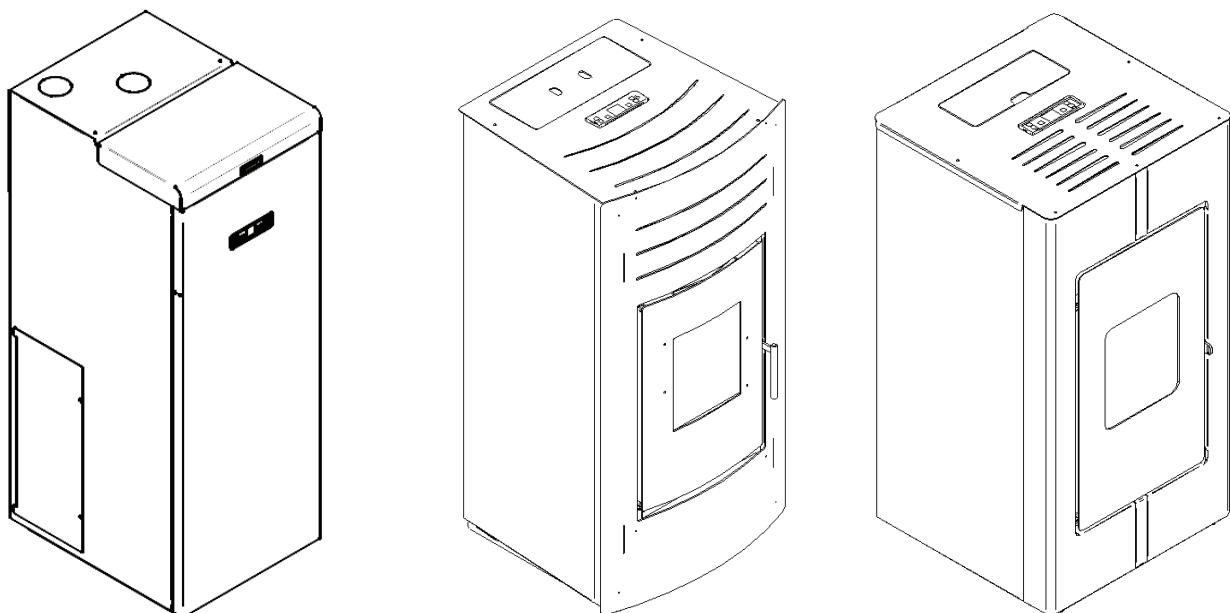


INSTRUCTION MANUAL

PELLET HYDRO STOVES



HYDRO KANTINA 20/24 KW

HYDRO CURVED FRONT 20/24 KW

HYDRO STRAIGHT FRONT 20/24 KW

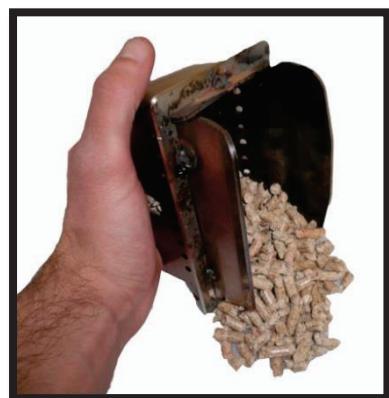
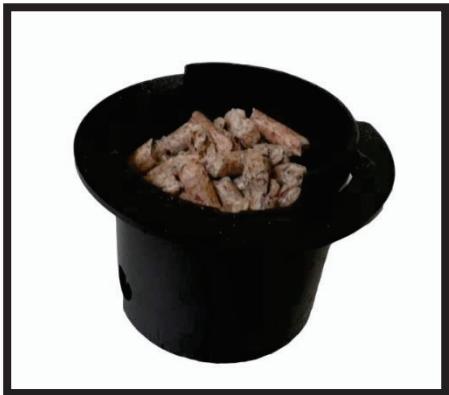


IMPORTANT: ESSENTIAL TO READ



1. The warranty is only valid if INITIAL IGNITION is carried out by an AUTHORISED TECHNICIAN.
2. Do not turn the product UPSIDE DOWN or LAY IT IN A HORIZONTAL POSITION DURING TRANSPORTATION AND INSTALLATION.
3. Stove installation must be carried out by qualified staff and pursuant to the regulations in force in the relevant country.
4. Empty the burn pot before trying to switch the stove back on IN CASE OF IGNITION FAILURE OR POWER OUTAGE. Failure to do so may also result in the breaking of the door glass.





- 5. DO NOT POUR PELLETS BY HAND** in the burn pot to facilitate stove's ignition.
- 6.** Should any anomaly concerning the flame be detected or, however, in any other case, NEVER SWITCH OFF the stove by disconnecting it from the mains. Use the relevant button. Disconnecting the stove from the mains will prevent exhaust fumes from being extracted.
- 7.** Should ignition phase take longer than expected (due to damp or poor quality pellets) generating excessive smoke in the combustion chamber, open the door to expel it, while remaining in a position that guarantees your safety.
- 8.** It is highly important to use GOOD QUALITY CERTIFIED PELLETS. The manufacturer declines any liability for any malfunctioning or damage to mechanical parts due to the use of poor quality pellets.
- 9. The burn pot and the combustion chamber MUST BE CLEANED DAILY.** The manufacturer declines any liability for any malfunctioning due to a failure to do so.



Eva Stampaggi S.r.l. declines any liability for any damage to persons or property arising from the failure to comply with the points mentioned above and from non-compliant product installation.

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01.1 SAFETY WARNINGS

The stoves were built in compliance according to standard EN13240 (wood stoves), EN 14785 (pellet stoves) and EN 12815 (kitchens and wood-burning stoves) using high quality and non-polluting materials. To make better use of your stove it is advisable to follow the instructions in this booklet.

Read this manual carefully before use or any maintenance operation.

Eva Stampaggi aims to provide as much information as possible to ensure safer use and to avoid damage to persons, property or parts of the stove itself.

Each stove is subjected to internal testing before shipment and as such residues inside the appliance may be found.

RETAIN THIS MANUAL FOR FUTURE REFERENCE.

FOR ANY REQUIREMENT OR CLARIFICATION PLEASE CONTACT

THE AUTHORISED RETAILER

- Installation and connection must be carried out by qualified staff in compliance with local regulations, national and European standards (UNI 10683) and with the annexed installation instructions. Furthermore, these operations must be performed by personnel who are authorised and professionally trained for the task in question.
- The combustion of waste, especially of plastic materials, damages the stove and the vent pipe. Moreover, it is forbidden by the law against the emission of harmful substances.
- Do not use alcohol, petrol or other highly inflammable liquids to light the fire or poke it during operation.
- Do not introduce into the stove an amount of fuel greater than that recommended in this booklet.
- Do not modify the product.
- It is forbidden to use the appliance with the door open or the glass broken.
- Do not use the appliance as, for example, a clothes drying rack, a bearing surface or step etc.
- Do not install the stove in bedrooms or bathrooms.

The pellets to be used are the following:

The pellet stoves operate exclusively with pellets made from various types of legislative-compliant wood.

DIN plus 51731 or EN plus 14961-2 A1 or PEFC/04-31-0220 or ONORM M7135 or having the following characteristics:

Min calorific value 4.8 kWh/kg (4180 kcal/kg)

Density 630-700 kg/m³

Maximum humidity 10% of the weight

Diameter: 6 ±0.5 mm

Percentage ash: max 1% of the weight

Length: min 6 mm- max 30 mm

Composition: 100% untreated wood from the industry of wood or post-consumption without the addition of binders, bark-free and compliant with current regulations.

01.2 GENERAL SAFETY PRECAUTIONS

- Use the stove only as described in this manual. Any other use not recommended by the manufacturer may cause fires or accidents to people.
- Make sure that the electrical power available corresponds to the value indicated on the data plate (220V~/50Hz).
- This appliance is not a toy. Make sure children are not left unattended and do not use the appliance as a toy.
- This device is not intended for use by persons (including children) with reduced physical or mental capacity, or without specific experience and knowledge, unless supervised or duly instructed on the use of the appliance by a person responsible for their safety.
- Disconnect the appliance from the mains when not in use or during cleaning operations.
- To do so, turn the switch to the O position and disconnect the plug from the socket. Pull the plug, not the cable.
- Never block the combustion air inlets and fume outlets.
- Since the stove is fitted with electrical components, do no touch it with wet hands.
- **Do not use the appliance in case of damaged cables or plugs. The device is classified as type Y: the power supply cable may only be replaced by a qualified technician. Should the power supply cable be damaged, it can be replaced only by the manufacturer or by its technical assistance service or by a similarly qualified person.**
- Do not place any object on the cable and do not bend it.
- Avoid using extension cables as their temperature may increase excessively posing fire hazards. Never use one single extension cable to power several appliances.
- **During normal functioning some parts of the stove may become extremely hot, such as the door, the glass or the handle. Be careful, especially with children. Do not touch any hot parts if not wearing adequate protective devices.**
- **ATTENTION! DO NOT TOUCH the FIRE DOOR, the GLASS, the HANDLE or the FUME OUTLET DURING FUNCTIONING if not wearing adequate protective devices since they become extremely hot.**
- Keep inflammable materials, such as furniture, cushions, pillows, blankets, paper, clothing, curtains, etc., at least 1.5 m away from the stove front and 30 cm from the stove sides and back.
- The stove that is covered by or in direct contact with **inflammable** materials, including curtains, blankets, etc., during normal operation may result in a fire hazard. **KEEP THE APPLIANCE AWAY FROM THE MATERIALS MENTIONED ABOVE.**
- Do not immerse the cable, plug or any other appliance component in water or other liquids.
- Do not use the stove in dusty environments or wherever inflammable vapours are generated (e.g. in a workshop or garage).
- The stove is fitted with components that generate arcs and sparks. Do not install the stove in areas posing a significant fire or explosion hazard due to a high chemical substance concentration or to a high humidity level.
- Do not use the appliance close to bathtubs, showers, basins, sinks or swimming pools.
- Do not install the appliance underneath an air vent. Do not install the stove outdoors.
- Do not repair, disassemble or modify the appliance. The appliance is not fitted with components that can be repaired by users.
- Turn off the stove, disconnect it from the mains and wait until it has cooled down completely before performing any maintenance operations.
- **WARNING: DISCONNECT THE STOVE FROM THE MAINS BEFORE PERFORMING MAINTENANCE OPERATIONS.**
- **ATTENTION! These stoves operate exclusively on pellets and possibly also pits if the stove has this option; DO NOT USE OTHER FUELS: any other material that may be burnt will result in failure and malfunction of the appliance.**
- **Keep the pellets in a fresh dry place: storing pellets in a place that is damp or excessively cold may reduce the stove potential heat output. Be careful when storing and handling pellet bags to prevent pellet crushing and consequent sawdust production.**
- The fuel consists of small cylinders with 6-7mm diameter and a maximum length of 30mm. Their maximum moisture content is equal to 8%. This stove is designed to burn pellets made of compacted sawdust obtained from different types of wood, in compliance with environment protection legislation.
- The use of different types of pellets may result in a slight, sometimes even undetectable, change in the stove efficiency. This change can be counterbalanced by increasing or decreasing the stove heat output by only one step.
- **Clean the burn pot on a regular basis upon every ignition or pellet refuelling.**
- Open the firebox only upon refuelling or removal of residues to prevent fumes from escaping.
- Do not switch the stove on and off intermittently to avoid damaging its electrical and electronic components.

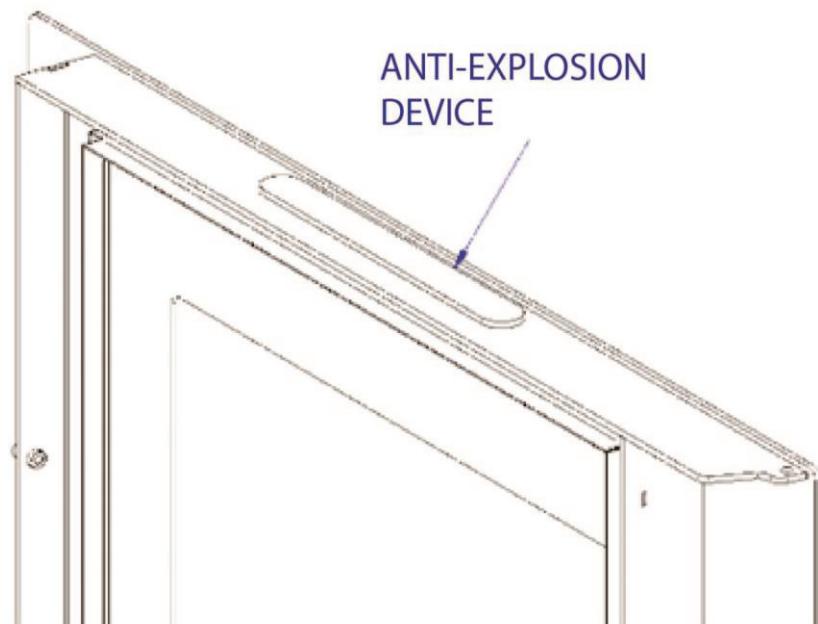
- Do not use the appliance as waste incinerator or for any other purpose other than the intended one.
- Do not use liquid fuels.
- Do not modify the appliance without prior authorisation.
- Use only original spare parts recommended by the manufacturer.
- Make sure that the stove is transported in compliance with safety regulations. Avoid any improper transfers or knocks that may damage the ceramics or the structure.
- The metal structure is coated using high temperature paints. When using the appliance for the first few times, unpleasant odours may be given off due to the paint of the metal parts that is drying: this is in no way dangerous and in such case, simply ventilate the premises. After the first heating cycles, the paint will reach its maximum adhesion and all its chemical and physical features.
- The reload the hopper, simply open the access lid and pour in the pellets, also during normal operation, making sure that no pellets fall out of it. Always refuel the hopper before leaving the operating stove unattended for long periods of time.
- Whenever the hopper and the Auger tube get completely empty, the appliance will be automatically switched off. It may take two separate ignitions to resume operation at ideal working conditions since the Auger tube is very long.
- **ATTENTION! If the stove is not properly installed, power outages may result in fume spillages. Under specific circumstances, an uninterrupted power supply unit must be installed.**
- **ATTENTION! Being a heating appliance, some parts of the stove can become extremely hot. We therefore recommend paying special attention during operation.**

WHEN THE STOVE IS WORKING:

- do not open the door;
- do not touch the door glass since it becomes extremely hot;
- keep children away from it;
- do not touch the fume outlet;
- do not pour any liquid inside the firebox;
- do not perform any maintenance operations if the stove is not cold;
- only qualified technicians are allowed to perform any operation;
- follow all the instructions contained herein.

Anti-explosion

Some products are fitted with a safety device to prevent explosion. Before switching on the product or, in any case, after any cleaning operation, make sure that the device is correctly positioned in its seat. The device is located on the firebox door upper edge.



