

WOOD PELLET BOILER-FIREPLACE

IDROPELLBOX



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The original language of this manual is Italian

The undersigned EDILKAMIN S.p.A., 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 wood pellet boiler-fireplace mentioned below are conforming with EU Regulation 305/2011 and harmonised EU standard EN 14785:2006

WOOD PELLET BOILER-FIREPLACE, bearing the EDILKAMIN trademark, models IDROPELLBOX

SERIAL NO.: Rating plate reference
IDROPELLBOX: Performance declaration
(DoP - EK no. 064)

Moreover, the company hereby declares that:
the wood pellet boiler-fireplace IDROPELLBOX comply with the requirements in the following European Directives:
2014/35/EC - Low Voltage Directive
2014/30/EC - Electromagnetic Compatibility Directive

Dear Sir/Madam

We thank you for and congratulate you on choosing our product. Before using it, we ask you to 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.edilkamin.com

Readers of this manual

This manual is addressed to:

- those who will use the product at home ("USER");
- the technician who will install the product ("INSTALLER")

The target person of each page is indicated in a band at the bottom of the page (USER or INSTALLER).

General information

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 them 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.

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.

Identification of the product and warranty.

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.

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

This consists of:

- 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.

Commissioning is required for activation of the Edilkamin manufacturer warranty. The warranty is only valid in the country where the product was bought.

If the appliance is not commissioned by an authorised technician, Edilkamin 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.

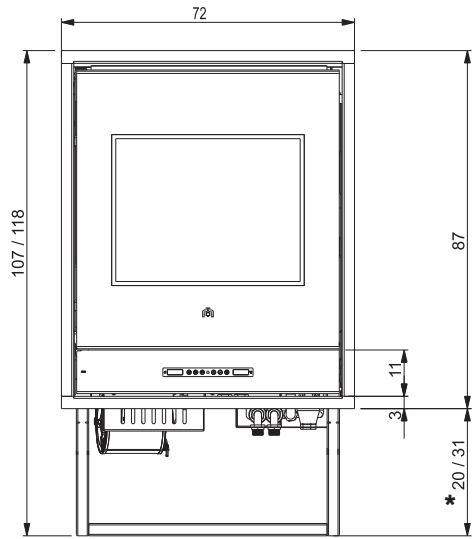
- The product is not designed for use by people, including children, with limited physical, sensory and mental abilities.
- The appliance is not designed for cooking purposes.
- The appliance is designed to burn wood pellets from category A1 in the UNI EN ISO 17225-2 standard, in the amounts and manner 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 Edilkamin nor the retailer are liable for damage resulting from incorrect installation or maintenance.

Safety risks may be caused by:

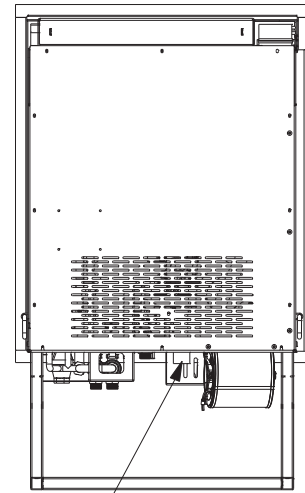
- installation in non-suitable settings, in particular those that are subject to fire risks. **DO NOT INSTALL THE PRODUCT IN AREAS SUBJECT TO THE RISK OF FIRE.**
- contact with fire and hot parts (e.g. glass panel and pipes). **DO NOT TOUCH HOT PARTS** and, when the stove is switched off and still hot, always wear the glove 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 COMBUSTION CHAMBER.** The product may become soiled, the flue may catch fire, and environmental damage may ensue.
- cleaning the combustion chamber when hot. **DO NOT CLEAN THE HEARTH WITH A VACUUM CLEANER WHILE IT IS HOT.** You could damage the vacuum-cleaner and risk the emission of smoke in the room.
- cleaning the smoke duct with cleaning products. **DO NOT CLEAN THE PRODUCT WITH FLAMMABLE PRODUCTS.** Risk of fire or blowback.
- cleaning the glass pane while hot or 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 stove with the combustion chamber 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.
- never operate the product without water in the circuit.
- running it dry can damage it.

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

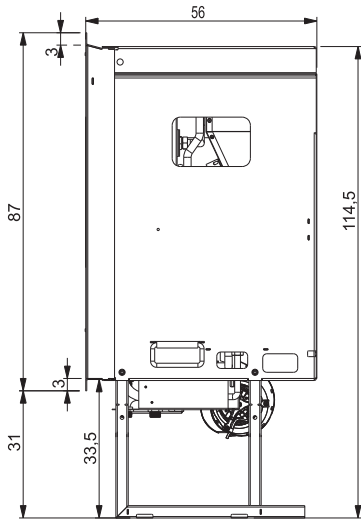
For reasons of safety, read the user instructions included in this manual.



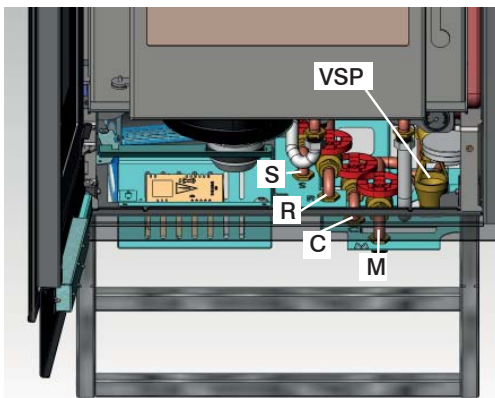
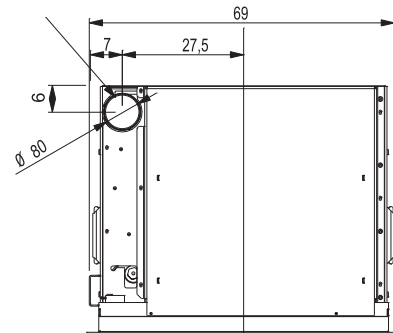
* minimum support height



Combustion air
Ø 40 mm



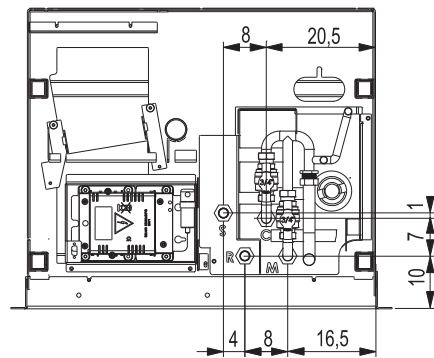
Smoke outlet
Ø 80 mm



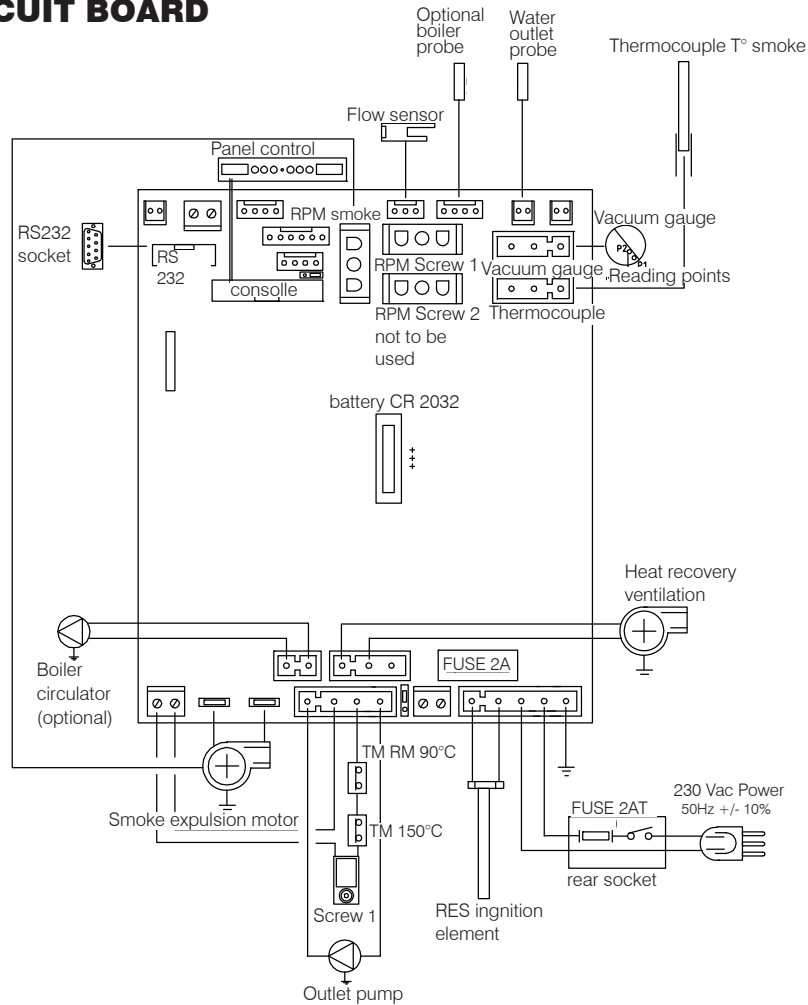
HYDRAULIC CONNECTIONS

- S:** Drain 3/4" male
- R:** System return 3/4" male
- C:** Fill/Top up 3/4" male

- M:** System in 3/4" male
- VSP:** Safety valve 3/4" female



ELECTRONIC CIRCUIT BOARD

**SERIAL PORT**

The Dealer can install an optional on the AUX (located on the electronic board), outlet for controlling the process of switching on and off (e.g. telephone remote, local thermostat), located at the rear oh the boiler-fireplace.
Can be connected via special optional trestle (code 640560).

