SOLZAIMA

SOLUÇÕES DE AQUECIMENTO A BIOMASSA

Instruction Manual

English

Insert Fires

SIENA | ORION | RIALTO | SIRIUS | URANO | IACO

BASIC | SLIM | DUO – BOX

BASIC | SLIM | DUO – BACK BOX

HERA | LOKI | JUNO | HEKA

Mod. 115 – J

Thank you for purchasing a SOLZAIMA unit.
Please read this manual carefully and keep it for future reference.

* All our products fulfil the requirements of the European Regulation (Reg UE 305/2011) and have been certified with the CE conformity trademark;

* SOLZAIMA disclaims responsibility for damages to the unit if it is installed by non-qualified personnel;

* SOLZAIMA disclaims responsibility for damages to the unit if the rules for installation and use described in this manual are not followed;

* All local regulations, including those referring to national and European standards, should be complied with when installing the unit;

* Our Insert Fires have been tested according to standards EN 13229:2001 + EN 13229:2001/AC:2003 + EN 13229:2001/A1:2003 + EN 13229:2001/A2:2004 + EN 13229:2001/AC:2006 + EN 13229:2001/A2:2004/AC:2006;

* Technical support is normally provided by SOLZAIMA, except in exceptional cases to be determined by the installer or support technician;

* Whenever you need assistance, you should contact your unit's supplier or installer. You should provide its serial number, which is on the identification plate located on the left side of the ash drawer, as well as on the label on the back cover of this manual.

Contents

1. Technical Specifications.....5
2. Your unit..... 10
3. Components..... 13
4. Installation..... 14
4.1. Combustion Air and Gas Circulation.....14
4.2. Installation Location Requirements..... 16
4.3. Forced Ventilation.....17
4.4. Forced Ventilation (Double Sided Equipment)..... 19
4.5. Switches Ventilation Kit 3 and 4 Sides Frame..... 21
4.6. Switches Ventilation Kit Integral Frame.....24
5. Instructions for Use..... 27
5.1. Fuel.....27
5.2. Power.....28
5.3. Energy Efficiency and Performance Ratings..... 28
5.4. A First Use..... 29
5.5. Normal Use..... 29
5.6. Optional Accessories.....30
5.7. Additional Outlets..... 31
6. Safety.....31
7. Cleaning and Maintenance..... 32
8. Troubleshooting..... 33
9. End of Life..... 33
10. Sustainability..... 34
11. Glossary.....35
12. Warranty..... 37
13. Statement of Performance..... 44

Solzaima

Having first entered the market in 1978, we are a leading specialist company in the design and manufacture of biomass heating solutions, including insert, back boiler and free-standing fires.

As a market leader and specialist in the area in which we operate, we put a premium on the quality of our products to make sure that we satisfy our customers' needs.

Solzaima is certified in accordance with standards ISO9001:2015 (Quality Management) and ISO14001:2015 (Environment) and is well aware of its environmental obligations. In addition, we submit to a demanding testing regime in order to guarantee top quality and performance across our entire range of products, in terms of raw materials selection, control of the manufacturing process, and treatment of all the waste generated. All this to ensure your home is fitted with solid and reliable equipment.

1. Technical Specifications

Insert fires are designed to heat their surroundings and are perfect for those who already own a fireplace and intend on refurbishing it or simply making it more efficient and cost-effective - such is the case of wall-mounted fires or, as they are commonly known, "cassettes".

Our stores offer you a range of options to suit the design of your room. The Back Box and Box units come in Basic, Slim and Duo variants, so you can find the right model to blend harmoniously into its surroundings without any need for major alterations, as they do not insert into the wall.

*** Technical specifications across the range:**

* CE certified
* Average reloading time: ≤ 45 minutes
* Fuel: Dry firewood
* Voltage: 230 V ***(except Urano/Iaco, Basic/Slim/Duo - Box)***
* Frequency: 50 Hz ***(except Urano/Iaco, Basic/Slim/Duo - Box)***
* Power: 2x8,5 W ***(except Urano/Iaco, Basic/Slim/Duo - Box)***
* Type of Equipment: intermittent use

Table 1 - Technical Specifications for each Unit

	Siena		Orion		Rialto		Sirius		Urano	
Dimensions	**W**	**H**	**W**	**H**	**W**	**H**	**W**	**H**	**W**	**H**
Front (inches/mm)	27,6 703	26,6 678	31,6 803	34,5 678	35,5 903	26,6 678	35,5 903	26,6 678	27,6 703	23,3 593
Casing (inches/mm)	24,6 627	23,2 590	28,6 727	23,2 590	32,5 827	23,2 590	32,5 827	23,2 590	24,6 627	19,8 504
Total Depth (inches/mm)	16,7 / 425		18,2 / 462		18,2 / 462		24,5 / 624		16,7 / 425	
Flue Ø (inches/mm)	Ø 5,9 / 150 int.		Ø 7,0 / 180 int.		Ø 7,0 / 180 int.		Ø 7,8 / 200 int.		Ø 5,9 / 150 int.	
Rated output (kW)	7		9,5		11		16,5		7	
Efficiency (%)	71		71		71		75		71	
CO Emissions (13%O_2) (%)	0,20		0,20		0,37		0,26		0,20	
CO2 Emissions (%)	8,8		9,7		8,79		11,2		9,7	
Average combustion temperature (ºF/ºC)	802 / 428		703 / 373		599 / 315		696 / 369		802 / 428	
Combustion flow (g/s)	10		11		10		13		10	
Power output[1] (kW)	4,9 – 9,1		6,7 – 12,4		7,7 – 14,3		11,6 – 21,5		4,9 – 9,1	
Firewood consumption[2] (pounds/kg / h)	3,7 / 1,7 – 6,8 / 3,1		3,5 / 1,6 – 6,4 / 2,9		4 / 1,8 – 7,5 / 3,4		7,9 / 3,6–14,5 / 6,6		3,7 / 1,7 – 6,8 / 3,1	
Weight (pounds/kg)	172 / 78		200 / 91		220 / 100		268 / 122		147 / 67	
Maximum heated volume (m^3)	207		216		323		488		207	
Energy efficiency rating	Class 1		Class 1		Class 1		Class 1		Class 2	
Length Firewood (inches/mm)	15,7 / 400		19,6 / 500		19,6 / 500		19,6 / 500		15,7 / 400	
Depression (Pa)	12		12		12		12		12	
Chamber width (inches/mm)	19,6 / 500		23,6 / 600		27,5 / 700		27,5 / 700		19,6 / 500	

W – Width; **H** – Height

[1] Power output is calculated by taking into account a variation of ± 30% in relation to the rated output.
[2] Consumption of firewood, taking into account the range of power outputs.

			Box					
	Iaco		Basic		Slim		Duo	
Dimensions	With 4-sided frame (50 mm) **W**	**H**	**W**	**H**	**W**	**H**	**W**	**H**
Front (inches/mm)	31,6 803	23,3 593	33,4 850	36,6 933	33,4 850	37 942	66,9 1700	36,7 933
Casing (inches/mm)	28,6 727	19,8 504	---	---	---	---	---	---
Total Depth (inches/mm)	18,1 / 462		23,6 / 600		23,6 / 600		23,6 / 600	
Flue Ø (inches/mm)	Ø 7,0 / 180 int.		Ø 7,8 / 200 int.		Ø 7,8 / 200 int.		Ø 7,8 / 200 int.	
Rated output (kW)	9,8		10		10		10	
Efficiency (%)	68		75		75		75	
CO Emissions (13%O_2) (%)	0,20		0,26		0,26		0,26	
CO2 Emissions (%)	9,7		11,2		11,2		11,2	
Average combustion temperature (ºF/ºC)	703 / 373		696 / 369		696 / 369		696 / 369	
Combustion flow (g/s)	11		13		13		13	
Power output[3] (kW)	6,9 – 12,7		7 – 13		7 – 13		7 – 13	
Firewood consumption[4] (pounds/kg / h)	5,4 / 2,45 – 10,1 / 4,6		3,7 / 1,7–6,8 / 3,1		3,7 / 1,7–6,8 / 3,1		3,7 / 1,7–6,8 / 3,1	
Weight (pounds/kg)	176 / 81		317 / 144		337 / 153		383 / 174	
Maximum heated volume (m^3)	223		294		294		294	
Energy efficiency rating	Class 2		Class 1		Class 1		Class 1	
Length Firewood (inches/mm)	19,6 / 500		23,6 / 600		23,6 / 600		23,6 / 600	

[3] Power output is calculated by taking into account a variation of ± 30% in relation to the rated output.
[4] Consumption of firewood, taking into account the range of power outputs.

	Back Box					
	Basic		Slim		Duo	
Dimensions	**W**	**H**	**W**	**H**	**W**	**H**
Front (inches/mm)	33,4 850	40,5 1030	33,4 850	40,7 1036	66,9 1700	40,5 1030
Casing (inches/mm)	---	---	---	---	---	---
Total Depth (inches/mm)	16,9 / 430		16,9 / 430		16,9 / 430	
Flue Ø (inches/mm)	Ø 7,0 / 180 int.		Ø 7,0 / 180 int.		Ø 7,0 / 180 int.	
Rated output (kW)	11		11		11	
Efficiency (%)	71		71		71	
CO Emissions (13%O_2) (%)	0,37		0,37		0,37	
CO2 Emissions (%)	8,79		8,79		8,79	
Average combustion temperature (ºF/ºC)	599 / 315		599 / 315		599 / 315	
Combustion flow (g/s)	10		10		10	
Power output[5] (kW)	6,4 – 12		6,4 – 12		6,4 – 12	
Firewood consumption[6] (pounds/kg / h)	3,39 / 1,54 6,3 / 2,86		3,39 / 1,54 6,3 / 2,86		3,39 / 1,54 6,3 / 2,86	
Weight (pounds/kg)	279 / 127		286 / 130		337 / 153	
Maximum heated volume (m^3)	267		267		267	
Energy efficiency rating	Class 1		Class 1		Class 1	
Length Firewood (inches/mm)	23,6 / 600		23,6 / 600		23,6 / 600	

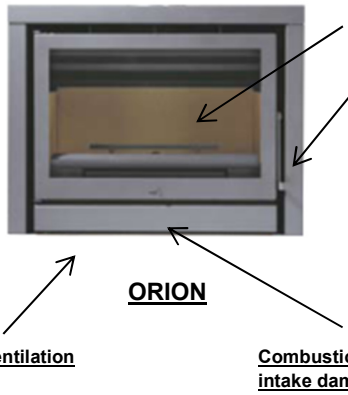
[5] Power output is calculated by taking into account a variation of ± 30% in relation to the rated output.
[6] Consumption of firewood, taking into account the range of power outputs.

