment features without the manufacturer's authorization;
- Do not cover or reduce the size of the vents at the installation area;
- The free standing pellet fire requires a clear space around the unit for proper

combustion, so possible air tightness of the location or any existing air extraction sources in the room may prevent the unit proper operation;

- The existence of vents is a requisite for proper combustion;
- · Do not leave the packing materials near children;
- During normal operation, Free Standing Fire unit's door must not be opened;
- Some parts of the unit may overheat during normal operation, so avoid direct contact with parts such as the door handle and glass;
- Check the existence of any obstructions on the fume duct before turning on the unit after a long period of inactivity;
- This free standing pellet fire unit is intended for residential use in protected areas. Safety systems may turn off the unit. If this occurs, contact the technical assistance. In any circumstances should you attempt to interfere with the safety systems;
- The free standing pellet 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 and the room will be filled with smoke. For this reason, you should have a natural fume extraction system, like a chimney, available;
- Solzaima offers you an optional safety system which allows the Free Standing Fire unit to be connected to a UPS so that during any power failure the fume extractor will still operate until complete extraction of all the fumes;
- If you intend to use the Free Standing Fire unit while you are away from home or unattended, you should use the safety system 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 pellet fire unit is electric so disconnecting the power plug will prevent the extraction of combustion fumes;
- Your unit must be disconnected from the mains for servicing. Before doing this, the unit must be totally cooled down (if operating before);
- Never touch the interior of the unit without disconnecting it from the power mains;
- On backboiler models, the maximum temperature of the water that can be set by the user (water set-point temperature) is 85°C. In the event of a temperature of 90°C being reached, the free standing pellet fire unit automatically disconnects and the respective alarm is activated.

3. Advice on action in the event of a fire in a chimney (includes equipment)

- Try to extinguish the fire without putting your life at risk.
- If within a minute you can not extinguish the fire, you should call the fire department.
- Close the doors and windows or partition where the fire has flared.
- Disconnect the electric current and close the gas before leaving your home.
- Once outside, you must wait for the firefighters and be ready to give you the following information: location of the fire, possible materials that are burning and what they can do to prevent the progression of fire.

4. Technical specifications

Features	Douro 12 kW	Douro 17 kW	Douro 23 kW	Units
Weight	185	202	219	kg
Height	1110	1153	1215	mm
Width	617	595	663	mm
Depth	680	657	730	mm
Diameter of the fume discharge pipe	80	100	100	mm
Reservoir capacity	30	30	45	kg
Maximum heating capacity	295	380	502	m³
Maximum overall thermal power (water/air)	11,5 / 1,5	14,5 / 2,2	18,8 / 3,3	kW
Minimum thermal power (water/air)	3,8 / 1,2	4,3 / 0,8	4,3 / 0,8	kW
Minimum fuel consumption	1,1	1,1	1,1	kg/h
Maximum fuel consumption	3,0	3,9	5,1	kg/h
Rated electric power	43	134	134	W
Electric power at start-up (<10 min.)	406	434	434	W
Rated voltage	230	230	230	V
Nominal frequency	50	50	50	Hz
Thermal yield at rated thermal power	92,0	90,9	89,2	%
Thermal yield at reduced thermal power	95,0	93,8	93,8	%
Combustion gas flow (max.)	21,0	6,9	6,9	g/s
Combustion gas flow (min.)	44,0	33,7	18,8	g/s
Max. gas temperature	108	126,5	153,4	°C
Min. gas temperature	62	66	66	°C
CO emissions at rated thermal power	0,0136	0,0162	0,0200	%
CO emissions at reduced thermal power	0,0256	0,0200	0,0200	%
Draught in the chimney	12	12	12	Pa
Unit water volume	19	22	22	L
Draught in the chimney	185	202	219	dB(A)

Table 1 - Technical specifications

Tests performed using wood pellets with a heating capacity of 4,9 kWh/kg.

The above information was obtained during product homologation tests performed at independent laboratories accredited for pellet unit tests.

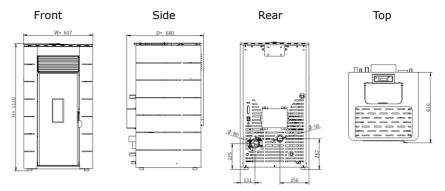


Figure 2 - Dimensions of the free standing pellet fire unit (Douro 12 kW)

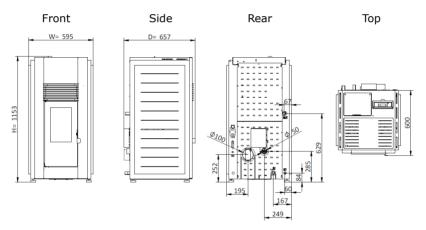


Figure 3 - Dimensions of the free standing pellet fire unit (Douro 17 kW)

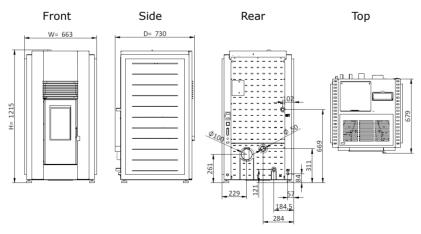


Figure 4 - Dimensions of the free standing pellet fire unit (Douro 23 kW)

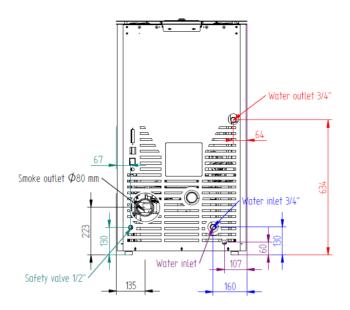


Figure 5 - Hydraulic connections of the free standing pellet fire unit (Douro 12 kW)

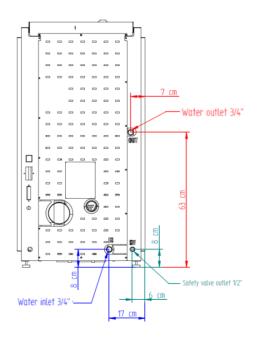


Figure 6 - Hydraulic connections of the free standing pellet fire unit (Douro 17 kW)

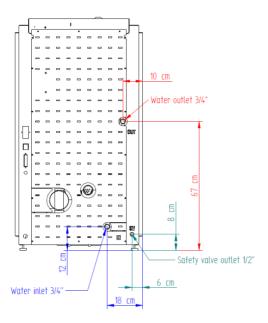


Figure 7 - Hydraulic connections of the free standing pellet fire unit (Douro 23 kW)

5. Installation of the free standing pellet fire unit

Before installing, please perform the following steps:

- Upon reception, check the product for completeness and to determine that is does not show any damage signs. Any damages or defects should be checked before the unit is installed;
- The unit is equipped with four adjustable height feet at the base which allow for a simple regulation when installed on a non flat surface;



Figure 8 - Adjustable feet

- Remove the instruction manual from the package and hand it over to the cliente;
- Connect an 80mm wide (Douro 12 kW) or 100mm wide (Douro 17kW or Douro 23kW) duct between the combustion gas output and the outgoing fume extraction duct of the building (e.g. chimney) check diagrams point 5;
- If a tube is used for combustion air inlet from the outside, it shall be no longer than 60cm horizontally or present offsets (such as bends);
- Perform the hydraulic installation;
- Connect the 230VAC power cable to a grounded socket;
- The surface of the unit where the hot air outlet is located must be facing the area to be heated;
- The unit's remote control has a programmable thermostat. As an option, a conventional external programmer may be used (not included) to automatically setup the unit's operating periods. This should be connected through cable to the optional 230VAC programmer plug (not provided).

5.1. Assembly of removable parts

After the installation, the Free Standing Fire unit should be fitted with the removable covers.

• Douro 12 kW

Before installing the casings, you should check if the package is complete and in good condition. Any possible damage or missing elements should be reported before proceeding with the installation.

This manual describes how to install the casings for the Stove.

To install the casings, the installer must have available:



Star shaped screwdriver PH2 screw

Figure 9 - Material required to install the casings with the free standing fire

IMPORTANT NOTICE: Before installing the casings, it is required that the unit is turned off (unplugged from the power socket).

To assemble some of this models, each kit must include the following parts:

• CASINGS 12 kW (Bordeaux, White or Black)

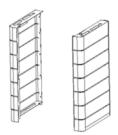


Figure 10 - Douro 12 kW Colors

• CASINGS Douro 12 kW Oak



Figure 11 - Douro 12 kW Oak

The covers should be placed on the pillars and grille slots identified in Figure 12-a and Figure 12-b.

The screw placed in the salamander must be removed and tightened after placing the side cover as shown in Figure 12-c.

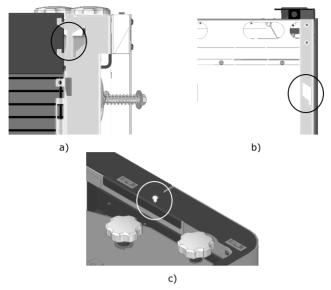


Figure 12 - Casings Douro 12 kW

• Douro 17 kW and Douro 23 kW

• Top front cover

To install the top front cover, place it over the unit (Figure 13-a) and then tighten the screws that secure it to the top panel of the unit (Figure 13-b).



Figure 13 - Assembly of the top front cover

· Bottom front cover

The bottom front cover can be assembled by removing the screws located on the bottom part of the unit. Then place the part in the appropriate position (Figure 14-a) and replace and tighten the screws again (Figure 14-b).



Figure 14 - Assembly of the bottom front cover

5.2. Installation requirements

The minimum distance between the free standing pellet fire unit and particularly flammable surfaces is specified in Figure 15. The top of the unit must be at least 100cm separated from the ceiling, especially in rooms with ceilings consisting of flammable materials. The base supporting the unit cannot be made of combustible material (e.g. carpet), so make sure you use an adequate protection.

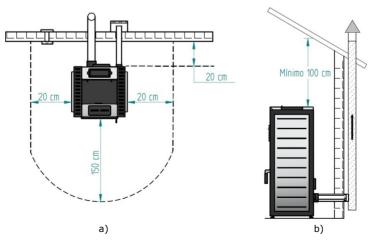


Figure 15 - Minimum distances from all surfaces: a) upper view of the unit's installation; b) side view of the unit's installation



Keep combustible and flammable materials at a safe distance.