BACKUP BATTERY

A backup battery is found on the control board (3-Volt CR 2032 battery).

Its malfunction is indicated with the following messages: (not considered a defect but due to normal wear-and-tear):
"Battery check".

For more detailed information, please contact the DEALER who has performed the first 1st ignition.

TECHNICAL DATA as per EN 14785		
Rated power	15,7	kW
Water heating power	12,6	kW
Approx. overall efficiency	92,2	%
Approx. water efficiency	81	%
CO emission (13% O ₂)	0,014	%
Max. pressure	2	bar
Operating pressure	1,5	bar
Smoke output temperature from test EN14785	130	°C
Minimum draught	12 / 5	Pa
Min./max. autonomy	8 / 27	hores
Fuel consumption min./max.*	1 / 3,5	kg/h
Hopper capacity	30	kg
Heating capacity **	410	m ³
Weight including packing	201	kg
Diameter of smoke extract duct male thread	80	mm
Air intake duct diameter (male)	40	mm
Energy efficiency classes (2015-1186/1187 Regulation)	A+	

*A calorific value of 4.8 kW/Kg has been used to calculate consumption.

** The heatable volume is calculated based on the assumption of a heating demand of 33 Kcal/m³ hour.

TECHNICAL DATA FOR SIZING THE FLUE		
which must in any case satisfy the requirements of this sheet and the installation instructions for the product		
Power supply	230Vac +/- 10% 50 Hz	
Average power consumption	150	W
Power consumption during ignition	400	W
Remote control frequency	infrared	
Protection on mains power supply	Fuse 2AT, 250 Vac 5x20	
Protection on electronic circuit board	Fuse 2AT, 250 Vac 5x20	

The above data is for guidance only and was measured during certification by a notified body.

EDILKAMIN s.p.a. reserves the right to modify the product without notification in the interests of improvement.

PRINCIPLE OF OPERATION

Small pellet-burning boiler-fireplace that is able to heat water to power heating systems (radiators, heated towel rails, underfloor heating panels) also with heat recovery in the room where it is installed via the release of a moderate amount of hot air (I).

The fuel (pellets) is transferred from the storage hopper (A) to the combustion chamber (B) by means of a feed screw (R), which is driven by a gear motor (D). The pellets are ignited by the air that is heated by an electrical resistance (E) and drawn into the combustion chamber by a smoke extractor (F). The fumes produced during the combustion process are extracted from the hearth by the same fan and expelled through the outlet (H) located on the upper part of the boiler-fireplace.

The ashes fall into the tray which is to be emptied periodically.

The hearth is made with an internal steel structure, and is closed in the front by two overlapping doors.

- external glass ceramic door
- an inner door made from ceramic glass in direct contact with the fire.

The fuel tank is located on the back part of the boiler-fireplace.

The tank is filled via a special tray (C) that can be opened from the front part of the boiler-fireplace.

The water in the boiler-fireplace is heated and sent to the heating system by the pump built into the boiler-fireplace.

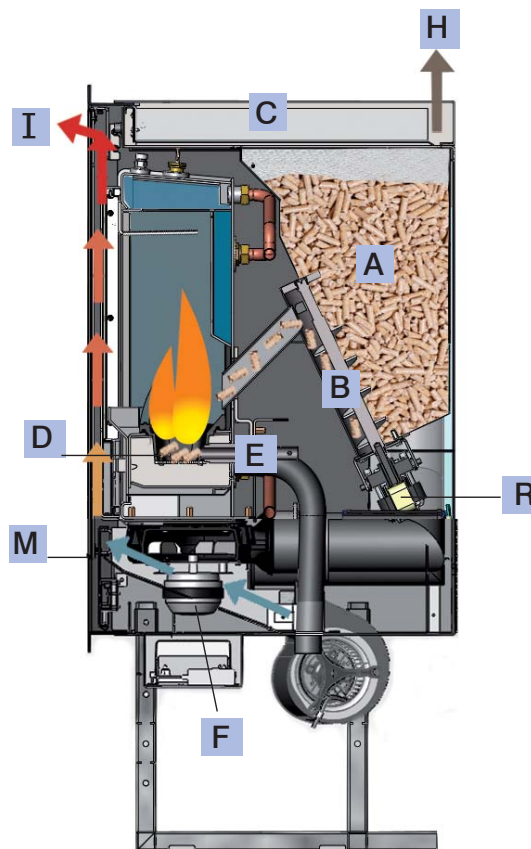
The boiler-fireplace has a built-in closed expansion tank and overpressure relief valve. Fuel quantity, smoke extraction and combustion air supply and pump operation are all controlled by an electronic control board (which is equipped with LEONARDO® software) to achieve high combustion efficiency and low emissions.

The fan recovers a moderate amount of heat, sufficient enough to prevent fumes that are too hot from escaping the chimney flue, causing a waste of energy.

The air speed is electronically modulated on the basis of actual heat recovery needs. For this reason, the fan at low speeds could be off or operate slowly; the system obviously favours an exchange with water.

Because of this, during the first few days of boiler operation when it is still clean and not dirty with deposits and condensation, the fan may not switch on or may turn very slowly even at high powers.

The synoptic panel (M) which allows managing and viewing all the phases of operation is installed under the glass door. The main phases can also be managed via the remote control.



PELLET LOADING

A convenient front drawer allows you to load the pellets in complete comfort, without having to remove the hearth from its housing, and therefore in absolute safety and in compliance with standards EN 14785.



Leonardo® is a combustion safety and control system which allows optimal performance in all conditions. Leonardo® ensures excellent operation thanks to two sensors measuring the pressure level in the combustion chamber and smoke temperature. The detection of and subsequent optimisation of these two parameters is continuous in order to correct operation anomalies in real time.

The Leonardo® system offers constant combustion, automatically regulating the draft based on the characteristics of the chimney flue (bends, length, shape, diameter, etc..) and environmental conditions (wind, humidity, atmospheric pressure, installations at high altitude, etc.). The standards for installation must be respected.

Leonardo® system is also able to recognise the type of pellets and automatically adjust the flow moment by moment to ensure the required level of combustion.

Water overheating safety thermostat with manual reset

measures the temperature of the water inside the boiler-fireplace.

If the temperature is too high, it cuts off the motor's electrical power supply.

If the thermostat is tripped, it must be reset using the button located inside external door on the top left part (fig. B). *

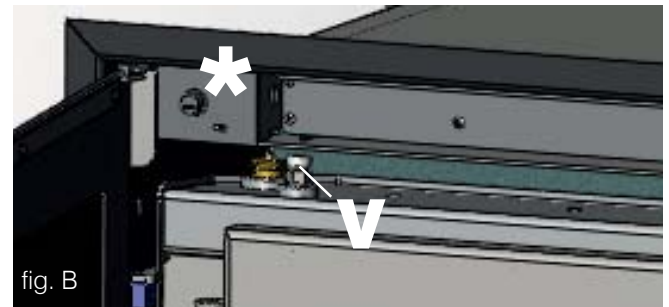
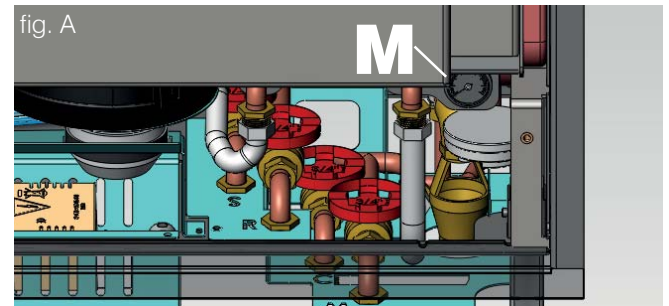
Overpressure valve

upon reaching the pressure stipulated on the plate, the system is triggered to discharge the water and consequently the water must be topped up.