	Hera		Loki		Juno		Heka	
Dimensions	**W**	**H**	**W**	**H**	**W**	**H**	**W**	**H**
Front (inches/mm)	27,6 703	26,6 678	31,6 803	26,6 678	35,5 903	26,6 678	35,5 903	26,6 678
Casing (inches/mm)	24,6 627	23,2 590	28,6 727	23,2 590	32,5 827	23,2 590	32,5 827	23,2 590
Total Depth (inches/mm)	17,0 / 432		18,5 / 469		18,5 / 469		24,9 / 634	
Flue Ø (inches/mm)	Ø 5,9 / 150 int.		Ø 7,0 / 180 int.		Ø 7,0 / 180 int.		Ø 7,8 / 200 int.	
Rated output (kW)	7		9,5		9,2		16,5	
Efficiency (%)	71		71		70		75	
CO Emissions (13%O_2) (%)	0,20		0,20		0,37		0,26	
CO2 Emissions (%)	8,8		9,7		8,79		11,2	
Average combustion temperature (ºF/ºC)	802 / 428		703 / 373		599 / 315		696 / 369	
Combustion flow (g/s)	10		11		10		13	
Power output[7] (kW)	4,9 – 9,1		6,7 – 12,4		7,7 – 14,3		11,6 – 21,5	
Firewood consumption[8] (pounds/kg / h)	3,7 / 1,7 – 6,8 / 3,1		3,5 / 1,6 – 6,4 / 2,9		4 / 1,8–7,5 / 3,4		7,9 / 3,6–14,5 / 6,6	
Weight (pounds/kg)	172 / 78		198 / 90		222 / 101		271 / 123	
Maximum heated volume (m^3)	207		216		323		488	
Energy efficiency rating	Class 1		Class 1		Class 1		Class 1	
Length Firewood (inches/mm)	17,5 / 400		19,6 / 500		19,6 / 500		19,6 / 500	
Depression (Pa)	12		12		12		12	
Chamber width (inches/mm)	19,6 / 500		23,6 / 600		27,5 / 700		27,5 / 700	

[7] Power output is calculated by taking into account a variation of ± 30% in relation to the rated output.
[8] Consumption of firewood, taking into account the range of power outputs.

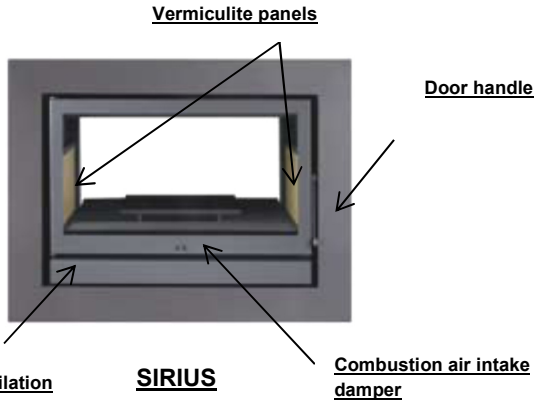
2. Your unit

Range with optional accessory – stainless steel or colour-matching frame, either 1,95in (5cm) or 3,9in (10 cm) wide



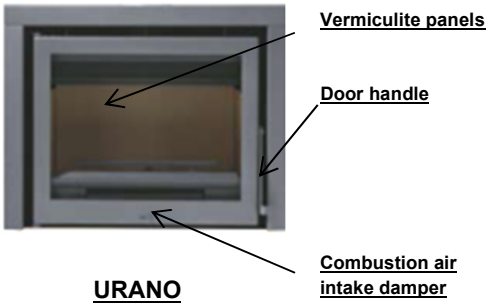
ORION

ORION with STAINLESS STEEL FRAME



SIRIUS

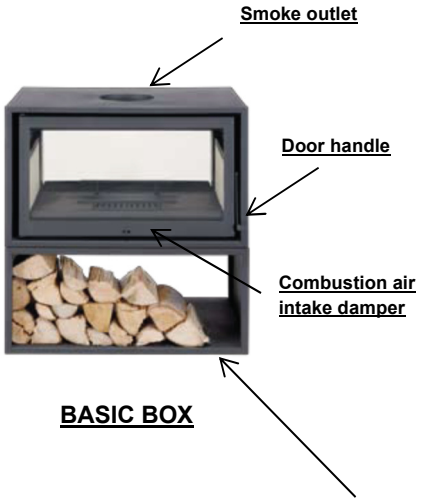
SIRIUS with STAINLESS STEEL FRAME



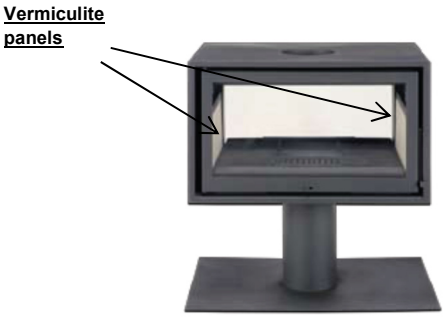
URANO

URANO with STAINLESS STEEL FRAME

BOX Range



BASIC BOX



SLIM BOX

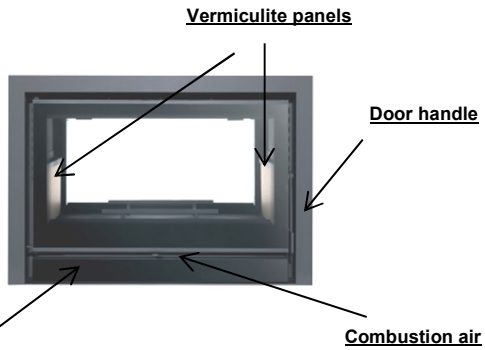
DUO BOX

BACK BOX Range

BASIC BACK BOX

BACK BOX also comes in SLIM BACK BOX and DUO BACK BOX variants.

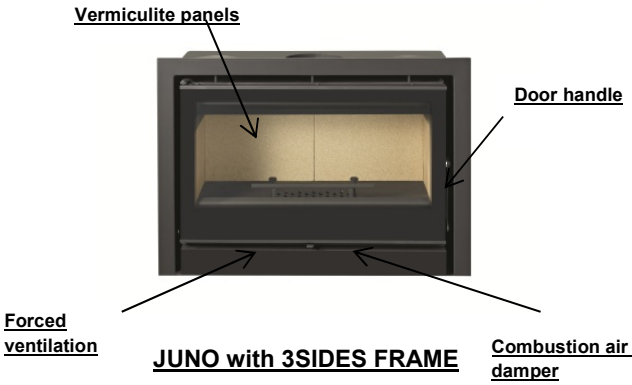
GLASS Range



HEKA with 3 SIDES FRAME

HEKA with 3SIDES FRAME

HEKA with INTEGRAL FRAME



JUNO with 3SIDES FRAME

JUNO with 4 SIDES FRAME

JUNO with INTEGRAL FRAME

Figure 1 - Orion, Sirius, Urano, Box, Back Box, Heka and Juno units

3. Components

* Our insert fires are built entirely of top-quality carbon steel plate, with a thickness of 0,118 inches (3 mm) and 0,19 inches (5 mm) in the combustion chamber and 0,019 inches (1,5mm) in the casing. Other parts, such as the door and ash drawer, use 0,019 inches (1,5 mm) and 0,078 inches (2 mm) plates;

* Heat-resistant ceramic glass. Can handle temperatures of up 1382°F (750°C) in continuous use;

* The combustion chamber is coated with a heat-resistant material known as vermiculite, a hydro silicate that can withstand temperatures in the order of 2012°F (1100°C). Its insulating properties allow the unit to take better advantage of the heat, improve efficiency and provide greater protection for the steel plate forming the combustion chamber walls, thus prolonging the life of the equipment.

* Heat-resistant paint for temperature peaks up to 1652°F (900°C) and operating temperatures in the order of 1112°F (600°C);

* The ash grate is made from a 0,19 inches (5mm) thick plate.

4. Installation

*Attention: **all** regulations and standards must be complied with when installing this stove.*

4.1. Combustion Air and Gas Circulation

* This type of stove should be installed in a well-ventilated area. Any air intake grilles should be placed in locations that are not liable to become blocked.

* Additional air inlets may be needed if the stove is used in simultaneous with other devises that require an air supply. The installer should evaluate the situation according to the overall air flow requirements.

* Use of this unit at the same time as other heating devices that require an air supply may necessitate additional air inlets. The installer should assess the situation in light of total air flow requirements.

* Under normal operating conditions, the combustion gas flow should create a draught of 12 Pa one metre above the throat of the flue. For proper installation, at least 78,7 inches (2 metres) of metal flue tube with the same diameter as the unit's smoke outlet should be fitted vertically above the unit. After this section, sections of tubing with a maximum angle of 45° may be used.

Figures 2 and 3 illustrate correct and incorrect angles for installing a bend.

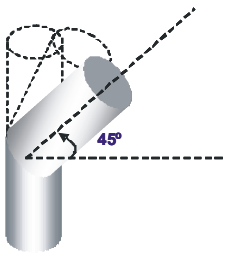


Figure 2 - Correct angle for bends

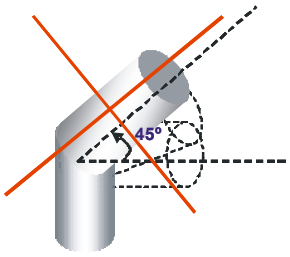
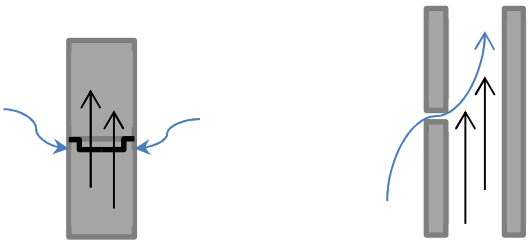


Figure 3 - Incorrect angle for bends

* A single-walled tube installed on the outside of a building results in the condensation of water vapour in the combustion gases. We therefore recommend the use of a double – walked insulated pipe.

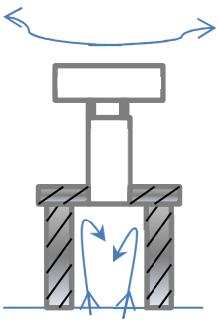
* The pipe joints must be tightly sealed so that possible cracks do not allow air to enter.