5.3. Installation of ducts and fume extraction systems

- The exhaust pipe must have been designed for this purpose, in compliance to the location requirements and in accordance with any applicable regulations.
- Important! An inspection-T with an airtight lid must be attached to the exhaust pipe of the unit to allow the regular inspection of the system or discharge of heavy dust and condensates.
- As indicated in Figure 15, the exhaust pipe must be assembled so as to allow cleaning and maintenance of the pipe by inserting inspection points.
- Under normal operating conditions, the combustion gas flow should create a draught of 12 Pa one meter above the chimney neck.
- The unit must not share the chimney with other equipment.
- Pipes outside the operating area must have double stainless steel insulation and an internal diameter of 80 mm (Douro 12 kW) or 100 mm (Douro 17 kW and Douro 23 kW).
- The fume exhaust pipe may generate condensation, so we recommend that the appropriate systems for collecting condensates should be installed.

5.4. Installation without a chimney

The installation of the free standing pellet fire without a chimney should be performed as illustrated in Figure 16, equipped with an exhaust pipe (with a minimum diameter of 80 mm for the **Douro 12 kW** and 100 mm for the **Douro 17 kW** and **Douro 23 kW** model) directly outside and over the roof.

Double-walled stainless steel insulated pipes must be used and properly fastened to avoid condensation.

A T-tube must be installed at the base of the pipe to allow periodic inspections and annual maintenance, as illustrated in Figure 16.

Figure 17 specifies the basic requirements for installing the chimney to the unit.

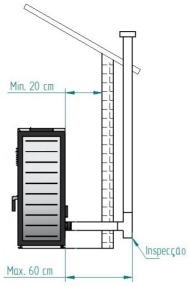
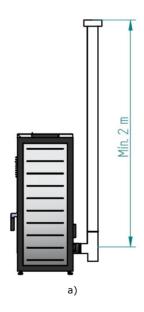
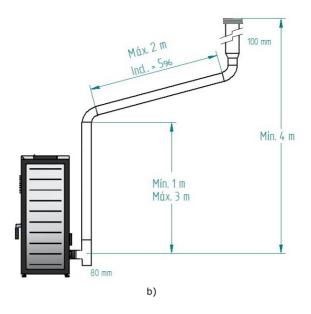


Figure 16 - Side view of the installation without a chimney, illustrating the inspection point





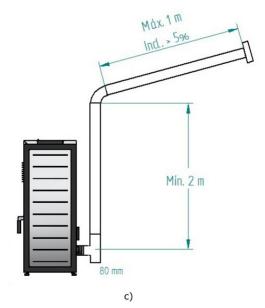


Figure 17 - Examples of standard installations

Failure to comply with these requirements may prevent the correct operation of the unit. Follow all the instructions presented on the diagrams.

The Douro units operate with the combustion chamber in vacuum, so it is absolutely necessary to have a fume exhaust pipe to extract combustion gases properly.

Fume duct material: The tubing must consist of 0,5 mm thick rigid stainless steel, with fastening joints 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 may damage the unit.

Output "T-tube": Always attach to the output of the unit a "T-tube" with a regulator.

Windproof terminal: A windproof terminal must always be installed to avoid the backflow of fumes.

Draught in the chimney: The figures below show three standard diagrams, specifying 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: To get the optimum operation of the unit it **is necessary that the installation location has an air inlet with a minimum section of 100 cm², preferably near the back panel of the unit.** The free standing pellet fire unit has a circular pipe (\varnothing 50mm) that may be connected to the exterior of the house.

If the residence has an air exhaust system installed (e.g. kitchen extractor fan), a top ventilation section must be installed, suitable to accommodate the different air exhaust units systems that exist in the house.

The installation of the unit on locations near kitchen exhaust fans or fume extractors may prevent the unit from operating properly.

5.5. Installation with a chimney

As shown in Figure 18, the unit is installed with an exhaust pipe (\varnothing 80 mm for the **Douro 12 kW**; \varnothing 100 mm for the **Douro 17 kW** and **Douro 23 kW**) directly on to the chimney. If the chimney is too large, an 80 mm-wide pipe should be installed at the fume outlet.

A T-tube must be attached to the base of the pipe to allow for periodic inspection and annual maintenance, as illustrated in Figure 18.

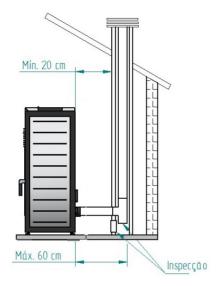


Figure 18 - Side view of the installation with a chimney, showing the inspection point

We do not recommend that you use the unit in rough weather conditions that may seriously impact the draught (particularly with very strong winds).

If you do not use the unit for a long time, check it to make sure that the flue pipes are clear before lighting the fire.

6. Hydraulic Installation

- The chapter 17 (installation diagrams) contains the optional connection diagrams for central heating installations, with or without water heating for household use;
- The free standing pellet fire unit is equipped with a circulating pump, an expansion vessel (6 litre volume (in the Douro 12 kW and 17kW model) or 10 litre volume (in the Douro 23kW model) and pre-charge of 1 bar) and a 3 bar safety valve;
- Operating pressure is between 0,8 and 1,2 bar (for Douro 12 kW) and 1 and 1,5 bar (for Douro 17 and 23 kW);
- To empty the unit, attach a "T-tube" with a tap to the outlet (connected to the household sewage); the safety valve (3 bar) outlet must also be connected to the household sewage;
- *The heating fluid must consist of water with an anti-rust, non-toxic product added in the quantity recommended by the manufacturer. If the unit installation or the fluid pipes are installed are likely to freeze, the installation engineer must add to the circulating fluid the amount of antifreeze product recommended by the manufacturer, to avoid freezing at the estimated minimum temperature.

6.1. Operating mode for radiator/buffer tank

IMPORTANT! The boiler is programmed to work directly for radiators, in case you want to install the boiler with a buffer or AQS tank, we recommend changing the temperature "OFF" of the circulation pump by placing the same temperature as the deposit or 1 °C higher than this temperature, should disable the "hYDRO Menu" modes "Modulating Pump" and "hydro independent" and switch the mode display "Auto" to "Manual" mode and select the power 5 (Fire 5).

You must change the smoke temperatures ("Toff" and "Ton") in the "Activation" menu. For these changes is necessary to access the "Installer Menu" on the display, please request a password manufactures.

7. Fuel

The Free Standing Pellet Fire operates exclusively with pellets. No other fuel sources are allowed to be used.

Only use pellets certified by standard EN 14961-2 grade A1 with a diameter of 6mm and a length of 10-30mm.

The pellets may have a maximum humidity of 8% their weight. To guarantee a good combustion, the pellets must maintain these characteristics so it is recommended that they should be stored in a dry place.

The use of different pellets will reduce the efficiency of the unit and cause deficient combustion.

Only certified pellets should be used and a sample must be tested before buying large bulks.

The physicochemical properties of the pellets (namely, calibre, friction, density and chemical composition) may vary within specific tolerances 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 an adjustment of +15%/-33% the pellet dosage at the start-up phase and at each power level (please see section 9.2.7 of this manual).



N WARNING!

This unit may NOT be used as an incinerator.

8. Using the Free Standing Pellet Fire

Recommendations

Before starting up the unit, please check the following:

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



Figure 19 - Electric power 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.
- Ensure that before each ignition the burner is clear.

The unit's combustion chamber and panel door are made of iron plate painted with high temperature resistant paint which releases fumes during the initial burn due to the paint's curing process. Avoid touching the unit during its first burn to prevent leaving permanent marks on the paint. The paint goes through a more plastic phase during the curing process. The curing of the paint occurs at approximately 300°C for 30 minutes.

Please make sure the room where the unit is installed has adequate air circulation; otherwise, the unit will not work properly. For this reason, it is important to check if there are any other air-consuming heating appliances present in the room (e.g. gas units, braziers, extractors, etc.); these should not be used simultaneously with the unit.

This Free Standing Pellet Fire unit has a probe for measuring the room temperature. This probe is attached to the grid at the rear panel (Figure 20). For a good reading of the room temperature, avoid the contact between the end of the probe and the unit surfaces. You may also attach the probe to the wall beside the unit.



Figure 20 - Room temperature probe

9. Remote Control

9.1. Remote control and display

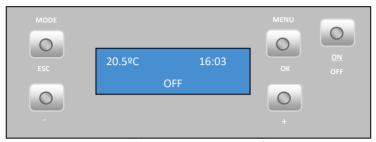


Figure 21 - Room temperature probe



a) Key to toggle between manual and automatic mode and exit menus (esc).



b) Key to access menus and confirmation key (ok).



c) Key to start/stop the unit and reset error messages.



d) Key to scroll the menus to the left, to increase and reduce the fan flow and increase or reduce the set-point temperature.



e) Key to scroll menus to the right and increasing and to reduce the unit's power.

Figure 22 - Remote control keys

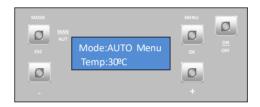
9.2. Display information summary

9.2.1. Menu

Menu indicating that the unit power is "off", the room temperature in °C and Time.



Selecting the operation mode: to select the operation mode, press the "mode" key to select "Manu" for manual mode or "Auto" for automatic mode.



"Auto" mode: in this mode, the unit shall be turned on at maximum power until reaching a temperature of 1°C above the temperature selected (set point temperature). Upon reaching the set temperature, the unit changes to minimum operating power.

The set-point temperature can be set between 5 and 40 $^{\circ}$ C by pressing the "-" and "+" keys.

"Manu" mode: in this mode, the unit will run at the speed selected with the "-" key, which may vary between 1 (minimum operating speed) and 5 (maximum operating speed).

9.2.2. Water temperature

Press the Menu key twice to set the water temperature, "Temp. Água" (Water Temp.) appears on the display. Press Set to see the "T. Aquecimento" (Heating T.) menu.