01. PRODUCT SAFETY

01.3 EC CERTIFICATE OF CONFORMITY



EVA STAMPAGGI S.r.l.
Via Cal Longa Z.I.
31028 Vazzola (TV) - ITALY

16

Trademark: EVA CALÒR

EN 14785 :2006

Residential space heating appliances fired by wood pellet
Apparecchi per il riscaldamento domestico alimentato a pellet di legno

Type: -----

Model: HYDRO 20 – TOSCA 20

Distance to adjacent combustible materials	: 20 cm Rear 20 cm Sides
Emission of CO in combustion products	: nominal heat output 0,020 % reduced heat output 0,020 %
Maximum operating pressure	: 3 bar
Flue gas temperature	: 154 °C at nominal heat output 84 °C at reduced heat output
Nominal heat output	: 18.5 kW total heating output 16.0 kW water heating output 2.5 kW space heating output with
Efficiency	: nominal heat output 91.5 % reduced heat output 94.5 %
Fuel type	: Wood pellet <i>Pellet di legno</i>
Dust emission	: 12 mg/Nm ³ At 13% O ₂ ---- mg/MJ At 0% O ₂
Electrical power supply	: 380 W
Rated voltage	: 230 V
Rated frequency	: 50 Hz
<i>Potenza termica nominale</i>	
<i>Tensione nominale</i>	
<i>Frequenza nominale</i>	



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Trademark: EVA CALÒR

EN 14785 :2006

Residential space heating appliances fired by wood pellet
Apparecchi per il riscaldamento domestico alimentato a pellet di legno

Type: -----

Model: HYDRO 24 – TOSCA 24

Distance to adjacent combustible materials	: 20 cm Rear 20 cm Sides
Emission of CO in combustion products	: nominal heat output 0.016 % reduced heat output 0.020 %
Maximum operating pressure	: 3 bar
Flue gas temperature	: 179 °C at nominal heat output 84 °C at reduced heat output
Nominal heat output	: 23.0 kW total heating output 20.5 kW water heating output 2.5 kW space heating output with
Efficiency	: nominal heat output 90.0 % reduced heat output 94.5 %
Fuel type	: Wood pellet <i>Pellet di legno</i>
Dust emission	: 12 mg/Nm ³ At 13% O ₂ ---- mg/MJ At 0% O ₂
Electrical power supply	: 380 W
Rated voltage	: 230 V
Rated frequency	: 50 Hz
<i>Potenza termica nominale</i>	
<i>Tensione nominale</i>	
<i>Frequenza nominale</i>	



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Trademark: EVA CALÒR

EN 14785 :2006

Residential space heating appliances fired by wood pellet
Apparecchi per il riscaldamento domestico alimentato a pellet di legno

Type: -----

Model: HYDRO KANTINA 20

Distance to adjacent combustible materials	: 20 cm Rear 20 cm Sides
Emission of CO in combustion products	: nominal heat output 0,010 % reduced heat output 0,020 %
Maximum operating pressure	: 3 bar
Flue gas temperature	: 145 °C at nominal heat output 77 °C at reduced heat output
Nominal heat output	: 18.5 kW total heating output 16.0 kW water heating output 2.5 kW space heating output with
Efficiency	: nominal heat output 92.0 % reduced heat output 94.5 %
Fuel type	: Wood pellet <i>Pellet di legno</i>
Dust emission	: 12 mg/Nm ³ At 13% O ₂ ---- mg/MJ At 0% O ₂
Electrical power supply	: 380 W
Rated voltage	: 230 V
Rated frequency	: 50 Hz
<i>Potenza termica nominale</i>	
<i>Tensione nominale</i>	
<i>Frequenza nominale</i>	



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Via Cal Longa Z.I.
31028 Vazzola (TV) - ITALY

16

Trademark: EVA CALÒR

EN 14785 :2006

Residential space heating appliances fired by wood pellet
Apparecchi per il riscaldamento domestico alimentato a pellet di legno

Type: -----

Model: HYDRO KANTINA 24

Distance to adjacent combustible materials	: 20 cm Rear 20 cm Sides
Emission of CO in combustion products	: nominal heat output 0.010 % reduced heat output 0.020 %
Maximum operating pressure	: 3 bar
Flue gas temperature	: 164 °C at nominal heat output 77 °C at reduced heat output
Nominal heat output	: 22.5 kW total heating output 20.5 kW water heating output 2.0 kW space heating output with
Efficiency	: nominal heat output 91.0 % reduced heat output 94.5 %
Fuel type	: Wood pellet <i>Pellet di legno</i>
Dust emission	: 12 mg/Nm ³ At 13% O ₂ ---- mg/MJ At 0% O ₂
Electrical power supply	: 380 W
Rated voltage	: 230 V
Rated frequency	: 50 Hz
<i>Potenza termica nominale</i>	
<i>Tensione nominale</i>	
<i>Frequenza nominale</i>	

The Hydro curved front 20/24 kW and the Hydro straight front 20/24 kW stoves

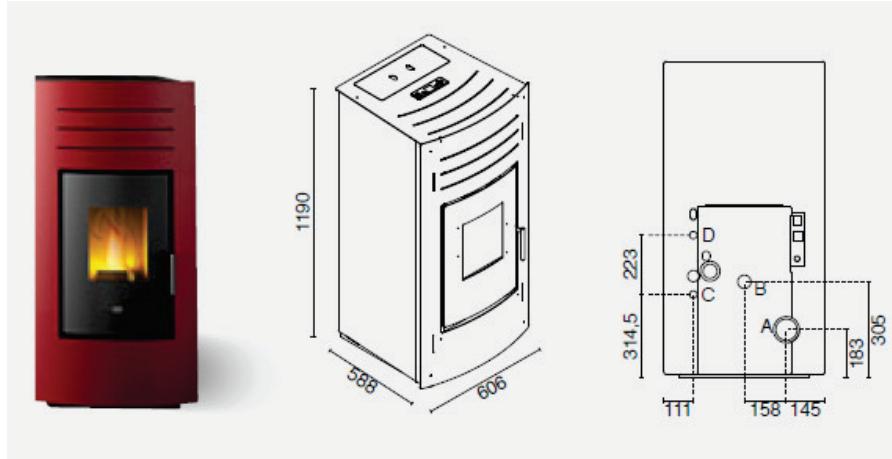
They are tireless workers, we simply have to remember to feed them. Available in four power versions 20/24 kW. The essential lines and curved front means it is a stove that can be used as a furnishing item. The aspects of robustness, reliability, ease of use, the cast iron and steel interiors, the corten steel exchanger and the high yields result in a self-sufficient and durable appliance. In the 20/24 kW power versions using a particular kit called ACS it is also possible to heat domestic water.

Hydro Kantina 20/24 kW Stove

Thanks to the technology with which it was designed, this pellet-fuelled stove can be installed, resting it directly against the wall without leaving any gaps. Hydro Kantina is available in the 20 kW or 24 kW version, providing ample power to ensure optimal heating of rooms. The discharge can be upwards or to the rear, is fitted with remote control, daily programming and the possibility of operating according to the temperature of the water or the room.

TECHNICAL DRAWING

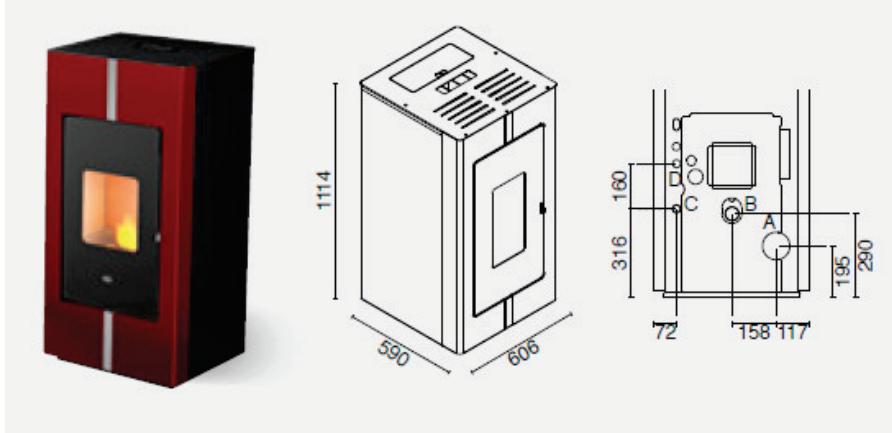
HYDRO CURVED FRONT 20/24 KW



A = Ø 80 mm
B = Ø 50 mm
C = 3/4
D = 3/4

Scarico fumi / Flue / Cheminée / Rauchabzug / Evacuación de humos / Odvod dimnih plinov
Ingresso aria primaria / Primary air inlet / Entreé d'air primaire / Primärlufteinlass / Entrada aire primario / Vstop primamega zraka
Ritorno riscaldamento / Heating return / Retour chauffage / Heizungsrücklauf / Retorno calentamiento / Povratek ogrevanje
Andata riscaldamento / Heating flow / Départ chauffage / Heizungsvorlauf / Ida calentamiento / Izstop ogrevanje

HYDRO STRAIGHT FRONT 20/24 KW

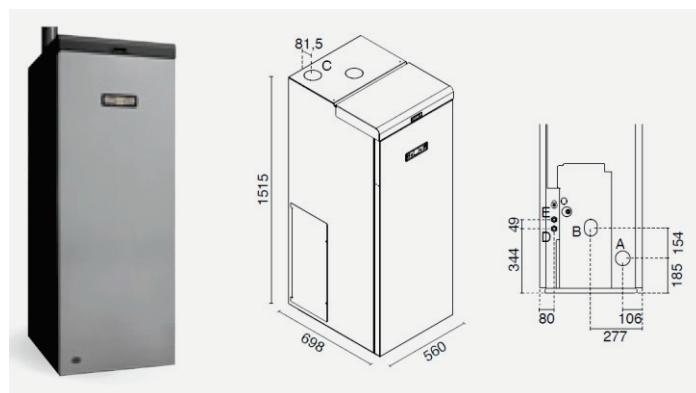


A = Ø 80 mm
B = Ø 50 mm
C = 3/4
D = 3/4

Scarico fumi / Flue / Cheminée / Rauchabzug / Evacuación de humos / Odvod dimnih plinov
Ingresso aria primaria / Primary air inlet / Entreé d'air primaire / Primärlufteinlass / Entrada aire primario / Vstop primamega zraka
Ritorno riscaldamento / Heating return / Retour chauffage / Heizungsrücklauf / Retorno calentamiento / Povratek ogrevanje
Andata riscaldamento / Heating flow / Départ chauffage / Heizungsvorlauf / Ida calentamiento / Izstop ogrevanje

02. PRODUCT DESCRIPTION

HYDRO KANTINA 20/24 KW STOVE



A = Ø 80 mm Scarico fumi / Flue / Cheminée / Rauchabzug / Evacuación de humos / Odvod dimnih plinov

B = Ø 50 mm Ingresso aria primaria / Primary air inlet / Entrée d'air primaire / Primärluftfeinlass / Entrada aire primario / Vstop primarnega zraka

C = Ø 80 mm Scarico fumi superiore / Top Flue outlet / Sortie de Haut de Fumée / Top Abgasstutzen / Salida humos superior / Izpuh dimnih plinov zgoraj

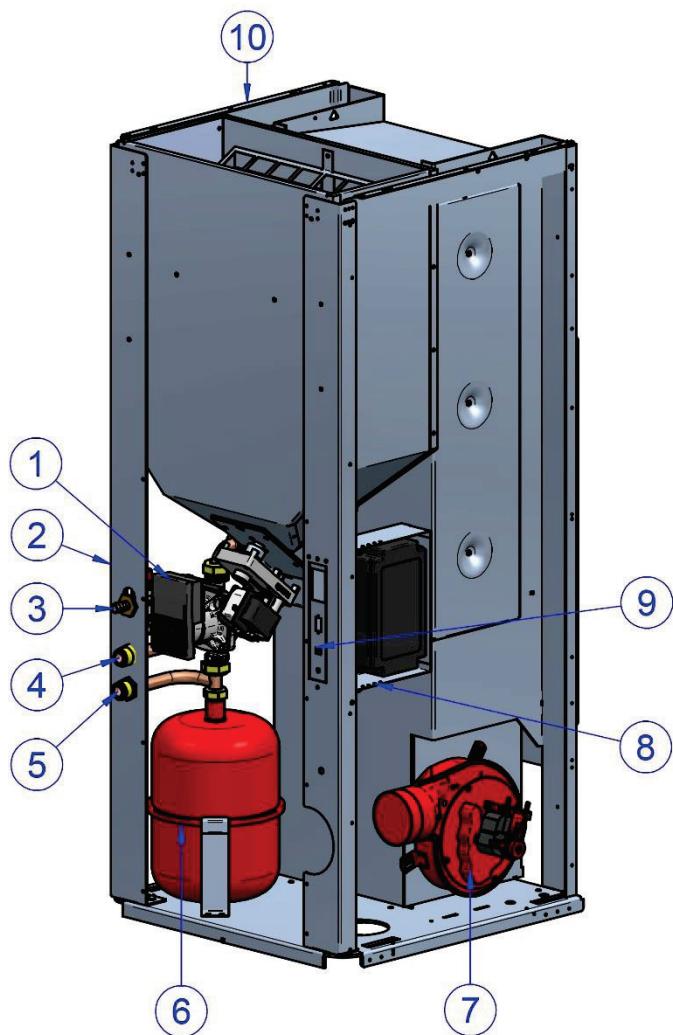
D = 3/4 Ritorno riscaldamento / Heating return / Retour chauffage / Heizungsrücklauf / Retorno calentamiento / Povratek ogrevanje

E = 3/4 Andata riscaldamento / Heating flow / Départ chauffage / Heizungsvorlauf / Ida calentamiento / Izstop ogrevanje

TECHNICAL DATA

Technical data of the appliance: Dati tecnici dell'apparecchio:	CURVED FRONT HYDRO 20 KW / STRAIGHT FRONTHYDRO 20 KW	CURVED FRONT HYDRO 24 KW / STRAIGHT FRONTHYDRO 24 KW	HYDRO KANTINA 20 KW		HYDRO KANTINA 24 KW			
Designation: <i>Designazione:</i>	Nominal heat output <i>Potenza termica nominale</i>	Reduced heat output <i>Potenza termica ridotta</i>	Nominal heat output <i>Potenza termica nominale</i>	Reduced heat output <i>Potenza termica ridotta</i>	Nominal heat output <i>Potenza termica nominale</i>	Reduced heat output <i>Potenza termica ridotta</i>	Nominal heat output <i>Potenza termica nominale</i>	Reduced heat output <i>Potenza termica ridotta</i>
Fuel throughput <i>Consumo orario (kg/h)</i>	4.3	1.1	5.4	1.1	4.3	1.1	5.2	1.1
Necessary flue draught <i>Requisiti minimi del tiraggio del camino (Pa)</i>	12	10	13	10	13	10	13	10
Flue gas temperature <i>Temperatura fumi (°C)</i>	154	77	179	77	145	77	164	77
Flue gas temperature at flue spigot or socket <i>Temperatura uscita fumi (°C)</i>	175	100	200	100	165	100	185	100
Flue gas mass flow <i>Flusso massico dei fumi (g/s)</i>	10.8	4.8	14.3	4.8	10.9	4.8	13.2	4.8
Efficiency <i>Rendimento (%)</i>	91.5	94.5	90.0	94.5	92.0	94.5	91.0	94.5
Total heating output <i>Potenza termica (Kw)</i>	18.5	5.0	23.0	5.0	18.5	5.0	22.5	5.0
Water heating output <i>Potenza termica resa all'acqua (Kw)</i>	16.0	3.5	20.5	3.5	16.0	3.5	20.5	3.5
Space heating output <i>Potenza termica resa all'ambiente (Kw)</i>	2.5	1.5	2.5	1.5	2.5	1.5	2.0	1.5
CO emission at 13% of O₂ <i>Emissioni di CO al 13% di O₂(%)</i>	0.020	0.020	0.016	0.020	0.010	0.020	0.010	0.020
Maximum water operating pressure <i>Massima pressione di esercizio dell'acqua (bar)</i>	3	3	3	3	3	3	3	3
Discharge control operating temperature <i>Temperatura di intervento termostato sicurezza acqua (°C)</i>	-	-	-	-	-	-	-	-
Electrical power supply <i>Potenza elettrica assorbita (W)</i>	380	380	380	380	380	380	380	380
Rated voltage <i>Tensione nominale (V)</i>	230	230	230	230	230	230	230	230
Rated frequency <i>Frequenza nominale(Hz)</i>	50	50	50	50	50	50	50	50

02.1 DESCRIPTION OF COMPONENTS



- 1 - Electronic pump
- 2 - Pressure transducer
- 3 - Safety valve (3bar)
- 4 - Heating inlet
- 5 - Heating return
- 6 - Expansion tank
- 7 - Fume motor
- 8 - Depressor
- 9 - Manual reset thermostat
- 10 - Automatic release valve

03.1 INTRODUCTION

INSTALLATION WITH WALL FUME OUTLET IS PROHIBITED. INSTEAD THE FUME OUTLET MUST BE ROOF-TYPE AS PROVIDED FOR BY NATIONAL REGULATIONS.

Eva Stampaggi S.r.l. declines any liability for any damage to persons or property arising from the failure to comply with the points mentioned above and from non-compliant product installation.

Install the stove according to the regulations in force in the country of use.

For example, in Italy this refers to UNI 10683: 2012, which dictates 4 points

1. preliminary activities - for which the retailer/installer is responsible and liable for at the time of the inspection before definitive installation. The preliminary activities include:

- installation site suitability verification;
- fume evacuation system suitability verification;
- external air inlet suitability verification;

At this stage it is necessary to check that the product can be safely operated and that it satisfies the relevant technical characteristics. The **safety conditions** must be ascertained by means of a prior inspection.

