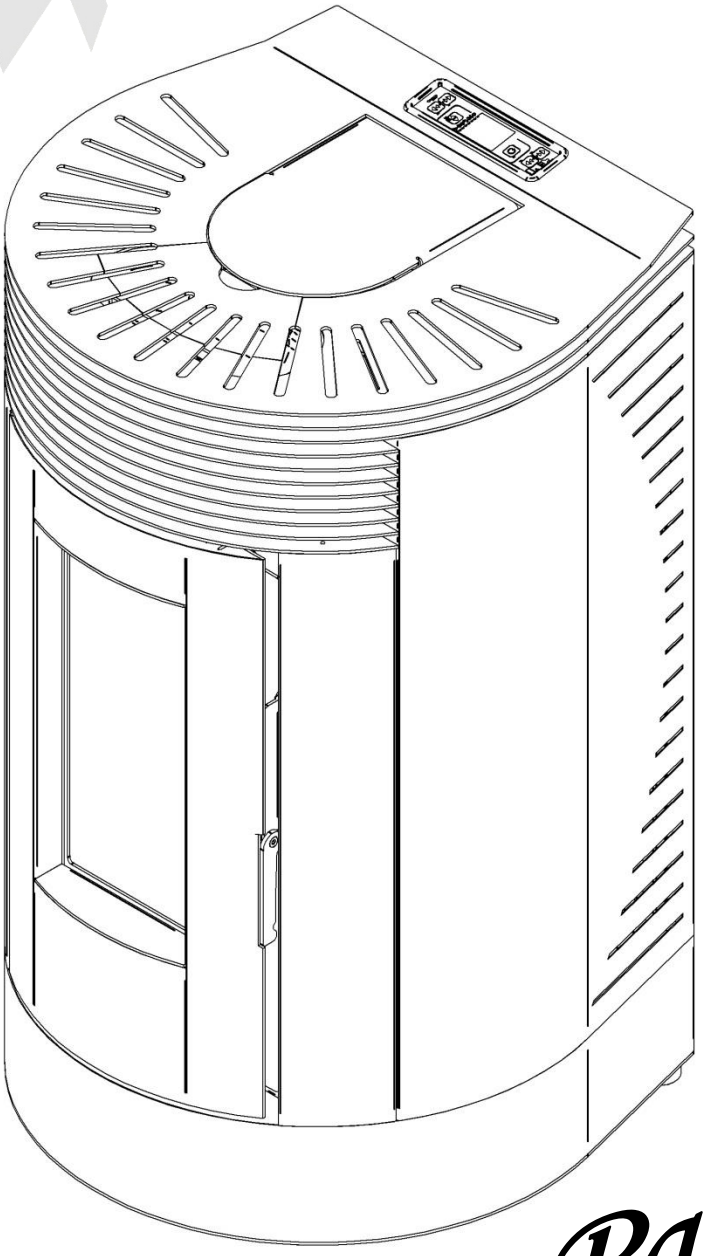
Use and maintenance manual for pellet stove



Pasubio

Euro Ajpi

English User Manual

Dear Customer

We thank you and we are honoured that you have chosen one of our products. **Please read this manual carefully**; in it you will find all the information and helpful advice for using the product with the maximum safety and efficiency.
The manual supplied with the stove should be guarded and in case of loss or destruction, it is necessary to request a copy from your dealer or from the company, specifying the serial number of the stove, on the back side.

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1 Misconduct

In this section, we will list some small rules to follow for the correct working of the stove and safety.
All the operations not considered in the manual and not authorized by a technician recommended by the company, must be considered dangerous. Otherwise, the ZF company does not assume any responsibility both civil and criminal.

Strictly forbidden

- Not observing the use and maintenance manual.
- Using the stove for any other use not provided (exclusively for heating).
- Touching the surfaces of the stove when it is hot.
- The use of the stove by children or unable people without assistance.
- The use of the stove by people who don't know the minimal safety regulations.
- The manual introduction of pellet into the brazier.
- Operating the stove with broken or not compliant parts (irregular flue, splintered glass, non-original spare parts, etc.)
- In case of firing failure, restarting the stove without first having emptied the brazier.
- In case of firing failure, restarting the stove without first having waited 10-15 minutes.
- Throwing away unburnt pellets (still burning), after having cleaned the brazier.
- Introducing pellets recycled from the combustion chamber or brazier.
- Neglecting stove cleaning (glass and flue included).
- Cleaning the stove with water (water could filter inside of the stove and damage its electric parts).

- Igniting the stove in case of any component failure.
- Exposing oneself for a long time directly to the hot air of the stove.
- Exposing animals, plants and any flammable thing to the air of the stove.
- Placing any kind of object on the stove.
- Drying clothes or objects on the stove
- Tamper with the parameters of the stove.
- Installing the stove in not specific conditions and rooms.
- Using the device as an incinerator and fuels other than those recommended.
- Using a quality of pellet that doesn't meet the regulations **DIN 51731**.
- Not executing the maintenance operations provided.
- Staying within 2 meters from the stove in case of firing failure for the first 10 minutes.
- Operating the stove with the door open.
- Touching the stove with bare hands.
- It is forbidden to turn on more devices simultaneously in the same room; installing multiple devices with forced ventilation can cause the malfunction of the stove.

2 Safety

- The installation of the stove, the flue, electrical connections, checking its operation, should always be carried out by authorized and qualified personnel.
- Install the stove in accordance with the regulations of the local area, region or state.
- For the proper use of the stove and electronic parts, you must follow the instructions in the user's manual.
- Use only pellets with a diameter of 6 mm regulations **DIN 51731**.
- Incorrect installation or poor maintenance (not in compliance with the provisions in this booklet of "Use and Maintenance") can cause damage to people and things. In this case, the company ZF is released from any civil or criminal responsibility.
- Before performing any operation, the user must have read and understood all the contents of this manual of "Use and Maintenance".
- Tampering and misuse of the stove can be dangerous for the user's safety. In these cases, the ZF Company declines any civil or criminal responsibility, resulting from damages to people and things.
- When the stove is in operation, most of the surfaces are very hot (glass, handles, tubes and shells); you must then use the appropriate protections for the contact.
- It is forbidden to operate the stove with broken glass, the door opened or any part broken (fans, motors, etc..).
- Before carrying out any cleaning or maintenance, disconnect the stove from the power supply with the power switch; after that, remove the cable on the back of the stove, check the cooling of the entire internal and external structure, and of the ash in the combustion chamber.
- In case of fire in the flue: switch off the stove, disconnect the power supply and never open the door of the stove. Call the authorities (fire department).
- The stove must be electrically powered by a system of earthing conductor, as provided by law **73/23 and 93/68 EEC**.

3 Warnings

- Turn the stove off in case of breakdown or malfunctioning.
- Never introduce pellets manually into the brazier.
- Make sure the brazier is empty before turning on the stove (even in case of previous firing failure).

- Every initiative or operation not considered in this manual must be considered dangerous. In this case, the ZF company does not assume any responsibility both civil and criminal.
- Do not clean the interior and exterior parts of the stove with water.
- Do not expose plants, animals, things and people to the hot air of the stove for too long.
- Install the stove in locations suitable for the prevention of fire and already prearranged for safety.
- The storage of the stove and the covering of all its parts (even those in ceramic) must take place in rooms without humidity and far from bad weather.
- Do not set the body of the stove directly on wood or flammable floors, in these cases always put an insulating material between the stove and the floor.
- The pellet stove is not an apparatus for cooking or heating up foods and drinks.
- Carry out all operations in maximum safety.
- Do not place any object on the stove.
- Do not dry any cloth, object, or being (animals, plants, etc.) on the stove.

4 Regulations and declaration of conformity

The ZF company states that the stove complies with the following directives and regulations for the CE marking European Directive:

2014/30/UE (EMCD Directive) and following amendments.
2014/35/UE (Directive on the safety of electrical equipment LVD) and following amendments.
2011/65/UE RoHS

European Standards: **EN 55014-1; EN 55014-2; EN 61000-3-2; EN 61000-3-3; EN 60335-1; EN 60335-2-102; EN 62233; EN 50581; EN 14785.**

For the installation and the use of the stove all the local and national and all European standards must be met.

5 Warranty

Warranty conditions

ZF s.r.l. located in Dino Fochesato Street n.1 Meledo of Sarego (VI) guarantees its products for 2 years from the date of purchase, for manufacturing or material defects. This warranty falls if the flaw of conformity is not reported within 2 months from the date of its detection.
ZF s.r.l. limits its responsibility to the supply of the stove, which has to be installed in accordance with the state-of-the-art, following the instructions contained in the manual supplied with the product and in accordance with the laws in force. The installation must be carried out by qualified staff and under the responsibility of the person who designates him, who will assume responsibility for the final installation and the consequent good operation of the installed product. ZF s.r.l. declines any responsibility in case of non-observance of these precautions. The installer will have to release a **Declaration of conformity** of the installation in accordance with the state-of-the-art, in accordance with the laws in force.

Examples of installation technicians:
- Authorized Service Centers technicians
- Technicians and companies associated Anfus (National Association Stove Fitting) (Italy)
- Technicians adherent to national school training plans Fuspa (Italy)
- Your trusted technicians (qualified thermotechnics)

Territorial expansion of the warranty: Italian territory

Validity of the warranty

The warranty is valid on condition that:

- The buyer sends within 8 days from the date of purchase the coupon in his possession completed in its entirety. The date of purchase must be validated by the possession of a valid tax record released by the seller

- The device is installed by qualified staff, in accordance with the laws in force and the instructions contained in the provided manual

- The device is used as illustrated in the provided manual

- The guarantee certificate has been filled in and signed by the costumer and validated by the dealer

- Presence of the document certifying warranty, filled in and accompanied with the tax record released by the dealer, to show to the ZF s.r.l. Technical Service Center in case of assistance

Revocation of the warranty

The warranty is not valid in the following cases:

- The above warranty terms have not been observed

- The installation is not carried out in full obedience of the laws in force and the instructions contained in the provided manual

- Non-maintenance or wrong maintenance of the product by the customer

- Presence of electrical and/or hydraulic systems not in accordance with the laws in force

- Damages caused by weather conditions, chemical, electrochemical agents, improper use of the product, natural calamities, modifications or tampering with the product, flaws of the electrical system or of the flue, use of non-original spare parts, sudden change in voltage or overloaded power supply or other causes not attributable to the product

- The combustion of materials not in accordance with the type and the quality indicated in the use and maintenance manual supplied with the stove.

- Damages caused during transport. We invite you to properly check your goods at the time of receipt. In case of anomalies, inform immediately the dealer and report everything in the transport document and in the copy which will remain in the possession of the carrier.

The warranty covers possible spare parts and the necessary labour for their substitution (with the exception of products installed outside the Italian territory).
In case of products installed outside the Italian territory only the Italian warranty is valid, therefore the local importers or distributors are not obliged to recognize warranty interventions on what has not been purchased through them. In these cases, the spare parts will be sent directly from our headquarter and the replacement and maintenance costs will be debited to the customer by the area technicians.

The ZF s.r.l. company is not responsible for possible damages caused, directly or indirectly, to people, things, animals due to a total or partial failure to comply with the rules contained in the use and maintenance manual supplied with the stove.

Limited warranty

Electric and electronic components, fans, motors and motherboard are not included in the warranty. The warranty covers these components for 12 months from the date of purchase.

Warranty exclusion

All components of the stove likely to wear out are excluded from the warranty and they are:

Gaskets	Ceramic/tempered glass	Upholstery and grills
Varnished details	Chromate/gilded	Satinized
Majolica	Handles	Electric cables
Vermiculite	Refractory material	Brazier

- Chromatic variations, crackles and slight dimensional differences of the parts in majolica are not contestable as they are all physical features of the materials not attributable to the manufacturing process

- The details of the installation for the production of sanitary water not furnished by ZF s.r.l. (for water products)

- Finally, all interventions carried out by qualified technicians aimed at the adjustment and setting of the product due to the type of combustible used or the typology of installation requested by the customer are excluded from the warranty

- In case of replacement of faulty components under warranty, any warranty extension won't be provided. Any type of reimbursement for the rest period of the machine won't be provided

- The warranty is valid only for the buyer and cannot be transferred to a third-party

Warranty interventions

The request for intervention must be submitted to the dealer within 2(two) months from the detection of the damage; the warranty intervention, according to the law, provides for the reparation of the product without any charge to the customer.

6 Responsibility

The ZF company refuses any responsibility whether civil or criminal, for any damage that may directly or indirectly result from non-compliance, partial or total, of the instructions contained in the booklet "manual of use and maintenance".

The ZF company refuses any responsibility whether civil or criminal, arising from the incorrect or improper use of the stove by the end-user, refuses any civil or criminal responsibility in the case of unauthorized repairs and the use of non-original spare parts, moreover, it is not liable for damages to the stove due to transport and does not recognize compensation for forced stopping of the stove.
The manufacturer disclaims any responsibility whether civil or criminal direct or indirect due to:

- Non-compliance with the instructions contained in the booklet
- Inadequate maintenance and cleaning
- Installation errors
- Non-compliance with safety regulations
- Installation by unqualified and untrained personnel
- Installation not in accordance with the regulations in force in the country
- Use of non-original spare parts
- Exceptional events (weather, power surges, strange places of installation)
- The ZF s.r.l. does not recognize any compensation for direct or indirect damages caused or depending on the product.

In the above cases the warranty falls.

7 Installation

Recommendations for the installer

The installation of the stove must be carried out by qualified technicians who have to install the stove in accordance with the European laws and the laws in force in the place, Region or State.

The stove must be electrically powered by a system in accordance with the regulation 72/23 and 93/68 CEE on the power grid.

The stove must be sized according to the space in which it is installed.

The stove must be positioned vertically.

The stove mustn’t be installed in bedrooms, bathrooms or where there is another heating system without a self-sufficient air flow (fireplace, etc.).

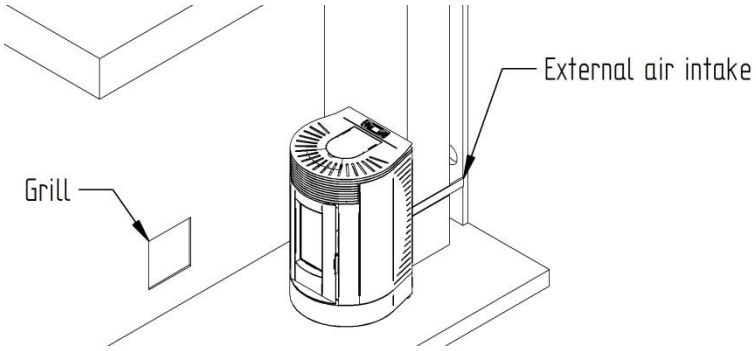
Spaces and distances

It is essential to check the space where the stove will operate for an optimal operation.

- The volume of the house or the working space mustn't be smaller than 40m³.

- There has to be a permanent opening of airflow to the outside of the place of the installation, minimum 800 cm², not obstruable and protected with a permanent grill, or the stove has to be connected to the outside by an air intake tube (as shown below), do not exceed 80 cm in length with 2 curves maximum.

- The air can be taken by the rooms contiguous to the room where the stove has been installed on condition that there are air intakes, not located in the bedroom, bathroom or where there are flammable materials.



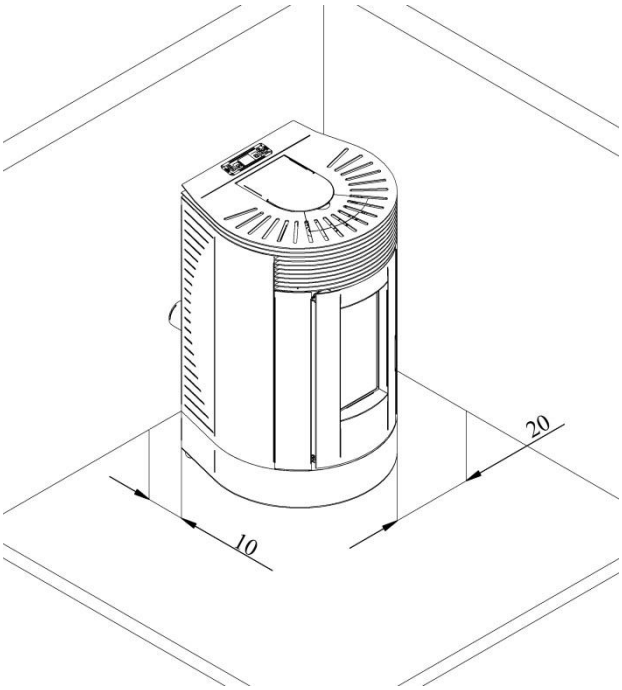
- If the stove is installed in a room with wooden or flammable floor, you must protect the floor by using (in addition to the anti-vibration feet provided) also an insulating slab, protruding at least 20 cm on the side and 40 cm on the front.

- In the space where the stove is placed, it is compulsory the presence of a suitable fumes evacuation system

- It is not compulsory to connect the air intake tube of the stove directly outside (see picture) but it is recommended for a better efficiency (energy-saving). In any case, it is necessary to ensure at least 50 m³/h of air. Grill 800 cm².

- The electrical system must be in accordance with the law; check the efficiency of the earthing circuit. The supply line must be of an appropriate section to the power of the device.

- When you place the stove in a room you must check that the walls are not flammable and that flammable materials such as curtains, wallpaper, etc. have not been applied on the walls. You must place the stove at a distance not less than 20 cm laterally and not less than 10 cm at the back. If there is an internal flue it's advisable to keep a distance of 10 cm between the flue and the wall.