Heating temperature

To set the desired **Heating Temperature** press "set". The display starts to flash. Press the "+" or "-" key to select the desired temperature and then "ok" to confirm. Press the "+" key to go to the "Temperatura de sanitários" (Bathroom Temperature) menu.



Note: in the equipment the water temperature can be regulated by the user (water set-point temperature) between 50 and 80°C.

• Bathroom temperature (this mode is disabled)

9.2.3. Date

To set the **Date**: press the Menu key twice and "Data" (Date) appears on the display. Press "set" to see the menu.



Year

To set the **Year** press "set". The display starts to flash. Press the "+" or "-" key to select the desired year and then "ok" to confirm. To move to the next menu press the "+" key and the Month menu appears.



Month

To set the **Month** press "set". The display starts to flash. Press the "+" or "-" key to select the desired month and then "ok" to confirm. Press the "+" key to go to the "Dia do Mês" (Day of the month) menu.



· Day of the month

To set the **Day of the month** press "set". The display starts to flash. Press the "+" or "-" key to select the desired day and then "ok" to confirm. Press the "+" key to go to the "Dia" (Day) menu.



Day

To set the **Day of the week** press "set". The display starts to flash. Press the "+" or "-" key to select the desired day and then "ok" to confirm. Press the "+" key to go to the "Hora" (Time) menu.



Time

To set the **time** press "set". The display starts to flash. Press the "+" or "-" key to select the desired time and then "ok" to confirm. Press the "+" key to go to the "Minutos" (Minutes) menu.



Minutes

To set the **Minutes** press "set". The display starts to flash. Press the "+" or "-" key to select the desired minutes and then "ok" to confirm. Press the "esc" key to exit. Press the "+" key to go to the next menu and the Crono (Timer) menu appears.



9.2.4. Timer

The unit is equipped with a timer that allows the unit to be turned on or off at a specified time.



Activation

To **activate the timer** press "set". The "Habilitação" (Activation) menu appears. The timer may only be activated after setting the configurations, as shown in the following paragraph.



The programs can be defined in two different ways, either by the "profile load" menu or by the daily programmer P1 to P6 (only one option can be active, they do not work simultaneously).

Press the "+" key to scroll to the "Carga Perfil" (Profile Load) menu.

There are 10 weekly programmes available on the Timer (see item 24 in the annexes). The selected programme runs from Monday to Friday and from Saturday to Sunday. Press "set"; the display starts to flash. Press the "+" or "-" key to select the desired programme and then press "ok" to confirm. Press the "+" key to go to menu "Reiniciado" (Reset).



This menu allows you to delete any programme settings. To do this, press "set" and the message "Confirm?" appears. Press "ok" again to confirm the order for deleting the programs, or "esc" to exit and then press the "+" key to proceed to the daily programmer.



The unit's **programmer** lets you choose from 6 different programmes for each day of the week.



To set up **programmes "P1" to "P6"**, select the desired programme using the "-" and "+" keys, and press "set" to select. The "Habilitação" (Activation) menu appears (**can only be enabled after time scheduling**).

Press the "+" key to go to the "H. Inicio" (Star Time) menu.



To set the **starting time** for Programme P1, press "set". The display starts to flash. Press the "+" or "-" key to select the time and then press "ok" to confirm. Press the "+" key to go to the "P1 A. Stop" menu.



To set the **stopping time** for Programme P1, press "set". The display starts to flash. Press the "+" or "-" key to select the time and then press "ok" to confirm. Press the "+" key to go to the "P1 Temp. (P1 Air Temp.) menu.



Important: Each program can **only** be configured within the **same** day.

To set the **set point temperature** for Programme P1, press "Set". The display starts to flash. Press the "+" or "-" key to select the desired temperature, followed by "Ok" to confirm. Press the "+" key to go to the "P1 Temp. Água" (P1 Water Temp.) menu.



To select the **set point water temperature** in program P1, press "set" and start flashing, press "+" or "-" to select the desired temperature, press "ok" to confirm value. Press the "+" key to move to the "Fire" menu.



To set the **operating power level** (1 to 5) of Programme P1, press "Set". The display starts to flash. Press the "+" or "-" key to select the desired power level (1 to 5), and then "Ok" to confirm. Press the "+" key to go to the "P1 Dia" (P1 Day) menu.



To select the **days of the week** that you want P1 Programme to run, press "set" and then select the day of the week using the "-" and "+" keys. Press "set". The display starts to flash. Select "On" or "Off" using the "-" and "+" keys. Press "ok" to confirm the selection. Press the "esc" key to go to the "P1 Dia" (P1 Day) menu. Press "esc" twice and then "+" to access the "Configurações" (Configuration) menu.



Press "set" again and when flashing, press the "+" or "-" keys to select "On" or "Off". Press "ok" to confirm your choice.

Repeat the above steps for programmes P2 to P6.

To activate Timer mode, press "esc" once and then "-" until you find the "Activation" menu, press the "set" key and it starts flashing, press the "+" or "-" key to select "On" or "Off", press "ok" to confirm your choice. Press the "esc" key once and then press the "+" key once to move to the "Sleep" menu.



Note:

- Once the programmes are set, remember to enable them on the "Habilitações" (Activation) menu.
- There can only be one enabled profile in the Timer, either weekly or daily (they do not operate simultaneously).
- When the Timer is enabled, you can check the following message in the display: "chrono prog".

9.2.5. Sleep (this menu is displayed only while the unit is operating)

The "Sleep" menu allows you to setup the time you want the unit to turn off.



Press "set". The display starts to flash. Select the desired time using the "-" and "+" keys. After choosing the time, press "ok" to confirm. Press "esc" to return to the menu and "+" to go to the info menu.



9.2.6. Info

This menu contains information on the Free Standing Fire unit.



Press "set"; the "Código de Ficha" (File Code) menu appears.

Software code / Motherboard firmware. Press the "+" key to scroll to the "Código de Segurança" (Security Code) menu.



Software code / Security firmware. Press the "+" key to scroll to the "Código Display" (Display Code) menu.



Software code / Display firmware. Press the "+" key to scroll to the "Código de Parâmetros" (Parameter Code) menu.



Parameter code. Press the "+" key to scroll to the "Horas de Trabalho" (Operation hours) menu.



This menu shows the unit's current operating hours.



This menu shows the number of operating hours the unit has registered since its last servicing.

The number of hours at which the next servicing should take place.



<u>Very Important:</u> When the machine is close to service hours it is recommended to call an accredited technician to perform its maintenance.

This menu shows the phase/status of the free standing fire.



Fume extractor operating speed (rotation per minute).



Air flow measured by air sensor.



Theoretical pellet consumption.



Fume temperature.



Worm drive rotation "On" time.



Hydraulic circuit pressure.



Press the "esc" key once and then "+" to go to the "settings" menu.

9.2.7. Settings Menu

To modify the unit's **settings**, press "Set". The "Língua" ("Language") menu should then appear, allowing the user to choose a set language.



Language

To select the **language**, press "set". Using the "+" or "-" keys, select the language (**Pt** – Portuguese; **NI** – Dutch; **Gr** – Greek; **Tr** – Turkish; **It** – Italian; **En** – English; **Fr** – French; **Es** – Spanish; **De** – German). Press "ok" to confirm. Press the "+" key scroll go to the "Eco" menu.



· Eco mode

When the "ECO" mode is enabled at the same time as the Thermostat feature, the unit will operate at maximum power until the thermostat opens contact (NO). The unit then will operate at minimum power for a preset period of time (Shutdown delay time:

factory setting: 20 minutes). Once the preset time is elapsed, the unit shuts down. At the start of the Shutdown phase, another timer for a different preset period of time is triggered (Start-up delay time: factory setting: 20 minutes), that will make the unit enter the activation phase, when the thermostat closes contact (NC)

Start-up delay time (Delay time On): The delay time that elapses between the moment the thermostat closes (NC) until the unit is activated.

Shutdown delay time (Delay time Off): The delay time that elapses between the moment the thermostat opens (OC) until the unit starts to shutdown.

Note: When using the feature for the first time, you must press the On/Off button in the display. To enable the eco mode, press "set". The display starts to flash. To activate the eco mode, press "set". The display starts to flash. Select "On" or "Off" using the "-" and "+" keys. Press "set" to confirm the selection. Press "esc" to return to the previous menu and then press "+" to go to the "Iluminação" (Lighting) menu.



Lighting

To select **lit screen**, press "set". The display starts to flash. Press the "+" or "-" key to select the time for the screen to light up, or select "On" to keep the light permanently on. Press "ok" to confirm. Press the "+" key to go to the "Controlo remoto" (Remote control) menu.



• Remote control (not applicable)

This feature enables and disables the remote control, when the user wants to operate the unit's thermostat remotely. Press "Set" and use the "+" and "-" keys to select the

"On" or "Off" mode. Press "Ok" to confirm. Press the "+" key to go to the "Unidade de temperatura" (Temperature units) menu.



Note: Some TV remote controls share the same frequency as the unit's remote control, possibly influencing the unit's operation. If this is the case, it is recommended to disable the remote control feature.

• Temperature unit (°C / °F)

To select ${}^{\circ}\mathbf{C}$ / ${}^{\circ}\mathbf{F}$, press "set". The display starts to flash. Press the "+" or "-" key to select " ${}^{\circ}\mathbf{C}$ ", " ${}^{\circ}\mathbf{F}$ " or "Auto", and then "ok" to confirm. Press the "+" key to go to the "Combustion recipe" menu.



Combustion recipe

Press "set" to display the "Combustão receita" (Combustion recipe) menu.



Pellet

This feature allows the user to increase or decrease up to 25% the **pellet quantity during the start-up and power process**. Press "set". The display starts to flash. Press "+" or "-" to increase or decrease (between -10 to +10), as required. Each unit

must be multiplied by 2,5 to obtain the correct percentage. Press "ok" to confirm. Press the "+" key to go to the "Ar" (Air) menu.



Air

This feature allows the user to increase decrease up to 25% the **rotation speed of the fume extractor during the start-up and power process**. Press "set". The display starts to flash. Press the "+" or "-" key to increase or decrease (from -10 to +10), as required. Each unit must be multiplied by 2,5 to obtain the correct percentage. Press "ok" to confirm. Press "esc" to return to the "Receita de pellets" (Pellet recipe) menu and then press "+" to go to the "Carga pellet" (Pellet loading) menu.



