

TECHNICAL MANUAL

ARCA
caldaie

ARCA



AIRPELLET

8 KW, 10 KW, 12 KW

Stoves

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The installation of the pellet stove must be realized by qualified technician observing the technical norms, the national and local laws in force.
Observe the safety notes concerning the installation, the maintenance and the use contained in this manual

1. INSTALLATION



AVVISO!

Read carefully the precautions to follow correctly the recommendations .
Do not try to install the heater: get in touch with authorized personnel who have the relevant training.

- In case that there is a breakup in the stove or it didn't correctly work, to put on in contact with the of Assistance Service of zone: whatever attempt that does him to get off pieces or to realize the maintenance of the stove can expose the consumer to a danger of power drains. The stove contains pieces whose substitution must have realized from the Assistance Service.
- The stove is a appliance of heating; its pieces can reach extreme temperatures and the contact with the same without the suitable protection you can provoke scorching of different degree. Pay particular care to the children.
- In the case to realize a removal, puts on in contact with the Assistance Service for its withdrawal and new installation.
- Insert neither the fingers nor other objects in the fissures of exit of the pipe of air.
- Inside the instrument there is a high speed fan that could cause serious personal wounds. Pay special attention to the children
- Doesn't directly remain during long time statement to the flow of warm air.
- The direct and prolonged exposure to the warm air could be dangerous for the health. Pay a particular attention in that environments in which is present sick, children or old person.
- In the case in which the stove doesn't work well, immediately stop the appliance, disconnect the corresponding automatic interrupter and put on in contact with the Assistance Service. The prolonged use of the appliance under said conditions could cause fires or sparks.

AVVISO!

- During the operation of installation of the stove, maintains the children far from of the zone of job to avoid unexpected accidents.
- Don't stop neither cover in some way the body of the stove, neither obstructs the situated loopholes in the superior part. The obstruction of said loopholes could cause fires.
- Don't use the stove in zones that contain instruments of precision, neither works of art. The quality of the preserved objects would be deteriorated.
- Don't expose animals neither plants directly to the flow of air of the stove. The exposure prolonged to the direct flow of the stove could have some negative effects in plants and animals.
- Occasionally ventilate the environment until it is using the appliance. An insufficient ventilation could be the cause of an insufficiency of oxygen in the environment.
- Don't expose the stove to the water. The electric isolation could result ruined, with , as consequence, the possibility of short-circuits.
- Verify the conditions of installation to locate the possible damages that stove could have.
- Don't use gas inflammable gas next to the heater. Disconnect the automatic interrupter if the instrument is not used during long time periods
- We test the starting of all of our products.

1.1 Norms and declarations of conformity

1.1 Laws

Our factory declares that the stove is conforming to the following norms and European directives ok CE marking.

89/336 and 2004/108/CE, EMC directive and following amendments.

2006/42/CE, Machinery Directive,

89/106/CE, Product for Construction.

EN 60335-1, EN 50165, EN 50366, EN 55014-1, EN 61000-3-2, EN 61000-3, EN 14785

The installation of appliances has to comply the local and national legislation and the European directives.

Responsibility

The manufacturer won't accept direct or indirect responsibility, civil or penal derived from:

an insufficient maintenance;
not observation of the instructions contemplated in the present training manual.
an use of this appliance ont allowses by the Country of destination;
the installation from personal unqualified or without the pertinent formation.
the changes and reparations not authorized from the manufacturer.
the employment of non original spare parts non original.

The use of pellet not approved by the manufacturer.

1.2 Installation

Chimney of exhaust gas

To prevent malfunction of the product is critical to have a chimney installed in a workmanlike manner and use a good quality pellet.

The chimney of exhaust gas must comply the followings requisite:

- It shouldn't be connected to any other type of fireplace, stove, boiler or bell of ventilation (fig 1).
- It has to be installed to a distance adjusted from where material fuel there is or

inflammable through a hollow of air or opportune isolation.

- The inside section will have to be uniform, preferably circular: the square or rectangular sections should have angles rounded off with a greater ray of 20 mms, a maximum relationship among the sides of 1,5; the walls have to be the smoothest possible not to have particularly narrow zones, irregular curves or discontinuity or deviations from the superior axle to the 45°.

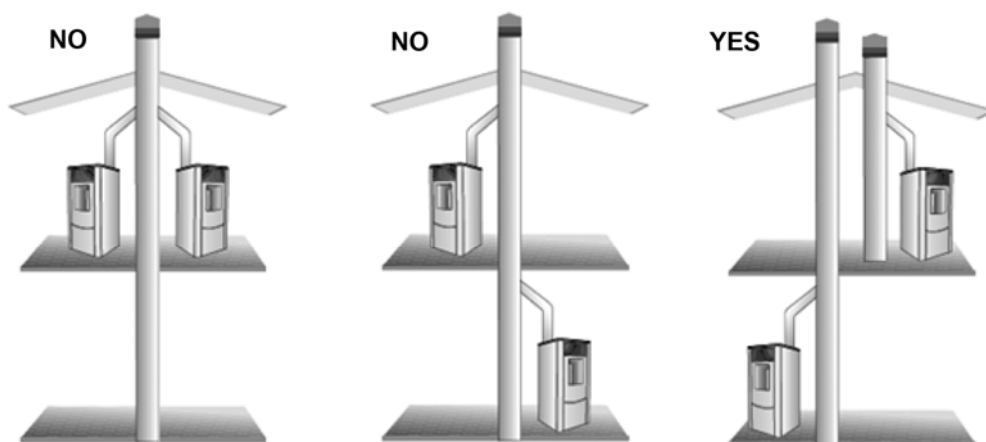


fig. 1: methods to install the exhaust gas ducts

All the appliances should have must have an own chimney with an equal or superior diameter to the pipe of gone out of the stove and a non inferior height to that declared;

In the same environment not ever use two stoves, a fireplace and a heater to firewood, a heater and a kitchen, etc, because the draught of one of these appliances could damage that some other. The ducts of collective ventilation that can reduce the atmospheric pressure in the environment of installation, are not admitted, even if installed in environments that are adjacent to the site of installation, or to communicate with it.

You recommends that the flue gas both duct endowed with a chamber that accumulates the solid materials. This chamber must have done so that can easily be opened and can easily be inspected through a hermetic cover.

the pipe of the flue gas ducts doesn't have to pass through inflammable material;

Chimney

The superior part of the fireplace has to respect the followings conditions:

- Should have an useful diameter of exit non inferior to double of chimney.

The top of the fireplace of the roof that remains to contact with the outside (for example, in the case of open lofts or mansard) must be covered with bricks or tiles and in every case must be well isolated.

Must be builds for holding out of the chimney the rain, the snow, and extraneous bodies, so that the unload of flue gas is not prevented

The top of the fireplace has to be of a type against back wind above to the peak of the roof.

The structures or other obstacles that over the superior part of the fireplace it doesn't have to be too much next to the superior part of the same fireplace

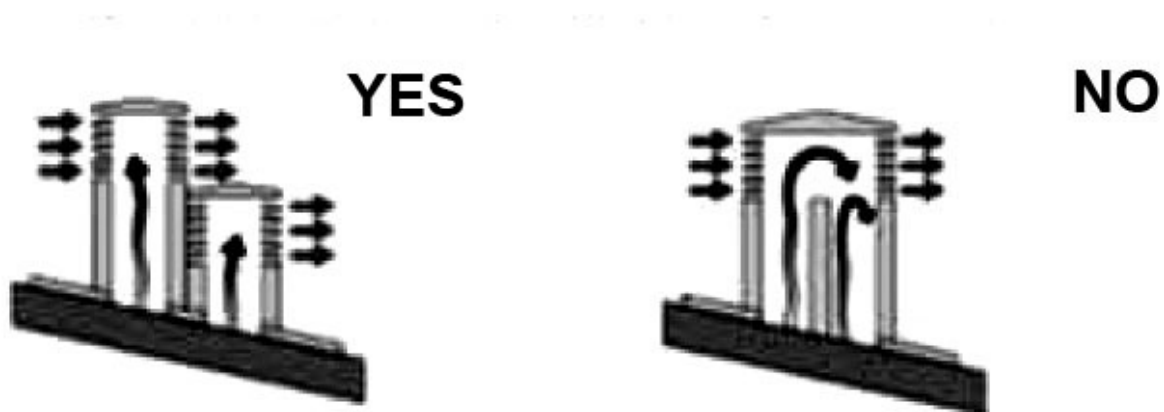


fig. 2: characteristics of the chimney pot.

Chimney

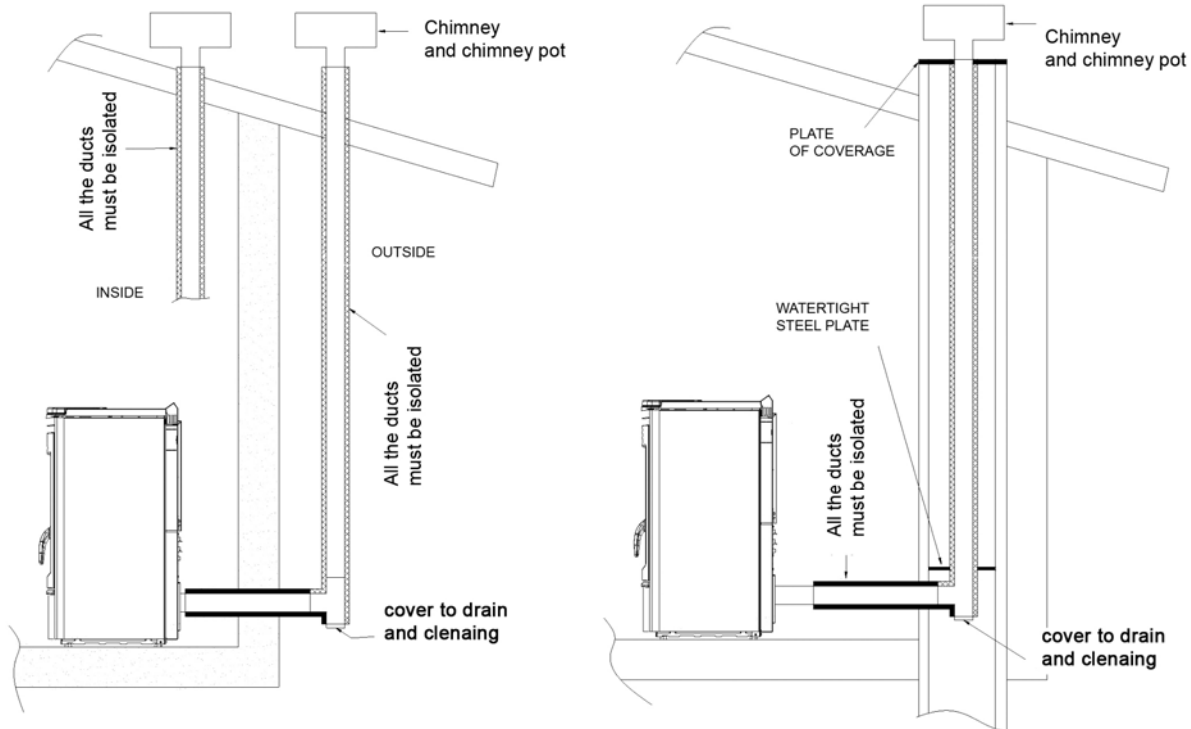


fig. 3

The customer has to own the "certified of conformity of the chimney".