Stoves and fireplaces are heating systems and must be installed safely and comply with the manufacturer's instructions!

2. Installation - responsibility of the installer. At this phase the aspects of **installation** of the product and of the fume evacuation system are taken into account and the following issues are addressed:

- **safety distance** from combustible materials;
- **chimney flue construction**, smoke ducts, intubated systems and chimney cowls.

3. issuing of additional documents - responsibility of the installer.

Issuing of the technical documentation must include:

- manual of use and maintenance of the appliance and of the components of the system (e.g smoke ducts, chimney flue, etc.);
- Photocopy or photograph of the chimney flue plate;
- system manual: (if applicable);
- Declaration of Conformity in relation to Ministerial Decree 37/08.

4. control and maintenance - responsibility of the maintenance technician who must oversee protection and maintenance of the product during its operation over time. The operator in charge of control and maintenance of the systems for winter and summer climate control performs these activities **to a professional standard** in accordance with the regulations in force. The operator, at the end of these operations, must draw up and sign a technical inspection report in accordance with the models provided by the provisions of this decree and the implementing rules, in relation to the type and capacity of the system, to be issued to the person who signs a copy thereby confirming receipt and reading thereof."

03.2 VENT PIPE

STOVE CHARACTERISTICS FOR SIZING OF THE VENT PIPE

The curved front hydro 20 kW and the hydro straight front 20 kW stoves have the following characteristics:

Chimney flue draught: 12 Pa

Fume temperature: 154°C

Mass flow of fumes: 10.8 g/s

The curved front hydro 24 kW and the hydro straight front 24 kW stoves have the following characteristics:

Chimney flue draught: 13 Pa

Fume temperature: 179 °C

Mass flow of fumes: 14.3 g/s

The kantina hydro 20 kW stoves have the following characteristics:

Chimney flue draught: 13 Pa

Fume temperature: 145 °C

Mass flow of fumes: 10.9 g/s

The kantina hydro 24 kW stoves have the following characteristics:

Chimney flue draught: 13 Pa

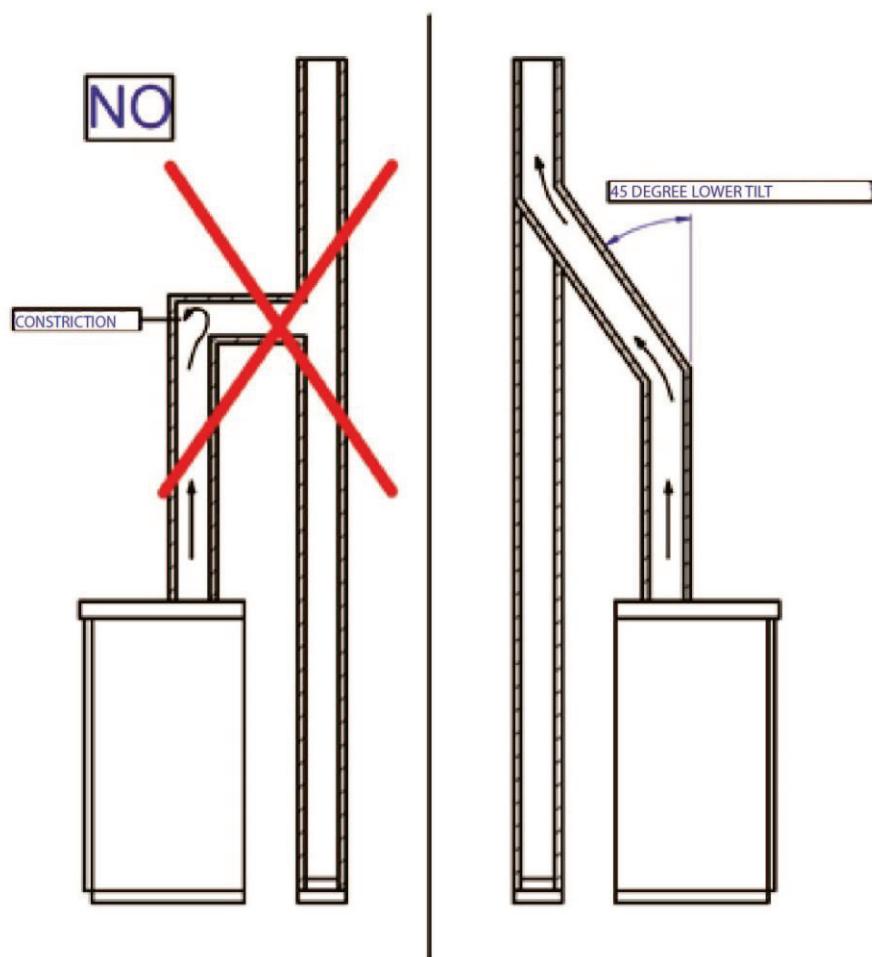
Fume temperature: 164°C

Mass flow of fumes: 13.2 g/s

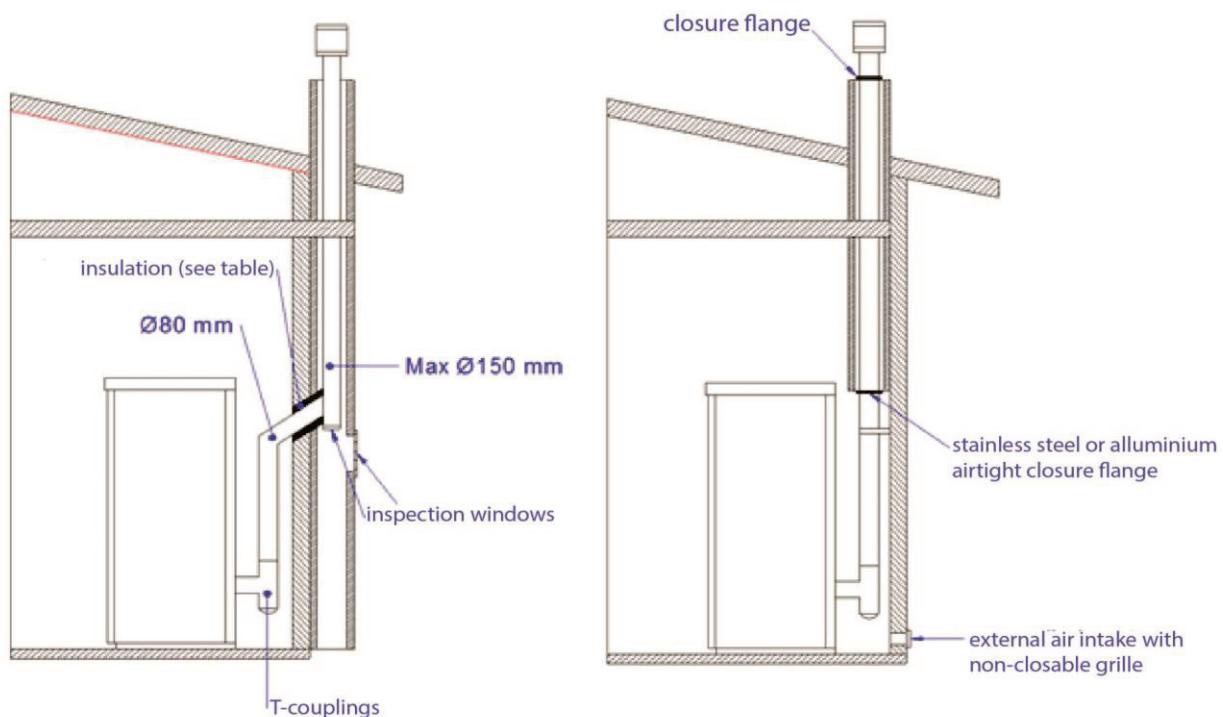
03 PRODUCT INSTALLATION

The vent pipe is one of the key features for guaranteeing the proper functioning of the stove. Thanks to the quality of the materials, the strength, the durability, the easy cleaning and maintenance, the best vent pipes are made of steel, either stainless steel or aluminised.

- The stove is fitted with a round fume outlet and a joint connection to be connected to the vent pipe.
- Use telescopic joint connections to facilitate connection to the steel rigid vent pipe and counterbalance the thermal expansion of both the firebox and the vent pipe.
- Seal the vent pipe joint connection with high temperature silicone sealant (1,000°C). Should the existing flue opening not be perfectly perpendicular to the firebox fume outlet, use an elbow to connect them. Inclination must never exceed 45°, with respect to the vertical axis.
- No constrictions. Use 10cm-thick insulating thimbles if pipe vent passes through floors.
- The vent pipe must be insulated along its entire length. Thanks to the vent pipe, insulation fume temperature will remain high optimising draught, preventing condensation and reducing the build-up of non-ignited particles along the vent pipe walls. Use proper insulating materials (glass wool, ceramic fibre, Class A1 non-combustible materials).
- Install a vent pipe with a minimum vertical run of 2 mt to guarantee proper draught.
- The vent pipe must be weather-proof and as linear as possible.
- Flexible and length-adjustable metal pipes may not be used.

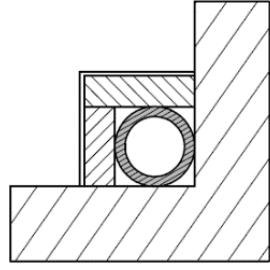
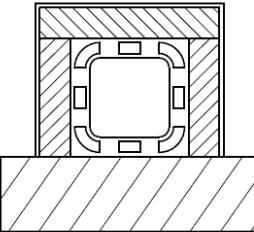
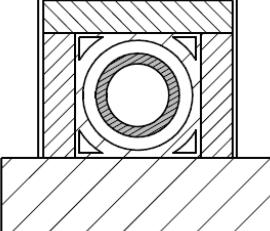
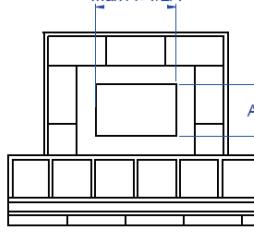


EXISTING VENT PIPE (TRADITIONAL)



Types of vent pipe

Examples of vent pipe

 <p>Steel vent pipe with double chamber insulated with material resistant to 400°C. Optimum efficiency.</p>	 <p>Traditional clay vent pipe with cavities. Optimal efficiency.</p>
 <p>Refractory vent pipe with insulated double chamber and external coating in lightweight concrete. Optimal efficiency.</p>	 <p>Avoid vent pipes with internal rectangular section whose ratio between the larger and smaller side is greater than 1.5. Poor efficiency</p>

03.3 CHIMNEY COWL

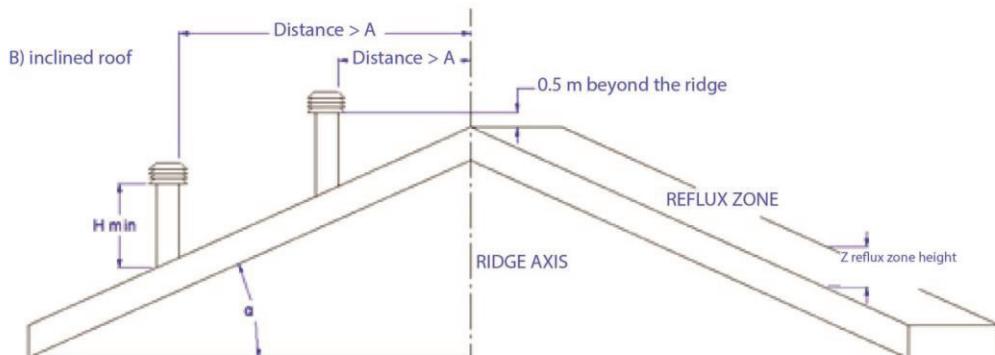
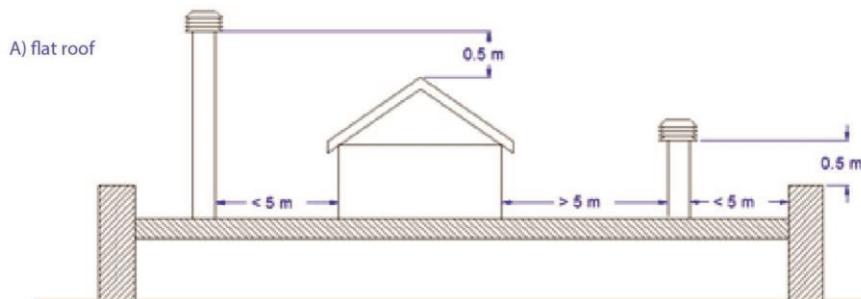
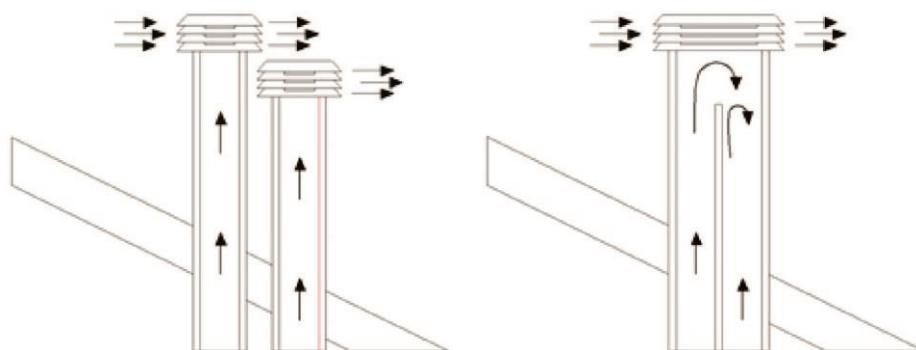
A properly installed chimney cowl ensures optimum stove functioning. The anti-downdraught chimney cowl consists of a number of components whose outlet section sum always doubles the vent pipe section. Make sure the chimney cowl is at least 150cm above the roof top so that it is fully exposed to the wind.

The chimney cowls must:

- have useful outlet section that is at least twice that of the vent pipe.
- be made in such a way as to prevent the penetration of rain or snow.
- be constructed in such a way as to ensure, in the event of winds coming from any direction, the evacuation of combustion products.
- be free of mechanical intake auxiliaries.

YES

NO



Roof pitch α [°]	Horizontal width of reflux zone measured from top A axis [m]	Minimum height from roof for discharging exhaust fumes H_{min} $= Z + 0.50m$	Height of reflux zone Z [m]
15	1.85	1.00	0.50
30	1.50	1.30	0.80
45	1.30	2.00	1.50
60	1.20	2.60	2.10

03.4 DRAUGHT

Fumes heat up during combustion, increasing their volume. Their density is therefore lower than the one of the surrounding colder air.

This difference between the inside and outside temperatures of the chimney results in a negative pressure which increases proportionally to the vent pipe length and the temperature.

The draught must be stronger than the fume circulation resistance so that all exhaust fumes generated during combustion inside the stove are drawn upwards through the outlet and the vent pipe. Many weather conditions affect the vent pipe functioning, such as rain, fog, snow, altitude, and wind being the most important since it can create both negative pressure and dynamic loading.

The wind action varies depending on whether it is ascending, descending or horizontal.

- Ascending wind always results in an increased negative pressure and draught.
- Horizontal wind results in an increased negative pressure as long as the chimney cowl was properly installed.
- Descending wind always diminishes the negative pressure, sometimes inverting it.

Excess draught causes an increase in the combustion temperature and consequently a loss in stove efficiency.

A part of the combustion fumes are drawn up through the vent pipe together with small pellet particles before combustion reducing stove efficiency, increasing fuel consumption and resulting in the emission of polluting fumes.

At the same time the high fuel temperature, due to an excess amount of oxygen, wears down the combustion chamber sooner than expected.

On the other hand, poor draught slows down combustion resulting in a decrease in the stove temperature, fume spillage inside the room, a loss of stove efficiency and dangerous build-up in the vent pipe.

In order to avoid excessive draught it is appropriate to use:

Draught regulator



03.5 STOVE EFFICIENCY

Highly efficient stoves may pose difficulties for fume extraction.

In order for a vent pipe to work properly its internal temperature must increase as a consequence of the fumes generated during combustion.