WARNING!!!! remember to carry out the connection with the sewage system.

Manometer (M)

Located inside the lower panel (fig. A), it allows reading the water pressure inside the thermal fireplace. The maximum recommended pressure is 1,5 bar when the boiler-fireplace is on.



Closed expansion tank

“absorbs” the variations in the volume of water contained inside the boiler-fireplace due to the heating effect.

A heating technician must evaluate the need to add a second tank to the existing one, depending on total amount of water in the system.

2 relief valves:

Located on the upper part, these allow for releasing any air present while the water is being loaded into the boiler-fireplace.

ATTENTION:

venting the boiler through the appropriate valves (V - photo above), water leaving may fall on the circuit board or other electrical components, creating a hazard to persons and product malfunction. Always direct the “adjustable” valve exhaust forward and make sure that water does not run over electrical components.

Discharge valve

Located inside the lower panel; this is to be opened if the water inside the thermal boiler-fireplace must be emptied.

N.B.:

IF THE BOILER-FIREPLACE BLOCKS, THE REASON WILL APPEAR ON THE DISPLAY AND THIS WILL BE SAVED.

(Reserved for DEALER)

IDROPELLBOX MUST NEVER BE MADE TO OPERATE WITHOUT WATER IN THE SYSTEM.

MUST BE MADE WITH A PRESSURE OF ABOUT 1.5 BAR.

IT CAN BE DAMAGED IF IT IS IGNITED WITH NO WATER IN THE SYSTEM.

The hydraulic connection must be performed by qualified personnel who can issue a declaration of conformity according to the Ministerial decree no. 37 ex L.46/90. Reference must however be made to the laws in force in the individual countries.

Water treatment

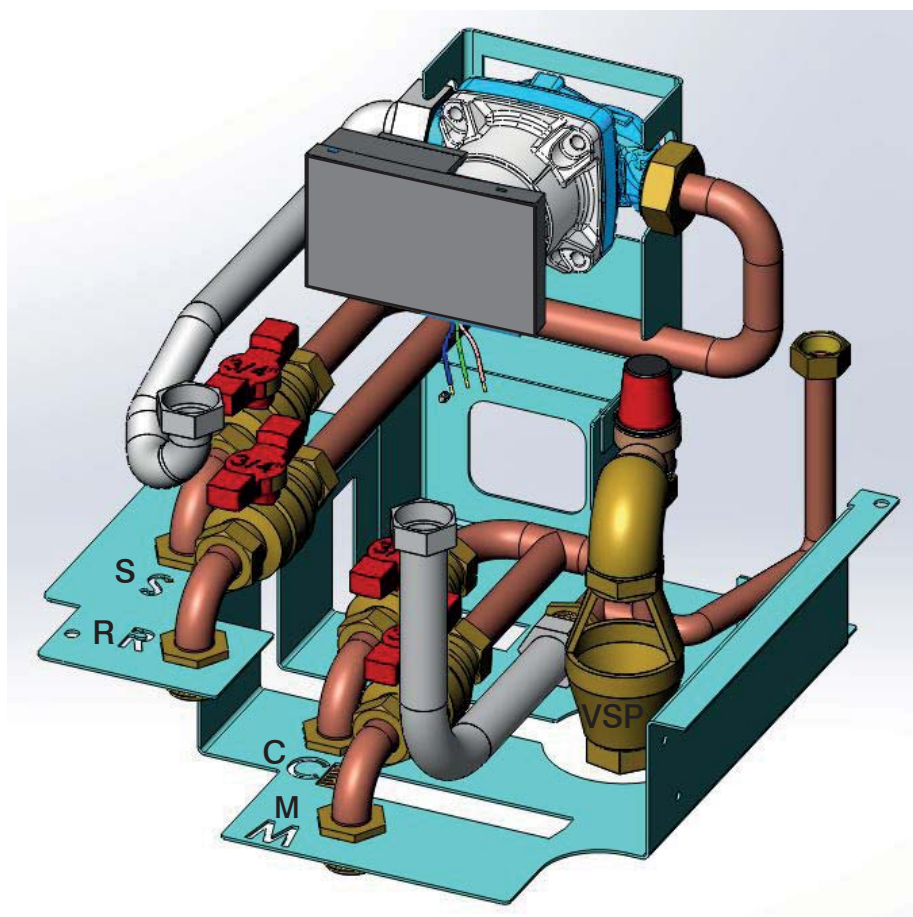
Foresees the addition of antifreeze, de-scaling and corrosion substances. In the event that the water used for filling and topping up has a hardness greater than 35° F, use a water softener. For suggestions please refer to regulation UNI 8065 (Water Treatment In Heating Systems For Civil Use).

Note on return water temperature.

An appropriate system must be set up to guarantee that the return water temperature does not fall below 45-50 °C.

Incorporated hydraulic kit.

The hydraulic kit incorporated in the boiler-fireplace.



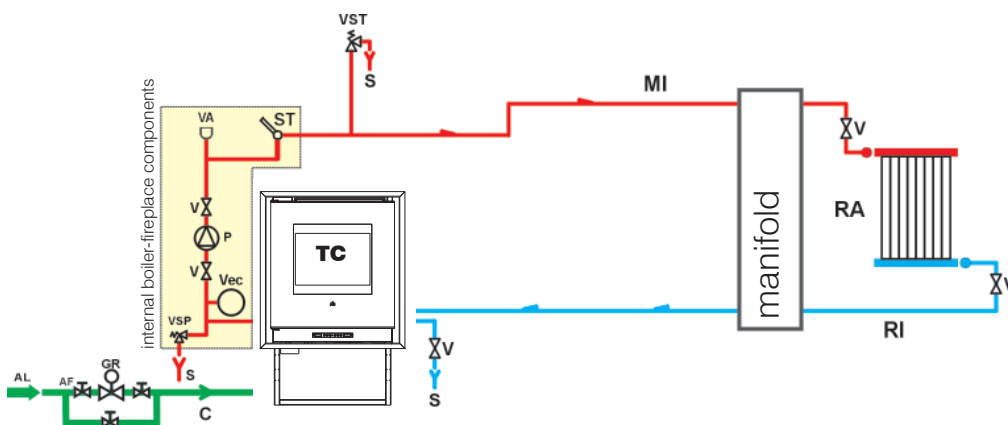
HYDRAULIC CONNECTIONS

- S:** Drain 3/4" male
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- C:** Fill/Top up 3/4" male

- M:** System in 3/4" male
- VSP:** Safety valve 3/4" female

Heating system with a boiler-fireplace as the only source of heat.

This layout is purely indicative. Have a plumber design and install the system.

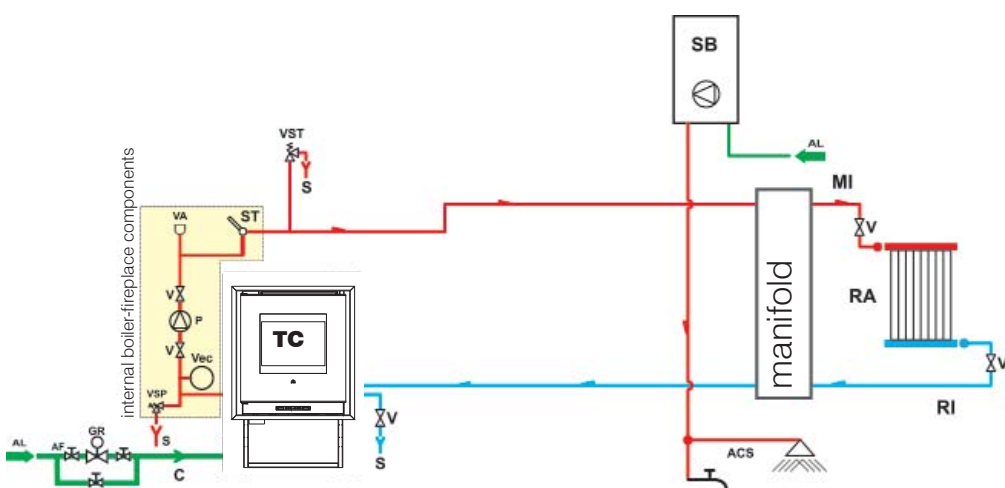


LEGEND

- AF:** Cold Water
- AL:** Water supply
- C:** Filling/Topping up
- GR:** Filling unit
- MI:** Outlet to system
- P:** Pump (circulator)
- RA:** Radiators
- RI:** Inlet from system
- S:** Drain
- ST:** Temperature Detector
- TC:** Boiler-fireplace
- V:** Ball valve
- VA:** Automatic bleed valve
- Vec:** Closed Expansion Tank
- VSP:** Safety Pressure Valve
- VST:** High Temperature Drainage Valve

Heating system with a boiler-fireplace combined with a bath heater.

