

Installation and User Manual



2023/R00/Punto_Micronova v00

Dear Customer,

Thank you for having chosen our product.

To allow for optimal operation and for you to enjoy the warmth and sense of wellbeing that the fire can convey in your home, we advise you to read this manual carefully before starting up the product for the first time.

CARE OF THE MANUAL AND HOW TO CONSULT IT

Take care of this manual and keep it in an easily accessible place. Should the manual be misplaced or ruined, request a copy from your retailer or directly from the authorised Technical Assistance Department.

1 INTRODUCTION

PUNTO is a welded steel air pellet insert with all necessary comfort and safety features packed inside the cabinet. Main features and advantages of PUNTO are as follows:

- 1. Automatic ignition
- 2. Output regulation
- 3. High heat resistant ceramic sight glass with auto cleaning system
- 4. Forced ventilation of room air to increase efficiency
- 5. Ducting with one motor
- 6. Air pressure switch (auto stop when there is lack at chimney draught)
- 7. Safety switch for unlock at unvoluntary removal of the insert heart
- 8. Mechanical safety key to fix insert heart
- 9. Safety against back burning
- 10. Chrono management, Remote controller

2 WARRANTY CONDITIONS

THE MANUFACTURER guarantees the product, with the exception of elements subject to normal wear (listed below), for a period of 2 (two) years;

- 1. Starting from date of start-up, which is proven by a commissioning document that contains the name of the seller and the date when the sale / first start-up took place
- 2. If there is no service/commissioning report, standard guarantee period starts with the date when the sale took place.

The term 'warranty' refers to the (free-of-charge) replacement or repairs of parts acknowledged to be faulty due to manufacturing defects.

Furthermore, in order for the guarantee to be valid, the product must be installed and calibrated by qualified personnel. Installations that do not meet the current standards, improper use and lack of maintenance as expected by the manufacturer, void the product warranty. The warranty is valid on the condition that the instructions and warnings contained in this manual are observed, and therefore the product is used correctly.

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

EXCLUSIONS FROM WARRANTY

Parts subject to normal wear such as gaskets, ceramic glass, cast iron grilles, vermiculite boards, fire bricks, fire stone burners, handles and electric cables, knobs, all parts which can be removed from the firebox, are excluded from the warranty

Any part that may be faulty as a result of negligence or careless use, incorrect maintenance or installation that does not comply with the manufacturer's instructions (see the relative chapters in user manuals of each product).

The warranty will be rendered null and void in the event of damage caused by tampering, atmospheric agents, natural disasters, vandalism, electrical discharges, fire, faults/defects in the electric and/or hydraulic system, and maintenance not being performed at all or as indicated by the manufacturer instructions

Non-regular electrical supplies, and electrical power cuts off too often, can cause severe damage on control system, sensors and actuators of the products carrying those components. We recommend installing 230 V 50 Hz AC voltage regulator for those products. Also installing a UPS for pumps can protect system from electrical cut-offs causing over heating of water.

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

- 1. Damage caused during internal transportation and/or handling
- 2. All parts that develop faults due to negligence or improper use, incorrect maintenance, installation that does not comply with the manufacturer's instructions (always refer to the installation manual provided with the product)
- 3. Improper overheating of the equipment, use of fuels not conforming to the types and quantities indicated in the instructions provided
- 4. Further damage caused by incorrect user interventions in an attempt to fix the initial fault
- 5. Worsening of the damage caused by the user continuing to operate the appliance even after the fault has been noticed.
- 6. Inefficiency of chimneys, flues or parts of the system affecting the appliance.
- 7. Failure to have the annual product maintenance performed by authorized technician or qualified personnel will result in the loss of the warranty.
- 8. Save for the legal or regulatory limits, the warranty does not cover the containment of atmospheric and acoustic pollution.

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

SPARE PARTS

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

The Manufacturer declines all liability if the product and any other accessory is used improperly or modified without authorisation. All parts must be replaced with original spare parts. Warranty cover is valid if the product is installed and tested by a qualified installer, according to the detailed instructions provided in the instruction manual supplied with the product. The term 'warranty' refers to the (free-of-charge) replacement or repairs of parts acknowledged to be faulty due to manufacturing defects.