• Pellet loading (esta função só aparece com a máguina em Off)

This feature allows you to enable the **worm drive** to fill the channel when it is empty to keep the unit running. Press "set"; the "ok" option appears. Press "ok" to activate the drive; the message "habilitada" (enabled) is displayed. Press "esc" to stop. Press the "+" key to go to the "Limpeza" (Cleaning) menu.



• Cleaning (this function only appears with the machine in Off)

This feature allows you to **clean** the burning basket manually. Press "set"; the "ok" option appears. Press "ok" to start the cleaning procedure; the "Habilitada" (Enabled) message is displayed. To stop, press "ok". Press the "+" key to go to the "Técnico" (Technical) menu.

Press the "esc" key and then "+" once to switch to the "Active Pump" menu.



• Active Pump (this function only appears with the machine in Off)

This function allows the **water pump** to be driven manually. Press "set" and the message "enabled" appears.



Press the "esc" key once and then "+" to go to the "Technical Menu" menu.

The technical menu is not available to the end user.

9.2.8. Technical Menu

This feature allows the user to adjust the unit's different variables. Pressing "set" displays the "password" menu to enter the technical menu.



Press "Ok"; the letter "A" starts to flash. Using the "+" and "-" keys, select the desired letter. Press "Ok" to confirm; the numbers "00" start to flash. Using the "+" and "-" keys, select the desired number. Confirm by pressing "OK" to go to the "Configuração" ("Settings") menu.



Note: The password is only provided to authorised technicians.

10. Start-up

After loading the pellets into the deposit, press and hold the ON/OFF button for 3s, to start the Free Standing Fire. During the lighting phase, the display will show the message "Ativação" (Activation) until this phase is completed.

The *pellets* are fed through the supply channel to the burning basket (combustion chamber), where they will be ignited using a heat resistor. This process may take 5 to 10 minutes, depending on whether the worm screw used to push through the pellets has been previously filled with fuel or is empty. Once the ignition phase is completed, the message "On" appears on the display. The heating power can be adjusted at any time by pressing the power selection button for approximately 1 second. You can select from the five pre-set power levels that are available. The selected power is indicated on the display. The initial power status at each start-up will correspond to the power level set before the last stop.

Important notice: Before starting up the unit, please check to determine if the deflector plate is in place.

10.1. Stop

The stop sequence of the unit is started by pressing the ON/OFF button for 3 sec.

The display will show "**Desativação**" (Disabling) until full completion of this phase. The extractor will operate until the fume temperature of 64°C is reached, to guarantee that all the material has been burnt.

10.2. Turning Off the Unit

The unit should only be disconnected after its full stop. Make sure the "Off" shows on the display before disconnecting the unit. If necessary, disconnect the power cable from the mains.

11. Instructions for removing the side covers (Douro 17 kW and 23 kW)

11.1. Remove side covers

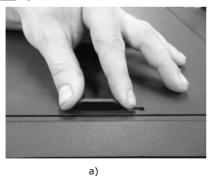
Raise the cover and pull backwards removing the upper and lower fixtures. Do the opposite to assemble the unit.



Figure 23 - Removal of side covers

11.2. Pellet reservois lid

The pellet reservoir is opened by sliding the bolt sideways (Figure 24-a) and lifting the lid (Figure 24-b).





b)

Figure 24 - Opening the lid

11.3. Filling the pellet reservoir

1 - Open the pellet reservoir lid at the top of the unit, as shown in Figure 24.

2 - Pour the pellets into the reservoir, as shown in Figure 25.



Figure 25 - Refilling the pellet reservoir

3 - Turn on the unit and close the lid, pressing it down as shown in Figure 24-a.

12. Installation and operation with the remote control (chrono-thermostat) – not included in free standing units

The free standing pellet fire units are mass produced with the command device (display). Alternatively, they can be used with a generic remote control unit (programmable thermostat).

Note: the remote control is usually accompanied by a manual. To use the remote control, you must install an interface (Figure 26-b).



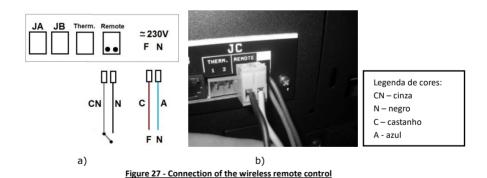


Figure 26 - Remote control (programmable thermostat) and connection interface - both not included

This board has two entries "remote" and "therm" to conect the chrono-thermostat into the "remote" the user of the start (closed contact NC) and stop (open contact NO) the boiler.

If connecting into the "thermostat" This will only change the power of the machine between minimum output (open contact NO) and maximum power (closed contact NC). **Note:** the external command, as a rule, comes with a manual.

In the case of **wireless** remote control is necessary to connect the two wires as shown in the following figure:



For the **wired** remote control, the black and grey wires must be connected to the receiver as shown in the following figure.

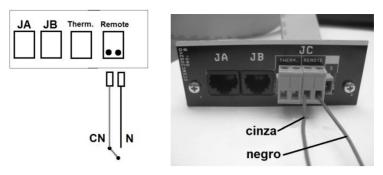


Figure 28 - Wired remote command connection

12.1. Instructions for remote control assembly

1 – Turn off the unit at the power switch, remove both the right side cover of the free standing pellet fire unit (Figure 29-a) and the plate with the microjoints (Figure 29-b).

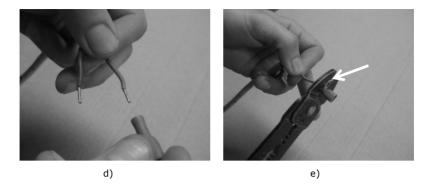


2 - Remove the unit's terminals phase (F) and neutral (N).



c)

3 – Rivet the terminals of the 220V wire supplying power to the transmitter.



4 – Connect the wires on the ON/OFF connector contact (Figure 29-f); direct the wires through the cable gland to the interior of the unit (Figure 29-g);



5 – Assemble the interface at the appropriate location on the unit and position the remote control (On/Off contact) switch to "remote" (Figure 29-h);





6 – Connect the interface cable to the electronic plate on the communication card (Servizi 5J).



Figure 29 - Installation of the chrono-thermostat

13. Maintenance

13.1. Daily Maintenance

The Solzaima free standing pellet fire unit requires careful maintenance. The most important thing is to remove the ash from the pellet burning area at regular intervals. This can be easily done by using a simple household vacuum cleaner. It should be cleaned after burning approximately 30kg (Douro 12 kW) / 60kg (Douro 17 kW and Douro 23 kW) of pellets.

Note: However, before cleaning, the power of the unit must be turned off and the unit should be allowed to cold off to prevent any accident.

13.2. Weekly Maintenance

• Douro 12 kW

To perform maintenance on the backboiler model, clean the airflow pipes. To do this, raise the lid on the top of the unit (Figure 30) and then lift the levers inside several times (Figure 30) to make the dirt accumulated inside the pipes fall out.



Figure 30 - Cleaning the turbulators

Then clean the inside of the unit using a steel brush on the surfaces where dirt has accumulated (Figure 31).



Figure 31 - Cleaning the interior of the backboiler model

Then remove the burning basket (Figure 32-a) and the ash basket (Figure 32-b) and vacuum the ashes from both. The interior of the unit must also be cleaned by opening the hatch, as shown in figure. Finally, assemble the parts in the reverse to which they were removed and close the unit door.



Figure 32 - a) Burning basket; b) Ash basket

WARNING! The maintenance task frequency depends on the quality of the pellets.

Note: See the warning label and read the maintenance instructions in chapter 16.

· Douro 17 kW and Douro 23 kW

To perform maintenance on the backboiler model, clean the airflow pipes. To do this, raise the lid on the top of the unit (<u>Figure</u> 33-a) and then turn (<u>Figure</u> 33-b) and lift the levers inside several times (<u>Figure</u> 33-c) to make the dirt accumulated inside the pipes fall out.

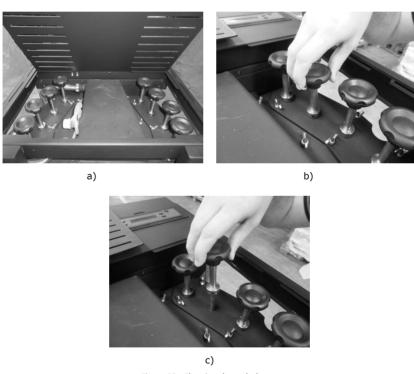


Figure 33 - Cleaning the turbulators

Then clean the inside of the unit using a steel brush on the surfaces where dirt has accumulated (Figure 34).





b)

Figure 34 - Cleaning the interior of the backboiler model

The burning basket (<u>Figure</u> 35-a) and ash basket (<u>Figure</u> 35-b) must then be removed and the ash vacuumed from both. The interior of the unit must also be cleaned by opening the hatch, as shown in <u>Figure</u> 37. Finally, assemble the parts in the reverse to which they were removed and close the unit door.



a)



b)

Figure 35 - a) Burning basket; b) Ash basket



Figure 36 - Cleaning the burning basket





a) b) Figure 37 - Cleaning the interior of the unit

WARNING! The maintenance task frequency depends on the quality of the pellets.

Note: See the warning label and read the maintenance instructions in chapter 16.

13.3. Additional cleaning

• Douro 12 kW

Additional cleaning should be performed for every 1300-1700 lbs (600-800 kg) of pellets consumed.

Remove the side covers to access the side lids of the combustion chamber. To clean the interior of the unit, remove the lid and vacuum the ashes. Using a 20-25mm wide 80cm long steel brush thoroughly clean the fume ducts (<u>Figure 38</u>).



Figure 38 - Cleaning Vacuum the interior

If you noticed that the fume extraction is not effective, we recommend cleaning the interior of the extractor with a vacuum cleaner, as shown in Figure 39-a and -b. Regardless, this operation should be performed, at least, once a year.



