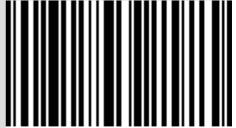


**SEALED PELLET STOVE** 

# **GIO' AIR 8 S1**

**Instructions in English** 





8901825000

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### INTRODUCTION

### Dear Customer,

Our products are designed and manufactured in compliance with European reference regulations for construction products (EN13240 wood-burning stoves, EN14785 pellet-burning appliances, EN13229 fireplaces/wood-burning inserts, EN 12815 wood-burning range cookers), with high quality materials and extensive experience in the transformation processes. The products also meet the essential requirements of Directive 2006/95/EC (Low Voltage) and Directive 2004/108/EC (Electromagnetic Compatibility).

To get the best performance, we suggest you read the instructions in this manual carefully.

This installation guide forms an integral part of the product: ensure that the manual is always supplied with the device, even if it changes owner. If the manual is lost, you can request another copy from the local technical department or download it directly from the company website.

All local regulations, including those regarding national and European regulations, must be observed when the appliance is installed. In Italy, for the installation of systems with biomass below 35KW, refer to ministerial decree D.M. 37/08, and the qualified installation technician with the appropriate requisites must issue a certificate of compliance for the system installed. (By system one means Stove+Chimney+Air inlet).

### **REVISIONS TO THE PUBLICATION**

The content of this manual is strictly technical and the property of MCZ Group Spa.

No part of this manual may be translated into other languages and/or adapted and/or reproduced, even in part, in other mechanical or electronic forms, photocopies, recordings or other, without the prior written authorisation from MCZ Group Spa.

The company reserves the right to make changes to the product at any time without prior notice. The proprietary company reserves its rights according to the law.

### CARE OF THE MANUAL AND HOW TO CONSULT IT

- Take care of this manual and keep it in an easily accessible place.
- Should the manual be misplaced or ruined, request a copy from your retailer or directly from the authorised Technical Assistance Department. It can be downloaded from the company website.
- The "text in bold" must be read with particular care.
- The "text in italics" draws attention to other sections in this manual or clarifications.
- "NOTE" provides the reader with additional information.

### SYMBOLS USED IN THE MANUAL

	N THE MANOAL
Â	ATTENTION: read the relative message carefully as <b>failure to observe the information provided could result in serious</b> damage to the product and put the persons who use it at risk.
0	INFORMATION: failure to comply with these provisions will compromise the use of the product.
	OPERATING SEQUENCES: sequence of buttons to be pressed to access the menus or change settings.
i	MANUAL carefully read this manual or the relative instructions.

# **A**SAFETY PRECAUTIONS

- Installation, electrical connection, function test and maintenance must only be carried out by authorised and qualified personnel.
- Install the product in accordance with all local and national legislation and regulations in force in the region or state.
- Only use the fuel recommended by the manufacturer. The product must not be used as an incinerator.
- It is strictly forbidden to use alcohol, petrol, liquid fuel for lanterns, diesel, bioethanol, fluids for lighting charcoal or similar liquids to light/rekindle the flame in these devices. Keep these flammable liquids well away from the appliance when in use.
- Do not put any fuel other than wood pellets in the tank.
- The instructions provided in this manual must always be complied with to ensure the product and any electronic appliances connected to it are used correctly and accidents are prevented.
- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children must not play with the appliance. Cleaning and user maintenance shall not be carried out by children without supervision.
- The user, or whoever is operating the product, must read and fully understand the contents of this installation guide before performing any operation. Errors or incorrect settings can cause hazardous conditions and/or poor operation.
- Do not climb on or lean on the product.

- Do not put linen on the product to dry. Any drying racks or the like must be kept at a safe distance from the product. Fire hazard.
- All liability for improper use of the product is entirely borne by the user and relieves the Manufacturer from any civil and criminal liability.
- Any type of tampering or unauthorised replacement with non-original spare parts could be hazardous for the operator's safety and relieves the company from any civil and criminal liability.
- Many of the surfaces of the product get very hot (door, handle, glass, smoke outlet pipes, etc.). Avoid coming into contact with these parts without adequate protective clothing or suitable means, such as gloves with thermal protection or "cold handle" operating systems.
- It is forbidden to operate the product with the door open or the glass broken.
- The doors/covers on the appliance must remain closed when it is not used.
- The product must be powered by an electrical system that is equipped with an effective earthing device.
- Switch the product off in the event of a fault or malfunction.
- Accumulated unburned pellets in the burner after each "failed start-up" must be removed before lighting again. Check that the burner is clean and positioned properly before lighting again.
- Do not wash the product with water. Water could get inside the unit and damage the electrical insulation and cause electric shocks.
- Do not stand for a long time in front of the product in operation. Do not overheat the room you are in and where the product is installed. This could cause injuries and health problems.
- Install the product in a location that does not present a fire hazard and is equipped with power and air supplies and smoke outlets.
- In the event of fire in the chimney, turn off the device, disconnect it from the mains electricity and do not open the hatch. Then contact the competent authorities.
- The product and the cladding must be stored in a dry place and must not be

- exposed to weathering.
- It is recommended not to remove the feet that support the product in order to guarantee adequate insulation, especially if the flooring is made of flammable materials.
- In the event of a malfunction of the ignition system, do not force it to light by using flammable materials.
- Special maintenance must only be performed by authorised and qualified personnel.
- Assess the static conditions of the surface on which the weight of the product will rest and provide suitable insulation if it is made of flammable material (e.g. wood, fitted carpet or plastic).
- Live electrical parts: only power the product once it has been fully assembled.
- Disconnect the product from the 230V power supply before performing any maintenance operation.
- Improper use or poor maintenance of the product can cause hazardous situations to arise.
- It is forbidden to manually load the fuel into the brazier. Failure to follow this warning can lead to hazardous situations.
- Before the product is restarted, always remove any unburned pellets building up in the brazier due to failed ignition, the emptying of the tank or any situation that may cause this condition.

### INFORMATION:

Please contact the retailer or qualified personnel authorised by the company to resolve a problem.

- You must only use the fuel specified by the manufacturer.
- When the product is switched on for the first time it is normal for it to emit smoke due to the paint heating for the first time. Therefore make sure the room in which it is installed is well ventilated.
- Check and clean the smoke outlet pipes regularly (chimney fitting).
- The product is not a cooking appliance.
- · Always keep the cover of the fuel tank closed.
- Store this installation guide with care as it must accompany the product for the duration of its useful life. If the product is sold or transferred to another user, ensure the manual is also handed over.

### INTENDED USE

The product only works with wood pellets and must be installed indoors.

### PRODUCT PERFORMANCE CHECKS.

All our products undergo ITT tests carried out by a notified laboratory (system 3) and in accordance with (EU) regulation number 305/2011 "Construction products", according to standard EN 14785:2006 (pellets) and "Machinery Directive" EN 303-5 (boilers).

In the case of tests for any market surveillance or inspections by third parties, please consider the following warnings:

- to reach the declared performance levels, the product must perform an operating cycle of at least 15/20 hours beforehand.
- use the average draught of the combustion smoke specified in the "technical product features" table.
- the type of pellets used must comply with current EN ISO 17225-2 regulations.
- the amount of fuel may vary according to the length and calorific value of the fuel. This may require some adjustments to stay in line
  with the hourly consumption specified in the "technical product features" table. A1 pellets ensure an overall calorific value within
  tight margins compared to the test pellets used. However, size considerably influences performance, so on average it must not be
  less than 24 mm long and with a 6mm diameter.
- in the case of a wood-burning product, check the correct residual moisture content of the fuel, which must not be less than 12% or
  more than 20%. As the moisture increases, different combustion air settings are required. The settings are to be carried out via the
  combustion air register, thereby modifying the mixture between primary and secondary air.
- it is necessary to check the operation of devices that can affect performance (for example air fans or electrical safety devices) in case
  of damage due to handling.
- maximum performance can be achieved at the maximum flame and ventilation power.
- strictly comply with the withdrawal points specified in regulations both in terms of emissions and temperature.

### WARRANTY CONDITIONS

The company guarantees the product, **with the exception of elements subject to normal wear** (listed on the following page), for a period of **2 (two) years** from the date of purchase attested by:

- a document to serve as proof of purchase (invoice and/or receipt) that shows the name of the vendor and the date on which the purchase was made;
- forwarding of the completed warranty certificate within 8 days of purchase;

Furthermore, in order for the guarantee to be valid, the device must be installed and calibrated by qualified personnel, and where necessary, the user must be issued with a declaration of conformity and correct functioning of the product.

We recommend performing a functional test of the product before completion with the relative finishes, if applicable (claddings, painting of walls, etc.).

Installations that do not meet the current standards, improper use and lack of maintenance as expected by the manufacturer, void the product warranty.

The warranty is valid on the condition that the instructions and warnings contained in the user and maintenance manual are observed,

and therefore the product is used correctly.

The replacement of the entire system or the repair of one of its components does not extend the warranty period, and the original expiry date remains unchanged.

The warranty covers the replacement or free repair **of parts recognised as being faulty at source due to manufacturing defects.** In the event of a fault, to benefit from the warranty, the customer must keep the warranty certificate and provide it with the document given at the time of purchase to the Service Centre.

### **EXCLUSIONS**

The warranty does not cover malfunctions and/or damage to the appliance that arise due to the following causes:

- Damage caused during transportation and/or handling
- all parts that develop faults due to negligence or improper use, incorrect maintenance, installation that does not comply with the manufacturer's instructions (always refer to the installation guide provided with the appliance)
- incorrect sizing with regard to the use or faults in the installation or failure to adopt the necessary devices to guarantee proper execution
- improper overheating of the equipment, use of fuels not conforming to the types and quantities indicated in the instructions provided
- further damage caused by incorrect user interventions in an attempt to fix the initial fault
- worsening of the damage caused by the user continuing to operate the appliance even after the fault has been noticed
- in presence of a boiler, any corrosion, incrustations or breakages caused by water flow, condensation, hardness or acidity of the water, improperly performed descaling treatments, lack of water, mud or limescale deposits
- inefficiency of chimneys, flues or parts of the system affecting the appliance
- damage caused by tampering with the appliance, atmospheric agents, natural disasters, vandalism, electric shocks, fires, faults in the electric and/or hydraulic system.
- Failure to have the annual stove maintenance performed by an authorised technician or qualified personnel will result in the <u>loss of</u> the warranty.

Also excluded from this warranty are:

- parts subject to normal wear such as gaskets, glass, claddings and cast iron grilles, painted, chrome-plated or gilded parts, handles
  and electric cables, bulbs, indicator lights, knobs, all parts which can be removed from the firebox.
- Variations in colour of the painted or ceramic/serpentine parts and crazed ceramics as they are natural characteristics of the material
  and product use.
- masonry work
- plant parts (if present) not supplied by the manufacturer

Any technical interventions on the product to eliminate the above defects and consequent damages must be agreed upon with the Service Centre, who reserves the right to accept the relative appointment or not. However, said interventions will not be carried out under warranty but as technical assistance to be granted as part of any eventual and specific agreed conditions and in accordance with the fee in force for the work to be carried out.

The user will also be charged for any costs incurred to remedy the incorrect technical interventions, tampering or damage to the appliance, not attributable to original faults.

Save for the legal or regulatory limits, the warranty does not cover the containment of atmospheric and acoustic pollution.

The company declines all liability for any damage which may be caused, directly or indirectly, to persons, animals or objects as a consequence of non compliance with any provision specified in the manual, especially warnings regarding installation, use and maintenance of the appliance.

### **SPARE PARTS**

In the event of a malfunction, consult the retailer who will forward the call to the Technical Assistance Department.

Only use original spare parts. The retailer or service centre can provide all necessary information regarding spare parts. We do not recommend waiting for the parts to get worn out before having them replaced. It is important to perform regular maintenance.



The company declines all liability if the product and any other accessory is used improperly or modified without authorisation.

All parts must be replaced with original spare parts.

Information for management of waste electrical and electronic equipment containing batteries and accumulators



This symbol appears on the product, on the batteries, on the accumulators or on their packaging or on their documentation; it indicates that the product and the batteries or the accumulators included must not be collected, recycled or disposed of with household waste at the end of their service life.