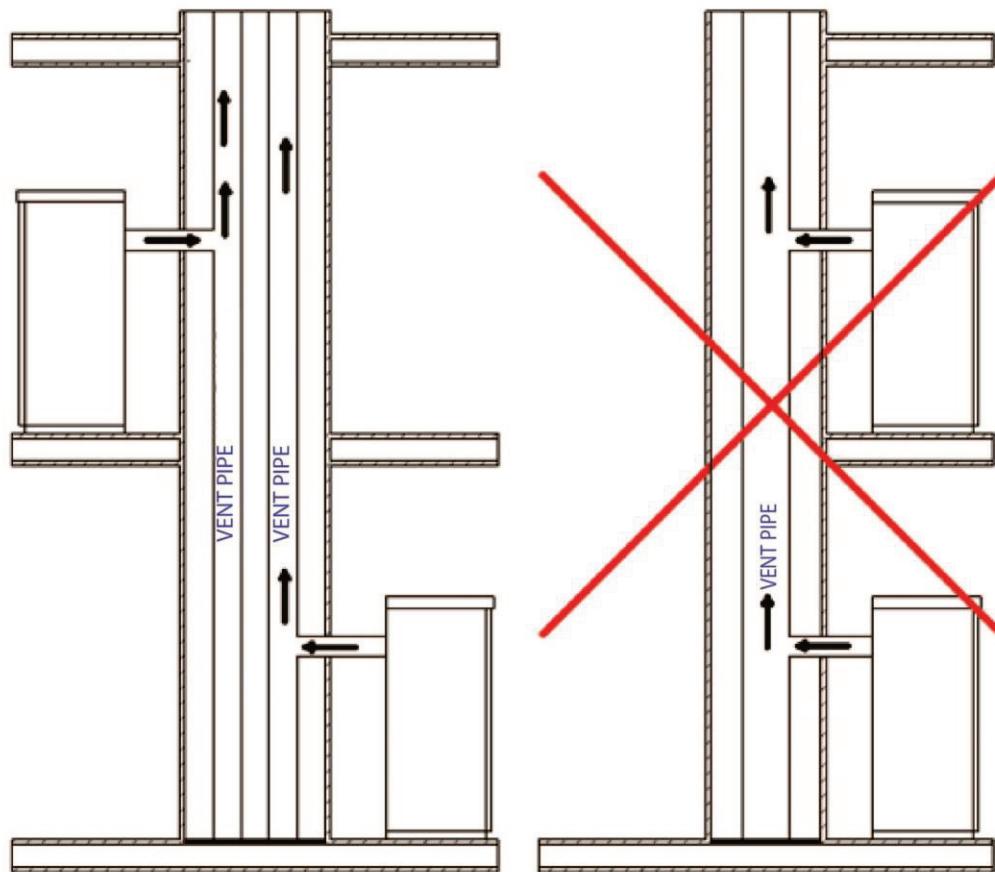
Importantly, the efficiency of a heater is determined by its ability to transfer most of the heat produced to the environment to be heated: consequently, the greater the efficiency of the stove, the "colder" the residual fumes of combustion, and consequently, the lower the "draught".

A traditional chimney flue, with a rough design and insulation, is more efficient if used with a traditional open fireplace or a poor quality stove where most of the heat is lost with the fumes.

Therefore, purchasing a quality stove often entails modifying the existing chimney flue to obtain a better insulation, even when it already works properly with old appliances.

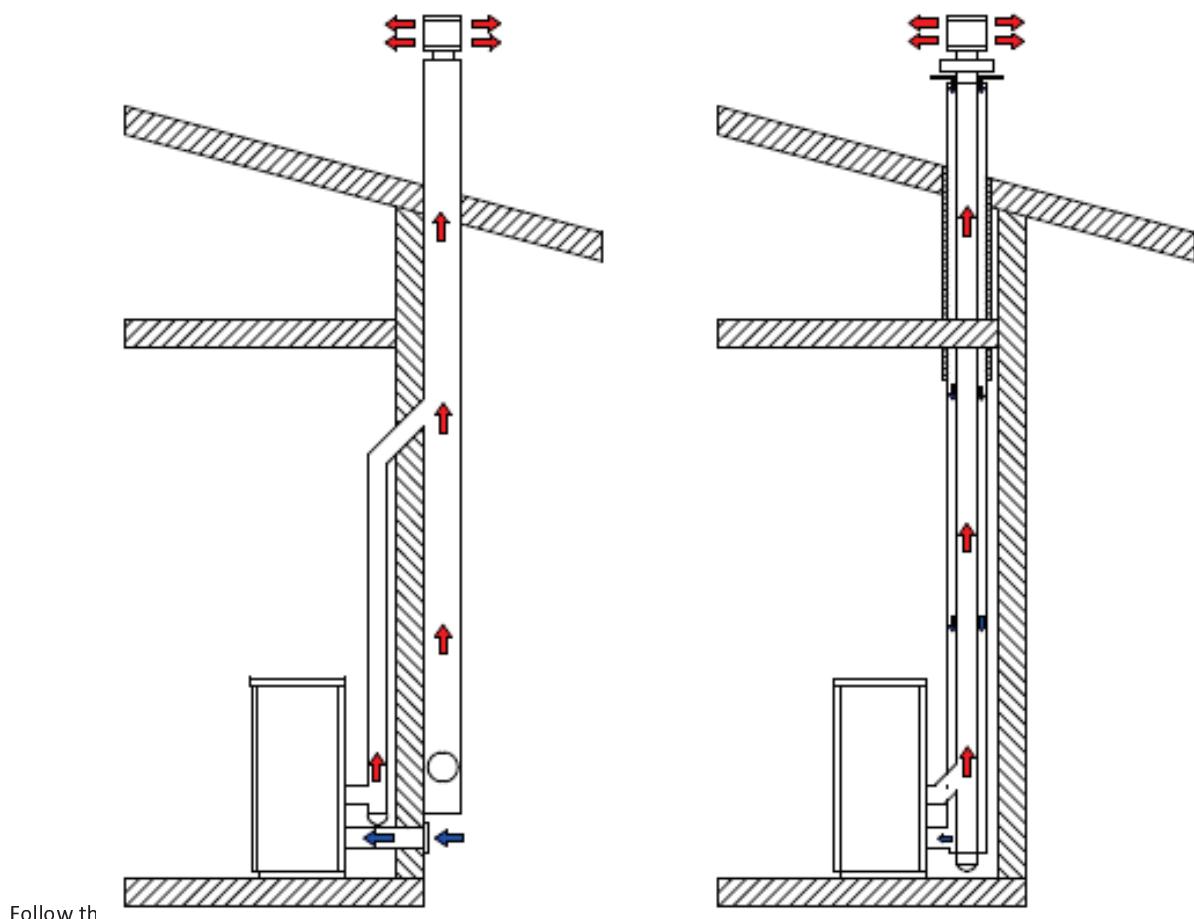
Poor draught results in the stove not operating when hot or in smoke spillage.

- Connecting the stove pipe to an existing chimney flue that has already been used with an old appliance is a common mistake. In this way two solid-fuel appliances share the same chimney flue, which is wrong and dangerous.
- If the two appliances are used simultaneously, the fume load might exceed the existing chimney flue capacity resulting in downdraught. If only one appliance is used, the fume heat will facilitate draught but the cold air coming from the other appliance not in use will cool down exhaust fume temperature again blocking the draught.
- Besides the problems described so far, if the two appliances are placed on different levels the communicating vessel principle might be interfered with, causing combustion fumes to be drawn in an irregular and unforeseeable way.



03.6 INSTALLATION

Using coaxial tubes the air will be pre-warmed contributing to improved combustion and lower emissions into the atmosphere.

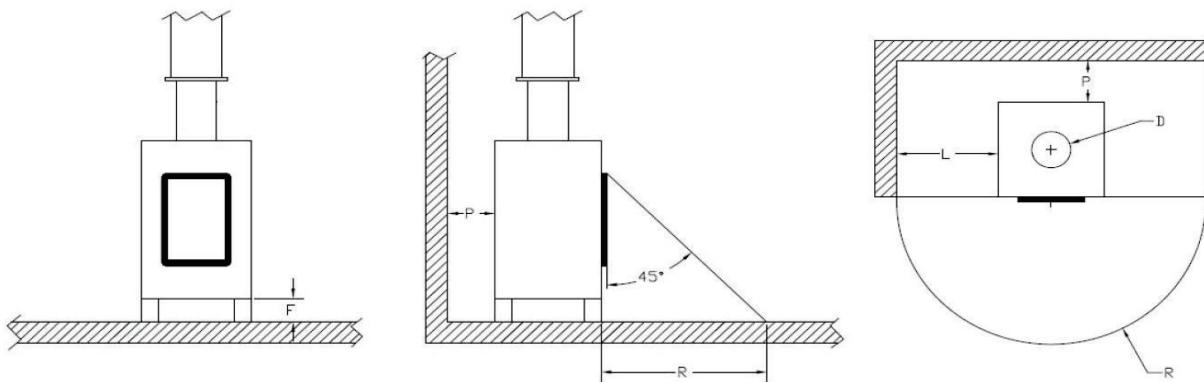


Select the position where the stove is to be installed and:

- Arrange the connection to the vent pipe for fume extraction.
- Arrange the external air intake (combustion air).
- Arrange the connection to the earthed mains.
- The electrical system of the room where the stove is to be installed must be earthed, otherwise the control board may not work properly.
- Place the stove on the floor in a convenient position for the connection to the vent pipe and close to the combustion air intake.
- The appliance must be installed on a floor with an adequate loading-bearing capacity.
- Should the existing floor not comply with the requirement above, proper measures must be taken (for instance, the installation of a load distribution plate).
- All the structures which can catch fire if exposed to excessive heat must be protected. Floors made from wood or inflammable materials must be protected using non-combustible materials (e.g. 4mm-thick sheet metal or ceramic glass).
- The appliance installation must ensure easy access for cleaning the stove, exhaust pipes and vent pipe.
- This appliance is not suitable to be installed on a shared vent pipe.
- During normal operation, the stove draws air from the room where it is installed. Therefore, an external air intake must be positioned at the same height of the pipe located on the stove back. Exhaust fume pipes must be suitable for pellet stoves and must therefore be made from coated steel or stainless steel, with a diameter of 8cm and fitted with adequate gaskets.

03. INSTALLING THE PRODUCT

- The combustion air intake must be connected directly to the outside or to adjacent rooms provided they are fitted with external air supply vents and are not used as bedrooms or bathrooms or, whenever a fire hazard exists, as storage rooms, garages, combustible material warehouses, etc. The air vents must be placed in such a way that they cannot be clogged either from the outside or inside and must be protected using a grille, a metal mesh or other suitable means provided they do not reduce the minimum section.
- If the stove is to be installed in rooms where it is surrounded by combustible materials (e.g. furniture, wood cladding, etc.), the following minimum clearances must be complied with:



SAFETY DISTANCE FROM COMBUSTABLE MATERIALS:	SAFETY DISTANCE FROM <u>NON</u> -FLAMMABLE MATERIALS:
REAR WALL P = 200 mm SIDE WALL = 200 mm FLOORING F = 30 mm FRONT R = 1500 mm	REAR WALL P = 100 mm SIDE WALL = 100 mm FLOORING F = 5 mm FRONT R = 1000 mm

- Besides complying with the minimum clearances set above, we also recommend installing heat-resistant fireproof insulating panels (rock wool, cellular concrete, etc.).

The following is recommend:

Promasil 1000

Classification temperature: 1000 °C

Density: 245 kg/m³

Shrinkage at reference temperature, 12 h: 1000°C / 1.3%

Cold crushing strength: 1.4 MPa

Bending strength: 0.5 MPa

Reversible thermal expansion: 5.4x10⁻⁶ m/mK

Specific heat capacity: 1.03 Kj/kg K

Thermal conductivity λ:

200 °C → 0.07 W/mK

400 °C → 0.10 W/mK

600 °C → 0.14 W/mK

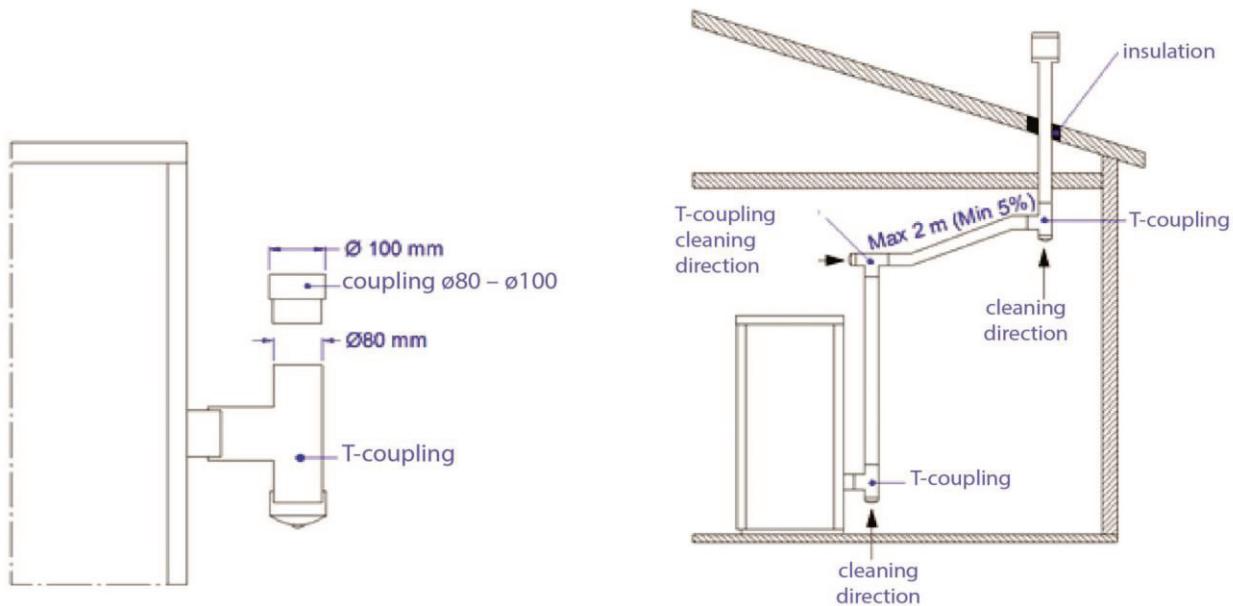
800 °C → 0.17 W/mK

Thickness: 40 mm

- When it is operational, the stove can cause a negative pressure in the room where it is installed. Therefore there should not be in the same room other naked flame devices, with the exception only of type c stoves (airtight).
- Make sure that the stove can draw the necessary quantity of combustion air: this must be from an open space (i.e. a space without exhaust blowers or providing adequate ventilation) or directly from outside.
- Do not install the stove in bedrooms or bathrooms.
- Unpack the stove: be careful not to damage the product at the time of unpacking.
- Check the stove's legs and adjust them so that the stove is stable.
- Place the stove so that the door and any window openings are not against the walls.
- After connecting the stove to the combustion air inlet join the coupling device to the vent pipe.