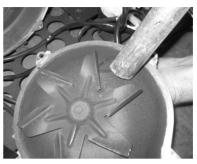
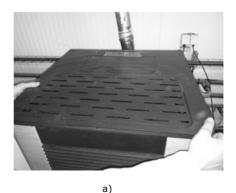


Figure 39 - a) Remove the screws; b) Remove the extractor

For the backboiler unit, the procedure involves cleaning the air flow pipes and turbulators. To do this, open the lid on the top of the unit (Figure 40-a and Figure 40-b) and remove the four sticks (Figure 40-c and Figure 40-d). Then pull the turbulators up (Figure 40-e). A vacuum cleaner must be used to clean this area (Figure 40-f) and the interior of the pipes can be cleaned with a steel brush. The turbulators that are removed must also be cleaned with a steel brush.

To reinstall the turbulators, execute in reverse the above procedure shown in the figures.





b)

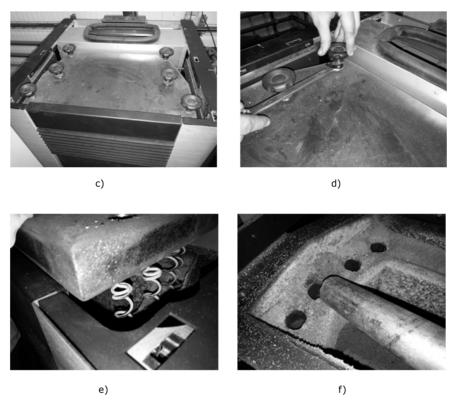
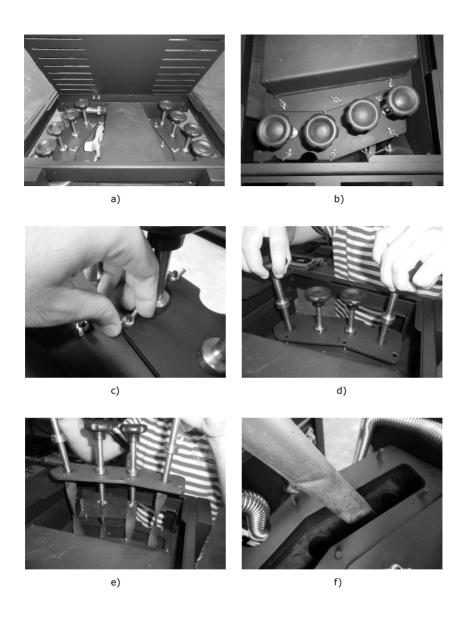


Figure 40 - Cleaning the air flow pipes and turbulators

• Douro 17 kW and Douro 23 kW

Additional cleaning should be performed for every 1300-1700 lbs (600-800 kg) of pellets consumed. For the backboiler unit, the procedure involves cleaning the air flow pipes and turbulators. To do this, open the lid on the top of the unit (Figure 41-a) and remove the six wing nuts securing each turbulator set (Figure 41-b and Figure 41-c). Then pull the turbulators up (Figure 41-d and Figure 41-e). A vacuum cleaner must be used to clean this area (Figure 41-f) and the interior of the pipes (Figure 41-g) can be cleaned with a steel brush. The turbulators that are removed must also be cleaned with a steel brush (Figure 41-h).

To reinstall the turbulators, execute in reverse the above procedure shown in the figures.



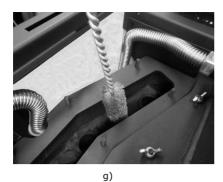
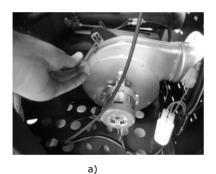




Figure 41 - Cleaning the air flow pipes and turbulators

If fumes are not being extracted in the best manner possible, we recommend you clean the extractor as shown in <u>Figure 42</u> and Figure 43. However, we recommend that you perform this procedure at least once a year.





b)

Figure 42 - a) Remove the screws; b) Remove the extractor



Figure 43 - Vacuum the air flow pipes

13.4. Cleaning the glass

The glass may only be cleaned with the unit completely cold, and using an appropriate product, as per the instructions for use. You should prevent the product from reaching the sealing ring and painted metal parts so that no undesirable oxidation occurs. The sealing ring is glued, so should not be exposed to moisture from water or cleaning products.



Figure 44 - Incorrect cleaning of the glass

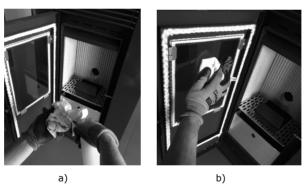


Figure 45 - Cleaning of the glass: a) moisten a soft cloth with liquid; b) clean the glass with the cloth

WARNING! The maintenance task frequency depends on the quality of the pellets.

Note: See the warning label and read the maintenance instructions in chapter 15.

14. Alarm/ Failure / Recommendation List 🔨

Alarm	Code		Troubleshooting
Ignition failure	A01	Maximum time 900 sec	- The worm drive channel is empty - restart the unit - Resistance burnt – replace resistance - The burning basket has been incorrectly installed - Worm locked - unlock - Smoke temperature did not exceed the value set at captivation
No flame or lack of pellets	A02	Temperature under: 104°F (40°C)	- Pellet reservoir is empty
Excess heat in the pellet drum	A03	110 °C	- The fan is not working – call for assistance - Faulty thermostat - call for assistance - Machine with faulty ventilation
Excess fume temperature	A04	Over 446°F (260°C)	- The fan is not working or is working at a low power level - increase the level to the maximum (if the problem persists, call for assistance) - Insufficient extraction - Excess pellets - Faulty smoke probe
Pressure switch alarm	A05	The door is open, lack of draught or extractor fault for 180 sec	- Close the door and clear the error message on the faulty pressure regulator - Obstruction of the exhaust pipe or faulty extractor
Air mass probe	A06	40 Ipm delta for 3600 sec	- Pipes with insufficient extraction or obstructed pipes
The door is open	A07	Door open for 120 seconds	- Close the door - clear the error message - Faulty air mass sensor
Fume extractor is faulty	A08	Connection failure	- Check connection - Check that the fan is not blocked
Fume probe failure	A09	Connection failure	- Check connection
Pellet resistance error	A10	Connection failure	- Check connection - Faulty resistance
Worm drive error	A11	Connection failure	- Check connection - Faulty auger motor
Pellet level alarm	A15		- Check connection
Water pressure outside operating range	A16		- Check connection - Check pressure in the hydraulic circuit - Adjust pressure (1 bar) in the hydraulic circuit (working range 0,5 to 2,8 bar)
Excess water temperature	A18		- Check connection - Check if the pump works - Purging hydraulic circuit - Check that the heat exchangers are open

Table 2 - List of alarms

riangle Important note: all alarms cause the machine to shut down. The alarm must be reset and restarted. To reset the unit press the "On/Off" button for 10 seconds until the alarm sounds.

- Failures

Failures
Manutenção "service"
Falha no sensor de massa de ar
Baixo nível de pellets
Porta aberta
Falha no sensor de temperatura de ar
Falha no sensor de temperatura de água
Falha no sensor de pressão de água
Pressão de água próxima dos extremos do intervalo de funcionamento

Table 3 - List of failures

Important notice: A "*service*" warning on the display (maintenance due) indicates that the unit has exceeded 2100 operating hours. In this case, the client must perform the unit's maintenance procedure (following the instruction on the Technical Manual). Once this procedure is completed the hour meter may be reset, to clear the waning message. This message does not impact the normal operation of the unit. It is simply a warning.

Important notice: The errors can be reset only when the error information is flashing on the display. To reset the error, press the "Mode" button once while displaying the error.



WARNING!

In case of an emergency, turn off the unit by following the normal shutdown procedure.



WARNING!

THE UNIT BECOMES HOT DURING OPERATION SO CARE MUST BE TAKEN ESPECIALLY WHEN HANDLING THE DOOR GLASS AND DOOR HANDLE.

15. Maintenance Plan and Log

To ensure the proper operation of the unit, maintenance operations must be performed, as described in Chapter 13 of this Instruction Manual. There are specific maintenance tasks that must be performed by authorised technicians only. Please contact the person responsible for installing the unit. To make sure the warranty remains valid, the maintenance operations performed on this unit must comply with the frequency requirement specified in the manual, and the service technician must fill and sign the maintenance log.

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Name:	
Address:	
Telephone:	
Model:	
Serial Number:	

Company/SAT:			Company/SAT:		
Technical:			Technical:		
Dates:			Dates:		
Service hours of boiler:			Service hours of boiler:		
Quantity of pellets burned:			Quantity of pellets burned:		
Task	Check	Obs.	Task	Check	Obs.
Clean burner			Clean burner		
Clean smoke circuit and turbulators			Clean smoke circuit and turbulators		
Vacuum pellet tank sawdust			Vacuum pellet tank sawdust		
Check pressure of the expansion vessel			Check pressure of the expansion vessel		
Check safety valve 3 bar			Check safety valve 3 bar		
Check the fluid on the hydraulic circuit			Check the fluid on the hydraulic circuit		
Clean the smoke extractor			Clean the smoke extractor		
Check and clean the inspection T			Check and clean the inspection T		
Clean chimney			Clean chimney		
check the tightening of the screws			check the tightening of the screws		
Check engine cap pellet hopper			Check engine cap pellet hopper		
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Check safety valve 3 bar			Check safety valve 3 bar		
Check the fluid on the hydraulic circuit			Check the fluid on the hydraulic circuit		
Clean the smoke extractor			Clean the smoke extractor		
Check and clean the inspection T			Check and clean the inspection T		
Clean chimney			Clean chimney		
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Check safety valve 3 bar			Check safety valve 3 bar			
Check the fluid on the hydraulic circuit			Check the fluid on the hydraulic circuit			
Clean the smoke extractor			Clean the smoke extractor			
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Check and clean the inspection T			Check and clean the inspection T			
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Check the fluid on the hydraulic circuit			Check the fluid on the hydraulic circuit		
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Check and clean the inspection T			Check and clean the inspection T		
Clean chimney			Clean chimney		
check the tightening of the screws			check the tightening of the screws		
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16. Maintenance Guide Label

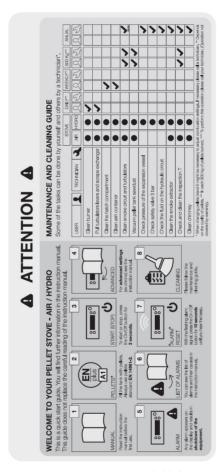


Figure 46 - Maintenance guide label

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.