Improper management of waste electrical and electronic equipment, batteries or accumulators can cause the hazardous substances contained within to leak out. In order to safeguard the environment and health, the user is required to separate this equipment, and/or the batteries or accumulators included, from other types of waste and take them to the local collection centre. The distributor can be asked to collect the waste electrical and electronic equipment under the conditions and according to the procedures laid down by Legislative Decree 49/2014.

Separate collection and correct treatment of waste electrical and electronic equipment, batteries and accumulators contribute to conserving natural resources, respect for the environment and ensure the protection of health.

For more information on collection centres for waste electrical and electronic equipment, batteries and accumulators, contact the competent public Authorities for issue of the authorisations.

### WHY A SEALED STOVE?

Products constructed with a perfectly sealed structure do not consume the room's oxygen but draw all the air form the outer environment (if suitably ducted) and may therefore be installed in all dwellings that require a high degree of insulation such as "passive" or "high energy efficiency" houses. Thanks to this technology there is no risk of smoke emissions in the room, hence no air intakes and relevant aeration grilles are required in the installation premises.

Consequently, there will be no more drafts of cold air in the room, which make it less comfortable and reduce the overall efficiency of the system. The sealed stove may even be installed in the presence of forced ventilation or in premises that might have negative pressure with respect to the outside.



The instructions in this chapter refer explicitly to the Italian installation regulation UNI 10683. In any case, always observe the regulations in force in the country of installation.

### **PELLETS**

Wood pellets are manufactured by hot-extruding compressed sawdust which is produced during the working of natural dried wood. The compactness of the material is guaranteed by the lignin contained in the wood itself and allows pellets to be produced without glue or binders.

The market offers different types of pellets with characteristics that vary according to the wood mixtures used. The most common diameter on the market is 6 mm (although 8 mm diameter is available too) with a length, on average, of between 3 and 40 mm. A good quality pellet has a density of between 600 and 750 or more kg/metres cubed and a water content that accounts for 5 to 8% of its weight. Pellets have technical advantages besides being an ecological fuel, as the wood residue is used completely, thereby achieving cleaner combustion than that of fossil fuels.

While good-quality wood has a calorific value of 4.4 kW/kg (15% moisture, after about 18 months of seasoning), whereas that of pellets is around 4.9 kW/kg. To ensure good combustion, the pellets must be stored in a dry place and protected from dirt. Pellets are usually supplied in 15 kg bags, therefore, storing them is very convenient.



Good quality pellets guarantee good combustion, thereby decreasing harmful emissions into the atmosphere.



The poorer the quality of the fuel, the more often the internal parts of the brazier and combustion chamber must be cleaned.

The main quality certifications for pellets currently available on the European market guarantee that the fuel complies with class A1/A2 according to ISO 17225-2 (ex EN 14961). These certifications include, for example, **ENPlus**, **DINplus**, **Ö-Norm M7135**, and in particular, guarantee the following characteristics:

- calorific value: 4.6 ÷ 5.3 kWh/kg.
- Moisture content: ≤ 10% of the weight.
- Percentage of ash: max 1.2% of the weight (A1 less than 0.7%).
- Diameter: 6±1/8±1 mm.
- Length: 3÷40 mm.
- Content: 100% untreated wood without the addition of binding substances (max 5% bark).
- Packaging: in sacks made from ecologically compatible or biologically decomposing material.



The company strongly recommends using certified fuel for its products (ENplus, DINplus, Ö-Norm M7135). Poor quality pellets or others that do not comply with the characteristics specified previously may compromise the operation of your product and can therefore make the guarantee and product liability invalid.

### **FOREWORD**

The installation position must be chosen according to the room, smoke extraction system and flue. Check with local authorities whether there are any restrictive regulations in force regarding the combustion air inlet, the smoke outlet system, the flue or the chimneypot. The manufacturer declines all responsibility in the event of installations that do not comply with the laws in force, incorrect room air exchange, electrical connection non-compliant with the standards and inappropriate use of the appliance. The installation must be carried out by a qualified technician, who must issue a declaration of conformity of the system to the purchaser and will assume full responsibility for final installation and consequent good operation of the product.

In particular one must ensure that:

- there is a suitable combustion air inlet and smoke exhaust in compliance with the type of product installed
- other stoves or devices installed do not cause depression in the room where the product is installed (for sealed appliances only, a maximum of 15 Pa of depression in the room is allowed)
- when the product is switched on there is no reflux of smoke in the room.
- smoke extraction takes place in total safety (sizing, smoke seal, distances from flammable materials..).

We especially recommend to check the data tags of the flue for the safety distances that must be observed in presence of combustible materials and the type of insulating material to be used. These indications must be followed strictly to prevent serious harm to people and the integrity of the home. The installation of the appliance must ensure easy access to clean the appliance itself, the smoke exhaust pipes and the flue. It is forbidden to install the stove in rooms with a fire hazard. Installation in studio flats, bedrooms and bathrooms is only allowed with sealed or closed appliances equipped with suitable combustion air ducting directly outside. Always maintain adequate distance and protection in order to prevent the product from coming into contact with water.

In the event there are several appliances installed, the external air inlet must be sized accordingly.

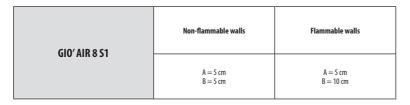
### MINIMUM DISTANCES

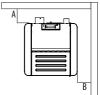
It is recommended to install the stove detached from any walls and/or furniture, with a minimum clearance to allow effective aeration of the appliance and a good distribution of heat in the room. Comply with the distances from flammable or heat-sensitive objects (sofas, furniture, wood panelling, etc.) as specified below. The frontal distance from flammable materials must be at least as specified in the product's technical data table.

If particularly delicate objects are present, such as furniture, curtains or sofas, increase the stove clearance accordingly.



If the floor is made of wood, it is recommended to fit a floor protection sheet in compliance with the Standards in force in the country of installation.





If the floor is made of combustible material, it is recommended to use protection made of non-combustible material (steel, glass...) that also protects the front from falling combusted material during cleaning operations.

The appliance must be installed on a floor with adequate load capacity.

If the existing construction does not meet this requirement, one must take appropriate measures (for example a load distribution plate).

### **FOREWORD**

The Chimney Flue chapter has been drawn up with reference to the provisions of European Standards (EN13384 - EN1443 - EN1856 - EN1457).

The chapter provides indications for installing an efficient and correct flue but is under no circumstances to substitute the regulations in force, which the qualified technician must be in possession of. Check with local authorities whether there are any restrictive regulations in force regarding the intake of air for combustion, the smoke extraction system, the flue or the chimneypot.

The company declines all liability relating to the poor functioning of the stove if this is due to the use of an insufficiently sized flue in violation of the Standards in force.

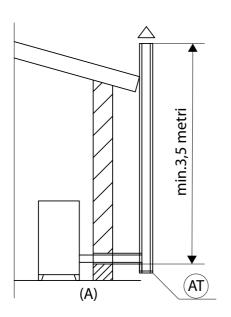
### **FLUE**

The flue or chimney is of great importance for the proper operation of a solid fuel-burning heating appliance with natural draught, as modern heating appliances have high efficiency with cooler flue gasses and consequently less draught, it is therefore essential that the flue is built up to standard and always kept in perfect working order. A flue that serves a pellet/wood fuelled appliance must be at least category T400 (or greater if the appliance requires so) and resistant to soot fires. Smoke must be extracted through a single flue made of insulated steel (A) or an existing flue that complies with the intended use (B).

A simple air shaft made of cement must be suitably lined. In both solutions there must be an inspection cap (AT) and/or inspection hatch (AP) - FIG. 1.

It is prohibited to connect more than one wood/pellet (\*) or any other type of appliance (vent cowling...) to the same flue.

(\*) unless there are national derogations (for instance in Germany), which under suitable conditions allow for the installation of several appliances in the same fireplace. In any case, strictly follow the product/installation requirements of the relative regulations/legislation in force in that country



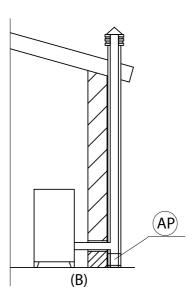


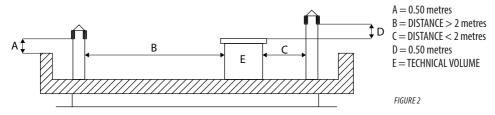
FIGURE 1 - FLUE

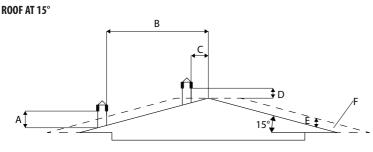
### **TECHNICAL CHARACTERISTICS**

Have the efficiency of the flue checked by an authorised technician.

The flue must be sealed against flue gasses, in a vertical direction without narrowing, be made with materials impermeable to smoke, condensation, thermally insulated and suitable to resist normal mechanical stress over time (we recommend fireplaces made of A/316 or refractory material with insulated round section double chamber). Be suitably insulated externally to avoid condensation and reduce smoke cooling. It should be separated from combustible or flammable materials with an air gap or insulating materials: check the distance specified by the manufacturer of the fireplace according to EN1443. The chimney opening must be in the same room as the appliance, or at most in the adjoining room, and have a soot and condensation collection chamber beneath the opening, and be accessible via a sealed metal batch.

### **FLAT ROOF**





A = MIN. 1.00 metres

B = DISTANCE > 1.85 metres

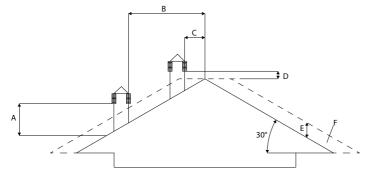
C = DISTANCE < 1.85 metres D = 0.50 metres ABOVE

HIGHEST POINT E = 0.50 metres

F = REFLUX AREA

FIGURE 3

### ROOF AT 30°



A = MIN. 1.30 metres

B = DISTANCE > 1.50 metres

C = DISTANCE < 1.50 metres

D = 0.50 metres ABOVE

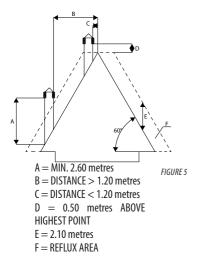
HIGHEST POINT F = 0.80 metres

E = 0.80 metres

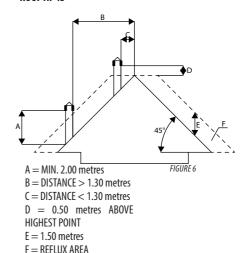
F = REFLUX AREA

FIGURE 4

### ROOF AT 60°



#### ROOF AT 45°



### SIZING

The draught of a flue depends on its height. Check the draught with the values indicated in the technical characteristics. The minimum height of the chimney is 3.5 metres.

The interior cross-section of the flue can be round (best), square or rectangular (the ratio between the internal sides must be  $\leq$ 1.5) with the sides joined with a minimum radius of 20 mm. The dimension of the cross-section must be **minimum Ø100mm**.

The cross-sections/lengths of the chimneys shown in the technical data tables are indications for correct installation. Any alternative configurations must be correctly sized in accordance with the general method of calculation of UNI EN13384-1 or other proven efficiency methods.

Below is a list of some flues available on the market:

AISI 316 steel chimney with double chamber insulated with ceramic fibre or equivalent resistant up to 400°C.

Refractory chimney with double insulated chamber and external lightweight concrete cladding with cellular material such as clay.

Traditional square-section clay chimney with insulating empty inserts.

Avoid products with an internal rectangular section where the larger side is 1.5 times the smaller side (e.g. 20x40 or 15x30).

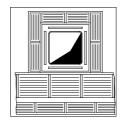
### **EXCELLENT**



### GOOD



### POOR



### **VERY POOR**



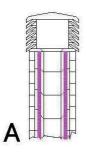
### MAINTENANCE

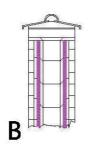
The flue must be kept clean, since the deposit of soot or unburned oils reduces the cross-section reducing the draft and thus compromising the efficient operation of the stove and, if large build-ups accumulate, can catch fire. The flue and chimneypot must be cleaned and checked by a qualified chimney sweep at least once a year. Once the inspection/maintenance has been performed, request a written report that the system is safe.