- **In the flue must be a vacuum of 12 Pa with the stove working.**
- The discharge of flues gas represented in the following figures is the optimal in demand solution to also assure the disposal of the flues gas with out fan caused by a possible lack of electric energy. The least gradient of 1.5 meters among unloaded back of the stove and the terminal to "T" external to the building, it assures the disposal of the flues residual gas of the combustion in the case described (Otherwise these would stagnate inside the hearth and they would go to escape in the environment with besides the possibility of bursts). The brought figures point out the optimal solution when is decided for the unload the flues gas over the roof or inside the chimney. In the case to unload the flues gas over the roof him proceeds foreseeing to insert a link "T" with cover of inspection, stirrups of link adjusted to the height of the chimney, converges that cross the roof

and chimney pot of protection against bad weather.

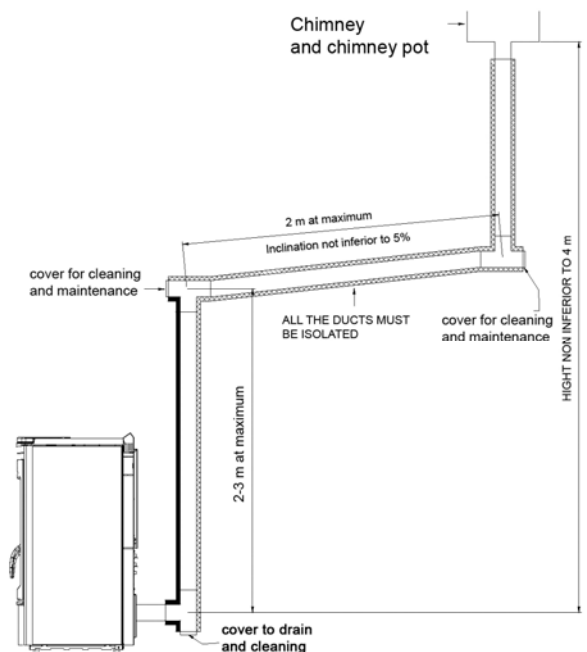


fig 4

If you want to use the classical chimney in masonry a link foresees him to "T" with a cover of inspection, stirrups of support adjusted.

If the chimney is very old is obligation to restore to pipeline health introducing it in steel or porcelain of the diameter not superior to 150 mms. Adequately seal the part of entry and exit in the chimney in comparison to the part in masonry.

It is forbidden the use of a net to the extremity of the pipe of unloading, since it could cause the bad operation of the stove. If the duct smokes is installed in fixed way it is opportune to foresee some openings of inspection to be able to effect the inside cleaning especially in its horizontal lines. To such intention follow the scheme. How much described above it results essential to be able to remove ash and residual that can be created during the process of combustion.

The system of unloading flue gas will have to entirely be for the stove, it is not permitted to realize the I unload in common with exits with other appliances. The I unload of smoke it realizes him through the pipe of 8 cm, positioned in the back part.

It will be had to prepare one" T" with a cover of receipt of the condensation.

The I unload of flue gas of the stove it will owe is go connected to the outside using a steel pipe or black resistant thin to a temperature of 450°C, without obstructions.

The pipe will be tight.

To assure that the pipes are tight and their possible isolation stopped it is necessary to use material resistant up to 300 °C, silicone or suitable mastic for high temperatures.

The horizontal sections can have until a longitude of 2 meter. Is possible to have three curve of 90°at maximum. If the pipe of flue gas is not inserted in the exit of flue gas, you need a opportunely isolated vertical section of a minimum of 1,5 meter, except in case of evident danger for the safety , and a terminal with a device of back wind (fig. 5).

The vertical duct can be in the inside or in the outside. If the duct of the flue gas is in a fireplace, this will owe this certificate for solid fuel and if it is greater than 150 mm in diameter, a change is necessary inserting an inside insulation that isolates flue gas from the contact of the bricks.

It has to be possible to inspect all the sections of the duct of flue gas. If it deals with a fixed duct, it will have to have orifices to realize works of inspection and of cleaning.

The adjacent place must not be use as garage neither to be a space without ventilation or exchange of air, a storage of inflammable material neither to be used for an activity that supposes a danger of fire.

fig 5: inside installation of flue gas ducts that it should be realized in conformity with the norms

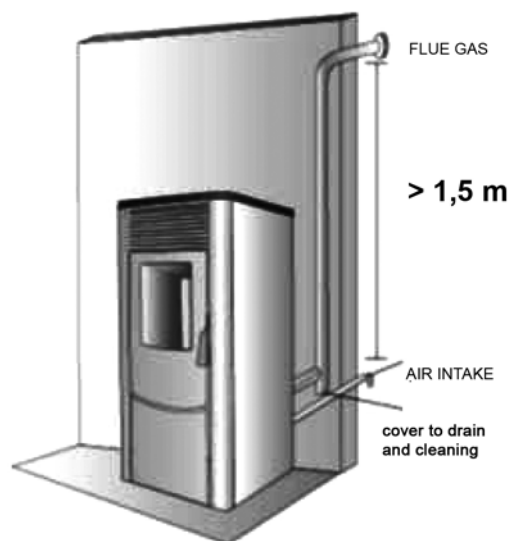
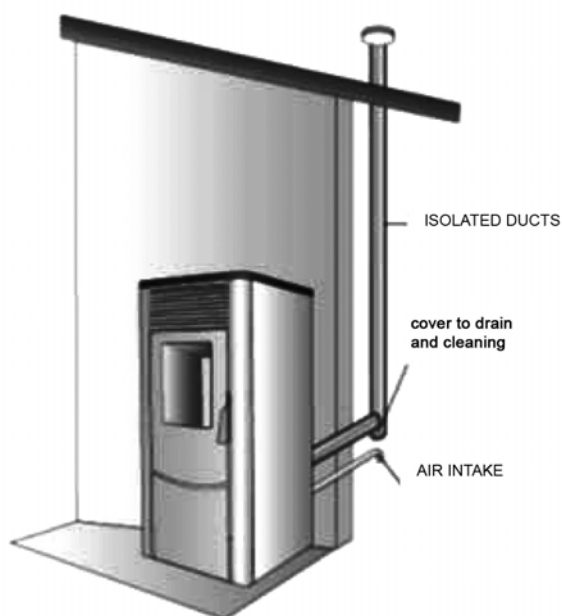


fig. 6: outside installation of flue gas ducts that it should be realized in conformity with the norms



The stove shouldn't be in the same place in which extractors are found, gas apparatuses type B neither, in any case, appliance or devices that put in depression one the place

The stove will owe with the necessary air is go installed for guaranteeing a regular operation of the combustion and an environmental comfort.

To make sure him that the environment in which the stove is installed has enough ventilation install a duct of taking of air with a diameter least recommended of 50 mms to allow the entrance of the air of the outside.

The taking of external air must have communicated with the stove and being positioned so that remains interrupted. It has to be protected with a permanent grate that cannot close or another adjusted protection provided that the least diameter is not be reduces.

Also the flow of air can get him of an adjacent place in local in which installed the stove provided that says flow can freely cross the permanent orifices communicating with the outside.

