Extraflame

Stufe a Pellet

PELLET STOVES

User manual

DUCHESSA IDRO

DUCHESSA IDRO STEEL

Read the instructions carefully before installation, use and maintenance.
The instruction book is an integral part of the product.

Congratulations! You are now the owner of an Extraflame stove

The Extraflame pellet stove is a great heating solution developed from the most advanced technology with top quality machining and modern design, aimed at making you enjoy the fantastic sensation that the heat of a flame gives, in complete safety.

This manual will help you to use your stove correctly. It must be read with great attention before use.

IMPORTANT

Make sure that your dealer fills the space in that is dedicated to your authorised specialist. He will help you with pleasure if you should have problems using your new pellet stove.

AUTHORISED SPECIALIST

COMPANY _____
Mr. _____
STREET NAME _____ NR. _____
POST CODE _____TOWN/CITY _____ COUNTY _____
TELEPHONE _____ FAX _____

All Extraflame products are built in compliance with the following Directives:

- ***89/106 EEC (Construction Products)***
- ***89/366 EEC (EMC Directive)***
- ***2004/108 CE (EMC Directive)***
- ***2006/95 CE (Low Voltage Directive)***

and the Standards:

- ***EN 14785***
- ***EN 60335-1***
- ***EN 60335-2-102***
- ***EN 61000-3-2***
- ***EN 61000-3-3***
- ***EN 50366***
- ***EN 55014-1***
- ***EN 55014-2***

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WARNINGS AND SAFETY DEVICES

The stoves produced by our establishment are built with attention to the individual components in a way to protect both the user and the installer from any accidents. It is therefore recommended that after any intervention on the product, authorised staff pays particular attention to the electric connections, especially the stripped parts of the wires. These must not escape from the terminal board in any situation, thus preventing possible contact with the live parts of the wire.

Installation must be carried out by authorised staff, who must provide the buyer with a declaration of conformity for the system and will assume full responsibility for final installation and as a consequence the correct functioning of the installed product. It is necessary to bear in mind all laws and national, regional, provincial and town council Standards present in the country the appliance has been installed.
Extraflame S.p.A. cannot be held responsible for the failure to comply with such precautions.

The instruction manual is an integral part of the product: make sure that it always accompanies the appliance, even if transferred to other owners or user or is transferred to another place. If it is damaged or lost, request another copy from the area technician.

This stove must be destined for the use for which it has been expressly realised. The manufacturer is exempt from any liability, contractual and extra-contractual, for injury/damage caused to persons/animals and objects, due to installation, adjustment and maintenance errors and improper use.

After the packaging has been removed, check the integrity and completeness of the contents. If this does not comply, contact the dealer where the appliance was purchased.
All electric components that make up the stove must be replaced with original spare parts exclusively by an authorised after-sales centre, thus guaranteeing correct functioning.

The stove must be serviced at least once a year, programming it in advance with the technical after-sales service.
N.B.: In case of thermo product or boiler, the product or system venting is not covered by the warranty.

For safety reasons, remember that:

- ❖ The stove must not be used by children or unassisted disabled persons.
- ❖ Do not touch the stove when you are barefoot or when parts of the body are wet or humid.
- ❖ The safety and adjustment devices must not be modified without the authorisation or indications of the manufacturer.
- ❖ Do not pull, disconnect and twist electric cables leaving the stove, even if disconnected from the electric power supply mains.
- ❖ Do not close or reduce the dimensions of the airing vents in the place of installation.
- ❖ The airing vents are indispensable for correct combustion.
- ❖ Do not leave the packaging elements within reach of children or unassisted disabled persons.
- ❖ The hearth door must always be closed during normal functioning of the product.
- ❖ Avoid direct contact with parts of the appliance that tend to heat up during functioning.
- ❖ Check for the presence of any obstructions before switching the appliance on following a prolonged standstill period.
- ❖ The stove has been designed to function in any climatic condition (also critical). In particularly adverse conditions (strong wind, freezing) safety systems may intervene that switch the stove off.
- ❖ If this occurs, contact the technical after-sales service and always disable the safety system.
- ❖ If the flue should catch fire, be equipped with suitable systems for suffocating the flames or request help from the fire service.

TECHNICAL FEATURES

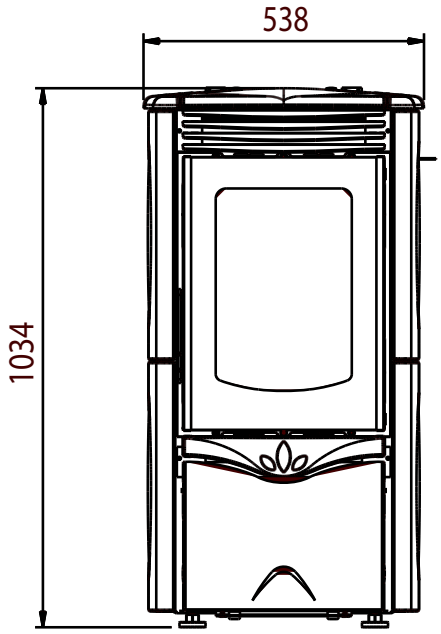
Features	U.M.	Duchesssa Idro	Duchessa Idro Steel
Weight	kg	170	158
Height	mm	1034	1034
Width	mm	538	538
Depth	mm	543	543
Flue exhaust pipe diameter	mm	80	80
Air intake pipe diameter	mm	50	50
Max. global heat output	kW	13.1	13.1
Max. useful heat output	kW	12.0	12.0
- useful output power to the air	kW	1.2*	1.2*
- useful output power to the water	kW	10.8	10.8
Minimum global heat output	kW	3.9	3.9
Min. useful heat output	kW	3.6	3.6
- useful output power to the air	kW	0.6*	0.6*
- useful output power to the water	kW	3.0	3.0
Max. hourly fuel consumption	kg/h	2.8	2.8
Min. hourly fuel consumption	kg/h	0.8	0.8
Feed-box capacity	kg	~ 20	~ 20
Recommended flue draught	Pa	~ 10	~ 10
Nominal electric output	W	300	300
Nominal voltage	Vac	230	230
Nominal frequency	Hz	50	50
Water inlet/outlet pipe diameter	"	3/4	3/4
Automatic exhaust pipe diameter	"	1/2	1/2
Pump head	m	5	5
Max. working water pressure accepted	bar	2.5	2.5

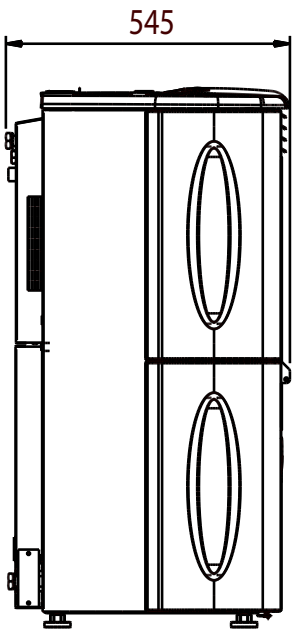
Tests performed using wooden pellets as fuel, certified according to ONORM M7135 DIN PLUS.

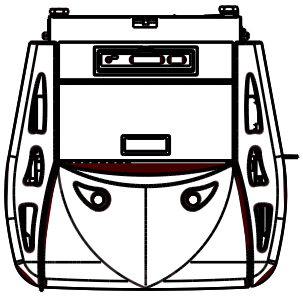
**The product has no tangential blowing hot air into the environment therefore the relative data only refers to natural convection.*

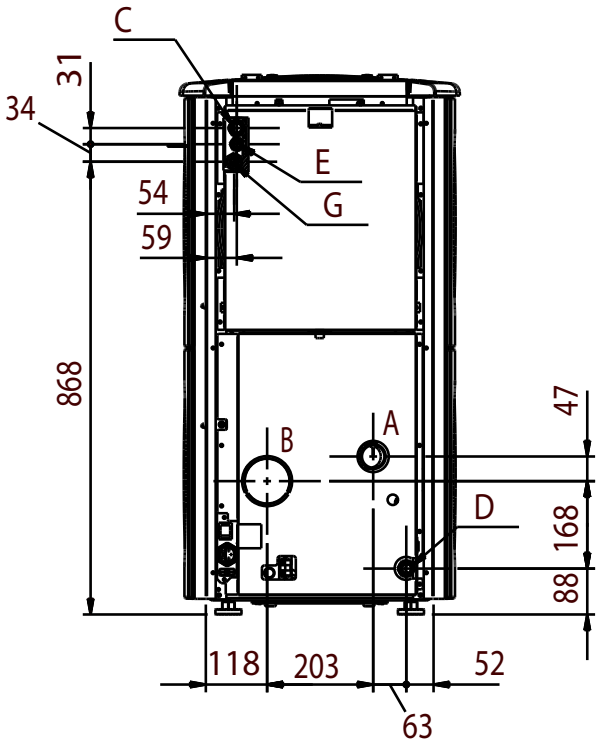
The data given above is indicative and not binding. The manufacturer reserves the right to make any modifications in order to improve product performance.

DIMA DUCHESSA IDRO



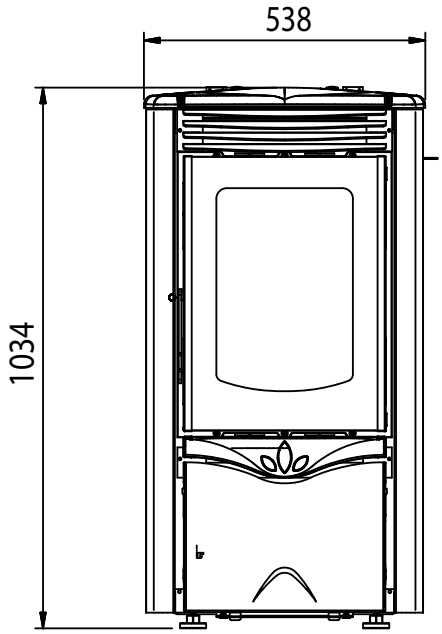


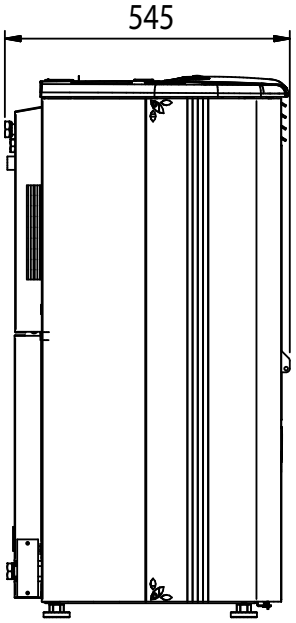


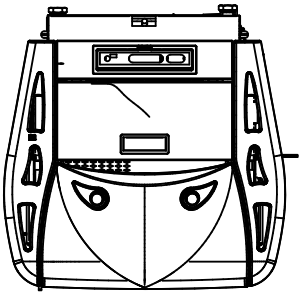


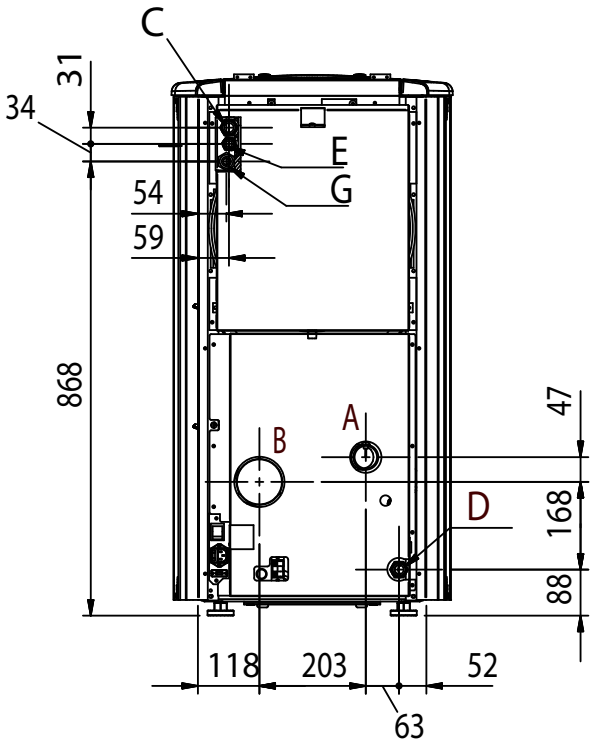
A = AIR INTAKE PIPE Ø 50 mm
B = FLUE GAS EXHAUST PIPE Ø 80 mm
C = BOILER 3/4 " FLOW/OUTLET
D = BOILER 3/4 " RETURN/INLET
E = 3 BAR 1/2 " SAFETY DRAIN
G = BOILER 3/4 " OUTLET AIR

DIMA DUCHESSA IDRO STEEL









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WHAT IS THE PELLET?