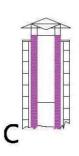
Failure to perform cleaning jeopardises the system's safety.

### **CHIMNEY POT**

The chimney pot is a crucial element for the heating appliance to work properly: we recommend a wind proof chimney pot (A), see Figure 7.



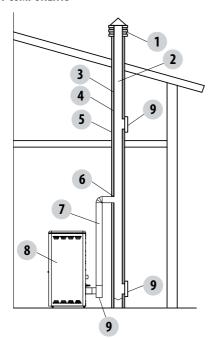




The area of the opening for smoke extraction must be at least double the cross-section of the flue/lined system, and arranged so that smoke extraction is ensured even in strong wind. The chimney must prevent rain, snow or animals from entering the chimney. The height of outflow into the atmosphere must be beyond the reflux area due to the shape of the roof or any obstacles near the outlet (see Figures 2-3-4-5-6).

FIGURE 7

### CHIMNEY COMPONENTS



### LEGEND:

- (1) CHIMNEYPOT
- (2) REFLUX CHANNEL
- (3) SMOKE DUCT
- (4) THERMAL INSULATION
- (5) OUTSIDE WALL
- (6) CHIMNEY FITTING
- (7) SMOKE DUCT
- (8) HEAT GENERATOR
- (9) INSPECTION ACCESS PANEL

FIGURE 8

### **EXTERNAL AIR INLET**

It is mandatory to provide an adequate external air inlet that supplies the combustion air required for the product to work properly. The flow of air between the outside and the installation room may be direct, through an inlet in an external wall of the room; or indirect, via air intake from adjoining rooms and connecting permanently with the installation room (see Figure 9 b). Adjoining areas may not include sleeping areas, garages or general areas with a fire hazard. During installation one must check the minimum clearances required for air intake from outside. Take into account the presence of doors and windows that could interfere with the proper flow of air to the stove (see diagram below).

The air inlet must have a minimum net total area of 80 cm2: the surface must be increased accordingly if there are other active generators (for example: electric fan for stale air extraction, hood, other stoves, etc.), which could cause a depression in the room. Make sure that, with all appliances on, the pressure drop between the room and the outside does not exceed the value of 4 Pa (also for Oyster appliances if the combustion air has not been suitably ducted outside). If necessary increase the intake section of the air inlet, which must be made at floor level and always protected with a bird-proof outer protection grid and in such a way that it cannot be obstructed by any object.

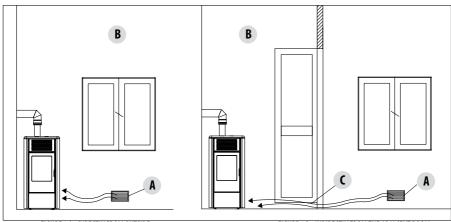
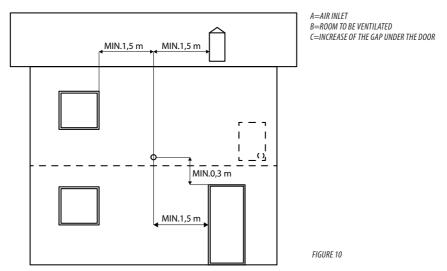


FIGURE 9 A - DIRECTLY FROM OUTSIDE

FIGURE 9 B - INDIRECTLY FROM THE ADJACENT ROOM



In order to fully enhance the sealed features and heating performance of this Oyster appliance, and thus to avoid fitting a free air intake in the room, It is recommended to connect the air required for combustion directly to the external air intake through 060 mm piping with a maximum length of 3 linear metres, using the suitable "j" 048/60 adapter supplied with the appliance; each pipe elbow must be considered as equivalent to one linear metre. If a longer connection should be required, increase further with an 080 mm smooth pipe. However, do not exceed 8 linear metres of ducting (considering the curves too). In sealed stoves the connection must be sealed in order not to affect the overall sealed features of the system.

For stoves installed in studio flats, bedrooms and bathrooms (where allowed), it is mandatory to connect the combustion air outside.

DISTANCE (metres)	The air inlet must be at a distance of:			
1.5 m	BELOW Windows, doors, smoke outlets, cavities,			
1.5 m	HORIZONTALLY	Windows, doors, smoke outlets, cavities,		
0.3 m	ABOVE	Windows, doors, smoke outlets, cavities,		
1.5 m	AT A DISTANCE	from smoke outlet		

### **CONNECTION TO THE FLUE**

The connection between the flue and the appliance must be via a smoke duct that complies with EN 1856-2. The connecting section must extend no more than 4 m horizontally, with a minimum slope of 3% and with a maximum of 3 90° bends (accessible for inspection - do not count the T fitting at the appliance outlet).

The diameter of the smoke duct must be equal to or greater than that of the outlet of the appliance (Ø 80 mm).

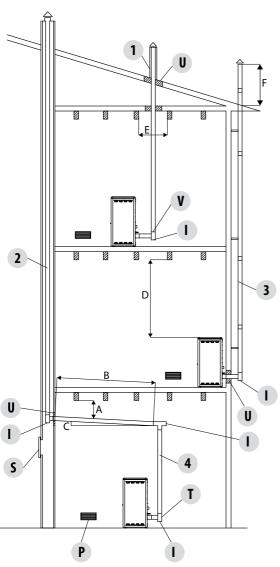
TYPE OF SYSTEM	SMOKE DUCT
Minimum vertical length	1.5 metres
Maximum length (with 1 accessible 90° bend)	6.5 metres
Maximum length (with 3 accessible 90° bends)	4.5 metres
Maximum number of accessible 90° bends	3
Horizontal sections (minimum slope 3%)	4 metres

Use smoke ducts with a diameter of 80mm or 100mm depending on the type of system, with silicone gaskets or similar gaskets that can withstand the high operating temperatures of the appliance (min. T200 class P1). The use of flexible metal hoses made of fibre cement or aluminium is forbidden. For direction changes, we always recommend the use of a T fitting with an inspection cap allowing easy access for cleaning the tubes. Always ensure that the inspection cap is put back in place and sealed hermetically with the relevant seal intact after cleaning.

It is prohibited to connect more than one appliance to the same smoke duct, or the discharge from hoods above it. It is forbidden to extract the combustion products directly through the wall, whether into indoor spaces or outdoors.

The smoke duct must be at a minimum distance of 400 mm from flammable or heat-sensitive structures.

### **EXAMPLES OF CORRECT INSTALLATION**



**1.** Installation of Ø120mm flue with hole for the passage of the pipe increased by:

minimum 100mm around the pipe if next to non flammable parts such as cement, brick, etc.; or

minimum 300mm around the pipe (or as required by rating plate) if next to flammable parts such as wood etc. In both cases, install suitable insulation between the flue and the ceiling.

Always check and respect the data tags on the flue, in particular the minimum safety distances from combustible materials.

The previous rules also apply for holes made in walls.

- **2.** Old flue, minimum pipe Ø100mm with the inclusion of an external access door for chimney cleaning.
- **3.** External flue made of insulated stainless steel pipes, i.e. with double walls minimum Ø100mm: all securely mounted on the wall. With wind-proof chimney pot. See fig. 7 type A.
- **4.** Ducting system using T fittings that allow easy access for cleaning without having to remove the pipes.

FIGURE 11

U = INSULATING

V = ANY REDUCTION FROM 100 TO 80 MM

I = INSPECTION CAP

S = INSPECTION ACCESS PANEL

P = AIR INLET

T = T JOINT WITH INSPECTION CAP

A = MINIMUM 40 MM

B = MAXIMUM 4 M

 $C = MINIMUM 3^{\circ}$ 

D = MINIMUM 400 MM

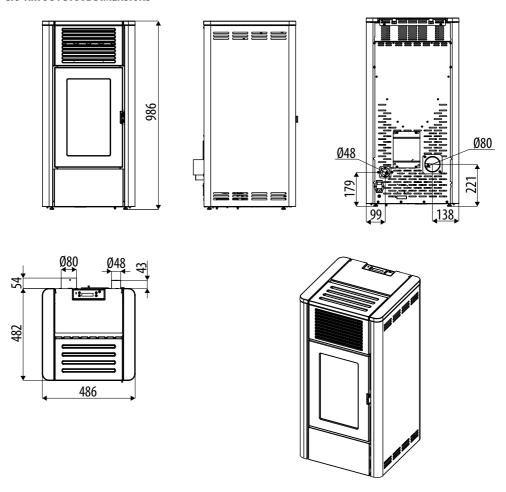
E = HOLE DIAMETER

F = SEE FIG.2-3-4-5-6

### **3-DRAWINGS AND TECHNICAL FEATURES**

### **DRAWINGS AND CHARACTERISTICS**

### **GIO' AIR 8 S1 STOVE DIMENSIONS**



### **3-DRAWINGS AND TECHNICAL FEATURES**

TECHNICAL CHARACTERISTICS	GIO' AIR 8 S1
Energy Efficiency Class	A+
Nominal output power	8.0 kW (6880 kcal/h)
Minimum power output	2.5 kW (2150 kcal/h)
Efficiency at Max	90.4%
Efficiency at Min	92.0%
Temperature of exhaust smoke at Max	196 ℃
Temperature of exhaust smoke at Min	103 ℃
Particulate/OGC/Nox (13%0 <sub>3</sub> )	16 mg/Nm3 - 1 mg/Nm3 - 137 mg/Nm3
CO at 13% O₂ at Min and at Max	0.055 - 0.003%
CO <sub>2</sub> at Min and at Max	7.4% - 14.1%
Recommended draught at Max power	0.10 mbar - 10 Pa***
Minimum draft allowed at minimum power	0.05 mbar - 5 Pa
Smoke mass	4.3 g/sec
Tank capacity	32 litres
Type of pellet fuel	Pellet diameter 6 mm and size 3 ÷ 40 mm
Pellet hourly consumption	Min ~ 0.6 kg/h* - Max ~ 1.8 kg/h*
Autonomy	At min ~ 35 h* - At max ~ 12 h*
Heatable volume m <sup>3</sup>	172/40 – 197/35 – 229/30 **
Combustion air inlet	Ø 50 mm
Smoke outlet	Ø 80 mm
Air inlet	80 cm <sup>2</sup>
Rated electrical power (EN 60335-1)	80 W (Max 350 W)
Supply voltage and frequency	230 Volt / 50 Hz
Net weight	140 kg
Weight with packaging	150 kg
Distance from combustible material (back/side/under)	50 mm /100mm / 0 mm
Distance from combustible material (ceiling/front)	800 mm / 1000 mm

Tested according to EN 14785 in accordance with European regulation for Construction Products (EU 305/2011).

<sup>\*</sup> Data that may vary depending on the type of pellets used
\*\* Volume that can be heated, according to the power requirement per m³ (respectively 40-35-30 Kcal/h per m³)
\*\*\*Value recommended by the manufacturer (non-binding) for optimal product operation

### PREPARATION AND UNPACKING

Remove all the parts of the packaging (polystyrene, wood, plastic). All packaging materials can be reused for similar use or disposed of as urban solid waste, in accordance with current regulations.

After having removed the packaging make sure the product is intact.



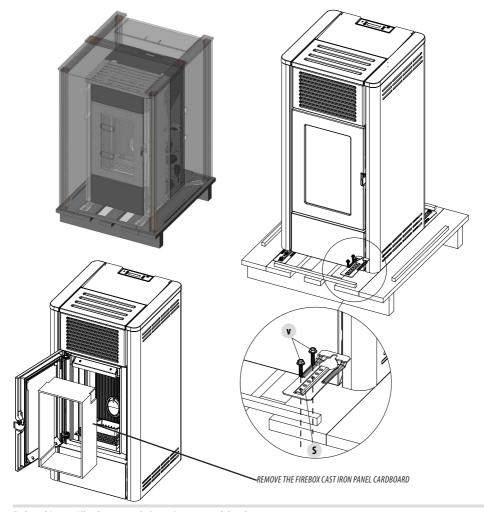
Handle the product with suitable means paying attention to the applicable safety regulations in force. Do not turn the packaging over and handle the majolica parts with care.