1.3 Dimensions

Dimensions of mod. 8 e 10 KW pellet stoves

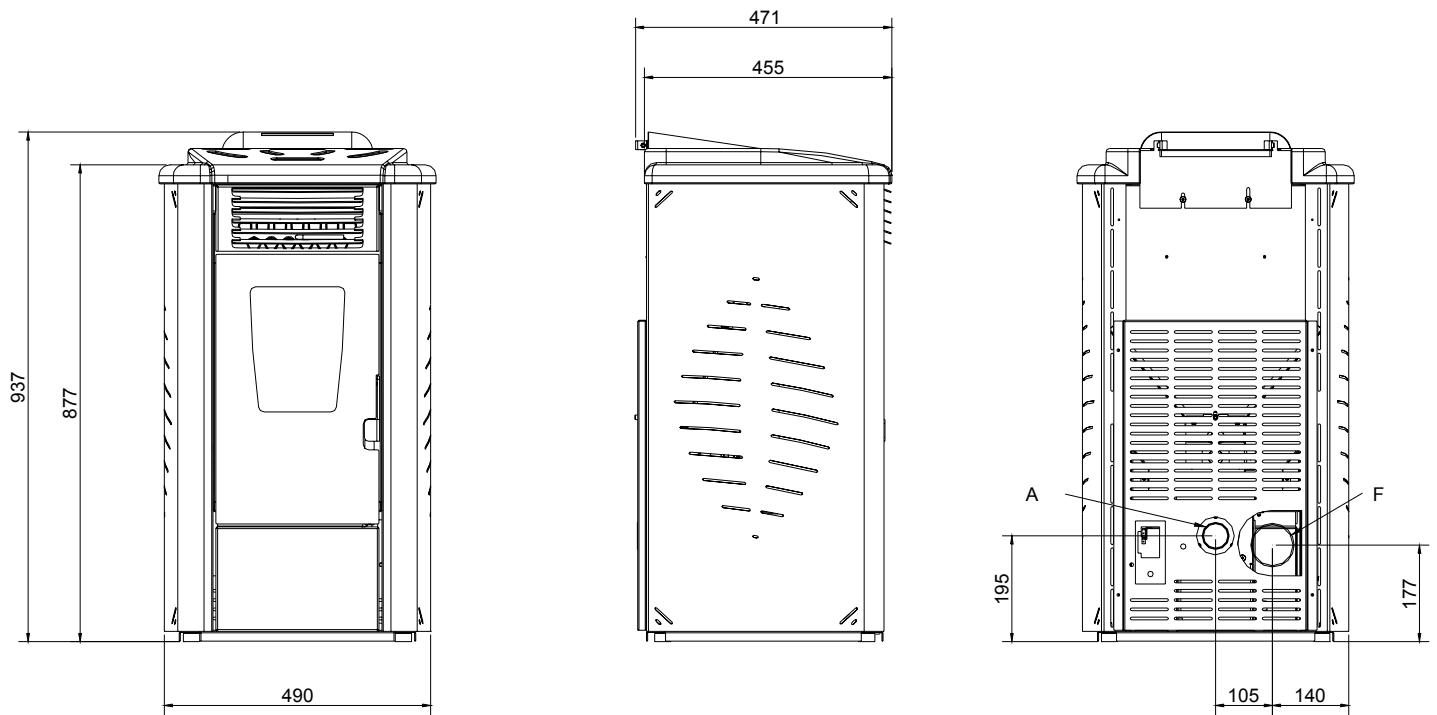


fig.7

F: flue gas Ø 80mm pipe
A: Ø 48-50 mm air pipe

Dimensioni della stove a pellet mod. 12 KW

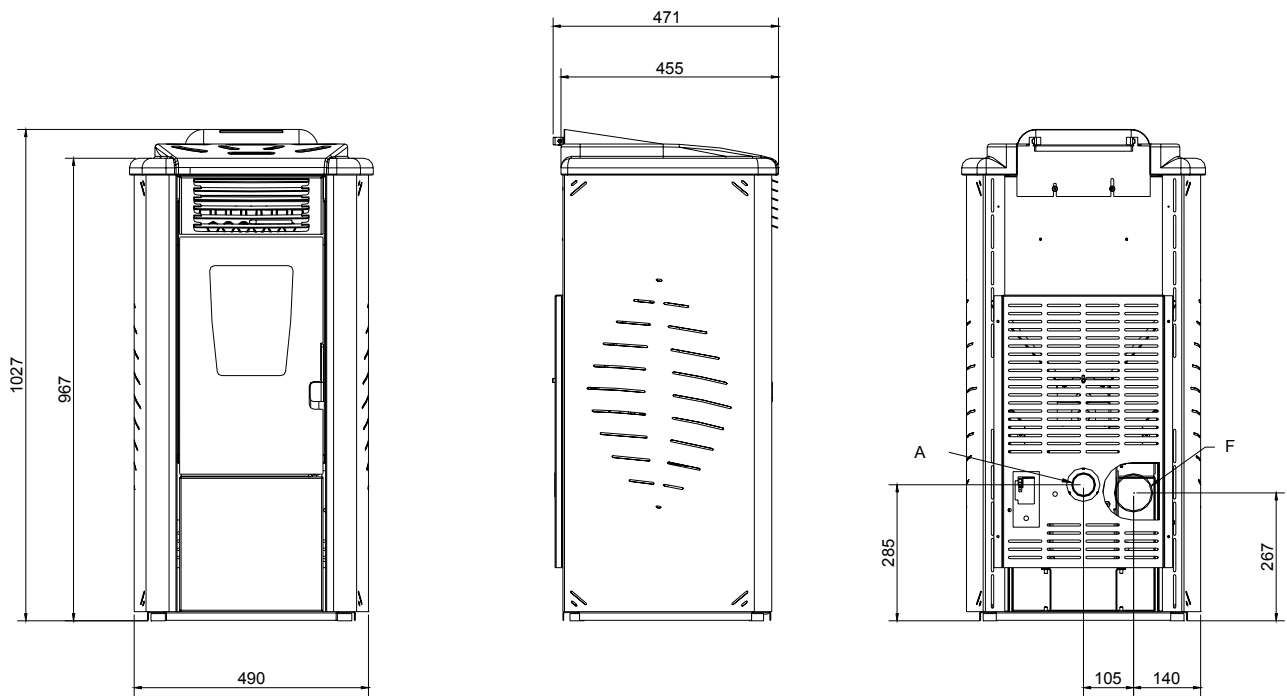


fig. 8

F: flue gas Ø 80mm pipe

A: Ø 48-50 mm air pipe

1.4 Positioning

The stove is equipped with an electric cable that must be connected to a female socket of 230 Volts and 50 Hz, with with a bipolar switch breaker. The variations of tension more of the 10 percent can put in danger the stove that doesn't have a differential interrupter.

The electric system has to observe the norms; to concretely verify the efficiency of the circuit of mass to earth. The cable of power supply has to have a suitable diameter for the feeding of the stove.

The stove will have to be completely in plain. Check the load capacity of the soil below.

Install the stove in an environment where you spend your life in a way that usual to heat evenly. Before deciding where to place the stove, you will have to take into account the following: The air used for combustion must not come from a garage or a room with no ventilation or air exchange, but rather to open space or outdoor. The stove must not be installed in a bedroom.

fig 9: minimum distance from objects



Aspiration combustive air

The air of combustion has to integrally take preferably from the external environment. To get a correct and sure position of the return of air, will need to concern all the precautions (fig.10). There is a series of distances to observe for avoiding that to the air of the fuel is drawn out from other places; the opening of a window could for example, cause eddies in the external air, picking them up of the stove.

It is better to install the stove in a large central room of the house to ensure maximum circulation of warm.

Safe distance from the fire

The stove should be placed taking into account the following safety condition.

The distance from the sides and the rear part must be 20 cm from the non-flammable material;

The distance from the sides and the rear part must be 40 cm from moderately flammable material;

A highly flammable material is not to be used at a distance less than 80 cm in front of the stove;

If you install the stove on a floor of combustible materials, the stove must be placed on a sheet of material that insulates against heat and it is wider on the sides of 20 cm, and 40 cm in front;

Do not place objects within the flammable material, or any material into the stove or in the safety distance which may cause the malfunction of the stove;

In addition, it is recommended to maintain all elements of fuel or flammable material, such as wood siding, wood furniture, flammable liquids, etc clothes. away from the radiating area of radiation of the stove, and, in any case, for a minimum distance of 1 m from heating block (fig.9);

In case the flue pipe passes through walls of wood or another combustible material, it is necessary to isolate the exhaust pipe of smoke with ceramic fiber and another material that has the same characteristics.



fig.10: distance from wall

Instructions for installing the fire protection

Put the protective plate of the fire following the instructions in the following figures. Install the protective plate of the fire making sure that you have properly positioned the 3 hooks as shown.

Fig. 11: mount the plate fire



fig 12



fig 13



fig 14



fig. 15

Componenti in porcellana di maiolica

La stove è ricoperta con porcellana semi-refrattario maiolica (no si deve confondere, pertanto con altri materiali simili come la porcellana comun). I punti od orifizi sono caratteristici di questa porcellana di maiolica fatto a mano, e pertanto non si considerano difetti, e né tanto minimamente hanno influenza sulla vita del prodotto

1.5 Turning on

Before lighting the fire in the stove, carefully read the instructions for use and maintenance.

Remove from the pellet storage that is located under the top cover of the stove, where is located the display, the components and documentation that are included in the packaging, making sure that the deposit is free from any foreign matter.

Unroll the cable of the ambient sensor which is placed in the rear of the stove without placing it on the pieces of the hot stove.

Correctly connect the output of the pellet stove fumes. Fill the deposit pellet 6 mm in diameter.

Open the door and check that the grate is properly inserted into its slot, and that the seal is properly mounted.

Close the door. Do not open the door until it's working. Do not open the stove until the pellet stove is operating. Connect the stove with the appropriate power cord received with the stove.

Before the first start of the stove, with the display in OFF, select M6 (see par.2.5.7 on page 36) To do this, press and hold the P1 for about 2 seconds. When appears the message M1, press the P2 button until appears in the display M6. Then press P3 to exit the menu M6.

Put the switch at the back of the stove in the "1" position.

Press the ON / OFF  button for 2 seconds and the stove will begin its ignition cycle

For the detailed explanations of the operation see the chapter 2 "Use and Maintenance" .

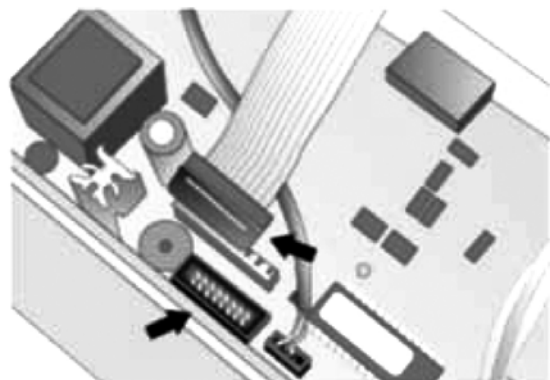
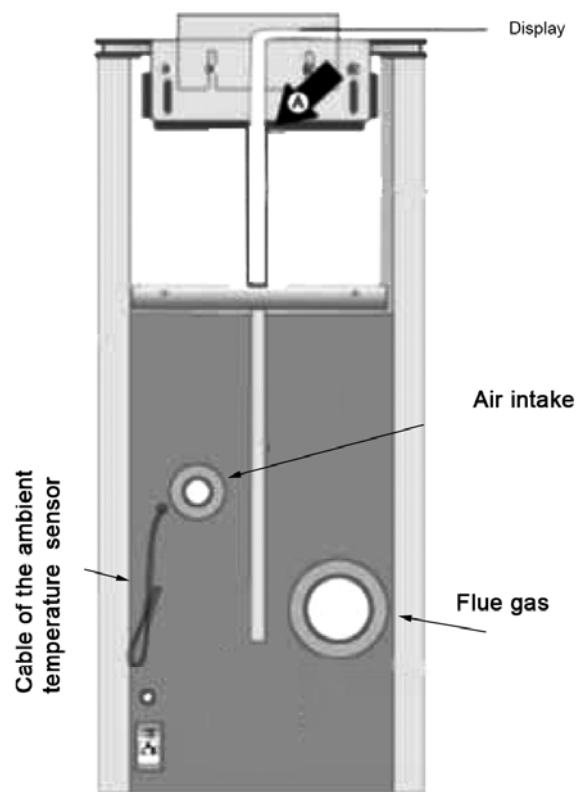


fig. 16

1.6 Maintenance

WARNING!

During the first firing is necessary to ventilate well around since the early hours of operation could emanate unpleasant odors due to the fumes of the paint and the fat that is present on the plates.

If during normal operation of the stove, the flue gas temperature reaches 220 ° C, a parameter that can be modified to a technician, the discharge of fumes is modulated in the following way:

- Flue fan motor speed;
- Auger pellet at minimum speed;
- Heat exchanger tangential fan at maximum speed.

This mode of operation reduces the temperature of the flue gas. When the temprature of flue gas decrease below the level of 220 °C, the stove restore the speed of the three engines to the previous settings.

When you restore the power, after a black-out, if the time of power failure is less than 30 seconds, the stove will restart in "WORK", otherwise it will activate the alarm AL1 Alar A1 Blac-out and the stove enters the shutdown sequence.

Operations to be carried out for the Assistance Service each year, before turning on the stove

- A general cleaning of the interior and exterior. A through cleaning of the heat exchange pipes
- A through cleaning and descaling of the grate of the cavity relative.
- Clean the engine and check the bearing clearance and unions mechanisms.
- Clean the flue gas channel (re-seal tubes) and cavity-extractor fan.
- Clean the flue gas pressostat, replace the silicone tube.
- Check the sensor of temperature.
- Clean, inspect and descale the cavity of the ignition coil, replacing it if necessary.
- Visually inspect the electrical cables, connections and power cord.
- Clean the pellet and verify the operation of the cochlea.
- Replace the door seal.
- Test auger, fan, ignition.
- Check the electrical parts and electronic components.
- Check the channel, creating a possible cleaning.

The figures are approximate and may differ from the original product. Images are an example to understand the way in which the product works.

2. USE AND MAINTENANCE

Dear Customer,

Thank you for choosing one of our products, the result of many years of experience and a continuous search for higher quality in terms of safety, reliability and performance.

This booklet contains all the information and helpful tips to use your product with maximum safety and efficiency.



Please note that the first switch must be by our Authorized Service Center which verifies the installation and complete the form of the guarantee.

Improper installation, maintenance performed poorly absolve the manufacturer from any damages arising from the use of the stove.

- The appliance should not be used as an incinerator, nor should they be used fuels other than pellets.
- This manual has been prepared by the manufacturer and is an integral part of the product and must accompany him throughout his life. In case of sale or transfer of the product always ensure the presence of the book because the information contained in this manual are addressed to the purchaser and to all those people who for various reasons do the installation, use and maintenance.
- Carefully read the instructions and information contained in this manual before installing or using any repairs.
- The instructions in this manual will ensure safety and product, operating economy and a longer operating life.
- Careful planning and risk analysis made by our company have allowed the creation of a safe product, but before performing any operation, it is recommended to strictly follow the instructions in this document and keep it handy.
- Exercise care in handling the ceramic components where present.
- The product should not be placed near a wall of wood or any other combustible material, it is also necessary to maintain the safety distances.
- During operation, some parts of the stove (door, handle, casing) can reach high temperatures.
- Therefore exercise great care and take precautions especially if there are children, the elderly, the disabled and animals.
- The installation must be performed by authorized persons (Authorized Service Center).
- Diagrams and drawings are provided for illustrative purposes, the manufacturer in order to pursue a policy of continuous product improvement may change, without notice, any changes it deems appropriate.
- It is recommended to use gloves to handle pellet loading door and handle for opening the door
- It is forbidden to install in the bedroom.