Correct sealing

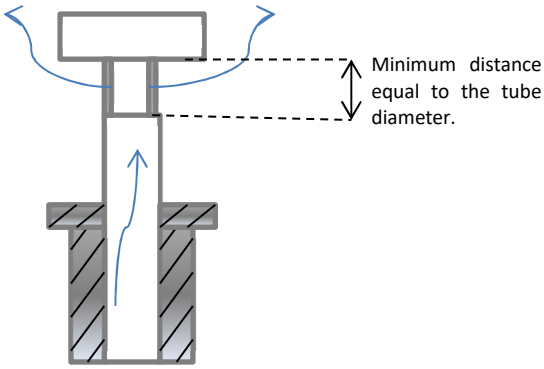


Incorrect sealing

* The pipe connections must not allow bottlenecks (reductions) and the internal walls must be perfectly smooth and free of obstacles; the hats must be placed in such a way that they do not hinder draught.

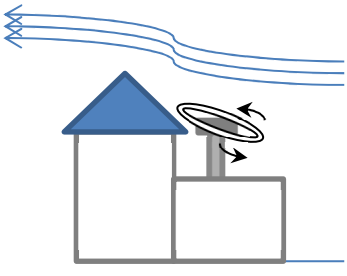


Incorrect

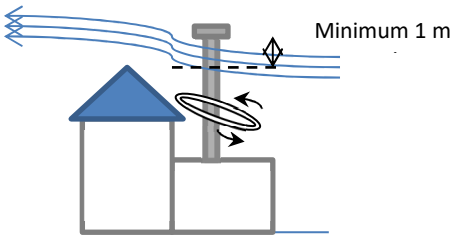


Correct

* The flue outlet should allow for good air circulation and be placed at least 39,37 inches (1 m) above the top of any obstacle located within a distance of 9,8 feet (3 m).



Incorrect



Correct

* The same flue should not be used for more than one unit or open fireplace. With shared chimneys, each flue should reach its outlet independently and these should be at the same level to ensure that the air circulation expels the gases.

* Brick chimneys should not be too wide, as the smoke will cool as it disperses, reducing the draft. In case of draft problems, a revolving chimney cowl can be installed.

4.2. Installation Location Requirements

* The unit should stand on a masonry hearth made of refractory bricks or another type of non-combustible material.

* It is recommended for insert fires to be insulated with insulating material with a thickness of 1,57 inches (40 mm) and a density of 154 pounds (70 kg/m^3) (except for the Back Box and Box ranges, in their Basic, Slim and Duo variants). All units should be installed at least 15,7 inches (400 mm) from combustible materials.

* Combustible materials should not be installed close to the walls of the unit.

* The floor on which the unit will stand must be able to support a permanent load of 2,2 pounds (1kg)/cm^2. If the load capacity of the floor is insufficient, a solid plate can be used to distribute the load over an area larger than the unit's base.

* The building's air intake grilles should not be obstructed.

* There should be a gap of around 0,19 inches (5 mm) between the unit and ornamental stones, to allow room for the metal to expand. These should also be installed so as to allow the unit to be removed without causing damage, if the need arises; This recommendation does not apply to the Back Box and Box ranges, in their Basic, Slim and Duo variants.

* Ensure that the opening in the wall is of an appropriate size to house the unit.

* Materials/objects placed in front of the unit, as well as behind in the case of the Box range, should be able to withstand the heat radiated from the glass of the door(s), so should not be combustible.

* Refractory cement or other refractory material should be applied on the chimney walls.

* The use of wood finishings may increase the risk of fire. Therefore, we recommend the use of adequate insulation or that wood not be used at all.

4.3. Forced Ventilation

* The devices that are equipped with forced ventilation incorporate one tangential fan with power of 38 W and a min and max air flow of about 60 m^3/h and 165 m^3/h respectively, connected in parallel with a thermostat, according to the following diagram.

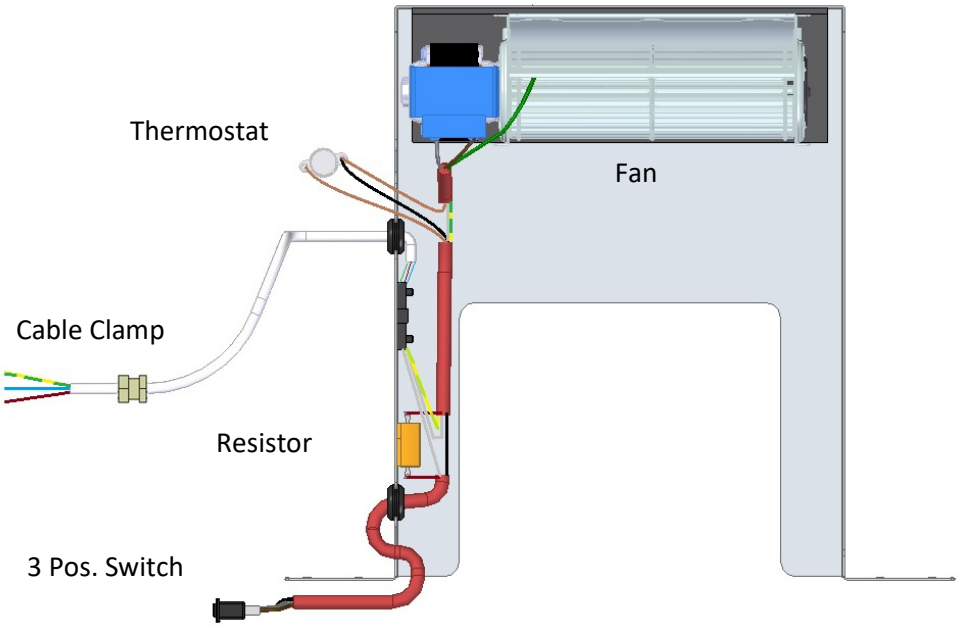


Figure 4 - Ventilation Kit Diagram

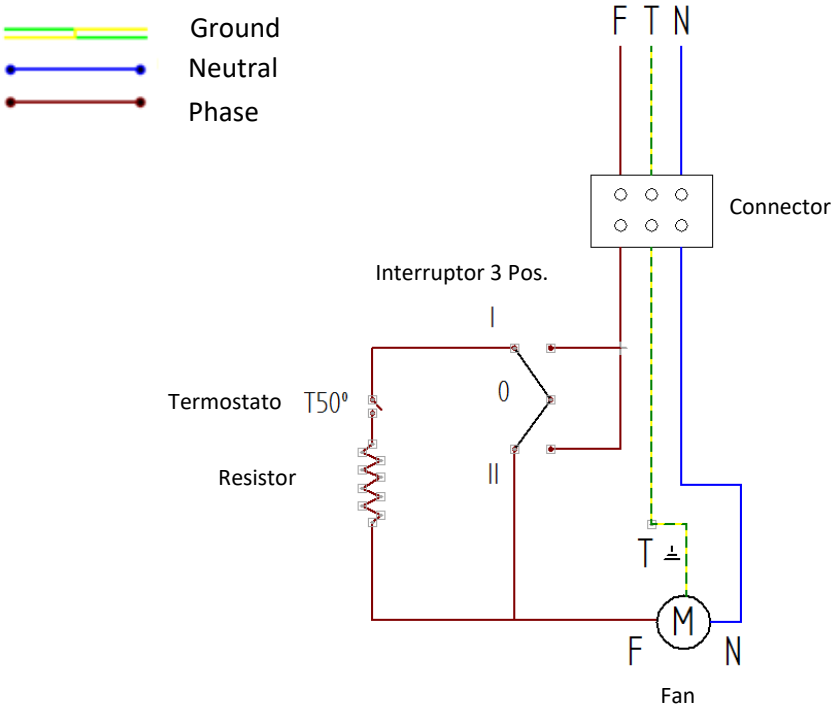


Figure 5 - Electrical diagram

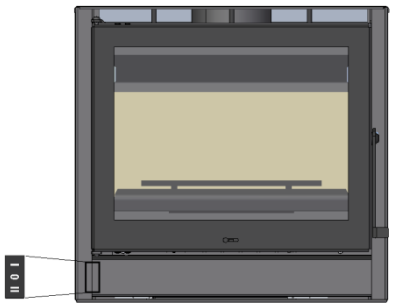


Figure 6 - Switch Location

Figure 7 - 3 Position Switch

Position I – Tangential fan automatically turns on with air flow of 60 m^3/h when the thermostat reaches 50 °C.

Position 0 – Tangential fan keeps inactive.

Position II – Tangential fan is activated manually with air flow of 165 m^3/h.

Attention: *all three wires in the power feed cable – ground, neutral and phase – should be connected. We take no responsibility for any damage resulting from non-compliance with this warning.*

* The electrical components should always be connected to the power supply.

* The cable used for the electrical connection should be silicon-coated and heat-resistant to 356°F (180°C). If the power feed cable is damaged, it should only be replaced by a qualified technician.

*** You should take care to <u>not</u> lay the cable where it may be crushed.**

* The electrical installation should incorporate means to switch the unit off, with a minimum separation of 0,118 inches (3 mm) between the contacts, pursuant to the applicable legislation in force[9].

[9] We recommend the use of a 30 mA differential switch and a 0.5 A circuit breaker for the unit's electrical installation.

4.4. Forced Ventilation (Double Sided Equipment)

* The devices that are equipped with forced ventilation incorporate two tangential fans with power of 38 W and a min and max air flow of about 60 m^3/h and 165 m^3/h respectively, connected in parallel with a thermostat, according to the following diagram.

