

PELLET BOILER STOVE

## DIDA IDRO



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The undersigned company with registered office in Via Vincenzo Monti 47 - 20123 Milan (Italy) - Tax ID Code and VAT number 00192220192

Hereby declares, under its sole responsibility, that:  
The pellet boiler stove mentioned below complies with EU Regulation 305/2011 and harmonised EU standard EN 14785:2006

PELLET Boiler Stove, bearing the  
ITALIANA CAMINI trademark and called DIDA IDRO

SERIAL NO.: Rating plate reference  
Performance declaration: (DoP - EK n° 092):  
Rating plate reference

Moreover, the company hereby declares that:  
the DIDA IDRO wood pellet boiler stove complies with the requirements  
of the European Directives:  
2014/35/EC - Low Voltage Directive  
2014/30/EC - Electromagnetic Compatibility Directive

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Dear Sir/Madam

We thank you for and congratulate you on choosing our product. Before using it, we ask that you read this manual carefully, in order for you to be able to make the most of all its functions in total safety.

This manual is an integral part of the product. We ask you to keep it for the entire lifetime of the product. If you lose it, you can request a copy from your dealer or download it from [www.italianacamini.com](http://www.italianacamini.com)

After unpacking the product, check the condition and completeness of the contents.

In the event of error, immediately contact the retailer where the purchase was made, providing him with a copy of the warranty booklet and the sales receipt.

The appliance must be installed and operated in compliance with local and national law and European regulations. For the installation, and for anything not specifically indicated in the manual, observe local regulations.

The diagrams provided in this manual are for illustration purposes only: they do not always strictly refer to your specific model, and are not binding in any way.

The product is uniquely identified by a number, the "counterfoil", which is indicated on the warranty certificate.

Please keep:

- the warranty certificate accompanying the product
- the purchase receipt given to you by the retailer
- the declaration of conformity given to you by the installer.

The warranty conditions are given in the warranty certificate accompanying the product.

In Italy, commissioning by an authorised technician is required by UNI 10683, and is recommended in all countries to ensure best results from the product.

This consists in:

- checking the installation documents (declaration of conformity) and the quality of the installation itself
- calibrating the product to suit its actual application
- providing explanations to the end user and issuing the complementary documentation (first ignition - commissioning certificate)

Having the appliance commissioned properly ensures that it will operate to best effect and in complete safety.

Proper commissioning is required for activation of the manufacturer's warranty. The warranty is only valid in the country where the product was bought.

If the appliance is not commissioned by an authorised technician, the manufacturer will not provide warranty service. See the warranty booklet for details. The above terms do not affect the dealer's legal responsibility for the legal warranty.

The warranty, however, covers only demonstrable manufacturing defects and not, for instance, problems resulting from improper installation or calibration.

## MEANING OF SYMBOLS

In some parts of the manual the following symbols are used:



### PLEASE NOTE:

carefully read and understand the message in question, since failure to follow the instructions in it could cause serious damage to the product and put the safety of those using it at risk.



### INFORMATION:

failure to comply with these requirements will compromise product use.



### OPERATING SEQUENCE:

follow the instructions for the operations described.

- The product is not designed for use by people, including children, with limited physical, sensory and mental abilities.
- The appliance is not designed for cooking purposes.
- The appliance is designed to burn UNI EN ISO 17225-2 category A1 wood pellets, in the amounts and manner described in this manual.
- The appliance is designed for indoor use and in areas with normal humidity conditions.
- Keep the product in a dry place out of the weather.
- For the legal and company warranties, refer to the warranty certificate inside the product: specifically, neither the manufacturer nor the dealer are liable for damage resulting from incorrect installation or maintenance.

Safety risks may be caused by:

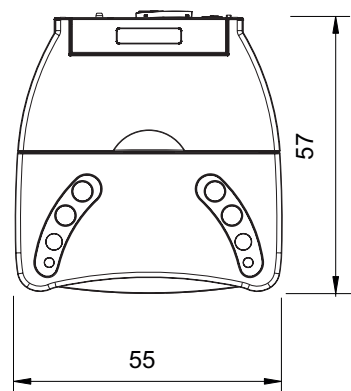
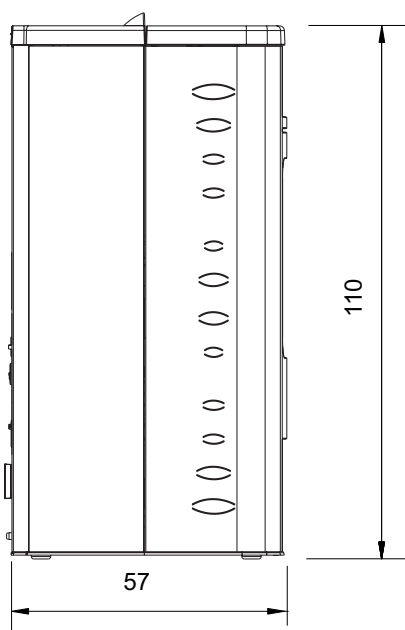
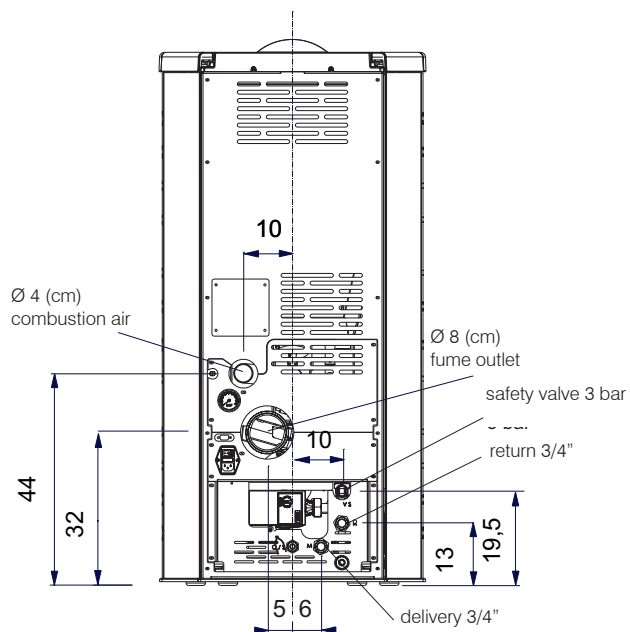
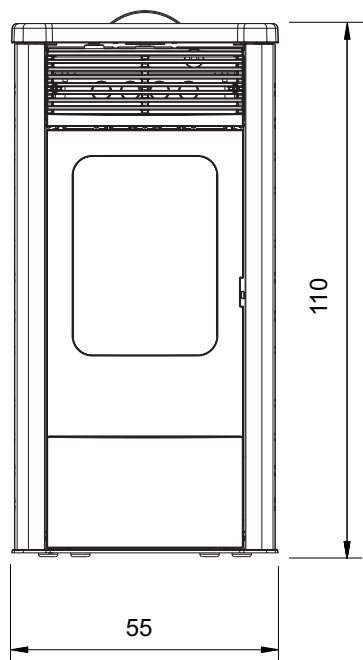
- installation in unsuitable conditions. In particular, conditions of fire hazard. **DO NOT INSTALL THE PRODUCT IN AREAS SUBJECT TO THE RISK OF FIRE.**
- contact with fire and hot parts (e.g. glass panel and pipes). **DO NOT TOUCH HOT PARTS** and, when the boiler stove is switched off and still hot, always wear the gloves supplied.
- contact with live electrical equipment (internal). **DO NOT ACCESS THE INTERNAL ELECTRICAL EQUIPMENT WHILE THE APPLIANCE IS POWERED ON.** Electrocution hazard.
- use of improper ignition aids (e.g. alcohol). **DO NOT IGNITE OR BOOST THE FLAME WITH FLUID SPRAYS OR A FLAME TORCH.** Serious risk of burns, damage and injury.
- use of fuel other than wood pellets. **DO NOT BURN WASTE MATTER, PLASTIC OR OTHER MATERIALS THAN WOOD PELLETS IN THE HEARTH.** The product may become soiled, the flue may catch fire, and environmental damage may ensue.
- cleaning the hearth when hot. **DO NOT CLEAN THE HEARTH WITH A VACUUM CLEANER WHILE IT IS HOT.** Risk of damage to the cleaner and smoke in the room.
- cleaning the fumes duct with cleaning products. **DO NOT CLEAN THE PRODUCT WITH FLAMMABLE PRODUCTS.** Risk of fire or blowback.
- cleaning the hot glass pane with unsuitable cleaning products. **DO NOT CLEAN HOT GLASS WITH WATER. ONLY USE RECOMMENDED GLASS CLEANING PRODUCTS.** Risk of cracking and permanent, irreparable damage to the glass.