Never cover in any way the body of the stove or occlude the slits placed on the upper side when the appliance is in operation.
All our stoves are tested on the production line

In case of fire, disconnect the power supply, use a fire extinguisher and possibly call the Fire Department. Then contact an Authorised Service Centre.

2.1 Regulations and declaration of conformity

Our company states that the stove is manufactured in accordance with the following standards and European Directives for CE marking:• 89/336 EC and 2004/108 EC, the EMC Directive, as amended;

- 2006/95 EC Low Voltage Directive and subsequent amendments;
- 2006/42 EC (Machinery Directive);
- 89/106 EC (Construction Products);

All local laws and national and European standards must be met when installing the appliance;

- EN 60335-1, EN 50165, EN 50366, EN 55014-1, EN 61000-3-2, EN 61000-3-3, EN 14785.

Information pertaining to a security

Please read this instruction manual and maintenance before installing and operating the stove.

If in doubt, contact your dealer or authorized service center.

- The pellet stove must only be operated in rooms used as a dwelling. This stove, being regulated by an electronic board, allows a completely automatic and controlled combustion; in fact, the controller adjusts the ignition phase, 5 power levels and the shutdown phase, guaranteeing a safe operation of the stove;
- The container used for the combustion does fall into the receptacle largely from the ashes produced by the combustion of the pellets. However, it is advisable to check daily the container, since not all the pellets have high standards (only use quality pellet recommended by the manufacturer);
- The glass is provided with a special air circulation for self-cleaning of the same, however, it is not possible to avoid a slight grayish coating on the glass after a few hours of operation. This also depends on the type of pellet used. Some pellets may soil more than others.

Responsibility

With the delivery of this manual, we do not accept any liability, both civil as penal, accident derivatives of partial or total non-fulfillment of the instructions contained therein. We disclaim all responsibility originating in the use of inadequate stove, misuse by the user, modifications and/or repairs, the use of non-original spare parts for this model. The manufacturer disclaims any responsibility or liability direct or indirect result of:

- Insufficient maintenance;
- Non-compliance with the instructions contained in the manual;• Improper security guidelines;
- Installation not in accordance with the rules in force in the country;• Installation by unqualified and unprepared;
- Modifications and repairs not authorized by the manufacturer;• Use of non-original spare parts;• Exceptional events.



- The stove must be turned on pellet quality, 6 mm diameter of the type recommended by the manufacturer;
- Before connecting electrically the stove, must be prepared the pipe connecting the exhaust duct with the flue gas;
- The protection grid located inside the deposit of pellets you do not have to ever take away;
- In the environment where you place the stove must have sufficient air exchange;
- Never open the door of the stove during operation thereof.



- When the stove is turned on, its surfaces, the glass, the tube flue gases are found at high temperature:
- during operation, do not touch these parts without adequate protection
- keep the pellets in a dry and not humid;
- keep at a safe distance, safe from stove fuel and other flammable materials.

2.2 Wiring diagram

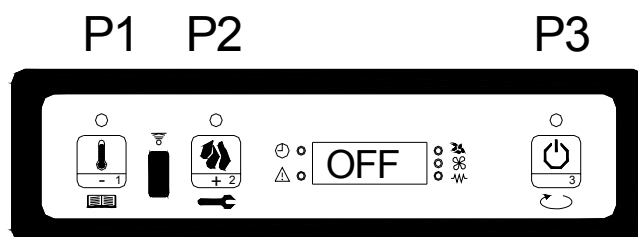
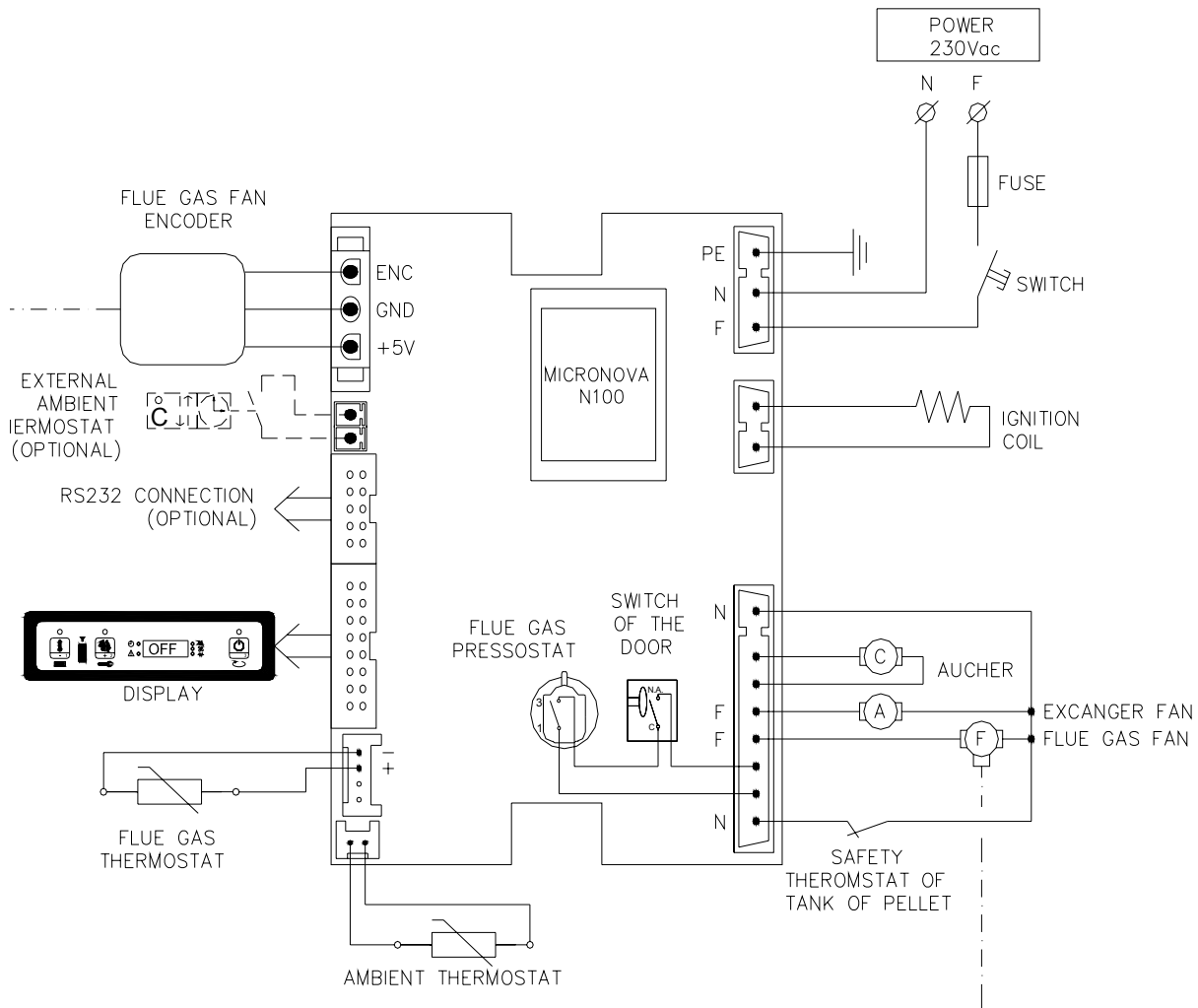


fig. 17

NB to enable an eventual T.A. external (external thermostat / contact), press P1 to bring the temperature to the minimum setting. You will see the word T-E. Confirm with the P3

2.2.1 The remote control

Using the remote control you can adjust the heating power, the temperature desired and the automatic on / off the appliance.

S = indicator light indicating the pressure of each key.
Correspondence of display keys with remote control keys

1 = p3+p5
2 = p2
3 = p3
4 = p4
5 = p5

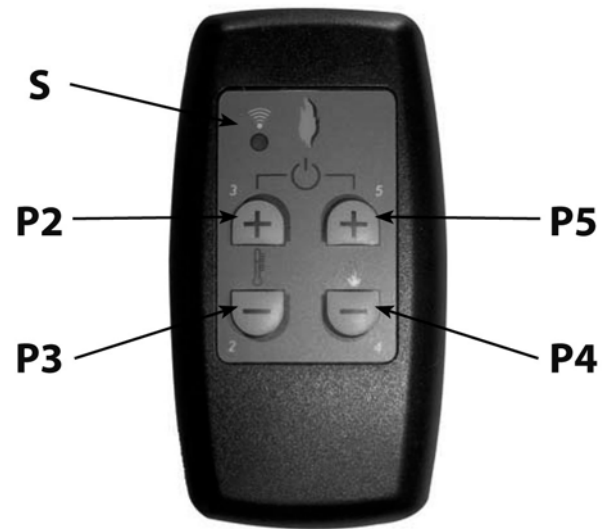


Fig. 18

To turn on the stove, press buttons simultaneously for 1 second 2 and 5; the device automatically enters the start-up phase. This is followed by the start-up phase which allows the stove to develop and settle the flame.

Once the start-up phase, the stove goes into normal operation buttons 4 and 5 it is possible to adjust the heating power while using buttons 2 and 3 you can adjust the desired room temperature. To turn off the stove and hold simultaneously for three seconds the buttons 3 and 5, the display will show "OFF".

The remote control works with a MN21 12V battery (type gate openers).

To replace the batteries, open the cover on the back as shown in the figures below.



fig 19

Open by pressing the part shown in fig. 19

2.3 USER INTERFACE

The unit allows the console to communicate with the controller with the touch of a few buttons. A display and LED indicators inform the operator about the operating status of the stove. In programming mode displays the various parameters that can be modified using the keys.

2.3.1 Description of the console

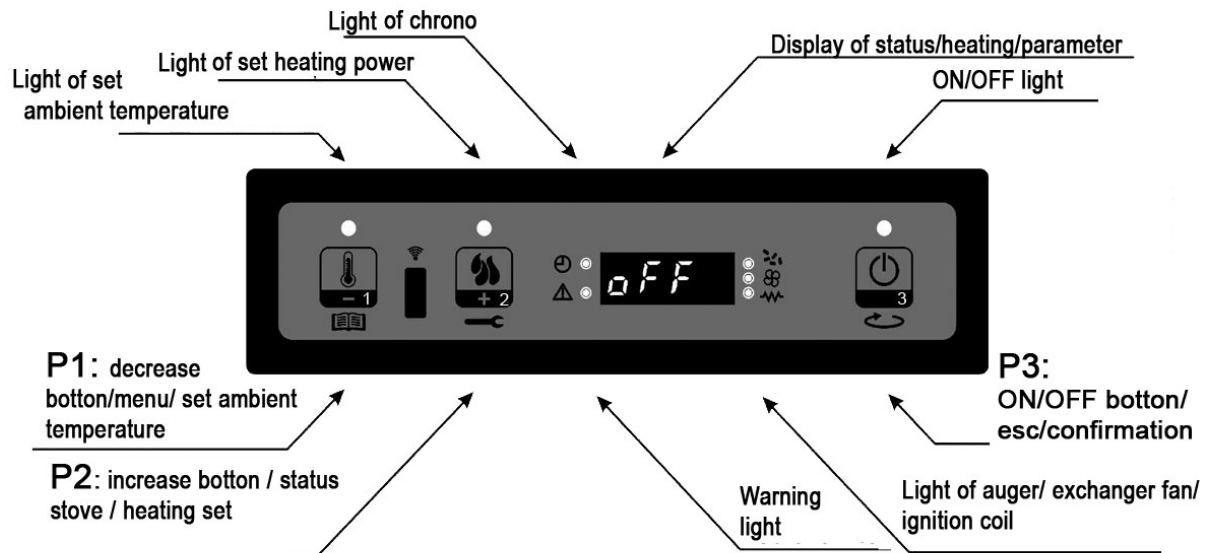


fig. 20

2.3.2 Use of the buttons

Botton	Description	mode	action
1	Decrease temperature	SET TEMPERATURE	Decrease the value of the temperature Set environment
		PLANNING	Decrease the selected parameter
		SET POWER	Decrease the value of the power of job
2	Increase power	SET TEMPERATURE	It increases the value of the temperature Set environment
		PLANNING	It increases some selected parameter
		SET POWER	It increases the value of the power of job
3	ON/OFF	WORK	Pressed for 2 seconds it turns on or it extinguishes the stove if it is out or respectively turned on
		PLANNING	It allows to select the parameters to program.