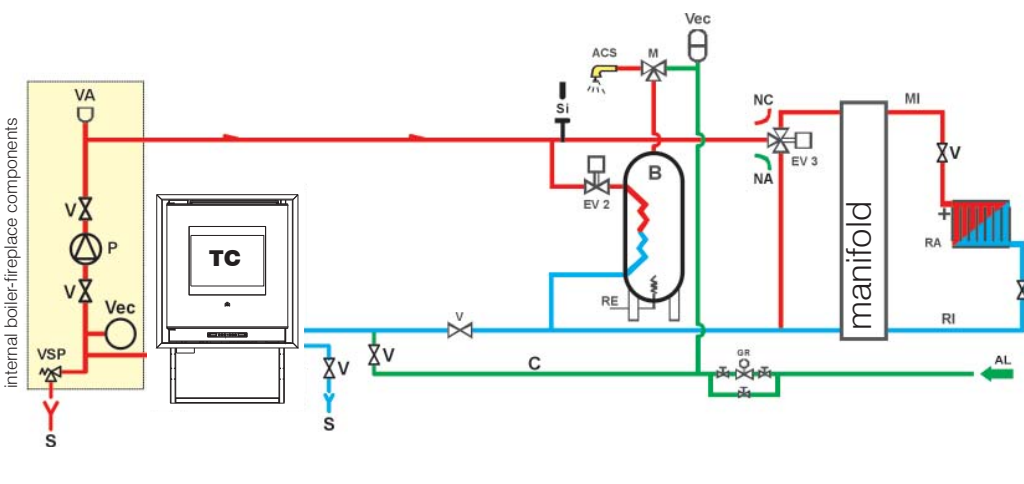
This layout is indicative only: your plumber will be responsible for the ultimate installation



LEGEND

- ACS:** Household hot water
- AF:** Cold water
- AL:** Water supply input
- C:** Fill/Top up
- GR:** Pressure reducer
- MI:** System in
- P:** Pump (circulation)
- RA:** Radiators
- RI:** System return
- S:** Drain
- SB:** Water boiler
- ST:** Temperature probe
- TC:** Boiler-fireplace
- V:** Spherical valve
- VA:** Automatic air vent
- Vec:** Closed surge tank
- VSP:** Safety valve
- VST:** Thermal discharge valve

Heating system with a boiler-fireplace as the only source of heat with the production of sanitary water by means of boiler. This layout is indicative only: your plumber will be responsible for the ultimate installation.



LEGEND

- ACS:** Household hot water
- AL:** Water supply input
- B:** Boiler
- C:** Fill/Top up
- EV2:** 2-way electro-valve
- EV3:** 3-way electro-valve
- NA:** Normally Open
- NC:** Normally Closed
- GR:** Pressure reducer
- MI:** System in
- P:** Pump (circulation)
- RA:** Radiator
- RI:** System return
- S:** Drain
- TC:** Boiler-fireplace
- V:** Spherical valve
- Vec:** Closed surge tank
- VSP:** Safety valve

ACCESSORIES:

In the diagrams referred to in the previous pages the use of accessories available from the Edilkamin catalogue has been assumed. Individual spare parts are also available (exchanger, valves, etc). For information, please contact your local dealer.

**ASSEMBLY AND INSTALLATION
(this must be carried out by a Dealer)**

Refer to local regulations in the country of use for anything that is not specifically covered in this manual. In Italy, refer to standard UNI 10683 in addition to any Regional or Local Health Authority regulations.

If the boiler-stove is to be installed in a block of apartments, consult the block administration before installing.

VERIFY COMPATIBILITY WITH OTHER DEVICES

The boiler-fireplace must NOT be installed in the same room as extractors, type B heating appliances and other appliances that may affect its operation.

VERIFY THE POWER SUPPLY CONNECTION (the plug must be accessible)

The boiler-fireplace is supplied with a power cable that is to be connected to a 230V 50 Hz socket, preferably fitted with a magnetothermic switch. Voltage variations exceeding 10% can damage the boiler-fireplace (unless already installed, an appropriate differential switch must be fitted). The electrical system must comply with the law; particularly verify the efficiency of the earthing system. The power line must have a suitable cross-section for the boiler-stove's power.

An inadequate earthing system can cause anomalies for which Edilkamin cannot be held liable.

FIRE SAFETY DISTANCES AND LOCATION

For correct operation the boiler-fireplace must be level. Check the load-bearing capacity of the floor. The boiler-fireplace must be installed in compliance with the following safety conditions:

- minimum safety distance at the sides and back from medium level flammable materials: 40 cm
- easily flammable materials must not be located less than 80 cm from the front of the boiler-stove
- if the boiler-fireplace is installed on a flammable floor, a sheet of heat insulating material must be placed between the boiler-stove and the floor, which protrudes by at least 20 cm at the sides and 40 cm at the front.

If it is impossible to comply with the distances given above, technical/building measures must be taken to avoid all fire risks. In the event of contact with wooden walls or other flammable materials, you must insulate the smoke exhaust pipe with ceramic fibre or other similar material.

AIR INTAKE

The room of installation must have an external air inlet, directly connected (via duct) to the special outlet provided on the back of the boiler-fireplace.

The air inlet and duct must have a diameter of 40mm in order to ensure the supply of the necessary amount of external air for combustion.

If a duct for direct connection cannot be made, system stoppage may occur after the intervention of the flow sensor, caused by a lack of combustion air.

This occurs because the heating air suction fan is located close to the combustion air intake outlet and; therefore, could interfere with the normal flow of the combustion air. In this case it is preferable to move the combustion air uptake point by applying a piece of tube on the outlet, preventing the combustion air from being sucked up by the heating air fan.

The external air intake duct must end with a section that curves 90° downwards or with an anti-wind guard.

In this case, there may be condensation problems and it is necessary to protect the air intake with a grille, which must have a free section of at least 12 cm².

The external terminal of the air inlet channel must be protected with an anti-insect netting that does not reduce the 12 cm² through passage.

SMOKE OUTLET

The boiler-fireplace must have its own smoke outlet (the smoke cannot be discharged into a smoke flue used by other devices).

The smoke is expelled from the 8 cm-diameter outlet on the lid.

A T-section with condensation trap and bleeder must be fitted at the beginning of the vertical section.

The smoke outlet must be connected to outside by means of suitable steel pipes EN 1856 certified.

The pipe must be hermetically sealed. The material used to seal and if necessary insulate the pipes, must be resistant to high temperatures (high temperature silicone or mastic).

The only horizontal section allowed may be up to 2 m long. It may have up to two 90° bends.

If the outlet is not fitted into a chimney flue, a vertical section and a wind guard are required (reference UNI 10683).

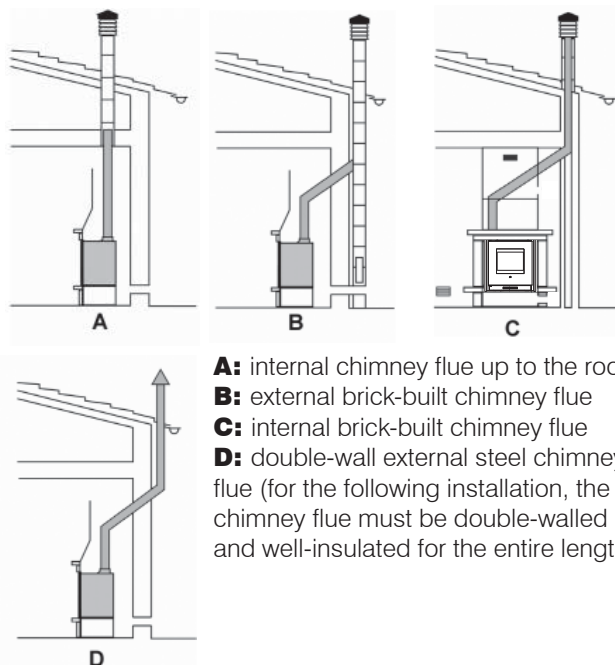
The vertical duct can be internal or external.