17. Installation Diagrams

Simple connection only the central heating radiators

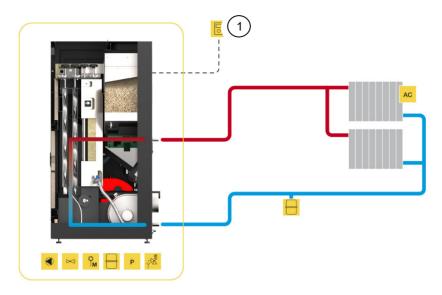


Figure 47 - Simple connection only the central heating radiators

Note:

- The chrono-thermostat should have 1 to 2 °C of hysterisis.
- Hydro independiente "On" (water temperature controlled regulation)
- Modulating pump "On"
- Water sensing inhibition "On"
- Alternative hydro shutdown "On"
- Pump "On" = 50 °C
- Pump "Off" = 50 °C

We can set / change according to the customer's discretion to another temperature.

Connection to central heating radiators and sanitary water combined with solar panel

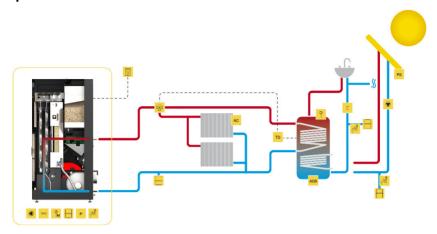


Figure 48 - Connection to central heating radiators and sanitary water combined with solar panel

Example: electrical connection of a thermostat (ambient air monitoring) of a differential thermostat connected to the deposit and three-way valve to a relay box.

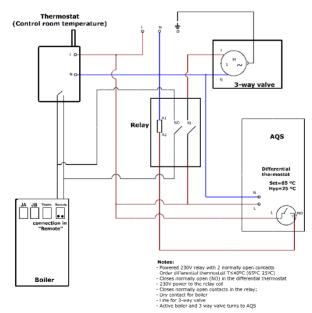


Figure 49 - Electrical connection of a thermostat (ambient air monitoring) of a differential thermostat connected to the deposit and three-way valve to a relay box

Connection to central heating radiators with another boiler support and sanitary water combined with solar panel

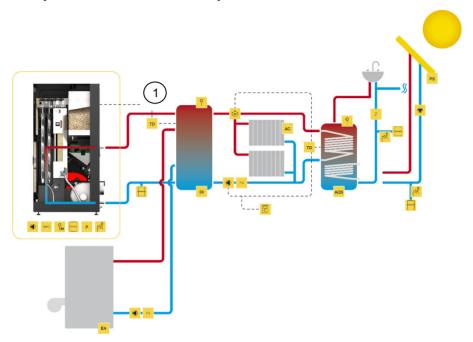


Figure 50 - Connection to central heating radiators with another boiler support and sanitary water combined with solar panel

Note:

- The differential thermostat must have a hysterisis of 15 to 25 $^{\circ}\text{C}.$
 - Hydro independiente "Off" (water temperature controlled regulation), put the
 - boiler in "manual" mode and power nivle to "5"
 - Modulating pump "On"
 - Water sensing inhibition "On"
 - Alternative hydro shutdown "On"
 - Pump "On" = 50 °C
 - Pump "Off" = same or thermostat temperature 1°C below the temperature differential thermostat.

When using the generator with differential thermostat the machine must be connected in the CONNECTION "Remote".

Calculation deposits of inertia: the boilers for pellets is recommended that the buffer tank has 20I/kW.

Connecting underfloor heating in conjunction with another boiler support and sanitary water combined with solar panel

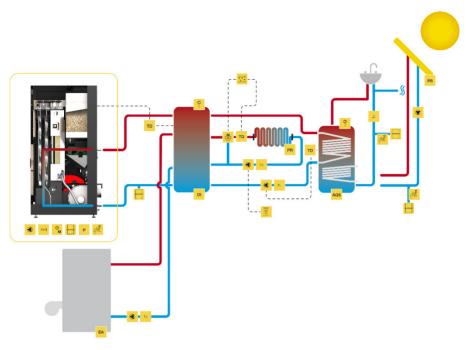


Figure 51 - Connecting underfloor heating in conjunction with another boiler support and sanitary water combined with solar panel

Simbology



Figure 52 - Simbology

18. Electrical diagram of the Free Standing Pellet Fire unit

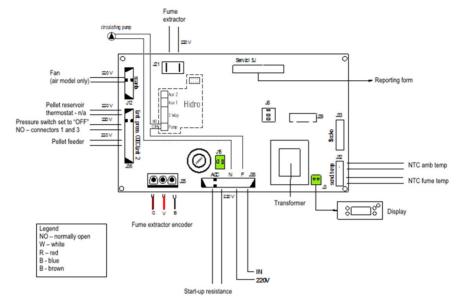


Figure 53 - Electrical diagram Douro 12 kW

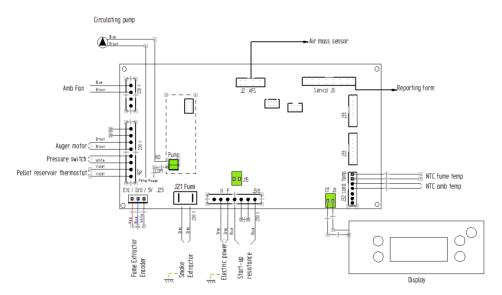


Figure 54 - Electrical diagram Douro 17 kW and Douro 23 kW

19. Pump UPM3 FLEX AS 15-70 130mm

Performance graph for the circulating pump

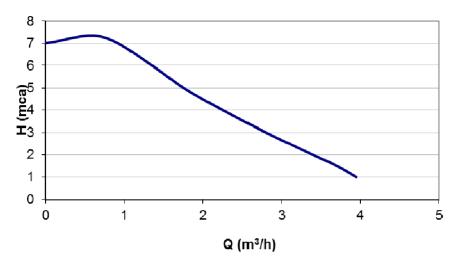


Figure 55 - Circulating pump performance graph

User interface

The user interface was designed with a single button, a red/green LED and four yellow LEDs



Figure 56 - User interface

When the pump is operating, the LED 1 is green. 4 yellow LEDs indicate the current performance of the pump, as shown in the following table.

Active LED	Performance (%)
LED Green	0 (Standby)
LED Green + 1 LED Yellow	0 - 25
LED Green + 2 LED Yellow	25 - 50
LED Green + 3 LED Yellow	50 - 75
LED Green + 4 LED Yellow	75 - 100

Table 4 - Performance of the pump

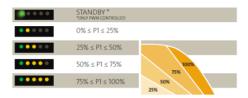


Figure 57 - Performance of the pump

Note: the pump is configured as standard at full capacity (75-100%).

Changing the setting of the pump

Can be chosen between the the view of the performance of pump and th view of settings, just press the button once.

If you need to change the pump performance, you must press the button for 2 seconds (Figure 58), after this action the LEDs start blinking, then you must press the button until the desired setting (Table 5), after 10 seconds the display automatically switches to the view of performance with alteration saved.



Figure 58 - Pump settings

Maximum manometric height (m)	Settings
2-4	• • • • •
3-5	••••
4-6	• • • •
5-7	• • • •

Table 5 - Pump settings

Alarms

Se a bomba detetar um ou mais erros o LED 1 comuta de verde para vermelho, quando o alarme esta ativo os LED amarelos indicam o tipo de alarme (ver tabela 6), se temos vários alarmes ativos ao mesmo tempo, o LED indica o alarme com maior prioridade, a prioridade esta definida na sequencia da tabela seguinte:

If the pump detects one or more errors, the LED 1 changes from green to red when the alarm is activated the yellow LED indicates the type of alarm (see Table 6), if we have several alarms at the same time, the yellow LED indicates the alarm with higher priority, the priority sequence is defined on table as follows:

Display	Priority	Alarm	Action
LED 1 red + LED 5 yellow	1	Rotor is blocked	Wait or deblock the shaft
LED 1 red + LED 4 yellow	2	Supply voltage too low	Control the supply voltage
LED 1 red + LED 3 yellow	3	Electrical error	Control the supply voltage or replace the pump

Table 6 - Alarms

20. Life Cycle of a Free Standing Fire Unit

Approximately 90% of the materials used to manufacture these units are recyclable, contributing towards a reduced environmental impact and a more sustainable planet. End-of-life units should be processed by licensed waste operators. We recommend contacting your local council to ensure the unit is collected and handled pursuant to any legal requirements.

21. Sustainability

Solzaima designs and manufactures biomass solutions and biomass-fuelled equipment as a primary energy source. This is our contribution for the sustainability of our planet – an economically viable and environmentally-friendly alternative, following environmental best management practices to ensure an efficient carbon cycle management.

Solzaima makes all efforts to learn and to know the national forest park while efficiently responding to energy demands, taking permanent care to maintain its biodiversity and natural wealth that are essential for the quality of life on our Planet.

SOLZAIMA is a member of the Portuguese **Sociedade Ponto Verde**, which manages packaging waste from products that the company places on the market, so you can take the packaging waste from your unit, such as plastic and cardboard, to your nearest recycling point.

SOLZAIMA is a member of **Amb3E**, the entity responsible for collecting waste electrical and electronic equipment (WEEE). Thus, end-of-life units with forced ventilation systems should be transported to an appropriate WEEE-processing location. When you disassemble your equipment, you can take its electrical components to your nearest WEEE collection point.



22. Warranty

22.1. Model-specific conditions

This model requires that the unit is subject to start-up for the warranty to be to 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.

To activate the warranty it is necessary to send the start-up form duly filled to the following email: apoio.cliente@solzaima.pt.

22.2. Warranty general conditions

1. Social name and address of the producer and Object

Solzaima, S.A.