Pellets are realised by subjecting wood shavings i.e. the rejects of pure wood (without paint) sawmill, carpenter products and products from other activities connected to working and transforming wood, to very high pressures.
This type of fuel is absolutely ecological as no glues are used to hold it together. In fact, the compactness of the pellets is guaranteed through time by a natural substance that is found in wood: lignin.
As well as being an ecological fuel, as wood residues are made the most of, the pellet also has technical advantages.
Pellet density is about 650 kg/m3 and water content is equal to 8% of its weight. For this reason the pellet does not have to be seasoned in order to obtain a sufficiently adequate heat yield.
The pellet used must comply with the features described by the Standard:

- **Ö-Norm M 7135**
- **DIN plus 51731**
- **UNI CEN/TS 14961**

Extraflame recommends the use of pellets with a diameter of 6 mm with its products.

ATTENTION!

THE USE OF EXPIRED PELLETS OR ANY OTHER MATERIAL DAMAGES THE FUNCTIONS OF YOUR STOVE AND CAN DETERMINE THE INVALIDITY OF THE WARRANTY AND THE ANNEXED RESPONSIBILITY OF THE MANUFACTURER.

PELLET STORAGE

To guarantee combustion without problems, the pellets must be kept in a dry place.

PELLET FEEDING

To feed the pellet, open the tank lid located on the upper part of the stove, and empty the bag of pellets being careful they do not fall out.

figure 3.1

SAFETY DEVICES

FLUE EXHAUST BREAKAGE

If the suction device stops, the electronic board immediately blocks the pellet supply.

PELLET FEED MOTOR STOP

If the motor reducer stops for any reason, the stove goes into alarm mode and the fumes motor continues to function in order to expel all combustion gas until the minimum cooling level is reached.

DOOR MICRO SWITCH

When the stove door is opened, a safety micro switch blocks fuel feeding.

NO IGNITION

If a flame is not developed during the ignition phase, the appliance will go into no ignition alarm mode, displaying **"NO ACC"**.

TEMPORARY POWER CUT

If the power cut is less than 10 seconds, normal stove functioning will continue when the current returns. If the power cut is longer than 10 seconds, the stove "black out" alarm will occur when the current returns, taking the product to complete cooling. When cooling has ended it will re-start in automatic mode.

ELECTRIC SAFETY

The stove is protected against strong current changes by a master fuse that is found in the rear part of the stove. (2.5A 250V Delayed).

FLUE EXHAUST SAFETY DEVICE

An electronic pressure switch blocks stove functioning and takes it to alarm conditions.

PELLET TANK TEMPERATURE SAFETY VIA 85°C BULB

If there is overheating inside the feed-box this device blocks pellet feed motor functioning; restoration is manual and must be performed by an authorised technician.
The restoration of 85°C safety device is not under warranty unless the after-sales centre can show the presence of a faulty component.

WATER OVERHEATING SAFETY VIA 100° C BULB

When the temperature of the water inside the product is in proximity of 100°C, pellet feeding is blocked. If the bulb trips, restoration of the safety device is manual and must be performed by an authorised technician.
The restoration of 100°C safety device is not under warranty unless the after-sales centre can show the presence of a faulty component.

MINIMUM AND MAXIMUM PRESSURE PRESSURE SWITCH

A minimum and maximum pressure pressure switch is installed in series with the pellet motor electric energy power supply. If the pressure in the system is below 0.6 bar, the electric energy power supply is blocked to the pellet feed motor. If the pressure in the system exceeds 2.5 bar, manual rearm of the pressure switch is triggered: restoration of the safety device is manual and must be performed by an authorised technician.
Attention: any presence of air in the system could cause the minimum or maximum pressure pressure switch to also intervene. If the minimum pressure pressure switch intervenes blocking pellet feed into the machine, alarms may occur connected to the lack of fuel.

Attention

For regular functioning of the product the ideal system pressure must be calibrated at approx. 1.1 bar with cold system. Moreover, there must be no air in the system.
Extraflame recommends suitable air vent circuit in the system. Any air venting operations from the system or the product is not covered by the warranty.

DEVICES NOT ON THE LIST

During installation of the stove it is MANDATORY to adjust the system with a manometer in order to display the water pressure.

INSTALLATION AND SAFETY DEVICES

The installation, relative plant connections, commissioning and inspection of correct functioning must be carried out perfectly, in total compliance with Standards in force, both national and regional, as well as these instructions.
For Italy, installation must be carried out by professionally authorised staff (Ministerial Decree dated 22.01.2008 n°37).
Extraflame S.p.A. declines all responsibility for damages to objects and/or persons caused by the plant.

SAFETY DEVICES FOR CLOSED VESSEL PLANT

According to the UNI 10412-2 (2006) Standard in force in Italy, the closed plants must have:

- Safety valve
- Pump control thermostat
- Acoustic alarm activation thermostat
- Temperature indicator
- Pressure indicator
- Acoustic alarm

- ❖ Adjustment automatic circuit breaker switch
- ❖ Automatic circuit breaker switch (block thermostat)
- ❖ Circulation system
- ❖ Expansion system*

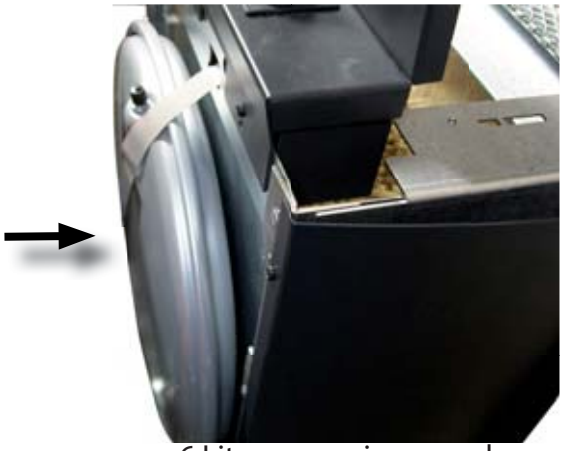
Safety dissipation system incorporated with the generator with thermal safety valve (self-activated), whenever the appliance does not have a temperature self-adjustment system.

The temperature safety sensors must be in place on the machine at a distance no greater than 30 cm from the flow connection.

Whenever the generators lack a device, those missing can be installed on the thermo product flow pipe, within a distance no greater than 1m from the machine.

The domestic heating appliances with automatic feeding must:

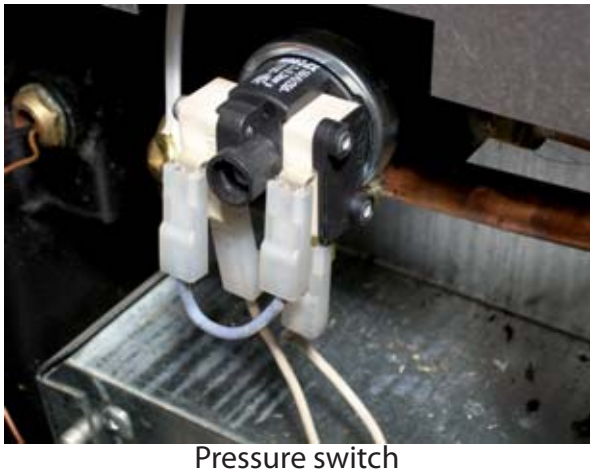
- ❖ be equipped with a fuel block thermostat, or
- ❖ be equipped with a cooling circuit prepared by the manufacturer of the appliance.
- ❖ The cooling circuit must be activated by a heat safety valve such to guarantee that the limit temperature set by the Standard is not exceeded.
- ❖ Connection between the power supply unit and the valve must be free from interceptions.
- ❖ The pressure upstream from the cooling circuit must be at least 1.5 bar.



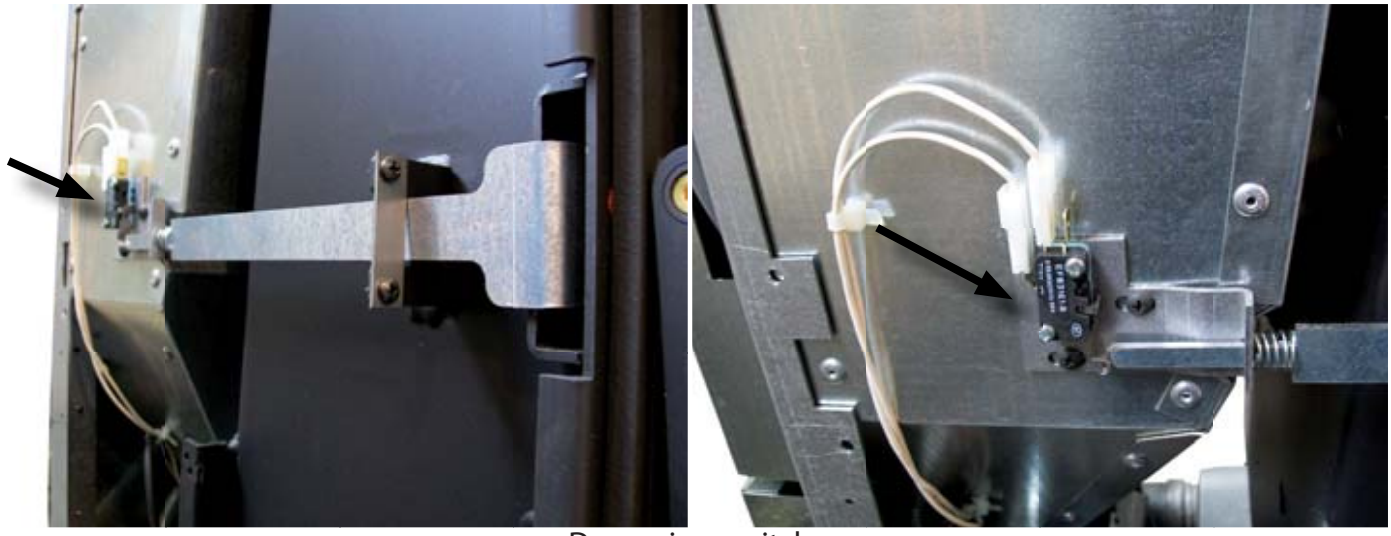
6 Litre expansion vessel

*The product expansion vessel is equal to 6 litres. The closed system expansion vessel must be dimensioned between 4% and 6% of the total volume of the plant therefore, the standard closed vessel may not be sufficient in cases of greater water volumes.