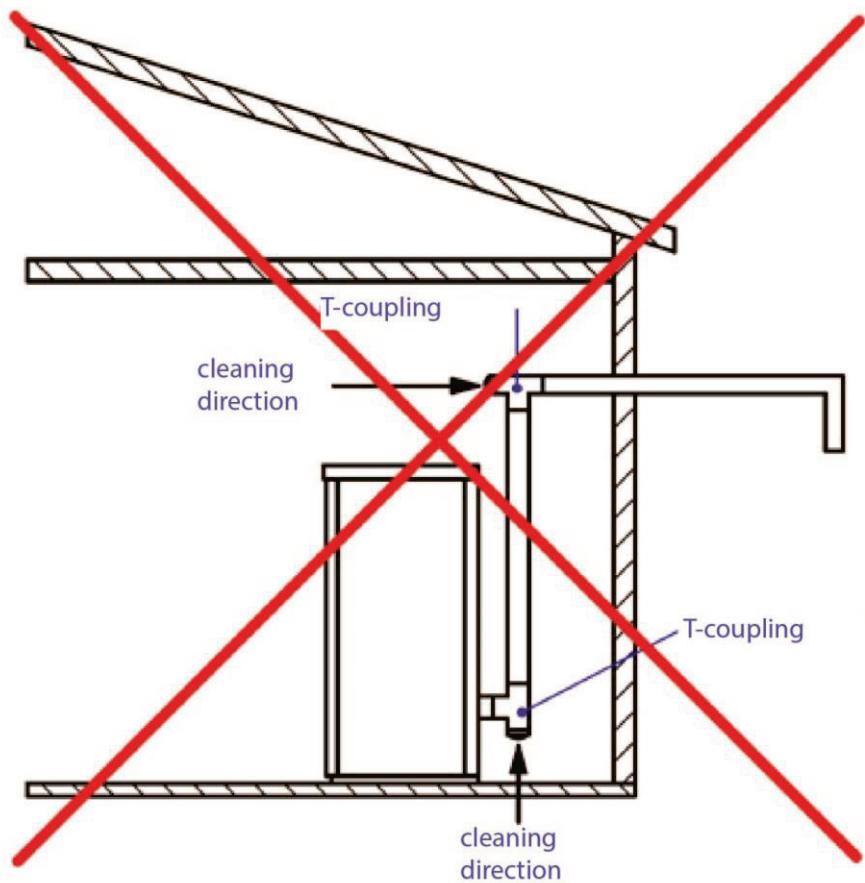
03. INSTALLING THE PRODUCT

INSTALLATION EXAMPLE:



EXAMPLE OF INCORRECT INSTALLATION:

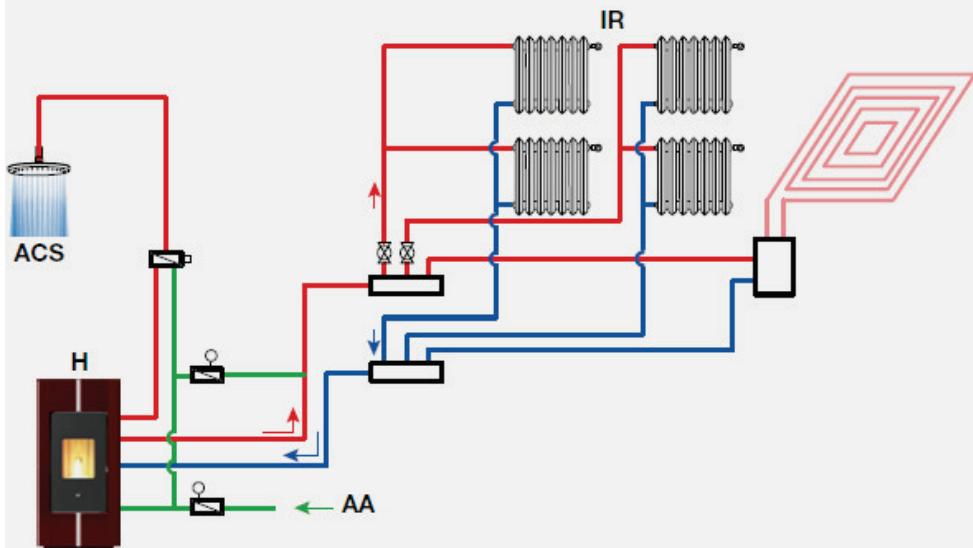
Exhaust pipes must never be fitted pointing downwards or horizontally so that fumes are discharged directly through the external wall.



CONNECTION EXAMPLES, SYSTEM DRAWINGS

TERMOSTUFA PER PRODUZIONE DI ACQUA CALDA SANITARIA

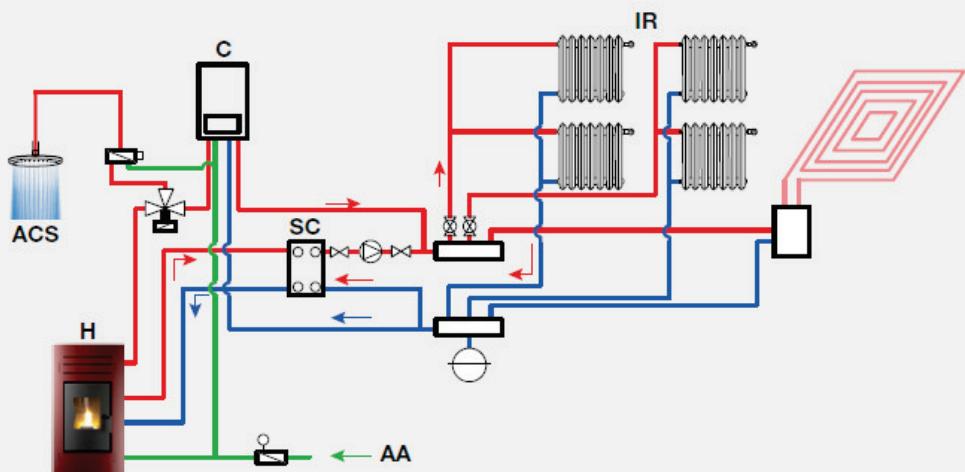
Heating stove for the production of potable hot water
 Termopoêle pour la production d'eau chaude sanitaire
 Heizofen zur erzeugung von Warmwasser
 Termoestufa para la producción de agua caliente sanitaria
 Termo peč za pripravo tople sanitarné vode



Schemi rappresentati in modo semplificato; gli impianti devono essere eseguiti da personale qualificato rispettando tutte le norme di sicurezza vigenti.
 These diagrams have been simplified; the systems must be installed by qualified personnel in compliance with all applicable safety standards.
 Schémas représentés de manière simplifiée; les installations doivent être réalisées par un personnel qualifié, conformément aux normes de sécurité en vigueur.
 In vereinfachter Form dargestellte Pläne. Die Installation der Anlagen muss von qualifiziertem Fachpersonal vorgenommen werden, das sämtliche geltenden Sicherheitsvorschriften beachtet.
 Los esquemas están representados de forma simplificada, las instalaciones tiene que efectuarlas personal cualificado respetando todas las normas de seguridad vigentes.
 Sheme so pomenjeno, vgradnja mora izvesti usposobljeni osobe, ki upošteva vse veljavne varnostne predpise.

TERMOSTUFA INTERFASSIATA CON CALDAIA E SEPARATORE PER PRODUZIONE DI ACQUA CALDA SANITARIA

Heating stove combined with boiler and separator for the production of potable hot water
 Thermopoêle interfacé avec chaudière et séparateur pour la production d'eau chaude sanitaire
 Mit Kessel und Trenner verbundener Heizofen zur erzeugung von Warmwasser
 Termoestufa conectada mediante interfaz con caldera y separador para la producción de agua caliente sanitaria
 Termo peč, povezana z grelnikom in razdelilnikom za pripravo tople sanitarné vode

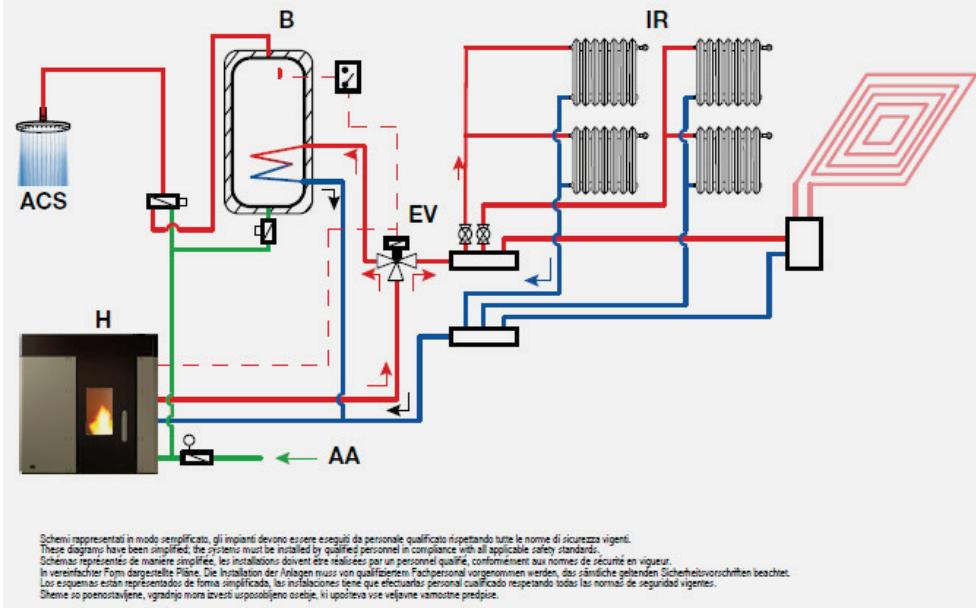


Schemi rappresentati in modo semplificato; gli impianti devono essere eseguiti da personale qualificato rispettando tutte le norme di sicurezza vigenti.
 These diagrams have been simplified; the systems must be installed by qualified personnel in compliance with all applicable safety standards.
 Schémas représentés de manière simplifiée; les installations doivent être réalisées par un personnel qualifié, conformément aux normes de sécurité en vigueur.
 In vereinfachter Form dargestellte Pläne. Die Installation der Anlagen muss von qualifiziertem Fachpersonal vorgenommen werden, das sämtliche geltenden Sicherheitsvorschriften beachtet.
 Los esquemas están representados de forma simplificada, las instalaciones tiene que efectuarlas personal cualificado respetando todas las normas de seguridad vigentes.
 Sheme so pomenjeno, vgradnja mora izvesti usposobljeni osobe, ki upošteva vse veljavne varnostne predpise.

TERMOSTUFA INTERFASSIATA CON BOLLITORE EVA CALÒR PER PRODUZIONE DI ACQUA CALDA SANITARIA



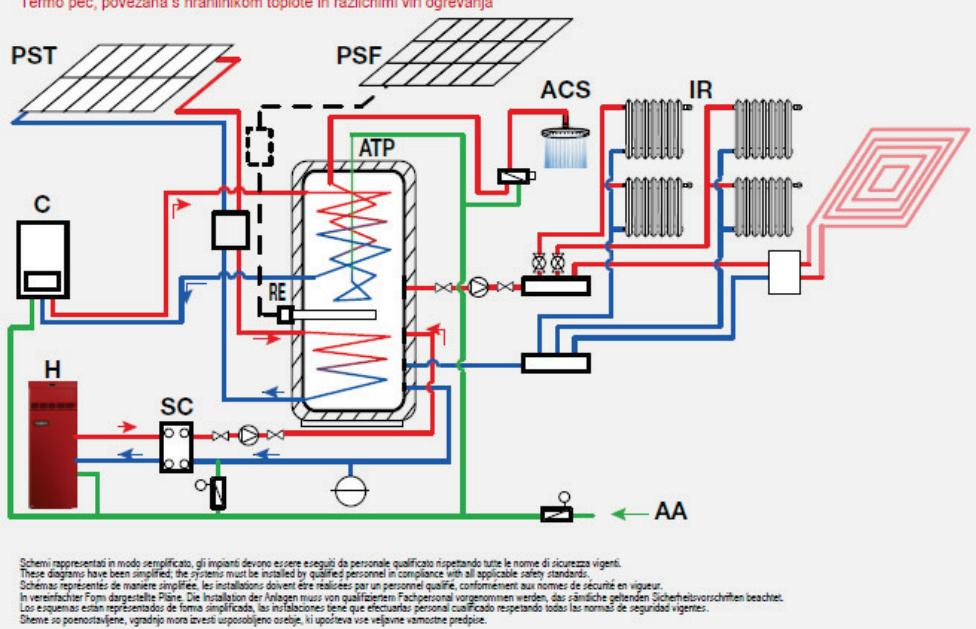
Heating stove combined with Eva Calòr boiler for the production of potable hot water
 Thermopöele interfacé avec chaudière Eva Calòr pour la production d'eau chaude sanitaire
 Mit Kessel Eva Calòr verbundener Heizofen zur erzeugung von Warmwasser
 Termoestufa conectada mediante interfaz con hervidor Eva Calòr para la producción de agua caliente sanitaria
 Termo peč, povezana z grelnikom Eva Calòr za pripravo tople sanitarne vode



TERMOSTUFA INTERFASSIATA CON PUFFER E VARIE FONTI DI RISCALDAMENTO



Heating stove combined with puffer and various heat sources
 Thermopöele interfacé avec puffer et sources de chauffe diverses
 Mit Wärmespeicher und sonstigen Heizquellen verbundener Heizofen
 Termoestufa conectada mediante interfaz con puffer y diversas fuentes de calentamiento
 Termo peč, povezana s hranilnikom toplice in različnimi viri ogrevanja



03. INSTALLING THE PRODUCT

INSTALLATION

In compliance with the current regulations for installation, the pellet thermo-stove should be installed in a ventilated place with air that is sufficient to ensure correct combustion and therefore good operation. The room must have a volumetry of no less than 20 m³ and to ensure good combustion (40 m³/h of air), there must be a combustion air intake" that must reach a wall that connects to the outside or to adjacent rooms provided they are fitted with external air supply vents (Ø80mm) and are not used as bedrooms or bathrooms or, whenever a fire hazard exists, as storage rooms, garages, combustible material warehouses, etc. These air vents must be placed in such a way that they cannot be clogged either from the outside or inside and must be protected using a grille, a metal mesh or other suitable means provided they do not reduce the minimum section.

When it is operational, the thermo-stove can cause a negative pressure in the room where it is installed. Therefore there should not be in the same room other naked flame devices, with the exception only of type c stoves (watertight) unless they are fitted with their own air flow.

They must not be positioned close to curtains, armchairs, furniture or to other flammable materials.

They must not be installed in explosive or potentially explosive environments which may become explosive due to the presence of machinery, materials or dust that can cause greenhouse gas emissions or which can easily ignite with sparks. Before attempting to install the pellet thermo-stove, bear in mind that all fixtures or any beams made of combustible material must be placed at a safe distance and outside the radiation area of the stove itself. Also consider that in order not to compromise the correct operation of the appliance, it is essential to create air circulation inside its casing. This helps prevent overheating and can be achieved by respecting the minimum distances and by creating a number of ventilation holes.

Internally, the thermo-stove is equipped with all the components for safety: automatic ventilating valve, 3-bar safety valve, expansion tank and stove safety thermostat. Remember to discharge the hydraulic system before switching on the appliance.

The use of hosing is recommended that connects the appliance to the hydraulic system as, in the case of ordinary or extraordinary maintenance, this makes it easy to move. It is also recommended to install a dirt separator as the electronic pump could capture the dirt of the system and become jammed.

ELECTRICAL CONNECTION

The electrical connection must be performed by qualified personnel who install circuit breakers upstream of the appliance.

Extra attention we need to do when the stove are an integration to the plant and all the machines have to work like the program.

Avoid installations with electric cables that run close to fume pipes or hot components that are suitably insulated.

The voltage is 230 V while the frequency is 50 Hz.

The electrical system where it is connected must be fitted with a conductor as required by the Regulations 73/23 EEC and 93/98 EEC.

EXTERNAL THERMOSTAT

In these thermo-stoves it is possible to install an external thermostat. This operation may only be performed by authorised personnel.

Use a 2-pole cable with everyday double insulation. In the event that the thermostat is closed, the stove functions at the power set. If the thermostat opened, the stove would work in MODULATE mode until the thermostat closes.

First connect the stove plug to the mains and load the pellet hopper.

Be careful not to empty the entire bag at once. Perform this operation slowly.

04.1 ELECTRONICS WITH 6-BUTTON LCD DISPLAY

Proper functioning and control adjustment devices

Control panel

The control panel shows the information concerning the stove status. Several types of data can be displayed and the settings available according to the access level can be modified by entering the menu.

Depending on the selected mode and on their position on the display, the data visualised may acquire different meanings.

figure 2 shows an example with the stove switched off or on.

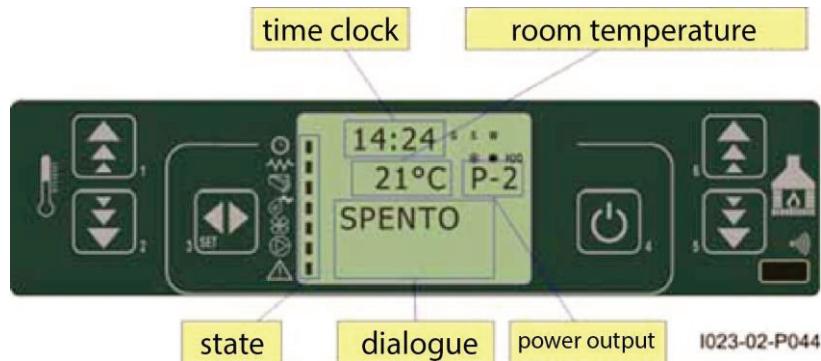


fig.2

figure 3 describes the meaning of the status indicators that appear on the left side of the display.