The stove is delivered in a single package. Open the package, remove the two screws "v" which secure the stove brackets to the pallet and then remove the bracket "S" from the stove foot. There are four brackets, two at the front and two at the back.

Install the stove in the chosen area, making sure it complies with the requirements.

The stove body or unit must always be kept in a vertical position when handled, and handled using carts only. Pay particular attention to the door and its glass, protecting them from mechanical knocks that would compromise their integrity.

The product must always be handled with care. If possible, unwrap the stove near the chosen area of installation. The packaging materials are neither toxic nor harmful, therefore no particular disposal measures are required.



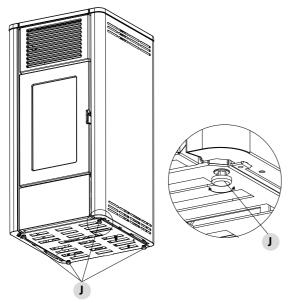
Therefore, the end user is responsible for product storage, disposal or possible recycling in compliance with the relative applicable laws in force. Do not store the stove unit or its cladding without their packaging.

Position the stove and connect it to the flue pipe. Remove the plastic clamp securing the top to the stove's frame.

If the stove needs to be connected to an outlet pipe which goes through the rear wall (to connect to the flue), take utmost care to make sure that the joint is not forced.



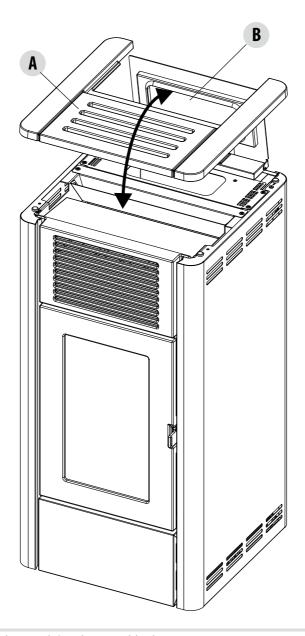
If the stove smoke outlet is forced or used improperly to lift it or position it, the operation of the stove can be damaged irreparably.



- 1. TURN THE FEET CLOCKWISE TO LOWER THE STOVE
- 2. TURN THE FEET COUNTER CLOCKWISE TO RAISE THE STOVE

### **DISASSEMBLING THE TOP**

Lift the tank cover "B" and remove the top "A". To remove the top "A", simply lift it off its rubber supports and put it in a safe place until it is to be used again.

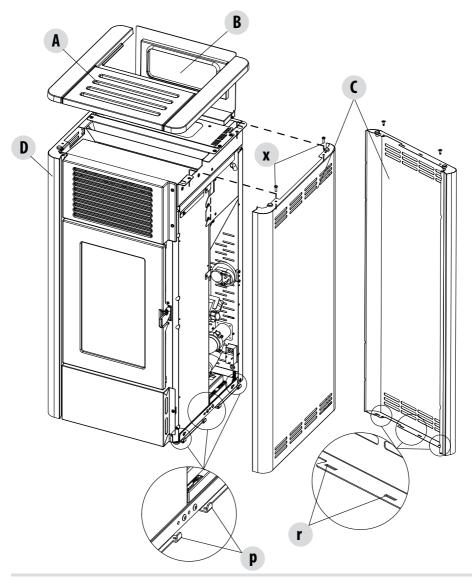


### REMOVING THE SIDE PANEL

The stove is delivered fully assembled; if you need to remove the side panels for technical service or cleaning, proceed as follows:

- raise the cover of the pellet tank "B"
- remove the top "A"
- in the upper section, remove the two screws "x" under top "A" securing the panel "C" to the structure
- lift the panel "C" upwards to free the four holes "r" from the four pins "p" in the structure of the stove.
- place the panel "C" in a safe place

Proceed in the same way also with panel "**D**"

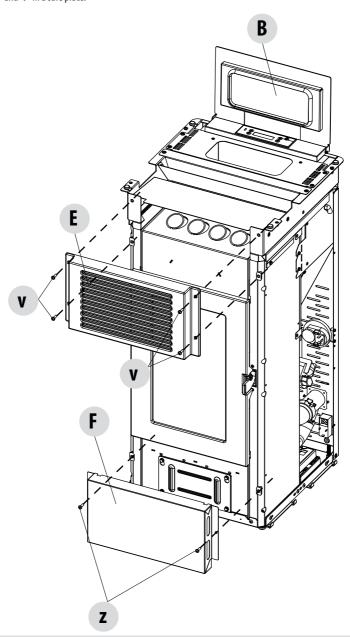


### DISASSEMBLING THE FRONT PANELS

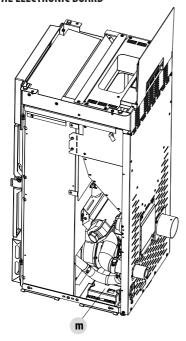
After removing the side panels "C" and "D", proceed as follows:

- Undo the four screws "v" and remove the upper front panel "E"
- Undo the two screws "z" and remove the lower front panel "F"

Put the panels "**E**" and "**F**" in a safe place.

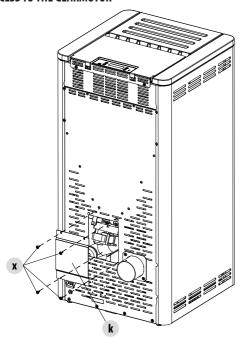


### **ACCESS TO THE ELECTRONIC BOARD**



The electronics board "m" is on the right side (handle side). If you need to access the board, you must remove the back side panel as explained above.

### **ACCESS TO THE GEARMOTOR**



To access the gearmotor, you must remove the four screws " $\mathbf{x}$ " from the stove's back panel and then remove the plate " $\mathbf{k}$ ".

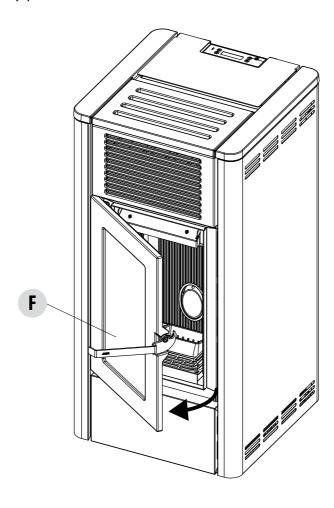
### **OPENING THE DOOR OF THE FIREBOX**

To open the firebox door, fit the cold handle "F" into its hole in the handle, and pull it outwards.



### Attention!

The firebox door must be closed properly for the stove to work correctly. Only open the doors when the stove is switched off and cold.

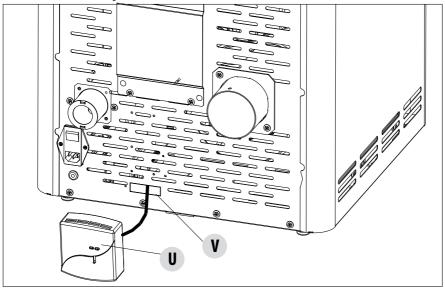


### 5-CONNECTION TO ADDITIONAL DEVICES

### INSTALLING THE MODEM / PROGRAMMABLE THERMOSTAT (OPTIONAL)

To install the thermostat and the mode, refer to their instruction manuals.

The modem mounts to the stove's back panel with adhesive velcro, while the programmable thermostat's receiver "U" mounts onto the provided holes. Once the receiver "U" has been secured with the provided screws, break the knockout hole "V" and route the cables for connection to the board through it.



### INSTALLING THE WEB-WIFI "N" INTERFACE (OPTIONAL)

To install the Web-Wi-Fi interface, fasten the Wi-Fi module to the stove using the adhesive Velcro straps supplied with the kit (refer to the instructions in the kit).

In the Play Store for Android (Smartphone and Tablet) and in iTunes for iOS, you will find the APP "MCZ WIFI Easy"

### **6-LOADING THE PELLETS**

### **LOADING THE PELLETS**

The fuel is loaded from the top of the stove by lifting the hatch "E" with the included cold handle "F".

Pour the pellets in slowly so that they are deposited at the bottom of the hopper.



If loading pellets when the stove is running, open the door of the tank using the stove mitten that comes with the stove itself.

When loading, do not let the pellet bag come into contact with hot surfaces.

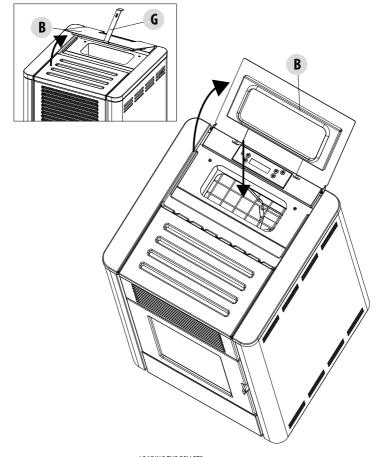
Never remove the protection grid inside the tank.

No other type of fuel other than pellets is to be inserted into the tank, in compliance with above-mentioned specifications.

Store the spare fuel at an adequate safe distance.

Do not pour pellets directly onto the brazier but only into the tank.

When the appliance is running and when it is turned off, most of the stove surfaces are very hot (door, handle, glass, smoke outlet pipes, etc.). Therefore it is recommended to avoid coming into contact with these parts.



LOADING THE PELLETS

### 7-ELECTRICAL CONNECTION

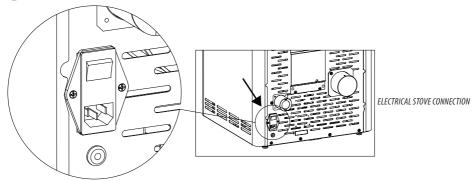
### **ELECTRICAL CONNECTION**

First connect the power cable to the back of the stove and then to a wall socket.

The main switch must only be activated to switch the stove on; otherwise, it is advisable to keep it switched off.



It is recommended to disconnect the power cable when the stove is not used.



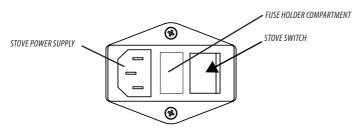
### STOVE POWER SUPPLY

After connecting the power cable to the back of the stove, turn the switch at the back to position (I).

The luminous switch button will light up.

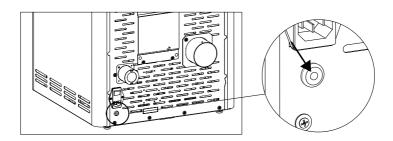
The switch on the back of the stove is used to power the system.

On the rear of the stove there is a fusebox which is located near the power socket. Open the fusebox cover with a screwdriver and replace the fuse if necessary (3.15 A delayed) - seek assistance from an authorised and qualified technician.



### **ROOM PROBE**

The room probe (B) is located at the back of the stove near the switch.



### **8-FIRST START-UP**

## PRECAUTIONS BEFORE START-UP GENERAL PRECAUTIONS

Remove any objects that may burn from the brazier (manual, various adhesive labels or any polystyrene).

Check that the brazier is positioned correctly and rests properly on the base.



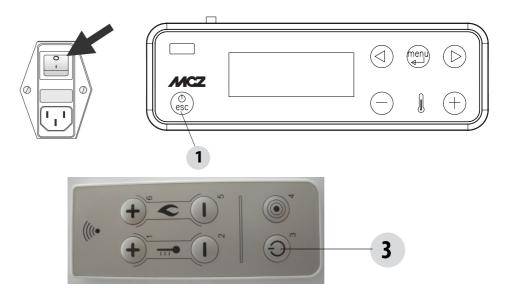
The first start-up may not be successful as the feed screw is empty and does not always manage to load the required amount of pellets in time to light the flame.



CANCEL THE FAILED IGNITION ALARM BY PRESSING AND HOLDING THE ON/OFF KEY FOR A FEW SECONDS. REMOVE THE PELLET LEFT IN THE BRAZIER AND REPEAT THE START-UP.

### SETTINGS TO BE CARRIED OUT BEFORE THE INITIAL START-UP

After connecting the power cable to the back of the product, turn the switch at the back to position(I). To turn the stove on or off, press button 1 on the control panel.



The <u>display on the panel will be ON with a flashing flame.</u> When the flame stops blinking, the stove has reached the operating condition to "supply power".

The default target room temperature is set at 20°C. To change this setting, follow the instructions in the adjustments menu; do the same to set the heating water temperature and the speed of the ventilation fan (if provided). To activate an external thermostat, if present, see the dedicated paragraph.