- Do not place flammable materials at a distance less than 1 meter from the stove.

- We also recommend to keep out of the thermal radiation area, anyway at a distance of at least 1 m from the warming block, all types of combustible or flammable materials such as: trusses, wooden fittings, curtains, flammable liquids.

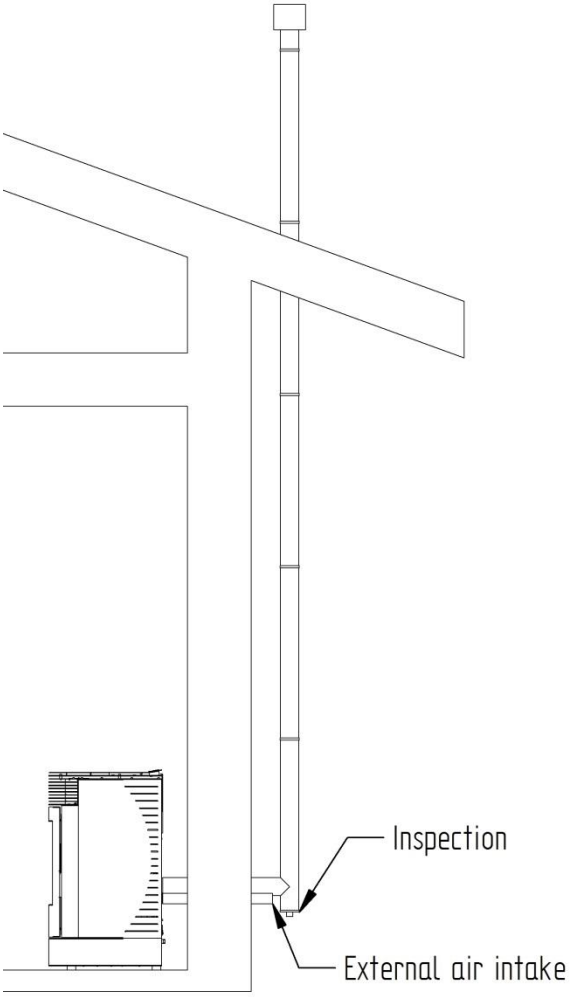
Flue

The flue of a pellet stove is a very important component because it affects the correct working of the stove.

The flue must be needed only for the stove and cannot be shared with other devices; you can't make fixed or movable openings to connect other air adduction pipes and pipes for plant-engineering use.

The flue must be provided with a chamber for the gathering of solid materials and possible condensations, placed under the entrance of the flue outlet duct, so that you can easily open it and inspect it from an air-tight small door.

The installer has to make sure that the opening do not cross flammable materials, or in the absence of alternative solutions, he has to use an insulating protection on the pipe (with wall junctions with a diameter of 13 cm at least, insulating the pipe with insulating materials 1,5-5 cm thick, with a suitable thermal conductivity), even though it passes near flammable materials (minimum distance 200 mm).



As for the assembly of the pipes you must always use pipes and junctions with hermetically sealed gaskets.

It's important that the curvature of 90° provides for a T junction with inspection; it is advisable to use curves of 45°.

Using nets or filters at the extremity of the flue or any extremity which could turn into a nest is forbidden. Use only extremity in accordance with the regulation.

The horizontal segments must have a minimum inclination of 3% upward.

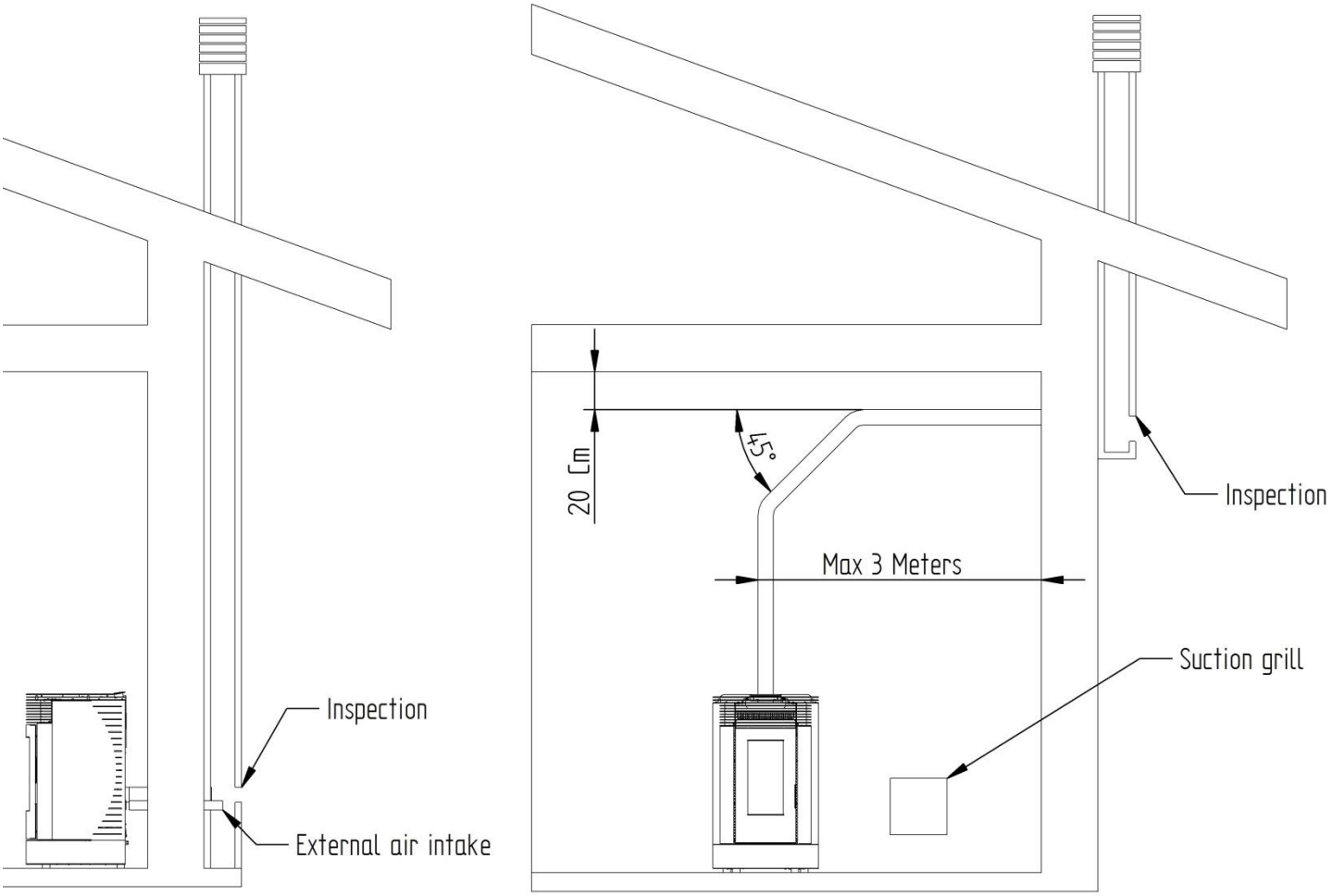
As for the connection of the flue, the horizontal segment must be minimum and you mustn't exceed 3 meters, the number of direction changes, including that as a result of the use of the T element, mustn't be bigger than 4, never exceed 6 m of pipes, use curves of 45° and obey the regulations **UNI 10683**, using pipes in accordance with the law.

Examples of connections with isolated and non-isolated external pipes

Connections that include the use of pipes not larger than 20 cm in diameter, which must have at the base an inspection system and a forced draught minimum 10 Pa. The internal section must be uniform, preferably circular; the sides of the pipe must be smooth as much as possible and without narrowings; the curves must be regular and without discontinuities; the pipes mustn't be subjected to deviations from the axis higher than 45°.

It is compulsory the installation of a windproof roof in accordance with the regulations. The T inspection, placed at the base, can also be placed inside the house (better if external).

NB: This system always guarantees the fumes evacuation, also in case of non-electric tension



Connection with multiple junctions

Connection that is exclusively done in cases of particular disadvantages in positioning. In this case, the horizontal section must have a minimum slope of 3% upwards and must not exceed 3 meters, the vertical section that goes from the stove to the second curve must be at least 1.5 meters long. The T inspection, at the base, can also be applied inside the house (preferably external). If there is a fireplace, it must have a preferably circular internal section; the square or rectangular sections must have rounded corners with a radius of at least 20mm, the rectangular sections, with a maximum ratio of 1.5 between the sides, must have a constant internal section, free and independent; at the base there must be an inspection hole. Always verify a minimum forced draught of 10Pa and follow the regulation **UNI 10683**.

NB: In case of obstruction of the pipe, due to damages, or birds' nest, the stove will stop (see the alarms section) and it will be necessary to clean or repair the pipe, and ventilate the room as quickly as possible, otherwise, it will saturate with smoke.

NB: The cleaning of the pipe should be done annually.

Chimney pot

The chimney pot must meet the following requirements:

- Have the section and the internal form equivalent to that of the flue.

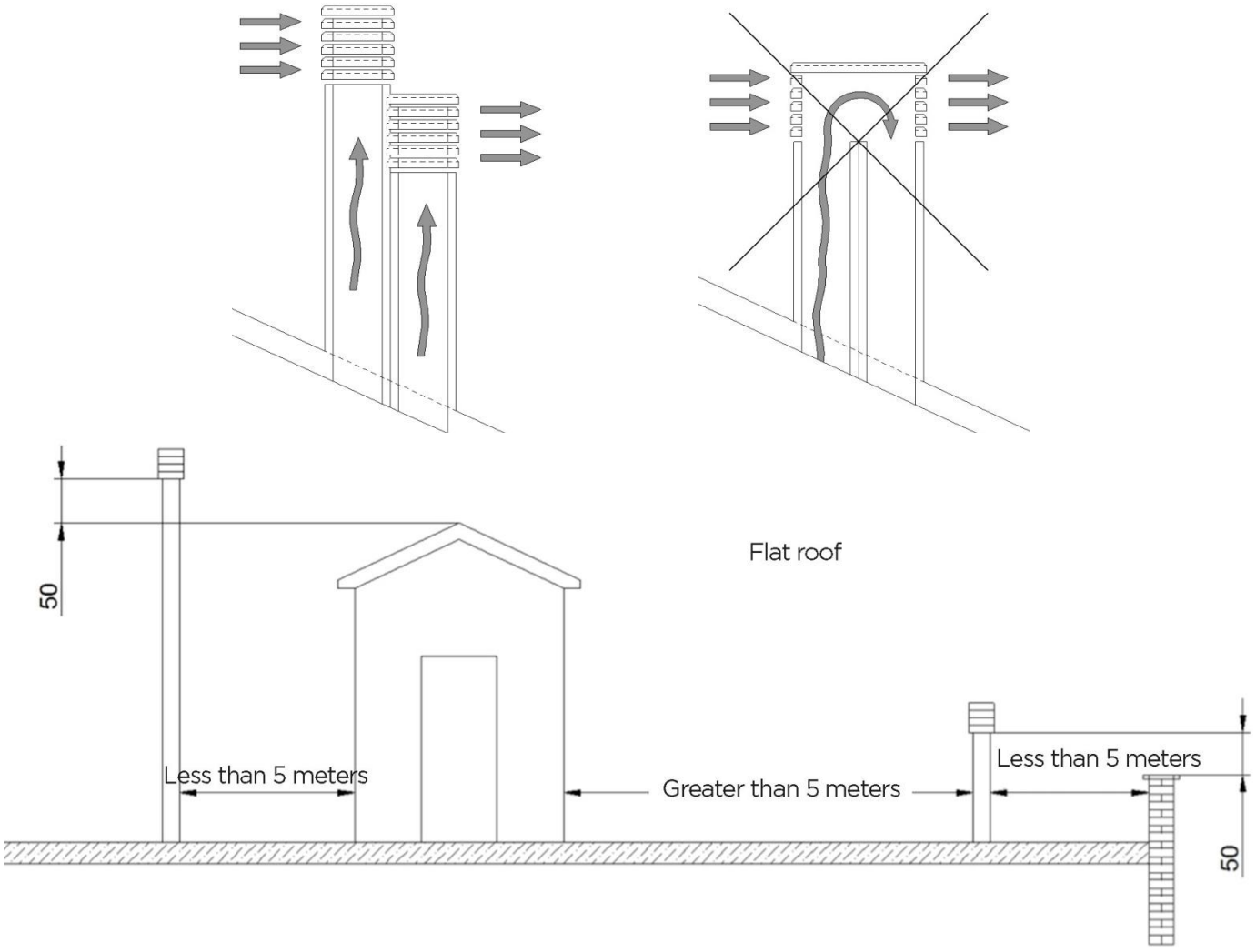
- Have a useful exit section not less than twice that of the flue.

- Be constructed to prevent the penetration of rain, snow, foreign bodies in the flue so that in case of winds in any direction and inclination, the discharge of the combustion products is assured (windproof chimney pot).

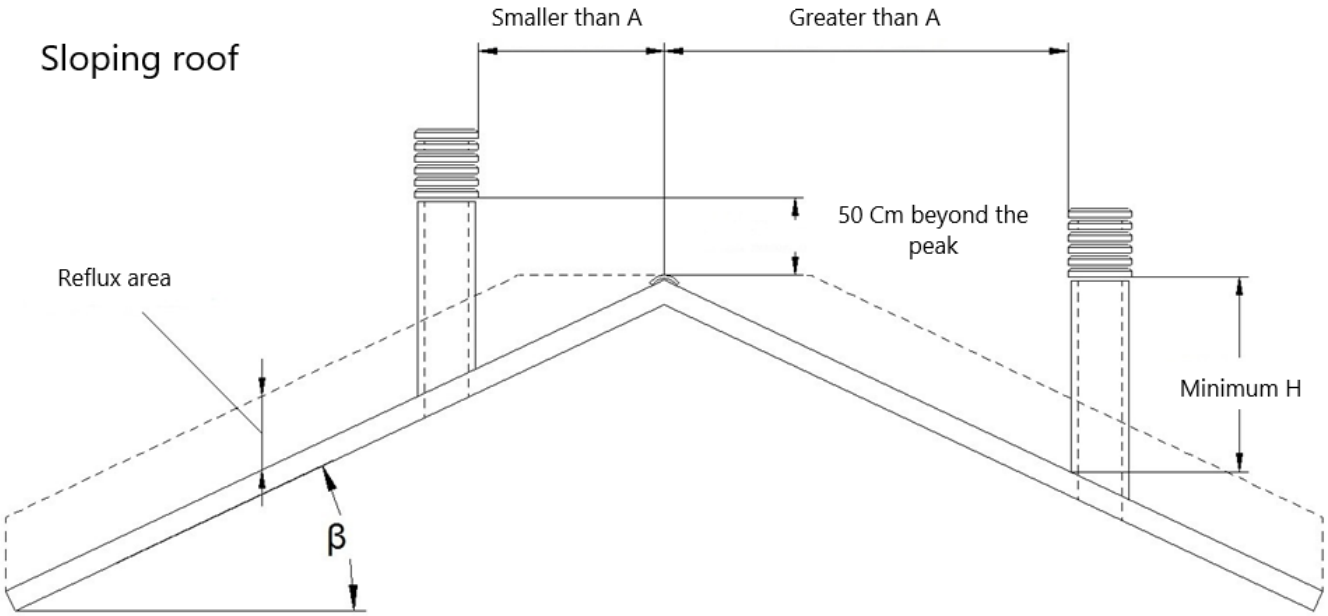
- The chimney pot must be positioned to guarantee an adequate dispersion and dilution of the combustion products and, however, outside the reflux area. This area has different sizes and shapes, depending on the angle of slope of the roof, so it is necessary to adopt the minimum heights (see figure).

- The chimney pot must be windproof and exceed the height of the peak or, where it is not possible, comply with the values indicated in the table.

- Any buildings or other obstacles, which exceed the height of the chimney pot, must not be close to the same chimney pot.