If the smoke channel (part of the pipe that goes from the boiler-fireplace to the chimney flue) is outside, it must be appropriately insulated.

If the smoke channel is fitted inside a chimney flue, the latter must be suitable for solid fuel.

If it is wider than 150 mm in diameter it must be improved by entering a pipe that has a suitable cross-section and is made of suitable material (e.g. 80 mm diameter steel).

All sections of the smoke duct must be accessible for inspection. If it is not removable, it must have inspection holes to allow for cleaning.

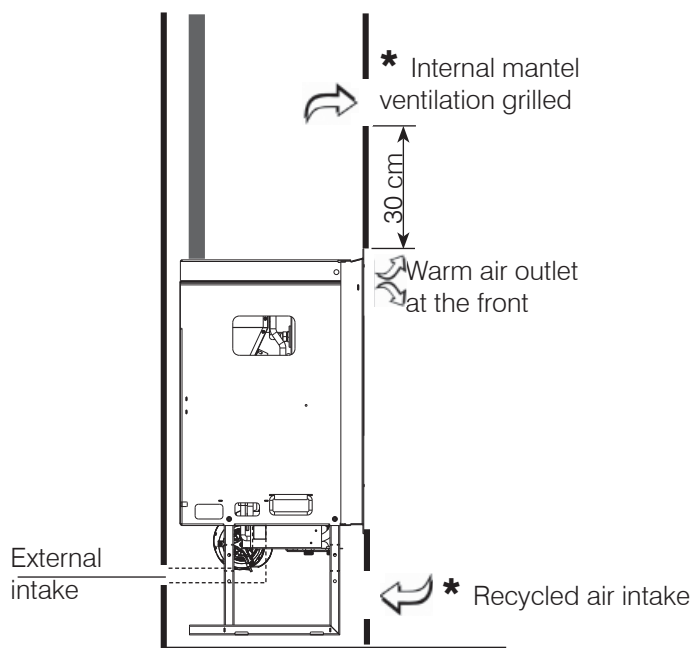


A: internal chimney flue up to the roof
B: external brick-built chimney flue
C: internal brick-built chimney flue
D: double-wall external steel chimney flue (for the following installation, the chimney flue must be double-walled and well-insulated for the entire length)

CHIMNEY POT

The main characteristics are:

- an internal cross-section at the base, which is the same as that of the chimney flue
- an outlet cross-section which is no smaller than twice that of the chimney flue
- its position must be high enough to catch the wind and avoid downdraft areas in turbulent wind..



N.B.: IMPORTANT FOR INSTALLATION CONDITIONS

There must be two ventilation grilles (surfaces greater than 300cm²); the first must be at a height which is lower than the hearth, while the second must be at a height greater than 30 cm with respect to the upper profile of the outlet.

These grilles prevent the accumulation of heat inside, which is then used to help heat the room of installation.

NOTES ON FITTING THE COVERING

- If using a prefabricated Edilkamin covering, In order to define the exact position of the IDROPELLBOX, it is important to check which covering will be used to complete it. Positioning differs according to the model chosen (see assembly instructions given in the packaging of each covering).

Always check that installation is perfectly vertical and horizontal.

- Before installing the covering, check that all connections, commands and moving parts are perfectly functional.

- Check this with the boiler-fireplace on and working for a few hours. Do so prior to fitting the covering in order to intervene as necessary.

Finishing works, such as construction of the counter-hood, covering assembly, pilaster preparation, painting, etc., should be carried out once the final test has been passed.

- Edilkamin will therefore not be held liable for any charges deriving from both demolition and reconstruction works, even where consequent to replacement of any faulty boiler-fireplace parts.

- Rather, at least 1 cm. (approx.) space must be left to allow air to flow, thereby preventing heat from accumulating. The counter-hood can be created from fireproof plasterboard panels or plaster sheets. When creating this, the air circulation grill must be included, as previously specified.

- **During the construction phase of the covering it is fundamental to ensure that the combustion air is restored to prevent pressure phenomena in the room where the boiler-fireplace is installed (refer to the Chapter regarding the external air inlet)**

- **In addition to the above, always consider the indications given by paragraphs 4.4 and 4.7 of standard UNI 10683 “insulation, finishes, coverings and safety recommendations”.**

CREATING THE MANTEL

- **the mantel can be constructed with fire resistant panels in plasterboard or gypsum board.**

- **aeration grilles for preventing any excess temperature inside must be provided for during construction.**

Before igniting.

The first start up must, without fail, be performed by DEALER.

You must consult the DEALER in your area when igniting the boiler-fireplace for the first time, in order for the boiler-fireplace to be calibrated according to the type of pellets and installation conditions

The DEALER must also:

- Verify that the hydraulic system is correctly installed and is equipped with an expansion tank that is sufficiently large to guarantee safety.

The presence of a tank within the thermal stove does NOT guarantee appropriate protection from thermal expansion occurring in the whole system.

Therefore the installer must assess whether an additional expansion tank is needed, depending on the type of system installed.

- Connect the electrical power to the boiler-fireplace and implement a cold test (to be carried out by the DEALER).

- Fill the system using the filling tap (it is recommended not to exceed a pressure of 1,5 bar).

When filling, 'bleed' the pump and the relief tap.

Attention:

During the first start-up phase, discharge the air/water using the manual valves (V) located above the boiler (see figure at the side).

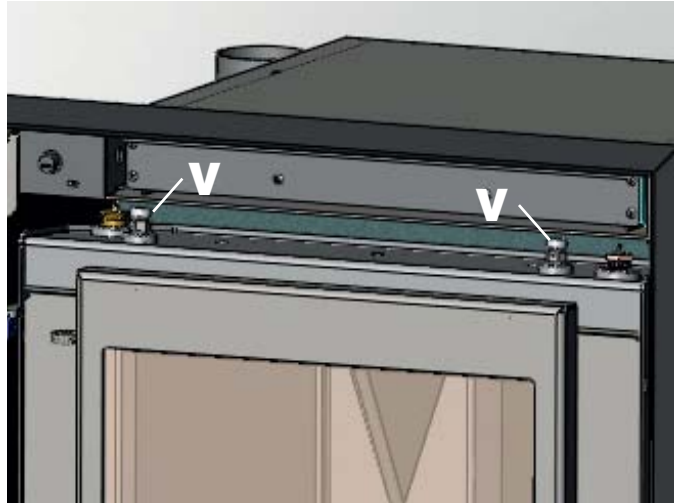
This operation must also be repeated during the first days of use and whenever the system is reloaded, even partially. The presence of air within the pipelines can hinder the unit's proper functionality.

There may be a slight smell of paint the first few times it is ignited, however, this will disappear quickly.

Before igniting you must check:

- that installation is correct
- the power supply
- that the door closes properly to a perfect seal
- that the combustion chamber is clean
- that the display is on stand-by (time and temperature set).

Note: When producing hot sanitary water, power to the radiators temporarily decreases.



ATTENTION:

venting the boiler through the appropriate valves (V), water leaving may fall on the circuit board or other electrical components, creating a hazard to persons and product malfunction. Always direct the "adjustable" valve exhaust forward and make sure that water does not run over electrical components.



PELLET CHUTE COVER

The supplied metal cover for the pellet chute has to be placed as shown in the picture below.

Mimic panel



to turn on and off (hold down for 2") and to exit from the menu during programming



to access the menu during programming



to increase the various settings



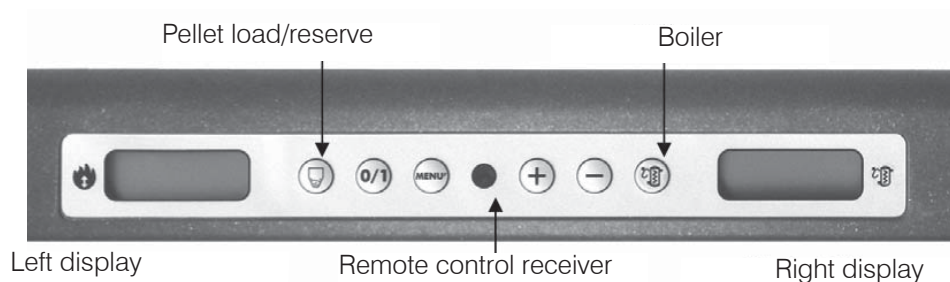
to decrease the various settings



(pellet loading/reserve button)
press once to 'inform' the boiler-fireplace memory that a 15 kg sack of pellets has been loaded, thereby allowing it to keep track of the reserve.