### SWITCHING THE EOUIPMENT OFF

To switch the equipment off, press and hold the ON-OFF button on the remote control or on the APP. The acoustic beep confirms this phase has started.

Alternatively, switch it off from the emergency panel by following the instructions provided in the dedicated chapter

The equipment will start the shutdown process which involves consuming the residual pellets in the brazier, the latter being cleaned and the residual heat in the structure being disposed of.

### 8-FIRST START-UP

During the disposal phase of the residual heat, the fans operate at about 80% of their output and the speed cannot be varied. This is determined by the need for all the accumulated heat to be evacuated safely and quickly. The switch-off phase can last 15 - 30 minutes depending on the heat stored in the structure, determined by the duration and the operating regime of the product throughout the day. When the internal temperature drops below the set thresholds, the fans for hot air and exhaust fume extraction will automatically switch off.

### **POWER SUPPLY**

When start-up is complete, the panel will display ON with a constant flame at level 3 III . The modulation of the flame for higher or lower power is then controlled autonomously on the basis of reaching the set temperature. (see also "OPERATING MODE" - "Set Flame")

If the flame fails to ignite, despite a regular flow of pellets, check that the brazier is seated correctly: it must **rest snugly against the interlocking slot and be clean of any ash incrustations.** If no anomaly is found during this inspection, there may be a problem with the product components or installation may not be correct.



### REMOVE THE PELLETS FROM THE BRAZIER AND CONTACT AN AUTHORISED TECHNICIAN.

Please ensure the brazier is free from ALL pellets and ash build up following any failed ignitions. Failure to clear out the brazier prior to resetting may result in further failed ignitions or in certain conditions an explosive ignition.



It is good practice to ensure effective ventilation in the room during the initial start-up, as the product will emit some smoke and smell of paint.

Do not stand close to the boiler and ventilate the room as described. The smell of paint will disappear after about an hour of operation, however, it is not harmful in any case.

The product will be subject to expansion and contraction during the start-up and cooling phases, therefore slight creaking noises may be heard.

This is absolutely normal as the structure is made of laminated steel and must not be considered a defect.



### DO NOT EXPECT HEATING EFFICIENCY IMMEDIATELY!!! THE PRODUCT NEEDS SOME RUNNING-IN TIME.

It is extremely important to make sure the product does not reach high temperatures straight away, but to increase the temperature gradually using low power at first.

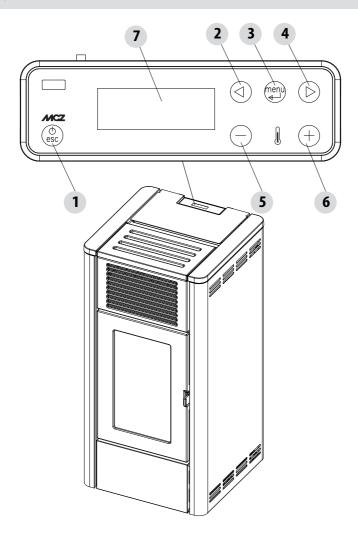
This will prevent damage to the welds and the steel structure.



Do not touch the product during the first lighting, as it is during this phase that the paint sets. If you touch the paint, you may expose the steel surface.

If necessary, touch up the paint with the spray can of the specific colour.

### 9-CONTROL PANEL



### KEY

- 1. Stove switch-on/switch-off
- 2. Scrolling down through the programming menu
- Menu
- 4. Scrolling up the programming menu

- 5. Decrease set temperature / programming functions.
- 6. Increase set temperature / programming functions.
- 7. Display.

### **10-MENU ITEMS AND OPERATION**

### MAIN MENU

Press key 3 (menu) to access. The options accessed are:

- Date and Time
- Timer
- Sleep (only when stove is on)
- Settings
- Info

### **Date and time configuration**

Configure the time and date as follows:

- Press the "menu" key.
- Select "Date and Time".
- Press "menu" to confirm.
- Scroll through with the arrow keys and select the variables to be edited one at a time: Day, Hour, Min, Num. day, Month, Year.
- Press "menu" to confirm
- Use the + and kevs to edit.
- Finally, press "menu" to confirm and "esc" to exit.

### **CONFIGURATION OF PROGRAMMED MODE (TIMER) - Main menu**



The current time and date must be configured to ensure correct operation of the timer.

There are six configurable TIMERS; for each one, the user can select a start and stop time and the days of the week when it is in use. When one or more programs are active, the status of the stove and the TIMER "n" alternate on the display. "n" is the number of timer programs in use, separated by dashes.

Example:

TIMER 1 Timer 1 program active.

TIMER 1-4 Timer 1 and 4 programs active.

TIMER 1-2-3-4-5-6 All timer programs active.

**EXAMPLE OF PROGRAMMING** 

With the stove on or off:

- · access the MENU.
- scroll to the TIMER item using the <> arrows,
- press the "Menu" key
- the system shows "P1" (Press the <> keys to move through the timers P2, P3, P4, P5, P6)
- Press the "Menu" key to activate "P1".
- press + and select "ON"
- press the "Menu" key to confirm

At this point the start time is 00:00. Press the + - key to set the start time and press the "menu" key to confirm.

Next, the proposed stop time is 10 minutes later than the configured start time: press the + key and edit the stop time, and press the "menu" key to confirm.

Next, you are asked to set the days of the week when the configured timer is to be enabled or disabled. Press the - or + keys to select the day you want to activate the time. It will light up white, then confirm with the "menu" key. If no day is selected for enabling the timer, the timer program is no longer enabled on the status window.

Next, program the other days or press "ESC" to exit. Repeat this procedure to program the other timers.

### 10-MENU ITEMS AND OPERATION

#### **EXAMPLES OF PROGRAMMING**

P1		P2			
on	off	day	on	off	day
08:00	12:00	mon	11:00	14:00	mon
Stove on between 08:00 and 14:00					

P1			P2		
on	off	day	on	off	day
08:00	11:00	mon	11:00	14:00	mon
Stove on between 08:00 and 14:00					

P1		P2			
on	off	day	on	off	day
17:00	24:00	mon	00:00	06:00	tue
Stove on between 17:00 on Monday to 06:00 on Tuesday					

### NOTES ON USE OF THE TIMER

- The timer always starts the boiler with the last temperature and ventilation settings (or with the default settings at 20°C and V3 if they have never been altered).
- The start time can be between 00:00 and 23:50
- If the stop time has not yet been saved, the program proposes a start time at +10 minutes.
- If a timer program turns off the stove at 24:00 on one day and another program starts it up at 00:00 on the next day: the stove remains on.
- A program has a start-up and/or shut-down time that overlap the times of another program: if the stove is already on, the start has
  no effect while OFF turns off the stove.
- When the stove is on and the timer is active, pressing the OFF key turns off the stove; the stove then restarts automatically at the next time of the timer.
- When the stove is off and the timer is active, pressing the ON key turns on the stove; the stove then stops automatically at the next time of the timer.

### SLEEP FUNCTION (main menu)

Sleep may be activated only when the stove is on and allows you to quickly set a time for the product to turn off.

To set the Sleep function, proceed as follows:

- Enter the MENU
- Scroll to the SLEEP item with the <> arrows
- Press Menu
- Set the turn-off time you want using the + and keys.

The panel shows a default time of 10 minutes after the current time, which can be adjusted with key 6 up to the following day (i.e. the turn-off can be delayed for a maximum of 23 hours and 50 minutes).

If the SLEEP function is active with the TIMER active, the former has priority, therefore the stove will not turn off at the time set in the timer program but at the time set by the sleep function, even if it comes after the time set by the timer.

### **10-MENU ITEMS AND OPERATION**

## OPERATING MODE ADJUSTMENTS MENU

"Adjustments" menu settings determine the operation mode of the stove.

To access the menu, proceed as follows:

- Press the + keys
- Scroll with the <> arrows and select "Set Amb. T" or "Set Ventilation T" or "Set Flame"
- Press "menu" to enter the option selected.
- Change with the + keys.
- Press "menu" to confirm and "esc" to exit.

**Set Amb T** - this function is used to set the temperature to be reached in the room in which the stove is installed, from a minimum of 5°C to a maximum of 35°C. When this condition is met, the stove setting is equivalent to the minimum consumption values (the flame and hot air fan speed at minimum), and then returns to the set values when the room temperature drops below the set threshold.

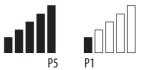
PLEASE NOTE: The point to the right of the room temperature on the control panel display indicates the half degrees (e.g. 23.°C is equivalent to 23.5°C).

**Set Vent** - this function allows you to select the desired speed of the room fan from 1 to 5.

<u>Set Flame</u> - this function allows you to set the power of the flame from a minimum of 1 to a maximum of 5. The power levels correspond to a different value of fuel consumption, setting 5 heats the room in less time and setting 1 can keep the room temperature stable for a longer period of time. The set flame is automatically set to a minimum when the set temperature value is reached.

### VIEW WITH STOVE ON

if the bars are all full, the stove is on flame power 5 if only one bar is full, the stove is on flame power 1 if the bars are flashing, automatic cleaning is in progress



#### **SETTINGS MENU**

The SETTINGS menu is to configure use of the stove:

- a. Language.
- b. Cleaning (shown only when stove is off).
- c. Auger loading (shown only when stove is off).
- d. Tones
- e. External thermostat (activation).
- f. Auto Eco (activation).
- g. Eco Turn-off T (default 10 minutes).
- h. Pellet recipe.
- i. % of smoke rpm.
- j. Component test (shown only when stove is off).
- k. "Chimney sweeper" function (can be enabled only when stove is on to check emissions in field).
- Technical menu.

#### a - Language

Select the language as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "language".
- Press "menu" to confirm.
- Use the + keys to select the required language (IT/EN/DE/FR/ES/NL/PL/DK/SLO)
- Press "menu" to confirm and "esc" to exit.

#### b - Cleaning

Select "Cleaning" (only with stove off) as follows:

- · Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Cleaning"
- Press "menu" to confirm.
- Use the + keys to select "On".
- Press "esc" to exit.

## c - Load auger

To select "Load auger" (only with stove off), proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Load auger".
- Press "menu" to confirm.
- With the + key "Enable" the load auger.
- Press "esc" to exit.

#### d - Tones

This function is disabled by default. To enable it proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Tones"
- Press "menu" to confirm.
- With the + keys, select "On/Off".
- Press "menu" to confirm and "esc" to exit.

#### e - External thermostat (see dedicated chapter)

#### f - Auto-Eco activation (see dedicated chapter)

To select the Auto-Eco function, proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Auto-Eco".
- Press "menu" to confirm.
- Use the + keys to select "On".
- Press "menu" to confirm and "esc" to exit.

### g - Eco stop T (see dedicated chapter)

To select the Eco Stop T function, proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "T Eco off".
- Press "menu" to confirm.
- With the + keys, insert the minutes (from 1 to 30').
- Press "menu" to confirm and "esc" to exit.

### AUTO ECO MODE (see above paragraph activation and switching off)

For activation of the "Auto Eco" mode and time settings, see paragraphs 8 f and 8 g respectively.

"ECO stop T" can be adjusted to ensure correct operation in the various environments in which the stove can be installed and to avoid constant stopping and starting when the room temperature is subject to sudden change (drafts, poorly insulated rooms, etc.).

The ECO stop procedure is activated automatically when the power recall device is satisfied (room probe  $\pm 1^{\circ}$ C or external thermostat with an open contact), the "ECO stop T" starts to decrease the time (factory default 5 minutes, which can be changed from the "Settings" menu). During this phase, the panel alternates between displaying 0N with a small flame and Crono (if active) – Eco active. The minutes counting down to the Eco Stop are shown at the top of the display. The flame moves to P1 and remains there until the set "T Eco Stop" time reaches zero, and if the conditions are still satisfied, turns off the boiler. The ECO stop count is cancelled if one of the devices recalls power. When the boiler begins to turn off, the panel shows: Off – Eco Active – flashing small flame.

When the stove turns off, OFF-ECO appears on the display with the flame symbol off.