Distances and positioning		
Roof inclination	Distance between the peak and the chimney	Minimum height of the chimney (Measured from the block)
β	A	H
15°	<1,85	50 centimeters beyond the top
	>1,85	1 meter from the roof
30°	<1,5	50 centimeters beyond the top
	>1,5	1,3 meters from the roof
45°	<1,3	50 centimeters beyond the top
	>1,3	2 meters from the roof
60°	<1,2	50 centimeters beyond the top
	>1,2	2,6 meters from the roof



Draught

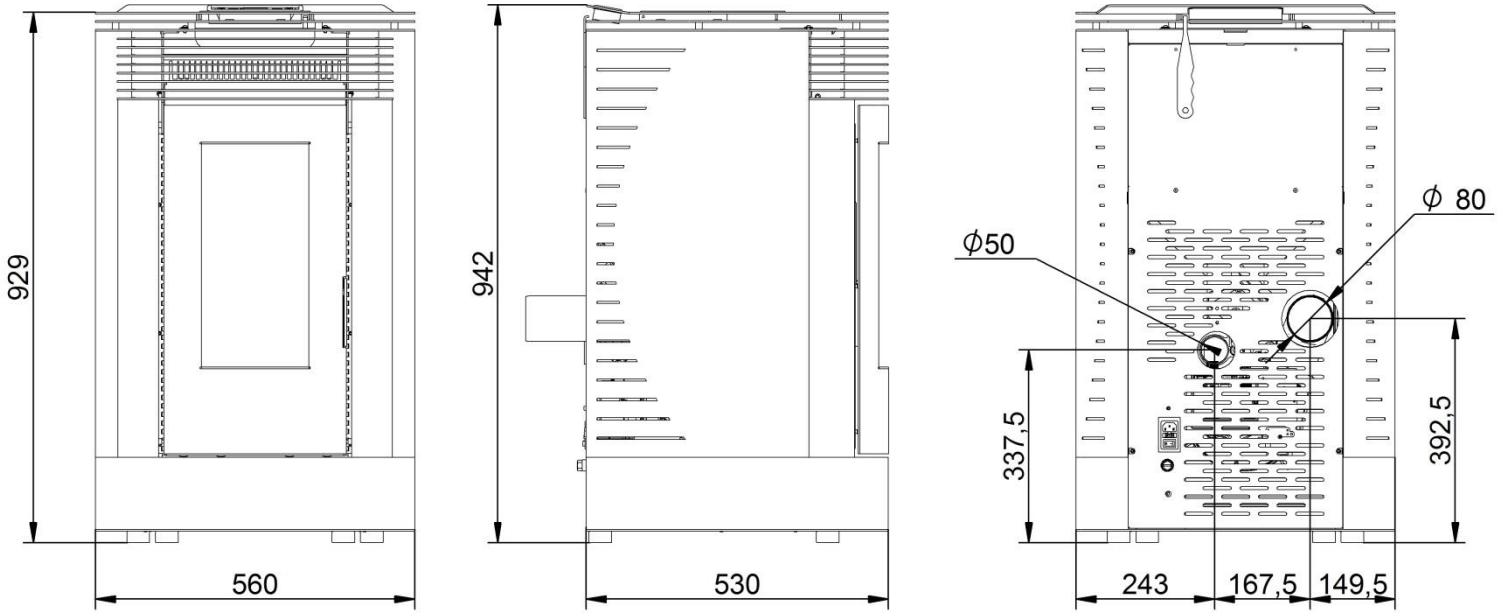
The draught of the stove is essential to have good performances in specific adverse weather conditions (rain, fog, snow, altitude, cold, wind), and it is conditioned by the position of the flue. Adverse weather conditions that affect negatively the draught are various; particularly burdensome is the wind, which can be: ascending, horizontal, descending.

- Ascending wind: increases the depression and consequently the draught.
- Horizontal wind: it increases the depression, only in the case of a right installation in the direction of the wind.
- Descending wind: decreases the depression and consequently the draught.

The flue, if placed in the upwind side, increases the overpressure and consequently, in the opposite situation, increases the depression, decreasing the draught.

To overcome these drawbacks, the installer must act directly on the stove, modifying the parameter to adjust the speed of fume extraction and verify all safeties. This operation is particularly delicate, it must always be carried out by authorized personnel. The ZF company declines any liability, whether civil or criminal, for missed control by the installer of all safeties.

8 Technical specifications



Characteristics	*Model PASUBIO*
Thermal power introduced (at rated power)	6,82 kW
Thermal power introduced (at reduced power)	3,43 kW
Nominal thermal power (at rated power)	6,20 kW
Reduced thermal power (at reduced power)	3,17 kW
Yield (at rated power)	90,89 %
Yield (reduced power)	92,49 %
Fumes temperature (at rated power)	104,6 °C
Fumes temperature (at reduced power)	68,4 °C
Carbon dioxide (at rated power)	6,89 %
Carbon dioxide (at reduced power)	4,95 %
CO at 13% O_2 (at rated power)	140,8 mg/m³
CO at 13% O_2 (at reduced power)	580,2 mg/m³
Fumes speed (rated power)	6,9 g/s
Fumes speed (reduced power)	4,7 g/s
Min. and Max. draft	10 Pa – 12 Pa
Pellets tank capacity	17 Kg
Pellet consumption (at rated power)	1,4 Kg/h
Pellet consumption (at reduced power)	0,7 Kg/h
Pellets autonomy (at rated power)	12 h
Pellets autonomy (at reduced power)	24 h
Air inlet diameter	Ø 50 mm
Fumes outlet diameter	Ø 80 mm
Voltage and frequency of power supply	230V~ 50/60Hz
Electrical power absorbed Min - Max	150 W -380 W
Fuel	Wood
Kind of fuel	Pellet
Size of the fuel	Ø 6 mm - Length 30 mm
Weight of the stove	Kg 103,5

Note: The data reported in the table may vary substantially depending on the pellets used (calorific value). To calculate the power of the stove to be installed, depending on the needs, take into account that 1 kW = 9.2 m² (with h = 2.70 m.).

The pellet

To obtain the maximum performance, the ZF company suggests to use pellets of the quality prescribed by the regulations **DIN51731.**

Length: 30mm
Diameter: 6mm
Calorific value: 4.9 ÷ 5.3 kWh / kg
Humidity max: 6%

The pellets must be stored in a dry place away from heat sources. The ZF company assumes no responsibility for malfunction due to the use of poor quality pellets.

9 First ignition

Warning

The first ignition will have to be carried out by a qualified technician who will have to check:

- That all the regulations mentioned above and the current regulations in the place of installation have been applied.
- The correct installation: of the stove, the flue, the chimney pot.
- That there is no risk of damage to the stove or to the room of installation. In case of problems, the ZF company assumes no liability both civil and criminal.

First steps

Check that there are no objects on the stove (manual included) and proceed as follows:

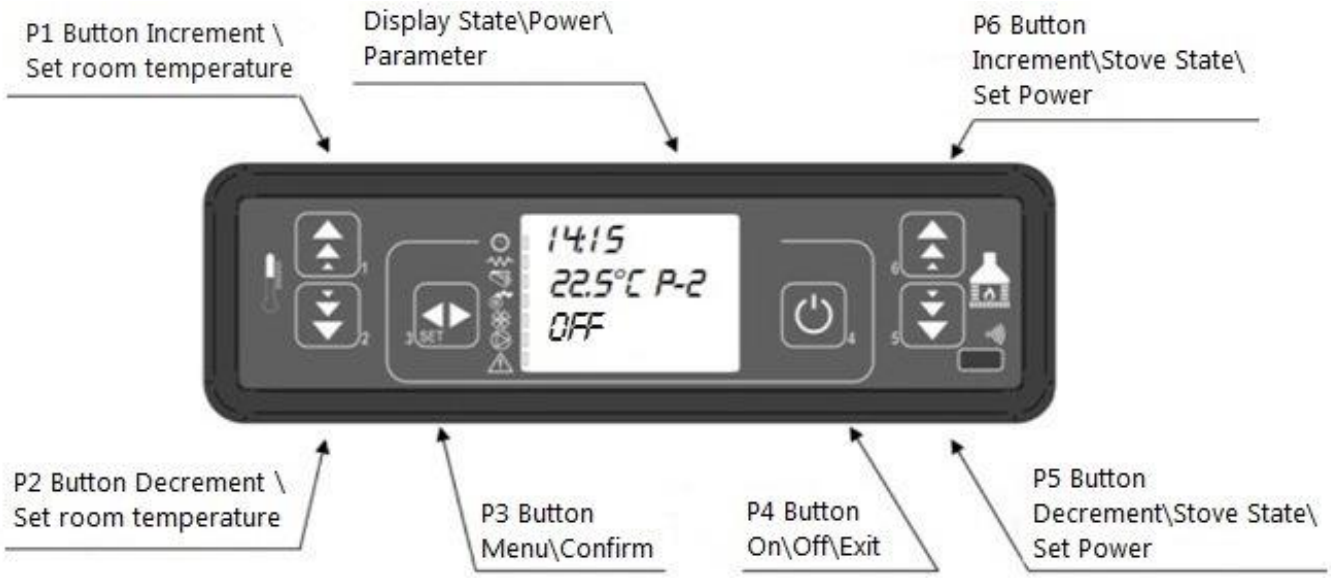
- Fill the hopper with pellets, opening the upper door and closing it again, making sure that no foreign body is in the hopper. Take off the cover of the hopper only during its charging.
- Check that the brazier is well positioned in its place.
- Check that the door is hermetically closed.
- Supply power, put the general switch ON (it is placed in the back down side); the control display will light up.
- During the first few times, there may be cases of unpleasant smells due to the presence of greases and oils on the components used during the production phase. Ventilate the space and avoid staying there for long periods until the smells disappear.

9.1 User interface

The console unity permits to talk to the controller by simply pressing some buttons. A display and other LED indicators inform the operator that the stove is working. In programming mode are displayed the different parameters that can be modified by pressing some buttons.

9.2 Console description

In the *figure* below it is described the use of the standard console that can be supplied to be fitted horizontally.



9.3 Function of the buttons

Button	Description	Mode	Action
1	**Temperature Increment**	WORK/OFF	It increments the room temperature value
		PROGRAMMING	It modifies/increments the selected parameter
2	**Temperature Decrement**	WORK/OFF	Decrement of the room temperature value
		PROGRAMMING	It modifies/decrements the selected parameter value
3	**SET/MENU**	-	Enter the menu
		SET/MENU	Enter the next submenu level
		PROGRAMMING	It sets the selected value and passes to the next entry
4	**ON/OFF**	WORK	Pressed for 2 seconds, it turns on and off the stove
		PROGRAMMING	It passes to the next level of the menu and all modifications carried out are memorized
		BLOCK	It unblocks and turns off the stove
5	**Power Decrement**	WORK/OFF	It reduces the value of the stove power
		PROGRAMMING	It passes to the next submenu entry and all modifications carried out are saved
		MENU	It passes to the next submenu entry
6	**Power Increment**	WORK/OFF	It increases the value of the stove power
		PROGRAMMING	It passes to the previous submenu entry and all modifications carried out are saved
		MENU	It passes to the previous submenu entry

9.4 Meaning of the LED

Led	Meaning when turn on	Icon
CHRONO	Chrono enabled	
ALARM	Stove on the alert	
IGNITION	Ignition on	
AUGER	Auger in motion	
FUMES ASPIRATOR	Fumes aspirator on	
EXCHANGER-PUMP	Exchanger \ pump on	
NOT USED	Not used	

9.5 Display

Display	Function	Conditions	Visualization
DISPLAY	Power state parameter name	**OFF**	**OFF+ROOM TEMPERATURE+WORK POWER+HOUR**
		ON	**ON+ ROOM TEMPERATURE+WORK POWER+HOUR**
		LOAD	**FED PELLET+ ROOM TEMPERATURE+WORK POWER+HOUR**
		WORK	**ROOM TEMPERATURE+WORK POWER+HOUR**
		PROGRAMMATION	**SELECTED PARAMETER**

10 MODES OF OPERATION

Premise

The installer must make the first start by taking precautions, and must ensure that the safeties are working properly (pressure switch, hopper temperature protection etc...). Any anomalies with the installation can not be attributed directly to the ZF company. The installer must carry out any other try he deems necessary and verify the operation of the buttons on the console.

10.1 Igniting the stove

Once the installation of the stove and the compulsory verification of the safeties are over, the operation phase begins. To power the stove, simply connect the cable to the electrical outlet, press the power switch located on the back of the stove at the bottom, moving from position **0** to position **1** as shown in *(Figure 1)*.

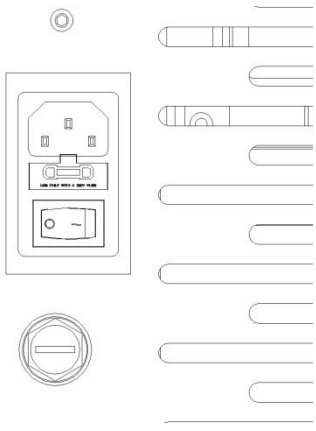


Figure 1

Before switching on the stove, the display appears as shown in *Figure 2*.

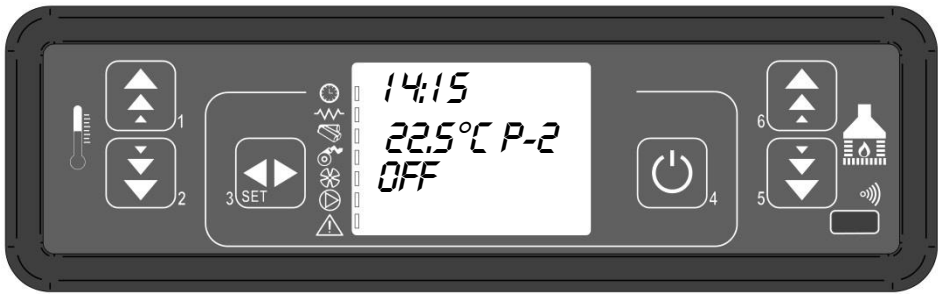


Figure 2

To turn on the stove, press on P4 for a few seconds. The successful ignition is indicated in the display with the message "**START**" as in (*Figure 3*). This phase lasts for a time given by the parameter PR01. Under these conditions, the stove will go in the state of preheating, the ignition turns on (shown by the ignition LED) and so does the smoke extractor. Malfunctions during the ignition phase are shown on the display and the stove goes into an alarm state.
(Refer to chapter 9).

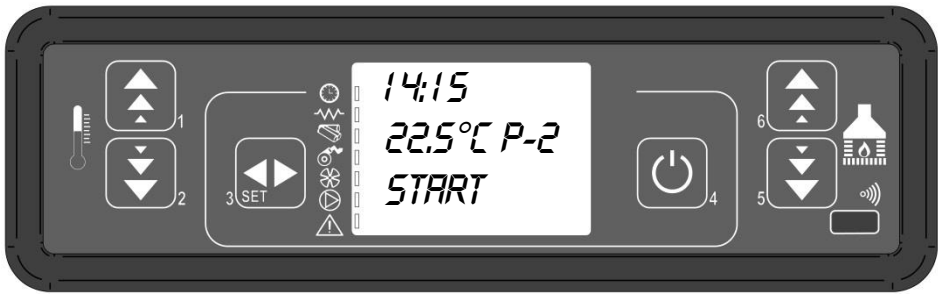


Figure 3

10.2 Pellet loading

After about 1 minute, the pellet loading phase begins, the message "**LOAD PELLET**" passes on the display. In a first phase the auger provides to load the pellets in the brazier for a time given by the parameter PR40 (auger LED on), the speed of the fumes is defined by parameter PR42 and the ignition is always on (ignition LED on). In the second phase, after the time of the parameter PR40 has passed, the auger turns off (auger LED off) for a time given by the parameter PR41, while the speed of the fumes and the ignition remain in the previous state. If the stove does not turn on after this phase, the auger turns on for a period given by the parameter PR04, the fumes speed is given by the parameter PR16 and the ignition is on. (*Figure 4*).

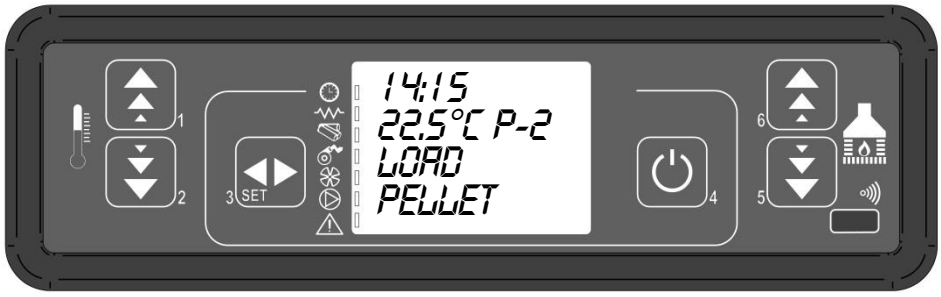


Figure 4

10.3 Fire Present

After the fumes temperature has reached and overcome the value contained in the parameter PR13, the system goes into power mode displaying "**FLAME LIGHT**" on the display. In this phase, it is checked that the temperature remains stable for a predefined time given by parameter PR02. The fumes speed is given by the parameter PR17, the auger will turn on for a time given by the parameter PR05 (auger LED on intermittent) and the ignition is switched off (ignition LED off). (*Figure 5*) Any anomalies will stop the board and this will report the error state. (Refer to chapter 9).

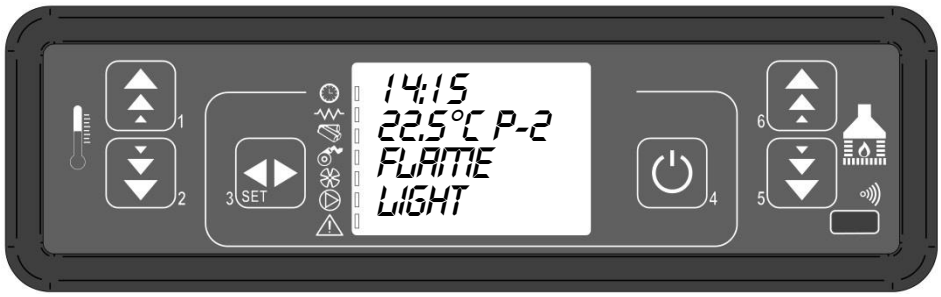


Figure 5

10.4 Stove on working mode

After the fumes temperature has reached and overcome the value contained in PR13 and maintained it for at least a time PR02, the stove goes into working mode which is the normal operating. The display will show the word "**WORK**". The power can be set by holding down the button P5 and P6 and the room temperature can be set by pressing the button P1 and P2. (*Figure 6*). If the fumes temperature reaches the threshold set by parameter PR15, the air exchanger fan lights on. (Led exchanger on).