(boiler setting button)
Controls a secondary circuit, e.g. that of a boiler. The right side of the display shows the temperature of any external storage tank/boiler (if the boiler sensor is connected). Press the 'boiler' button to see the set value. If the boiler sensor is not connected, dashes will appear instead of the temperature (--- °C).



Filling the feed screw

If the pellet storage tank is completely emptied, it follows that the Archimedes' screw is also emptied. Before re-starting the stove you must fill it by following these steps: press the +/- keys simultaneously (via the remote control or the synoptic panel) for a few seconds, after which, having released the keys, the display will show the text "Reload".

It is quite normal for some pellet residue to remain inside the hopper, this is what the feed screw is unable to pick up. Once a month, fully vacuum the hopper to prevent dusty residue from accumulating.

Automatic ignition

With the boiler-fireplace on stand-by, press the 0/1 button for 2 seconds (on the synoptic panel or remote control). This will start-up the ignition process, 'Start' will appear on the display and a countdown will commence in seconds (1020). There is no preset time for the ignition process: its duration will be automatically shortened if the control board detects that certain tests have been carried out positively.

The flame appears after about 5 minutes.

Manual ignition (in case of start up failure)

At a temperature lower than 3 °C – too low for the electrical resistance to become red hot - or if the resistance is temporarily not working, you can use a firelighter to ignite the boiler-fireplace.

Insert a well-lit firelighter into the combustion chamber, close the door and press 0/1 on the synoptic panel or remote control.

Operating modes

Operating from synoptic panel/remote control.

With the boiler-fireplace running or on stand-by, from the synoptic panel.

Press the + or – keys to increase or decrease the desired water temperature.

It is possible to visualise (if the boiler probe is connected) the temperature of any boiler/external storage, by pressing the "boiler" key the set value is displayed, by pressing the +/- keys while viewing the boiler value set that setting can be varied. If the boiler probe is not connected dashes appear in place of the temperature (--- °C).

Shutdown

While the boiler-fireplace is working pressing the 0/1 key for 2 seconds begins the shutdown process and "OFF" is displayed (for 10 minutes). The turning off phase includes:

- The interruption of falling pellets
- The circulation of running water.
- Smoke extractor operating at maximum speed.
- Air ventilation

Never pull the plug during shutdown.

N.B. Please note that the circulator runs until the water temperature drops below 40° C.

Setting the clock

Press the MENU button for 2 seconds and use the + and – keys to follow the instructions given on the display to access the 'Clock' menu. This allows you to set the time on the electronic control board. Then press MENU and the following data appears in sequence – this can be adjusted: day, month, year, hour, minutes, day of the week. When 'Save?' appears on the display, you can check that the settings have been entered correctly before confirming. Press MENU to save the information ('Save OK' then appears on the display).

Programmer to ignite and shutdown the thermal stove at various times during the week.

Press the MENU button on the remote control or the synoptic panel for 2 seconds to access the time setting function and press the + key to access the weekly timer function 'Program ON/OFF' will appear on the display. The timer allows you to set a number of ignitions and shutdowns per day (up to a maximum of three), for each day of the week. As you confirm via the MENU button, one of the following options will appear:

- No Prog. (no program is set)
- Program/daily (a single program is set for every day)
- Program/weekly (a program is set for each day of the week)

Move from one to the other using the + and – keys.

Use the MENU button to confirm the 'Daily program' option and access the selection of the number of programs (ignition/shutdown) to be set per day. Use the 'Program/daily' option to set the identical program/s for every day of the week.

The following will be displayed if the + key is pressed:

- No Prog.
- Prog. No. 1 (one ignition and one shutdown per day), Prog. No. 2 (same as before), Prog. No. 3 (same as before)

Use the button to show them in reverse order. If the 1st program is selected, the ignition time is shown.

The display shows: 1 Ignition Hour 10.30; use the +/- keys to change the hour and press MENU to confirm.

The display shows: 1 Ignition Minutes 10.30; use the +/- keys to change the minutes and press MENU to confirm. In the same way, adjust the shutdown times.

The program is confirmed by pressing the MENU button when "Saved" appears on the display.

When confirming 'Program/week', you will need to choose the day to which the program is to apply:

1 Mon; 2 Tues; 3 Wed; 4 Thurs; 5 Fri; 6 Sat; 7 Sun

Once you have chosen the day by scrolling through them with the + and – keys, confirm by pressing MENU and proceed with the settings of the programs in the same way as for the 'Program/daily', selecting whether or not to enable a program for each day of the week and choosing the number and times of interventions. Should you make a mistake whilst setting the programs you can exit without saving by pressing the 0/1 key and 'Saved' will appear on the display. Should the hopper run out of pellets, the stove will block and 'Stop/Flame' will appear.

Pellet reserve warning

The boiler-fireplace is equipped with an electronic pellet detection system.

The pellet detection system is integrated into the electronic control board, allowing the stove to monitor how many kilos of pellets are left.

This verification is implemented at any point whilst the stove is in operation mode.

For correct system operation, it is important that the following procedure is adhered with during the first ignition (that must be implemented by the DEALER). Before starting to use the pellet detection system, you must load and consume a full sack of pellets.

This allows for a brief running-in of the loading system.

Subsequently load 15 kg of pellets.

Then press the 'reserve' button once, thereby storing the data into the memory that 15 kg have been loaded.

From now on the display will show the remaining pellets as they decrease in kg (15...14...13). Each time pellets are reloaded you must

enter the quantity. E.g. when loading 15 kg, simply press the 'pellet load' button to enter this into the memory.

For other quantities, or in the event of an error, you can specify the quantity using the pellet reserve menu as follows:

Press the MENU button for 2 seconds to view the SETTINGS.

Press + or – consecutively to view T. Max exit.

Confirm by pressing MENU and the remaining quantity of pellets will be displayed + that being loaded (default is 15 and can be changed using the +/- keys).

Should the hopper run out of pellets, the boiler-fireplace will block and 'Stop/Flame' will appear.

Variation feeding pellets (ONLY AFTER SUGGESTED BY DEALER)

Press and hold the "M" key on the remote control for two seconds. Scroll through the display instructions using the "+"

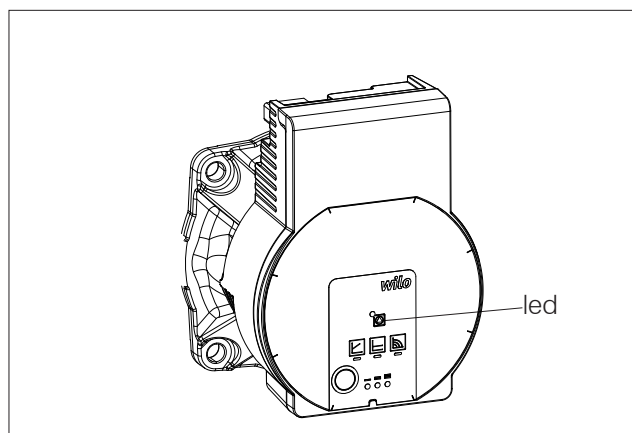
and "-" keys, to the description "ADJ-PELLET". By confirming this function using the menu key you can adjust the supply of pellets,

by reducing the set value, you decrease the supply of pellets, increasing the set value increases the supply of pellets. This function can be useful in the event that one changes the type of pellets used, no longer using those for which the boiler-fireplace was calibrated, thus necessitating an adjustment of the load setting.

Should this correction not suffice, contact the Edilkamin-authorized Dealer, to establish the new operating axis.