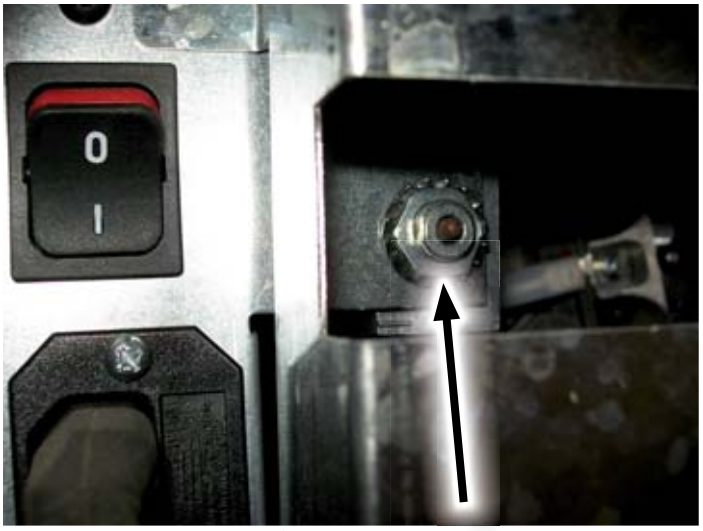
3 Bar safety valve



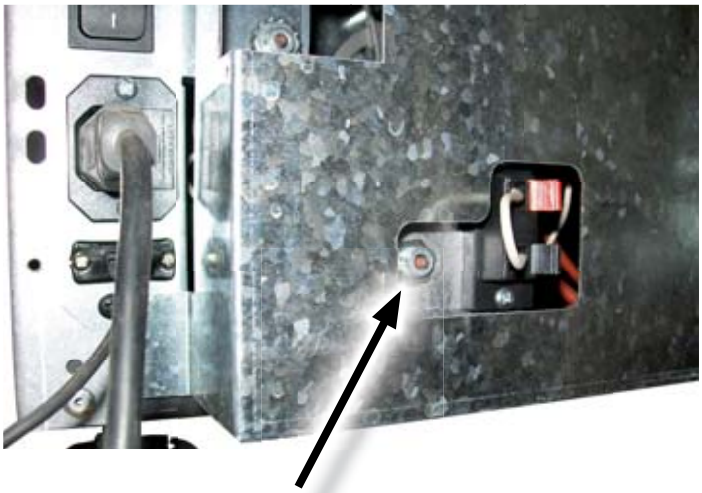
Pressure switch



Door micro switch



Rearm of the tank bulb 85°C



Rearm water bulb 100°C

ASSEMBLY AND INSTALLATION INSTRUCTIONS

The installation must be in compliance with:

- *UNI 10683 (2005) heat generators fed with wood and other solid fuels: installation.*

The chimneys have to be in compliance with:

- *UNI 9731 (1990) chimneys: classification based on thermal resistance.*
- *EN 13384-1 (2006) chimneys thermal and fluid-dynamics calculation method.*
- *UNI 7129 point 4.3.3 Fire Department dispositions, local rules and prescriptions.*
- *UNI 1443 (2005) chimneys: general requisites.*
- *UNI 1457 (2004) chimneys: terracotta and ceramic inside pipes.*

GLOSSARY

CLOSED HEARTH APPLIANCE
Heat generator which opening is only allowed through the loading of the fuel during use.

BIOMASS
Biological material, excluding the material incorporated in geological formation and transformed in fossil.

BIOFUEL
Fuel produced directly or indirectly by biomass.

CHIMNEY
Vertical pipe with the aim to collect and expel, at a convenient height from the ground, the fuel products coming from only one appliance.

SMOKE CHANNEL OR CONNECTION
Pipe or connecting element between heat generator appliance and chimney to evacuate fuel products.

INSULATION
Together of devices and materials used to prevent the transmission of heat through a wall which separates rooms with different temperature.

CHIMNEY CAP
Device positioned at chimney peak to ease the dispersion of fuel products in the atmosphere.

CONDENSATION
Liquid products which form when the fuel gas temperature is lower or equal to the water dew point.

HEAT GENERATORS
Appliance which allows to produce thermal energy (heat) through the rapid transformation, through combustion, of the chemical energy of the same fuel.

GATE VALVE
Mechanism to amend the fuel gas dynamic resistance.

SMOKE EVACUATION SYSTEMS
Flue gas exhaust system independent from the appliance constituted by a fitting or smoke channel, chimney or individual flue and chimney cap.

FORCED DRAUGHT
Air circulation by means of the fan activated by electric motor.

NATURAL DRAUGHT
Draught which determinates in a chimney/flue for effect of the volume mass difference existing between smoke (hot) and surrounding atmosphere air, without any mechanical intake aid installed inside it or at its peak.

RADIATION AREA
Area immediately near the furnace in which the heat caused by combustion is diffused, where there must be no fuelling materials.

REFLUX AREA
Area where leaking of the fuel products is verified, from the appliance towards the installation room.

INSTALLATION

The installation must be preceded by checking the chimneys, flues or unload terminals positioning of appliances similarly to:
- ❖ No installation
- ❖ Legal distances
- ❖ Limitations disposed by local administrative regulations or particular authority prescriptions.
- ❖ Conventional limitations deriving from apartment building, constraints or contracts.

ALLOWED INSTALLATIONS

Only appliances working softly respect to the room or which do not place the room in depression respect to the external environment, can exist or be installed in the room where the heat generator will be installed. Only in rooms for kitchen use are appliances for cooking food and relative hoods without extractor.

INSTALLATIONS NOT ALLOWED

In the room where the heat generator will be installed the following must not pre-exist or be installed:
- ❖ hoods with or without extractor
- ❖ collective type ventilation pipes.

Should these appliances be in rooms adjacent, communicating with the installation room, the simultaneous use of the heat generator is forbidden, where a risk exists of one of the two rooms being placed in depression respect to the other.

CONNECTION TO THE SMOKE EVACUATION SYSTEM

SMOKE CHANNEL OR CONNECTIONS

To mount the smoke channels, non-flammable elements will have to be used, ideal for resisting fuel products and their eventual condensing.
The use of flexible metal and asbestos cement pipes to connect the appliances to the flue is forbidden, even for pre-existing smoke channels.
There must be continuity between the smoke channel and the flue so that the flue does not lean on the generator. The smoke channels must not cross rooms where the installation of the combustion appliances is not allowed.
The mounting of the smoke channels must be carried out in order to guarantee smoke seal for the appliance functioning conditions, limit the forming of condensate and avoid it being transported towards the appliance.
The mounting of horizontal routes must be avoided.
For appliances where ceiling or wall non coaxial discharges respect to the appliance smoke outlet have to be reached, the direction changes will have to realised using open elbows not higher than 45° (see figures below).

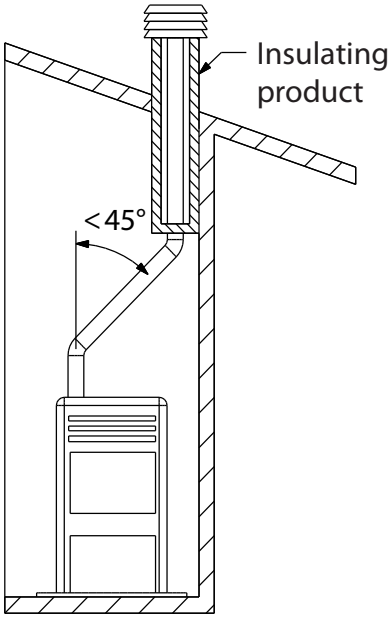


figure 5.2

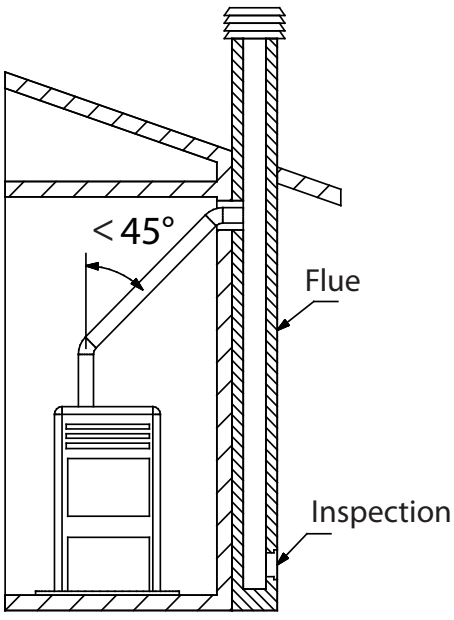


figure 5.3

For the heat generator appliances equipped with electric fan for expelling fumes, the instructions below must be followed:

- ❖ The horizontal routes will have to have a minimum upward slope of 3%
- ❖ The length of the horizontal route must be minimal and, however, not higher than 3 meters
- ❖ The number of direction changes including the one for effect of using the "T" element must not be more than 4 (if 4 bends are used, use double wall piping with an internal diameter of 120 mm).

In any case, the smoke channels must seal the fuel and condensing products and be insulated if they pass externally to the installation room.
The use of counterslope elements is forbidden.
The smoke channel must allow the recovery of soot or be brushed.
The smoke channel must be at constant section. Any section changes are only allowed at the flue coupling.

It is forbidden to have other air supply channels and pipes for plant engineering, especially if over-sized, transit inside the smoke channels. The mounting of manual draught adjustment devices on forced draught appliances is forbidden.

CHIMNEY OR INDIVIDUAL FLUE

The chimney or individual flue must respond to the following requisites:

- ❖ seal the fuel products, waterproof and adequately insulated similarly to the use conditions;
- ❖ be realised with materials which resist the normal mechanical stresses, heat, action of the fuel products and any condensing;
- ❖ have mainly vertical progress with deviations from the axis not higher than 45°;
- ❖ be adequately distanced from fuel or flammable materials through air space or opportune insulation;

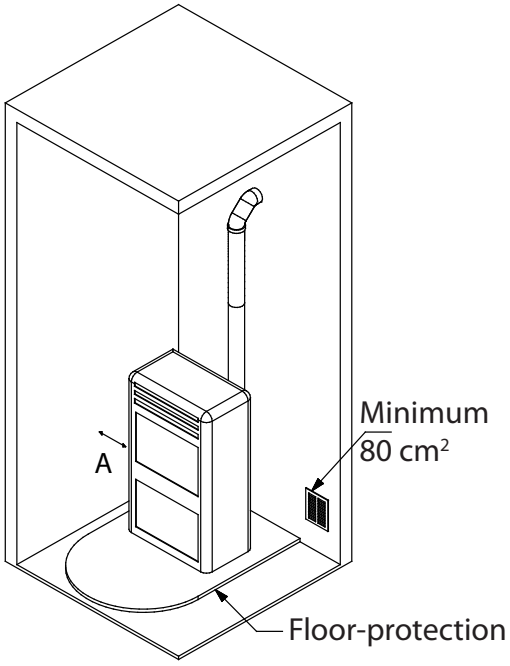


figure 5.4

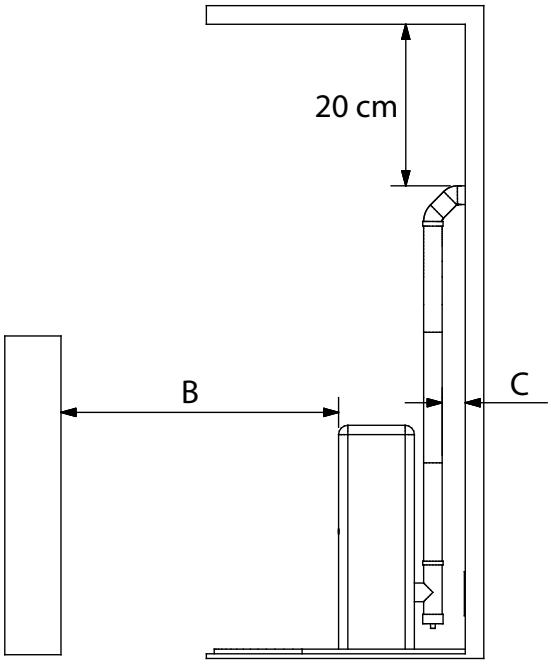
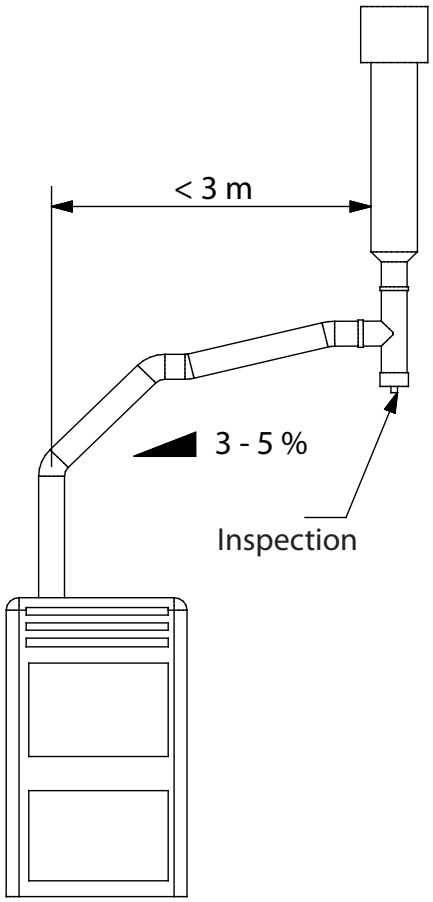


figure 5.5

REFERENCES	Abbildung 5.1 Inflammable objects	Non-inflammable objects
A	200 mm	100 mm
B	1500 mm	750 mm
C	200 mm	100 mm

- ❖ have preferably circular internal section: the square or rectangular sections must have round corners with a radius not lower than 20 mm;
- ❖ have constant internal section, free and independent;
- ❖ have rectangular section with max. ratio between the sides of 1.5.