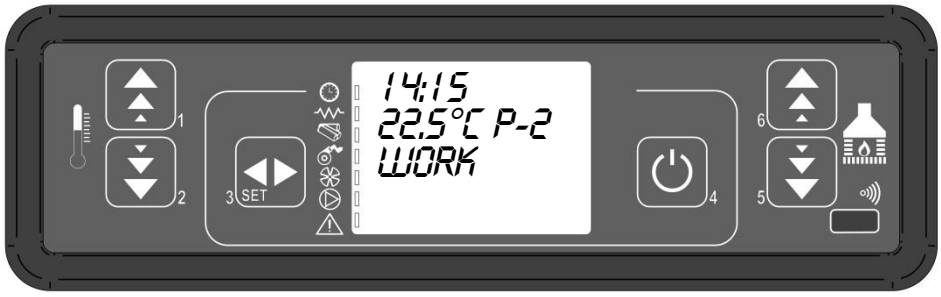


Figure 6

During this phase, after a time given by the parameter PR03, the stove carries out a cleaning of the brazier. The message " **CLEANING FIRE-POT** " will pass on the display, the auger is turned on (auger LED on) with a speed given by the parameter PR09, the smoke extractor speed given by parameter PR08. (*Figure 6a*) Once the given time by the parameter PR12 has passed, the stove backs in working state.

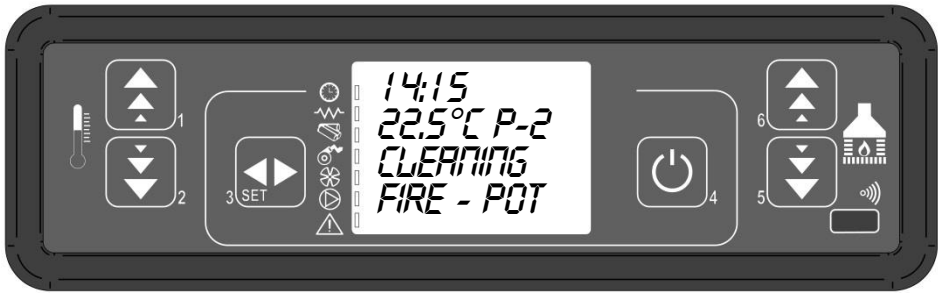


Figure 6a

10.5 Changing the heating power set

During the normal operation of the stove (Work), you can change the heat power output by using the buttons P5 (Decrease) and P6 (Increase). The power level set is shown on the display. (*Figure 7*) To exit from the menu wait 5 seconds without performing any operation on the keyboard, or press P3.

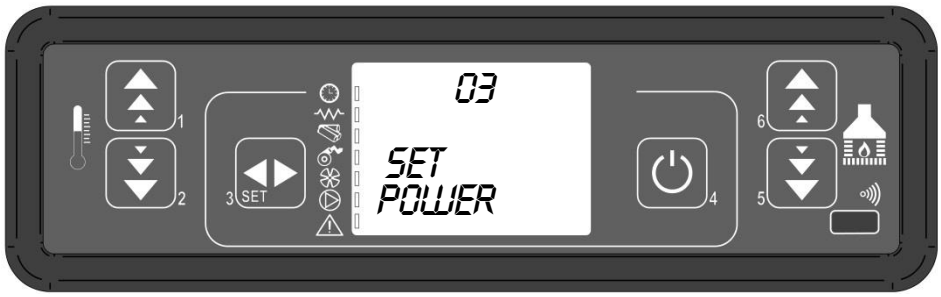


Figure 7

10.6 Changing the room temperature

To change the room temperature it is enough to act on the button P1. The display shows the set room temperature (SET temperature). Thus acting on the buttons P1 (increase) and P2 (decrease) it is possible to change the value. After about 5 seconds the value is saved and the display returns to the normal mode, or press P3 to exit. (*Figure 8*).

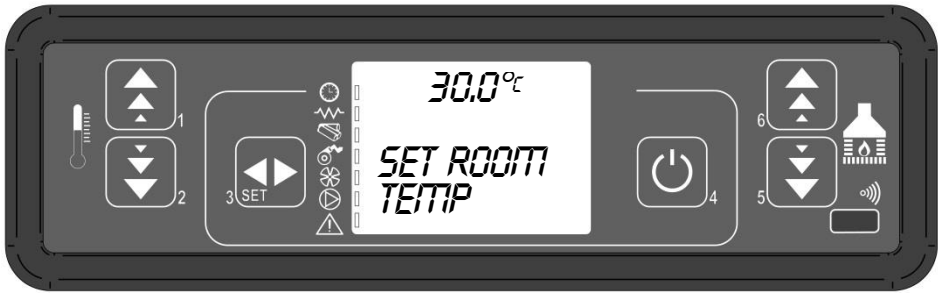


Figure 8

10.7 The room temperature reaches the set temperature (SET temperature)

When the room temperature has reached the set value, the heating power of the stove is automatically decreased to the minimum value. Under these conditions, the display shows the message " **MODULAT-**". (*Figure 9*). If the room temperature decreases below the set one (Set temperature) the stove goes back to "Work" mode and to the power previously set (Set power).

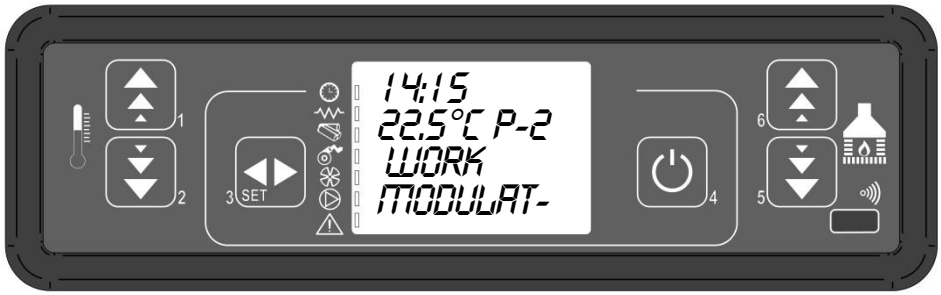


Figure 9

10.8 Stand-by

If enabled in the menu, standby function allows to turn off the stove once the conditions explained below are respected. It is enabled if, at a given time by the parameter PR44, the room temperature is higher than the set temperature (Set environment) plus the parameter PR43. The display shows " **STANDBY** " and the minutes left. (*Figure 10*).

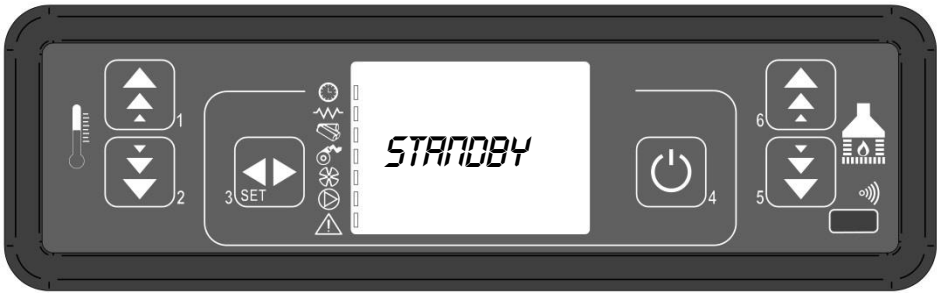


Figure 10

At the end of the time given by the parameter PR44, the display shows the message "**WAIT COOLING**". In this state, the stove has turned off the auger (auger LED off), the exchanger switches off when it reaches the threshold given by the parameter PR15 and the LED ON \ OFF flashes. (*Figure 10a*).

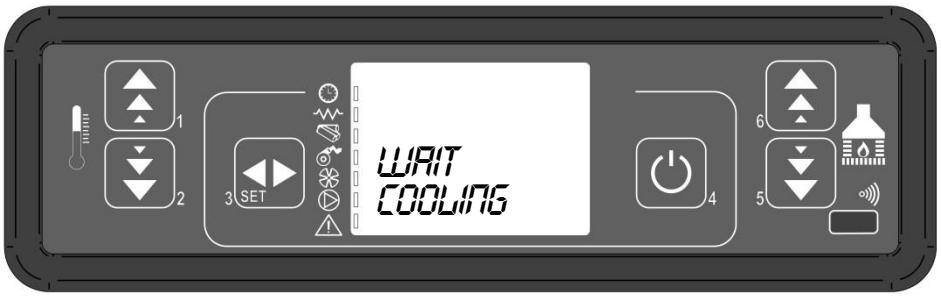


Figure 10a

When the fumes temperature reaches the threshold given by the parameter PR13, the stove goes into stand-by mode and "**WAIT COOLING-**" passes on the display. The auger is off (auger LED off), the exchanger is off (exchanger LED off), as well as the smoke extractor. (*Figure 10b).*

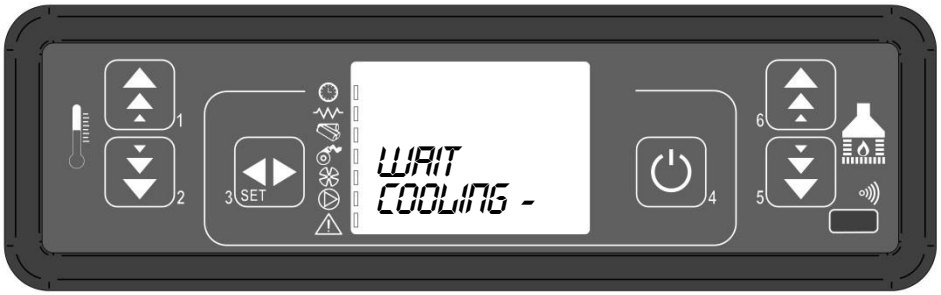


Figure 10b

If the room temperature drops below the set temperature (Set environment) minus the threshold given by the parameter PR43, the stove will switch on again.

10.9 Switching off the stove

To turn off the stove just make a prolonged pressure on the button P4. The display shows the message "**CLEANING FINAL**". (*Figure 11*). The motor of the auger stops (auger LED off), the smokes fan speed is given by the parameter PR08.

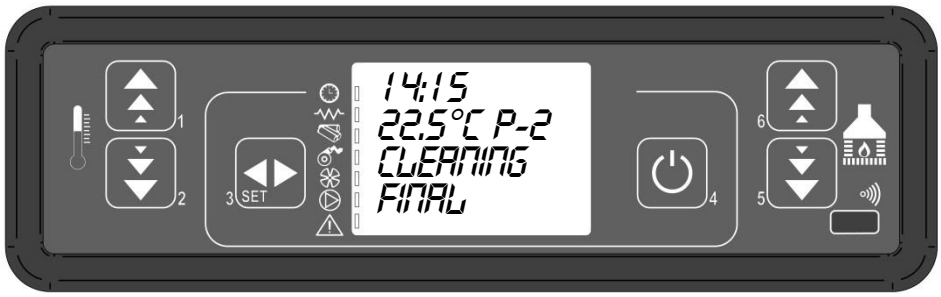


Figure 11

The exchanger fan (exchanger LED on) will remain active until the fumes temperature drops below the value set by parameter PR15. After a time given by parameter PR39, if the fumes temperature appears to be below the threshold given by the parameter PR10, the stove turns off, displaying the message "**OFF**". (*Figure 11a).*

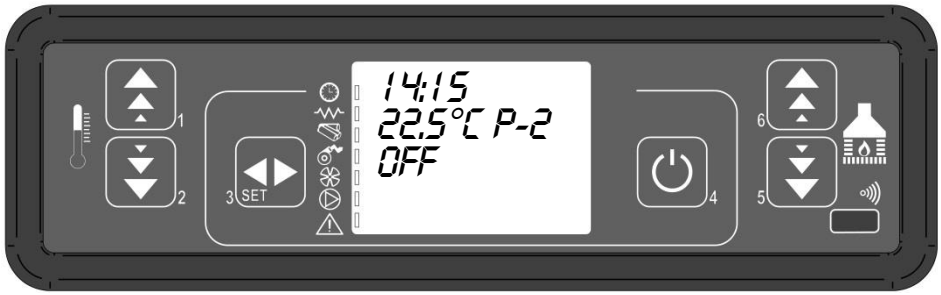


Figure 11a

11. THE MENU

You can enter the menu by pressing the P3 button. The menu is subdivided into different entries and levels that allow you to enter the settings and the programming of the board.

11.1 User menu

The following table synthetically describes the structure of the menu dwelling, in this paragraph, upon the selections available to the user.

Level 1	Level 2	Value
M1 - set clock		-
	01- Day of the week	M-T-W-T-F-S-S
	02- Hours clock	0-23
	03- Minutes clock	0-59
	04- Day clock	1-31
	05- Month clock	1-12
	06- Year clock	00-99

Level 1	Level 2	Level 3	Value
M2 - set time			
	M2-1 - enable time		
		01 - enable time	on/off
	M2-2 – daily programming		
		01 - day time	on/off
		02 - start 1 day	OFF-0-23:50
		03 - stop 1 day	OFF-0-23:50
		04 - start 2 day	OFF-0-23:50
		05 - stop 2 day	OFF-0-23:50
	M2-3 – weekly programming		
		01 - week time	on/off
		02 - start Prg 1	OFF-0-23:50
		03 - stop Prg 1	OFF-0-23:50
		04 - Monday Prg1	on/off
		05 – Tuesday Prg 1	on/off
		06 - Wednesday Prg 1	on/off
		07 - Thursday Prg1	on/off
		08 - Friday Prg 1	on/off
		09 - Saturday Prg 1	on/off
		10 – Sunday Prg 1	on/off
		11 - start Prg 2	OFF-0-23:50
		12 - stop Prg 2	OFF-0-23:50
		13 - Monday Prg2	on/off
		14 - Tuesday Prg 2	on/off
		15 - Wednesday Prg 2	on/off
		16 - Thursday Prg 2	on/off
		17 - Friday Prg 2	on/off
		18 - Saturday Prg 2	on/off
		19 - Sunday Prg 2	on/off
		20 - start Prg 3	OFF-0-23:50
		21 - stop Prg 3	OFF-0-23:50
		22 - Monday Prg 3	on/off
		23 - Tuesday Prg 3	on/off
		24 - Wednesday Prg 3	on/off
		25 - Thursday Prg 3	on/off
		26 - Friday Prg 3	on/off
		27 - Saturday Prg 3	on/off
		28 - Sunday Prg 3	on/off
		29 - start Prg 4	OFF-0-23:50
		30 - stop Prg 4	OFF-0-23:50
		31 - Monday Prg 4	on/off
		32 - Tuesday Prg 4	on/off
		33 - Wednesday Prg 4	on/off
		34 - Thursday Prg 4	on/off
		35 - Friday Prg 4	on/off
		36 - Saturday Prg 4	on/off
		37 - Sunday Prg 4	on/off
	M2-4 - week-end programming		
		01 – week-end time	on/off
		02 - start week-end 1	OFF-0-23:50
		03 - stop week-end 1	OFF-0-23:50
		04 - start week-end 2	OFF-0-23:50
		05 - stop week-end 2	OFF-0-23:50
	M2-5 - exit		Set

Level 1	Level 2	Value
M3 – Select language		
	01 - Italian	set
	02 - English	set
	03 - French	set
	04 - German	set
	05 - Spanish	set
	06 - Portuguese	set

Level 1	Level 2	Value
M4 - Stand-by		
	01 -stand - by	On/off

Level 1	Level 2	Value
M5– Buzzer		
	01– buzzer	On/off

Level 1	Level 2	Value
M6 – First load		
	01 – first load	90″

Level 1	Level 2	Level 3	Value
M7 – stove state			
	01 – stove state		
		01 – auger state	info
		02 - T minutes	info
		03 – Thermostat state	info
		04 – Fumes state	info
		05 – Fumes extraction revolutions state	info

Level 1	Level 2	Value
M8 – technician settings		
	01 – access key	set

Level 1	Level 2	Value
M9 – exit		
	01 - exit	set

11.2 Menu M1 - SET CLOCK

It sets the current hour and date. The board is equipped with a lithium battery that allows the internal clock a life of more than 3/5 years. To enter the general programming menus, press the P3 button. The M1 entry will be selected by pressing P5 (decrement) or P6 (increment) and the message "**Menu 01 set clock**" will pass on the display. Press the P3 button again to enter the menu *(figure 12)*

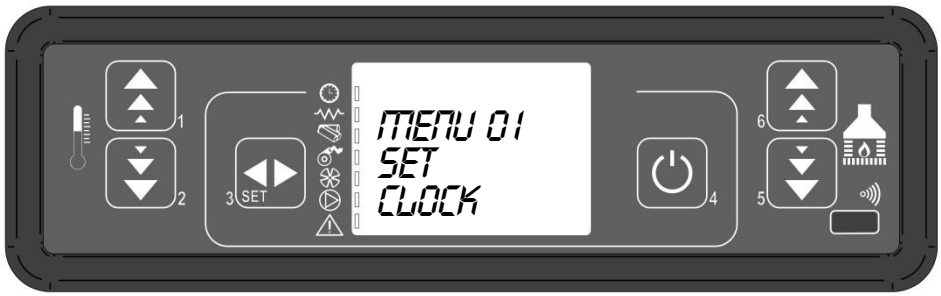


Figure 12

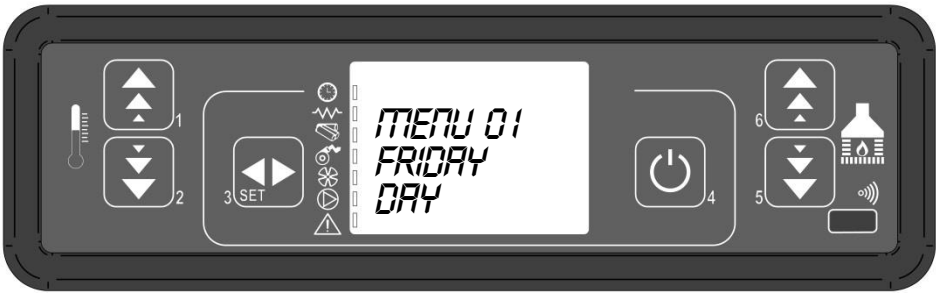


Figure 12a

Select the wanted day and press the P3 button *(figure 12a)*. You can set the hour *(figure 12b)*, the minutes *(figure 12c)*, the day *(figure 12d)*, the month *(figure 12e)* and the year *(figure 12f)* by pressing the P1 button (increment) and P2 button (decrement) and confirming by pressing the P3 button.