Rua dos Outarelos, 111

3750-362 Belazaima do Chão

This document does not substantiate the provision by Solzaima S.A. of a voluntary warranty on it's 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 witch rests the warranty

The activation of the warranty presupposes prior and correct identification of the product object towards Solzaima, SA, 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 Solzaima, S.A., 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 - Solzaima 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 Solzaima, S.A., 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 waranty. 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 Solzaima, S.A. Customer support service, by means of a proper form present on the Website www.solzaima.co.uk, or, e-mail: support.cliente@solzaima.pt. 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 caseAppliances 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 channeled to drained sewage to prevent damage to the dwelling by water discharges. Product Warranty does not include damages caused by non-channeling 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 waranty 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 Solzaima SA solely and exclusively within the geographical and territorial zone of the country where the Product was sold by Solzaima.

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 (eg 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 Solzaima, S.A.;
- 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 Solzaima, SA.:
- 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 lacation. Also excluded from the Waranty are interventions for the descalsification 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 warrnty are air bleeding interventions of the circuit or unblocking of circulating pumps.
- 4.16. The installation of the equipment supplied by Solzaima, S.A. 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 ie, 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

Solzaima, S.A. 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 Solzaima, S.A.

6. Responsibility of Solzaima, S.A

Notwithstanding legally established, Solzaima, S.A., 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 Solzaima have a 6-month guarantee.

9. Warranty Spare Parts provided by Solzaima

As Peças fornecidas pela Solzaima, no âmbito da venda comercial de spare parts, isto é, não incorporados nos equipamentos não dispõem de garantia.

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. Solzaima 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 can not 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.

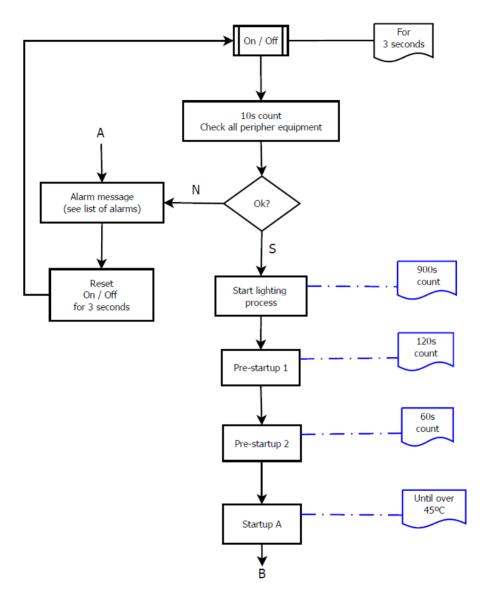
23. Annexes

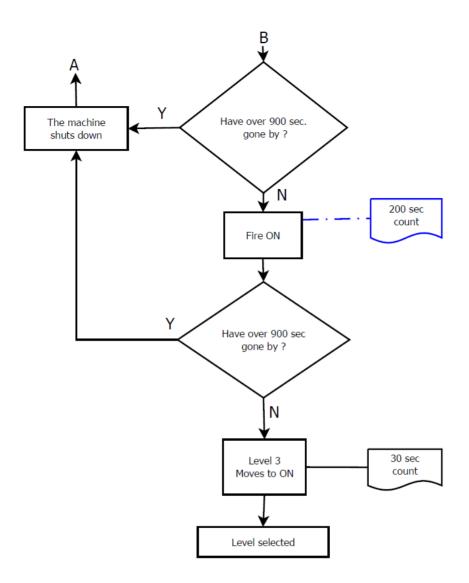
23.1. Timer weekly programming

D N-	Davis											Dai	ly pro	gramm	ing										
Prog No.	Days	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
P01	Mon-Fri																								
F01	Sat-Sun																								
P02	Mon-Fri																								
. 02	Sat-Sun																								
P03	Mon-Fri																								
. 05	Sat-Sun																								
P04	Mon-Fri																								
	Sat-Sun																								
P05	Mon-Fri																								
	Sat-Sun																								
P06	Mon-Fri																								
	Sat-Sun																								
P07	Mon-Fri																								
	Sat-Sun																								
P08	Mon-Fri					<u> </u>	<u> </u>																		
	Sat-Sun					<u> </u>	<u> </u>																		
P09	Mon-Fri	<u> </u>				-	-															<u> </u>		<u> </u>	
	Sat-Sun		L			L	L	L				L	L	L	L		L	L		L	L				
P10	Fri	<u> </u>				-	-																		
	Sat-Sun					<u> </u>	<u> </u>																		

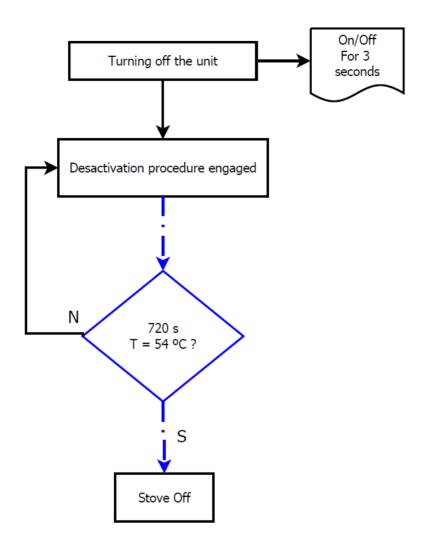
23.2. Flow chart Douro 12 kW

• Flow chart 1 - Lighting





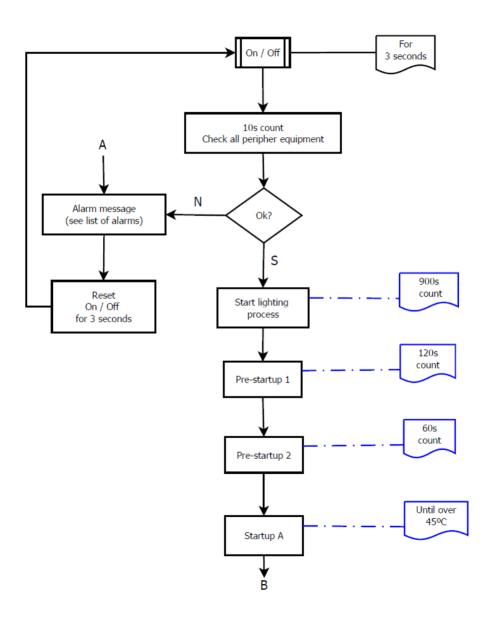
• Flow chart 2 - Disabling

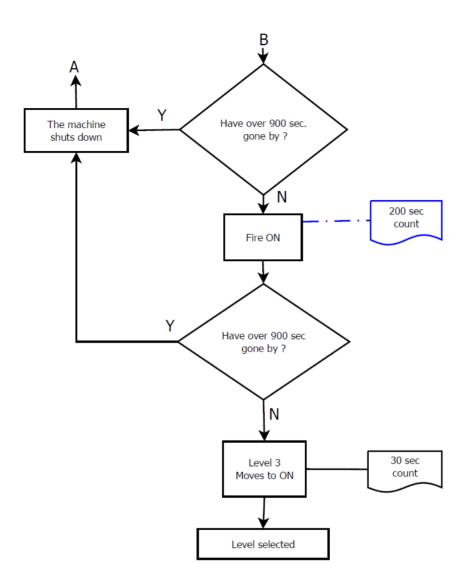


Note: The circulator pump off below 40 °C water temperature.

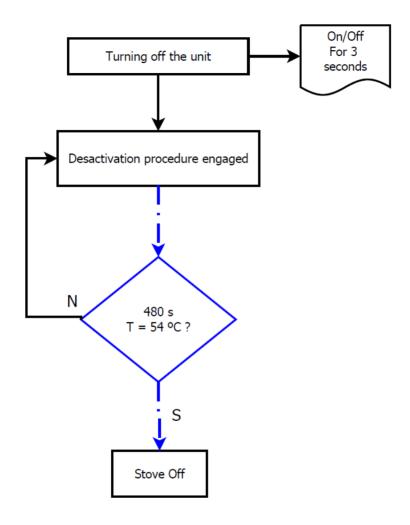
23.3. Flow chart Douro 17 kW and Douro 23 kW

• Flow chart 1 - Lighting





• Flow chart 2 - Disabling



Note: The circulator pump off below 40 °C water temperature.

23.4. Statement of Performance

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

Nº DD-066

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

<u>Douro 12 kW – EAN 05600990442535</u> Douro 12 kW Porta em Vidro – EAN 05600990427815

- 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 EDIFÍCI 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 DOS OUTARELOS, Nº111

3750-362 Belazaima do Chão – 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 prodoto | 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 harmoisée | Standard armonizatta

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

<u>CEIS</u> NB: 1722

8. Relatório de ensaio | Informe de la prueba | Test report | Rapport d'essai | Rapporto di prova

CEE-0257/19-1 RV1

Características essenciais Características esenciales Essencial characterístics Caractéristiques essentielles Caratterístiche 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 incêndios Fire safety Sécurité incendie Sicurezza antincendio	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova CEE-0257/19-1 Rv1	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 produtos de combustión Emission of combustion products Emission des produits de combustion Emissione dei prodotti di combustione	OK. Caudal térmico nominal Caudal térmico nominale Nominal heat output Le débit calorifique nominal Nominal heat output Flusso termico nominale – CO:0,0136% OK. Caudal térmico reduzido Flujo térmico reducido Reduced thermal	Caudal térmico nominal Caudal térmico nominale Nominal heat output Le débit calorifique nominal Nominal heat output Flusso termico nominale – CO<0,04% Caudal térmico reduzido Flujo térmico reducido Reduced thermal flow Flux
Libertação de substâncias perigosas	flow Flux thermique réduit Flusso termico ridotto – CO: 0,0256% OK. De acordo com relatório de ensaio	thermique réduit Flusso termico ridotto – CO<0,06% De acordo com o Anexo ZA.1 (EN14785)
Emisión de substancias peligrosas Release of dangerous substances Dégagement de substances Rilascio di sostanze pericolose	DR. De accordo com relatorio de ensalo De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova CEE-0257/19-1 RV1	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 superficie Temperatura de la superficie Surface temperature La température de surface Temperatura superficiale	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova CEE-0257/19-1 RV1	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 eléctrica Seguridad eléctrica Electrical safety Sécurité électrique sicurezza elettrica	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova CEE-0257/19-1 Rv1	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	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova CEE-0257/19-1 Rv1	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	ОК. 108 <i>-</i> С	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 mecânica Mechanical strength résistance Resistenza meccanico	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova CEE-0257/19-1 Rv1 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	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 4.2, 4.3(EN14785)
Potència térmica nominal Potencia térmica nominal Nominal Thermic output Puissance thérmique nominal Potenza térmica nominale	OK. 13 KW	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)
Potència térmica reduzida Potencia térmica reducida Reduced Thermic output Puissance thérmique réduite Potenza térmica ridotta	OK. 5 KW	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	OK. 92 %	≥ 75% para potència térmica nominal de potencia térmica nominal for rated termal input Pour puissance thermique nominale di potenza termica nominale
L'efficacité énergétique Efficienza energetica	OK. 95 %	≥ 70% para potência térmica reduzida la reducción térmica to reduced termal à la réduction thermique di potenza térmica ridotto
Durabilidade Durabilidad Durability Durabilité Durabilità	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova CEE-0257/19-1 Rv1	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 4.2 (EN14785)