- the storage of flammable materials at a distance which is less than the safe distances listed in this manual. **DO NOT PLACE LAUNDRY ON THE APPLIANCE. DO NOT PLACE DRYING RACKS WITHIN THE SAFETY CLEARANCE.** Keep flammable fluids away from the appliance. Fire hazard.
- blocking the aeration vents and air intakes in the room. **DO NOT BLOCK THE AERATION VENTS OR FLUE.** Risk of smoke returning into the room with consequent damage and injury.
- use of the product as a support or ladder. **DO NOT CLIMB ONTO THE PRODUCT OR USE IT AS A SUPPORT.** Risk of damage and injury.
- use of the boiler stove with the hearth open. **DO NOT USE THE PRODUCT WITH ITS DOOR OPEN.**
- incandescent material projected from the open door. **DO NOT throw incandescent material outside the appliance.** Fire hazard.
- use of water in case of fire. **CALL THE AUTHORITIES** if a fire breaks out.
- The appliance must never be used without water in the system; any "dry" lighting is likely to damage the appliance.

If you have doubts, please do not take any action, but contact the retailer or the installer.

For reasons of safety, read the user instructions included in this manual.

## DIMENSIONS (cm)



**TECHNICAL CHARACTERISTICS in accordance with EN 14785**

	Nominal power	Reduced power	
Available power	16,2	4,8	kW
Power for water	11,8	3	kW
Efficiency	91,6	97,6	%
CO emissions at 13% O <sub>2</sub>	0,010	0,025	%
Fumes temperature	129	56	°C
Fuel consumption	3,7	1	kg/h
Tank capacity	30		kg
Draw	12-5	10-3	Pa
Autonomy	8	30	hours
Heatable volume *	420		m <sup>3</sup>
Fumes outlet diameter (male)	80		mm
Air intake diameter (male)	40		mm
Weight including packaging	224		kg

**TECHNICAL DATA FOR RATING THE FLUE**

which must in any case satisfy the requirements of this sheet and the installation instructions for the product

	Nominal power	Reduced power	
Fumes temperature at outlet	155	67	°C
Minimum draw	0,01		Pa
Fumes flow rate	10.6	3.6	Rps

\* The heatable volume is calculated for a house insulated pursuant to Italian Law 10/91 and subsequent amendments, and a heating demand of 33 Kcal/m<sup>3</sup> hour.

**ELECTRICAL SPECIFICATIONS**

Power supply	230 V AC +/- 10% 50 Hz
Mean absorbed power	50 - 80 W
Power absorption during ignition	300 W
Remote control frequency (provided)	2.4 GHz
Protection rating	Fuse 2 AT 250 V AC 5x20

**The manufacturer reserves the right to modify the product at his own discretion and without notification.**

## PREPARATION AND UNPACKING

The packaging materials are neither toxic nor noxious and do not require special disposal.

The user is responsible for storing, disposing or and recycling them in a regulatory fashion.



Always move the stove vertically with suitable equipment and in observance of safety regulations.

Do not turn the package over, and handle all parts requiring installation with care.

## PACKAGING

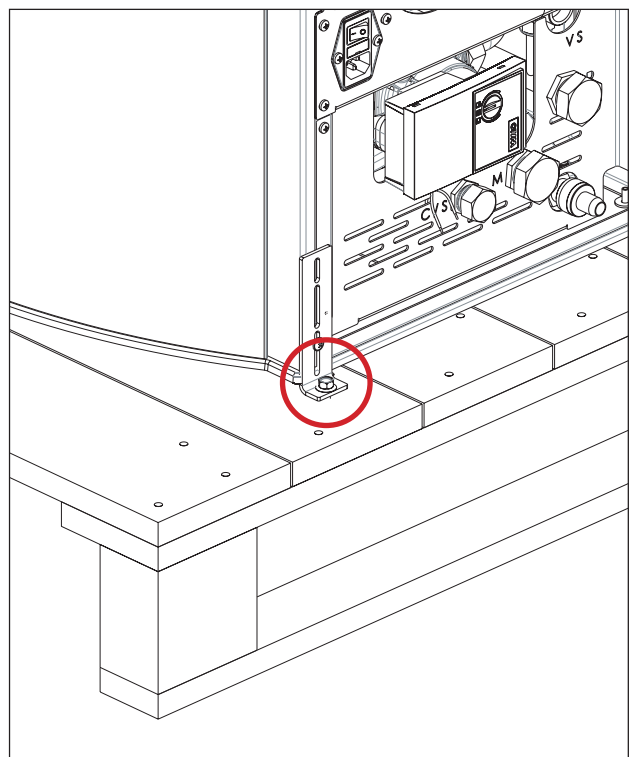
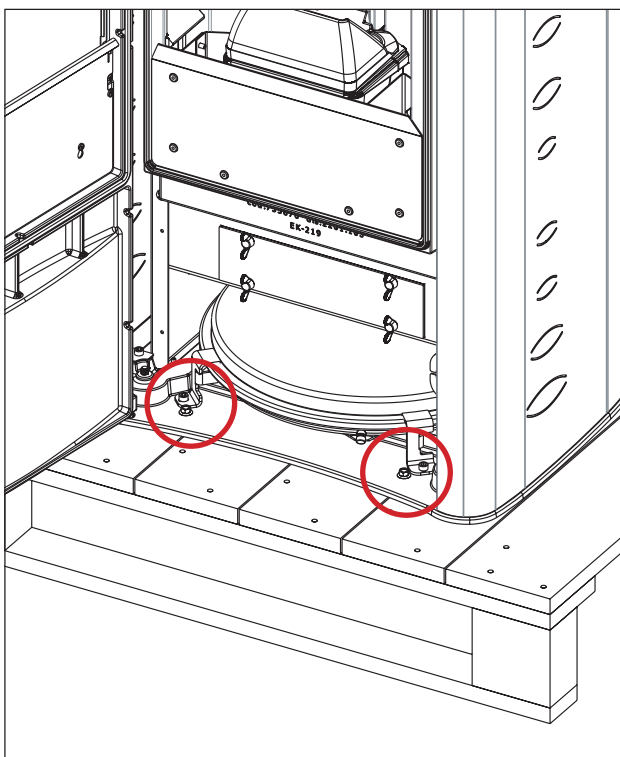
The delivery consists of two packages:

- one (1) containing the structure of the boiler stove with the side panels already installed.
- one (2) with the top.

## TO REMOVE THE BOILER STOVE FROM THE PALLET

Proceed as follows:

- open the hearth door
- unscrew the two screws as shown in the figure below
- unscrew the screw on the back to remove the bracket as shown in the figure below



## INSTALLING THE CLADDING

The boiler stove is delivered with the metal sides already fitted, while the ceramic top is packed separately (fig.1).

Position the ceramic top into the special runners on the cast iron top.

The D.8 washers are used as shims under the rubber supports, if it is necessary to "level up" the surface the ceramic top rests on.

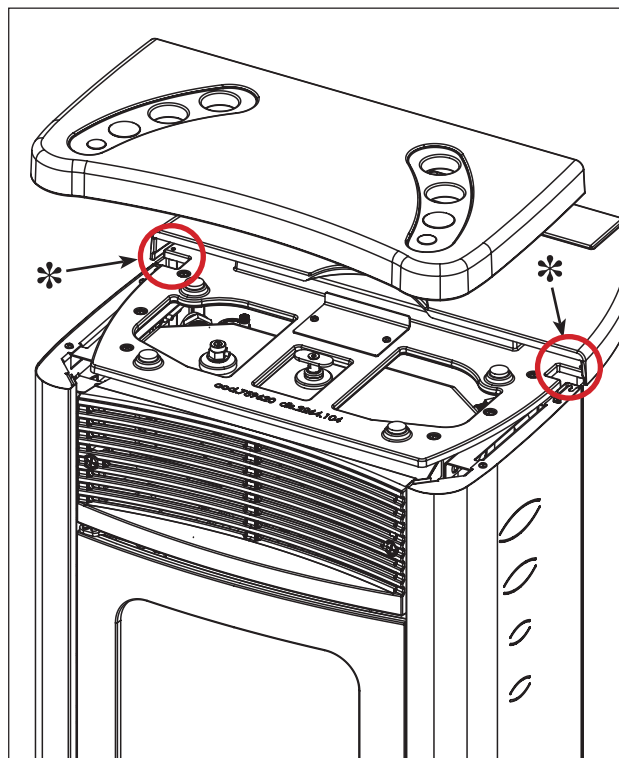


Fig. 1



## REMARKS ON INSTALLATION

Note that:

- installation must be carried out by authorised technical personnel.
- The appliance must be installed and operated in compliance with local and national law and European regulations. The applicable Italian regulation is UNI 10683.
- If installed in a condominium, the appliance must be approved by the administrator.