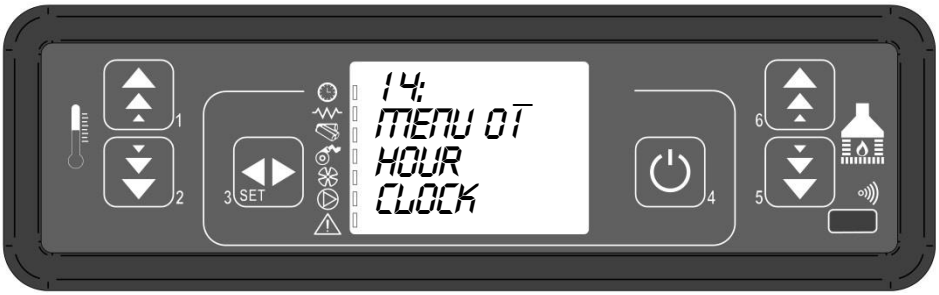


Figure 12b

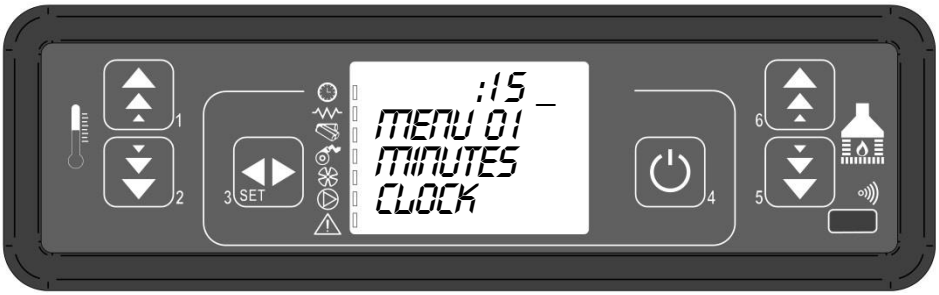


Figure 12c

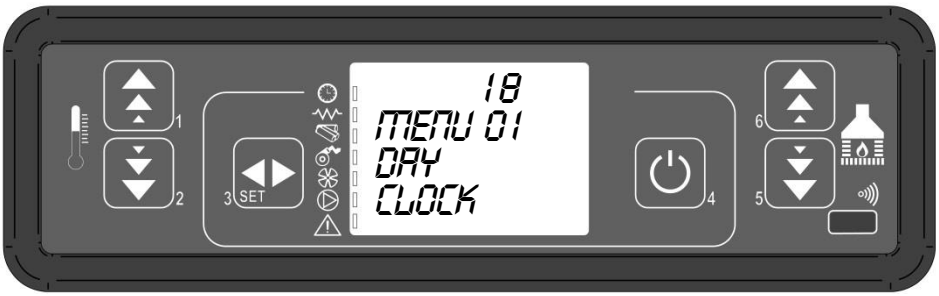


Figure 12d

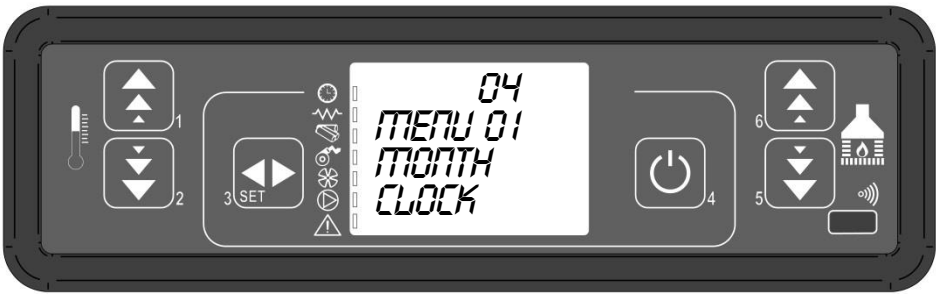


Figure 12e

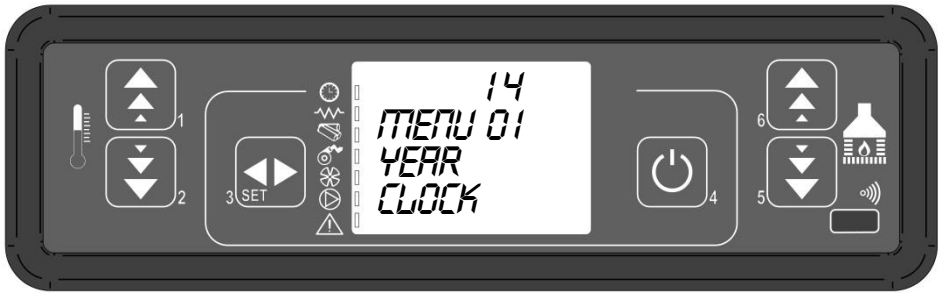


Figure 12f

11.3 Menu M2 - Set time

The menu visualized on the display "**M2-2-1 CHRONO ENABLE**" allows to totally enable and disable all clock thermostat functions. Press the P3 button to enter and then press P1 or P2 to select On or Off. Press the P3 button to confirm. *(Figure 13).*

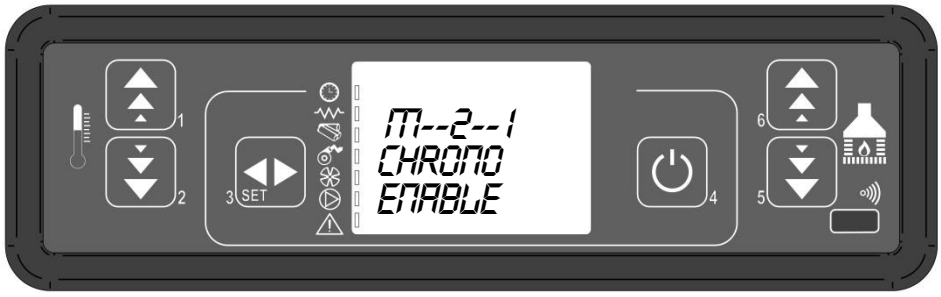


Figure 13

Submenu M2 - 2 - Day program

Once selected the menu "**M2-2 CHRONO DAYLY**", you can scan the different parameters of the daily time programming, time enable included, by pressing P3 button first and then P1 and P2 *(figure 13a).*

Figure 13a

You can set two sections of functioning, the first one with START1 Day and STOP1 Day and the second one with START2 Day and STOP2 Day, delimitated by the times set according to the following table, where the setting "OFF" indicates to the clock to ignore the order. Press the P1 button (increment) and the P2 button (decrement) to select. Press P3 to confirm.

DAY PROGRAM			
Menu level	**Selection**	**Meaning**	**Possible values**
M2-2-01	DAY TIME	Enable daily time	ON/OFF
M2-2-02	START 1 Day	Activation hour	OFF-0-23:50
M2-2-03	STOP 1 Day	Deactivation hour	OFF-0-23:50
M2-2-04	START 2 Day	Activation hour	OFF-0-23:50
M2-2-05	STOP 2 Day	Deactivation hour	OFF-0-23:50

Submenu M2- 3- Weekly program

The menu "M2-3 Weekly program" allows to enable/disable and to set the functions of the weekly clock thermostat. The weekly function has 4 independent programs. Moreover, the clock ignores the corresponding order by setting "OFF" in the entry "time". The following tables synthesize the weekly program function. Press the P3 button to enter the next function and to confirm the value. Press the button P4 if you want to exit the menu.

ENABLE WEEKLY TIME			
Menu level	**Selection**	**Meaning**	**Possible values**
M2-3-01	WEEKLY TIME	Enable weekly time	ON/OFF

PROGRAM 1			
Menu level	**Selection**	**Meaning**	**Possible values**
M2-3-02	START PRG 1	Activation hour	OFF-0-23:50
M2-3-03	STOP PRG 1	Deactivation hour	OFF-0-23:50
M2-3-04	MONDAY PRG 1	Day of reference	on/off
M2-3-05	TUESDAY PRG 1		on/off
M2-3-06	WEDNESDAY PRG 1		on/off
M2-3-07	THURSDAY PRG 1		on/off
M2-3-08	FRIDAY PRG 1		on/off
M2-3-09	SATURDAY PRG 1		on/off
M2-3-10	SUNDAY PRG 1		on/off

PROGRAM 2			
Menu level	**Selection**	**Meaning**	**Possible values**
M2-3-11	START PRG 2	Activation hour	OFF-0-23:50
M2-3-12	STOP PRG 2	Deactivation hour	OFF-0-23:50
M2-3-13	MONDAY PRG 2	Day of reference	on/off
M2-3-14	TUESDAY PRG 2		on/off
M2-3-15	WEDNESDAY PRG 2		on/off
M2-3-16	THURSDAY PRG 2		on/off
M2-3-17	FRIDAY PRG 2		on/off
M2-3-18	SATURDAY PRG 2		on/off
M2-3-19	SUNDAY PRG 2		on/off

PROGRAM 3			
Menu level	**Selection**	**Meaning**	**Possible values**
M2-3-20	START PRG 3	Activation hour	OFF-0-23:50
M2-3-21	STOP PRG 3	Deactivation hour	OFF-0-23:50
M2-3-22	MONDAY PRG 3	Day of reference	on/off
M2-3-23	TUESDAY PRG 3		on/off
M2-3-24	WEDNESDAY PRG 3		on/off
M2-3-25	THURSDAY PRG 3		on/off
M2-3-26	FRIDAY PRG 3		on/off
M2-3-27	SATURDAY PRG 3		on/off
M2-3-28	SUNDAY PRG 3		on/off

PROGRAM 4			
Menu level	**Selection**	**Meaning**	**Possible values**
M2-3-29	START PRG 4	Activation hour	OFF-0-23:50
M2-3-30	STOP PRG 4	Deactivation hour	OFF-0-23:50
M2-3-31	MONDAY PRG 4	Day of reference	on/off
M2-3-32	TUESDAY PRG 4		on/off
M2-3-33	WEDNESDAY PRG 4		on/off
M2-3-34	THURSDAY PRG 4		on/off
M2-3-35	FRIDAY PRG 4		on/off
M2-3-36	SATURDAY PRG 4		on/off
M2-3-37	SUNDAY PRG 4		on/off

Submenu M2- 4 – weekend program

It allows to enable/disable and to set the clock thermostat functions during the weekend (days 6 and 7, that is Saturday and Sunday). Press the P3 button in the entry " weekend time" to enable and set "on" by pressing the P1 button (increment) or P2 button (decrement). You can set the period of functioning for Saturday by setting Start1 weekend and Stop1 weekend, while you can set the functioning of the stove for Sunday by setting Start2 weekend and Stop2 weekend.

WEEKEND PROGRAM			
Menu level	**Selection**	**Meaning**	**Possible values**
M2-4-01	WEEKEND TIME	Enable weekend time	ON/OFF
M2-4-02	START1 WEEKEND	Activation hour	OFF-0-23:50
M2-4-03	STOP 1 WEEKEND	Deactivation hour	OFF-0-23:50
M2-4-04	START 2 WEEKEND	Activation hour	OFF-0-23:50
M2-4-05	STOP 2 WEEKEND	Deactivation hour	OFF-0-23:50

11.4 Menu M3 – Language selection

It allows to select one of the available languages *(figure 14)*. Press the P1 button (increment) to pass to the next language, press the P2 button (decrement) to move back. Press P3 to confirm.

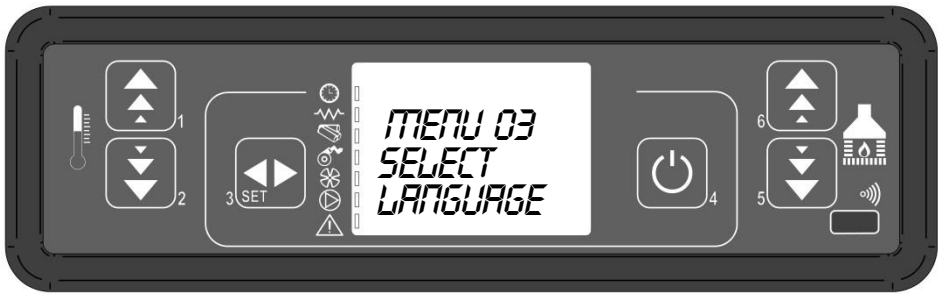


Figure 14

11.5 Menu M4 - Stand-by

It allows to enable or disable the Stand-by mode *(figure 15)*. Once selected the Menu M4 by pressing P3, press P1 (increment) or P2 (decrement) to pass from "on" to "off" and vice versa. As for the functioning, refer to the stand-by paragraph, chapter 7.8.

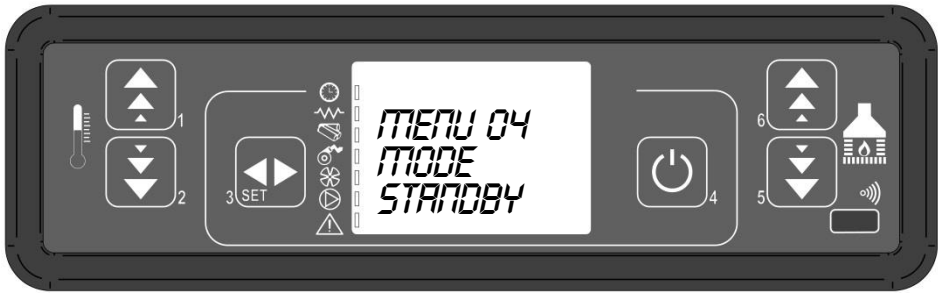


Figure 15

11.6 Menu M5 – Buzzer

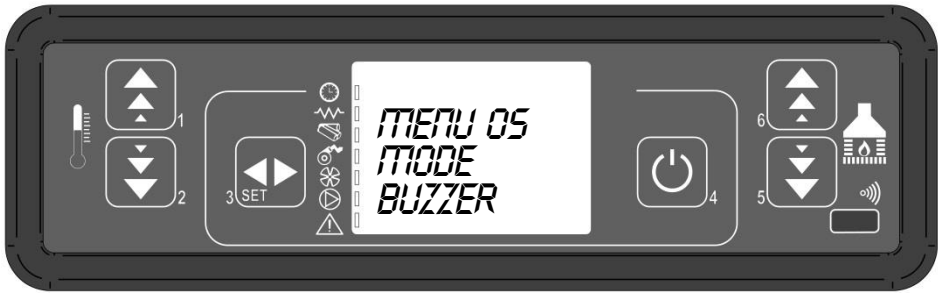


Figure 16

It allows to enable or disable the buzzer of the controller during the alarms warning (*figure 16*). Press P1 or P2 to enable or disable, press P3 to confirm.

11.7 Menu M6 – First load

This function is available only when the stove is turned off and allows to load the auger at the first ignition of the stove *(figure 17)*, when the pellet tank is empty. After having selected the menu M6, the message "P1 to load" will pass on the display *(figure 17a)*. Then press P1 (increment). The smokes fan turns on at maximum speed, the auger turns on (auger LED turned on) and they will keep turned on until the end of the time indicated on the display *(figure 17b)*, or until you press the P3 button.