It is recommended that the smoke pipe be equipped with a collection chamber for solid materials and any condensing situated under the smoke channel inlet, so that it can be easily opened and inspected from airtight door.



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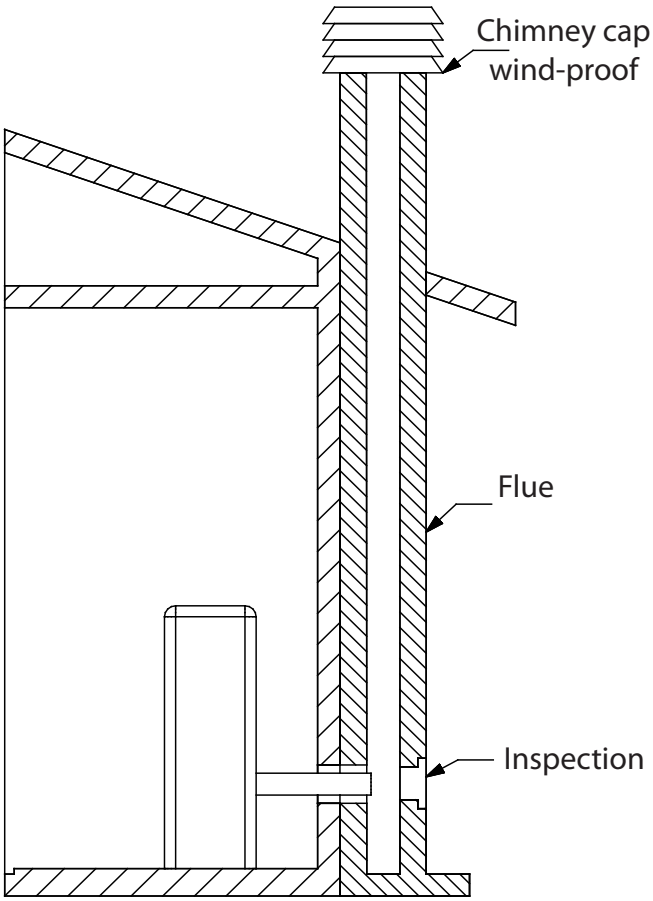

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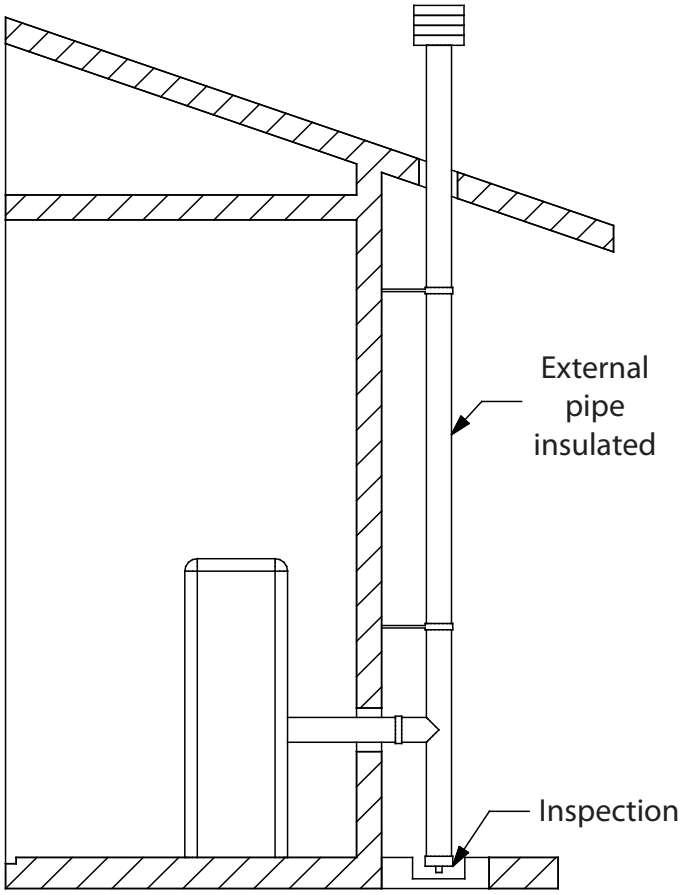

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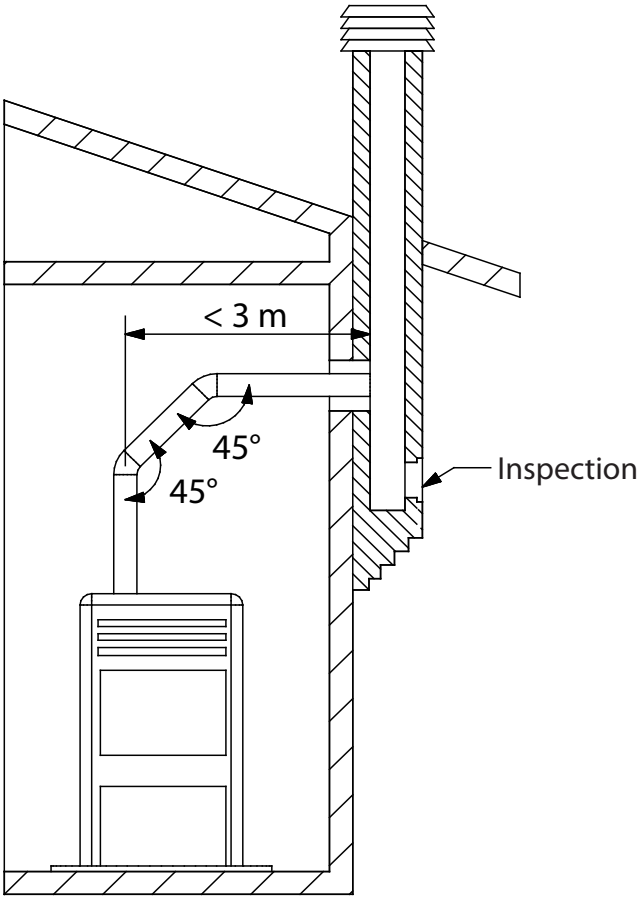


figure 5.9

APPLIANCE CONNECTION TO THE FLUE AND FUEL PRODUCTS EVACUATION

The flue must receive the discharge from only one heat generator.
The direct discharge towards closed spaces is forbidden, even with clear sky.
The direct discharge of the fuel products must be at roof and the smoke pipe must have the features provided in the "Chimney or individual flue" section.

CHIMNEY CAP

The chimney cap must comply with the following requisites:

- ❖ have an internal section equivalent to that of the chimney;
- ❖ have useful outlet section not lower than double the chimney internal section;
- ❖ be built in order to avoid rain, snow, foreign bodies penetrating the chimney and in order that, in case of winds in any direction and inclination, the discharge of the fuel products is assured.
- ❖ be positioned in a way to guarantee an adequate dispersion and dilution of the fuel products and, however, outside the reflux area in which the formation of counterpressures occurs. Such area has different dimensions and configuration depending on the covering inclination angle, it is therefore necessary to adopt the minimum heights indicated in the figure layouts below.
- ❖ The chimney cap must not have mechanical intake means.

FLAT ROOF

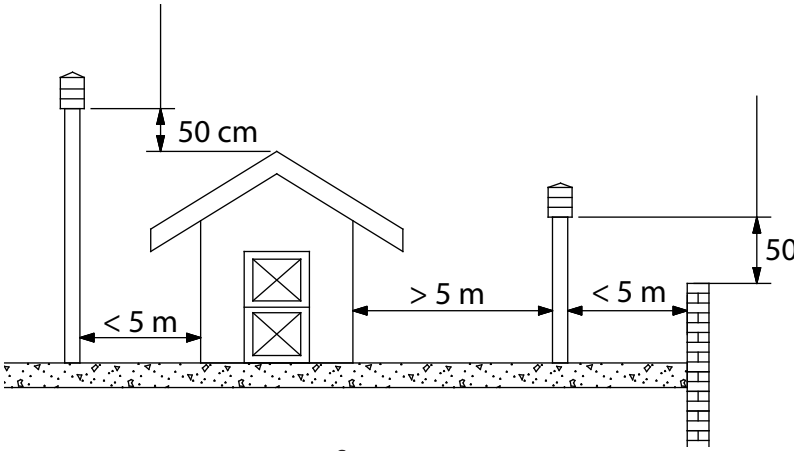


figure 5.10

SLOPING ROOF

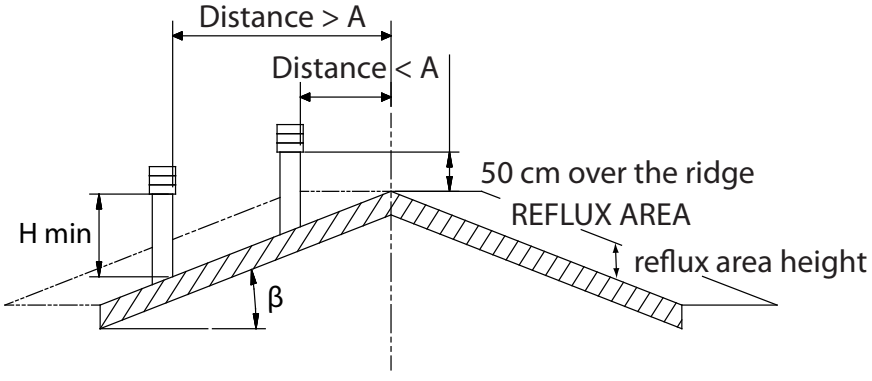


figure 5.11

CHIMNEY CAPS, DISTANCES AND POSITIONING		
Roof inclination	**Distance between the ridge and the chimney**	**Minimum chimney height (measured from outlet)**
β	**A (m)**	**H (m)**
15°	< 1,85	0,50 m over the ridge
	> 1,85	1,00 m from roof
30°	< 1,50	0,50 m over the ridge
	> 1,50	1,30 m from roof
45°	< 1,30	0,50 m over the ridge
	> 1,30	2,00 m from roof
60°	< 1,20	0,50 m over the ridge
	> 1,20	2,60 m from roof

CONNECTION TO EXTERNAL AIR INLETS

The appliance must be able to use the necessary air to guarantee regular functioning through external air inlet. The air inlets must comply with the following requisites:

1. have a total free section of at least 80 cm^2.
2. must be protected by grates, metal net or suitable protections as long as they do not reduce the minimum section stated in point 1 and positioned in order to avoid them being obstructed.