When one of the devices included in the list is activated, the relevant segment on the display status area switches on.



Fig.3

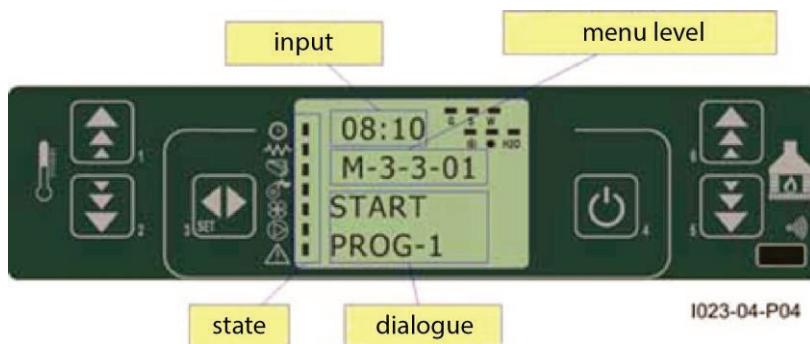


Fig. 4.

figure 4 describes the position of the messages displayed during programming or setting of the operating parameters. In particular:

- 1.The input area shows the entered programming values
- 2.The menu level area displays the current menu level. See chapter dedicated to menu.

Description of Panel



BUTTON 1 (P1) - Temperature increase:

When in programming mode, use this button to modify/increase the selected menu value. When in working mode/switched off, use instead this button to increase the stove temperature value.



BUTTON 2 (P2) - Temperature decrease:

When in programming mode, use this button to modify/decrease the selected menu value. When in working mode/switched off, use instead this button to decrease the room thermostat temperature value.



BUTTON 3 (P3) - Set/menu:

Use this button to access temperature setting and user and technician parameter menu. After entering the menu, use this button to access the next sub-menu or set the value and move to the next menu item when in programming mode.



BUTTON 4 (P4) - ON/OFF Release:

Hold this button down for two seconds to manually switch the stove on or off respectively depending on its initial status (switched on or off).

Should have any alarm blocked the stove, press this button to unlock it and subsequently switch it off. After entering the menu or during the programming phase, use this button to access the upper menu level. Any change is automatically saved



BUTTON 5 (P5) - Heat output decrease:

When in working mode, use this button to decrease the heat output value. In menu mode, use this button to move to the next menu item or, in programming mode, to go back to the subsequent sub-menu item. Any change is automatically saved.



BUTTON 6 (P6) - Heat output increase:

When in working mode, use this button to modify the exchanger speed. In menu mode, use this button to go back to the previous menu item or, in programming mode, to go back to the previous sub-menu item. Any change is automatically saved.

The menu

Press the P3  (MENU) button to access the menu.

It includes  several items and levels to access settings and control board programming.

The menu items providing access to the technical setting are protected by access code.

User menu

The table below briefly describes the menu structure, focusing in particular on the functions available to users.

The menu item 01-fan adjustment is only available if the corresponding function has been enabled.

04. PRODUCT USE

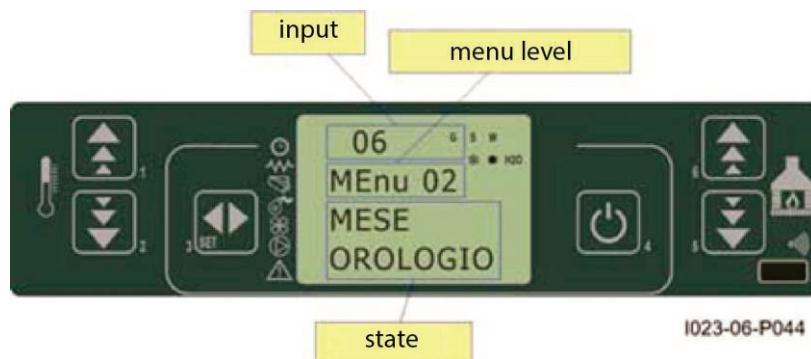
<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>	<i>Level 4</i>	<i>Value</i>
01 - time clock setting				
	01 - day			Week day
	02 - hours			Hour
	03 - minutes			Minute
	04 - day			day month
	05 - month			Month
	06 - year			Year
02 – chrono setting				
	01 - enable chrono			
		01 - enable chrono		On/off
	02 – day programming			
		01 – day chrono		On/off
		02 - start 1 day		Hour
		03 - stop 1 day		Hour
		04 - start 2 day		Hour
		05 - stop 2 day		Hour
	03 – week programming			
		01 – week chrono		On/off
		02 - start prog 1		Hour
		03 - stop prog 1		Hour
		04 - Monday prog 1		On/off
		05 - Tuesday prog 1		On/off
		06 - Wednesday prog 1		On/off
		07 - Thursday prog 1		On/off
		08 - Friday prog 1		On/off
		09 - Saturday prog 1		On/off
		10 - Sunday prog 1		On/off
		11 - start prog 2		Hour
		12 - stop prog 2		Hour
		13 - Monday prog 2		On/off
		14 - Tuesday prog 2		On/off
		15 - Wednesday prog 2		On/off
		16 - Thursday prog 2		On/off
		17 - Friday prog 2		On/off
		18 - Saturday prog 2		On/off
		19 - Sunday prog 2		On/off
		20 - start prog 3		Hour
		21 - stop prog 3		Hour
		22 - Monday prog 3		On/off
		23 - Tuesday prog 3		On/off
		24 - Wednesday prog 3		On/off
		25 - Thursday prog 3		On/off
		26 - Friday prog 3		On/off
		27 - Saturday prog 3		On/off
		28 - Sunday prog 3		On/off

04. PRODUCT USE

<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>	<i>Level 4</i>	<i>Value</i>
		29 - start prog 4		Hour
		30 - stop prog 4		Hour
		31 - Monday prog 4		On/off
		32 - Tuesday prog 4		On/off
		33 - Wednesday prog 4		On/off
		34 - Thursday prog 4		On/off
		35 - Friday prog 4		On/off
		36 - Saturday prog 4		On/off
		37 - Sunday prog 4		On/off
	04 - week-end program			
		01 - week-end chrono		
		02 - start 1		
		03 - stop 1		
		04 - start 2		
		05 - stop 2		
03 – select language				
	01 - Italian			Set
	02 - French			Set
	03 - English			Set
	04 - German			Set
04 - stand-by mode				On/off
05 - buzzer				On/off
06 – initial load				Set
07 – stove status				-

Menu 01 - time clock setting

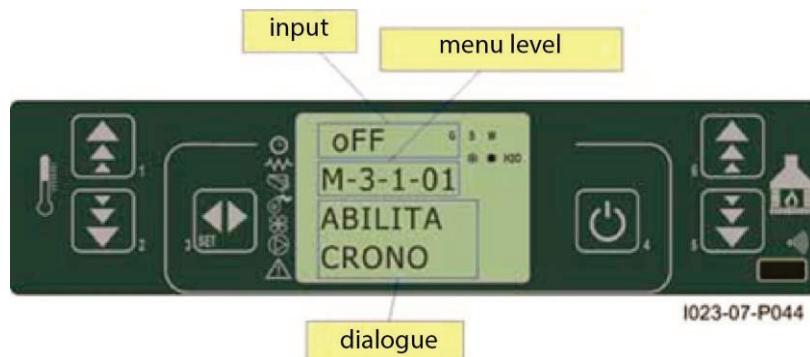
Use this function to set current time and date. The control board is equipped with a lithium battery guaranteeing the internal time clock a 3/5 year-long life.



Menu 02 – chrono setting

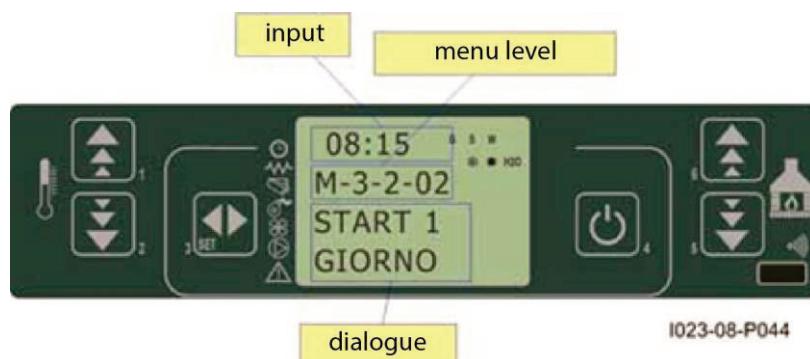
Sub-menu 02 - 01 – enabling chrono

The programmable thermostat functions can be disabled and enabled.



Sub-menu 02 - 02 – daily program

The daily programmable thermostat functions can be enabled, disabled and set.

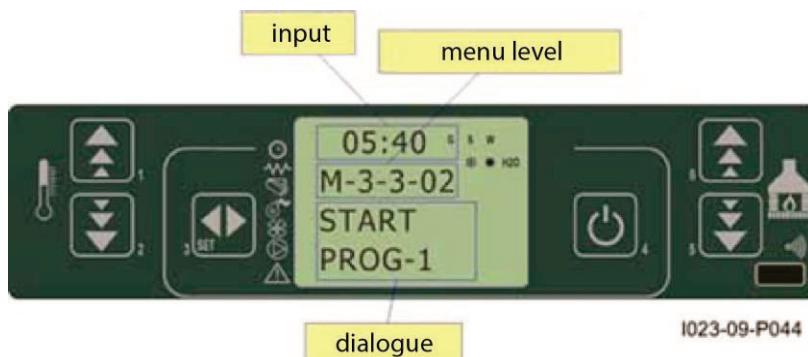


It is possible to set two on/off times defined by the times set according to the table below. If the value is set to OFF, the time clock ignores the control.

Selection	Meaning	Available values
START 1	switching-on time	time - OFF
STOP 1	switching-off time	time - OFF
START 2	switching-on time	time - OFF
STOP 2	switching-off time	time - OFF

Sub-menu 02 - 03 – weekly programme

The weekly programmable thermostat functions can be enabled, disabled and set.



The weekly programmer consists of 4 independent programmes which can be combined together in different ways.

The weekly programmer can be enabled or disabled.

Moreover, if the time is set to OFF, the time clock ignores the corresponding control.

Attention: set the programming carefully in order to avoid overlapping of switching on and/or off times of different programmes on the same day.

PROGRAMME 1			
menu level	setting	meaning	available values
03-03-02	START PROG 1	switching-on time reference day	time - OFF
03-03-03	STOP PROG 1		time - OFF
03-03-04	MONDAY PROG 1		on/off
03-03-05	TUESDAY PROG 1		on/off
03-03-06	WEDNESDAY PROG 1		on/off
03-03-07	THURSDAY PROG 1		on/off
03-03-08	FRIDAY PROG 1		on/off
03-03-09	SATURDAY PROG 1		on/off
03-03-10	SUNDAY PROG 1		on/off

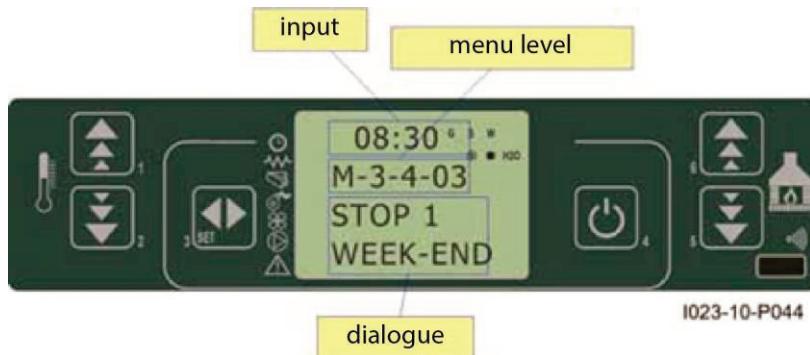
PROGRAMME 2			
menu level	setting	meaning	available values
03-03-11	START PROG 2	switching-on time reference day	time - OFF
03-03-12	STOP PROG 2		time - OFF
03-03-13	MONDAY PROG 2		on/off
03-03-14	TUESDAY PROG 2		on/off
03-03-15	WEDNESDAY PROG 2		on/off
03-03-16	THURSDAY PROG 2		on/off
03-03-17	FRIDAY PROG 2		on/off
03-03-18	SATURDAY PROG 2		on/off
03-03-19	SUNDAY PROG 2		on/off

PROGRAMME 3			
menu level	setting	meaning	available values
03-03-20	START PROG 3	switching-on time reference day	time - OFF
03-03-21	STOP PROG 3		time - OFF
03-03-22	MONDAY PROG 3		on/off
03-03-23	TUESDAY PROG 3		on/off
03-03-24	WEDNESDAY PROG 3		on/off
03-03-25	THURSDAY PROG 3		on/off
03-03-26	FRIDAY PROG 3		on/off
03-03-27	SATURDAY PROG 3		on/off
03-03-28	SUNDAY PROG 3		on/off

PROGRAMME 4			
menu level	setting	meaning	available values
03-03-29	START PROG 4	switching-on time	time - OFF
03-03-30	STOP PROG 4	switching-off time	time - OFF
03-03-31	MONDAY PROG 4	reference day	on/off
03-03-32	TUESDAY PROG 4		on/off
03-03-33	WEDNESDAY PROG 4		on/off
03-03-34	THURSDAY PROG 4		on/off
03-03-35	FRIDAY PROG 4		on/off
03-03-36	SATURDAY PROG 4		on/off
03-03-37	SUNDAY PROG 4		on/off

Sub-menu 02 - 04 - week-end program

The programmable thermostat functions can be enabled, disabled and set for the week-end (days 5 and 6, or Saturday and Sunday).



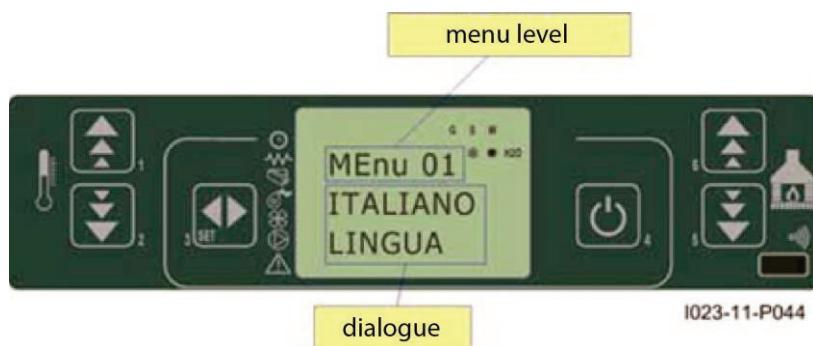
SUGGESTION: if you still do not know exactly the result you want to obtain, enable only one programme at a time to avoid confusion and unwanted stove switching on and off.

Disable the daily programme if you want to use the weekly programme. If you use the weekly programme for 1, 2, 3 and 4 programmes, never enable the week-end programme.

Always disable the weekly programme before enabling the week-end programme.

Menu 03 – select language

Use this function to select one of the languages available.



Menu 04 - stand-by-mode - activate mode 2

If you select the "STAND-BY" mode, the stove switches off after a period of time, set by Pr44, during which the room temperature remains at a value higher than the SET temperature.

Only if the following condition occurs it is then possible to switch the stove back on: TSET < (Tstove-Pr43)

FOR THE INSTALLER:

There are 3 standby modes:

Mode 1

WITH RESPECT TO THE AMBIENT SENSOR AND THE TEMPERATURE OF THE WATER

Having set the water temperature, commence operation of the stove.

1 - With the environment set reached the stove goes into stand by.

2 - With the air set not reached the stove is operational

Nearing Set Water, the stove goes into modulation and remains in modulation.

Only go into stand by when air Set has been reached.

It comes on again with a value below air Set.

The AMBIENT SENSOR takes priority

Mode 2:

WITH RESPECT ONLY TO THE WATER TEMPERATURE

Having set the water temperature, commence operation of the stove.

Nearing the Water Set, the stove goes into modulation and when the Set is exceeded, modulation and then stand by are enabled.