We give some general instructions below, however these do not obviate the need to comply with local regulations and do not affect the installer's liability for the installation.

### Checking the suitability of the installation space

- The room must have a volume of at least 20 m<sup>3</sup>.
- The floor must be able to bear the weight of the product and its accessories.
- Level the appliance.
- The appliance may not be installed in a bedroom, bathroom or in the same room as other equipment which draws air for combustion from the room itself, or in any area with an explosive atmosphere. Any extraction fans operating in the same room or area as the product, may affect its draw.
- In Italy, check the compatibility pursuant to UNI 10683 and UNI 7129 in the presence of gas fired products.

## Protection from heat and safety clearances

The surfaces of the building adjacent to the product must be protected against overheating.

The insulation to be used will depend on the type of surface in question.

The appliance must be installed in accordance with the following safety instructions:

- minimum clearance at the sides and back of 20 cm from flammable materials.
- no flammable materials may be kept closer than 80 cm in front of the boiler stove.

If connected to a wooden or otherwise flammable wall, the flue must be insulated appropriately.

If installed on a flammable or combustible floor, or which is not capable of bearing its load, use steel or glass plates under the stove to distribute the load. Contact the retailer for such optional equipment.

### Positioning the product

The product is designed to operate in all climatic conditions. In special circumstances, such as strong wind, its safety equipment may switch the stove off. Contact the authorised Technical Assistance Centre.

## FLUE SYSTEM

### (Fumes duct, flue and chimney pot)

This chapter has been drawn up pursuant to European regulations EN 13384, EN 1443, EN 1856 and EN 1457. The installer must observe both these and any other local regulations. This manual does not in any way substitute such regulations.

The product must be connected to a flue system which ensures that the fumes produced by combustion are exhausted in complete safety.

Before positioning the appliance, the installer must check that the flue is suitable.

### FUMES DUCT, FLUE

The fumes duct (which connects the hearth's fumes outlet with the flue) and the flue itself must, among other regulatory requirements:

- receive the fumes from a single product (the outlets of multiple appliances may not be conveyed into a single flue)
- be routed vertically for the most part
- have no downwards sloping sections
- preferably have a circular internal cross section, or with a ratio of the sides of less than 1.5
- terminate at roof level with a proper chimney pot: the flue may not discharge directly on the wall or into an enclosed space, even if the space in question is open to the sky
- be made of material rated fire reaction class A1 per UNI EN 13501 or analogous national regulations

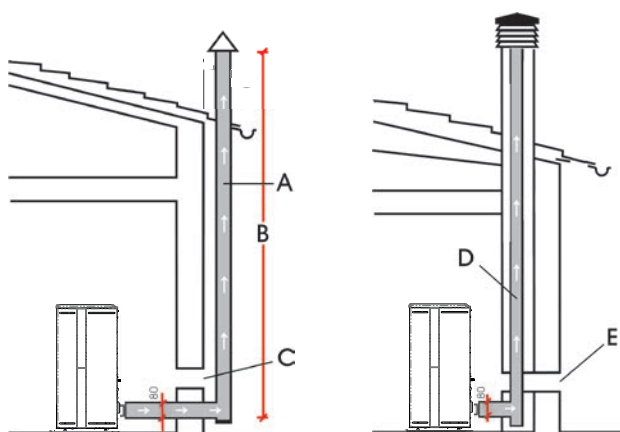
- be certified, with a chimney plate if metal
- be of uniform cross section or vary in cross section only immediately after the outlet, not at some mid point of its length

### THE FUMES DUCT

Further to the general prescriptions for the fumes duct and flue, the fumes duct:

- may not be made of flexible metal material
- must be insulated, if routed through unheated areas or outdoors
- must not be routed through rooms where the installation of combustion heat generators is prohibited, there is risk of fire, or which cannot be inspected
- must enable the recovery of soot and be open for inspection
- have at most 3 bends with a maximum angle of 90°
- must have a single horizontal section with a length of no more than 3 metres, depending on the draw. Note, in any case, that long sections promote the accumulation of dirt and are harder to keep clean.

### TYPICAL CASES



- A:** insulated steel flue, pursuant to EN 1856
- B:** minimum height 1.5 m and, nevertheless, above the level of the roof guttering
- C-E:** external ambient air intake (through section of at least 80 cm<sup>2</sup>)
- D:** steel flue inside existing masonry chimney

## THE FLUE:

Further to the general prescriptions for the fumes duct and flue, the flue:

- must serve solely to exhaust fumes
- must be correctly sized to satisfy the requirements of fumes exhaust (EN 13384-1)
- must preferably be insulated, in steel with a circular internal section. If rectangular, the corners must have a radius of not less than 20 mm, with a ratio of the internal dimensions of  $<1.5$
- must normally be at least 1.5 metres in vertical length
- must have a constant cross section
- must be waterproof and thermally insulated to ensure a good draw
- must preferably have a collection chamber for uncombusted matter and condensation
- if pre-existing, must be clean, to prevent the fire hazard
- in general, we recommend fitting a tube inside the existing masonry chimney if its diameter is greater than 150 mm.

## INTUBATED SYSTEM:

Further to the general prescriptions for the fumes duct and flue, the intubated system:

- must operate in negative pressure
- must be open to inspection
- must observe local regulations.

## THE CHIMNEY POT

- must be windproof
- must have an internal cross section equivalent to that of the flue and a fumes outlet at least double that of the interior of the flue
- for dual flues (which should be spaced at least 2 m apart) the chimney pot receiving the fumes from the solid fuel appliance or that from the higher storey, must be at least 50 cm higher than the other
- it must extend beyond the back flow zone (in Italy, refer to UNI 10683 point 6.5.8.)
- it must allow for maintenance of the chimney

## EXTERNAL AIR INTAKE

In general, we suggest two ways to ensure a proper flow of combustion air.

### Indirect air intake

Install an air outlet at floor level with an effective surface area (net of the screen or other protections) of at least 80 cm<sup>2</sup> (10 cm in diameter).

To prevent draughts, we recommend installing the intake behind the boiler stove or behind a radiator.

Installing it in front of the appliance will create unpleasant draughts.

### Direct air intake

Install an air intake of effective area ((net of the mesh or other protective equipment) at least equal to that of the air intake at the back of the product.

Connect the air intake to the appliance's air intake with a tube (which may also be flexible).

The air may be drawn from an adjacent room only if:

- the flow is taken from permanent and unobstructed openings communicating with the outdoors;
- the adjacent room is never in underpressure relative to the outdoors;
- the adjacent room is not a garage. subject to fire hazard, a bathroom or bedroom;
- the adjacent room is not a shared room in the condominium.

In Italy, UNI 10683 provides that ventilation is sufficient even if a pressure difference between the outdoors and indoors of no more than 4 PA is guaranteed (UNI EN 13384-1). The installer who issues the declaration of conformity is responsible for ensuring these conditions.

## PLUMBING

Plumbing depends on the type of system.

However, there are some "general rules":

- Plumbing must be carried out by qualified personnel.
- The hydraulic system must operate at a pressure between 1 and 1.5-2 bars at running temperature (hot) in a closed vessel circuit.
- N.B.: The boiler **SHOULD NOT** be installed in place of, for example, an open vessel installed kitchen range without adjusting the expansion system to closed vessel.
- The presence of an accumulator (tank) is recommended but not mandatory. Its advantage is that it releases the boiler from "sudden" requests from the system and can be integrated with other heat sources. It reduces fuel consumption and increases the efficiency of the system.
- The return temperature of water to the boiler stove must be higher than 50-55° C to prevent the forming of condensation.
- An accumulator (tank) is needed to heat low-temperature radiant panels and must be installed according to the panel manufacturer's instructions.
- The material used in the circuit must be suitable to withstand overheating.
- Check that the plumbing is carried out properly and is fitted with an expansion vessel that is sufficient to ensure safety.