2.3.3 Meaning of lights LED

<i>Light</i>	<i>Meaning when turned on</i>
Ambient temperature set	Ambient temperature set
Heating power set	Programmazione set potenza
Timer programming	Timer enabled
WARNING	Stove in allarm
IGNITION COIL	IGNITION COIL ON
AUCHER	AUCHER ON
SXCHANGER	EXCHANGER ON
ON/OFF	Status of stove

2.3.4 Display

<i>display</i>	<i>function</i>	<i>condition</i>	<i>visualization</i>
DISPLAY	State /heating power /parameter name	OFF	OFF+AMBIENT TEMPERATURE
		START	START+AMBIENT TEMPERATURE
		LOAD PELLETT	LOAD PELLETT
		ON FLAME	AMBIENT TEMPERATURE+ HEATING POWER (1-2-3-4-5)+ TIME
		PROGRAMMING	PARAMETER

2.4. OPERATING MODE

Below is described the normal operation of the controller regularly installed in a stove air with reference to the functions available to the user. Before turning on the stove, the display appears as in Fig. 21.



fig. 21

2.4.1 TURNING ON THE STOVE

Turn the stove on press P3 for a few seconds. The ignition is indicated in the display with the message "START" as shown below and the LED will flash ON/OFF.

In that condition the stove is placed in the state of preheating, turns on the ignition coil (visible from the ignition coil light) and the flue gas fan (fig. 22).

.Any anomalies during the ignition phase, are shown on the display and the stove goes into an alarm state. (refer to paragraph 2.6)



fig. 22

2.4.2 Loading the pellet

After about 10 seconds starts the loading phase pellet, will scroll the message "LOAD PELLET" and the LED ON \ OFF is flashing.

In a first step the auger provides to load the pellets in the grate for a time given by the parameter PR40 (LED auger turned on), the speed of the fan is defined by parameter PR42 and the ignition coil is always turned on (lit LED of ignition coil).

In the second phase, the elapsed time of the parameter PR40, the auger is turned off (LEDs auger off) for a time given by the parameter PR41, while the speed of the fan and the ignition coil remain in its previous state. If the ignition does not take place after that stage, the auger on again for a period given by parameter PR04, the speed of the fan is given by the parameter PR16 and the glow plug remains lit (fig. 23).



fig. 23

2.4.3 LOAD FLAME LIGHT

After the flue gas temperature has reached and exceeded the value in the parameter PR13, the system switches to power mode, the message "Fire Present" on the display and the LED ON \ OFF flashes.

In this phase occurs that the temperature remains stable for a time defined by parameter PR02.

The fan speed is given by the parameter PR17, the auger will turn on for a time given by the parameter PR05 (LED lit auger intermittent) and the ignition coil is turned off (LEDs glow plug off) (Figure 24).

Anomalies, stop the card and reports the error. (refer to section 2.6)



fig. 24

2.4.4 Stove in work

After that the flue gas temperature has reached and exceeded the value PR13 and maintained it for at least a time PR02, the stove reaches the working mode which is that of normal operation.

The display will show the word "on Flame on 5" and the LED ON \ OFF is lit. The power is set by pressing and holding P2 and the temperature can be set by pressing the P1. (Figure 25).

If the flue gas temperature reaches the threshold set by the parameter PR15, the fan air exchanger startss. (led exchanger on).



fig. 25

During this phase, after a time given by the parameter PR03, the stove performs a cleaning of the grate. The display will scroll the message "Pul-grate", the auger is turned on (LED screw on) with a speed given by the parameter PR09, the smoke fan speed given by parameter PR08. (Figure 7b) After a time given by the parameter PR12 the stove returns to the working state.



fig. 26

2.4.5 Changing the heating power

During normal operation of the stove (on FLAME on 5) you can change the heat power emitted by pressing the button P2. (September Led power on).

To increase the heating power press P2, while to decrease, press P1. The power level is set on the display. (fig. 27). To exit from the set wait 5 seconds without performing any operations on the keyboard, or press P3.



fig. 27

2.4.6 Changing the room temperature

To change the ambient temperature is sufficient to act on the button P1.

The display shows the set temperature (SET temperature). Thus acting on the keys P1 (decrease) and P2 (increase) you can change the value. After about 5 seconds the value is stored and the display returns to the normal display, or press to exit P3. (fig. 28).



fig. 28

2.4.7 The ambient temperature reaches the set temperature (SET temperature)

When the temperature has reached the set value, the heating power of the stove is automatically increased to the minimum value. In these conditions, the display shows the message "Modulating". (Figure below).

If the ambient temperature falls below the set (Set temperature) the stove returns to standby mode "on FLAME on 5" and the power previously set (Set power).



fig. 29

2.4.8 Stand-by

If enabled in the menu, standby function allows you to turn off the stove once the conditions explained below.

It is enabled if the ambient temperature is higher than the set temperature (set temperature). The display shows "Go-standby" and follow the remaining minutes. (fig. 30)



fig. 30

The display shows the message "Waiting cool". In this state the stove has screw off (LED screw off), the coil turns off and the LED ON/OFF flashes. (Fig 31)



fig. 31

When the temperature of the flue gas is reduced enough, the stove goes into stand-by mode and runs the "Stop eco temp good". The screw is turned off (auger light off), the exchanger is off (exchanger light off), as well as the fan of the flue gas. (fig. 32)



fig. 32

If the ambient temperature, decreases below the set temperature (ambient temperature set) the stove turns on again.

2.4.9 Turning off the stove

To turn off the stove just do a long press on the button P3. The display shows the message "CLEANING-FUEL" (fig. 33)

The auger motor stop (auger light off).



fig. 33

The fan of the heat exchanger (heat exchanger LED lit) remains active until the temperature flue gas decreases below a preset value. After a preset time, if the temperature of the flue gas appears to have been sufficiently lowered, the stove is turned off, displaying the message "Off". (fig. 34)



fig. 34

2.5. MENU

With long press on button P1 to access the menu. This is divided into different voices and levels that allow you to access the settings and programming the board.

2.5.1 User Menu

The following table briefly describes the structure of the menu focusing in this section only to the selections available to the user.

<i>level 1</i>	<i>level 2</i>	<i>level 3</i>	<i>value</i>
M1 - set clock			-
	01 - day week		M-T-W-T-F-S-S
	02 - times clock		0-23
	03 - minutes clock		0-59
	04 - day clock		1-31
	05 - month clock		1-12
	06 - Year clock		00-99
M2 - set chrono			
	M2-1 - enable time programming		
		01 – enable time programming	on/off
	M2-2 - daily programming		
		01 - time programming day	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 - weekly time programming	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

<i>level 1</i>	<i>level 2</i>	<i>level 3</i>	<i>value</i>
		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 - program fine – week		
		01 - crono fine - settimana	on/off
		02 - start fine-settimana 1	OFF-0-23:50
		03 - stop fine-settimana 1	OFF-0-23:50
		04 - start fine-settimana 2	OFF-0-23:50
		05 - stop fine-settimana 2	OFF-0-23:50
	M2-5 - exit		set

<i>level 1</i>	<i>level 2</i>	<i>level 3</i>	<i>value</i>
M3 - language			
	01 - italian		set
	02 - english		set
	03 - french		set
	03 - german		set
M4 - stand-by			
	01 -stand - by		On/off
M5– buzzer			
	01– cicalino		On/off
M6 – firts load			
	01 – first load		90"
M7 – sate stove			
	01 – status of stove		
		01 – Status of auger	info
		02 - T minutes	info
		03 – status of thermostat	Info
		04 – Status of flue gas temperature	Info
		05 – satus of flue gas fan speed (rpm)	info
M8 - set technic			
	01 – key of access		set
M9 - escape			
	01 - exit		set

2.5.2 Menu M1 - SET CLOCK

Set the time and date. The card comes with a lithium battery that allows the internal clock autonomy over 3/5 years.

To access the menu of general programming, press the P1 button for 2 seconds. Press P1 (decrease) or P2 (increase) will select the voice M1, will scroll the message "M1 Sept. clock." (fig. 35)



fig. 35



fig. 36

Select the desired day and press the button P3 (fig. 36), followed by the setting time (fig. 37), minutes (fig. 38), the day (Fig. 39), month (fig. 40) and year (fig. 41) by means of the buttons P1 (decrease) and P2 (increase) and confirm by pressing the button P3.



fig. 37



fig. 38



fig. 39



fig. 40



fig. 41

2.5.3 Menu M2 - Set chrono

Submenu M2 - 1 - Enables chrono

The menu displayed on the display "M2 September Chrono", allows you to enable and disable all functions of thermostat. To enable press the button P3, and then press P1 or P2 by section On or Off Press button P3. (fig. 42).



fig. 42

Submenu M2 - 2 - Program day

Select the menu "M2-2 day program," through the P3 button to scroll through the parameters of the timer programming daily, including the enabling of the same (fig. 43).



fig. 43

You can set up two working groups, one with START1 Day and STOP1 Day and the second with START2 Day and STOP 2 Day, delimited by times set according to the following table indicates where the OFF setting the clock to ignore the command. To change use the P1 (decrease) and P2 (increase) and confirm by pressing P3.

DAY PROGRAM

DAY PROGRAM			
Level menu	slection	meaning	possible value
M2-2-01	CHRONO Day	Enable the timer daily	ON/OFF
M2-2-02	START 1 Day	Activation time	OFF-0-23:50
M2-2-03	STOP 1 Day	Off time	OFF-0-23:50
M2-2-04	START 2 Day	Activation time	OFF-0-23:50
M2-2-05	STOP 2 Day	Off time	OFF-0-23:50

Submenu M2 - 3 - weekly program

The menu "M2-3-Weekly Program" allows you to enable/disable and set the thermostat functions weekly. The weekly service has 4 independent programs. Also, by setting OFF in field of time, the clock ignores the command. The tables below summarize the weekly program function. To access the next function and confirm the value press the P3. E 'can exit the menu by pressing and holding the button P3.