3 SAFETY WARNINGS

- 1. Installation, electrical connection, functional verification and maintenance must only be performed by qualified or authorized personnel. Install the product in accordance with all the local and national laws and standards applicable in the relative place, region or country.
- 2. Only use fuels recommended in this manual. Do not put any fuel other than wood pellets in the hopper. Keep cover of the fuel hopper always closed.
 - 3. It is strictly forbidden to use alcohol, petrol, liquid fuel for lanterns, diesel, bioethanol, fluids for lighting charcoal or similar liquids to light/rekindle the flame in these devices. Keep these flammable liquids well away from the appliance.
- 4. Any clothes or similar objects including the fuel must be kept at a safe distance from the product.
- 5. Any type of tampering or unauthorized replacement with non-original spare parts could be hazardous for the operator's safety and relieve the producer/re-seller from any civil and criminal liability.
- 6. Avoid contact with front glass and opening handle unless adequate protective clothing is worn or appropriate means are used, such as heat protective gloves or cold handle type operating systems. It is forbidden to operate the stove with door open or glass broken.
- 7. THE PRODUCT MUST BE POWERED BY A SYSTEM THAT IS EQUIPPED WITH AN EFFECTIVE EARTH SYSTEM.
- 8. Switch the product off in the event of a fault or malfunctioning.
- 9. Accumulated unburned pellets in the burner (fire pot) after each "failed start-up" must be removed before starting up again.
- 10. Do not wash the product with water. The water could get inside the unit and damage the electrical insulation and cause electric shocks.
- 11. INSTALL THE PRODUCT IN ROOMS THAT ARE ADEQUATELY PROTECTED AGAINST FIRE AND EQUIPPED WITH ALL THE UTILITIES SUCH AS SUPPLIES (AIR AND ELECTRICITY) AND SMOKE OUTLETS.
- 12. If a fire breaks out inside the chimney, switch the appliance off, disconnect it from the mains and do not open the door. Then contact the competent authorities.
- 13. If the ignition system is faulty, do not force ignition with flammable materials.
- 14. Special maintenance must only be performed by authorized and qualified personnel.
 - 15. Do not stand for a long time in front of the product in operation. This could cause injuries and health problems.
 - 1. Each time the insert is removed, a security system cuts off the power supply. Should the insert be removed involuntarily during ignition, operation or while switching off (including while blocked), the "Power failure" block phase will be launched when the insert is reinserted. Wait for the block phase to end before reactivating the insert.
 - 2. The insert must not function if the door is open, if the glass is broken or if the pelletloading port is open.

NOTICE – First operation

1. It is quite normal to smell water vapour contained in the special coating of combustion unit of the product. This smell will go out through chimney after a few hours of first operation, and it should not be considered as a product defect.

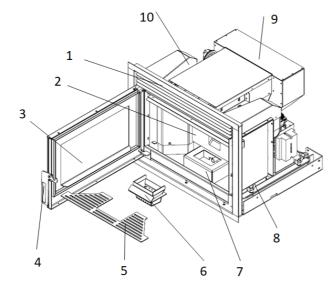
WARNING - Allowed user for the product

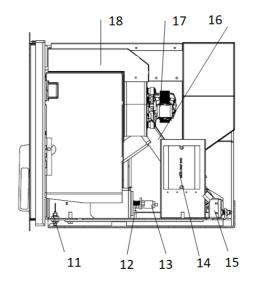
1. This appliance can be used by children aged 10 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children must not play with the appliance. Cleaning and user maintenance shall not be carried out by children without supervision.

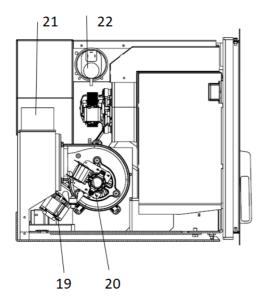
DANGER – Risk of electric shock

- 2. Switch off the system before performing work on the stove.
- 3. THIS APPLIANCE MUST BE EARTHED !