Below Set the stove comes on again and resumes operation.

The stove in no way considers the temperature measured by the ambient sensor of the same stove.

The WATER TAKES PRIORITY

Mode 3:

WITH RESPECT TO THE THERMOSTAT AND TO THE TEMPERATURE OF THE WATER

Having set the water temperature, commence operation of the stove.

1 - With thermostat open the stove goes into modulation and then stand by

2 - With thermostat closed the stove is operational

Nearing Set Water, the stove goes into modulation and remains in modulation. It only goes into stand by mode when the thermostat opens the contact. It turns on when the thermostat closes the contact.

The stove in no way considers the temperature measured by the ambient sensor of the same stove.

The THERMOSTAT TAKES PRIORITY

Menu 05 - buzzer mode

Set it to "OFF" to disable the buzzer.

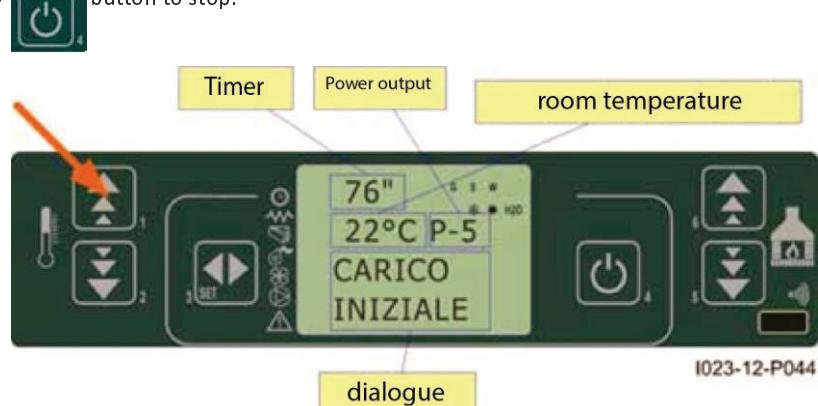
Menu 06 – initial load

This function is important if the stove is new or if the stove is off due to the absence of pellets in the hopper.

INITIAL IGNITION MUST BE PERFORMED BY AUTHORISED PERSONNEL ONLY NOT BY THE PURCHASER.

CONTACT THE SERVICE CENTER THAT WILL SEND OUT A SPECIALIST TECHNICIAN TO YOU.

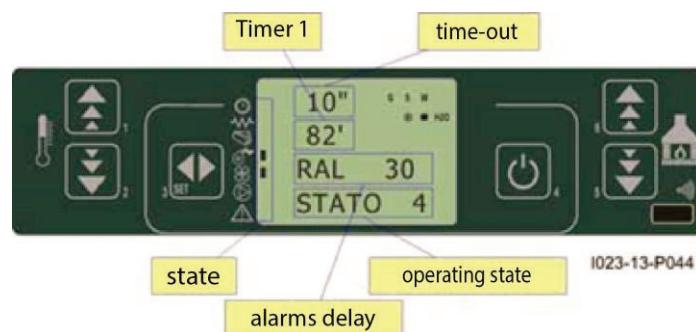
Use this function to pre-load pellets for a period of 90 seconds when the stove is switched off and cold. Press P1  button to start and P4  button to stop.



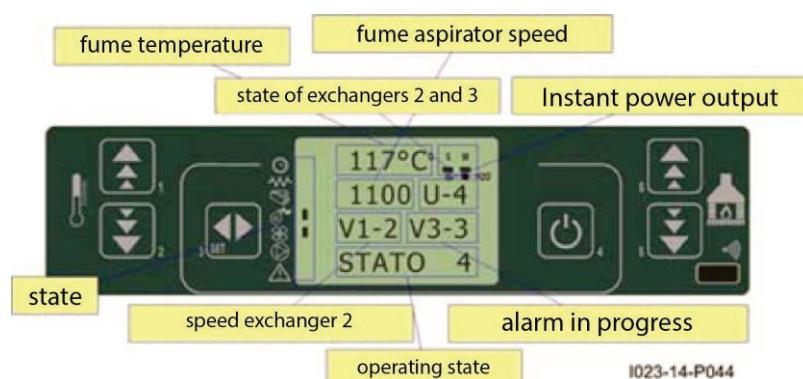
Menu 07 – stove status

This function displays the current status of all the devices connected to the stove. A few examples are included in the following pages.

page 1



page 2



page 3



User functions

Standard functioning of a control board properly installed on a forced air pellet stove is described below with reference to the functions available to users. The indications listed below refer to a control board fitted with programmable thermostat.

Before switching on the stove, the display is as in *figure 16*.

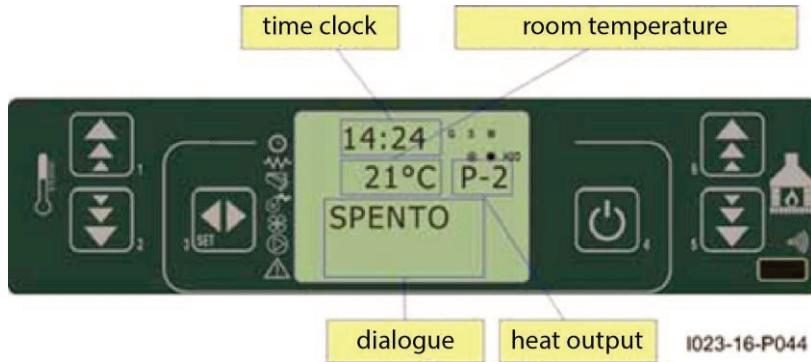


fig. 16

Stove ignition

Make sure that there are pellets in the hopper, that the burn pot is correctly positioned and clean from any combustion residues and then close the door.

Hold down P4 for a few seconds to switch on the stove. The display shows that the stove is on.

Start-up phase

The stove performs all the steps of the start-up phase according to the parameters concerning its levels and times. The display will show the wording ON, as there is no pellet loading but the fume fan is operating. PELLET LOADING state will occur where the pellets are being loaded into the burn pot. Once the pellets have started to burn and the fume temperature is increased, the display will show FIRE ON, a transition phase between ignition and operating power.

Ignition failure

The alarm is triggered when, after the period of time set by Pr01, the fume temperature has not reached the minimum value permitted (Pr13 parameter) with a gradient equal to 2°C/min.

If there are unburned pellets inside the burn pot, it is necessary to empty the burn pot before switching on the stove again. This will avoid wasted pellets and possible spillage within the combustion chamber.

If the pellets have begun to burn but the alarm state persists, wait until all the pellets are burning and then switch on again. Check that there are pellets inside the hopper.

Stove operational.

At the end of the start-up phase, if no problems occurred, the stove enters its normal working mode.

If the temperature of the stove is the same as that set, the pump will come on.

Changing set room temperature

Press the P2 button to change the set room temperature. The display shows the current SET temperature state as in *figure 19*.

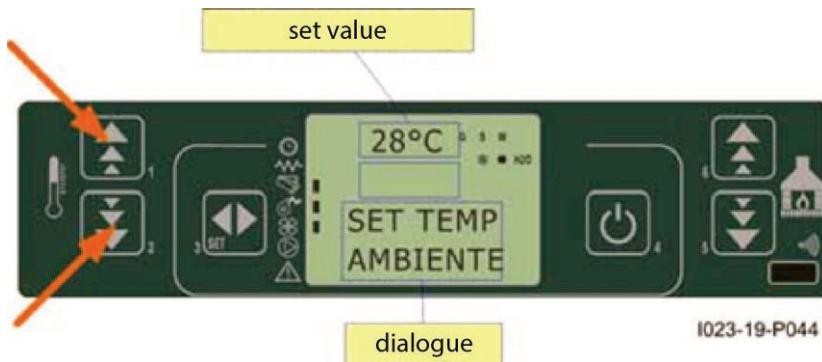


fig. 19

Changing set stove temperature

Press P1 button to change the set room temperature. The display shows the current SET temperature value.

External thermostat/chronothermostat use

If you want to use an external programmable thermostat, connect it to the TERM clamps (connector CN7 pin 7-8).

- **external thermostat:**
- **external chronothermostat:**

The stove external thermostat is enabled when the contact is closed with stove on.

Room temperature reaches the set value (SET temperature)

When the set room temperature value is reached or the fume temperature has reached the Pr13 value, the stove heat output is set automatically to the minimum value (MODULATION mode). See *figure 20*

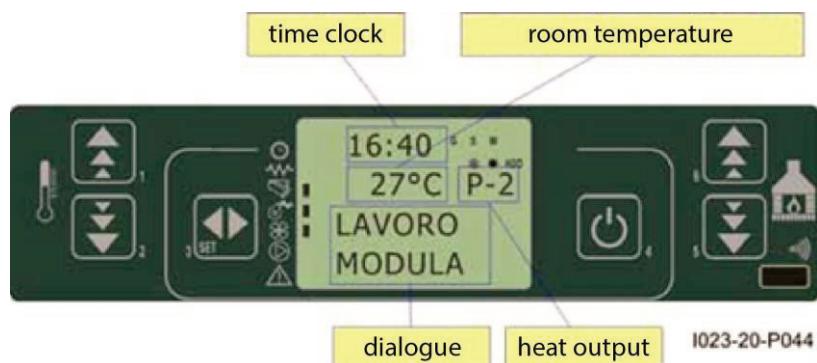


fig. 20

If the stove is in the STAND-BY mode, it switches off after the period of time set by Pr44 and after reaching the SET temperature. Re-ignition occurs after occurrence of the following condition: Tambient > (TSET + Pr43)

The same situation is achieved and the stove temperature reaches that set. The modulation status is evident and, if enabled, STANDBY status.

Cleaning of the burn pot.

When the stove is in the working mode, the "BURN POT CLEANING" mode is activated for the period set by Pr12 parameter at the intervals set by Pr03 parameter.

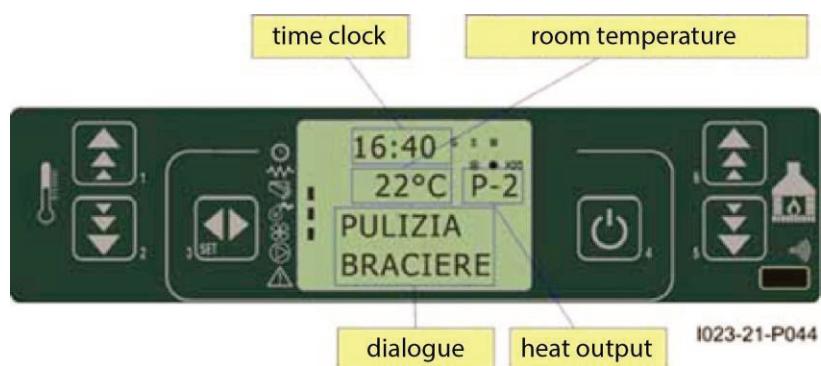


fig. 21

Stove switch off

Hold down P4 button for approx. 2 seconds to switch off the stove. The Auger tube stops immediately and the exhaust blower reaches its maximum speed value. The FINAL CLEANING phase is performed.

At the end of the period of time set by Pr39, when the fume temperature has reached a value below Pr13 parameter, the exhaust blower stops.

Stove switched off

The display will show the wording OFF. The fume fan stops working.

Stove re-ignition

It will be possible to switch the stove back on only at the end of the safety period of time set by Pr38 and if the fume temperature has reached a value below Pr13.

What happens in case of...

Pellet ignition failure

If the pellets do not ignite, the display shows the alarm message "NO ACC" as shown in figure 25.



fig. 25

I023-25-P044

black-out

Pr48 = 0

When the power is resumed after an outage, the stove enters the FINAL CLEANING phase and waits until the fume temperature reaches a value below Pr13.



fig. 26

I023-26-P044

Pr48 = T seconds

After a power outage, one of the following conditions may occur depending on the stove previous status:

<i>previous status</i>	<i>black-out duration</i>	<i>new status</i>
switched off	any	switched off
ignition	< T	ignition
pellet loading without pre-load	< T	pellet loading
pellet loading with pre-load	any	switching off
waiting for flame	< T	waiting for flame
working mode	< T	working mode
burn pot cleaning	< T	burn pot cleaning
switching off	< T	switching off

If the power outage duration is longer than T, the stove switches off.

Alarms

In case of malfunctioning the control board reports the problem and activates various procedures depending on the type of alarm. Possible alarm messages are listed below.

Cause	Display shows
Fume temperature sensor	ALARM FUME SENSOR
Fume overheating	ALARM HOT TEMP
Ignition failure	ALARM NO FIRE
Switches off when in working mode	ALARM NO FIRE
Power outage	COOL FIRE (see sect. 9.2)
Auger tube safety pressure switch	ALARM PRESS FAIL
General safety thermostat	ALARM SAFETY FAIL
Damaged exhaust blower	ALARM FAN FAIL

In case of alarm, the stove is immediately switched off.

The alarm status is reached after a set period of time (Pr11) and can be cleared by pressing the P4 button.

Fume temperature sensor alarm

The alarm is triggered when the fume temperature sensor is not working properly or is disconnected. During the alarm, the stove switches off.



fig. 27

I023-27-P044

Fume overtemperature alarm

The alarm is triggered when the fume sensor identifies a temperature exceeding 280°C. The message shown in figure 28 appears.



fig. 28

I023-28-P044

The stove switching-off phase starts immediately.

Ignition failure alarm

The alarm is triggered whenever ignition fails. The stove switching-off phase starts immediately.



fig. 29

I023-29-P044

Stove switching-off during working mode alarm

If during normal working mode, the flame goes out and the fume temperature falls below the minimum threshold (Pr13 parameter), the alarm is activated as shown in *figure 30*. The stove switching-off phase starts immediately.



fig. 30

I023-30-P044

Auger tube safety pressure switch alarm.

If the pressure switch (pressure meter) detects a value below the trigger threshold, it immediately switches off the Auger tube (to which it is connected in series) while the control board acquires this change in status through the AL2 clamp in CN4. The message "Alarm Dep Fail" appears on the display and the stove is immediately switched off.



fig. 31

I023-31-P044

General thermostat alarm

If the general safety thermostat detects a value exceeding the trigger threshold, it immediately switches off the Auger tube (to which it is connected in series), while the control board acquires this change in status through the AL1 clamp in CN4. The message "ALARM SEC FAIL" is displayed and the system shuts down. Unscrew the black cap behind the stove and press the button to reset the contact.