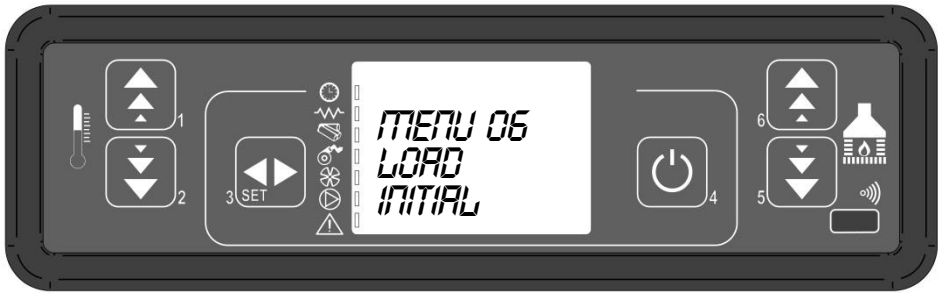


Figure 17

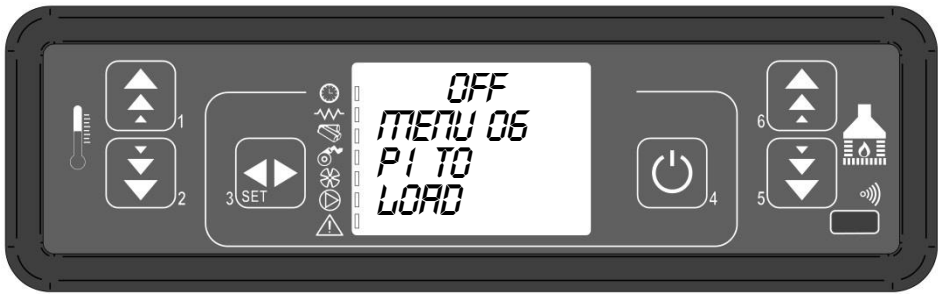


Figure 17a

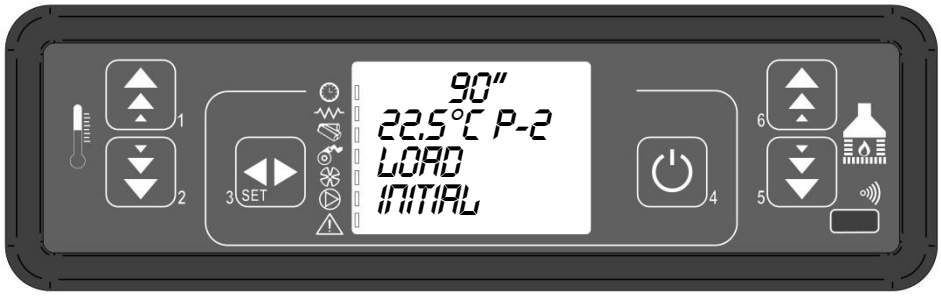


Figure 17b

11.8 Menu M7 – Stove state

Once entered the menu M7, by pressing the P3 button, the state of some variables during the functioning of the stove passes on the display. The following table is an example of the visualization on the display and the meaning of these values *(figure 18)*.

State visualized	Meaning
3,1″	Auger pellet load state
52′	Time out
Toff	Thermostat state
106°	Fumes temperature
1490	Fumes extraction speed

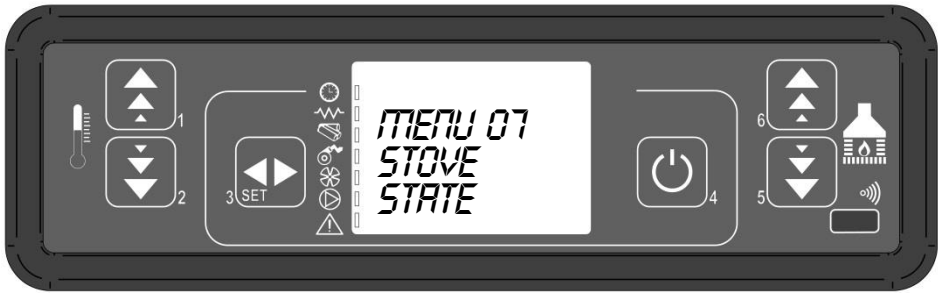


Figure 18

11.9 Menu M8 – Technician settings

This menu entry is for the technician who installs the stove. After having put the access key (*figure 19a*), it allows to set different parameters of the stove functioning by pressing the P1 button (increment) and P2 button (decrement) *(Figure 19- 19a)*

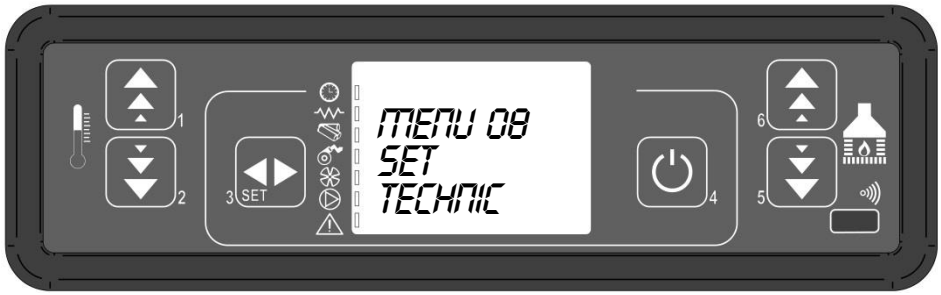


Figure 19

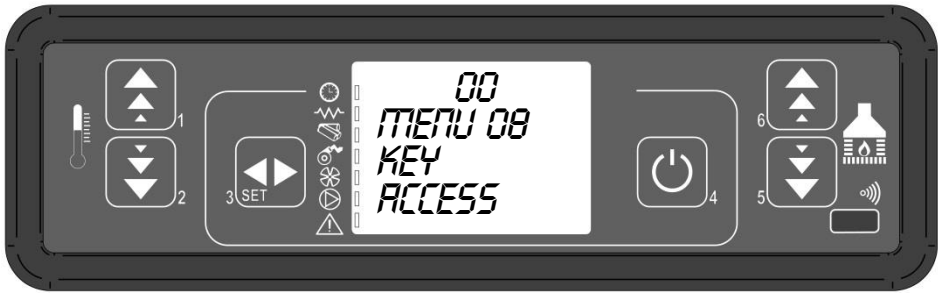


Figure 19a

12. ALARMS

In the event that a malfunction occurs, the board intervenes and signals the irregularity, lighting the LED Alarm (Alarm LED on) and producing acoustic signals.
There are the following alarms:

Alarm origin	Display view
Energetic Black-out	**AL 1 BLAC-OUT**
Probe temperature smokes	**AL 2 PROBE EXHAUST**
Fumes overheating	**AL 3 HOT EXHAUST**
Encoder fumes failure	**AL 4 FAN FAILURE**
Firing failure	**AL 5 NO LIGHTIN-**
Pellet absence	**AL 6 NO PELLET**
Overheating thermal safety	**AL 7 SAFETY THERMAL**
No depression	**AL 8 FAILURE DEPRESS**

Each alarm condition causes the immediate turning off of the stove

The alarm state is reached after the time PR11, **EXCEPT THE ALARM OF BLAC-OUT,** and can be reset by pressing and holding the button P4. Whenever an alarm is reset, a turning off phase of the stove is initiated for safety. During the alarm phase the alarms LED will always be on (Alarm LED on) and when enabled the buzzer, it will sound intermittently. If you don't reset the alarm, the stove will shut down anyway, always displaying the alarm message.

12.1 Energetic Black out

During the working status of the stove, electricity may miss. When it is restarted, if the period of the black-out is lower than the parameter PR48, the stove restarts on **WORK** mode, otherwise the alarm is activated. The message "**Al 1 BLAC-OUT** " will pass on the display (*Figure 20*) and the stove goes off.

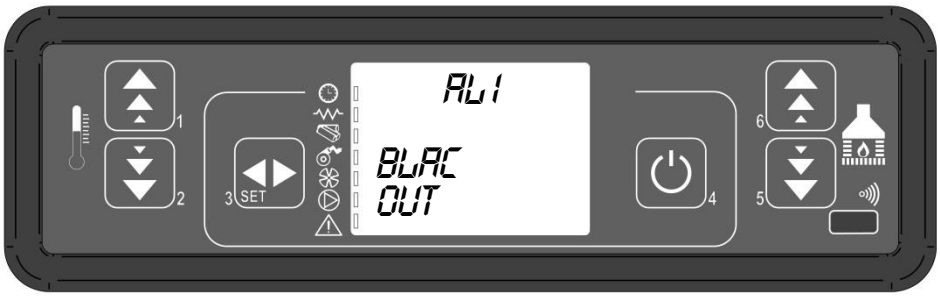


Figure 20

12.2 Probe smokes temperature alarm

It occurs in the case where the smokes probe is damaged. The stove goes into alarm, the alarms LED lights up (Alarm LED on). The stove will show, "**Al 2 PROBE EXHAUST** " on the display (*Figure 21*) and will turn off. In this case, reset the alarm by pressing the On / Off button and contact your authorized service center.

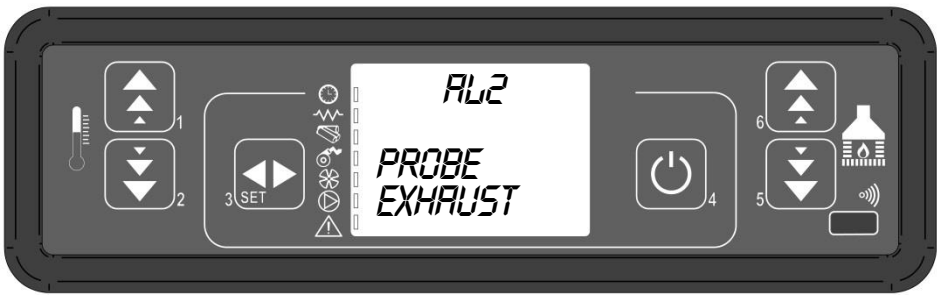


Figure 21

12.3 Fumes temperature alarm

It occurs in the case the smokes probe detects a temperature higher than a set value fixed which can't be changed through parameter. The display shows the message "**Al 3 HOT EXHAUST** " as in (*Figure 22*) and the stove goes off. Electrically disconnect the stove and call your authorized service center.

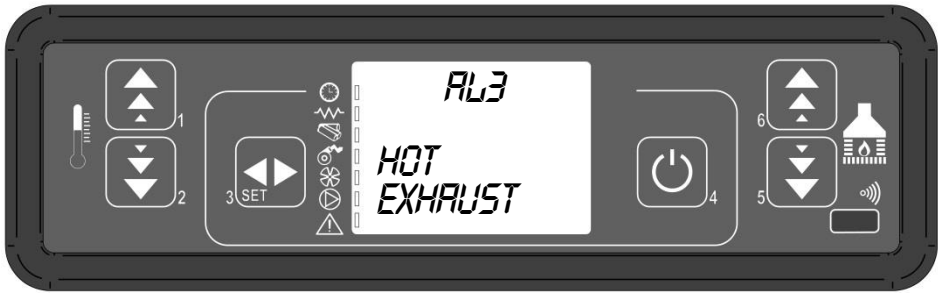


Figure 22

12.4 Encoder smoke damaged alarm

It happens in case there is a damage in the fumes fan. The stove goes into alarm state and the message "**Al 4 FAN FAILURE** " (*Figure 23*) will pass on the display. It occurs in the case in which the smoke extractor is damaged or in the case the fan speed of the smoke extractor is not detected by the board. In this case, reset the alarm by pressing the On / Off button and contact an authorized service center.

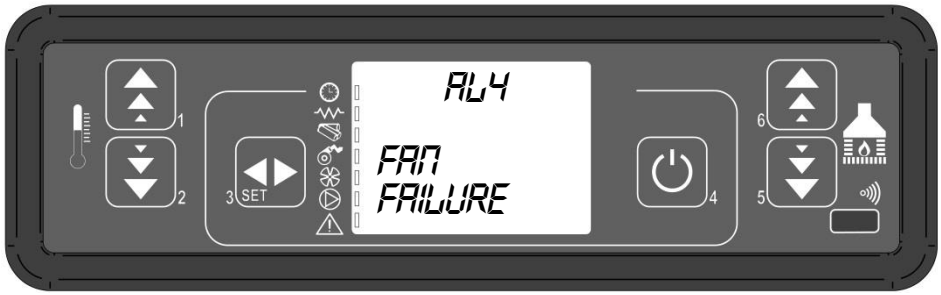


Figure 23

12.5 Firing failure alarm

It occurs when the ignition phase fails. That is what happens if the time given by the parameter PR01 passes without the fumes temperature overcomes the parameter PR13. The message "**Al 5 NO LIGHTIN-"** will pass on the display and the stove goes into alarm state (*figure 24*). Wait for the end of the cooling cycle, clean the brazier and proceed with a new ignition.

Figure 24

12.6 Pellets absence Alarm

It occurs when, in working phase, the smokes temperature decreases below the parameter PR13. The message "**Al 6 NO PELLET**" will pass on the display and the stove goes into alarm state (*Figure 25*).

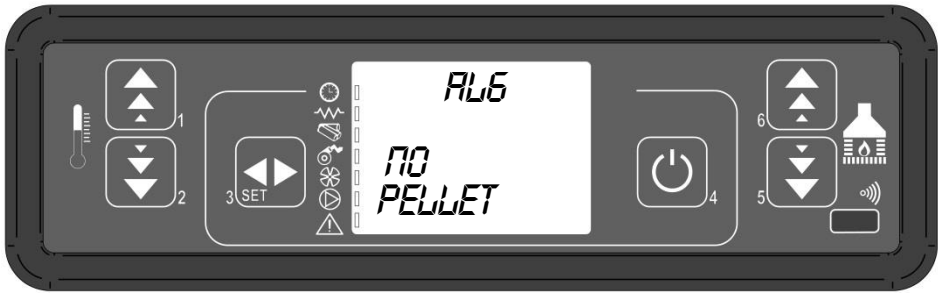


Figure 25

12.7 Safety thermal over-temperature alarm

It occurs when the general safety thermostat detects a temperature above the trigger threshold. The thermostat intervenes and stops the auger and the controller intervenes indicating the alarm status (alarm LED on) by displaying the message "**Al 7 SAFETY THERMAL** " (*Figure 26*), and the stove turns off.

Figure 26

Check that the thermal protection of the tank didn't activate, if it has intervened please make sure that there are no obstructions at the back and front openings of the stove or to the air outlet grill, which block the right passage of air. Once this is done, reset the safety thermostat, which is located in the back of the stove (*Figure 27*), under the general switch, covered by a plastic lid screwed on, remove the cap, press the button, put the cap back; restart the stove and check if the environment fan is working correctly. If the alarm persists, call the Authorized Service Provider.

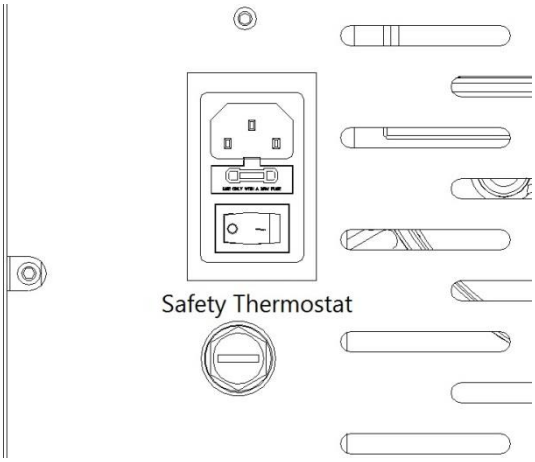


Figure 27

12.8 Alarm absence depression

It occurs when the external pressure switch component detects a pressure/depression below the trigger threshold. The pressure switch intervenes by turning the auger off, being these two electrically connected in series, and the controller signals the alarm status (alarm LED on) displaying "**AL 8 FAILURE DEPRESS"** on the display (*Figure 28*). The stove turns off. Remove voltage, clean carefully: the brazier, the combustion chamber, the passage of smokes and the flue; if the alarm persists, call the Authorized Service Provider.

Figure 28

12.9 Display message SERV

When the message "**SERV**" appears, the stove has reached 1400 hours of operation. We recommend that you call your authorized service center for routine maintenance. *(Figure 29)*

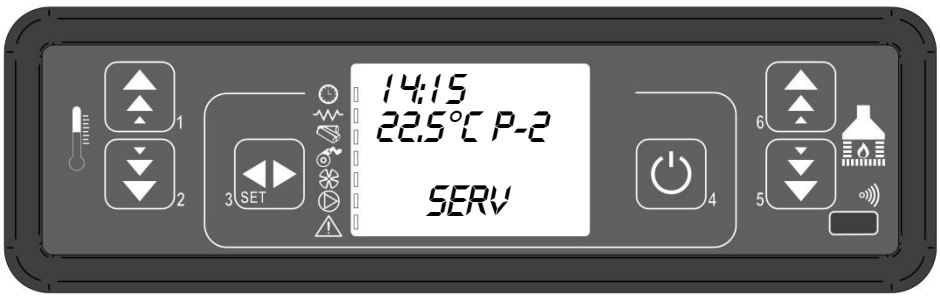


Figure 29

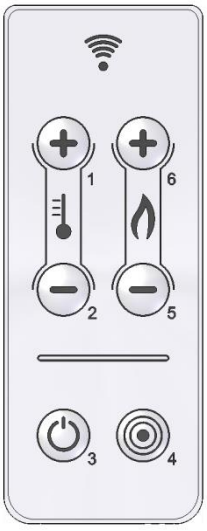
Alarm that can occur during the working phase of the stove:

Message on the display	Reason	Solution
ALAR NO FIRE	The pellet is over.	Reload the pellets in the tank
	The auger does not load	Check that there are no pellet obstructions
	The draught is not enough	Check that there are no obstructions in the flue and air inlet
	The fumes probe is broken or disconnected	Call an authorized service
	The pellet loading auger is broken	Call an authorized service
	The fume extractor is broken	Call an authorized service
	Power failure	Turn on the stove again

Message on the display	Reason	Solution
ALAR NO ACC	The flame did not ignite	Substitute the pellet with a higher quality one, if the problem persists, call the authorized service
	Ignition disconnected or damaged	Call an authorized service
	The flame did not bring the fumes on right temperature within the preset time	The pellet is finished, reload the tank, turn the stove on, if the problem persists, call the authorized service
	The draught is not enough	Check that there are no obstructions in the flue and air inlet
	The pellet loading auger is broken	Call an authorized service
	The smoke extractor is broken	Call an authorized service

12.10 Remote Control Description (Optional)

The remote control allows you to control the following functions:



Pressing the button 1
The temperature increased from a minimum value of 7 ° C to a maximum value of 40 ° C
Pressing the button 2
Temperature decreases from a maximum value of 40 ° C to a minimum value of 7 °C
Pressing the button 3
It turns on / off the stove
Pressing the button 4
Joker can be matched to a specific function
Pressing the button 5
Power is decreased from a maximum value of 5 to a minimum of 1
Pressing the button 6
Power is increased from a minimum value of 1 to a maximum of 5

13 Maintenance, cleaning, testing the stove

All cleaning operations and tests must be carried out when the stove is cold, with the plug disconnected, using gloves and mask. The ZF company does not assume civil or criminal liability, in case you clean or test the stove when this is on, still warm, with the voltage supply switched on and without proper protective equipment.