4 MAIN PARTS AND SPECIFICATIONS

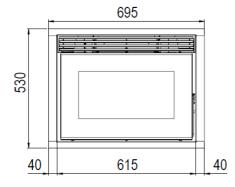


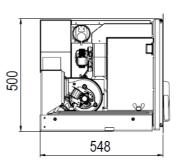


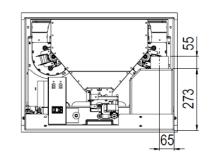


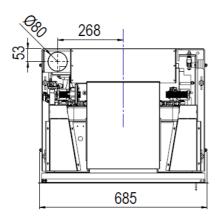
1	Fuel loading tray	12	High pressure relief cover
2	Combustion chamber	13	Ignitor
	board		
3	Front door	14	Main controller (PCB)
4	Handle	15	Safety switch for hearth
5	Ash grille	16	Feeding screw
6	Fire pot	17	Ventilation fan x2
7	Burner	18	Ventilation duct x2
8	Hearth locking nuts	19	Gear motor
9	Fuel container	20	Exhaust fan
10	Safety limit switch (STB)	21	Flue outlet
11	Mechanic lock	22	Air pressure switch

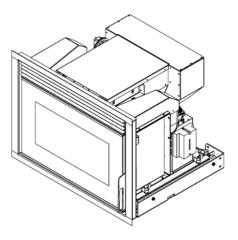
Model		PUNTO 8
Fuel parameters		Wood pellets size 6 mm EnPlus A1 or A2 to ISO 17725-2
Rated heat input (maximum power)		8,3
Nominal heat output	kW	7,2
Efficiency at nominal heat output	%	87,2
Fuel consumption at nominal heat output	kg/h	1,76
CO content (13% O ₂) at nominal heat output	%	0,01
	mg/m ³	126
Flue temperature at nominal heat output	°C	166
Mass flow in flue at nominal heat output	gr/s	6,8
Requested draught at chimney	Pa	12
Reduced heat output	kW	3,6
Efficiency at reduced heat output	%	90,9
Fuel consumption at reduced heat output	kg/h	0,83
CO content (13% O ₂) at reduced heat output	%	0.006
	mg/m ³	92
Flue temperature at nominal heat output	°C	99
Mass flow in flue at reduced heat output	gr/s	4,4
Requested draught at chimney	Pa	10
Autonomy (nominal - reduced heat output)	h	8 - 16
Maximum power rating	W	316
Power rating at work	W	94
Supply voltage and frequency	V/Hz	230/50
Fuel tank capacity	kg / It	14 / 20
Weight	kg	95
External dimensions HxWxL	mm	928 x 430 x 550
Flue outlet diameter	mm	Ø 80
Ducting outlet (optional)	mm	Ø 80











5 BEFORE INSTALLATION

5.1. Fuels

Pellets must comply with Class A1 or A2 according to EN 14961-2

Diameter (mm)	6 ± 1
Length (mm)	Max 40
Moisture (w)	≤ 10%
Ash (w)	≤ 1,5%
Net Calorific Value (kWh/kg)	≥ 4.4

To guarantee combustion without problems, pellets must be kept in a dry place. Poor quality pellets or others that do not comply with that specified previously compromises the operation of your product and can therefore render the warranty and product liability null and void.

5.2. Room selection / operating environment

The product must be installed on its original stand that can be purchased separately or on an existing supporting surface which can hod the total weight of the system. This surface must be nonflammable and free air for combustion and air ventilation must be ensured within the cladding. Check that the floor load capacity is sufficient. The installation area must be:

- 1. Equipped with an adequate smoke expulsion system. The product must be connected to a chimney or an internal/external vertical duct that complies with the regulations in force.
- 2. Equipped with ventilation intake from outside.
- 3. Equipped with 230V 50 Hz power supply with an EC compliant earth system.

Insert must be installed in compliance with the following safety conditions:

- 1. Minimum distance from flammable materials around the sides and back of the insert should be 20 cm, if nonflammable material is used around the heart this distance can be lowered to 5 cm minimum.
- 2. Flammable materials must not be placed less than 80 cm from the front of the insert.