**If the expansion tank is built into the boiler stove, this does NOT ensure proper protection against the thermal expansion incurred by water in the entire system. Therefore, installers should assess whether an additional expansion tank is needed, depending on the type of system.**

- The installer must determine whether or not to use conditioned products. In Italy, refer to UNI 8065-1989 (Water treatment in heating systems for civil use).
- Direct plumbing to radiators prevents proper operation, owing to the small diameter of their pipes.

- The safety valve bleed must be reachable and visible. Waste water must be conveyed via a vertical pipe through a funnel with backflow air vents, at a suitable distance from the point of drainage.

This pipe must have the following characteristics:

- It must begin no more than 50 cm from the drainage point of the valve and must be in the same room as the appliance.

- It must be vertical for no less than 30 cm.

After this, the pipe can continue horizontally with a slope that allows the flow of the water

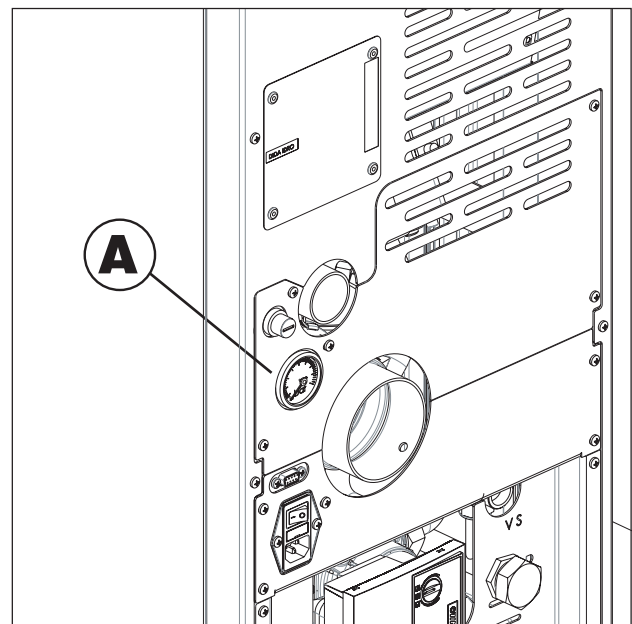
- The pipe diameter should be at least one size larger than the nominal size of the valve outlet.

- The end of the pipe must discharge into the sewage system.

**IT IS FORBIDDEN TO INTERCEPT THE DISCHARGE.**

## PRESSURE GAUGE (A)

placed on the boiler stove (see figure below) enables you to read the water pressure in the boiler stove.



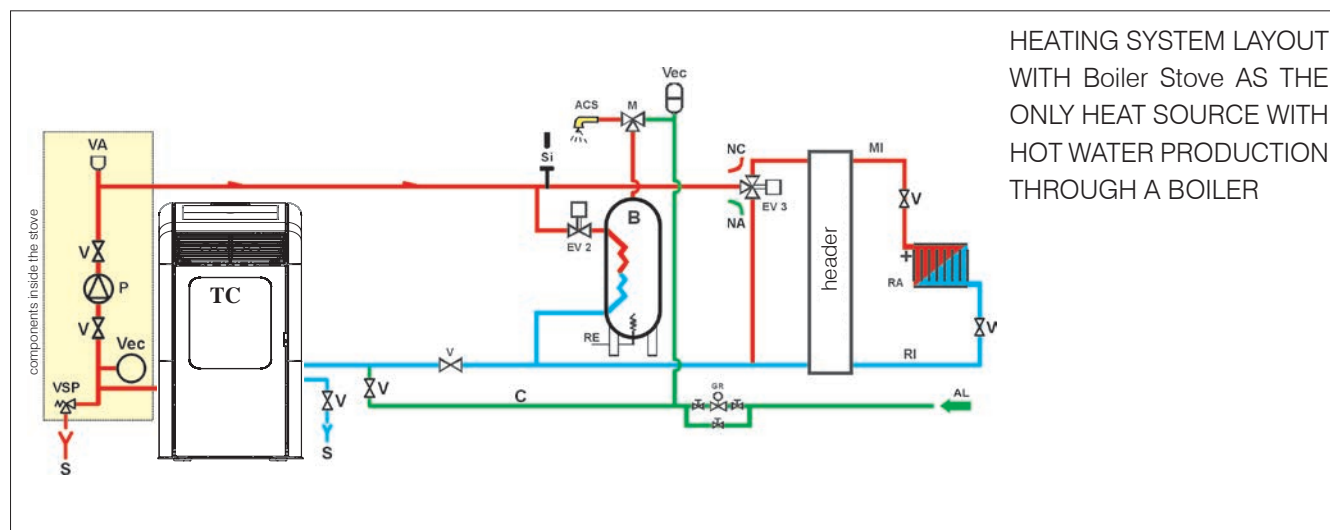
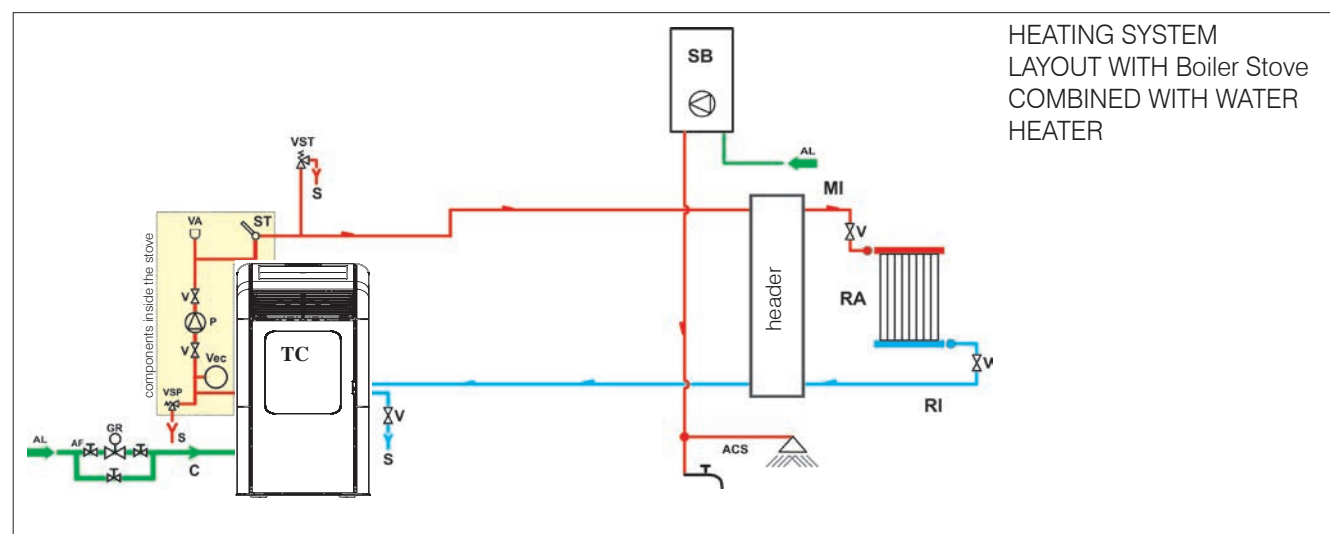
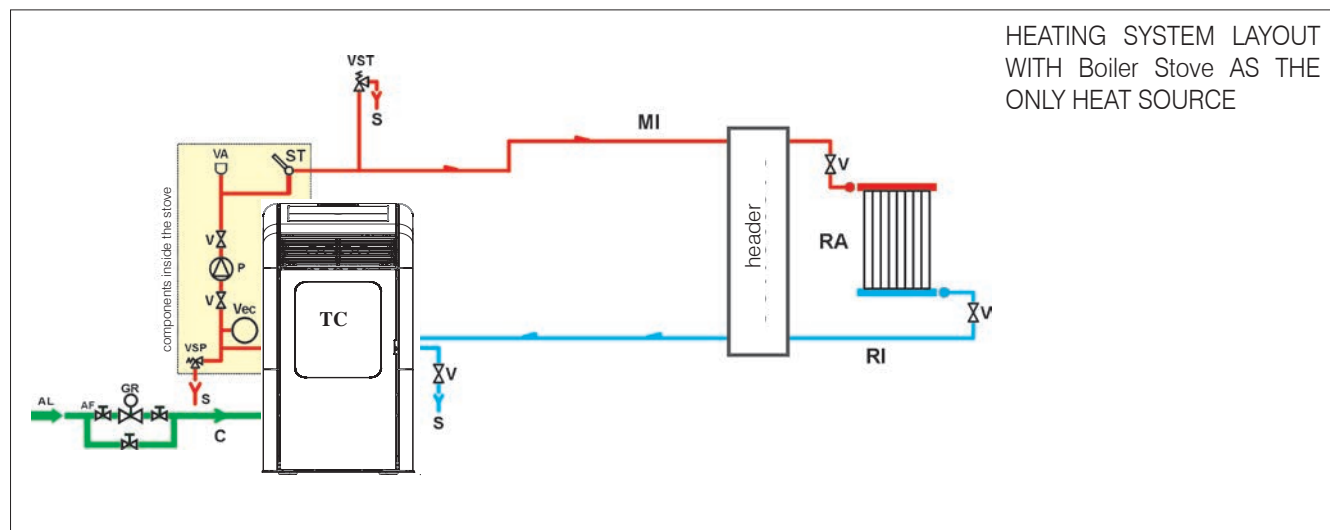
## LEGEND