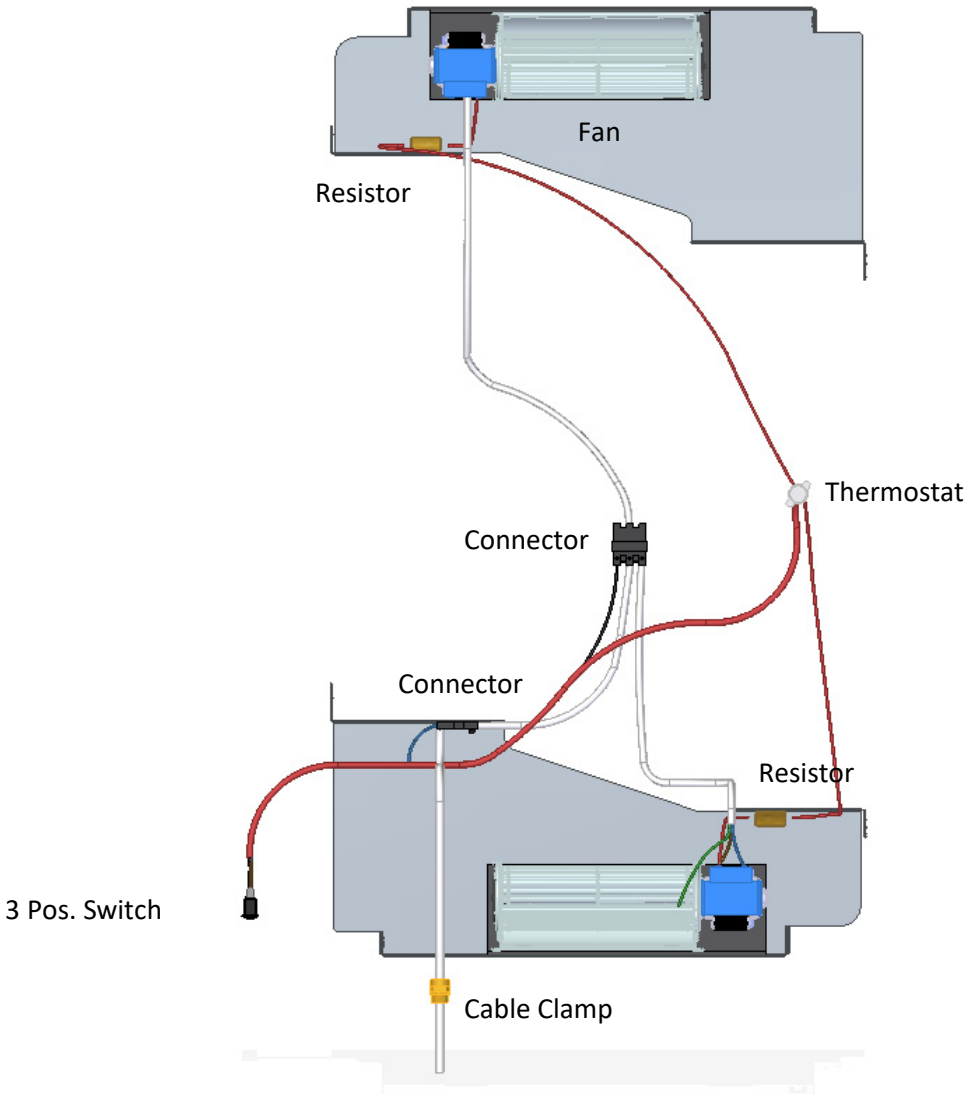


Figure 8 - Ventilation Kit Diagram

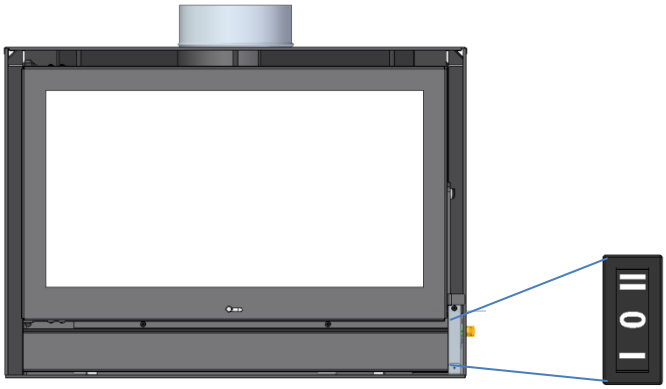
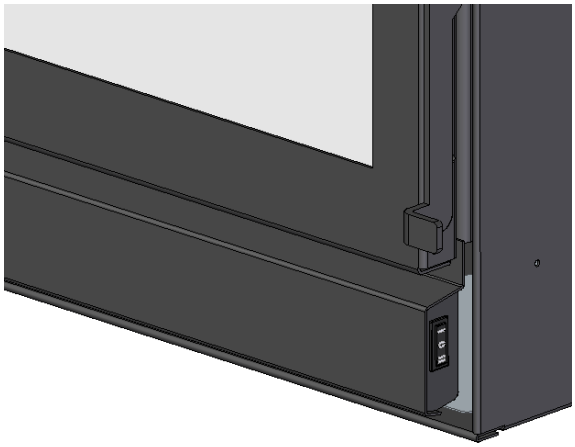


Figure 9 - Switch Location



Position I – Tangential fans automatically turns on with air flow of 60 m^3/h when the thermostat reaches 50 °C.

Position 0 – Tangential fans keeps inactive.

Position II – Tangential fans are activated manually with air flow of 165 m^3/h.

Figure 10 - 3 Position Switch

Attention: *all three wires in the power feed cable – ground, neutral and phase – should be connected. We take no responsibility for any damage resulting from non-compliance with this warning.*

* The electrical components should always be connected to the power supply.

* The cable used for the electrical connection should be silicon-coated and heat-resistant to 356°F (180°C). If the power feed cable is damaged, it should only be replaced by a qualified technician.

*** You should take care to not lay the cable where it may be crushed.**

* The electrical installation should incorporate means to switch the unit off, with a minimum separation of 0,118 inches (3 mm) between the contacts, pursuant to the applicable legislation in force[10].

[10] We recommend the use of a 30 mA differential switch and a 0.5 A circuit breaker for the unit's electrical installation.

4.5. Switches Ventilation Kit 3 and 4 Sides Frame

* For models Hera, Loki, Juno e Heka follow these steps:

1º - Open the door, as shown in the following figure.

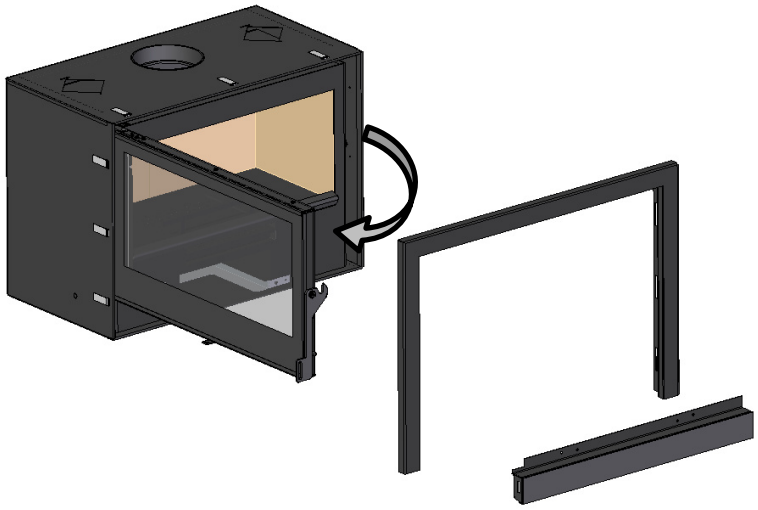


Figure 11 - Door opening

2º - Remove switch **A** from terminals **B** according to Figure 12.

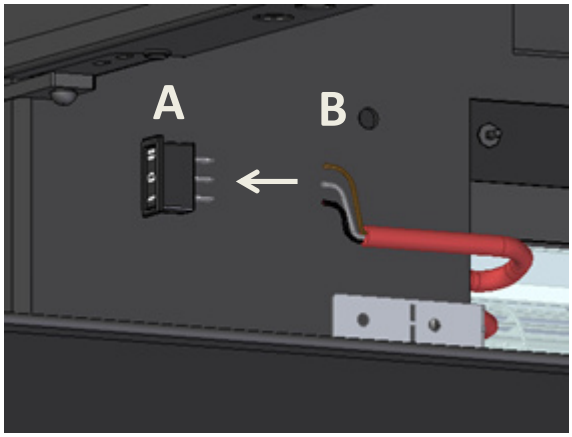
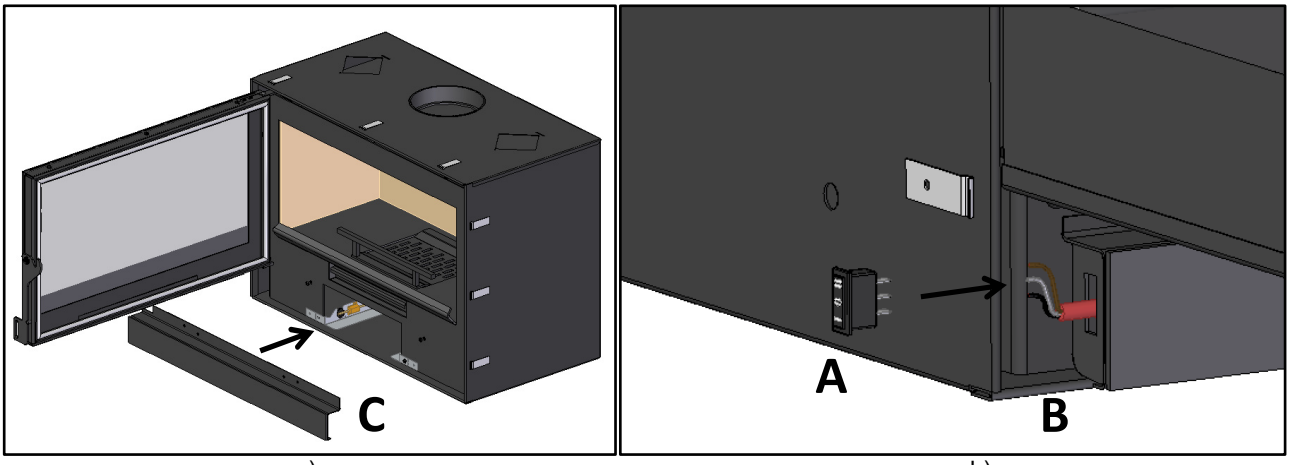


Figure 12 - Switch release

3º - Move part **C** closer to the equipment (Figure 13a) and insert the red lead into the hole in the part, as shown in Figure 13b.