If it is not possible to comply with the above-mentioned distances, technical and constructionrelated provisions must be taken to prevent fire hazards. If connected to wooden walls or other flammable materials, the smoke exhaust pipe must be insulated.

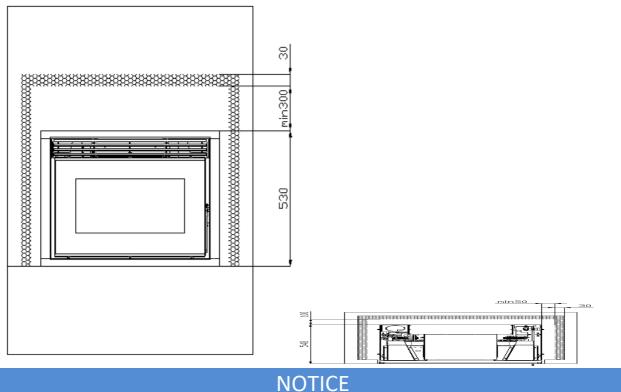
NOTICE

The product cannot be installed

- 3. in bedrooms or bathrooms;
- 4. in rooms where there are liquid fuel appliances with continuous or intermittent operation that draw the combustion air from the room they are installed in;
- 5. in rooms where there are B-type gas heating appliances, with or without domestic hot water production and interconnecting rooms;
- 6. where another heating appliance is installed without an independent air flow.

Operating environment must ensure the following regulations unless any local regulation in force request different conditions

- 7. The volume of the room where the product is installed should be no less than 15 m³. Air must enter through permanent openings made in the walls (near the product) that reach outwards with a minimum section of 80 cm² without the protective grille. In the case of ducting, up to 3.5 linear meters, increase the cross-section by about 5%, whereas for longer ducts, increase it by 15%. These openings (air inlets) must be made in such a way that it is impossible for them to be obstructed in any way. The opening must be positioned in the lower part of an outer wall, preferably opposite to that in which the smoke evacuation duct is located.
- 1. Air can also be drawn from adjacent rooms to the one that is to be ventilated, provided they have an external air inlet and are not used as a bedroom or bathroom or where there is a fire hazard, such as: garages, timber storerooms, warehouses of flammable materials, observing under all circumstances the the provisions of all the applicable standards in force.
- 2. When installing a cladding around the insert, refer to the following sketches for the clearances around the product for safe operation. If there is no insulation material to protect surrounding walls, minimum distance from insert to side / rear walls must be 20 cm.

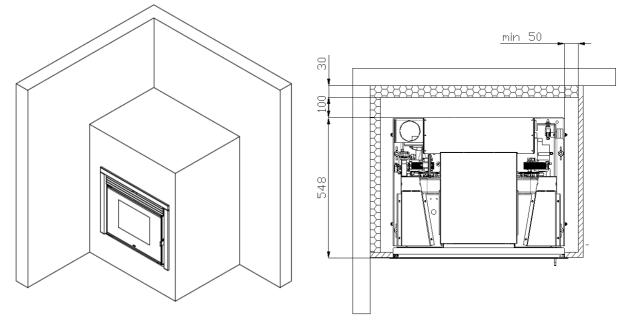


3. The insert takes air for combustion and ventilation from the room where it installed. Therefore, the surrounding design must ensure necessary fresh air for operation

WARNING

- 4. Heat-sensitive or flammable objects cannot be placed near the product. Keep such objects at a minimum distance of 80 cm from the outermost point of the product.
- 5. Leave minimum 80 cm free space in front of the stove for loading, and cleaning of combustion unit.