If the combustion agent air is withdrawn directly from outside through a pipe, a downward bend must be mounted outside or a protection against the wind and no grids or similar must be positioned. (it is recommended that the air vent always communicates directly with the installation room even if the air is withdrawn from outside through a pipe). The air flow can also be obtained from an adjacent room to the installation one, as long as the flow can happen freely through permanent openings communicating with the outside.

The adjacent room, respect to the installation one, must not be put in depression respect to the external environment by means of reverse draught caused by the presence of another used appliance or intake device in such room. The permanent openings in the adjacent room must comply with the above-described requisites. The adjacent room cannot be set up as garage, storage for fuelling material or activity with danger of fire.

INSULATION, FINISHINGS, COVERING AND SAFETY RECOMMENDATIONS

The coverings, independently from the materials with which they are made, must constitute a self-supporting construction respect to the heating block and not be in contact with it.

The wooden or fuelling materials beam and finishings must be positioned outside the hearth radiation area or adequately insulated.

In case coverings in fuelling material or sensible to heat exist in the space above the generator, an insulating and non fuelling protection diaphragm must be inserted.

Elements in fuelling or inflammable material like wooden furniture, curtains, etc., directly exposed to the hearth radiation, must be positioned at a safe distance. The appliance installation must guarantee easy access for cleaning the same appliance, discharge gas pipe and flue.

NATIONAL, REGIONAL, PROVINCIAL AND TOWN COUNCIL REGULATIONS

It is necessary to bear in mind all laws and national, regional, provincial and town council Standards present in the country the appliance has been installed.

HYDRAULIC SYSTEM

Certain concepts referring to Italian normative UNI 10412-2 (2006) are described in this chapter. As previously described, when installing, all national, regional, provincial and town council Standards in force provided by the country in which the appliance has been installed must be complied with.

TYPE OF SYSTEM

There are two different types of plant: Open vessel plant and closed vessel plant.
The product has been designed and realised to work with closed vessel systems.

CLOSED VESSEL SYSTEM FOR AUTOMATIC LOADING APPLIANCES

System in which the water it contains is not in direct or indirect communication with the atmosphere. Generally, the closed vessel system has one of the following expansion vessels:

- ❖ Pre-loaded closed expansion vessel with membrane impermeable to the passage of gases.
- ❖ Automatic closed expansion system with compressor and membrane impermeable to the passage of gases.
- ❖ Automatic closed expansion system with transfer pump and membrane impermeable to the passage of gases.
- ❖ Expansion system without diaphragm.

GENERALITY

The closed plants must have:

- ❖ Safety valve
- ❖ Pump control thermostat
- ❖ Acoustic alarm activation thermostat
- ❖ Temperature indicator
- ❖ Pressure indicator
- ❖ Acoustic alarm
- ❖ Adjustment automatic circuit breaker switch
- ❖ Automatic circuit breaker switch (block thermostat)
- ❖ Circulation system
- ❖ Expansion system
- ❖ Safety dissipation system incorporated with the generator with thermal safety valve (self-activated), whenever the appliance does not have a temperature self-adjustment system

The temperature safety sensors must be in place on the machine at a distance no greater than 30 cm from the flow connection.
Whenever the generators lack a device, those missing can be installed on the thermo product flow pipe, within a distance no greater than 1m from the machine.
Domestic type heating appliances with automatic feed must have a fuel block thermostat or a cooling circuit prepared by the manufacturer of the appliance, activated by a thermal safety valve such as to guarantee that the limit temperature set by the Standard is not exceeded. Connection between the power supply unit and the valve must be free from interceptions. The pressure upstream from the cooling circuit must be at least 1.5 bar.

SAFETY VALVES

The load capacity of the safety valve must allow the discharge of a quantity of vapour, not lower than:

Q / 0,58 [kg/h]

where:
Q is the useful outlet power to the generator water expressed in kilowatt.

The diameter of the minimum net transversal section of the valve inlet must not be lower than 15 mm.
The valve load pressure, equal to the calibration pressure, increased by the overpressure, cannot exceed the maximum exercise pressure of the heat generator.
The designer must check that the maximum pressure existing in every point of the system, does not exceed the maximum exercise pressure of its every component.
The safety valve must be connected to the highest part of the heat generator or outlet pipes, immediately near the generator. The length of the pipes route included between the attachment to the generator and the safety valve must not be higher than 1 m.
The connection piping of the safety valve to the heat generator must not be traceable and must not present, in any point, section lower to the inlet of the safety valve or the sum of the inlet sections in case of more valves under the individual pipe.
The discharge piping of the safety valve must be realised in order not to prevent the regular functioning of the valves and not to cause damages to persons; the discharge must flow immediately near the safety valve and be accessible and visible.
The diameter of the discharge piping must not however be lower than that of the outlet connection of the safety valve. For diameter of outlet connection it is intended the minimum internal diameter on the valve outlet upstream of the eventual internal threading.

CLOSED EXPANSION VESSEL

The appliance must be connected directly to the vessel or to the system expansion vessels unit through a pipe with internal diameter not lower than 18 mm.
The vessel maximum exercise pressure must not be lower than the calibration pressure of the safety valve, increased by overpressures, characteristic of the same valve, bearing in mind the eventual level difference between vessel and valve and the pressure generated by the functioning of the pump.
The capacity of the expansion vessel/s is evaluated depending on the total system capacity as results from the project.
The closed expansion vessels must comply with the dispositions regarding the planning, manufacturing, evaluation of conformity and use for pressure appliances. Intercepting objects or section decreases must be inserted/practiced on the connection piping, which can be constituted by system portions.
The insertion of a three-way intercepting valve which allows connection between the vessel and the atmosphere for maintenance operations is allowed. Such device must be protected against accidental manoeuvres. The connection pipe must be realised in order not to present scales or deposits storage points.
In case of more heat generators which feed the same plant or the same secondary circuit, each heat generator must be connected directly to the expansion vessel or plant expansion vessels unit, altogether dimensioned for the total volume of water contained in the same plant or the same independent circuit.

Where it is necessary to separate the individual heat generator from the expansion vessel or expansion vessels unit, a three-way tap must be applied on the connection piping between the generator and the vessel, in order to ensure, in every position, the connection of the generator with the expansion vessel or with the atmosphere.
The expansion vessels, the connecting pipes, the bleed pipes and drain pipes must be protected from freezing, where this phenomenon occurs. The solution used for this purpose is described in the design.

COMMISSIONING CHECKS

Before connecting the boiler arrange:
a) an accurate washing of all plant piping in order to remove any residues which might compromise the correct functioning of certain plant components (pumps, valves, etc.).
b) a check to verify that the flue as adequate draft, is not narrowed and that other appliances do not discharge into the flue.
This is to prevent unexpected power increases. Only after this control can the flue fitting be mounted between the boiler and the flue.
A check of the connections with pre-existing flues is recommended.

FEEDING WATER FEATURES

The chemical-physical features of the plant and reinstate water are fundamental for the correct functioning and life-span of the boiler.
Amongst the inconveniences caused by bad quality feeding water, the most frequent is the scaling of the thermal exchange surfaces.
Less frequent, but equally serious, is the corrosion of the water side surfaces of the entire circuit.
It is known that the limescale scalings, even if there are only a few millimetres, due to their low thermal conductivity, greatly reduce the thermal exchange, determining damaging located heating. It is strongly recommended in the following cases to treat the water:
a) very hard water available (higher than 20°f)
b) very extended plants
c) large water quantities restored due to leaks
d) subsequent fillings due to plant maintenance work
To treat the feeding water of the heating plants, it is recommended to always contact specialised companies.

FILLING THE PLANT

Once the hydraulic connections have been carried out, proceed to connecting the plant.
Open all air venting valves of radiators, boiler and plant.
Gradually open the load cock ensuring that the air venting valves work regularly. Using the manometer, check that the plant is pressurised. In case of closed vessel plant, reach the pressure of about 0.11 – 0.12 MPa (1.1 – 1.2 bar). For open vessel plants, the pressure in the lowest part of the boiler is given by the height of the vessel. Close the load cock and again release the air from the boiler through the venting valve.

PRODUCT FUNCTIONALITY

CONTROL BOARD

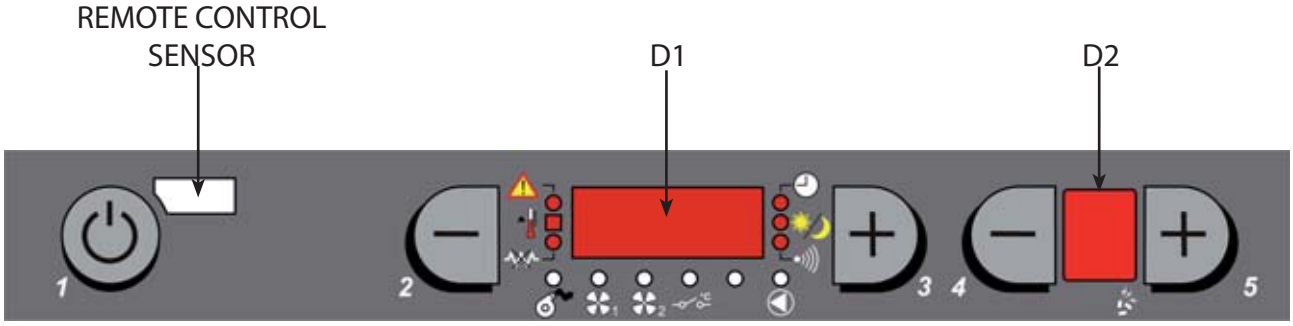


figure 7.2

1 ⇨ ON/OFF BUTTON

By pressing button 1 it is possible to switch the stove on and off automatically.

2-3 ⇨ WATER TEMPERATURE SETTING

Buttons 2 and 3 are used to adjust the water temperature which will then be distributed inside the plant.

4-5 ⇨ FUNCTIONING POWER

The power can be adjusted using buttons 4 and 5; the machine has 5 different powers

Display **D1** to view the various messages.
Display **D2** to view the power set.

CURRENT DATE AND TIME ADJUSTMENT

Follow the procedure below to adjust these parameters:

1. Remove and restore the stove power supply using the master switch or using the power supply cable.
2. The stove will first display the microprocessor version, **"TIME"**, then **"LI 3"** and then **"OFF"**.
3. When **"TIME"** appears, press button 5 once to access the adjustment mode.
4. Display **D1** will show the current time, the hours flashing while the minutes are fixed: use keys 2 and 3 to adjust the time and then confirm using key 5.
5. At this point the hours will become fixed and the minutes will start to flash: use keys 2 and 3 to adjust the minutes.

To go back to selection of the hours, press button 4 again or escape and confirm using button 1.

BASIC INSTRUCTIONS

The stove you have purchased uses pellet fuel. This type of material is obtained from natural waste from the machining of wood. By means of a special process that does not
require the use of any binding agent and additive, the waste is compressed in industrial machinery under high pressure and they become solid wooden pellets.

IT IS PROHIBITED TO BURN NON-PELLETISED RAW MATERIALS INSIDE OUR STOVES. THE FAILURE TO COMPLY WITH THESE PRESCRIPTIONS VOIDS ALL GUARANTEES AND COULD JEOPARDISE THE SAFETY OF THE APPLIANCE.