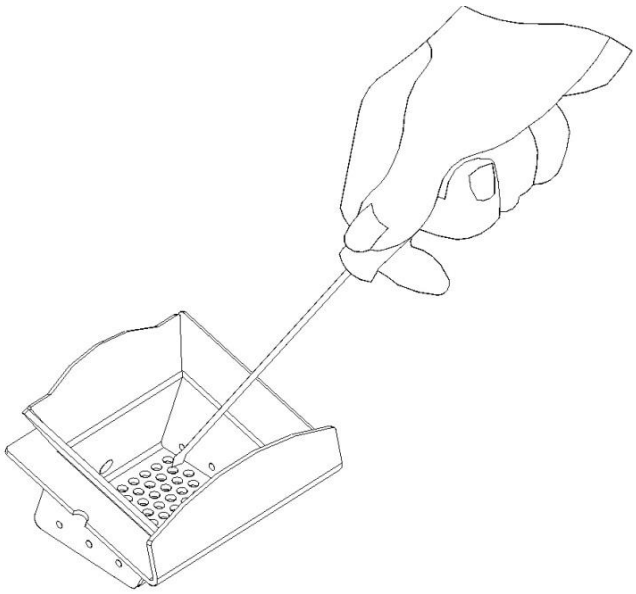
Daily cleaning

Brazier Cleaning

The cleaning of the brazier is very important for the proper operation of the stove; it should be performed daily before each start. Lift the brazier from its place, clean the inside of the brazier with a brush by removing combustion remains and free all the air passages with a screwdriver or a pointed tool (not supplied with the stove). This operation is particularly necessary when using a pellet of poor quality; it is also good to check and clean the brazier support, if there are remains inside they should be removed with a shovel or with a vacuum cleaner. A good cleaning of the brazier ensures good combustion and, consequently, a high yield of the stove.

Cleaning the combustion chamber and ash drawer

The cleaning of the ash drawer and combustion chamber should be made when the ash reaches the edge of the same drawer; it is strictly forbidden to light the stove if the ash goes beyond it. Every day when you clean the brazier also check if the drawer has to be emptied. This maintenance must be done when the stove is cold; it is forbidden to use water to cool the ash or to clean the inside of the stove. You can use the vacuum cleaner, but the ash has to be perfectly cold. The drawer must be replaced correctly and get to the bottom and there should be no remains of ash in front of or under it, if remains are present, there can be interference with the closing of the door, consequently a loss of air in the combustion chamber.



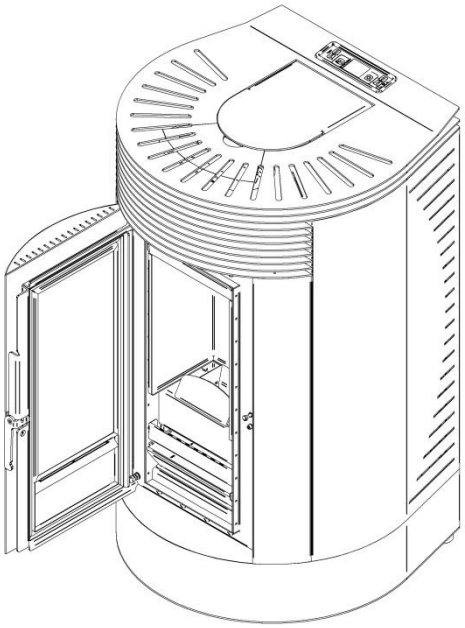
Cleaning the glass

The glass is self-cleaning and so, while the stove is in operation, a little of air flows along the surface of the same, taking away the ash and dirt; Nevertheless, after a few hours, a grayish patina will appear and it has to be cleaned at the first turning off of the stove. The dirt on the glass also depends on the quality and quantity of pellets used.

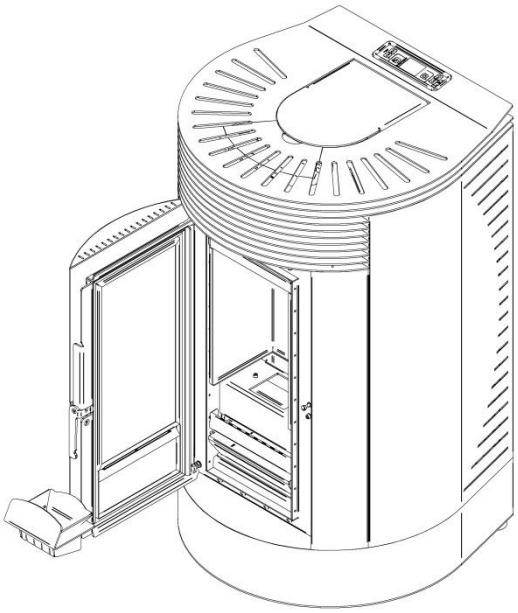
When this operation is done, always watch if the gray seal around the glass is in good condition; if you don't control the efficiency of this seal, the operation of the stove may be compromised. Pellets of poor quality, dirty brazier, may nevertheless cause more dirt in the glass.

Attention: in case of broken or damaged glass, do not try to turn on the stove.

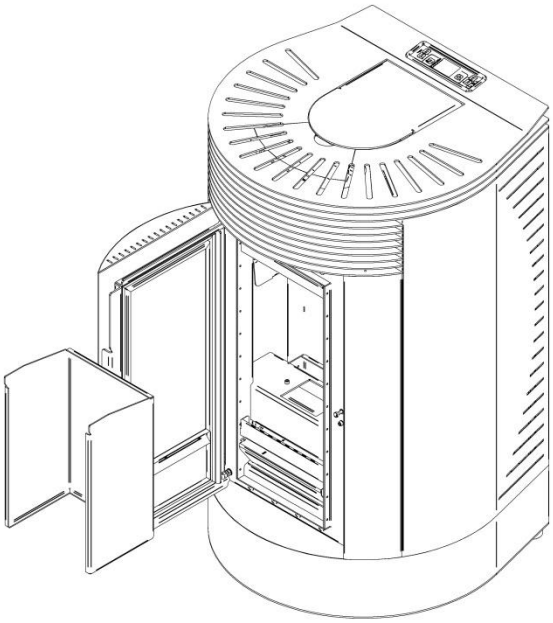
Monthly cleaning



Open the door of the stove, by a vacuum cleaner remove all the ash, with a brush, clean the remains attached to the inner sides of the stove.

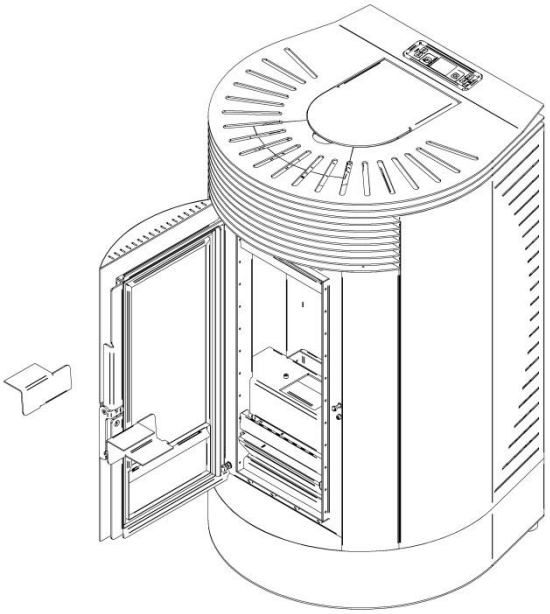


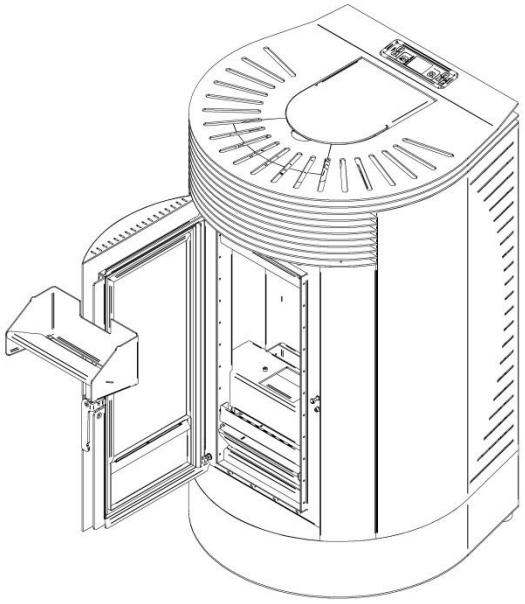
Remove the brazier to proceed with the removal of interior sides.



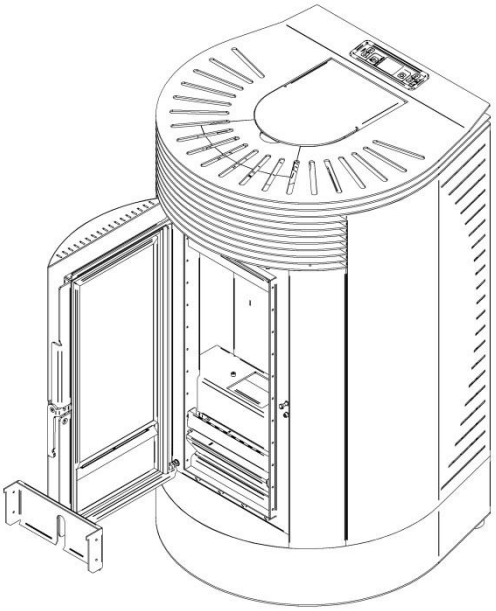
Remove the internal combustion chamber surround, taking it by the two lower edges, if this operation is difficult, use pincers.

Remove the two lateral supports by turning them up, after you have done this, remove the flame trap top.

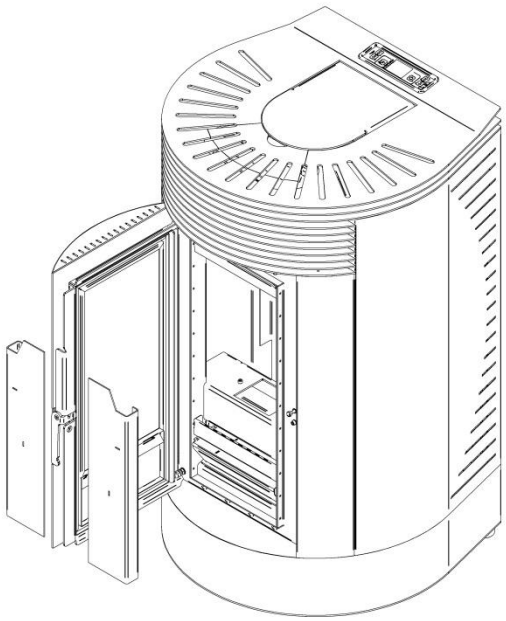




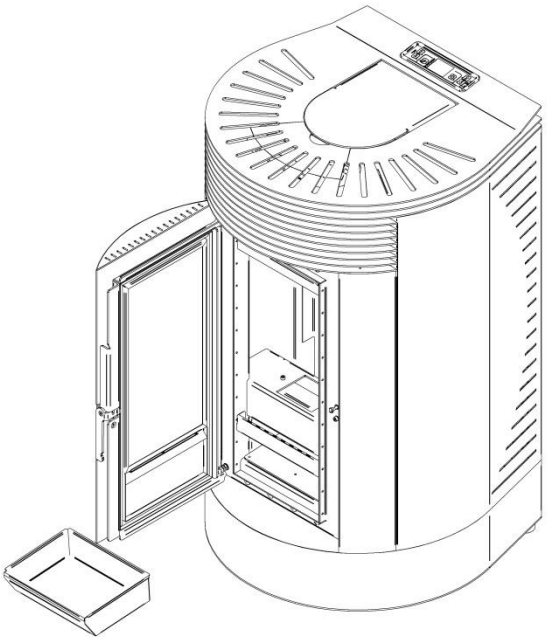
To remove the flame trap top, take it with one hand in the middle, pull in a linear way down, once you see all the spin box, rotate to remove it from the combustion chamber of the stove. Take the vacuum cleaner and clean the inside.



At the bottom of the combustion chamber, behind the support of the brazier, there is another combustion chamber surround, to remove it, grab it by the edge and pull up.

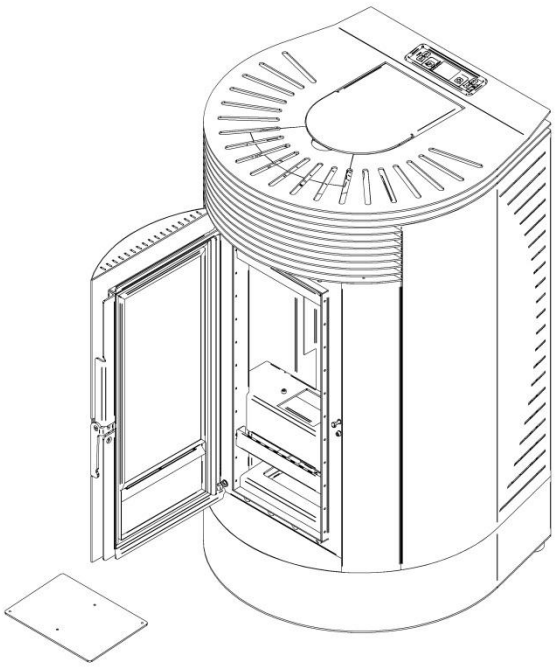


Removed this part, the two rear combustion chamber surrounds are released, to remove them, simply take them off. Even at this stage, take the vacuum cleaner to clean the entire inner part of the stove, if there are remains stuck on, use a brush to remove them from all surfaces.



When all surfaces are clean, remove the ash drawer and clean it carefully.

Finally, use a screwdriver to remove the cap that is located under the ash drawer and clean also this space carefully.



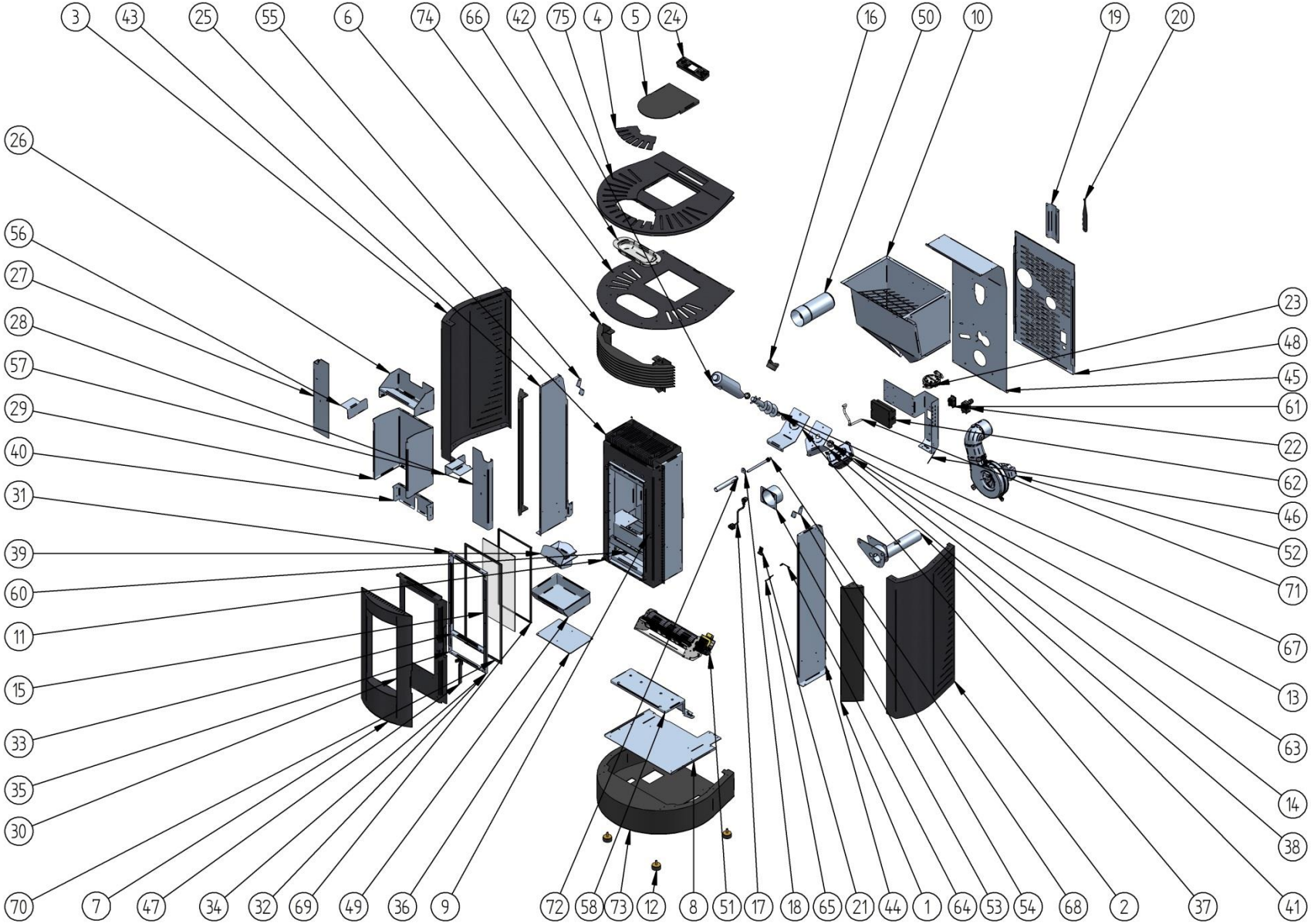
Check all the interior, and then proceed with the reassembly of all components, paying attention to their correct repositioning, cleaning and physical state. Do not reassemble broken or damaged parts that may cause the malfunction of the stove.