For installations at corner, following sketches should be referred:



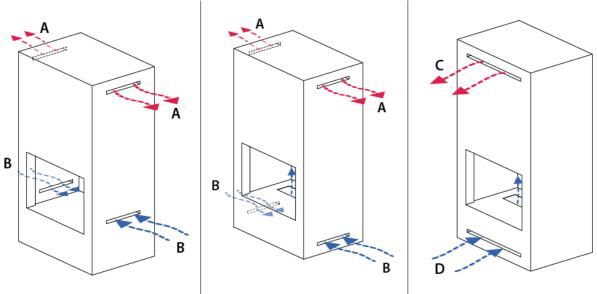
5.3. Ventilation

For correct operation, air must be allowed to recirculate inside the cladding structure that covers the insert in order to prevent the appliance from overheating. To guarantee this, just realise one or more openings in the lower and upper part of the covering. The following measurements must be respected:

1. Lower part (cold air inlet) with total minimum surface 240 cm²

2. Upper part (hot air outlet) with total minimum surface 240 cm²

For existing installations, one of following sketches must be regarded. In case of sketches 2 and 3, a hole on support plinth must be made to ensure correct air flow to and around the insert.



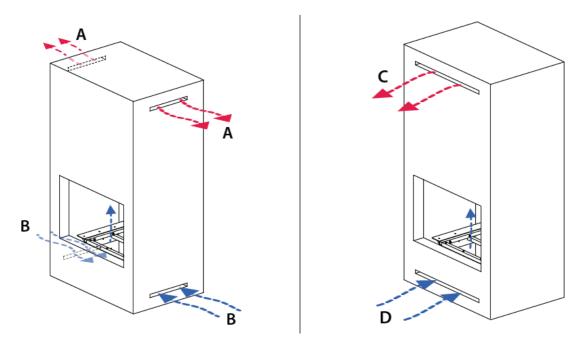
A: Air convection outlet. Minimum section 120cm2.

B: air inlet from room. Minimum section 120cm2.

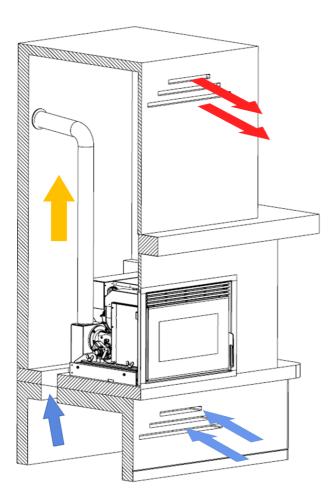
C: Air convection outlet. Minimum section 240cm2.

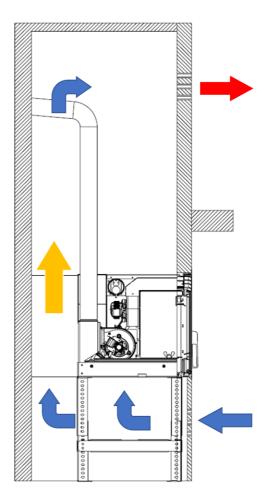
D: air inlet from room. Minimum section 240cm2.

For new installations, the original stand of the insert should be used, and one of following installations must be regarded:



Following sketches show installations with and without original stand of the insert:





5.3. Connection of the smoke exhaust duct and chimney

Punto insert must have its own smoke outlet (the smoke cannot be discharged into a smoke flue used by other devices). Smoke outlet must be connected to outside by means of suitable steel pipes EN 1856 certified. The pipe must be sealed. The material used to seal and if neccessary insulate the pipes, must be resistant to high temperatures (high temperature silicone or mastic).

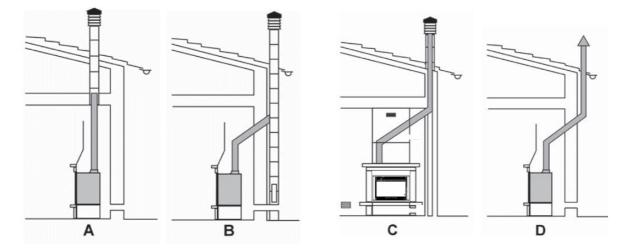
The only horizontal section allowed may be up to 2 m long up to three 90° bends (in relation to the vertical). A vertical section of at least 1.5 m and an anti-wind terminal is necessary (if the discharge outlet is not in a chimney flue).