4º - Connect switch **A** to terminals **B** according to Figure 14.



a) b)

Figure 13 - a) Workpiece approach; b) Passing the cable through the workpiece

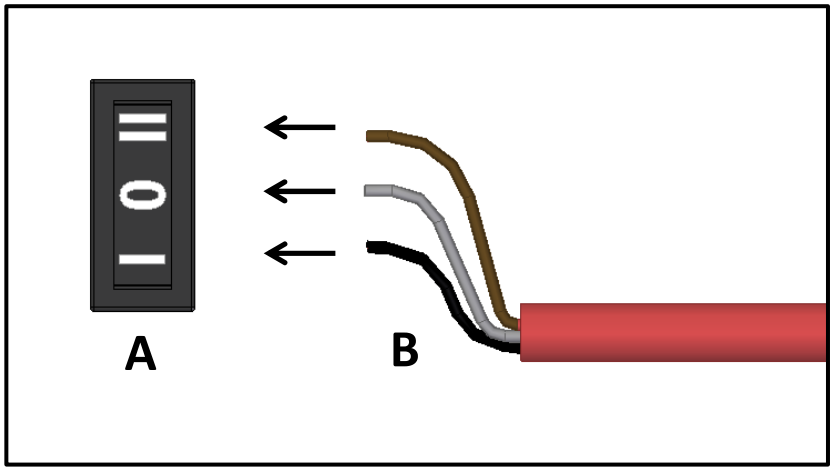


Figure 14 - Switch / terminal connection

5º- Insert switch **A** into the hole in the part (Figure 15).

6º- Attach the frame to the tabs **C** (Figure 16).

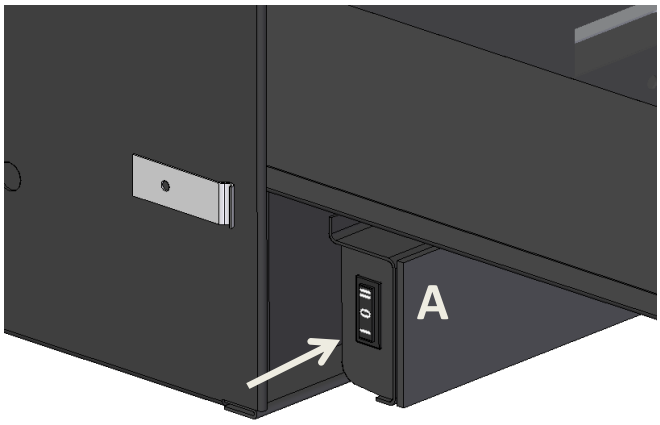


Figure 15 - Switch attachment

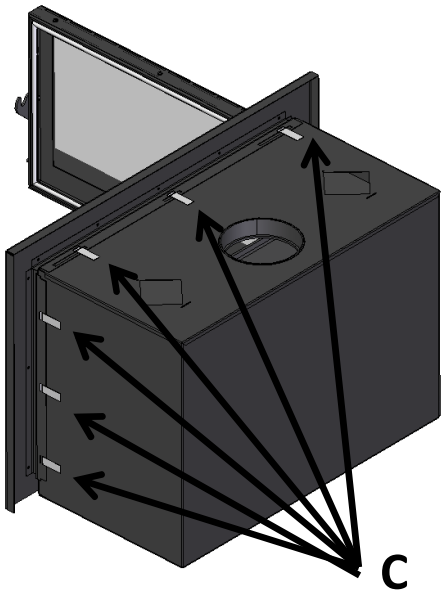


Figure 16 - Frame attachment

7º- Screw in the screws D to secure the part (Figure 17).

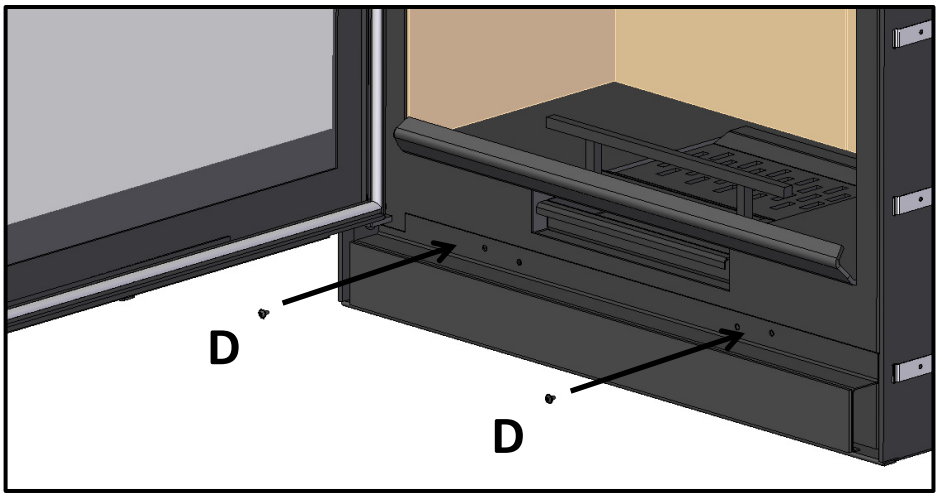


Figure 17 - Screw attachment

The updated version will take effect starting from the following serial numbers:

Hera: 02-15-00162 Juno: 02-15-00409

Loki: 02-15-00299 Heka: 02-16-00208

4.6. Switches Ventilation Kit Integral Frame

* For models Hera, Loki, Juno e Heka follow these steps:

1º - Open the door, as shown in the following figure.

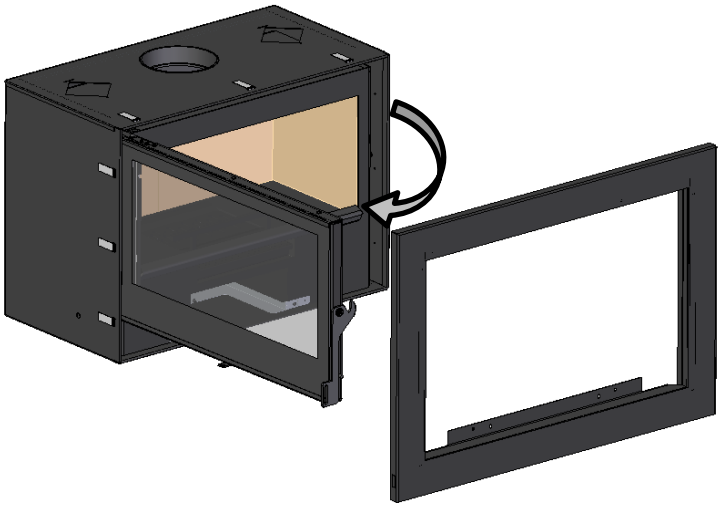


Figure 18 - Door opening

2º - Remove switch **A** from terminals **B** according to Figure 19.

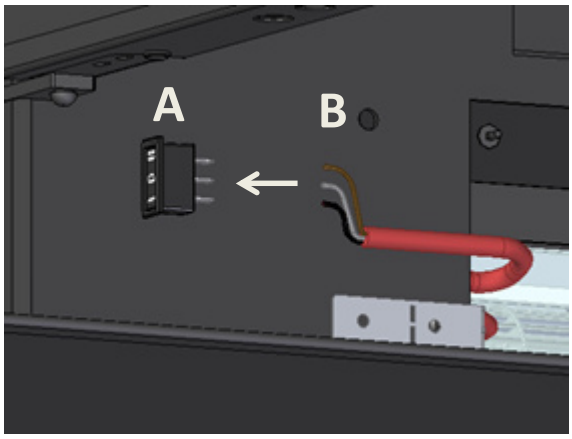
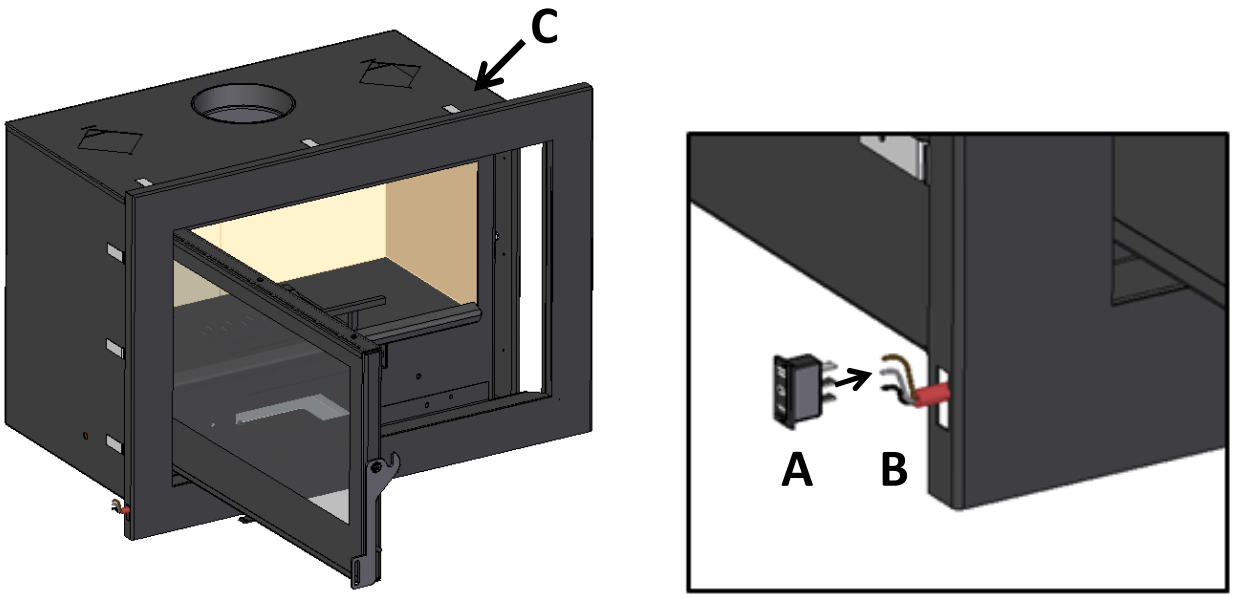


Figure 19 - Switch release

3º - Bring the frame closer to the equipment without fitting into the **C** slots (Figure 20a) and insert the red cable into the hole in the frame, as shown in Figure 20b.