The following recommendations must be followed the first two or three times the stove is ignited:

- ❖ no children must be present because the vapours emitted can be noxious to health. Adults should also avoid long stays.
- ❖ Do not touch the surfaces as they could still be unstable.
- ❖ Air the room well several times.
- ❖ The hardening of the surfaces is terminated after several heating processes.
- ❖ **This appliance must not be used to burn waste.**

IGNITION

6. Before switching the stove on the following points must be verified:
   a. the feed-box must be full of pellets
   b. the combustion chamber must be clean
   c. the pot must be completely free and clean
   d. check the hermetic closure of the fire door and the ash drawer
   e. make sure the power supply cable is connected correctly
   f. the bipolar switch in the rear right part must be positioned on 1

7. Press button 1 for 3 seconds: display D1 will show **"AT 08"** decreasing by one number every second. In the phase the appliance performs self-analysis to check the functionality of each individual electric component. When this cycle has been completed, display D1 will show **"AC 15"** (these are the minutes when the stove attempts the ignition phase and decreases by 1 every minute that passes).
NOTE: The first time the product is used, even if the feed-box is full, there is the possibility that the pellets are not distributed into the combustion chamber for the first 15 minutes. This is because the pellet feed worm screw is empty. If no flame has developed in the stove after 15 minutes D1 will show **"NO ACC"**.
8. If points 1 and 2 have been performed correctly, when the flame is developed the stove will pass to start mode (**"AU 07"**).
9. On termination of the start phase the stove will pass to normal functioning.

ATTENTION!!
1. DO NOT USE ANY INFLAMMABLE LIQUIDS FOR IGNITION
2. DO NOT ALLOW THE BAG OF PELLETS TO COME INTO CONTACT WITH THE BOILING HOT STOVE DURING THE FILLING PHASE

N.B. In the case of continuous ignition failure, contact an authorised technician

WATER TEMPERATURE ADJUSTMENT

The appliance can control the water temperature through a digital probe which automatically adjusts the machine functioning when nearing the desired temperature.

- ❖ When the stove is started and has entered normal functioning mode, display D1 will shows the water temperature.
- ❖ Adjust the desired water temperature using keys 2 and 3. During adjustment, **"SET"** in flashing mode and the temperature to be set will appear on display D1 (the value has max travel from 60 to 80°C) whereas the functioning power will appear on display D2.
- ❖ When the desired temperature has been adjusted, let **"SET"** disappear from the display.
- ❖ Adjust the desired functioning power using buttons 4 and 5.
- ❖ When nearing the desired water temperature, the product will automatically modulate fuelling.
- ❖ When the displayed water temperature exceeds by approx. 5° that set, the machine will go in H OFF, automatically switching itself off.
- ❖ The pump continuous to work during H OFF phase.
- ❖ The machine will switch on again when the water temperature inside the stove decreases by approx. 5° from the pre-set.

Check the content of the feed-box in order to prevent the fire going out due to the lack of fuel.

N.B. It is recommended to adjust the stove at maximum power to speed up the water heating process; the stove will automatically slow down when nearing the set temperature.

Functioning summary example:

1st Ignition	2nd Start-up	3rd Work	H OFF (reached water set)	START (re-ignition)
variable times max 15	count-down	Set by customer = 70° C	75	65

N.B. The automatic switch off and start-up temperatures are subject to thermal inertia and delays controlled by the internal program, therefore a slight tolerance must be taken into account.

WORK

When ignition has taken place, the user can adjust the heating power using buttons 4 and 5. By pressing button 4 the heat power is decreased and therefore the consumption of pellets, vice versa by pressing 5 the heating power is increased and as a consequence pellet consumption.

ATTENTION!

1. The lid of the pellet container must always be closed. It must only be opened during the fuel loading phase.
2. The bags of pellets must be kept at least 1.5 metres from the stove.
3. It is recommended that the feed-box is always half full.
4. Make sure the appliance is off before filling the pellet tank.

PUMP FUNCTIONING

The standard installation of the pump inside the product starts the water circulation when the temperature of the water inside the stove reaches approx. 60°C. The pump will always function to circulate the water inside the plant, unless the water returning to the stove is below 60°C.
As soon as the product switches on, it is normal for the pump to function intermittently, given the thermal exchange with the plant.
As the pump always functions above 60°C, an always open heating area is recommended to make the product functioning homogenous, avoiding overheating blocks.

SWITCH-OFF

If wanting to manually switch off the product, press button 1 for three seconds.
When the operation has been performed, the appliance automatically enters the switch- off phase, blocking the supply of pellets.
The flue exhaust motor will continue to turn until the product temperature has fallen sufficiently.

Abbildung 7.1The pump stops when the water temperature has dropped below 60°C.

N.B. The automatic switch off and start-up temperatures are subject to thermal inertia and delays controlled by the internal program, therefore a slight tolerance must be taken into account.

THE REMOTE CONTROL

The heating power, the plant set water and the automatic appliance ignition/switch off, can be adjusted using the remote control.

S = Indicator light indicating the pressing of every key.

Display keys correspondence with remote control keys

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

figure 8.1

To switch on the stove, simultaneously press buttons 3 and 5 for 1 second; the appliance will automatically enter the ignition phase. The start phase will follow allowing the stove to develop and adjust the flame.
Once start phase is completed, the appliance enters normal functioning: it is possible to adjust the heating power by using buttons 4 and 5, whereas the plant water temperature can be adjusted using buttons 2 and 3.
To switch off the stove simultaneously press buttons 3 and 5 for three seconds; display D1 will show **"OFF"**.
The remote control works with a MN21 12 volt type battery (like open gates remote controls).
To replace the batteries open rear part lid as shown in the figures below.


figure 8.2


figure 8.3

Open by pressing the point indicated in the figure

ADDITIONAL EXTERNAL ROOM THERMOSTAT

INSTALLATION

N.B. : Installation must be performed by an authorised technician

1. Switch the appliance off using the master switch positioned on the rear of the stove.
2. Remove the plug from the socket.
3. Refer to the electrical layout to remove the default bridge and connect the two thermostat cables on to the relative clamps positioned on the rear of the machine; one is red and the other black.

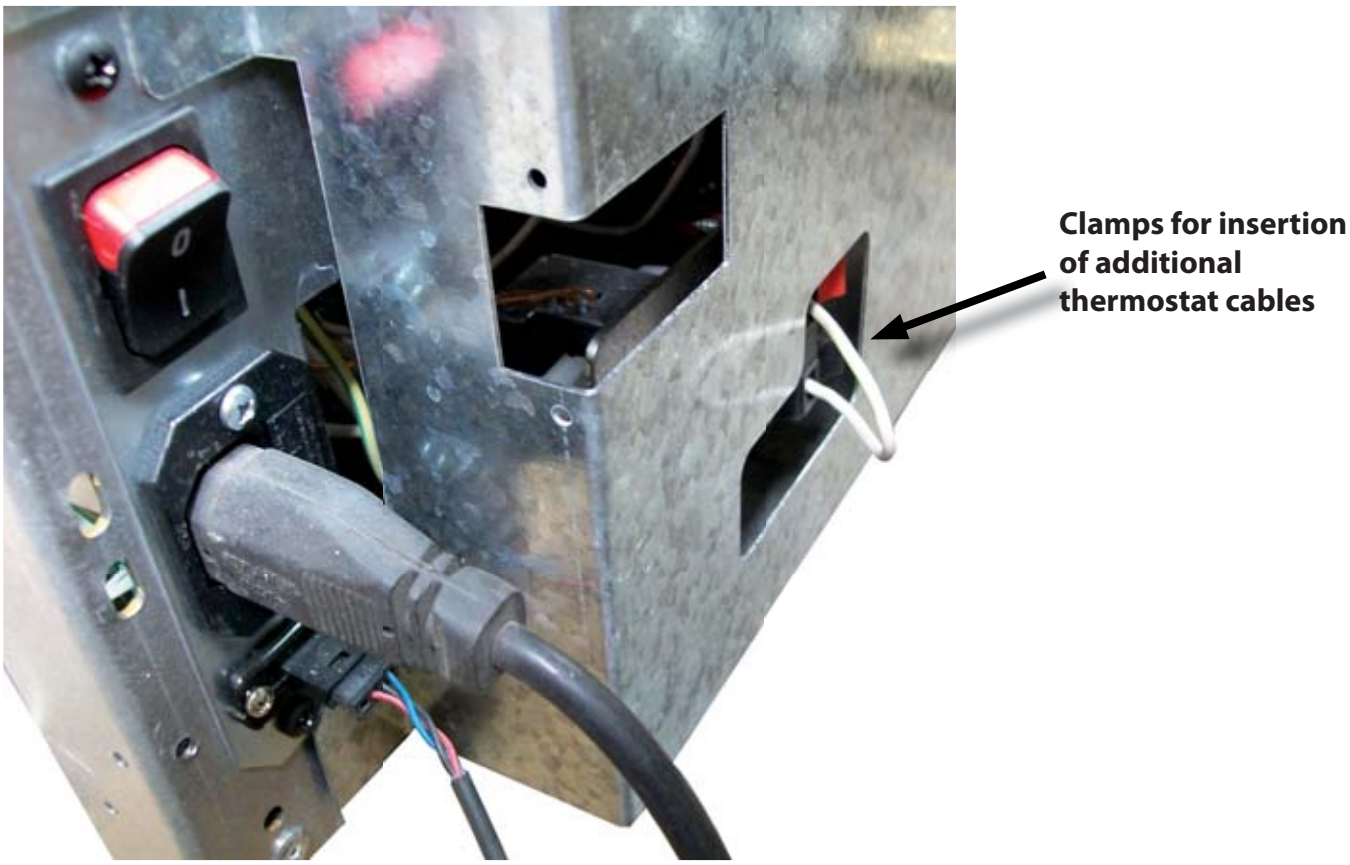
INDICATOR

When the thermostat external contact closes (not satisfied), the machine switches on.
When the thermostat external contact opens (satisfied), the machine switches off

CONTACT CLOSED = HEAT REQUEST = MACHINE IGNITION
CONTACT OPEN = NO HEAT REQUEST = MACHINE SWITCH OFF

Recommendations:

Position the external thermostat away from heat sources.
Position the external thermostat at a height of approx. 1.5 m.
If machine is in H OFF (reached water temperature), any thermostat request will be ignored.



USER PARAMETERS

USER PARAMETERS		
WEEKLY PROGRAMMER		
Display D1	**Display D2**	**Function**
off	**0**	Act./Deact. Weekly programmer
00:00	**1**	Time 1st switch-on
00:00	**2**	Time 1st switch-off
off 1	**3**	Consents for 1st switch on/off for various days
00	**4**	Installer parameter
00:00	**5**	Time 2nd switch-on
00:00	**6**	Time 2nd switch-off
off 1	**7**	Consents for 2nd switch on/off for various days
00:00	**8**	Time 3rd switch-on
00:00	**9**	Time 3rd switch-off
off 1	**A**	Consents for 3rd switch on/off for various days
PELLET FEED ADJUSTMENT		
Display D1	**Display D2**	**Function**
00	**F**	% pellet feed adjustment

WEEKLY PROGRAMMER

The weekly programmer allows to program 3 time spans within a day to use every day of the week. The ignition and switch-off times must be within the arc of one day, from 0 to 24 and not over several days:

E.g. switch-on 07:00 / switch-off 18:00 OK
switch-on 22:00:00 / switch-off 05:00:00 ERROR

First of all the current date and time must be set using the "current date and time adjustment" sequence to give a reference to the function itself.
To access programming press 3, hold it down and press 5 and then release both keys together. Shift using button 5 until **"CHRONO"** appears on display D1.
The table below gives all weekly programmer parameters.

Parameter	**Function**	**Keys adjustment**	**Value**	**Key confirmation**
Display D2			**Display D1**	
ON/OFF	Act./Deact. weekly programmer	2 o 3	**CRONO**	5
UT 1	Time 1st switch-on	2 o 3	**OFF** or from 00:00 to 23:50	5
UT 2	Time 1st switch-off	2 o 3	**OFF** or from 00:00 to 23:50	5
UT 3	Consents for 1st switch on/off for various days	2 o 3	**ON/OFF 1**, **ON/OFF 2**, … **ON/OFF 7**	5
UT 4	**Installer parameter**	2 o 3	**0**	5
UT 5	Time 2nd switch-on	2 o 3	**OFF** or from 00:00 to 23:50	5
UT 6	Time 2nd switch-off	2 o 3	**OFF** or from 00:00 to 23:50	5
UT 7	Consents for 2nd switch on/off for various days	2 o 3	**ON/OFF 1**, **ON/OFF 2**, … **ON/OFF 7**	5
UT 8	Time 3rd switch-on	2 o 3	**OFF** or from 00:00 to 23:50	5
UT 9	Time 3rd switch-off	2 o 3	**OFF** or from 00:00 to 23:50	5
UT A	Consents for 3rd switch on/off for various days	2 o 3	**ON/OFF 1**, **ON/OFF 2**, … **ON/OFF 7**	1

Let's suppose that the weekly programmer function is to be used and 3 time periods are to be used in the following way:

1st time span: from 08:00 to 12:00 every day of the week excluding Saturday and Sunday
2nd time span: from 15:00 to 22:00 only Saturday and Sunday
3rd time span: not used

Let's set the data.