The vertical duct can be internal or external. If the smoke channel 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. The chimney pots and smoke ducts connected to the solid fuel appliances must be cleaned once a year (verify whether a specific legislation exists in your country). Failure to regularly inspect and clean the insert increases the probability of a fire occurring in the chimney pot. In that case, proceed as follows:

Do not use water to extinguish the fire; Empty the pellet hopper; Contact specialist personnel before reigniting the stove.

The insert is designed to work under any weather conditions. In case of particular conditions, such as strong wind, the safety system may be activated, which results in the insert being extinguished. If this happens, do not operate the insert with the safety devices disabled. If the problem persists, contact our Technical Service Department



- 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, it must be high enough to catch the wind and avoid downdraft areas in turbulent wind.

WARNING

1. Always use pipes and fittings with appropriate seals that guarantee tightness.

NOTICE

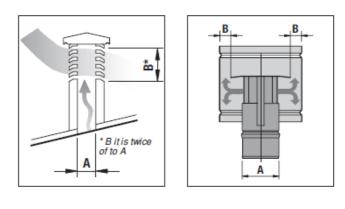
The following conditions must be complied with when connecting the appliance to the chimney:

- 2. The smoke duct must be at least category T200 (or higher if required by the smoke temperature of the appliance) and P1-type (airtight).
- 3. All 90° angles (max. 3) in the smoke exhaust duct must be preferably fitted with the relative T-fittings with inspection hole.
- 4. It is strictly forbidden to fit a mesh at the end of the exhaust pipe as it could cause the product to malfunction (due to clogging).
- 5. It is forbidden to use counter-sloping pipes.
- 6. The horizontal section of the smoke duct must not be longer than 2-3 m.
- 7. It is also recommended not to exceed 6 meters in length with the pipe Ø 80 mm.

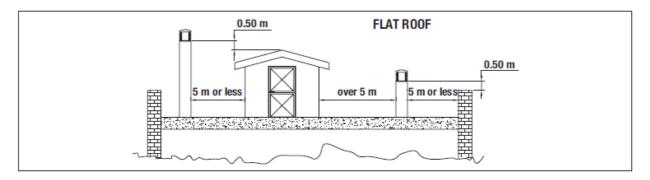
5.4. Chimney stack

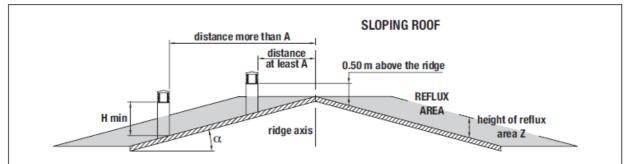
The chimney stack is a device fitted on the top of the chimney that is designed to aid dispersion of the products of combustion in the atmosphere. Chimney stack must comply with the following requirements:

- 1. it must have an internal section and shape the same as the flue (A);
- it must have a useful outlet section (B) of not less than twice that of the flue (A);
- the part of the chimney that emerges from the roof or remains in contact with the outside (e.g. in the case of a flat roof), must be covered with brick or tile elements and in any case well insulated;
- 4. it must be built in such a way as to prevent the penetration of rain, snow and foreign matter into the flue and to ensure that in the event of winds from all directions and angle, discharge of the combustion products is assured (chimney stack with down-draught cowl).









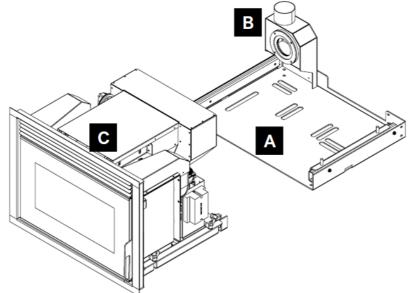
Pitch of the roof	Horizontal width of reflux area from ridge axis	Minimum height of outlet from roof	Height of reflux area
α	Α	Н	Z
15°	1.85 m	1.00 m	0.50 m
30°	1.50 m	1.30 m	0.80 m
45°	1.30 m	2.00 m	1.50 m
60°	1.20 m	2.60 m	2.10 m