4º - Connect switch **A** to terminals **B** according to Figure 21.



a) b)

Figure 20 - a) Frame approach; b) Passing the cable through the frame

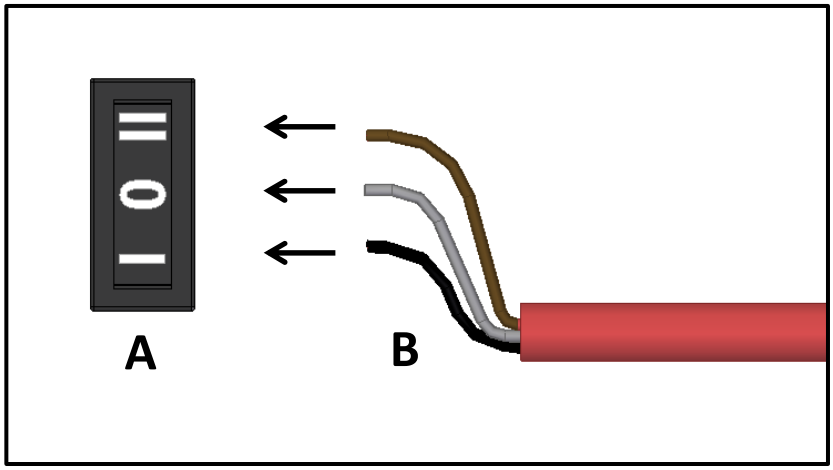


Figure 21 - Switch / terminal connection

5º- Insert switch **A** into the frame hole (Figure 22).

6º- Attach the frame to the tabs **C** (Figure 23).

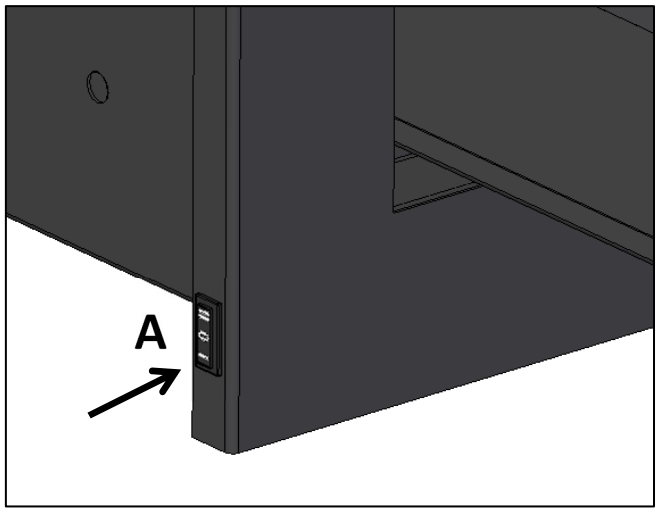


Figure 22 - Switch attachment

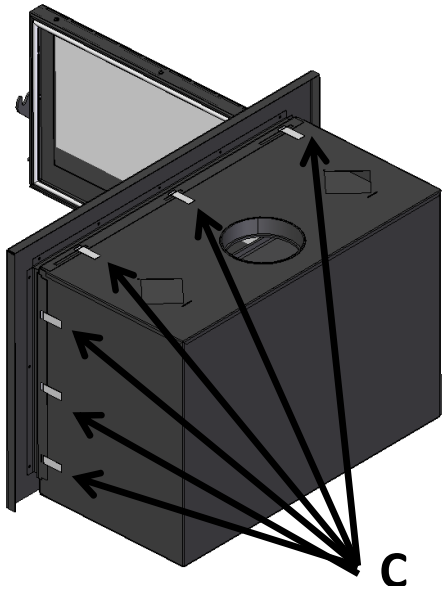


Figure 23 - Frame attachment

7º- Screw in the screws **D** to secure the frame (Figure 24).

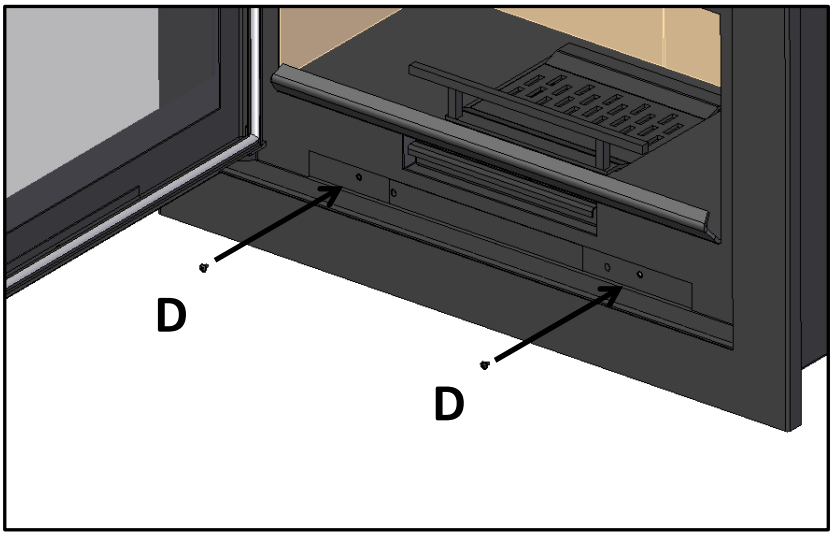


Figure 24 - Screw attachment

The updated version will take effect starting from the following serial numbers:

Hera: 02-15-00162 Juno: 02-15-00409

Loki: 02-15-00299 Heka: 02-16-00208

5. Instructions for Use

*Attention: **all** regulations and standards must be complied with when installing this unit.*

5.1. Fuel

* Only firewood should be used in this type of unit. It may not be used as an incinerator, nor should other materials such as coal, painted wood, varnishes, thinners, liquid fuels, glues or plastics be used. Also avoid burning common combustible materials such as cardboard and straw.

* The firewood should have a low water content (less than 20%) in order to ensure efficient combustion and avoid creosote build-up in the smoke duct and on the glass.

* See Table 2, which lists some of the types of wood that can be used in these units.

Table 2 - List of types of firewood that may be used in SOLZAIMA fires, their geographical distribution and calorific value/reactions

Common Name	Scientific Name	Distribution	Characteristics				
			Smoke	Heat	Lighting	Combustion Speed	Hardness
Pine	Pinus	Europe, except Finland; Northern Sweden and Norway.	Little	High	Easy	Fast	Soft
Cork Oak (+)	Quercus suber	Southern Europe	Little	Very High	Easy	Regular	Hard
Eucalyptus	Eucalyptus	Mediterranean Region	Lot	Regular	Difficult	Slow	Hard
Holm Oak (+)	Quercus ilex	Southern Europe	Little	Very High	Difficult	Slow	Hard
Olive tree	Olea	Mediterranean Region	Little	Very High	Difficult	Slow	Hard
Oak	Quercus	*Across Europe*	Little	High	Difficult	Slow	Hard
Ash	Fraxinus	*Across Europe*	Regular	High	Difficult	Slow	Hard
Birch	Bétula	*Across Europe*	Little	Very High	Easy	Fast	Soft
Beech	Fagus	*Europe, except Iberian Peninsula and Northern Europe, including United Kingdom.*	Little	High	Difficult	Slow	Hard
Elm	Ulmos	*Across Europe*	Regular	High	Difficult	Slow	Hard
Maple	Acer	*Across Europe*	Little	Regular	Regular	Slow	Soft
Poplar	Populus	*Across Europe*	Little	High	Easy	Fast	Soft
Chestnut	Castanea	*Across Europe*	Regular	High	Difficult	Slow	Hard

(+): greatest commercial availability

5.2. Power

* The power of your unit indicates its heating capacity, i.e. the energy your unit transfers from the firewood to your home (usually measured in kW) and is directly related to the amount of firewood that you place in it.

* The rated output is the measure of a standard load of firewood when tested in laboratories during a certain amount of time.

* The power output is a manufacturer's recommendation from tests to the equipment with firewood loads within a reasonable operation range. This power output range will present different firewood consumptions per hour.

5.3. Energy Efficiency and Performance Ratings

* Implementing solutions that seek to achieve greater energy efficiency allows for substantial reductions in energy needs, and thus reduces our current dependence on fossil fuels and other non-renewable sources of energy.

* Energy efficiency enables you to make large savings from both an economic and an environmental point of view.

* As a result of Solzaima's commitment towards the equipment's efficiency, most of our products are classified as efficiency class 1, i.e., with an efficiency rate equal to or greater than 70%.

* A 70% efficiency rate means that 70% of the energy contained in the firewood is used to warm your home or, in other words, you are able to produce the same amount of energy with much less firewood.

EFICIENCY RATING*	EFICIENCY RATE* (fire door closed)
1	≥ 70 %
2	≥ 60% < 70 %
3	≥ 50% < 60 %
4	≥ 30% < 50 %

* In accordance with EC classification standards for insert fires.

A Solzaima 5kW stove with an efficiency rate of 75%, i.e. efficiency class 1, will consume approximately 3,5 pounds (1,6 kg) of firewood per hour to warm a 389 sq. ft room (35 m^2).

Typically, a traditional fireplace has an efficiency rate of approximately 10%, which means it will consume about 26,5 pounds (12 kg) of firewood to produce the same 5kw necessary to warm the same 389 sq. ft room (35 m^2).

FIREWOOD CONSUMED IN ONE HOUR TO WARM APPROXIMATELY 389 SQ FT (35 m^2) WITH A 5kW UNIT

A traditional fireplace with an efficiency rate of 10% consumes 26,5 pounds (12 kg) of firewood

A fireplace equipped with a simple fire (class 4) and providing an efficiency rate of 30% consumes 8,8 pounds (4 kg) of firewood

A fire with an efficiency rate of 50% (class 3) consumes 5,3 pounds (2,4 kg) of firewood

A Solzaima fire with an efficiency rate of 75% (class 1) consumes only 3,5 pounds (1,6 kg) of firewood

5.4. A First Use

* Ask the installer to light the unit to ensure that all is functioning correctly.

* The stove's paint is cured by the heat when it is first used, which may give rise to additional smoke. If this happens, you should ventilate the room by opening external windows and doors.

5.5. Normal Use

a) Open the combustion air regulator on the door;

b) Place some pine cones (preferably) on the ash grate;

c) Place some kindling wood on top, piled horizontally;

d) The lighting period is over when the unit has reached a constant temperature. You should then regulate the combustion air intake.

* You should check that there is sufficient ventilation in the room where the stove is installed, otherwise it will not work properly. For this reason, you should check if there are any other heating devices which consume air during operation (e.g. gas-fired equipment, braziers, etc). We recommend against using these devices all at once.

* The air for combustion is drawn from the surrounding room, consuming oxygen. You should check that ventilation grilles and other devices for allowing air to enter from outside remain unobstructed.

* You should only open the door during reloading. Normal conditions of use require the door to remain closed.

* Reload before the previous load has burnt completely, in order to make it easier for the combustion to continue.

* When reloading with firewood, open the door slightly and wait a little while to allow a good draft, and only then open the door completely.

* Use of the stove is not recommended when weather conditions are so bad that the draught is seriously affected (particularly when there are very strong winds).