ENABLE WEEKLY TIMER			
Level menu	slection	meaning	possible value
M2-3-01	WEEHLY TIMER	Eneble the weekly timer	ON/OFF

PROGRAMA 1			
level di menu	selezione	significato	valori possibili
M2-3-02	START PRG 1	Activation time	OFF-0-23:50
M2-3-03	STOP PRG 1	Off time	OFF-0-23:50
M2-3-04	MONDAY PRG 1		on/off
M2-3-05	TURSDAY 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 PROG 1		on/off

PROGRAMA 2			
Level menu	slection	meaning	possible value
M2-3-11	START PRG 2	Activation time	OFF-0-23:50
M2-3-12	STOP PRG 2	Off time	OFF-0-23:50
M2-3-13	MONDAY PRG 2		on/off
M2-3-14	TURSDAY 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			
Level menu	slection	meaning	possible value
M2-3-20	START PRG 3	Activation time	OFF-0-23:50
M2-3-21	STOP PRG 3	Off time	OFF-0-23:50
M2-3-22	MONDAY PRG 3		on/off
M2-3-23	TURSDAY 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			
Level menu	slection	meaning	possible value
M2-3-29	START PRG 4	Activation time	OFF-0-23:50
M2-3-30	STOP PRG 4	Off time	OFF-0-23:50
M2-3-31	MONDAY PRG 4		on/off
M2-3-32	TURSDAY 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

Allows you to enable/disable and set the thermostat functions at the weekend (days 6 and 7, ie saturday and sunday). To enable press the P3 in "chrono order - week" and set "on" by pressing the button P1 (decrease) or P2 (increase). By setting the **Start time 1 week - end** and **Stop 1 week - end** you set the period of operation for the day **Saturday**, while **Start 2 week - end** and **Stop 2 week - end** to set the operation of the stove for the day Sunday.

WEEKEND PROGRAM			
Level menu	slection	meaning	possible value
M2-4-01	WEEKEND CHRONO	Enable weekend chrono	ON/OFF
M2-4-02	STAR 1 FINE- SETT	Activation time	OFF-0-23:50
M2-4-03	STOP 1 FINE- SETT	Off time	OFF-0-23:50
M2-4-04	STAR 2 FINE- SETT	Activation time	OFF-0-23:50
M2-4-05	STOP 2 FINE- SETT	Off time	OFF-0-23:50

Menu 2.5.4 M3 - Language selection

Allows you to select the language from those available (fig.44). To go to the next language press P2 (increase) to move back press P1 (decrease), to confirm press P3.



fig. 44

2.5.5 Menu M4 - Stand-by

Allows you to enable or disable the standby mode (fig.46). Once you have selected the menu M4 with button P3, press P1 (decrease) or P2 (increase) to change the status from ON to OFF and vice versa. For operation, refer to section standby par.2.4.8.



fig. 45

2.5.6 Menu M5 - Buzzer

Allows you to enable or disable the buzzer of the controller during alarm signaling (fig. 46). To enable or disable the action buttons P1 or P2, P3 press to confirm



fig. 46

2.5.7 Menu M6 – LOAD INITIAL

This function is available only when the stove is turned OFF and allows you to load the worm at the first start of the stove, when the pellet hopper is empty. After selecting the menu M6, scroll across the display the message and "Press More" (fig. 47). Then press P2 (increase). The flue gas fan comes on at full speed, turn the screw (auger LED lit) and remain there until you run out of time indicated on the display (fig. 48), or until you press the button P3.



fig. 47



fig. 48

2.5.8 Menu M7 - State stove

Entered in menu M7, after pressing the button P3 will scroll the status of certain variables during the operation of the stove in work. The table below brings an example of the display on the display and the meaning of these values.

<i>visualization</i>	<i>meaniang</i>
3,1"	State auger
52'	Time out
Toff	Stato thermostat
106°	Flue gas thermostat
1490	Flue gas fan speed

2.5.9 Menu M8 - Set Technic

This menu item is reserved for the installer of the stove.



fig. 49

2.5.10 Menu M9 - Esc

Selecting this menu item by pressing the button P3 (fig. 50), you exit the menu and return to its previous state.



fig. 50

2.6. ALARMS

In the event that a malfunction occurs, the board intervenes and signals the irregularities, lighting the LED alarms (alarm LED on) and beeps.

There are the following alarms:

Origine dell'allarme	Visualizzazione display
Black-out electric power	AL 1 ALAR AL 1 BLAC-OUT
Sensor of flue gas temperature	AL 2 ALAR AL 2 FLUE GAS
Overheting of flue gas	AL 3 ALAR AL 3 HOT EXHAUST
Fan Encoder failure	AL 4 ALAR AL 4 FAN FAILURE
No ingition	AL 5 ALAR AL 5 NO LIGHT IN-
No pellet	AL 6 ALAR AL 6 NO PELLETT
Overheating of drawer of pellet	AL 7 ALAR AL 7 SAFETY THERMAL
Air pressostat	AL 8 ALAR AL 8 FAILURE DEPRESS-

Each alarm condition causes the immediate shutdown of the stove

The alarm state is reached after about 20 seconds of delay, EXCEPT OF ALARM BLACK-OUT, and can be reset by pressing and holding the button P3. Whenever resets an alarm, for safety is initiated a shutdown phase of the stove. During the alarm is always on the LED alarms (alarm LED illuminated) and enabled when the buzzer will sound intermittently. If not reset the alarm, the stove will go off in any case, always displaying the alarm message.

2.6.1 Black-out electricity

During the working status of the stove, may lack electricity. Upon restart, if the period of the blackout is less than 30 seconds, the stove again mode WORK, otherwise the alarm is activated. The display will scroll the message "AL 1 ALAR AL 1 BLAC-OUT" (Figure 51) and the stove goes into shutdown.



fig. 51

2.6.2 Flue temperature probe alarm

Takes place in the case in which the flue probe proves defective. The stove goes into alarm, the LED alarms (alarm LED on). Stove show on the display will scroll the message " **AL 2 ALAR AL 2 FLUE GAS** " (Figure 52) and will go into shutdown.



fig. 52

2.6.3 Alarm over temperature flue gas

Takes place in the case in which the flue gas probe detects a temperature higher than a set value fixed and not changeable via parameter. The display shows the message " **AL 3 ALAR AL 3 HOT EXHAUST** " as (fig. 53) and the stove goes into shutdown.



fig. 53

2.6.4 Alarm encoder flue gas failure

Happens if there is a fault in the flue gas fan. The stove goes into alarm status and scroll across the display shows " **AL 4 ALAR AL 4 FAN FAILURE** " (fig. 54).



fig. 54

2.6.5 Alarm misfire

Occurs when the ignition phase fails. This occurs if after 15 minutes, the temperature of the smoke does not reach the desired value. The display will scroll the message " **AL 5 ALAR AL 5 NO LIGHT IN-** positions and the stove goes into alarm (fig. 55).



fig. 55

2.6.6 Alarm no pellet

Occurs when in working phase, the temperature of the flue gas cools. The display will scroll the message " **AL 6 ALAR AL 6 NO PELLET** and the stove goes into alarm condition (fig. 56).



fig. 56

2.6.7 Alarm temperature thermal safety

Occurs when the safety thermostat of the container of the pellet detects a temperature higher than the intervention threshold. The thermostat intervenes and turns off the auger, as it is placed in series with its power, and the board intervenes indicating the alarm status (alarm LED on) by displaying the message " **AL 7 ALAR AL 7 SAFETY THERMAL** " (fig. 57), and the stove goes into shutdown.



fig. 57

After checking the message, you can reset the alarm by pressing briefly on the on / off button. (⏻)

Before resetting the alarm wake up the thermostat with manual reset on the back of the stove (bottom, near the main switch).

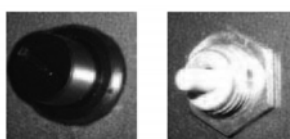


fig. 58

2.6.8 Warning failure flue gas pressostat

Occurs when the external switch detects a pressure/vacuum below the trigger threshold. The pressure switch operates off the auger, being electrically connected in series, and the controller signals the alarm (Alarm LED lit) displaying on the display "AI 8 ALAR 8 FAILURE DEPRESSION " (fig.58). After having decreased the flue gas temperature the stove goes to off mode.



fig. 59

2.7 TROUBLESHOOTING

Never disconnect the power supply of the stove until there is no flame and completed the post ventilation. The post ventilation is required to burn all the embers and prevent unburned residues that would dirty the stove and would make difficult switched back on.

FAULTS	CAUSE	REMOVAL OF THE PROBLEM
DO NOT GET PELLET IN THE GRATE	PELLET TANK FINISHED (THE WORDS "AL 5" IS SHOWN FROM THE DISPLAY)	EMPTY THE BRAZIER AND CLEAN. FILL THE TANK OF PELLETS
	AUGER LOCKED BY FOREIGN BODY ES. NAIL, NYLON, PIECE OF WOOD (THE WORDS "AL 5" IS SHOWN FROM THE DISPLAY)	REMOVE POWER AND REMOVE FOREIGN BODY.
	NOT FREE OR FLUE TERMINAL obstructing the passage of FLUE GAS (THE WORDS "AL 8" IS SHOWN FROM THE DISPLAY)	EMPTY AND CLEAN THE BRAZIER. CHECK THE EXHAUST FUMES AS THEY COULD BE BLOCKED
	FLUE GAS TERMINAL CLOSED BECAUSE OF A GRILL OR TERMINAL WHICH PREVENTS THE FREE TRANSFER OF FLUE GAS (THE WORDS "AL 8" IS SHOWN FROM THE DISPLAY)	EMPTY THE BRAZIER AND CLEAN. CHECK THE EXHAUST FUMES AND REMOVE THE GRILL OR TERMINAL.
	GUST OF WIND HAS DETERMINED THE BLOCK OF APPLIANCE (THE WORDS "TO 8" IS SHOWN FROM THE DISPLAY)	EMPTY AND CLEAN THE BRAZIER GIVE AND REMOVE POWER FROM THE STOVE
	THE ENGINE AUGER PELLET DOES NOT WORK	REPLACE THE ENGINE AUGER PELLET
	THERMOSTAT WITH MANUAL RESET HAS LOCKED THE STOVE (THE WORDS "TO 7" IS SHOWN FROM THE DISPLAY)	FAN EXCHANGER IS BROKEN AND MUST BE REPLACED. REPLACE THE FAN AND SWITCH THE THERMOSTAT BEHIND THE APPLIANCE
THE HEATER OFF AFTER A FEW MINUTES FROM THE CONCLUSION OF THE PROCEDURE TO START	ON DELAYED BECAUSE THE AUGER WAS EMPTY (THE WORDS "TO 5" IS SHOWN BY DISPLAY)	EMPTY THE BRAZIER AND CLEAN. FILL THE TANK OF PELLETS
	BRAZIER DIRTY . IGNITION WAS WITH MUCH DELAY (THE WORDS "AL 5" IS SHOWN FROM THE DISPLAY)	EMPTY THE BRAZIER AND CLEAN FOLLOWING THE INSTRUCTIONS IN THIS MANUAL Procedure done as shown on page load auger. 36 par. 2.5.7