Notes on flame variability: *Any changes in the state of the flame depend on the type of pellets used, as well as on normal variation of solid fuel flames and on the periodic cleaning of the crucible the boiler-fireplace automatically carries out (Note: This does NOT replace the necessity cold vacuuming by the user prior to start up).*

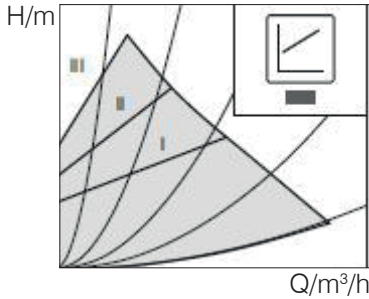
PUMP SPECIFICATIONS



CONTROL MODES AND FUNCTIONS

Variable differential pressure $\Delta p-v$ (I, II, III)

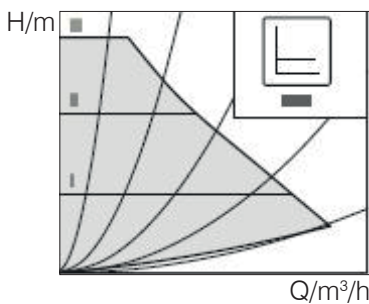
Recommended for two-pipe heating systems with radiators to reduce the flow noise at thermostatic valves.



The pump reduces the delivery head to half in the case of decreasing volume flow in the pipe network.
 Electrical energy saving by adjusting the delivery head to the volume flow requirement and lower flow rates.
 There are three pre-defined pump curves (I, II, III) to choose from.

Constant differential pressure $\Delta p-c$ (I, II, III)

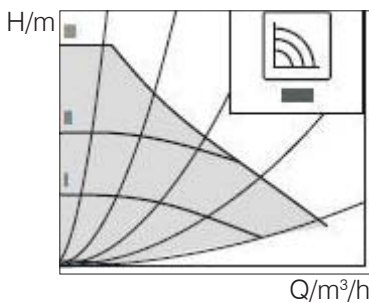
Recommended for underfloor heating or for large-sized pipes, applications without a variable pipe network curve (e.g. storage charge pumps) or single-pipe heating systems with radiators.



The control keeps the set delivery head constant irrespective of the pumped volume flow.
 There are three pre-defined pump curves (I, II, III) to choose from.

Constant speed (I, II, III)

Recommended for systems with fixed system resistance requiring a constant volume flow.



The pump runs in three prescribed fixed speed stages (I,II, III).



NOTICE
Factory setting:
Constant speed, pump curve III

VENTING

Activate the pump venting function via the operating button: press and hold for 3 seconds, then release.

- The pump venting function is initiated and lasts 10 minutes.
- The top and bottom LED rows flash in turn at 1 second intervals.

To cancel, press and hold the operating button for 3 seconds.



NOTICE

After venting, the LED display shows the previously set values of the pump.

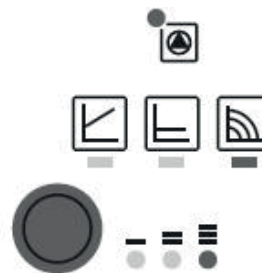
SETTING THE CONTROL MODE

Select control mode

The LED selection of control modes and corresponding pump curves takes place in clockwise succession.

Press the operating button briefly (approx. 1 second).

- LEDs display the set control mode and pump curve.



The following shows the various possible settings, beginning with the factory setting (constant speed / pump curve III):

Press the BUTTON	LED display	Control mode	Pump curve
1.		Constant speed	II
2.		Constant speed	I
3.		Variable differential pressure $\Delta p-v$	III
4.		Variable differential pressure $\Delta p-v$	II
5.		Variable differential pressure $\Delta p-v$	I
6.		Constant differential pressure $\Delta p-c$	III
7.		Constant differential pressure $\Delta p-c$	II
8.		Constant differential pressure $\Delta p-c$	I
9.		Constant speed	III

Pressing the button for the 9th time returns to the factory setting (constant speed / pump curve III).

Lock/unlock the button

To activate the key lock, press and hold the operating button for 8 seconds until the LEDs for the selected setting briefly flash, then release.

- LEDs flash constantly at 1-second intervals.
- The key lock is activated: pump settings can no longer be changed.

The key lock is deactivated in the same manner as it is activated.



NOTICE
All settings/displays are retained if the power supply is interrupted.



FAULT SIGNALS

- The fault signal LED indicates a fault.
- The pump switches off (depending on the fault) and attempts a cyclical restart.

LED	FAULTS	CAUSES	REMEDY
Lights up red	Blocking	Rotor blocked	Activate manual restart or contact customer service
	Contacting/ winding	Winding defective	
Flashes red	Under/ overvoltage	Power supply too low/ high on mains side	Check mains voltage and operating conditions, and request customer service
	Excessive temperature of module	Module interior too warm	
	Short-circuit	Motor current too high	
Flashes red/ green	Generator operation	Water is flowing through the pump hydraulics, but there is no mains voltage at the pump	Check mains voltage, flow rate/ pressure and ambient conditions
	Dry run	Air in the pump	
	Overload	Sluggish motor, pump is operated outside of its specifications (e.g. high module temperature). The speed is lower than during normal operation.	

MANUAL RESTART

The pump attempts an automatic restart upon detecting a blockage. If the pump does not restart automatically:

Activate manual restart via the operating button: press and hold for 5 seconds, then release.

- The restart function is initiated, and lasts max. 10 minutes.
- The LEDs flash in succession clockwise.

To cancel, press and hold the operating button for 5 seconds.



NOTICE
After the restart, the LED display shows the previously set values of the pump.

REMOTE CONTROL

This controls all the functions. It is necessary to point it directly at the boiler-fireplace.
For further information contact our customer service centre.



Key to buttons and display:

- : ignition / shutdown button
- +/-** : to increase/decrease the various regulations
- A** : button to switch to the "EASY TIMER" program
- M** : key for viewing/setting the set temperature (Set 70°C)



Indicates data transmission between the remote control and the control board.



blocked keypad; avoid turning on the remote control for no reason (press "A" and "M" simultaneously for a few seconds to block/unblock the keypad)



low batteries; replace them and put them in their appropriate containers.



Indicates that ignition / shutdown is being via the "EASY TIMER" program



Indicates the room temperature detected by the remote control (it indicates the values of the set parameters during its technical set-up).



On icon: boiler-fireplace in start-up/operating phase



Indicates that the boiler-fireplace is operating in automatic mode



pellet/water boiler-fireplace remote control setting indicator

USING THE "EASY TIMER" PROGRAM

The new remote control allows you to manage a new timer program that is very intuitive and easy to use:

- **If the boiler-fireplace is on:** a delayed shutdown can be set from the remote control - from one to twelve hours. The remaining time for the scheduled shutdown is shown on the display of the synoptic panel.
- **If the boiler-fireplace is off:** a delayed ignition can be set from the remote control - from one to twelve hours. The remaining time for the scheduled ignition is shown on the display of the synoptic panel.
- **Setting:** proceed as follows to set the timer:

a) Press the "A" button and the icon will light up on the display, thereby confirming the "Easy timer" program has been accessed.

b) Set the hours by pressing the +/- buttons, for example:



c) Point the remote control towards the synoptic panel receiver

d) Confirm the setting by pressing the "A" button for a few seconds; the icon will go off and the remaining time will appear on the synoptic panel after which the "Easy timer" setting will intervene.

e) Repeat points a), b), c), d) to cancel the setting, and set the hours to "00H"

BLOCKED KEYPAD

The remote control buttons can be blocked so as to prevent it from going on accidentally.

Press the A and M buttons simultaneously and the key symbol will light up confirming that the keys have been blocked.

Press the A and M buttons simultaneously once again to unblock the keypad.

LOW BATTERY INDICATOR

When the battery icon lights up it indicates that the batteries inside the remote control are almost flat.

Replace them with three new batteries of the same model (size AAA 1.5V).

- Do not use new batteries with used ones.
- Do not mix brands and different types as every type and brand has a different capacity.
- Do not mix traditional batteries with rechargeable ones;
- Do not try recharging alkaline and zinc-carbon batteries as this can cause them to break and/or a liquid leakage.

Before performing any maintenance, disconnect the appliance from the mains.

Remember to vacuum the combustion chamber before each ignition

Should ignition fail, do not re-ignite until you have emptied the combustion chamber

Attention: the pellet emptied from the combustion chamber must not be deposited inside the hopper.

Regular maintenance is required for the boiler-fireplace to function correctly.

The boiler-fireplace will trigger the message: 'smoke °C/high' or 'Mainten.' to appear on the panel when further cleaning is necessary. This is preceded by 'Clean exchang.' appearing on the display.

Failure to perform regular maintenance, at least on a seasonal basis, could lead to poor functionality.