5.6. Optional Accessories

* The stove is supplied with three/four frame elements or a full frame and accompanying components to attach them to the wall.

* The Sirius, Siena, Orion, Rialto, Urano and Iaco models offer a choice of frame designs to best suit the room where the unit is to be installed.

* The following frames are available:

a) stainless steel, either 1,95 in (5 cm) or 3,9in (10 cm) wide;
b) full colour-matching frame, either 1,95 in (5 cm) or 3,9 in (10 cm) wide;
c) 3 or 4 separate colour-matching frame sides.

5.7. Additional Outlets

* There are 2 outlets (each 3,9 inches (100 mm) in diameter) on the top surface of the unit, which may be used by removing the covers and adapting ducts to direct the warm air to other rooms; this does not apply to the Box and Back Box ranges, in their Basic, Slim and Duo variants.

* If the warm air duct always runs upwards, there is no need for a forced system. If it is for distributing the heat, you should install an aspirator to force the air to circulate. In this case, it should be installed as plumb over the unit as possible, so the thermostat can detect the rising heat immediately.

* An air outlet grille should be placed in each room and all the ducts should be well insulated.

* If you are interested in this form of heating, we recommend you contact a specialised installer.

6. Safety

* The ventilators should always be connected to the power supply.

*** You should take care to not lay the cable where it may be crushed.**

* The exposed metal parts reach high temperatures - 212°F (100°C) on the door and 140°F (60°C) on the frame. The door handle **does not** reach temperatures above 113°F (45°C). Do not touch the hotter areas.

* You should use a glove or other protection if you have to touch the unit when it is in operation.

* In case of **fire in the flue, immediately close the door of the unit and the combustion air intake damper;**

* If there is a power cut, resulting in the ventilators cutting out when the unit is in operation, close the combustion air intake and do not load the unit with any more firewood. Keep the door closed.

7. Cleaning and Maintenance

* You should remove ash from the drawer on a regular basis (after the unit is switched off), so that the combustion air can enter through the ash grate unobstructed.

* The window should be cleaned with a suitable product, by following the instructions for use and not allowing the product to come into contact with the sealing ring and painted metal parts, which could trigger oxidation. The sealing ring is glued, so should not be moistened with water or cleaning products. If it becomes detached, it can be reattached with contact glue after cleaning the groove with fine sandpaper.

* We advise you to clean the flue and flue throat (at the exit of the unit) at least once a year, removing the baffle plate to do so.

* If you do not use the unit for a prolonged period, check to make sure that the flue pipes are clear before lighting it.

* The stove should be cleaned using a dry cloth.

8. Troubleshooting

Problem	Solution
Glass gets dirty	. Check moisture of firewood . Increase burn intensity by opening the combustion air intake regulator slightly
Excessive draft	. Close the combustion air intake damper . Contact the installer
Weak draft, causing smoke to be expelled into the room	. Check that the flue is clear of obstructions . Clean the flue . There may be exceptional weather conditions
Weak fire	. Check moisture of firewood and opening of the combustion air damper . Check entry of air into the room
Ventilation stopped working	. Check possible obstruction of ventilators . Check and/or reconnect power supply . The stove may not be hot enough to make the ventilators switch on
Ventilation working but flow is weak	. Clean all dust, ash or other residue that may have accumulated in the ventilator grilles
Problems associated with the weather	. Contact the installer

9. End of Life

* Around 90% of the materials used in the manufacture of these units is recyclable, thus helping to reduce environmental impact and contributing to the sustainable development of the planet.

* End-of-life units should be taken to licensed waste operators. We advise you to contact your local council for collection.

10. Sustainability

* Solzaima designs solutions and equipment "moved" by biomass as their 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 cares about being up to date with and assessing the existing forest area while efficiently responding to energetic demands, with a constant watch on biodiversity and natural wealth, critical aspects to the quality of life in our planet.

* SOLZAIMA is a member of the **Sociedade Ponto Verde**, which manages waste packaging from products placed on the market by member companies; as such, the packaging that comes with your unit (i.e. plastic and cardboard) can be taken to your nearest recycling point.

* SOLZAIMA also participates in the **Amb3E** project, responsible for collecting waste electrical and electronic equipment (WEEE); as such, end-of-life heating units with forced ventilation systems must be taken to an appropriate WEEE processing facility. When disassembling your end-of-life unit, keep its electrical components to be delivered at your nearest WEEE collection point.

11. Glossary

* **Ampere (A):** SI unit of measurement of electric current
* **bar:** unit of pressure equal to exactly 100 000 Pa. This pressure is very close to standard atmospheric pressure.
* **cal (calorie):** equal to the amount of heat required to increase the temperature of one gram of water by one degree centigrade.
* **Groove:** housing for the sealing ring.
* **cm (centimetres):** unit of measurement.
* **CO (carbon monoxide):** Lightly flammable, colourless, odourless and very dangerous gas, due to its toxicity.
* **CO2 (carbon dioxide):** Gas needed by plants on the one hand for photosynthesis, and emitted into the atmosphere on the other, contributing to the greenhouse effect.
* **Combustion:** a process that releases energy. Combustion is basically a chemical reaction that requires three things in order to take place: fuel, oxidant and ignition temperature.
* **Oxidant:** chemical substance that feeds combustion (essentially oxygen) and is essential for it to take place.
* **Fuel:** anything that can undergo combustion, in this case wood.
* **Creosote:** chemical compound created by combustion. This compound is sometimes deposited on the glass and flue of an insert fire.
* **Circuit breaker:** Electromechanical device that protects a given electrical appliance.
* **Energy Efficiency:** capacity to generate large quantities of heat with the least amount of energy possible, causing the least environmental impact and reducing the energy budget.
* **CO Emissions:** emission of carbon monoxide gas into the atmosphere.
* **CO Emissions (13% O_2):** carbon monoxide content corrected for 13% of O_2.
* **Differential Switch:** protects people and property against earthing failures, preventing electric shocks and fires.
* **kcal (Kilocalorie):** multiple unit of measurement of calories. Equivalent to 1000 calories.
* **kW (Kilowatt):** Unit of measurement equal to 1000 watts.
* **mm (millimetres):** unit of measurement.
* **mA (milliampere):** unit of measurement of electric current.
* **Pa (Pascal):** standard SI unit of pressure and tension. This unit is named after Blaise Pascal, eminent French mathematician, physicist and philosopher.
* **Calorific Value:** also known as specific combustion heat. Represents the quantity of heat released when a certain quantity of fuel is completely burned. Calorific value is expressed in calories (or kilocalories) per unit of weight of fuel.
* **Rated output:** Electric power consumed by an energy source. Measured in watts.

* **Nominal heat output:** heating capacity, i.e. the heat energy the unit transfers from energy present in the firewood – measured for a standard load of firewood over a given period of time.

* **Power output:** a manufacturer's recommendation from tests on the equipment with firewood loads within a reasonable operating range. This power output range will present different firewood consumptions per hour.

* **Plumb:** vertically above the installation.

* **Efficiency:** expressed as a percentage of “useful energy” that can be extracted from a given system, taking into account the “total energy” of the fuel used.

* **Ignition temperature:** temperature above which the fuel can enter into combustion.

* **Heat-resistant:** resistant to high temperatures and thermal shock.

* **Ceramic glass:** Highly resistant ceramic material produced through controlled crystallisation of vitreous materials. Used widely in industrial applications.

* **W (Watt):** SI unit of power.

12. Warranty

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 warranty. It must be registered up to 3 months after the date of invoice, or, 100 hours of work of the product (whichever occurs first);

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

3.8 All requests for assistance must be submitted to the 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 warranty intervention does not renew the warranty period of the Product. The rights arising from the Warranty are not transferable to the purchaser of the Product.

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

3.17 The Warranty is valid for the Products and equipment sold by 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 aware 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 location. Also excluded from the Warranty 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 warranty 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 i.e., weekend and holiday interventions because they are special interventions not included in the Guarantee coverage and which therefore have an additional cost, will be carried out exclusively on request expressed by the Buyer and upon the availability of the Producer.

5. Warranty Inclusion

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

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

10. Replaced Parts under the of Scope Technical Service

From the moment they are removed from the equipment, the Parts used are considered as waste. 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 cannot keep them in their possession.

11. Administrative expenses

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

12. Competent court

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

13. Statement of Performance

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

Nº DD-011

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

SIENA– EAN 05600990400078 HERA– EAN 05600990400221

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

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

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

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

SOLZAIMA, SA

RUA 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 13229

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

CATIM – CENTRO DE APOIO TECNOLÓGICO À INDÚSTRIA METALOMECÂNICA

NB: 0464

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

20074000358110

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

Características essenciais | Características esenciales | Essencial characteristics | Caractéristiques essentielles | Caratteristiche essenziali	Desempenho | Desempeño | Performance | Prestazione	Especificações técnicas harmonizadas | Especificaciones técnicas armonizadas | Harmonized technical specifications | Spécifications techniques harmonisées | Specifiche tecniche armonizzate
Segurança contra incêndio | Seguridad contra 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 **20074000358110**	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, 4.15, 5.2, 5.5, 5.6, 5.9, 5.10, 6.11 (EN13229)
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: 0,37%**	Caudal térmico nominal | Caudal térmico nominale | Nominal heat output | Le débit calorifique nominal | Nominal heat output | Flusso termico nominale –**CO < 1,0%**
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 **20074000358110**	De acordo com o Anexo ZA.1 (EN13229) | De acuerdo con lo Anexo ZA.1 (EN13229) | According to the Annex ZA.1 (EN13229) | Selons le Annexe ZA.1 (EN13229) | Secondo l'allegato ZA.1 (EN13229)
Temperatura de superfície | Temperatura de la superfície | 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 **20074000358110**	De acordo com os requisitos | De acuerdo con los requisitos | According to the requirements | Selons les exigences | Secondo i requisiti 4.2, 4.13, 5.2, 5.3, 5.6, 5.10 (EN13229)
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 **20074000358110**	De acordo com os requisitos | De acuerdo con los requisitos | According to the requirements | Selons les exigences | Secondo i requisiti 5.9 (EN13229)
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 **20074000358110** 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 (EN13229)
Rendimento energético | Eficiencia energética | Energy efficiency | L'efficacité énergétique | Efficienza energetica	**OK.** **71%**	**≥ 30%** para potência térmica nominal | de potencia térmica nominal | for rated termal input | Pour puissance thermique nominale | di potenza termica nominale