ACS: Domestic Hot Water  
AF: Cold Water  
AL: Mains water supply  
B: Boiler  
C: Load/Replenishment

CE: Electronic control box  
EV2: 2-way solenoid valve  
EV3: 3-way solenoid valve  
NA: Normally open  
NC: Normally closed  
GR: Pressure reducer  
MI: Delivery System

P: Pump (circulator)  
RA: Radiators  
RI: Return System  
S: Drain  
SB: Water heater  
ST: Temperature Probe

TC: Boiler stove  
V: Ball valve  
VA: Automatic air vent valve  
VEC: Closed expansion tank  
VSP: Safety valve  
VST: Thermal safety valve



N.B.: These diagrams are for guidance only; the actual execution is the responsibility of the plumber.

## THE ELECTRONIC CIRCULATOR

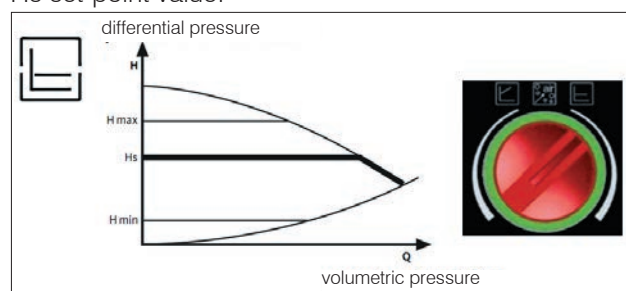
### (low-energy pump)

The product is fitted with a circulator with electronic motor for limiting electricity consumption and complying with European regulations.

#### Electronic performance control

##### a) Control mode $\Delta p - c$

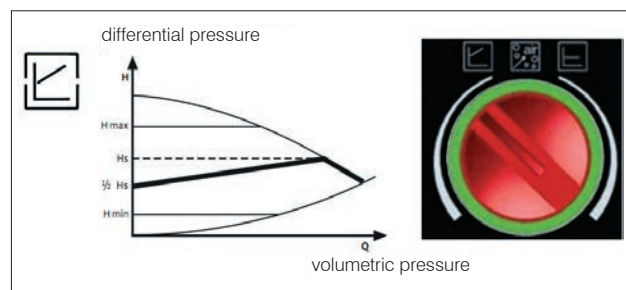
In this mode, the electronic controller keeps the pump's differential pressure constant at the defined  $H_s$  set-point value.



##### b) Control mode $\Delta p - v$

In this mode, the electronic controller makes the differential pressure vary between the set-point value  $H_s$  and  $1/2 H_s$ .

The differential pressure varies with the volume flow rate.



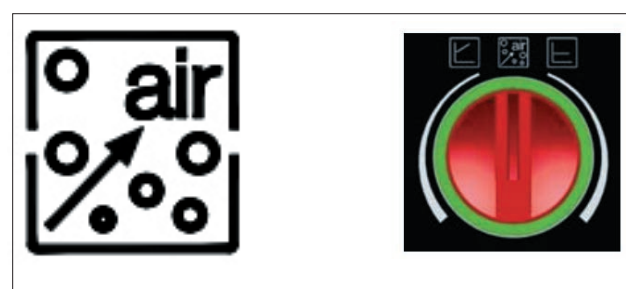
##### c) Air relief procedure

This procedure allows for relieving the air inside the water circuit.

After manually selecting the "AIR" mode, for 10 minutes the pump will automatically shift between the maximum and minimum speeds alternately.

Once the procedure terminates, the circulator will run at the pre-set speed.

It is therefore possible to select the desired operating mode.



Below we summarise the signals emitted by low-energy circulators (pumps) with the LED appearing on the control unit of the pump itself.

LED	MEANING	OPERATING STATUS	CAUSE	SOLUTION
Lit with green light	Pump running	The pump functions according to its setting	Normal operation	
Fast flashing with green light		The pump functions for 10 min in the air relief mode. Subsequently, the desired power must be set	Normal operation	
Flashing with red/green light	The pump is ready for operation, but does not move	The pump starts rotating autonomously as soon as the error disappears	Undervoltage $U < 160\text{ V}$ or overvoltage $U > 253\text{ V}$ Module overtemperature, the motor's temperature is too high	Check the power supply voltage $195\text{V} < U < 253\text{V}$ Check the temperature of the fluid and of the room
Flashing with red light	Pump out of order	The pump is not moving (blocked)	The pump does not restart automatically	Contact the technician
LED off	No power supply voltage	The electronic system is not powered	The pump is not connected to the mains power: - The LED is defective - The electronic system is defective	Contact the technician



### CHECKING THE ELECTRICAL CONNECTIONS (the power socket must be located in an easy to access position)

The boiler stove is equipped with an electrical power cable for connection to a 230V 50 Hz socket, preferably with a circuit-breaker.

Variations in voltage of more than 10% can affect the operation of the boiler stove.

The electrical system must be compliant; check the operation of the earth in particular.

The manufacturer is not responsible for malfunctions due to an improperly grounded system.

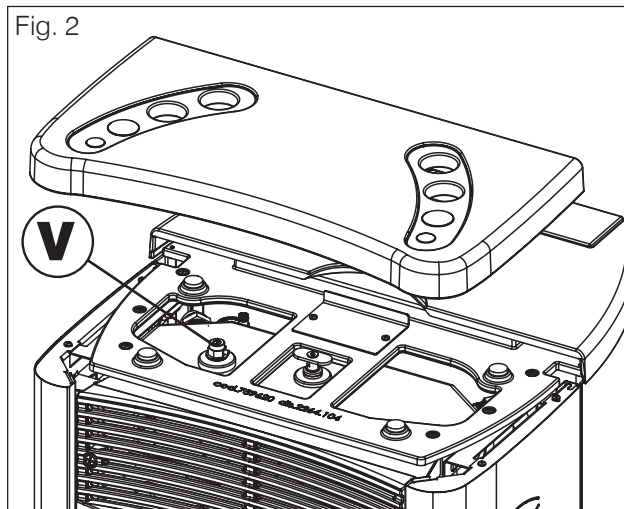
The power line must be of adequate section for the power of the appliance.

The power cable must not come into contact with the flue or other hot parts of the boiler stove.

Supply power to the boiler stove by moving the switch on the back from 0 to 1.

There are two 2 A fuses on the socket with switch located at the rear of the stove.

Fig. 2



### VENT

When performing first ignition, vent both air and water through the manual valve (V) located on the front of the top.

To access, lift the ceramic top.

**The operation must also be repeated during the first few days of use** and if the plant has also been partially reloaded. The presence of air in the ducts does not allow it to function properly.

To help with venting operations, the valve is equipped with a rubber tube.

### FIRST IGNITION (COMMISSIONING) PHASES

- Make sure you have read and understood this manual
- Remove all flammable materials from the appliance (manuals, labels, etc). In particular remove any labels from the glass.

On first ignition, there may be a slight smell of paint, which will disappear in a short time.

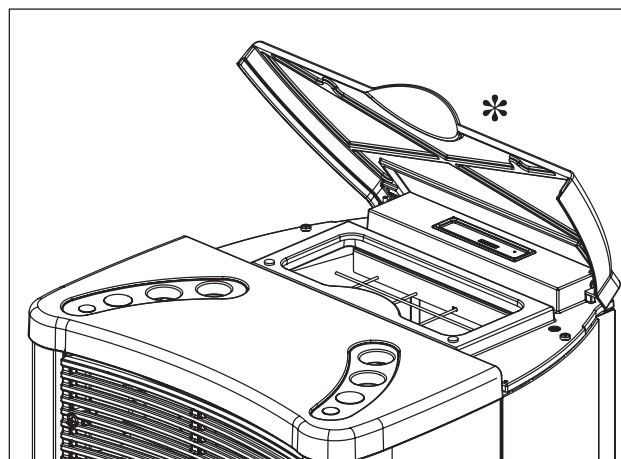
### LOADING THE PELLETS INTO THE TANK.