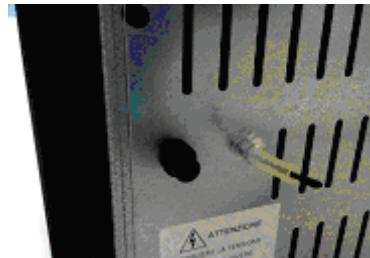


fig. 32

I023-32-P044

Damage exhaust blower alarm

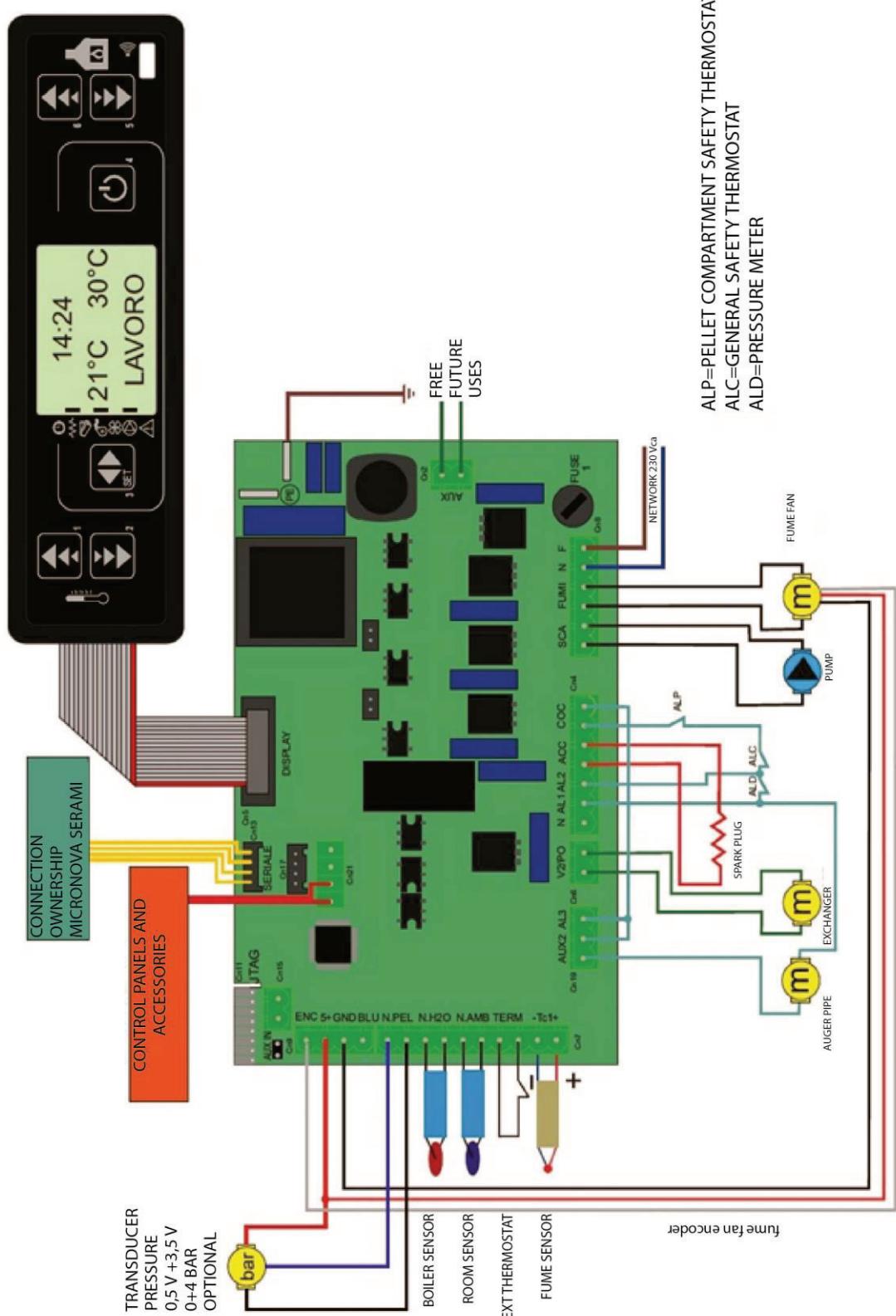
Whenever the exhaust blower stops working properly, the stove switches off immediately and the message **ALARM FAN FAIL** appears on the display. The stove switching off phase starts immediately.



fig. 33

I023-33-P044

Connections



05.1 INTRODUCTION

The stove requires a simple yet constant cleaning to guarantee top efficiency and proper functioning.

Constant maintenance by a qualified technician is recommended.

The stove should be cleaned before the cold season because it can sometimes get clogged during the summer (by nests for example) preventing exhaust fumes to flow regularly.

At the beginning of the season and in case of wind, a build-up of residue in the pipe may lead to fires. Should this happen, find below a few pieces of advice to follow:

- **Block air supply to the pipe immediately;**
- **Throw sand or kitchen salt, and not water, to extinguish fire and coals;**
- **Keep objects and furniture away from the burning pipe.**

ALSO TO PREVENT THIS TYPE OF FAULT YEARLY CLEANING OF THE VENT PIPE IS ESSENTIAL, REMOVING DEPOSITS OR ANY POCKETS OR OBSTRUCTIONS.

ATTENTION:

- **USE A DRY CLOTH TO CLEAN THE STOVE EXTERNALLY**
- **THE AUGER TUBE MUST BE COMPLETELY EMPTIED FROM PELLETS WHEN USING THE STOVE FOR THE LAST TIME AT THE END OF THE SEASON. THE AUGER TUBE MUST REMAIN EMPTY TO PREVENT IT FROM GET CLOGGED BY SAWDUST RESIDUES SOLIDIFIED DUE TO MOISTURE.**

05.2 DAILY CLEANING

Any cleaning operation must be performed when the stove is completely cold:

- Empty the ash drawer: vacuum it out or dispose of the ashes in a waste bin.
- Vacuum the combustion chamber: check that there are no embers that may still be lit. In this case your ash vacuum cleaner will catch fire.
- Remove the ash inside firebox and on door.
- Wipe the glass with a damp cloth or a damp ball of newspaper dipped into the ash. If the operation is performed with the stove hot there is a risk of the glass exploding.



ATTENTION: USE A DRY CLOTH TO CLEAN THE STOVE EXTERNALLY DO NOT USE ABRASIVE MATERIALS OR PRODUCTS THAT MAY CORRODE OR LIGHTEN THE SURFACES.

05.3 MANUFACTURER LIABILITY

The manufacturer shall not be held liable against any direct and/or indirect, criminal and/or third party liability arising from:

- failure to abide by the instructions contained herein.
- non authorised repair operations or changes.
- use not compliant with safety rules.
- installation not compliant with national current regulations and safety rules.
- insufficient maintenance;
- the use of spare parts that are not original or which are not specific to the model.

06. TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
FIRST START-UP	IT MAY BE NECESSARY TO REPEAT THE FIRST LOAD PHASE A FEW TIMES TO FACILITATE THE APPLIANCE FIRST START-UP SINCE THE AUGER TUBE IS COMPLETELY EMPTY AND IT MAY TAKE A SPECIFIC PERIOD OF TIME TO FILL.	
DISPLAY SWITCHED OFF	POWER OUTAGE	CHECK PLUG AND POWER SUPPLY.
	FAULTY ELECTRICAL CABLE	CALL TECHNICAL ASSISTANCE.
	INTERRUPTED FUSE IN CONTROL BOARD	CALL TECHNICAL ASSISTANCE.
	FAULTY CONTROL BOARD	CALL TECHNICAL ASSISTANCE.
	FAULTY DISPLAY	CALL TECHNICAL ASSISTANCE.
PELLETS NOT FED TO BURN POT	NO PELLETS	CHECK HOPPER
	SAFETY THERMOSTAT TRIGGERED	MANUALLY RESET THE THERMOSTAT LOCATED ON STOVE BACK.
	AUGER TUBE BLOCKED BY FOREIGN BODY	DISCONNECT PLUG, EMPTY HOPPER, REMOVE ANY FOREIGN BODY, SUCH AS NAILS, ETC.
	FAULTY AUGER TUBE MOTOR	CALL TECHNICAL ASSISTANCE.
	ACTIVE ALARM	SEE ALARM SECTION.
	DIRTY BURN POT	CLEAN BURN POT.
	TEMPERATURE TOO COLD	REPEAT SWITCHING-ON PHASE SEVERAL TIMES, EMPTYING THE BURN POT UPON EACH TIME.
	DAMP PELLETS	CHECK PELLET STORAGE LOCATION.
	FAULTY IGNITION PLUG	CALL TECHNICAL ASSISTANCE.
	FAULTY FUME SENSOR	CALL TECHNICAL ASSISTANCE.
PELLETS FALL BUT NOT LIT	FAULTY EXHAUST BLOWER	CALL TECHNICAL ASSISTANCE.
	FAULTY CONTROL BOARD	CALL TECHNICAL ASSISTANCE.
	POWER OUTAGE	CHECK PLUG AND POWER SUPPLY.
	NO PELLETS	CHECK HOPPER
	AUGER TUBE BLOCKED BY FOREIGN BODY	DISCONNECT PLUG, EMPTY HOPPER, REMOVE ANY FOREIGN BODY, SUCH AS NAILS, ETC.
	POOR QUALITY PELLETS	CHANGE PELLET TYPE.
	INSUFFICIENT PELLET SET VALUE AT MINIMUM HEAT OUTPUT	CALL TECHNICAL ASSISTANCE.
STOVE SWITCHES OFF DURING NORMAL FUNCTIONING	ACTIVE ALARM	SEE ALARM SECTION.
	ANTI-EXPLOSION DEVICE PLUG MISSING OR NOT CORRECTLY POSITIONED.	
	PARTIALLY CLOGGED VENT PIPE	CLEAN VENT PIPE IMMEDIATELY.
	COMBUSTION AIR NOT SUFFICIENT	CLOGGED AIR INTAKE.
	CLOGGED STOVE	CLEAN BURN POT AND ASH DRAWER.
	FAULTY / DIRTY EXHAUST BLOWER	GET IT CLEANED BY A SPECIALISED TECHNICIAN CALL TECHNICAL ASSISTANCE
POOR FLAME	INADEQUATE COMBUSTION AIR SET VALUE	CALL TECHNICAL ASSISTANCE.
	POWER OUTAGE	SWITCH STOVE ON AND OFF, CHECK PLUG.
RIS / ECO	SET ROOM TEMPERATURE REACHED / STOVE WORKS PROPERLY	
DISPLAY DOES NOT WORK	SET ROOM TEMPERATURE REACHED	INCREASE SET ROOM TEMPERATURE SO THAT APPLIANCE GOES BACK TO "WORKING" MODE.
STOP FIRE	PERIODIC CYCLE OF BURN POT CLEANING	STOVE WORKS PROPERLY
ALARM DEP	EXCESSIVE OR INADEQUATE VENT PIPE LENGTH	NON-COMPLIANT VENT PIPE
	CLOGGED OUTLET	CLEAN VENT PIPE / CALL AUTHORISED TECHNICIAN.
	BAD WEATHER CONDITIONS	STRONG WIND.

14. CERTIFICATE OF INSTALLATION AND TESTING

ALARM SIC FIREBOX OVERHEATING	LET STOVE COOL DOWN, MANUALLY RESET THERMOSTAT ON BACK.	LET STOVE COOL DOWN, MANUALLY RESET THERMOSTAT ON BACK. IF THE PROBLEM REMAINS UNSOLVED, CONTACT A SPECIALISED TECHNICIAN.
	TEMPORARY POWER OUTAGE	LET STOVE COOL DOWN, MANUALLY RESET THERMOSTAT ON BACK. SWITCH STOVE ON AGAIN.
	FAULTY EXCHANGER BLOWER	CALL TECHNICAL ASSISTANCE.
	FAULTY THERMOSTAT WITH RESET	CALL TECHNICAL ASSISTANCE.
	FAULTY CONTROL BOARD	CALL TECHNICAL ASSISTANCE.
FUME SENSOR ALARM	FAULTY FUME SENSOR	CALL TECHNICAL ASSISTANCE.
	FUME SENSOR DISCONNECTED	CALL TECHNICAL ASSISTANCE.
ALARM HOT TEMP	FAULTY FUME SENSOR	CALL TECHNICAL ASSISTANCE.
	FAULTY CONTROL BOARD	CALL TECHNICAL ASSISTANCE.
	FAULTY EXCHANGER BLOWER	CALL TECHNICAL ASSISTANCE.
	EXCESSIVE PELLET SET VALUE AT MAXIMUM HEAT OUTPUT	CALL TECHNICAL ASSISTANCE.
REMOTE CONTROL NOT CONNECTING (FIELD SEARCH)	POSSIBLE INTERFERENCE	TRY DISCONNECTING FROM THE MAINS SUPPLY ANY HOUSEHOLD APPLIANCE OR ANY OTHER APPLIANCE THAT MAY GENERATE ELECTROMAGNETIC FIELDS.
REMOTE CONTROL DOES NOT SWITCH ON	DISPLAY SWITCHED OFF	CHECK BATTERY / FAULTY REMOTE CONTROL.

07. CERTIFICATE OF INSTALLATION AND TESTING

CERTIFICATE OF INSTALLATION AND TESTING

CUSTOMER: _____

Retailer's Stamp:

ROAD: _____

CITY: _____

Installer's stamp:

POSTAL CODE: _____

PROVINCE: _____

First name: _____

Last Name: _____

TEL: _____

Address: _____ Postal code: _____

Delivery date: _____

Location: _____

Delivery date: _____

Tel: _____

Equipment mod.: _____

Serial number: _____ Year: _____

The customer acknowledges that, upon completion of the installation of the device, the works were carried out professionally and in accordance with the instructions in this user manual. The same also states that they acknowledge perfect functioning and are aware of the information needed to correctly use, operate and perform maintenance on the appliance.

Signature of the CUSTOMER

Signature of the RETAILER / INSTALLER



Copy of the retailer or installer

CERTIFICATE OF INSTALLATION AND TESTING

CUSTOMER: _____

Retailer's Stamp:

ROAD: _____

CITY: _____

Installer's stamp:

POSTAL CODE: _____

PROVINCE: _____

First name: _____

Last Name: _____

TEL: _____

Address: _____ Postal code: _____

Delivery date: _____

Location: _____

Delivery date: _____

Tel: _____

Equipment mod.: _____

Serial number: _____ Year: _____

The customer acknowledges that, upon completion of the installation of the device, the works were carried out professionally and in accordance with the instructions in this user manual. The same also states that they acknowledge perfect functioning and are aware of the information needed to correctly use, operate and perform maintenance on the appliance.

Signature of the CUSTOMER

Signature of the RETAILER / INSTALLER

08. YEARLY SCHEDULED MAINTENANCE

Date 1st maintenance _____ / _____ / _____

(Technical Assistance Centre stamp)

Date 2nd maintenance _____ / _____ / _____

(Technical Assistance Centre stamp)

Date 3rd maintenance _____ / _____ / _____

(Technical Assistance Centre stamp)

Congratulations! Thank you for purchasing an Eva Stampaggi product.

Warranty

The warranty period is **two** years if fiscally described as sold to an individual (Legislative Decree no. 24 of 02.02.2002) and **one** year if sold to a company or profession (subject to VAT).

The tax document referred to the product purchase gives validity to the warranty and the date on it shall be used to calculate the warranty period.

The warranty provided shall be subject to the following terms and conditions:

You can contact the staff in charge of the **after-sale** procedure by calling **0438.35469** or by sending an email to info@evacalor.it

Our qualified staff will provide you with information concerning technical, installation or maintenance problems.

Should it prove impossible to solve the issue over the phone, our staff will forward it to the **Technical Support Service** closest to you, which will guarantee assistance from a technician within 5 working days.

Any parts replaced during the warranty period shall be covered for the remaining period of the purchased product warranty.

The manufacturer shall not pay the customer any indemnities for the inconvenience of not being able to use the product during the period required for repairing.

Should it be necessary to replace the product, the manufacturer will deliver it to the retailer who will then deliver it to the end user following the same procedure as for the product purchase.

This warranty is valid within Italy. Should the product be sold or installed abroad the warranty shall be recognised by the distributor in charge of the relevant territory.

This warranty covers the repair or replacement of faulty parts or components or of the entire product at our sole discretion.

Whenever you require assistance, you may be asked to provide:

- Serial number
- Stove model
- Purchase date
- Purchase location
- Warranty activation certificate filled in by an authorised Technical Assistance Centre

The warranty shall not cover:

- Non-compliant installation or installation carried out by non-qualified staff (UNI10683 and UNI EN 1443);
- Initial ignition not carried out by an authorised technician;
- Improper use, such as keeping the stove switched on for too long at maximum heat output;
- Annual stove maintenance carried out by someone other than one of our authorised Technical Assistance Centres;
- Vent pipe cleaning not carried out;

The warranty will not cover the following differences due to the natural features of the covering materials:

- Veining is a main feature of stone guaranteeing its uniqueness;
- Any small cracks or cracking in ceramic or majolica surrounds;
- Any shade or tone differences in ceramic or majolica surrounds;
- Door glass;
- Gaskets;
- Ignition plug heating elements (warranty period: 1 year);
- The warranty does not cover masonry works;
- Damage to chromed and/or anodised and/or painted metal parts or on any other treated surfaces due to rubbing or bumping with other metal parts;
- Damage to chromed and/or anodised and/or painted metal parts or on any other treated surfaces due to improper maintenance and/or cleaning using chemical products or agents (said parts must be cleaned using only water);
- Damage to mechanical components or parts due to improper use or to installation carried out by non-qualified staff or not in compliance with the instructions provided with the product;
- Damage to electrical or electronic parts or components due to improper use or to installation carried out by non-qualified staff or not in compliance with the instructions provided with the product.

Attention: after purchase, please keep this warranty certificate together with the original package, installation and testing certificate and the retailer receipt.

Eva Stampaggi S.r.l.
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I - 31028 Vazzola (Treviso - Italy)
Tel. +39.0438.740433 rollover lines
Fax +39.0438.740821
E-Mail: info@evacalor.it

Retailer Stamp and Signature