Parameter 0 (D2=UT 0(flashing); D1=ON]
Use buttons 2 and 3 to activate the weekly programmer by setting the value on display D2 at ON.

Parameter 1 (D2=UT 1(flashing); D1=E.g. "08:00:00"]
Use buttons 2 or 3 to set "08:00", which corresponds to the switch-on time of the 1st time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 2 (D2=UT 2(flashing); D1=E.g. "12:00:00"]
Use buttons 2 or 3 to set "12:00:00", which corresponds to the switch-off time of the 1st time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 3 (D2=UT 3(flashing); D1= "OFF 1"]
Activate the first time span for every day of the week except Saturday and Sunday. To do this use keys 2 and 3 in the following way:
a. key 3 - scroll the various days
b. key 2 - enable/disable (ON/OFF) the 1st time span for that day

Example:

Day	Initial value	Function key 2	Final value	Function key 3
MONDAY	**OFF 1**	OFF 1 ⇨ ON 1 and vice versa	**ON 1**(time span active)	Go to next day
TUESDAY	**OFF 2**	OFF 2 ⇨ ON 2 and vice versa	**ON 2**(time span active)	Go to next day
WEDNESDAY	**OFF 3**	OFF 3 ⇨ ON 3 and vice versa	**ON 3**(time span active)	Go to next day
THURSDAY	**OFF 4**	OFF 4 ⇨ ON 4 and vice versa	**ON 4**(time span active)	Go to next day
FRIDAY	**OFF 5**	OFF 5 ⇨ ON 5 and vice versa	**ON 5**(time span active)	Go to next day
SATURDAY	**OFF 6**	OFF 6 ⇨ ON 6 and vice versa	**OFF 6**(time deactivated)	Go to next day
SUNDAY	**OFF 7**	OFF 7 ⇨ ON 7 and vice versa	**OFF 7**(time deactivated)	Go to next day

To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 4 (D2=UT 4(flashing); D1= "00"]
N.B. This parameter is reserved for the after-sales service and must not be modified.

Parameter 5 (D2=UT 5(flashing); D1=E.g. "15:00:00"]
Use buttons 2 or 3 to set "15:00", which corresponds to the switch-on time of the 2nd time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 6 (D2=UT 6(flashing); D1=E.g. "22:00:00"]
Use buttons 2 or 3 to set "22:00", which corresponds to the switch-off time of the 2nd time span. To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 7 (D2=UT 7(flashing); D1=E.g. "OFF 1"]
Activate the second time span only Saturday and Sunday. To do this use keys 2 and 3 in the following way:
a. key 3 - scroll the various days
b. key 2 - enable/disable (ON/OFF) the 1st time span for that day

Example:

Day	Initial value	Function key 2	Final value	Function key 3
MONDAY	**OFF 1**	OFF 1 ⇨ ON 1 and vice versa	**OFF 1**(time deactivated)	Go to next day
TUESDAY	**OFF 2**	OFF 2 ⇨ ON 2 and vice versa	**OFF 2**(time deactivated)	Go to next day
WEDNESDAY	**OFF 3**	OFF 3 ⇨ ON 3 and vice versa	**OFF 3**(time deactivated)	Go to next day
THURSDAY	**OFF 4**	OFF 4 ⇨ ON 4 and vice versa	**OFF 4**(time deactivated)	Go to next day
FRIDAY	**OFF 5**	OFF 5 ⇨ ON 5 and vice versa	**OFF 5**(time deactivated)	Go to next day
SATURDAY	**OFF 6**	OFF 6 ⇨ ON 6 and vice versa	**ON 6**(time span active)	Go to next day
SUNDAY	**OFF 7**	OFF 7 ⇨ ON 7 and vice versa	**ON 7**(time span active)	Go to next day

To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 8 (D2=UT 8(flashing); D1=E.g. "OFF"]
Set at **"OFF"** using buttons 2 or 3, which is found before the time **"00:00"**, in a way to disable the switch-on of the 3rd time period.
To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter 9 (D2=UT 9(flashing); D1=E.g. "OFF"]
Set at **"OFF"** using buttons 2 or 3, which is found before the time **"00:00"**, in a way to disable the switch-off of the 3rd time period.
To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.

Parameter A (D2=UT A(flashing); D1=E.g. "OFF 1"]
At this point the values introduced in this parameter have no value as the ignition and switch-off of the 3rd time span have been disabled.
To confirm and continue programming, press button 5.
Press button 4 to go back to the previous parameter.
Press button 1 to escape.

N.B.: The relative indicator light on the control board will switch on when the weekly programmer is active (see display table description).

TO DEACTIVATE THE WEEKLY PROGRAMMER enter user programming by pressing key 3 and holding it down press key 5. Shift using button 5 until **"CHRONO"** appears on display D1 and set **"OFF"** in display D2 using keys 2 and 3. Successively press key 1 to confirm and escape.
The manual controls, from the display or remote control, always remain priority with respect to programming.

PELLET FEED ADJUSTMENT

If the stove has functioning problems owing to the quantity of pellets, adjust pellet feeding directly from the control board.
The problems correlated to the amount of fuel can be divided into 2 categories:

1. LACK OF FUEL:

❖ the stove can never develop a suitable flame, tending to remain very low even at high powers
❖ at minimum power the stove tends to almost switch off taking the stove into **"NO PELL"** alarm conditions.
❖ When the stove displays the **"NO PELL"** alarm, there may be non-burned pellets inside the pot.

2. EXCESS FUEL:

❖ the stove develops a very high flame even at low power
❖ the panoramic glass is very dirty, obscuring it almost totally
❖ the brazier tends to become encrusted, blocking the holes for air intake due to the excessive pellet feed, as it is only burned partially

N.B. If the problem occurs after only a few months working, check that routine cleaning stated in the stove booklet, has been carried out correctly.

The regulation to be performed is a percentage. Therefore a modification of this parameter will lead to a proportional variation of all stove feeding speeds.

To access the percentage adjustment of pellet feeding, enter the user programming by pressing key 3 and, holding this down, press key 5.
At this point use key 5 to move within the menu until **"UT F"** appears on display D2.
If, inadvertently, progress is made beyond this parameter, exit using key 1 and repeat the operation.
The value **"00"** will appear on display D1: keys 2 and 3 can be used to adjust the percentage increase/decrease desired by 5 points per time (the parameter can be varied with a maximum travel from –50 to +50).

Adjustment table

LACK OF FUEL	Increase the percentage value by 5 points and try the stove with the new calibration for at least half an hour. If the problem is attenuated, but not solved, increase by another 5 points. Repeat the operation until the problem is solved. If the problem cannot be resolved, contact the after-sales service.
EXCESS OFFUEL	Decrease the percentage value by 5 points and try the stove with the new calibration for at least half an hour. If the problem is attenuated, but not solved, decrease by another 5 points. Repeat the operation until the problem is solved. If the problem cannot be resolved, contact the after-sales service.

When the adjustment has been made, press button 1 to conform and escape.

N.B. Pellet feed adjustment carried out by the after-sales centre is not under warranty.

CLEANING

Maintenance operations guarantee correct functioning of the product through time.
Failure to comply with these operations can jeopardise the safety of the product.

BRAZIER CLEANING

The brazier must be cleaned every day.

- ❖ Remove the brazier from the relevant compartment and free the holes using the appropriate fire irons supplied.
- ❖ remove the ash from the pot using a suction device
- ❖ suck the ash deposited in the pot compartment

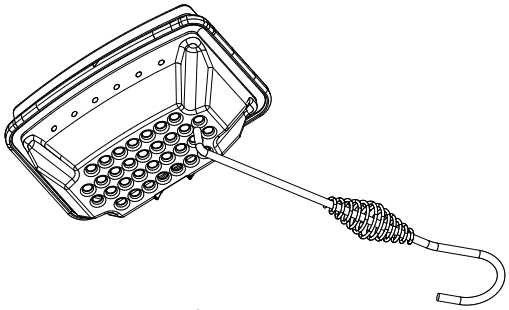


figure 11.1

ATTENTION!!!

Removal of the divider jeopardises the safety of the product and leads to the immediate voiding of the warranty period. In the case of wear or deterioration request after-sales assistance for replacement of the part (replacement that is not under guarantee as the component is subject to wear).

figure 11.2

USING THE SCRAPERS

Cleaning of the heat exchangers guarantees constant heat output through time. This type of maintenance must be performed at least once a day. To do this, just use the relevant scrapers positioned in the upper part of the stove, making the high/low movement several times. The rods must be activated simultaneously.

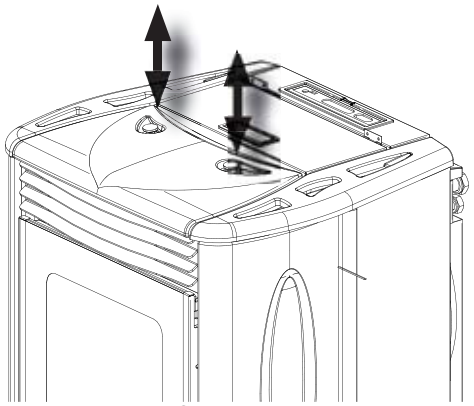


figure 11.3

DOOR, ASH DRAWER AND BRAZIER GASKETS

The gaskets guarantee the tightness of the stove and its consequent good functioning.
These must be checked regularly: if they should be worn or damages they must be replaced immediately.
These operations must be carried out by a qualified technician.
To clean the ash drawer, remove the lower door by pressing downwards (figure 11.4), extract the ash drawer and empty it (figure 11.5).

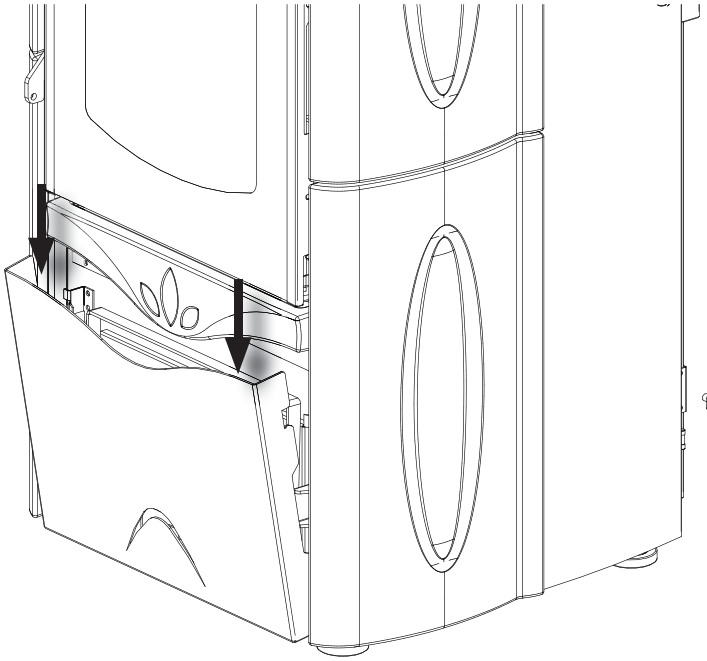


figure 11.4

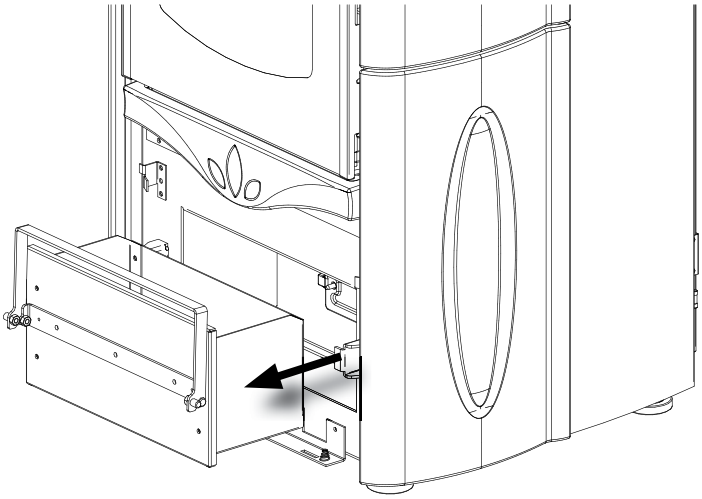


figure 11.5

N.B. For correct functioning, the stove must undergo routine maintenance by a qualified technician, at least once a year.