10. Distância mínima a materiais combustíveis (laterais/frente/topo/posterior) | Distancia mínima a materiales combustibles (laterales/frente/topo/trasero) | Minimum distance to combustible materials (side/front/top/back) | Distance minimale aux matériaux combustibles (côte/avanta/haut/arrière) | Distanza mínima da materiali combustibili (lato/anteriore/top/posteriore)

(500 mm / 1500 mm / 1000 mm / 300 mm)

11. 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 funcionamento 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

Belazaima do Chão, 15/06/2020

Nuno Sequeira (Director Geral | CEO)

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

Nº DD-069

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

<u>DOURO 17 KW – EAN 05600990405615</u> DOURO 17 KW PORTA VIDRO – EAN 05600990408104

- 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 EDIFÍCI 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

<u>Solzaima, SA</u> <u>Rua dos Outarelos, №111</u> 3750-362 Belazaima do Chão — 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 prodoto | 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 harmoisée | Standard armonizatta

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 INDUSTRIE SERVICE GMBH - TÜV Rheinland Group

NB: 2456

<u>CEIS</u> NB: 1722

<u>K15032015T1</u> <u>CEE-0257/19-1 Rv1</u>

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

Características essenciais Características esenciales Essencial characterístics Caractéristiques essentielles Caratterístiche 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 incêndios Fire safety Sécurité incendie Sicurezza antincendio	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 CEE-0257/19-1 Rv1	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 produtos de combustión Emission of combustion products Emission des produits de	OK. Caudal térmico nominal Caudal térmico nominale Nominal heat output Le débit calorifique nominal Nominal heat output Flusso termico nominale -CO:0,0162% OK. Caudal térmico reduzido Flujo	Caudal térmico nominal Caudal térmico nominale Nominal heat output Le débit calorifique nominal Nominal heat output Flusso termico nominale – CO<0,04%
combustion Emissione dei prodotti di combustione	térmico reducido Reduced thermal flow Flux thermique réduit Flusso termico ridotto - CO: 0,0200%	reducido Reduced thermal flow Flux thermique réduit Flusso termico ridotto – CO<0,06%
Libertação de substâncias perigosas Emisión de sustâncias peligrosas Release of dangerous substances Dégagement de substances Rilascio di sostanze pericolose	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 CEE-0257/19-1 Rv1	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 superficie Temperatura de la superficie Surface temperature La température de surface Temperatura superficiale	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 CEE-0257/19-1 RV1	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 eléctrica Seguridad eléctrica Electrical safety Sécurité électrique sicurezza elettrica	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 CEE-0257/19-1 Rv1	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 5.9 (EN14785)

	OK. De acordo com relatório de ensaio	
Aptidão para ser limpo Capacidad para ser limpiado Ability to be cleaned Possibilité d'être nettoyé Capacità di essere puliti	De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 CEE-0257/19-1 Rv1	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	OK. 126,51 °C	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 mecânica Mechanical strength résistance Resistenza meccanico	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 CEE-0257/19-1 Rv1 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 support di carico	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 4.2, 4.3(EN14785)
Potència térmica nominal Potencia térmica nominal Nominal Thermic output Puissance thérmique nominal Potenza térmica nominale	OK. 16,7 KW	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)
Potència térmica reduzida Potencia térmica reducida Reduced Thermic output Puissance thérmique réduite Potenza térmica ridotta	OK. 5,1 KW	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	OK. 90,85 %	≥ 75% para potència térmica nominal de potencia térmica nominal for rated termal input Pour puissance thermique nominale di potenza termica nominale
L'efficacité énergétique Efficienza energetica	OK. 93,80 %	≥ 70% para potência térmica reduzida la reducción térmica to reduced termal à la réduction thermique di potenza térmica ridotto
Durabilidade Durabilidad Durability Durabilité Durabilità	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 CEE-0257/19-1 RV1	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 4.2 (EN14785)

10. Distância mínima a materiais combustíveis (laterais/frente/topo/posterior) | Distancia mínima a materiales combustibles (laterales/frente/topo/trasero) | Minimum distance to combustible materials (side/front/top/back) | Distance minimale aux matériaux combustibles (côte/avanta/haut/arrière) | Distanza mínima da materiali combustibili (lato/anteriore/top/posteriore)

(500 mm / 1500 mm / 1000 mm / 300 mm)

11. 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 funcionamento 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 Nuno Sequeira (Director Geral | CEO) Belazaima do Chão, 15/06/2020

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

Nº DD-002

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

<u>Douro 23 kW – EAN 05600990401297</u> Douro 23 kW porta em Vidro – EAN 05600990402966

- 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

 <u>AQUECIMENTO DE EDIFÍCIOS DE HABITAÇÃO COM POSSIBILIDADE DE FORNECIMENTO DE ÁGUA QUENTE | CALEFACCIÓN DE</u>

 EDIFICIOS RESIDENCIALES COM POSIBILIDAD DE SUMINISTRO DE AGUA CALIENTE | HEATING OF RESIDENTIAL BUILDINGS WITH

POSSIBILITY OF HOT WATER SUPPLY | CHAUFFAGE DE BATIMENTS RESIDENTIELS AVEC LA POSSIBILITÉ DE L'APPROVISIONNEMENT EN

EAU CHAUDE | RISCALDAMENTO DEGLI EDIFICI RESIDENZIALI CON POSSIBILITÀ DI ACQUA CALDA

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 DOS OUTARELOS, Nº111

3750-362 BELAZAIMA DO CHÃO - 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 prodoto | 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 harmoisée | Standard armonizatta

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 INDUSTRIE SERVICE GMBH - TÜV Rheinland Group

NB: 2456

8. Relatório de ensaio | Informe de la prueba | Test report | Rapport d'essai | Rapporto di prova

**K15032015T1

Características essenciais Características esenciales Essencial characterístics Caractéristiques essentielles Caratterístiche essenziali Segurança contra incêndio Seguridad contra incêndios Fire safety Sécurité incendie Sicurezza antincendio	Desempenho Desempeño Performance Prestazione OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1	Especificações técnicas harmonizadas Especificaciones técnicas armonizadas Harmonized technical specifications Spécifications techniques harmonisées Specifiche tecniche armonizzate 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 produtos de combustión Emission of combustion products Emission des produits de combustion Emissione dei prodotti di combustione	OK. Caudal térmico nominal Caudal térmico nominale Nominal heat output Le débit calorifique nominal Nominal heat output Flusso termico nominale – CO:0,0195% OK. Caudal térmico reduzido Flujo térmico reducido Reduced thermal flow Flux thermique réduit Flusso termico ridotto –CO: 0,024%	Caudal térmico nominal Caudal térmico nominale Nominal heat output Le débit calorifique nominal Nominal heat output Flusso termico nominale -CO<0,04% Caudal térmico reduzido Flujo térmico reducido Reduced thermal flow Flux thermique réduit Flusso termico ridotto -CO<0,06%
Libertação de substâncias perigosas Emisión de sustâncias peligrosas Release of dangerous substances Dégagement de substances Rilascio di sostanze pericolose	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1	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 superficie Temperatura de la superficie Surface temperature La température de surface Temperatura superficiale	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1	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 eléctrica Seguridad eléctrica Electrical safety Sécurité électrique I sicurezza elettrica	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1	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	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i

Capacità di essere puliti	Secondo i rapporto di prova K15032015T1	requisiti 4.5, 4.6, 4.10, 4.12 (EN14785)
Pressão máxima de serviço Presión máxima de trabajo Maximum working pressure Pression de service maximale Pressione massima di esercizio	OK. 2,8 bar	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 4.2, 5.6,5.7 (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	ОК. 153•С	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 mecânica Mechanical strength résistance Resistenza meccanico	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1 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	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 4.2, 4.3(EN14785)
Potència térmica Potencia térmica Thermic output Puissance thérmique Potenza termico	OK. 23 KW	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	OK. 89,2%	 ≥ 75% para potência térmica nominal de potencia térmica nominal for rated termal input Pour puissance thermique nominale di potenza termica nominale
energetica	OK. 93,8%	≥ 70% para potência térmica

		reduzida la reducción térmica to reduced termal à la réduction thermique di potenza térmica ridotto
Durabilidade Durabilidad Durability Durabilité Durabilità	OK. De acordo com relatório de ensaio De acuerdo com informe de la prueba According to the test report Selons le rapport d'essai Secondo i rapporto di prova K15032015T1	De acordo com os requisitos De acuerdo con los requisitos According to the requirements Selons les exigences Secondo i requisiti 4.2 (EN14785)

^{9.} Distância mínima a materiais combustíveis (laterais/frente/topo/posterior) | Distancia mínima a materiales combustibles (laterales/frente/topo/trasero) | Minimum distance to combustible materials (side/front/top/back) | Distance minimale aux matériaux combustibles (côte/avanta/haut/arrière)/ Distanza mínima da materiali combustibili (lato/anteriore/top/posteriore)

(200 mm/1500 mm/1000 mm/200 mm)

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 funcionamento 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 Belazaima do Chão, 28/06/2013

Nuno Sequeira (Director Geral | CEO)