The following conditions have to be met simultaneously for the ECO to restart:

- room probe -1°C or external thermostat with a closed contact (for at least 20" in order to prevent false recalls)
- 5 minutes have passed since shut-down.

#### h - Pellet Recipe

This function is for adapting the stove to the type of pellet in use. As there are many types of pellet available on the market, operation of the stove can vary considerably according to the quality of the fuel. When the pellets clog up the brazier due to excess loading of fuel or when the flames are high even at low power, or when the flames are low, it is possible to decrease/increase the amount of pellets in the brazier:

Available values:

- -3 = A decrease of 20% on the factory setting.
- -2 = A decrease of 13% on the factory setting.
- -1 = A decrease of 6% on the factory setting.

0% No changes.

- 3 =An increase of 10% on the factory setting.
- 2 =An increase of 6% on the factory setting.
- 1 =An increase of 3% on the factory setting.

#### Edit the recipe as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Pellet recipe"
- Press "menu" to confirm.
- Alter the % with the + keys.
- Press "menu" to confirm and "esc" to exit.

## i - Variation % rpm smoke

In the event the installation presents problems in extracting smoke (lack of draft or even pressure in the duct), it is possible to increase the smoke and ash extraction speed. This change resolves all the potential problems related to pellets clogging in the brazier and deposits forming at the bottom of the brazier itself caused by poor quality fuel or fuel that produces a lot of ash. The extraction speed may be altered between -30% to +50%, with increments of 10 percent at a time. Negative variation can be necessary if the flame is too low.

#### To alter this parameter, proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Fumes rpm Var."
- Press "menu" to confirm.
- Alter the % with the + keys.
- Press "menu" to confirm and "esc" to exit.

#### j - Components test

This can be done only when the stove is off and allows you to select the components to be tested:

- Spark plug: it is turned on for a fixed period of 1 minute during which the panel displays the countdown in seconds.
- Feed screw: it is powered for a fixed period of 1 minute during which the panel displays the countdown in seconds.
- Extractor: it is activated at 2500 rpm for a fixed period of 1 minute during which the panel displays the countdown in seconds.
- **Exchanger**: enables you to conduct the test in V5 for a fixed period of 1 minute during which the panel displays the countdown in seconds.

Enable the "Component test" function (only with stove off) as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.

- Use the arrow keys to scroll through and select "Component test"
- Press "menu" to confirm.
- Use the + keys to select the test to be carried out.
- Press "menu" to confirm and "esc" to exit.

## k - Chimney sweeper function (for maintenance operators only) -

This function can only be activated when the stove is on and power is supplied, and it forces operation of the boiler at the parameters P5, with the ventilator (if present) in V5. Any corrections to the loading/smoke ventilation percentage must be read. This state lasts 20 minutes, the countdown is displayed on the panel.

The technician can stop this phase at any moment by guickly pressing the on/off key.

Enable the "Chimney sweeper" function as follows:

- · Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Chimney sweeper function"
- Press "menu" to confirm.
- Use the + keys to select "On" (Off by default)
- Press "menu" to confirm and "esc" to exit.

#### I - Technical menu

To access the technical menu you must contact the assistance centre as it requires a password.

Access the "technical menu" as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Use the arrow keys to scroll through and select "Technical menu"
- Press "menu" to confirm.
- With the + keys, select "Product Type", "Service", "Counter memories", "Parameters".
- Press "menu" to confirm and "esc" to exit.

#### INFO MENU

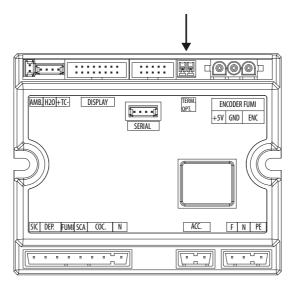
- Product type
- Firmware version
- Software info
- Total hours
- No. of start-ups
- Rpm evacuator
- T. smoke
- Heat exchanger voltage
- Feed screw loading
- Flame

## **EXTERNAL THERMOSTAT CONNECTION (optional)**



The room thermostat is not included with the stove and must be installed by a qualified technician. CAUTION!

The electrical wires must not come into contact with the hot parts of the stove.



The temperature of the stove can also be controlled by an external room thermostat. It should be positioned centrally in the room where the stove is installed. It provides a closer match between the heating temperature requested of the stove and the actual room temperature it provides.

Connect the cables coming from the external thermostat to terminal "Term opt" on board N100 on the stove.

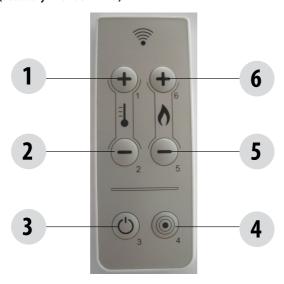
Enable the external thermostat (factory settings OFF) as follows:

- Press the "menu" key.
- Scroll with the arrows to "Settings".
- Press "menu" to select.
- Now use the arrows to scroll to "External thermostat".
- Press "menu" to select.
- Press the + keys.
- Select "On" to activate the external thermostat.
- · Press the "menu" key to confirm.
- Press the "esc" key to exit.

Once the external thermostat has been enabled, instead of displaying the detected temperature from the probe on the stove, ON or OFF will appear, depending on whether you have requested heat from the external thermostat or not.

**ON** if the external thermostat contact is <u>closed</u>, **OFF** if the contact is <u>open</u>.

## Remote control (accessory - NOT SUPPLIED)



#### **LEGEND OF BUTTONS**

1. Increase temperature set-point	4. Temperature/power switch and vice versa.		
2.Decrease temperature set-point	5/6. Set power and ventilation		
3. ON/OFF			
PLEASE NOTE Adjusting the temperature with the remote control has no effect if the external thermostat has been selected.			

Attention! Before using, remove the protection from the battery. The batteries are not included.

Keys 1 and 2: set the room temperature (automatic mode). See paragraph "Automatic mode".

Keys 6 and 5: set power and ventilation (manual mode). The values that can be set are from 1 to 5.

Power does not scale immediately but reaches it at the set time (1 power per minute)

Button 3: On/Off

Button 4: moves on from temperature to flame power; when passing from one status to another, the following values will be set:

- Temperature 23°C.
- Power 3 ventilation 3

#### **Batteries - type and replacement**

The batteries are in the bottom of the remote control. To replace them, pull out the battery holder and remove or insert the battery in the orientation marked on the remote control and on the battery itself.

The remote control takes 1 CR2025 lithium battery.



Used batteries contain metals which are harmful to the environment, so they must be disposed of separately in appropriate containers.



If the remote control is off because it has no battery, the stove can be controlled with its top-mounted control panel. While replacing the battery, observe the orientation marked inside the battery compartment

## 11-SAFETY DEVICES

## **SAFETY DEVICES**

The product is fitted with the following safety devices

#### PRESSURE SWITCH

Monitors pressure in the smoke duct. It is designed to shut down the pellet feed screw in the event of an obstructed flue or significant back-pressure (from the wind).

#### **SMOKE TEMPERATURE PROBE**

Detects the temperature of the smoke, thereby enabling start-up or stopping the product when the temperature drops below the preset value.

#### CONTACT THERMOSTAT IN THE FUEL TANK

If the temperature exceeds the preset safety level, it immediately shuts down the running of the stove.

#### **ELECTRICAL SAFETY**

The stove is protected against violent changes in current by a general fuse located in the control panel at the back of the stove. Other fuses that protect the electronic boards are found on the latter.

#### **SMOKE FAN**

If the fan stops, the electronic board shuts off the supply of pellets in good time, and an alarm message is displayed.

#### **GEAR MOTOR**

If the reduction motor stops, the stove will continue to run until the flame goes out due to lack of fuel and until a minimum level of cooling is reached.

#### **TEMPORARY POWER CUT**

When a power cut is less than 10" the stove returns to its previous operating state; if it is more, it executes a cooling/re-ignition cycle.

#### **FAILED START-UP**

If during ignition no flame develops, the stove will go into alarm condition.

#### TAMPERING WITH THE SAFETY DEVICES IS PROHIBITED

If the product is NOT used as described in this instruction manual, the manufacturer declines all liability for any damage caused to persons and property. The manufacturer furthermore refuses to accept responsibility for damage to persons and property arising from the failure to observe all the rules contained in the manual and in particular:

- All the necessary measures and/or precautions must be adopted when performing maintenance, cleaning and repairs.
- Do not tamper with the safety devices.
- Do not remove the safety devices.
- Connect the product to an efficient smoke expulsion system.
- First, check that the environment where it is to be installed is properly ventilated.

Only after having eliminated the cause of the intervention of the safety system is it possible to relight the product and therefore restore the automatic operation of the probe. This manual will help you understand which anomaly has occurred, and explain how to intervene according to the alarm message displayed on the appliance.

#### **ALARM SIGNALLING**

When a condition occurs other than the one expected for regular operation of the stove, an alarm is triggered.

The reason for the alarm is given on the control panel. The sound signal is not enabled for alarms A01-A02 in order not to disturb the user when there is an absence of pellets in the night tank.

Panel signalling type of problem		Solution	
A01		Check the level of pellets in the tank. Check that the brazier is correctly positioned in its seat and has no build-up or unburned material. Make sure the ignition plug warms up. Thoroughly empty and clean the brazier before restarting.	
A02	The fire goes out abnormally.	Check the level of pellets in the tank.	
A03  The temperature of the pellet hopper exceeds the required safety threshold.		Wait until the end of the cooling phase, stop the alarm and re-ignite the stove setting the supply of fuel to minimum (SETTINGS menu - pellet recipe). If the alarm persists, contact the service centre. Check whether the room fan is working correctly.	
A04 Smoke overtemperature		Reduce the load of pellets (SETTINGS menu - Pellet recipe); check cleaning of the brazier.	
	Smoke pressure switch intervention	Check for chimney obstructions / door open	
A05 Safety devices alarm	Fuel loading hatch	Close the hatch. Lower the fuel level in the tank.	
	Open stove door	Close the door	
A08	Anomalous operation of smoke fan.	Delete the alarm and switch the stove on again. If the alarm persists, contact the service centre.	
A09	Fault with the smoke sensor.	Delete the alarm and switch the stove on again. If the alarm persists, contact the service centre.	
Service	Routine maintenance warning (does not seize)	When this blinking message appears upon start-up, it means it is time to carry out scheduled maintenance. Call the assistance centre.	

## **ALARM RESET**

To reset the alarm, press and hold key 1 (ESC) for a few seconds. The stove checks whether the cause of the alarm is ongoing. In the first case, the alarm continues to be displayed, in the second case it turns OFF.

If the alarm persists, contact a service centre.

## NORMAL SHUTDOWN (on the panel: OFF with flashing flame symbol)

When the shutdown key is pressed, or when there is an alarm signal, the stove enters the thermal extinguishing phase which involves automatic execution of the following phases.

- Stop pellet loading
- The room fan maintains the set speed until reaching the switch-off temperature
- The smoke extractor fan is activated at maximum speed and remains on for a fixed period of 10 minutes, at the end of which if the
  smoke T has dropped below the stop threshold, the fan stops, otherwise it will continue to operate at minimum speed until the
  temperature drops below the threshold.
- If the stove has been shutdown regularly but, due to thermal inertia, the smoke temperature exceeds the threshold again, the shutdown phase will be repeated at minimum speed until the temperature drops.

#### BI ACKOUT WITH STOVE ON

In the event of a blackout, the stove does the following:

- Blackout of less than 10": continues the work in progress;
- After a loss of power of more than 10" which occurred when the stove was on, or during ignition, you can restore the stove to its
  previous operating condition when power returns as follows:
- 1. Cool the boiler by activating the smoke extractor at minimum speed for 10' then proceed to the next step;
- 2. Restore the stove to the operating condition prior to the blackout.

During phase 1, the panel shows ON BLACK OUT.

During phase 2, the panel shows Start-up.

If during phase 1 the stove receives manual user commands from the control panel, it stops the blackout restoration sequence and begins the start-up or shutdown commanded by the user.

#### BLACKOUT OF MORE THAN 10" DURING EXTINCTION OF STOVE

If the stove experiences a loss of power GREATER THAN 10" while it is shutting down, when power is restored to the stove, it will automatically turn on in shutdown mode, even if the smoke temperature has fallen below 45°C in the meantime. This phase can be skipped by pressing key 1 (esc) (skips to start-up) and pressing it again (recognises that the stove is off).