To access the tank, open the lid \*



**1) During this operation NEVER PUT the sack of pellets on the ceramic top, as the plastic sack may ruin it with the heat.**

**2) Use the provided gloves when loading the boiler stove while it is operating and therefore hot to touch.**



Use UNI EN ISO 17225-2 category A1 wood pellets or similar regulatory products with the following characteristics.

diameter 6 mm

length 3-4 cm

humidity < 10 %

For reasons of safety and protecting the environment, DO NOT burn plastic, painted wood, coal, bark or other such materials in the stove.

Do not use the boiler stove as an incinerator.



Caution

Using fuels other than those specified can damage the appliance



## SYNOPTIC PANEL



**ON/OFF Button**  
It is also used to confirm/exit



**Selection button:** access to regulation menu



**Temperature DECREASE button** and backward scrolling for selected data



**Temperature INCREASE button** and forward scrolling for selected data



It indicates the operation of the circulator (pump).



It indicates the operation of the pellet feed motor



It indicates that we are operating within the parameters menu (only CAT)



It indicates timer is active; an automatic programming schedule has been selected

## MENU DESCRIPTION






When the boiler stove is in standby mode, it displays the text **OF** and the set temperature.


DISPLAY	DESCRIPTION
<b>OF</b>	The switch-off phase is in progress, lasting about 10 minutes, while the pump runs until the set switch-off temperature is reached (usually 40° C)
<b>ON AC</b>	Boiler stove is in first stage of ignition; pellets are being loaded and waiting for flame to light
<b>ON AR</b>	Boiler stove in the second stage of ignition; heating up of boiler stove body and combustion start up
<b>Burn</b>	Boiler stove in the phase of heating water exchanger
<b>P1-P2-P3</b>	Power level modulated automatically
<b>50....80°C</b>	Water temperature level required for delivery to system
<b>PROG</b>	Weekly timer programming menu
<b>SET</b>	Menu for setting the clock
<b>SF</b>	Stop Flame: operating block probably due to the pellet supply coming to an end
<b>AF</b>	Failed Ignition: operating block due to failed ignition
<b>CP-TS-PA</b>	Control menu available solely for CAT (Technical Assistance Centre)
<b>H1.....H9</b>	Alarm system; the number identifies the cause of the alarm
<b>Air</b>	Menu for activating/deactivating room ventilation. It pushes the hot air into the room where the boiler stove is installed; to activate it, enter the "Air" menu and set "ON" (press the SET button for 3" and then set ON/OFF with buttons +/-).

## SCREW FEEDER FILLING


Loading the pellet screw feeder (coclea) is only necessary if the boiler stove is new (and being switched on for the first time) or if the boiler stove had completely run out of pellets.

To activate this loading, press the   buttons simultaneously, and the term "RI" is displayed. The loading function ends automatically after 240" or if you press the  button.

## IGNITION

With the boiler stove in stand-by (after checking that the grate is clean), press the  button and the ignition procedure starts up. The term "ON AC" (combustion starting) is displayed; after completing some control cycles and when the pellets have actually ignited the term "ON AC" is displayed (heating is being turned on). This phase will last for a few minutes allowing the ignition to be completed successfully and the boiler stove's heat exchanger to be heated. After a few minutes the boiler stove will move to the heating phase, indicating the term "burn" and then, during operation, it will display the delivery water temperature set by the user and the power selected by the automatic modulating system.



## SWITCHING OFF

By pressing the  button when the boiler stove is ON, the switching off phase is started which involves:

- Interruption to pellet supply
- Consumption of the last pellets in the grate, while the flue fan stays on (typically for 10 min.)
- Cooling down of the boiler stove body maintaining the pump in operation until the shutdown temperature is reached
- The term "OF" is displayed together with the number of minutes until switch-off.

During the switch-off phase, the boiler stove cannot be switched on again; once the switch-off phase is complete, the system will automatically go back to standby.

## AUTOMATIC OPERATION

It is necessary for the user to set the system delivery water temperature; this temperature must be assessed in relation to the type and size of the system, also considering the atmospheric temperature linked to seasonal use. The boiler stove, independently, regulates the power according to the difference between the set temperature (set on the display) and the temperature measured by the probe; when the desired temperature is reached, the stove will operate at minimum power on 1. You can increase the temperature required by pressing the  button or reduce it by the pressing the  button.

The required temperature and the power that is chosen automatically by the electronic modulating system are displayed alternately.

## ECONOMY FUNCTION

Function suitable for boiler stoves installed in small-scale systems, or in mid-season when even minimum power operation causes excessive heating. This function, managed automatically, allows for switching the boiler stove off once the set delivery temperature is exceeded. The term "EC OF" will be displayed indicating the minutes remaining to switch-off. When the delivery temperature falls below the set value, the boiler stove switches back on automatically. Request activation of this function, if required, from the Technical Assistance Centre during initial start-up.

## REMOTE ACTIVATION FUNCTION (AUX port)



By means of a special optional connection cable, you can turn on/off the boiler stove using a remote device such as a GSM remote telephone control, a room thermostat, a command from a home automation system, or in any case from a device with voltage free contact with the following logic:  
**Contact open** = boiler stove OFF  
**Contact closed** = boiler stove ON  
 Activation and deactivation occurs 10" after the last command was transferred.  
 If the remote activation port is connected up, you can still turn the boiler stove on/off using the control panel; the boiler stove will always react in compliance with the last order received, whether it is for switching ON or switching OFF.



## ROOM VENTILATION

To activate/deactivate the room temperature, press the SET button for 3"; when "Air" is displayed, release the SET button, and using the +/- buttons set to Air ON, if you want to activate ventilation or to Air OFF, if you want to disable it. Please note: the activation of ventilation is dependent on this menu but also on a minimal water temperature inside the boiler stove.



## SETTING: CLOCK AND WEEKLY PROGRAMMING

Press the SET button for 5" to enter the programming menu and the term "TS" is displayed.





Press the   buttons until "Prog" is displayed and press SET.

By pressing the   buttons you can select the following settings:



- Pr OF: Enables or disables totally the use of the timer.



To activate the timer, press the SET button and set "On" using the   buttons; to deactivate it, set "OFF"; confirm the setting with the SET button; to exit programming, press ESC.



- Set: allows you to set the current time and date.

To set the current time, select the term "SET" on the display; confirm the selection with the SET button; you set the current time using the  button which increases the time by 15 min. with each press and using the  button which decreases the time by 1 min. with each press; confirm the setting with the SET button; set the current day of the week using the   keys (e.g. Monday=Day 1), confirm the programming with the SET button. After the hour/day insertion has been completed 'Prog' will appear on the display; to continue with programming for Pr1/Pr2/Pr3 press SET or press 'ESC' to exit programming.



- Pr 1: This is program no. 1. In this range you set a switch-on time, a switch-off time and the days on which to apply the Pr 1 times.

To set the Pr 1 range, select "Pr 1" using the   buttons; confirm the selection with the SET button.

"On P1" is displayed briefly. Use the   buttons to set the switch-on time for the Pr 1 range; confirm with the SET button. "OFF P1" is displayed briefly.

Use the   buttons to set the switch-off time for the Pr 1 range and confirm with the SET button.

You continue with assigning the newly programmed range to the different days of the week. Using the SET button, you scroll down through the days from

day 1 to day 7, where day 1 is Monday and day 7 is Sunday; with the   buttons you activate or deactivate the Pr 1 program on the day selected on the display (Example: On d1=active or Of d1=disabled).

After programming is complete "Prog" will appear on the display; to continue programming Pr 2/Pr 3 press SET and repeat the process above or press ESC to exit programming.

Programming example Pr 1 On 7:00 /OF 9:00:  
red=active green=disabled

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
ON	ON	ON	ON	ON	Off	Off

Pr 2:

Allows you to set a second range of times. In order to program, follow the same instructions as for program Pr 1.

Programming example Pr 2 On 17:00 /OF 23:00:  
red=active green=disabled

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
ON	ON	ON	ON	ON	Off	Off

Pr 3:

Allows you to set a third range of times. In order to program, follow the same instructions as for program Pr 1 and Pr 2.