DURING NORMAL OPERATION THE STOVE PELLET IN THE GRATE	CHIMNEY OR FLUE TERMINAL WHICH PREVENTS THE PASSAGE OF FLUE GAS	EMPTY AND CLEAN THE BRAZIER. CHECK THE EXHAUST FUMES AND REMOVE THE GRILL OR THE TERMINAL. CLEAN THE DUCT SMOKE AND REMOVE ANY SCALING
	DIRTY BRAZIER	EMPTY THE BRAZIER AND CLEAN FOLLOWING THE INSTRUCTIONS IN THIS MANUAL.
	PELLET WITH ABOVE NORMAL REMAINING	EMPTY THE BRAZIER AND CLEAN FOLLOWING THE INSTRUCTIONS IN THIS MANUAL. SETTING THE OPERATING POWER "P 2".INCREASE THE AIR. CHECK THE QUALITY OF PELLET.
	BRAZIER THAT IS NOT WELL SUPPORTED FROM ITS PLACE	EMPTY THE BRAZIER AND CLEAN FOLLOWING THE INSTRUCTIONS IN THIS MANUAL. TURN THE BURNER IN ITS PROPER PLACE.
THE STOVE WILL NOT TURN ON	THE PLUG IGNITION IS BROKEN (THE WORDS "TO 5" IS SHOWN FROM THE DISPLAY)	EMPTY THE BRAZIER AND CLEAN FOLLOWING THE INSTRUCTIONS IN THIS MANUAL. CHANGE THE PLUG IGNITION
GLASS GETS DIRTY IN black soot	THE STOVE ACCUMULATES PELLET IN THE BRAZIER	GLASS MUST BE CLEAN WITH MORE FREQUENCY. MAKE CLEANING AND CARING FOR YOUR STOVE SET THE OPERATING POWER "P 2". INCREASE THE FLOWRATE OF THE AIR.
THE STOVE IT SEEMS THAT NOT WARM	ENVIRONMENT TOO BIG AND / OR TOO COLD WALLS	SEPARATE SPACES OPERATE THIS STOVE TO HIGHER POWER FOR MORE TIME
	POOR PELLET	REPLACE THE PELLET WITH SOMEONE OF CERTIFIED QUALITY ACCORDING TO OM 7135. OM 7135.
	VERY HIGH CEILINGS AND / OR THE PRESENCE OF SPACE SCALE THAT dissipate heat IN OTHER AREAS	SEPARATE SPACES OPERATE THIS STOVE TO HIGHER POWER FOR MORE TIME.
	AMBIENT THERMOSTAT SET TOO LOW TEMPERATURE	SET A HIGHER TEMPERATURE.
THE STOVE IS OFF BUT THERE IN THE GRATE unburnt pellets	PELLET TANK EMPTY (THE WORDS "AL 5" IS SHOWN IN THE DISPLAY)	EMPTY AND CLEAN THE BRAZIER, FILL THE TANK OF PELLETS
PROGRAMMING AND TIME ARE NOT IN MEMORY	THE BACKUP BATTERY OF CONTROL PANEL IS DOWN	PROVIDE FOR BATTERY REPLACEMENT

2.8 Technical menu

N.B. The instructions here following described is reserved to the technical personnel with competence specific respect the product. The change of the parameters in casual way can provoke serious damages to the equipment and the people and the environment. For this fact, ARCA Srl is not taken on any responsibility.

☒ To access the TECHNICAL MENU enter the menu by pressing the button for 2 seconds P1, scroll with P1 (increase) and P2 (decrease) until you see the menu M8 "Settings technical" to get press P3.



Subsequently, act on P1 or P2 (maintain pushing for quickly scrolling) select the key of access, then to get the value **A9**.



Press the P3 (on / off) to confirm the password and gain access to the sub-menu, where you can configure various parameters of the stove. The table below shows the submenu.

Menu	Display visualization
M8-1	SEttinGS FAcToRY
M8-2	SEt GEnErAL
M8-3	TyPE
M8-4	TyPE cHiMnEY
M8-5	bAnK dAtA
M8-6	tESt outPutS
M8-7	rESEt PArT tiME
M8-8	rESEt ALArM
M8-9	countErs MEMorY
M8-A	ESCaPE

2.8.1 M8-1 Settings factory

Once in the menu, with subsequent pressure on the P3 button you can scroll through all the configuration parameters from PR01 to PR21). To change each parameter press P1 (decrease) or P2 (increase). To confirm press on P3, where the system stores the value and the display will show the next parameter.

After having displayed the parameter PR21, press the button P3 to exit the menu.



2.8.2 M8-2 Other settings

This menu has additional parameters that can be set by pressing the button.

You can scroll through the P3 configuration parameters from PR38 to PR48 (see Appendix A). Act to change the value of P1 or P2, and P3 press to confirm and continue. After having displayed the parameter PR48, press the button P3 to exit the menu.

2.8.3 M8-3 Type of pellet

By acting on the buttons P1 and P2 varying the percentage of load pellets (PR54) (figure 32) with a value + 9 max and min -9. Every single step increases or decreases approximately 3% the total period of the auger with respect to the default period (pellet type = 0). The time T Auger-ON remains unchanged.



2.8.4 M8-4 Type of chimney

By acting on the buttons P1 and P2 changes the percentage of the turns of ventilation fumes (PR55) with a value + 9 max and min -9 (Figure 33). Every single step increases or decreases by about 3% the value of the smoke extraction speed compared to the parameter set.



2.8.5 M8-5 Bank of database

The device holds within it a number of presets called DATABASES. These settings are present in a number dependent on the version of the device. Are available and can not be modified in order to allow, for example; adaptation to most types of stoves, without having to program a parameter at a time.

To access these settings, after accessing the menu M8-5, acting on P1 (decrease) or P2 (increase) to select the value for the table (database) you want to load (o0, o1, o2, etc..), see (figure 34) and next table.



Value	Database
o0	Dati predefiniti 0
o1	Dati predefiniti 1
o2	Dati predefiniti 2
o3	Dati predefiniti 3
o4	Dati predefiniti 4
o5	Dati predefiniti 5
o6	Dati predefiniti 6
o7	Dati predefiniti 7
o8	Dati predefiniti 8
o9	Dati predefiniti 9

N.B. Depending on the version, you may not have all the tables

2.8.6 M8-6 test outputs

This function allows you to test the outputs of the pcbt board. It should be noted that this function is unlocked only when the stove is turned off, or displaying on the display "OFF".

Each press of the button P1 or P2 tenable / disable the output to be tested, according to the table below. With the P3 button you will proceed to the next test.

Type of test	value
Test ignition coil	On/Off
Test auger	0" ÷ 5"
Test fan	65V ÷ 225V
Test exchanger fan	65V ÷ 225V

2.8.7 M8-7 Reset partials hours

The stove during operation of work, takes into account the partial operating hours. To reset this value, enter the menu M8-7 and enter the access key 55, then press the button P3. The display will show "done" to confirm correct reset.

2.8.8 M8-8 Alarm Reset

When the alarm is activated, the electronic stores the type of alarm in progress on one of the 5 banks of memory alarms. To reset the memory banks of the alarms, enter the menu M8-8 and enter the access key 55, then press the button P3. The display will show "done" (Figure 35) to confirm proper reset.



Parameters

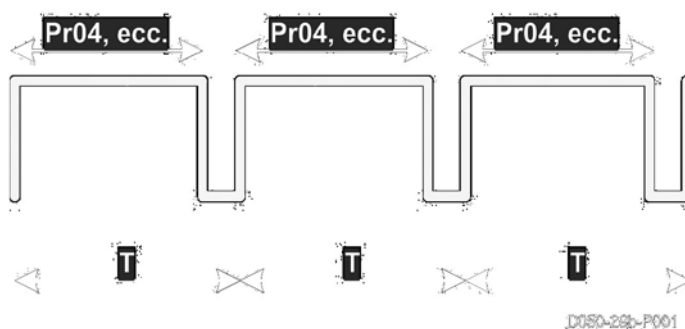
PARAMETER	Description	RANGE	8 KW	10 KW	12 KW
PR01	tiME out MinutES	05÷25 min	19 min	19 min	19 min
PR02	StArt MinutEs	02÷20 min	3 min	3 min	3 min
PR03	cAdEncE cLEAninG	10÷255 min	60 min	60 min	60 min
PR04	LiGHts timE	0,1÷6,0 sec	1,5sec	1,5sec	1,5 sec
PR05	StArt timE	0,1÷6,0 sec	1,5sec	1,5sec	1,5 sec
PR06	AuGEr P1	0,1÷6,0 sec	1,5 sec	1,6 sec	1,7 sec
PR07	AuGEr P5	0,1÷6,0 sec	2,6sec	2,7 sec	2,8 sec
PR08	cLEAninG SPEEd	700÷2800 rpm	2700 rpm	2700 rpm	2700 rpm
PR09	AuGEr cLEAninG	0÷5 sec	1 sec	1 sec	1 sec
PR10	soGLia oFF	50÷180°C	50 °C	50 °C	50 °C
PR11	ALArm deLAY	20÷90 sec	20 sec	20 sec	20 sec
PR12	cLEAninG durAtion	0÷120 sec	30 sec	30 sec	30 sec
PR13	MiniMuM tHrEsoLd	35÷180 °C	50 °C	50 °C	50 °C
PR14	MaxiMuM tHrEsoLd	60÷280 °C	230 °C	230 °C	230 °C
PR15	blou Er tHrEsoLd	50÷210 °C	70 °C	70 °C	70 °C
PR16	SMoKE tHrEsoLd	500÷2800 rpm	1900 rpm	1900 rpm	1900 rpm
PR17	SMoKE StArt	500÷2800 rpm	1900 rpm	1900 rpm	1900 rpm
PR18	SMoKE P1	500÷2800 rpm	1900 rpm	1900 rpm	1900 rpm
PR19	SMoKE P5	500÷2800 rpm	2000 rpm	2050 rpm	2100 rpm
PR20	blou Er P1	65÷225 Volt	150 Volt	150 Volt	150 Volt
PR21	blou Er P5	65÷225 Volt	225 Volt	225 Volt	225 Volt

Other parameters

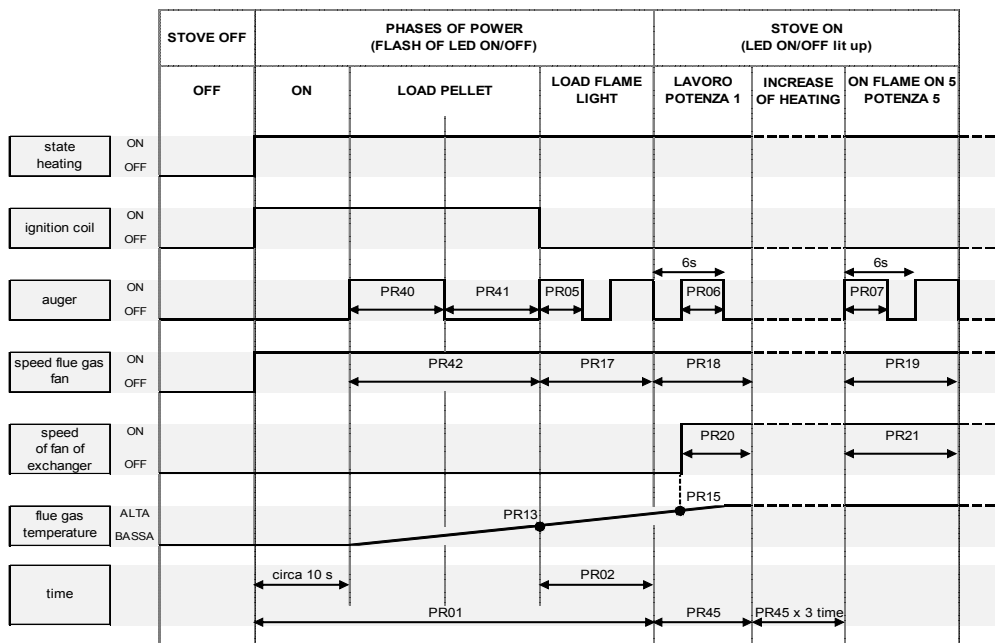
PARAMETRO	DESCRIZIONE PARAMETRO	RANGE	8 KW	10 KW	12 KW
BANCA DATI	o1, o2,o3	o0, o1,o2, ...o9	o1	o2	o3
PR38	rEStArt ALt	0÷10 min	2 min	2 min	2 min
PR39	ASPIratorE Min SPEnto	0÷20 min	2 min	2 min	2 min
PR40	PrELoAd iGnitiNG	0÷255 sec	120 sec	120 sec	120 sec
PR41	Aiting Fire	0÷255 sec	180 sec	180 sec	180 sec
PR42	EXAuSt SPEEd PrELoAd	600÷2800 rpm	1900 rpm	1900 rpm	1900 rpm
PR43	diFFErEncE Auto	0÷15 °C	1 °C	1 °C	1 °C
PR44	Auto dELAY	2÷120 min	2 min	2 min	2 min
PR45	PO Er cHAnGe	0÷60 sec	20 sec	20 sec	20 sec
PR46	reMote EnAbLE	On/off	off	off	off
PR47	Frozen KEYboArd	On/off	off	off	off
PR48	bLAcK-out	0÷60 sec	30 sec	30 sec	30 sec

Modalità di interpretazione dei parametri di temporizzazione della coclea

Il comando di funzionamento della coclea è di tipo temporale ed è strutturato come segue: è definito un periodo T=6s. In questo periodo il motore è attivato per il tempo Pr04, Pr05, Pr06, Pr07, Pr08, Pr09, Pr10 e Pr12 a seconda della fase operativa.