#### BLACKOUT OF MORE THAN 10" WITH THE STOVE OFF FROM ECOSTOP

Once power has been restored, a 5-minute timer is set as though the stove were in switch-off mode; should there be a request for heat in these 5 minutes, the stove will not start.

#### **SAFETY DEVICES ALARM A05**

The safety devices alarm includes the intervention of the smoke pressure switch, of the fuel loading hatch and of the open stove door. The alarm will be triggered after 30 seconds, after which the stove will stop working (e.g. after 30 seconds with the pellet loading hatch open, alarm A05 will be triggered).

In the event that alarm A05 is triggered often, please note that:

A05 Smoke pressure switch intervention Fuel loading hatch		Check for chimney obstructions / door open	
	, ,	Lower the fuel level in the tank.	
Safety devices alarm	Open stove door	Close the door	

you must check some points to verify the cause of the problem and possibly act on some adjustments and/or safety devices to restore the correct operation of the product.

However please note that all the adjustments and alterations affecting the operational safety devices, must only be performed if THE PRODUCT IS INSTALLED IN COMPLIANCE WITH THE STANDARDS AND LAWS IN FORCE AND IF IT IS SERVICED PROPERLY BY AUTHORISED AND SPECIALISED PERSONNEL. Alterations performed randomly, to ensure operation of the product even in the non-compliant conditions, can cause serious damage to property and injuries to people. If this occurs, the manufacturer declines all liability



#### Attention!

The adjustments should only be performed by authorised and qualified personnel and upon verification of the installation compliance. The manufacturer declines all liability for damage to property or injuries to people in the event of altering the safety devices.

As mentioned alarm A05 identifies a drop in pressure inside the product that can be generated by difficulty to discharge the fumes (ash clogging the flue), to draw combustion air (clogged ducting or no air inlet) or by opening some stove compartments (fire door or pellet tank cover)

In light of the above, before acting on the safety devices or on any adjustments, you must check in this sequence if there are any potential malfunctions that may generate the alarm. Therefore check that:

- The stove door is closed
- The pellet loading hatch is closed
- The installation is compliant and the flue/smoke fitting does not generate obvious obstructions which can stop the release of smoke, such as: long horizontal sections (over 3 metres), uninsulated smoke ducts, "wall-mounted" smoke exhaust without proper terminals (installation regulated and permitted in France only [ZONE 3])
- The minimum depression in the flue is at least 5 Pa
- The pellets are of certified quality and do not cause obstructions
- There is no ash clogging the flue and the latter is serviced properly.
- There are no foreign bodies in the flue (nests, birds, grilles, leaves etc..)
- There are no foreign bodies in the combustion air ducting and/or in the room air inlet
- When installed without combustion air ducting, it is crucial to check that there is an efficient air inlet dedicated to the stove, according to the specifications referred to in chapter 2 of this manual.
- That there are no internal air extraction or recirculation systems (e.g. VMC systems) that generate internal depressions exceeding those required by law (not exceeding 4 Pa)
- That the pressure switch is not damaged or dirty (inspection to be performed by an authorised service centre)
- That the stove gasket (fire door, pellet tank, etc..) is not worn or damaged. Otherwise contact an authorised service centre for replacement/repair



#### Attention!

All liability for improper use of the product is entirely borne by the user and relieves the Manufacturer from any civil and criminal liability.

If all the above checks are negative, it is likely that the depression inside the stove drops due to poor performance of the flue, especially when the machine is operating at minimum speed for a long time.

In this case it is possible to make small adjustments that allow you to increase the operating speed of the smoke fan to increase the depression inside the product, or make it less sensitive to the intervention of the pressure switch by changing its position mechanically. While the first adjustment has no impact on the level of safety, the second one described affects it considerably and therefore should only be performed by authorised and specialised personnel after carrying out all the inspections mentioned above.

#### Changing the smoke fan revolutions

In the event the installation presents problems in extracting smoke (lack of draft or even pressure in the duct), it is possible to increase the smoke and ash extraction speed. This change resolves all the potential problems related to pellets clogging in the brazier and deposits forming at the bottom of the brazier itself caused by poor quality fuel or fuel that produces a lot of ash. The extraction speed may be altered between -30% to +50%, with increments of 10 percent at a time. Negative variation can be necessary if the flame is too low.

#### To alter this parameter, proceed as follows:

- Press the "menu" key.
- Use the arrow keys to scroll through and select "Settings"
- Press "menu" to confirm.
- Scroll with the arrows and select "Fumes rpm Var."
- Press "menu" to confirm.
- Alter the % with the + kevs.
- Press "menu" to confirm and "esc" to exit.

### 13-RECOMMENDATIONS FOR SAFE USE



# ONLY CORRECT INSTALLATION AND APPROPRIATE MAINTENANCE AND CLEANING OF THE APPLIANCE CAN GUARANTEE CORRECT OPERATION AND SAFE USE OF THE PRODUCT.

We would like to inform you that we are aware of cases of malfunctioning of domestic pellet-fuelled heating products, mainly due to incorrect installation and use, as well as inadequate maintenance.

We would like to assure you that all of our products are extremely safe and certified according to European standards of reference. The ignition system has been tested with the utmost attention to enhance ignition efficiency and to prevent any type of problem, even in the worst operating conditions. In any case, like for any other pellet-fuelled product, our appliances must be installed correctly and undergo regular periodical cleaning and maintenance to guarantee safe operation. Our studies show us that malfunctioning is mainly due to the combination of part or all of the following factors:

- Brazier holes obstructed or brazier deformed, due to lack of maintenance and conditions which can cause delayed ignitions, generating an anomalous production of unburned gases.
- Insufficient combustion air due to a reduced or clogged air inlet duct.
- Use of smoke ducts nonconforming to regulatory installation requirements, failing to guarantee an adequate draught.
- Partially clogged chimney, due to lack of maintenance, reducing the draught and making ignition difficult.
- End chimneypot nonconforming to the indications of the instruction manual, and therefore not suitable to prevent potential inverse
  draught.
- This factor is crucial when the product is installed in especially windy areas, such as coastal regions.

The combination of one or more of these factors could generate important malfunctioning conditions.

To keep this from occurring, it is fundamental to guarantee that the product is installed in compliance with standards in force. Furthermore it is of the utmost importance to respect the following simple rules:

- Every time the brazier is removed for cleaning, it must always be put back properly in the work position before using the product, completely removing any residual filth left on the support base.
- Pellets must never be loaded in the brazier manually, either before ignition or during operation.
- The accumulation of unburned pellets ensuing a failed ignition must be removed before repeating ignition. Also check that they are fed correctly and that the combustion air inlet/smoke outlet are regular.
- If ignition fails repeatedly, immediately suspend use of the product and contact a qualified technician to check its operation.

Compliance with these indications is absolutely sufficient to guarantee proper operation and to avoid any type of problems with the product.

If the above-mentioned precautions are not taken, and during ignition the brazier is overloaded with pellets thus generating anomalous smoke in the combustion chamber, carefully follow the indications below:

- Do not disconnect electrical power to the product for any reason whatsoever: this would stop the smoke extractor, releasing smoke into the environment.
- Take the precaution of opening the windows to ventilate the installation room from any smoke in the environment (the chimney might not work properly).
- Do not open the fire door: this would compromise regular operation of the smoke extraction system to the chimney.
- Just switch the stove off by acting on the on-off button on the control panel (not the rear power supply socket button!) and move
  away until smoke has completely evacuated.
- Before attempting re-ignition, clean the brazier and its air passage holes completely of all deposits and unburned pellets. Put
  the brazier back in place, removing any residue from its support base. If ignition fails repeatedly, immediately suspend use of the
  product and contact a qualified technician to check its operation and the chimney.

#### 14-CI FANING





EXAMPLE OF A CLEAN BRAZIER

EXAMPLE OF A DIRTY BRAZIER

Only by properly servicing and cleaning the product is it possible to ensure its safety and correct operation.



#### ATTENTION!

All the cleaning operations of all parts must be performed with the product completely cold and the plug disconnected.

Disconnect the product from the 230V power supply before performing any maintenance operation.

The product requires little maintenance if used with certified good quality pellets.

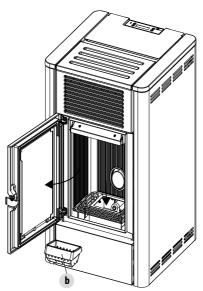
## DAILY OR WEEKLY CLEANING PERFORMED BY THE USER

#### **Brazier cleaning**

Before ignition, always clean the "b" brazier and remove any ash or incrustation from it that might obstruct the air flow holes, paying attention to hot ash. In the case of ignition failure, or if fuel in the tank runs out, unburned pellets may accumulate in the brazier. Always empty the residue in the brazier before each start-up. Only if ash is completely cold may a vacuum cleaner be used to remove it. In this case, use a suitable vacuum cleaner to remove small sized particles.



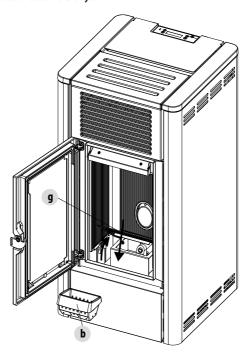
REMEMBER THAT ONLY A CORRECTLY POSITIONED AND CLEAN BRAZIER CAN GUARANTEE IGNITION AND OPTIMAL OPERATION OF YOUR PELLET PRODUCT. IN CASE OF FAILED IGNITION AND AFTER ANY OTHER LOCK STATE OF THE PRODUCT, IT IS ESSENTIAL TO EMPTY THE BRAZIER BEFORE EVERY RESTART.



For the brazier to be cleaned properly, remove it from its housing completely and thoroughly clean all the holes and the grate on the bottom. If good quality pellets are used, you will normally only need to use a brush to restore the optimal operating conditions of the component.

## Cleaning the ash collection compartment

To clean the ash collection compartment, you must raise grille "g" by rotating until it rests against the hearth. Clean out any residual ash before lowering the grille "g". The quality of the pellets used and user experience will determine the required cleaning frequency. **However, it is recommended not to exceed 2 or 3 days.** 



#### **CLEANING THE GLASS**

It is recommended to clean the ceramic glass with a dry brush, or if it is very dirty, spray a little specific detergent and clean with a cloth.



#### ATTENTION!

Do not use abrasive products and do not spray the glass cleaning product on the painted parts and on the door gaskets (ceramic fibre cord).

# PERIODIC CLEANING PERFORMED BY A QUALIFIED TECHNICIAN CLEANING THE HEAT EXCHANGER

Half-way through the winter season, **but especially at the end**, the compartment through which the exhaust smoke passes will need to be cleaned. This cleaning process is mandatory in order to facilitate the general removal of all combustion residue, before it becomes very difficult to remove it due to the humidity compacting it over time.



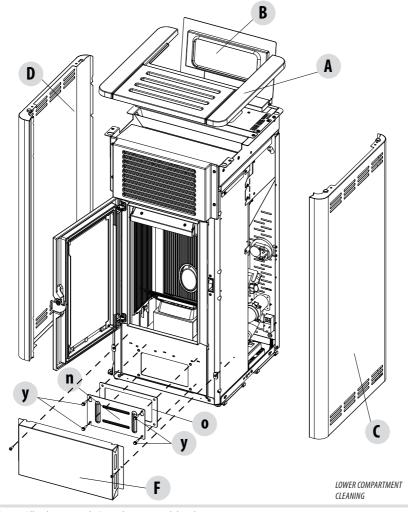
#### ATTENTION:

It is obligatory to have an authorised and skilled technician perform the periodic end-of-season cleaning in order to replace any worn gaskets.

#### CLEANING THE LOWER COMPARTMENT

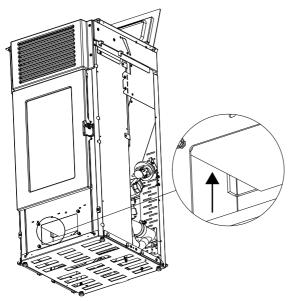
To clean ash out of the lower compartment, open the pellet loading access door "B", remove the top "A", the side panels "C" and "D", and the lower front panel "F". Now loosen the four screws "y", remove the plate "n" and gasket "o"; use the nozzle of a vacuum cleaner to remove any ash and soot that may have built up in the lower exchanger indicated by the arrow.