Programming example Pr 3 On 9:00 /OF 22:00:  
red=active green=disabled

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Off	Off	Off	Off	Off	ON	ON

## REMOTE CONTROL code no. 633280 (optional)



: ON/OFF Button

**+** : button to increase power/working temperature (the displayed variable increases within a menu)

**-** : button to decrease power/working temperature (the displayed variable decreases within a menu)

**A** : button to switch from manual mode to automatic mode

**M** : button to switch from automatic mode to manual mode

- The remote control transmits infra-red signals; the LED signal transmission has to be in line of sight with the receiving LED on the boiler stove in order for correct transmission to take place. In free field conditions without any obstacles, it can cover a maximum distance of 4-5 metres.

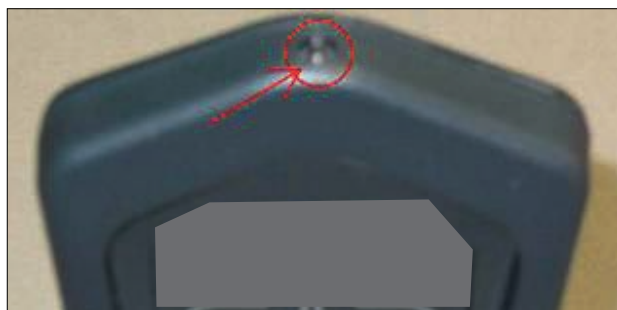
- The remote control works with 3 AAA size 1.5V alkaline batteries. The battery life depends on usage but still covers an entire season for a normal average user.

- If the key back-lighting comes on, when one of the keys is touched, this indicates that the remote control is transmitting the signal; a "beep" from the boiler stove confirms it has been received.

- The remote control must be cleaned with a damp cloth without spraying detergents or liquids directly onto it. In any case, use neutral detergents free of aggressive substances.

- Handle the remote control with care; it might break if you accidentally drop it.

- Using the remote control, you can also perform all the actions that can be done on the synoptic control panel.



- The working temperature is: 0-40°C

- The correct storage temperature is: -10/+50° C

- Working humidity: 20-90% R.H. without condensation

- Protection rating: IP 40

- Weight of the remote control with the batteries inserted: 160gr

NOTE FOR THE CAT: An infra-red remote control is easily identified from a radio remote control because it has the transmitter LED at the front, see photo "A" below.

**Before doing any maintenance, disconnect the appliance from the mains.**

**Regular maintenance is essential for keeping the appliance in good working order.**

**FAILURE TO SERVICE THE BOILER STOVE will prevent it from working properly.**

**Any problems due to failure to service the stove will void the warranty.**

**N.B.:**

- **Do not make unauthorised modifications**
- **Use original spare parts**
- **Using non-original parts voids the warranty**

## DAILY MAINTENANCE

**These jobs must be done with the boiler stove off, cold and disconnected from the mains.**

It involves cleaning with the help of a vacuum cleaner. The entire procedure takes just a few minutes.

- Even with the stove ON and using the glove provided, shake the cleaning rod (fig. A \*) placed at the top front, underneath the tank lid.
- Open the door of the hearth, remove the grate (1 - fig. B) and pour out the residue into the ash tray or suck it up with the vacuum cleaner.
- Scrape the grate with the provided scraper and clean out any material obstructing the holes. UNDER NO CIRCUMSTANCES SHOULD YOU EMPTY THEM INTO THE PELLET TANK.
- Remove and empty the ash tray (\*\* - fig. B) into a non-flammable container (the ashes may still contain embers and hot pieces).
- Vacuum out the interior of the hearth, the bed, and the compartment around the grate into which the ash falls.
- Vacuum out the grate housing, clean the edges of the grate that are in contact with the housing.
- If necessary, clean the glass (when cold).



**Do not vacuum up hot ash; this damages the vacuum cleaner and may cause a fire.**

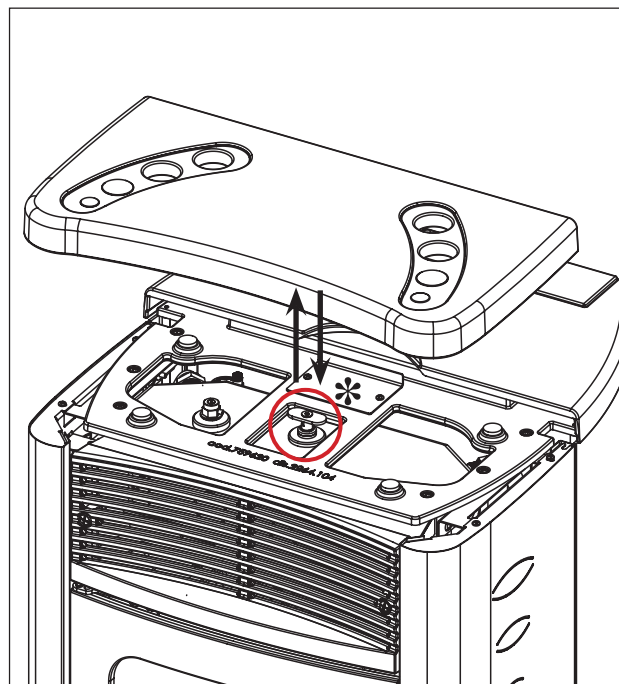


FIG. A

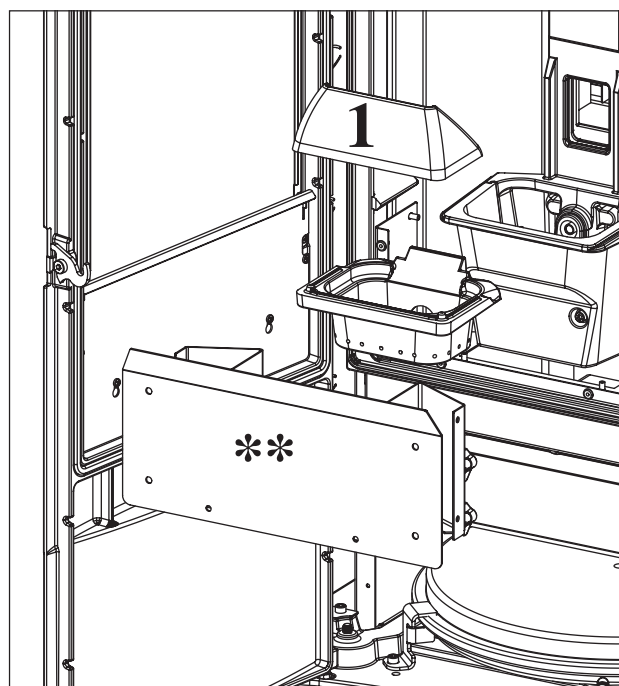


FIG. B

## PLEASE NOTE:

**ONCE IT IS REFITTED, MAKE SURE THAT THE ASH TRAY IS PROPERLY SEATED IN ITS HOUSING**



## WEEKLY MAINTENANCE

- Clean the hearth (brush).



**After normal cleaning, make sure the grate is PROPERLY SEATED (A - fig. D); failure to do so can cause the appliance to malfunction.**

**So, before starting up the boiler stove, make sure the grate is seated properly as shown in fig. E, without ash or non-combusted matter trapped around its border.**

**We would remind you that using the boiler stove, without cleaning the grate, can cause the gas in the combustion chamber to ignite and lead to detonation.**

## CLEANING TO BE EVALUATED WITH THE TECHNICIAN ACCORDING TO USE

### Cleaning the smoke duct

- When the stove is off and cold shake the cleaning rod energetically; open the door of the hearth and remove the inspection plate (4 - fig. C), complete with silicone gasket (5 - fig. C), fastened with wing nuts; clean the silicone gasket and vacuum the residue in the smoke duct (6 - fig. C).

The boiler stove is supplied with a replacement silicone gasket.

The quantity of residue which forms depends on the type of fuel used and the type of system.

Failure to carry out this cleaning can cause the boiler stove to get blocked.

N.B.: AFTER COMPLETING THIS JOB, MAKE SURE YOU CLOSE THE INSPECTION PANEL (4 fig. C).