If the power supply cable is damaged, it must be replaced by the after-sales service or by a similarly qualified person, so as to avoid al risks.

CONNECTION TO THE FLUE

Suck and clean the pipe that leads to the flue yearly or anytime that it is necessary. If there are horizontal tracts the residues must be removed before they can obstruct flue passage.

ATTENTION!

NON-CLEANING JEOPARDISES SAFETY.

PRODUCT DISPLAY TABLES

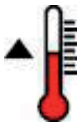
SIGNALS		
Signals Display	**Reason**	**Solution**
ATTE	A new ignition is attempted when the stove has just been switched off (normal switch-off or caused by an alarm).	When the stove switches off (normal or caused by an alarm) it is necessary to wait until complete fumes motor switch off and then clean the brazier. The stove can only be re-ignited when these operations have been performed.
STBY	Stove off waiting for re-ignition.	In this mode the machine can be switched on/off by means of an additional thermostat.
HOFF	The temperature of the water has exceeded the set threshold by more than 5°C.	Check the correct functioning of the hydraulic plant. On lowering of the water temperature (5° below the set threshold) the machine will re-start in automatic mode. To exclude any stove re-ignition just hold button 1 down for 3 seconds, taking the stove to **OFF**.
RAF / BLAC OUT	No current on the main power supply.	After the complete switch-off cycle the stove will re-ignite automatically.
PUL	Automatic pot cleaning is in progress.	The automatic pot cleaning is performed at pre-established intervals of continued working. The automatic cleaning does not start if the stove is in 1st power. **Attention! It is however recommended to manually clean the brazier every day.**

ALARMS

Signals Display D1	Reason	Solution
	Indicates the presence of an alarm	It is on in the presence of one of the alarms described below and is accompanied by the relative signal in display D1, which identifies the cause. To reset the alarm, just hold key 1 down for 3 seconds when the stove is completely cold. If flashing it indicates the deactivation of the depression sensor. **The sensor restoration operations must be carried out by an authorised technician.**
FUM FAIL	The fumes motor is blocked. The speed control probe is broken. No power supply to the fumes motor.	**The restoration operations must be carried out by an authorised technician.**
FUMI TC	The fumes probe is broken. The fumes probe is disconnected from the board.	**The restoration operations must be carried out by an authorised technician.**
HIGH TEMP	The flue temperature has exceeded 310°C. Excessive pellet feed.	Check pellet flow (see *"Pellet feed adjustment"*). Check that the machine is clean, including the flue route. Avoid resting cloths on the machine. **Other restoration operations must be carried out by an authorised technician.**
DEPR FAIL	The flue exhaust pipe is blocked. The combustion chamber is dirty. The depression sensor is faulty. The ash drawer is not closed correctly. The door is not closed correctly.	Check cleanliness of the fumes pipe and the combustion chamber. Check hermetic closure of the ash drawer. Check hermetic door closure. **Other restoration operations must be carried out by an authorised technician.**
NO ACC	The pellet feed-box is empty. The ign-plug is faulty or out of position. Pellet feed calibration inadequate.	Check for the presence of pellets in the feed-box. Check the procedures described in the "*Ignition*" chapter. Adjust pellet flow (see *"Pellet feed adjustment"*). **Other restoration operations must be carried out by an authorised technician.**
NO ACC BLAC OUT	No current during the ignition phase.	Take the stove to off conditions using key 1 and repeat the procedures described in the *"Ignition"* chapter. **Other restoration operations must be carried out by an authorised technician.**
NO PELL	The pellet feed-box is empty. No pellet feed. The loading motor must still settle. The motor reducer does not feed pellets.	Check for the presence of pellets in the feed-box. Adjust pellet flow (see *"Pellet feed adjustment"*). **Other restoration operations must be carried out by an authorised technician.**
HIGHT H2O	The circulation pump is blocked. Insufficient plant pressure. Presence of air in the system.	Check the hydraulic plant pressure. Bleed the air from the plant. **Other restoration operations must be carried out by an authorised technician.**

ATTE + ALLARME	Attempt to release the alarm with stove still in cooling mode	Every time the stove displays one of the alarms listed above it will switch-off automatically. The stove will block any release attempt during this phase, showing the alarm itself and **ATTE** alternately on the display. The alarm can only be released using button 1 when it switch-off has been completed.
NR. TELEFONO - - - - - - - - - -	Telephone number display.	During the display of an alarm, the type of alarm detected and the telephone number of the After-sales Centre will flash alternatively. If the number has not been introduced the display will show hyphens.

LUMINOUS INDICATORS

Signals Indicator light	Reason	Solution
	It indicates the *Weekly programmer* function	It is on/off when the *Weekly programmer* function is active/deactivated. For all settings relative to the following function see the *"Weekly programmer"* function.
	Indicates modulation of the fumes motor	When LED flashes the fumes motor is modulating, if permanent it is not.
	It indicates deactivation of the ign-plug	It is off/on when the electrode is activated/deactivated. **To restore the functioning of the component, contact an authorised technician.**
	It indicates functioning of the fumes motor	It is on/off when the fumes exhaust motor is activated/deactivated.
	It indicates functioning of the pellet feed motor	It is on/off when the pellet feed motor is activated/deactivated. During normal functioning the following indicator switches on flashing.
	Not used	Not used
	Not used	Not used
	Not used	Not used
	It indicates pump functioning	It is off/on when the circulation pump is activated/deactivated.
	It indicates the communication between remote control and stove	Every time a key is pressed on the remote control the indicator must switch on. If the indicator is always on it indicates that the communication between remote control and stove is blocked. **To restore the functioning of the component, contact an authorised technician.**

WARRANTY

EXTRAFLAME S.p.A. reminds you that the manufacturer is the owner of the rights envisioned by the Legislative Decree dated 2 February 2002, n. 24 and the following warranty does jeopardise these rights.

This warranty certificate, granted by Extraflame S.p.A., with offices in Montecchio Precalcino (VI), via dell'Artigianato 10, refers to all stove components supplied by Extraflame S.p.A. and is extended to the free repair or replacement of any part of the defective appliance, on the condition that:

- ❖ the same defect is detected within 2 YEARS from the product delivery date and is communicated to an Extraflame S.p.A. After-Sales Centre within 2 months from its discovery;
- ❖ is recognised as such by an Extraflame S.p.A. After-Sales Centre

No cost or expense will be charged to the client for interventions that the Extraflame S.p.A. After-Sales Centre will carry out if provided by the warranty certificate.

WARRANTY CONDITIONS

The warranty is considered valid on the condition that:

1. The stove is installed in compliance with the Standards in force on this subject, the prescriptions contained in this manual and professionally qualified staff.
2. The customer has filled-in and signed the warranty certificate, validated by the Extraflame S.p.A. Technical After-sales Service or the dealer.
3. The warranty document, filled-in and accompanied by the receipt, must be kept and shown to staff of the Extraflame S.p.A. Technical After-sales Service in the case of intervention.

The warranty is not considered valid in the following cases:

1. The warranty conditions described above have not been respected.
2. Installation has not been performed with respect to the Standards in force regarding the provisions described in this manual.
3. Negligence of the customer due to lack of or incorrect maintenance of the product.
4. Presence of electric and/or hydraulic plants that do not comply with the standards in force.
5. Damages deriving from atmospheric agents, chemicals, electro-chemicals, improper use of the product, modifications or tampering of the product, inefficacy and/or unsuitability of the flue and/or other causes not deriving from the manufacture of the product.
6. Damage caused by normal corrosion or deposits typical of the central heating systems (condition valid for water products).
7. Damage caused to the stove owing to the use on non-original spare parts or consequences of interventions carried out by technical staff not authorised by Extraflame S.p.A.
8. Improper or negligent use of the stove.
9. All damage caused by transport. It is therefore recommended to carefully check the goods on receipt, informing the dealer of any damage immediately, making a note on the transport document and on the carrier's copy.

Extraflame S.p.A. is not liable for any damage/injury that can, directly or indirectly, affect persons, objects and pets as a consequence of failure to comply with the prescriptions indicated in this manual and the standards in force regarding installation and maintenance of the appliance.

The following are excluded from the warranty:

- ❖ The gaskets, all ceramic or toughened glass, coverings and cast iron or Ironker grids, the painted, chrome or gold -plated details, the majolica, the handles and the electric cables.
- ❖ Colour variations, crackles and slight size differences f the majolica parts are not a reason for claims, as they are natural features of the materials themselves.
- ❖ Masonry work.
- ❖ The plant particulars for the production of domestic water not supplied by EXTRAFLAME S.p.A. (water products only).
- ❖ The heat exchanger is excluded from the warranty unless an adequate anti-condensate circuit is realised (water products only).
- ❖ The warranty also excludes any calibration or regulation interventions of the product in relation to the type of fuel or the type of installation.
- ❖ The operations required to vent the air from the hydraulic system or from the product.

Further clauses

If during normal use of the product defective or badly working particulars should be detected, the replacement of such particulars will be free of charge, ex dealer who made the sale or ex our area After-Sales Centre.
For products sold abroad, the same situations will always be free of charge, ex our establishment, with the exception of particular conditions agreed during negotiations with the foreign distributor.
In case of replacing particulars, the warranty is not extended.
No compensation will be paid for the time the product is inefficient.
This is the only valid warranty and no one is authorised to issue others in name or on behalf of EXTRAFLAME S.p.A.

Recommended inspection (with payment)

Extraflame recommends that the functional inspection of the product is performed by an Extraflame authorised Technical After-Sales Centre, which will supply all information for correct use.

WARRANTY INTERVENTION

The request for information must be sent to the dealer.

LIABILITY

EXTRAFLAME S.p.A. does not grant any compensation for direct or indirect damages caused or dependant by the product.

LAW COURT

The Vicenza Law Court is elected as the competent court for any disputes.

QUALITY CONTROL

Document to be kept and produced if an intervention is requested under warranty

Name

Surname

Address

Post code

Municipality County

Telephone

Model

Serial N°.

Dealer

Date of Purchase

IMPORTANT: ❑ accept ❑ do not accept

Information note for the purpose and effect of Legislative Decree 196/2003 - Your personal data is processed by the company with full respect of the Legislative Decree 196/2003 for the entire duration of the contractual relationship in order to fulfill all legal requirements as well as to efficiently manage the commercial relationships. The data can only be communicated to other external subjects to protect credit and for better management of our rights relative to individual commercial relations, as well as communication to third parties due to specific obligations of the law. The affected body has the faculty to exert the rights recognised in art. 7 of the stated decree

Notes

Notes

Extraflame

Stufe a Pellet

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This document is available at www.extraflame.it/support

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