12. APPENDICE B : Sequenza di avvio e condizione di lavoro



12.1. Modulation

12.2. Stand by

12.3. Spegnimento

2.8 Cleaning and maintenance

Before performing any maintenance on the stove, take the following precautions.

- Make sure that all parts of the stove are cold;
- Make sure that the ashes are completely extinguished;
- Make sure the power switch is in the OFF position;
- Disconnect the plug from the socket, to prevent accidental contact;
- Completed the maintenance phase, check that everything is in order as before maintenance, placing the grate properly.

Please observe the following instructions for cleaning. Its default may cause problems in the operation of the stove.

- DAILY: clean the grate combustion residues and reassembled correctly, the brazier (Figure - 73). CAUTION: Make sure, before any power, proper cleaning of the grate and clean the BRAZIER thoroughly using a vacuum cleaner. To ensure proper operation, clean with particular attention to the area around the spark plug.
- EVERY 2 DAYS: empty the ash from the combustion residues (Figure - 61).
- WEEKLY: Remove the brazier and suck from the space below the brazier, the residual ash (Figure - 72).
- EVERY 2 WEEKS clean the "T" at the mouth of the stove flue.
- MONTHLY: remove the back plate of the combustion chamber and clean the area thoroughly by all the ash residues (Figures 62-63-64-65)
- MONTHLY: aspire to spent fuel, pellet powder deposited on the bottom of the tank.
- AT THE END OF WINTER OR WHENEVER IS NECESSARY TO: Perform a thorough cleaning of the hearth and the back of the combustion chamber of the stove, using brushes and aspiraceneri.
- twice a year: clean all exhaust fumes including the chimney. The use of an aspirator simplifies the cleaning of the ashes. Glass cleaning should be done with a damp cloth or with paper, moistened and placed in the ashes, rubbing the glass until the cleaning. Do not clean the glass when the stove is lit. The cleaning of the skin, must be carried out when the stove is cold and off, using a soft microfibre specifically for delicate surfaces and moistened with water. Warning: this is normal a daily deposit of soot and combustion made on the glass.

Cleaning of the combustion chamber, once a month.

With the stove cold stop, make the following:

Remove the scraper with the door closed.

Actuate 5 or 6 times the scraper pulling and pushing towards the stove to maintain the cleanliness of the heat exchange tubes.

At the end of the operation leave pulled the lever to facilitate disassembly of the rear inner walls of the combustion chamber.



fig 60



fig. 61

- Open the door of the stove and remove the grate and ashpan, fig 61).
- Remove the top sheet of fire , following the procedure described previously



fig. 62



fig. 63



fig. 64



fig. 65

Remove the external bulkheads fire moving but not rotating. If necessary, you can use a screwdriver or something similar to remove the bulkheads, figs. 62-63-64). Remove the central bulkhead of the combustion chamber. , fig. 65)



fig. 66



fig. 67



fig. 68

Remove the side with a screwdriver inside the point indicated in figures 66-67-68
Remove the bulkheads bottom of the combustion chamber with a screwdriver. Start strictly defined by the right side.



fig. 69

fig. 70

fig. 71

Through the vacuum cleaner, clean the inside of the chamber accumulated ash from the combustion



fig. 72

Surface Cleaning

To clean the surfaces, use a cloth with mild soap and water. The use cleaning agents or aggressive solvents gave damage the surfaces and the stove. Do not use any detergent. We recommend that you try it on an area that is not visible or contact the authorized service center for advice about it. Cleaning of metal parts To clean the metal parts of the heater with a soft cloth dampened with water.

Never clean the metal parts with alcohol, thinner, benzene, acetone or other detergents. In case of use of these substances, our company accepts no liability. Any changes in the tone of the pieces of metal can having an inappropriate use of the stove.

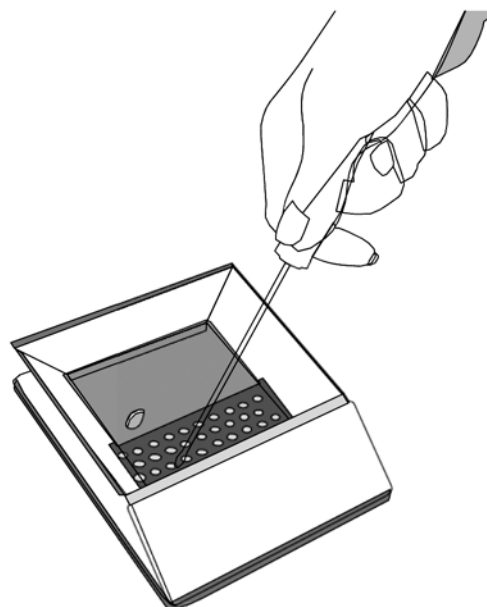


WARNING!

You must do the daily cleaning of the brazier and periodic ash box. The little or no cleaning in some cases can cause problems turning on the stove and consequent damage in this or in the environment, and can cause emissions of soot and unburned. Do not pour the pellets which may exist in the grate and has not been completely burned.

Cleaning of the grate and its support

When the flame acquires tones of red color or is weak, accompanied by black smoke, means that there are ash deposits or incrustations which do not allow the correct operation of the stove and which must be eliminated, (Fig. 73). Simply pull the grate every day lifting of its head, and later, from the ashes and clean any deposits that may form, paying special attention to free orifices stopped using a pointed tool, not fitted as standard equipment of the machine. This is especially necessary in the first few times with each time, especially if you use pellets



than those recommended by our company.
The frequency of this operation will be determined by the frequency of use and the type of pellet.
You should also check the support of the brazier

fig.73

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Daily cleaning by means of the scraper, where present

With the stove off, operate 5-6 times the scraper of the conduit for the exchange of heat by pulling and pushing the lever located between the front grilles from where it exits the ambient air.

- Push the scraper to the stove with the door closed, figs. 74-75).
- Pull the scraper toward you with the door closed, the following figures



fig.74



fig.75

Clean the plate fire

Remove the plate fire following the instructions in the following figures.

Remove with a vacuum throughout the ash deposited in the upper part. Then, mount the plate fire and ensure that the three hooks are properly seated.



fig.76



fig.77



Container of ashes

Open the door and remove the container of ashes.

Remove with a vacuum cleaner all the ashes that have been deposited in its interior.

This operation can be accomplished with greater or lesser frequency in accordance with the quality of the pellet used.

Cleaning the glass

The glass is of self-cleaning type, therefore, while the stove is operating, a blade of air moves along the surface of the same, maintaining distant ash and dirt; despite everything, after a few hours it will form a patina greyish that should be cleaned when turn off the stove. That the glass gets dirty depends not only on the quality and quantity of pellets used. Glass cleaning must be carried out with the stove is cold with the products recommended and tested by our company

When does this, make sure that the gray seal around the glass is in good condition and the lack of control of the efficiency of this seal may compromise the operation of the stove. The pellet of low quality may contribute to soil ill glass.

WARNING! If the glass is broken, do not try to turn on the stove.

Cleaning the pipes

Until an acceptable experience to increase compared to operating conditions, it is recommended to do this at least monthly maintenance.

- Disconnect the power cord;
- Remove the cap from the tee and clean the ducts; If it is necessary, at least for the first few times, contact qualified personnel;
- Thoroughly clean the exhaust pipes of smoke.

Cleaning the fan

The stove has two fans, environment and fumes, located in the back and bottom of your stove. Any deposits of dust or ash on the blades of the fans make them unbalance, causing noise during operation. Therefore, it is necessary to clean the fans, at least annually. Since this operation involves removing some parts of the stove, instruct our authorized service center.

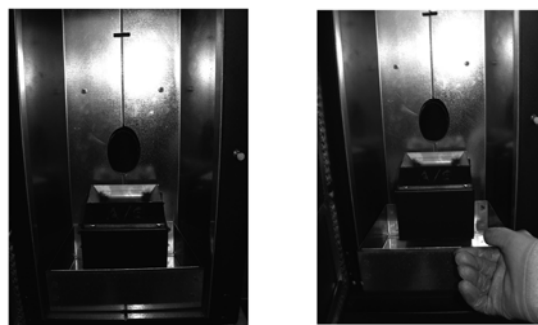
Cleaning at the end of season

At the end of the season, when the stove is no longer used, we recommend a more diligent cleaning and general.

- Remove all pellets from the storage and screw;
- Thoroughly clean the grate, the grate support, the combustion chamber and the container of ashes.

If you have followed the previous steps, check the status of the stove. You need to very carefully clean the flue gas ducts and check the status of the container, if necessary, ask the authorized service center. If necessary, lubricate door hinges and handle. Also check the cord close to the

fig. 81: Cleaning the container of ashes



glass ceramic fiber, the inner wall of the door and, if worn or too dry, order it from an Authorised Service Centre.

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Replacement of components

Replacement of glass

The stove is supplied with a ceramic glass of 4 mm thick, resistant to a thermal shock of 750 ° C; the glass may break only due to a strong impact, or to an incorrect use.

Never hit the door or the glass.

In the event of breakage replace only with an original calling the authorized Service Centre.

Annual maintenance charged to the service center.

These operations must schedule them annually Authorized Service Center and are necessary to ensure which maintains the efficiency of the product, ensuring its operation in conditions of safety.

- Thorough cleaning of the combustion chamber;
- Cleaning and inspection of the duct leakage of flue gas ducts;
- Check the tightness of the seals;
- Cleaning of the mechanisms and moving parts, motors and fans of the auger;
- Control of the electrical and electronic components.

Operations to make each station prior to ignition.

- General cleaning inside and outside;
- Thoroughly clean the heat exchange pipes;
- Carefully clean and descale the brazier and the corresponding compartment;
- Clean engines, mechanical control, gaming and hardware;
- Cleaning the exhaust channel, replace the seals in the pipes, and smoke extractor fan compartment;
- Cleaning the silicone tube connected to the pressure switch;
- Clean, inspect and descale compartment of the ignition coil, replace the same if it were necessary;
- Cleaning, display control;
- Visual inspection of electrical cables, connections and power cord;
- Cleaning of the deposit of the pellet and worm-gear control group;
- Replacing the door seal combustion;
- Functional test, loads the cochlea, ignition, operation for 10 minutes on and off.

We suggest to make an annual maintenance contract with the after-sales technical service authorized by the manufacturer



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