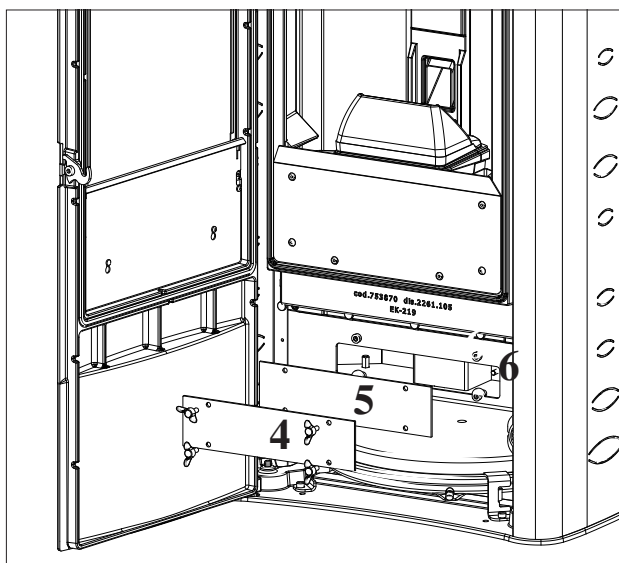


FIG. C

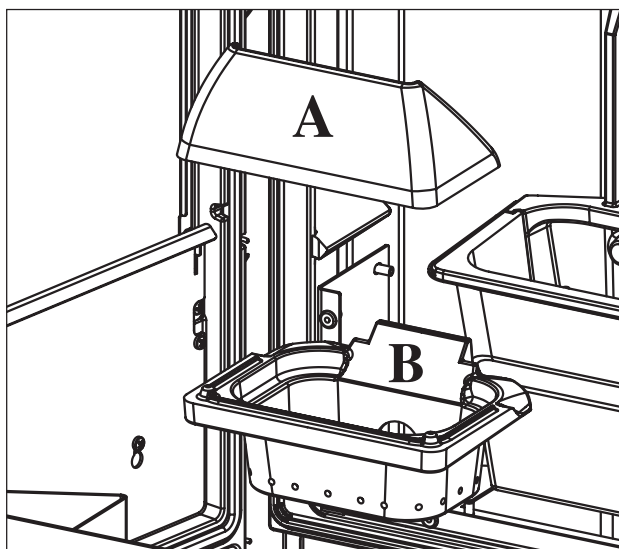


FIG. D

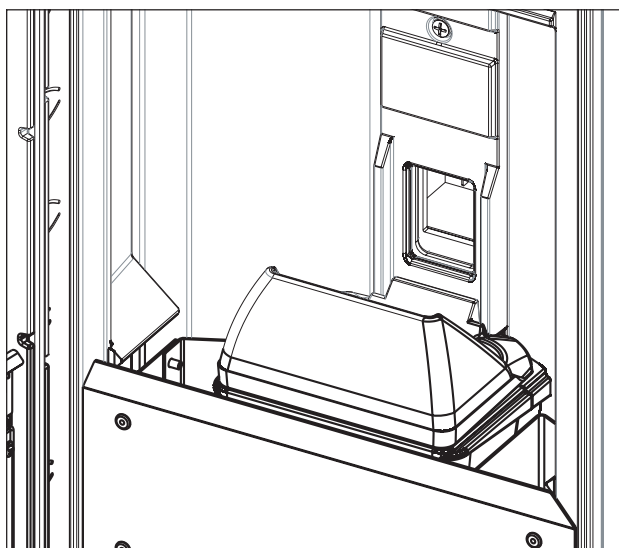


FIG. E

## SEASONAL MAINTENANCE

**(to be carried out by the technical assistance centre)**

This consists in cleaning the stove inside and out.

**If the product is used intensively, we recommend cleaning the fumes duct and flue every 3 months.**

You should clean the chimney system at least once a year (check local regulations for details).

If you fail to regularly clean and inspect the system, there is an increased risk of the chimney pot catching fire.

We recommend against using compressed air to clean the combustion air inlet

## SUMMER SHUTDOWN

When the stove is not in use, keep the doors, hatches and covers closed.

We recommend emptying out the pellet tank.

## SPARE PARTS

for any spare parts, contact your reseller or technician. Using non-original spare parts may damage the appliance and relieves the manufacturer from all liability for damage due to this.

## DISPOSAL

At the end of its service life, dispose of the product as required by regulations.




In accordance with art. 26 of Legislative Decree no. 49 of 14th March 2014, "Implementation of Directive 2012/19/UE on the disposal of electrical and electronic devices (RAEE)".

The crossed-out dustbin symbol displayed on equipment or its packaging indicates that the product at the end of its life must be collected separately from other waste.

At the end of its useful life, the user should therefore deliver the product to a suitable local sorted collection centre for electrical and electronic devices.

Sorted collection for recycling, treatment and environmentally compatible scrapping contributes to the prevention of negative effects on the environment and health, and promotes the re-use and recycling of the materials of which the equipment is made.

If any problems occur, the boiler stove will automatically stop by performing the switch-off operation and a term will be displayed indicating the reason why it has been switched off (see below the different reasons).

In the event of a block, in order to restart the boiler stove you must allow it to switch off completely (15 minutes with a beep), and then press the  button.

Do not turn the boiler stove on again, before checking the cause of the blockage and having CLEANED/EMPTIED the grate.

The boiler stove is equipped with all safety devices but, if the grate is not cleaned regularly as explained above, ignition may involve a small detonation.

If continuous white smoke forms in the combustion chamber for a long time, disconnect the mains supply and wait 30 minutes before opening the hearth door and emptying the grate.

#### SHUTDOWN MESSAGES AND THEIR SOLUTIONS:

MESSAGE	PROBLEM	SOLUTION
<b>AL01</b>	Intervenes if the water reading probe is faulty or disconnected.	<ul style="list-style-type: none"> <li>Contact the technician</li> </ul>
<b>AL02</b>	displays when the logic board is not detecting the right fumes fan speed	<ul style="list-style-type: none"> <li>Contact the technician</li> </ul>
<b>SF (AL03)</b>	displays when the thermocouple detects a fume temperature lower than the set value and interprets this as the absence of flame	<ul style="list-style-type: none"> <li>Check that there are pellets in the tank</li> <li>Contact the technician</li> </ul>
<b>AF (AL04)</b>	displays when ignition times out unsuccessfully	<p>There are two possibilities:</p> <p>NO flame:</p> <ul style="list-style-type: none"> <li>Check that the grate is seated properly and clean</li> <li>Check that there are pellets in the tank and grate</li> <li>Use a bit of solid paraffin to ignite the stove (contact the technician first)</li> </ul> <p>Flame present:</p> <ul style="list-style-type: none"> <li>Contact the technician</li> </ul>
<b>AL05</b>	Shutdown due to lack of electricity; this is not normally a defect of the boiler stove	<ul style="list-style-type: none"> <li>Check electrical connections and any voltage drops.</li> </ul>
<b>AL06</b>	displays when the logic board determines that the fumes thermocouple is broken or disconnected	<ul style="list-style-type: none"> <li>Contact the technician</li> </ul>



MESSAGE	PROBLEM	SOLUTION
<b>AL07</b>	Shut-down due to exceeding maximum fumes temperature.	<ul style="list-style-type: none"> <li>Check the type of pellet (contact the technician if in doubt)</li> <li>contact the technician</li> </ul>
<b>AL08</b>	Shutdown due to overheated water	<ul style="list-style-type: none"> <li>check the system has been vented</li> <li>contact the technician</li> </ul>
<b>AL09</b>	displays when the combustion air intake is below the set level	<ul style="list-style-type: none"> <li>Ensure the furnace door is closed</li> <li>Check that the stove, exhaust and combustion air duct are clean.</li> </ul>
<b>AL C</b>	Intervenes if there are electrical absorption problems on the gearmotor	<ul style="list-style-type: none"> <li>Contact the technician</li> </ul>
<b>AL H</b>	Intervenes if there are electrical absorption problems on the gearmotor	<ul style="list-style-type: none"> <li>Contact the technician</li> </ul>

### MESSAGES WHICH DO NOT SHUT THE STOVE DOWN, BUT ARE SIMPLY WARNINGS

MESSAGE	PROBLEM	SOLUTION
<b>“Bat. 1”</b>	The boiler stove does not stop operating, although the term is displayed.	<ul style="list-style-type: none"> <li>The back-up battery on the board needs replacing.</li> </ul>

**If pellet loading fails to occur**, especially after a power failure, check whether the safety thermostat has intervened. If the temperature is too high, it switches off the product by cutting off the power supply to the gearmotor. If the thermostat has intervened, it must be reset via the reset button at the back of the boiler stove after removing the protective cap.