Any problems resulting from lack of maintenance will immediately void the warranty.

NOTE: The DEALER, upon commissioning, sets the kg value of consumed pellets; after which, the message "SERVICE UTE" will appear on the display. The boiler-fireplace continues operation, but the end client is invited to perform careful maintenance, described above and explained by the DEALER during commissioning, to the extent of his abilities. To eliminate the message from the display, press the boiler button for at least 5 seconds after having completed maintenance.

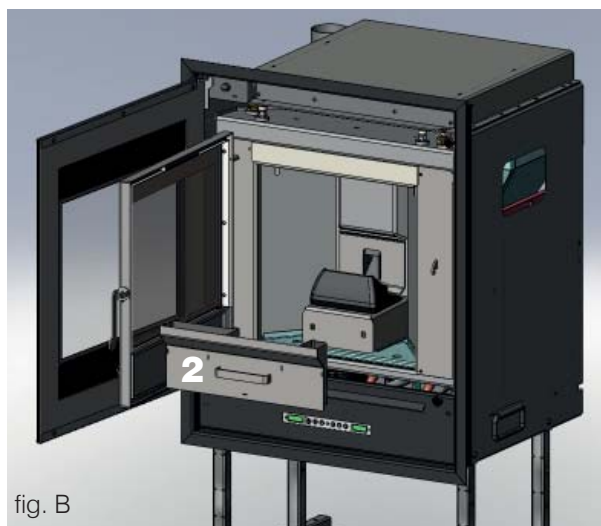
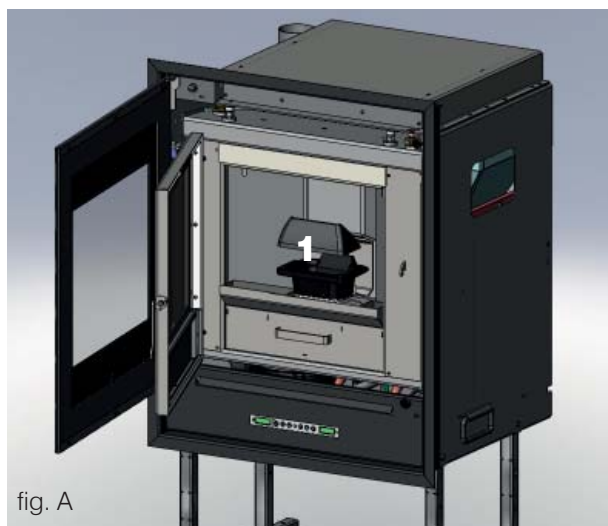
DAILY MAINTENANCE

Operations must be performed when the boiler- fireplace is off, cold and unplugged from the power supply

- Must be performed using a vacuum cleaner, the whole procedure takes up a few minutes every day.
- Open the door, remove the combustion chamber (1 - fig. A) and empty the residue out into the ash pan.
- Scrap the combustion chamber with the spatula provided, removing any obstructions in the openings.
- **IN NESSUN CASO SCARICARE I RESIDUI NEL SERBATOIO DEL PELLETT.**
- Take out and empty the ash (2 - fig B) pan into a fireproof container (the ash may still contain hot parts and/or embers).
- Remove the combustion chamber or use the spatula to scrape it and clean out any blocked holes on all sides
- Vacuum the combustion chamber holder, clean the edges where the combustion chamber is lodged into its seat.
- Clean the glass, if necessary (when cold).

NEVER SUCTION HOT ASH, as this could damage the suction device and possibly cause a fire.

ENGLISH



WEEKLY MAINTENANCE

- Clean the hearth after having removed the ash pan (2 - fig. C) and the smokebox plate.
- Suction clean the smokebox compartment
- Clean the chimney flue using the swabs moving the relative metal levers up and down.
- Clean the combustion chamber and the smoke extractor, paying careful attention.

• To clean the chimney flue, proceed as follows:

Open the external door and the lower panel; remove the 3 screws to open the chimney flue's inspection hole and and suction the residue. The quantity of residue that forms depends on the type of fuel used and the type of system.

Note:

1) Be sure to close the inspection hole once this operation is complete.

2) Failure to clean the chimney flue will cause boiler-fireplace stoppage.

SEASONAL MAINTENANCE

(to be carried out by the technical assistance centre)

This consists of 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

During the period of disuse, keep the stoves doors, hatches and lids closed.

We recommend emptying out the pellet tank.

SPARE PARTS

For any spare parts, contact your dealer or technician. Using non-original spare parts may damage the appliance and relieves Edilkamin of all liability for damage resulting such use.

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.

In the event of problems the boiler-fireplace stops automatically and runs the shutdown process and the display shows text regarding the motivation of the shutdown (see the various alarms below).

Never pull the plug during shutdown on account of malfunction.

To start the boiler-fireplace up again after a shutdown, let the shutdown procedure end (10 minutes marked by a beep) and then press the button 0/1.

Do not turn the boiler-fireplace on again before checking the cause of the malfunction and CLEANING/ EMPTYING the crucible.

INDICATION OF POSSIBLE CAUSES OF MALFUNCTION AND INDICATIONS AND REMEDIES:

- 1) Signalling: H2O PTC_FAULT**
Problem: Shuts down due to the water temperature sensor being broken or disconnected.
Actions: - Contact the technician
- 2) Signalling: Verific./extract.:** (this trips if the smoke extraction speed sensor detects a fault)
Problem: Shutdown for smoke extraction speed fault detection
Actions: - Contact the technician.
- 3) Signalling: Stop/Flame:** (this trips if the thermocouple detects a smoke temperature lower than the value set, which it interprets as the absence of flames)
Problem: Turns off due to drop in smoke temperature
 Flame may fail for any of the following reasons:
 - lack of pellets
 - too many pellets have suffocated the flame, check pellet quality (DEALER)
- 4) Signalling: Block_FI/NO Start:** (intervenes if a flame fails to appear within a maximum of 15 minutes, or if ignition temperature is not reached).
Problem: Turns off due to incorrect smoke temperature during ignition
 Distinguish either of the following cases:
Flame does NOT appear
Actions: Check: - combustion chamber position and cleanliness;
 - arrival of combustion air in the combustion chamber;
 - room temperature (if lower than 3°C use a firelighter) and damp.
 - Try to light with a firelighter.
Flames appear, but AF appears on the display after Ar.
Actions: - Contact the technician.
- 5) Signalling: Black Out:** (not a defect of the boiler-fireplace).
Problem: Turns off due to lack of electricity
Actions: • Check electricity connection and drops in voltage.
- 6) Signalling: Fault/RC:** (intervenes if the thermo coupling has failed or is disconnected).
Problem: Turns off due to thermo coupling failed or disconnected
Actions: - Contact the technician.
- 7) Signalling: smoke °C/high.:** (turns off due to exceeding maximum smoke temperature).
Problem: Spegnimento per superamento temperatura massima fumi.
 Check (only by the Dealer):
 • smoke channel blocked,
 • incorrect installation,
 • gear motor 'drift'

8) Signalling: H2O TEMPALARM**Problem: Shuts down due to water temperature being higher than 90 °C.**

An excessive temperature may occur because of the following:

- system too small: ask the DEALER to activate the ECO function
- blockage: clean the exchanger pipes, the combustion chamber and the smoke outlet.

9) Signalling: Verific./air flow: (intervenes if the flow sensor detects insufficient combustion).**Problem: Turns off for lack of depression**

- Flow may be insufficient if there is a hatch open or the hatch is not perfectly sealed (e.g. seal flawed).
- This may also be the case if there is a problem with air intake or smoke extraction, or if the
- combustion chamber is blocked or the flow sensor dirty (clean with dry air).
- Also check that the flow sensor limits are within the parameters.

10) Signalling: “Battery check”**Problem: The boiler-fireplace does not stop but the error appears on the display.****Actions:**

- The buffer battery of the control board needs changing (DEALER).

11) Problem: Remote control not working**Actions:**

- closer to the receiver of the boiler-fireplace
- check the battery and if necessary, replace it.

12) Problem: Display is off:**Actions:**

- check the power cable connection,
- check fuse (on power cable),
- check connection of flat cable to display

13) Problem: Water is not hot enough:**Actions:**

- Contact the technician

NOTA

All signals/warnings remain shown until you intervene on the remote control, by pressing the button 0/1.

Do not use the boiler-fireplace before having eliminated the problem.

It is important to tell the Dealer exactly what the panel signals.



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