Before restoring cap "n" we recommend changing the gasket "o".

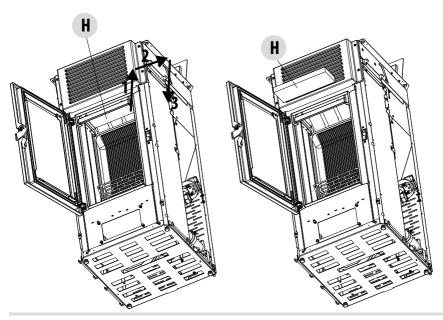


# CLEANING THE EXCHANGER CLEANING THE UPPER COMPARTMENT

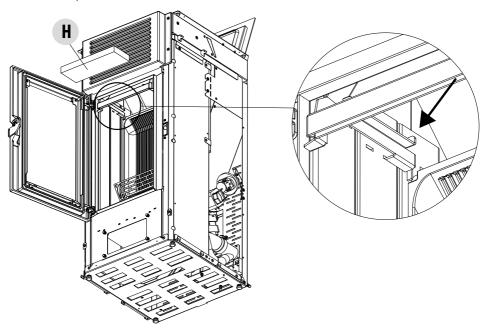
Clean the upper exchanger when the stove is cold and without cladding. After removing the cap for lower cleaning "N" (see previous paragraph), use a stiff rod or a bottle brush to scrape the firebox walls (see arrow) so that the ash falls into the lower compartment.



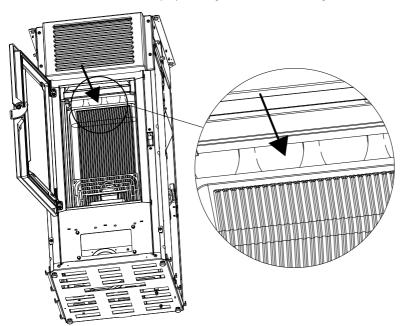
Then remove the upper Calorite plate "H"; to do this, open the firebox door and lift the Calorite plate "H" by tilting it right or left so that it comes out of its supports and remove it.



Use a stiff rod or a bottle brush to scrape the firebox walls (see arrow - at the right and left of the firebox respectively) so that the ash falls into the lower compartment.

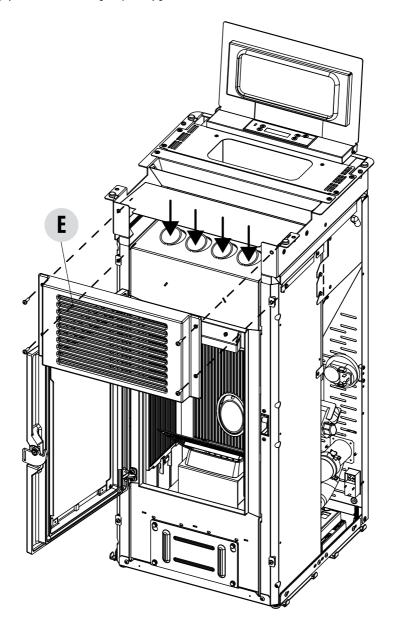


Use a vacuum cleaner nozzle to vacuum up any remaining ash and dust on the exchanger (see arrow).



In the upper section, too, remove the front panel "**E**" (see the instructions in the dedicated paragraphs) and insert the nozzle of the vacuum cleaner to remove any deposits of dust.

Then thoroughly clean the lower exchanger, replace any gaskets if needed, and reassemble.



#### 14-CI FANING

#### CLEANING THE SMOKE DUCT AND GENERAL CHECKS

Clean the smoke extractor system, especially around the "T" joints, elbows and any horizontal sections of the smoke duct. For information on periodically cleaning the flue, contact a skilled chimney sweep.

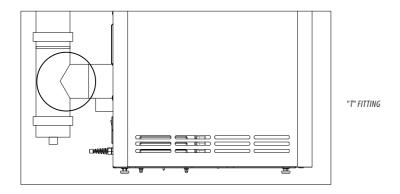
Check the seal of the ceramic fibre gaskets on the door of the stove. If necessary, order new replacement gaskets from the retailer or contact an authorised service centre to carry out the operation.



#### ATTENTION:

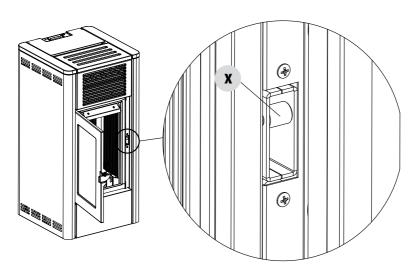
The frequency with which the smoke outlet system is cleaned depends on the use of the boiler and the type of installation.

We recommend relying on an authorised service centre for end-of-season cleaning and maintenance, as they will carry out all of the previously mentioned work and inspect the stove components.



#### PERIODICAL CHECK OF THE DOOR CLOSURE

Make sure the door closure ensures a correct sealing action (with the "paper sheet" test) and that when the door is closed, the closing block (X in the figure) does not protrude from the sheet metal to which it is secured. For some products it will be necessary to disassemble the cladding to be able to assess the anomalous protrusion of the block when the door is closed.

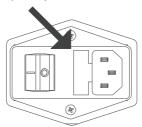


## SHUTDOWN (end of season)

At the end of each season, before switching the product off, it is recommended to remove all the pellets from the tank with a vacuum cleaner with a long pipe.

We recommend removing the unused pellet from the tank because it can retain humidity. Disconnect any combustion air ducting that can lead humidity inside the combustion chamber but, above all, ask the specialised technician to refresh the paint inside the combustion chamber with the special silicone spray paints (available at any store or CAT) during the necessary annual end of season scheduled maintenance operations. In this way the paint will protect the inner parts of the combustion chamber, blocking any type of oxidative process.

When not in use the appliance must be disconnected from the mains power supply. It is recommended to remove the power cable for additional safety, especially in the presence of children.



The service fuse may have to be replaced if the control panel display does not switch on when the product is switched on again by pressing the main switch on its side.

There is a fusebox on the side of the product, near the power socket. Open the fusebox cover with a screwdriver and replace the fuses if necessary (3.15 A delayed) - seek assistance from an authorised and qualified technician.

#### CHECKING THE INTERNAL COMPONENTS



#### ATTENTION!

The internal electromechanical components must only be checked by qualified personnel whose technical expertise includes combustion and electricity.

We recommend that an annual maintenance service is carried out (with a scheduled service contract). This service is essentially a visual and functional inspection of the internal components. The following is a summary of the checks and/or maintenance that are essential for the correct operation of the product.

PARTS/INTERVAL	1 DAY	2-3 DAYS	1 YEAR
Brazier	•		
Ash compartment		•	
Glass		•	
Lower exchanger			•
Complete exchanger			•
Smoke duct			•
Door gasket			•
Remote control battery (if purchased/optional)			•
Door closure operation			•

## 15-TROUBLESHOOTING



## ATTENTION!

All repairs must only be carried out by a specialised technician, with the product switched off and the plug disconnected.

ANOMALY	POSSIBLE CAUSES	SOLUTIONS
The pellets are not fed into	The pellet hopper is empty	Fill the hopper with pellets.
the combustion chamber.	Sawdust has blocked the feed screw	Empty the hopper and remove the sawdust from the feed screw by hand.
	Faulty gear motor	Replace the gear motor.
	Faulty electronic board	Replace the circuit board.
The fire goes out or the boiler	The pellet hopper is empty	Fill the hopper with pellets.
stops automatically.	The pellets are not fed	See the previous anomaly.
	The pellet temperature safety probe has been triggered	Let the product cool down, restore the thermostat until the lockout is off and switch the product back on. If the problem persists, contact Technical Assistance.
	The door is not closed properly or the gaskets are worn	Close the door and replace the gaskets with original ones.
	Unsuitable pellets	Change the type of pellets with those recommended by the manufacturer.
	Low pellet supply	Check the flow of fuel following the instructions in the manual.
	The combustion chamber is dirty	Clean the combustion chamber, following the instructions in the manual.
	Clogged outlet	Clean the smoke duct.
	Faulty smoke extraction motor	Check the motor and replace it, if necessary.
	Pressure switch broken or defective.	Replace the pressure switch.
The product works for a few	Start-up phase is not completed	Repeat start-up.
minutes and then switches off.	Temporary power cut	Wait for the automatic restart.
	Clogged smoke duct	Clean the smoke duct.
	Faulty or malfunctioning temperature probes	Check and replace the probes.
	Faulty spark plug	Check the spark plug and replace it, if necessary.

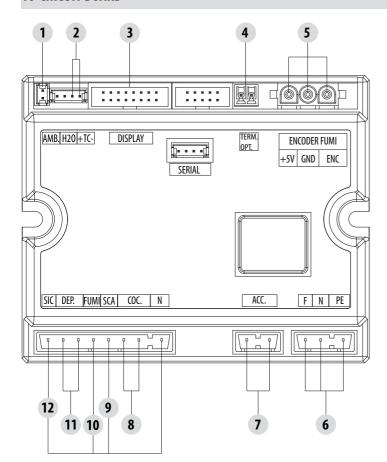
## 15-TROUBLESHOOTING

ANOMALY	POSSIBLE CAUSES	SOLUTIONS
Pellets accumulate in the brazier, the glass of the door gets dirty and the flame is weak.	Insufficient combustion air.	Clean the brazier and check that all the holes are clear. Perform a general cleaning of the combustion chamber and the smoke duct. Check that the entry of air is not obstructed.
	Damp or unsuitable pellets.	Change the type of pellets.
	Faulty smoke evacuation motor.	Check the motor and replace it, if necessary.
The smoke evacuation motor does not work.	No electrical supply to the stove.	Check the mains voltage and the protection fuse.
	The motor is faulty.	Check the motor and capacitor and replace them, if necessary.
	Defective motherboard.	Replace the electronic board.
	The control panel is broken.	Replace the control panel.
The convection air fan never stops.	Faulty or malfunctioning temperature control probe.	Check the probe and replace it, if necessary.
In the automatic position, the stove always runs at full power.	Thermostat is set to minimum.	Reset the temperature of the thermostat.
	The room thermostat is in the maximum position.	Reset the temperature of the thermostat.
	Malfunctioning temperature probe.	Check the probe and replace it if necessary.
	Faulty or malfunctioning control panel.	Check the panel and replace it, if necessary.
The product does not start.	No power supply.	Check that the plug is inserted and the main switch is in the "I" position.
	Pellet sensor has seized up.	Check the recipe parameters.
	Blown fuse.	Replace the fuse.
	Pressure switch broken (lockout indicated).	Insufficient pressure of water in stove.
	Clogged smoke outlet or smoke duct.	Clean the smoke exhaust and/or the smoke duct.
Noisy air fan even though it is set to minimum	High set flame causes ventilation increase	Lower set flame from Adjustments menu

## 15-TROUBLESHOOTING

ANOMALY	POSSIBLE CAUSES	SOLUTIONS
No increase in temperature with	Incorrect combustion adjustment.	Check recipe.
stove in operation.	Set flame 1 setting (level too low)	Increase power from the settings menu.
	Poor pellet quality.	Using pellets from the producer.

## **16-CIRCUIT BOARD**







LIVE ELECTRICAL CABLES

DISCONNECT THE POW-ER SUPPLY CABLE 230V BEFORE CARRYING OUT ANY OPERATIONS ON THE ELECTRICAL BOARDS

#### **WIRING KEY**

- 1. ROOM PROBE
- 2. SMOKE SENSOR
- 3. CONTROL PANEL
- 4. EXTERNAL THERMOSTAT (OPTIONAL)
- 5. SMOKE ENCODER
- 6. POWER SUPPLY

- 7. SPARK PLUG
- 8. AUGER
- 9. ROOM FAN
- 10. SMOKE FAN
- 11. AIR PRESSURE SWITCH
- 12. PELLET SAFETY THERMOSTAT

PLEASE NOTE The electrical wiring of individual components is fitted with pre-wired connectors of different sizes.



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