Summary scheme of the cleaning and maintenance of the stove

	Daily	Every 3 days	Every 15 days	Once every 1000 Kg	Seasonal 1500 hours	Executed by
Brazier	X					User
Ash drawer		X				User
Glass		X				User
Suction Line					X	Technician
Flue					X	Technician
Fumes pipe					X	Technician
Pellet tank				X		Technician/User
Ash chamber			X		X	User
Door gasket		Check			X	Technician

14 Spare parts

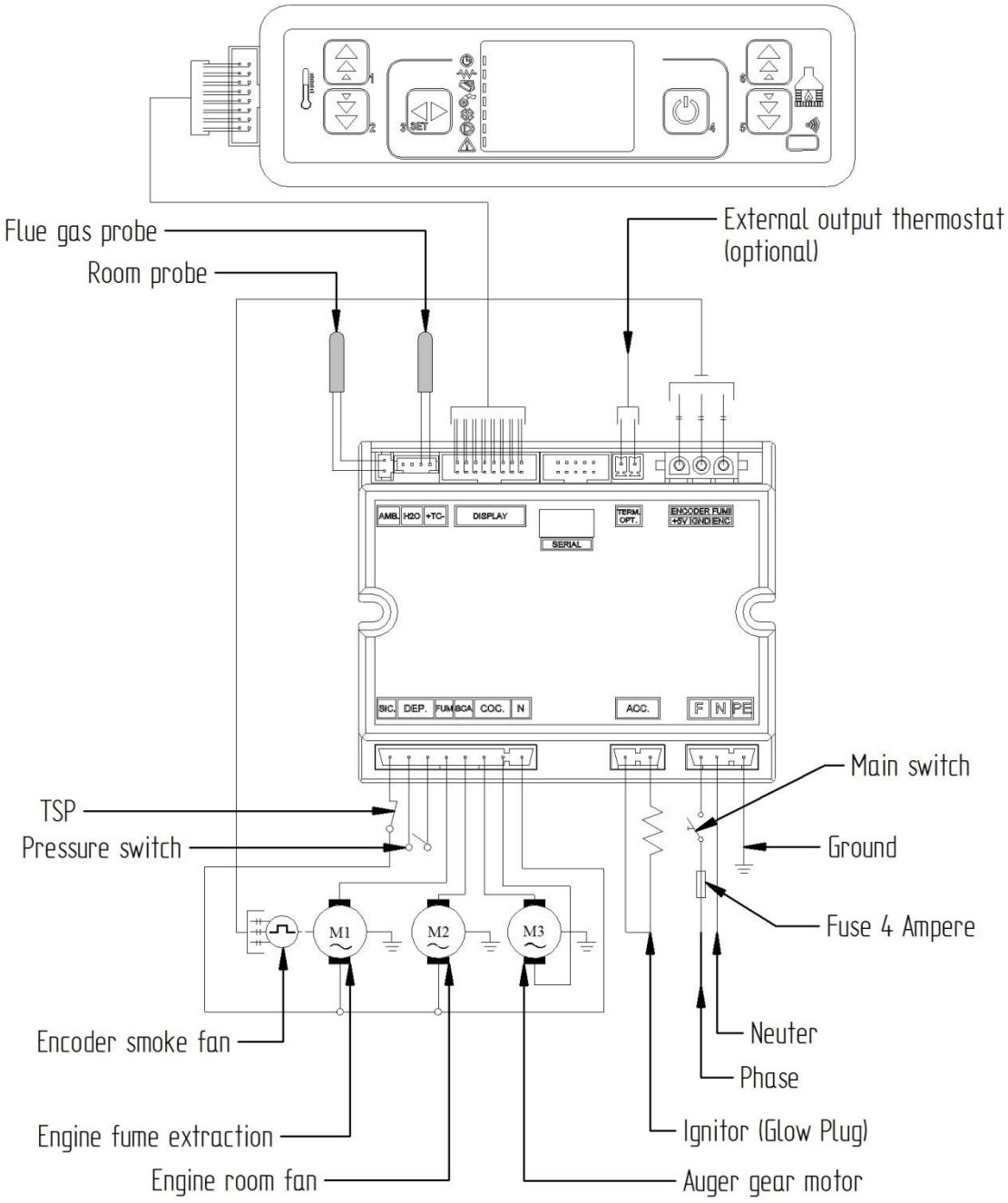
The ZF company disclaims any liability whether civil or criminal, arising from the use of non-original spare parts, also informs that the use of these implicates the fall of the warranty on the stove. You will find the complete list of spare parts and related code to communicate at the time of the request below.



Pos.	Replacement Code	Title	Q.ty	Notes
1	R2000046	Angolare stufa	2	
2	R2000047	Pannello esterno DX	1	
3	R2000048	Pannello esterno SX	1	
4	R2000050	Sportello umidificazione	1	
5	R2000051	Sportello carico Pellet Sp.30/10	1	
6	R2000052	Griglia centrale	1	
7	R2000054	Cornice porta	1	
8	R2000056	Piastra di spessoramento 20/10	1	
9	R2400353	Perno aggancio porta 6/8 kW nitrurato	1	
10	R2400420	Serbatoio Pellet 29 litri 17 Kg 2010/A	1	
11	R2400448	Cerniera per porta Ø 12 X 34 2010/A	2	
12	R2400483	Piedino antivibrante 40x20+perno M8	4	
13	R2400486	Bussola per coclea	2	
14	R2400508	Fissaggio coclea x stufa 6/8/12 kW	1	
15	R2400513	Vetro ceramico 205x413 40/10 K 2010/A	1	
16	R2400573	Boccola isolante Teflon 2010/A	1	
17	R2400671	Cavo alimentaz.3x075 nerp 2mt SCHUKO	1	
18	R2400737	Staffa fissaggio candela	1	
19	R2600760	Omega per flat Sp.10/10	1	
20	R2600044	Leva estrai maniglia stufe EA	1	
21	R2600400	Cavo Flat 16VIE L=120cm FL16V1200FFZZ	1	
22	R2600947	TERMOSTATO - 100°	1	
23	R2600402	Pressostato Sic. 39Pa TDPNP04MBAR00	1	
24	R2600404	Display LCD Bianco con Dec Neu PF047_E01	1	
25	R2600414	Corpo 6/9 kW	1	
26	R2600415	Deflettore superiore	1	
27	R2600416	Batti fiamma post sx	1	
28	R2600417	Batti fiamma post dx	1	
29	R2600418	Batti fiamma alluminato	1	
30	R2600419	Telaio porta EA 310 X 587 X 20	1	
31	R2600420	Ferma vetro superiore	1	
32	R2600421	Ferma vetro laterale dx	1	
33	R2600422	Ferma vetro corto centrale	1	
34	R2600423	Ferma vetro corto inferiore	1	
35	R2600424	Ferma vetro laterale sx	1	
36	R2600425	Tappo inferiore	1	
37	R2600427	Staffa supporto serbatoio-coclea	1	
38	R2600428	Staffa supp. motore-coclea	1	
39	R2600430	Braciere 6/9 kW EA	1	
40	R2600431	Convogliatore ceneri	1	
41	R2600433	Staffa aspirazione-sostegno 2014	1	
42	R2600435	Tubo coclea EA 6-8-11-13	1	
43	R2600437	Fianco sx convogliatore	1	
44	R2600438	Fianco dx convogliatore	1	
45	R2600439	Fondo convogliatore	1	
46	R2600446	Supporto interruttore	1	
47	R2600447	Maniglia porta EA	1	
48	R2600450	Pannello posteriore	1	
49	R2600455	Cassetto cenere	1	
50	R2600740	Tubo con bicchiere INOX 316 Ø 80 L=200	1	
51	R2600512	Ventilatore Ø 80X304 M POLI SCHERMATI DX	1	
52	R2600516	Ventilatore est. fumi PL21 dis.022434-00	1	
53	R2600518	Flangia raccordo Ø 80 H=50 dis.017023-02	1	
54	R2600526	Staffa serbatoio sx	1	
55	R2600527	Staffa serbatoio dx	1	
56	R2600533	Turbolatore sx	1	
57	R2600534	Turbolatore dx	1	
58	R2600535	Mensola porta stufa	1	
60	R2600580	Copertura per velo d'aria inferiore	1	
61	R2600627	Modulo Alimentazione polysnap BZ01001	1	
62	R2600631	Scheda Madre N100	1	
63	R2600632	Motoriduttore SPG 2 RPM	1	
64	R2600638	SONDA AMBIENTE SONTC0851PLCP x N100	1	
65	R2600639	SONDA FUMI SOTCJ0880ACCF x N100	1	
66	R2600662	Vaschetta umidificazione stampata 15/10	1	
67	R2600663	Coclea x stufa mod. 6-9-11-13 kW	1	
68	R2600674	Resistenza .HDL Ø 9,9 L=130 mm x N100	1	
69	R2600706	Nastro tex-tape black adesivo	1	
70	R2600707	Treccia artica nera D12mm	1	
71	R2600709	Tubetto silicone	1	
72	R2600720	Tubo candela 2014	1	
73	R2600726	Base stufa baldo	1	
74	R2600728	Sotto-top inferiore Sp.30/10	1	
75	R2600729	Top stufa baldo	1	

15 Wiring diagram

Below the diagram for the connection between the different electric parts and the motherboard of the stove is represented.



TSP= safety thermostat pellet tank

16 Duct (Optional)

The duct system allows to carry and distribute the heat generated from the stove also in other rooms different from the one where the machine is positioned.

Connection

The connection to the heater can be of two types:

- Connecting on top of the stove only through a tube
- Connection on the back of the stove using two pipes

The company Z.F. s.r.l. recommends using smooth tubes, with wide curves and insulated to prevent heat loss along the way, it also recommends not exceed 10 meters in overall length of the system because in this case there's loss of heat produced from the stove.

Regulation

The adjustment of the channeling can happen in two ways depending on the type of stove you have:

- Manual Adjustment
- Automatic Adjustment

Automatic Adjustment

To adjust the fan press button 3 to go to the menu Rule Fans *Figure 30* press the button 3 again *Figure 31*

For each of the two fans are possible different types of adjustment (see table below). To change the parameters press button 1 (fan 2) and 2 (fan 3) press button 4 to confirm.

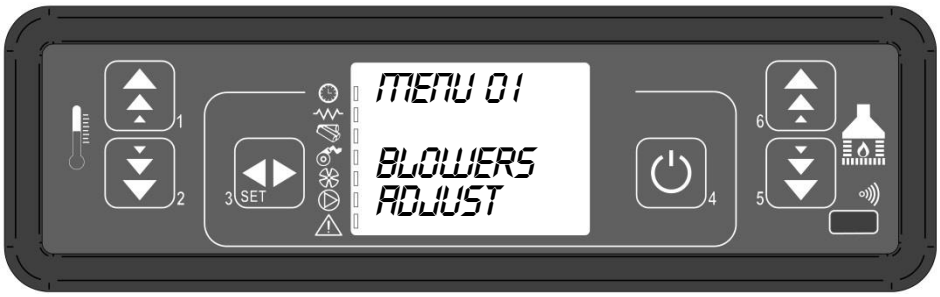
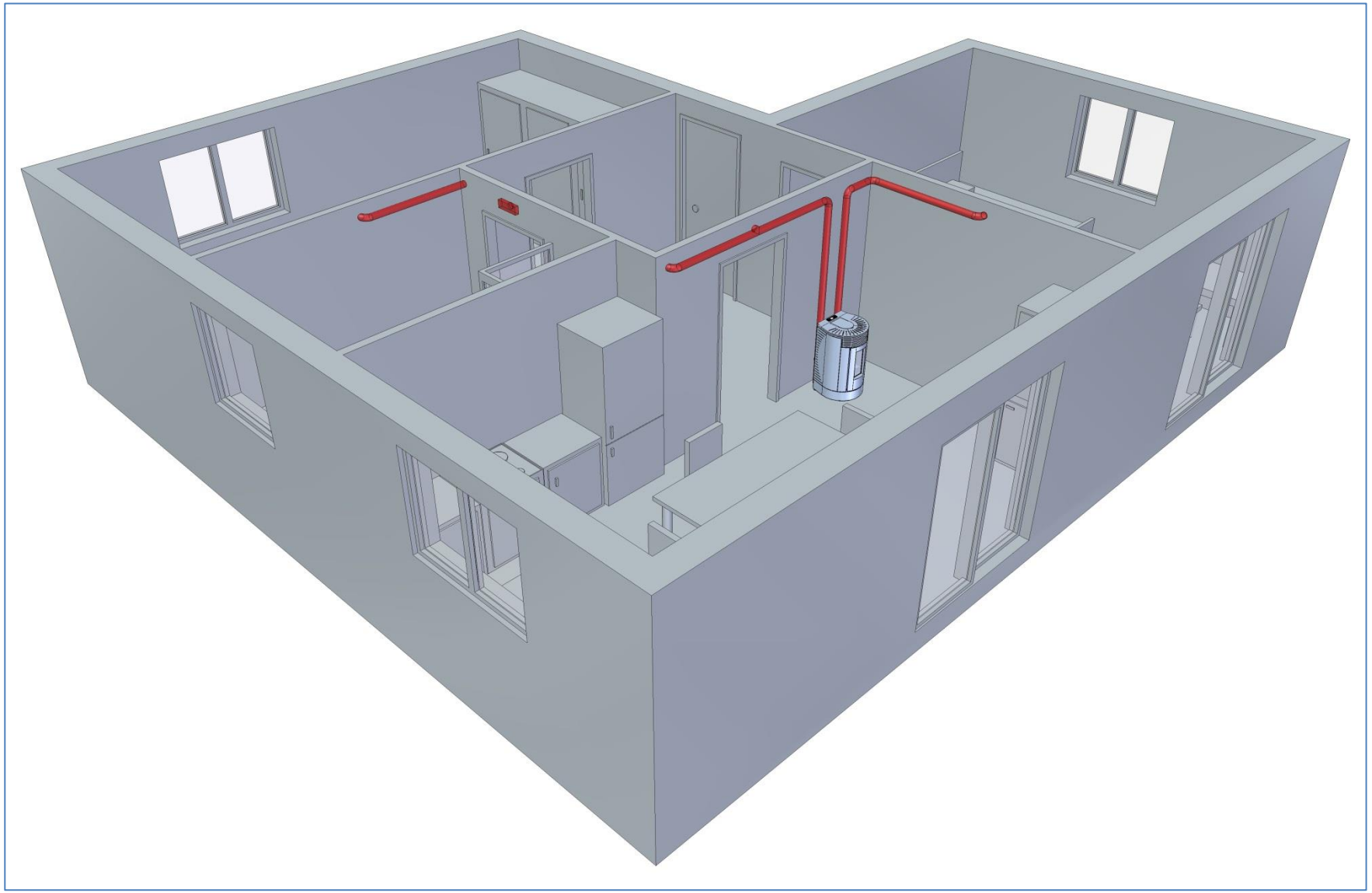


Figure 30

Figure 31

Setting	Fan 2	Fan 3
A	Corresponding to the selected power	Corresponding to the selected power
0	Fan off	Fan off
1	Fixed speed preset 1	Fixed speed preset 1
2	Fixed speed preset 2	Fixed speed preset 2
3	Fixed speed preset 3	Fixed speed preset 3
4	Fixed speed preset 4	Fixed speed preset 4
5	Fixed speed preset 5	Fixed speed preset 5

Below there is an example of installation of ducted stove in a home.



17 Notes

Notes

Information on disposal or recycling of the product at the end of its life cycle

(for the member states of the EU)

This product falls within the ambit of the Directive 2002/96/CE, also named WEEE (or RAEE), concerning the electric equipment wastes. The aim of the directive is to prevent, so to reduce, the wastes production derived from that equipment and to promote reuse, recycling and other forms of reutilization, in order to protect environment and public health from possible harmful effects. The symbol of the barred dustbin indicates that the product is subjected to the Directive: therefore, at the end of its life cycle, it can't be disposed like mixed municipal waste but it must be assigned to specialized collection structures, as prescribed by local regulations or by the dealer. The importer and the dealer are responsible for collection and disposal, both in case in which these are carried out directly and in case in which these are carried out through a collective collection system. Every explanation and every other information will be provided by the dealer/ technician where this product has been bought or by the local authority responsible for waste management.

Dichiarazione di Conformità
Declaration of Conformity

CE

Declares

Under his responsibility that the product

Description - Pasubio

Year of construction 2016

It is conform to European standard; **2014/30/UE, 2014/35/UE; 2011/65/UE**

Z.F. SRL Unipersonale
Via Dino Fochesato,1
36040 Meledo di Sarego
Vicenza Italy tel +39 0444 820933

il 17/10/2016
Zorzetto Graziano