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)

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

Nº DD-012

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

ORION– EAN 05600990400085 LOKI– EAN 05600990400207

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

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

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

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

SOLZAIMA, SA

RUA 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 13229

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

CEIS – CENTRO DE ENSAYOS INOVACION Y SERVICIOS
NB: 1722

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

LEE/035/08

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

Características essenciais | Características esenciales | Essencial characteristics | Caractéristiques essentielles | Caratteristiche essenziali	Desempenho | Desempeño | Performance | Prestazione	Especificações técnicas harmonizadas | Especificaciones técnicas armonizadas |Harmonized technical specifications | Spécifications techniques harmonisées | Specifiche tecniche armonizzate
Segurança contra incêndio|Seguridad contra 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 **LEE/035/08**	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, 4.15, 5.2, 5.5, 5.6, 5.9, 5.10, 6.11 (EN13229)
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: 0,37%**	Caudal térmico nominal|Caudal térmico nominale|Nominal heat output|Le débit calorifique nominal|Nominal heat output | Flusso termico nominale –**CO < 1,0%**
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 **LEE/035/08**	De acordo com o Anexo ZA.1 (EN13229)|De acuerdo con lo Anexo ZA.1 (EN13229)|According to the Annex ZA.1 (EN13229)|Selons le Annexe ZA.1 (EN13229)| Secondo l'allegato ZA.1 (EN13229)
Temperatura de superfície|Temperatura de la superfície|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 **LEE/035/08**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences| Secondo i requisiti 4.2, 4.13, 5.2, 5.3, 5.6, 5.10 (EN13229)
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 **LEE/035/08**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences |Secondo i requisiti 5.9 (EN13229)
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 **LEE/035/08** 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 (EN13229)
Rendimento energético|Eficiencia energética|Energy efficiency|L'efficacité énergétique |Efficienza energetica	**OK.** **70%**	**≥ 30%** para potência térmica nominal|de potencia térmica nominal|for rated termal input|Pour puissance thermique nominale|di potenza termica nominale

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)

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

Nº DD-013

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

RIALTO – EAN 05600990400092 *JUNO – EAN 05600990400214*

BACK BOX BASIC – EAN 05600990400245 *BACK BOX DUO – EAN 05600990400269*

BACK BOX SLIM – EAN 05600990400252

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

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

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

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

SOLZAIMA, SA

RUA 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 13229

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

CEIS – CENTRO DE ENSAYOS INOVACION Y SERVICIOS

NB: 1722

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

LEE/045/08

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

Características essenciais | Características esenciales | Essencial characteristics | Caractéristiques essentielles | Caratteristiche essenziali	**Desempenho | Desempeño | Performance | Prestazione**	**Especificações técnicas harmonizadas | Especificaciones técnicas armonizadas |Harmonized technical specifications | Spécifications techniques harmonisées | Specifiche tecniche armonizzate**
Segurança contra incêndio|Seguridad contra 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 **LEE/045/08**	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, 4.15, 5.2, 5.5, 5.6, 5.9, 5.10, 6.11 (EN13229)
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: 0,37%**	Caudal térmico nominal|Caudal térmico nominale|Nominal heat output|Le débit calorifique nominal|Nominal heat output | Flusso termico nominale –**CO < 1,0%**
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 **LEE/045/08**	De acordo com o Anexo ZA.1 (EN13229)|De acuerdo con lo Anexo ZA.1 (EN13229)|According to the Annex ZA.1 (EN13229)|Selons le Annexe ZA.1 (EN13229)| Secondo l'allegato ZA.1 (EN13229)
Temperatura de superfície|Temperatura de la superfície|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 **LEE/045/08**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences| Secondo i requisiti 4.2, 4.13, 5.2, 5.3, 5.6, 5.10 (EN13229)
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 **LEE/045/08**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences |Secondo i requisiti 5.9 (EN13229)
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 **LEE/045/08** 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 (EN13229)
Rendimento energético|Eficiencia energética|Energy efficiency|L'efficacité énergétique |Efficienza energetica	**OK.** **70%**	**≥ 30%** para potência térmica nominal|de potencia térmica nominal|for rated termal input|Pour puissance thermique nominale|di potenza termica nominale

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)

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

Nº DD-014

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

SIRIUS – EAN 05600990400108 *HEKA – EAN 05600990400191*

BASIC BOX – EAN 05600990400382 *DUO BOX – EAN 05600990400405*

SLIM BOX – EAN 05600990400399

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

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

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

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

SOLZAIMA, SA

RUA 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 13229

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

CEIS – CENTRO DE ENSAYOS INOVACION Y SERVICIOS
NB: 1722

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

LEE/051/10

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

Características essenciais | Características esenciales | Essencial characteristics | Caractéristiques essentielles | Caratteristiche essenziali	Desempenho | Desempeño | Performance | Prestazione	Especificações técnicas harmonizadas | Especificaciones técnicas armonizadas | Harmonized technical specifications | Spécifications techniques harmonisées | Specifiche tecniche armonizzate
Segurança contra incêndio|Seguridad contra 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 **LEE/051/10**	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, 4.15, 5.2, 5.5, 5.6, 5.9, 5.10, 6.11 (EN13229)
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: 0,26%**	Caudal térmico nominal|Caudal térmico nominale|Nominal heat output|Le débit calorifique nominal|Nominal heat output | Flusso termico nominale –**CO < 1,0%**
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 **LEE/051/10**	De acordo com o Anexo ZA.1 (EN13229)|De acuerdo con lo Anexo ZA.1 (EN13229)|According to the Annex ZA.1 (EN13229)|Selons le Annexe ZA.1 (EN13229)| Secondo l'allegato ZA.1 (EN13229)
Temperatura de superfície|Temperatura de la superfície|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 **LEE/051/10**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences| Secondo i requisiti 4.2, 4.13, 5.2, 5.3, 5.6, 5.10 (EN13229)
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 **LEE/051/10**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences |Secondo i requisiti 5.9 (EN13229)
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 **LEE/051/10** 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 (EN13229)
Rendimento energético|Eficiencia energética|Energy efficiency|L'efficacité énergétique |Efficienza energetica	**OK.** **75%**	**≥ 30%** para potência térmica nominal|de potencia térmica nominal|for rated termal input|Pour puissance thermique nominale|di potenza termica nominale

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)

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

Nº DD-015

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

URANO – EAN 05600990400344

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

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

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

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

SOLZAIMA, SA

RUA 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 13229

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

CATIM – CENTR DE APOIO TECNOLÓGICO À INDUSTRIA METALOMECÂNICA

NB: 0464

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

20074000358110

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

Características essenciais | Características esenciales | Essencial characteristics | Caractéristiques essentielles | Caratteristiche essenziali	Desempenho | Desempeño | Performance | Prestazione	Especificações técnicas harmonizadas | Especificaciones técnicas armonizadas |Harmonized technical specifications | Spécifications techniques harmonisées | Specifiche tecniche armonizzate
Segurança contra incêndio|Seguridad contra 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 **20074000358110**	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, 4.15, 5.2, 5.5, 5.6, 5.9, 5.10, 6.11 (EN13229)
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: 0,20%**	Caudal térmico nominal|Caudal térmico nominale|Nominal heat output|Le débit calorifique nominal|Nominal heat output | Flusso termico nominale –**CO < 1,0%**
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 **20074000358110**	De acordo com o Anexo ZA.1 (EN13229)|De acuerdo con lo Anexo ZA.1 (EN13229)|According to the Annex ZA.1 (EN13229)|Selons le Annexe ZA.1 (EN13229)| Secondo l'allegato ZA.1 (EN13229)
Temperatura de superfície|Temperatura de la superfície|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 **20074000358110**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences| Secondo i requisiti 4.2, 4.13, 5.2, 5.3, 5.6, 5.10 (EN13229)
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 **20074000358110**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences |Secondo i requisiti 5.9 (EN13229)
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 **20074000358110** 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 (EN13229)
Rendimento energético|Eficiencia energética|Energy efficiency|L'efficacité énergétique |Efficienza energetica	**OK.** **68%**	**≥ 30%** para potência térmica nominal|de potencia térmica nominal|for rated termal input|Pour puissance thermique nominale|di potenza termica nominale

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)

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

Nº DD-016

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

IACO – EAN 05600990400351

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

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

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

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

SOLZAIMA, SA

RUA 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 13229

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

CEIS – CENTRO DE ENSAYOS INOVACION Y SERVICIOS
NB: 1722

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

LEE/035/08

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

Características essenciais | Características esenciales | Essencial characteristics | Caractéristiques essentielles | Caratteristiche essenziali	Desempenho | Desempeño | Performance | Prestazione	Especificações técnicas harmonizadas | Especificaciones técnicas armonizadas |Harmonized technical specifications | Spécifications techniques harmonisées | Specifiche tecniche armonizzate
Segurança contra incêndio|Seguridad contra 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 **LEE/035/08**	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, 4.15, 5.2, 5.5, 5.6, 5.9, 5.10, 6.11 (EN13229)
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: 0,20%**	Caudal térmico nominal|Caudal térmico nominale|Nominal heat output|Le débit calorifique nominal|Nominal heat output | Flusso termico nominale –**CO < 1,0%**
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 **LEE/035/08**	De acordo com o Anexo ZA.1 (EN13229)|De acuerdo con lo Anexo ZA.1 (EN13229)|According to the Annex ZA.1 (EN13229)|Selons le Annexe ZA.1 (EN13229)| Secondo l'allegato ZA.1 (EN13229)
Temperatura de superfície|Temperatura de la superfície|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 **LEE/035/08**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences| Secondo i requisiti 4.2, 4.13, 5.2, 5.3, 5.6, 5.10 (EN13229)
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 **LEE/035/08**	De acordo com os requisitos|De acuerdo con los requisitos|According to the requirements|Selons les exigences |Secondo i requisiti 5.9 (EN13229)
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 **LEE/035/08** 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 (EN13229)
Rendimento energético|Eficiencia energética|Energy efficiency|L'efficacité énergétique |Efficienza energetica	**OK.** **68%**	**≥ 30%** para potência térmica nominal|de potencia térmica nominal|for rated termal input|Pour puissance thermique nominale|di potenza termica nominale

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)

Please read this Instruction Manual carefully and keep it for future reference.

SOLZAIMA

SOLUÇÕES DE AQUECIMENTO A BIOMASSA

APPROVED PRODUCT