6 INSTALLATION

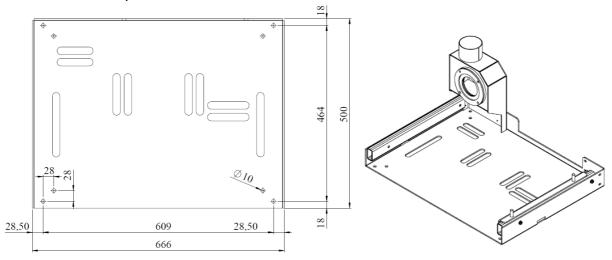
The insert is supplied complete with all its electrical components factory-tested. Open the package and cut the strips that fasten the insert to palette. If possible, unpack insert near the place of installation. Insert body must always be kept in a vertical position when handled and moved by using carts only. Pay particular attention that its door and its glass are protected from knocks that might compromise their integrity.

The materials that make up the packaging are neither toxic nor harmful, and so require no particular disposal measures. After removing the packaging, make sure that the insert is complete and not damaged. If in doubt contact the dealer.

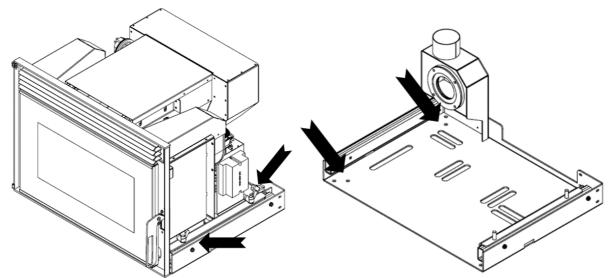
The insert is supplied with a base plate (A) complete with smoke duct (B) and the heart (C). The insert heart can be removed for loading pellets (OPERATION TO BE PERFORMED WITH THE INSERT TURNED OFF) and for any maintenance or cleaning.



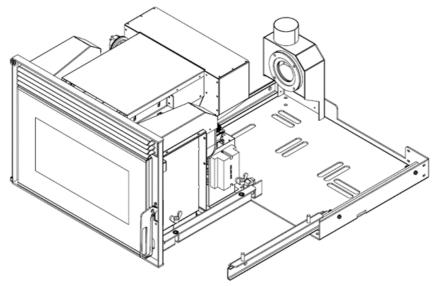
1. If you do not use the original stand of insert, refer to following dimensions for holes fixing insert onto plinth of the construction. First, position the whole insert on the installation plinth.



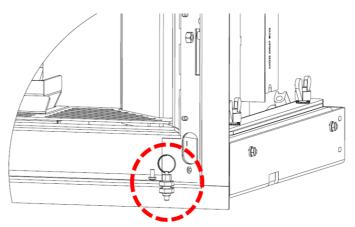
2. Remove the insert heart from the base frame by loosening four butterfly nuts on both sides. Then fix base frame on plinth of the installation



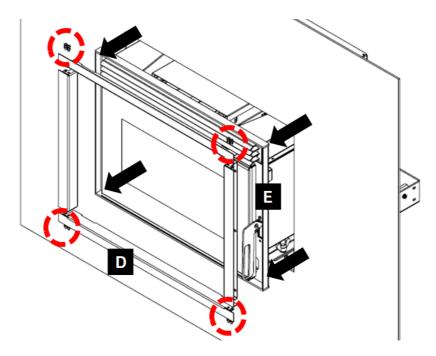
3. Pull the drawer railes on base frame, and re-fit the heart onto rails by the same butterfly nuts. Make sure that exhaust fan fits the smoke outlet duct firmly and squarely to prevent any smoke gas leakage.



4. There is a mechanical lock hidden behind the front panel of the insert. For any reason, when the heart is needed to be pulled out from the cabinet, first this lock must be released by pulling its ring.



5. The frame (D) is delivered in four pieces with assembly screws. After assembly of the frame, you should fix it onto insert heart front face by the points shown by arrows:



WARNING

1. Check for a power outlet on the back of the insert, so that it is accessible once installation is complete.

Electrical safety of the system is ensured only when it is properly connected to an efficient earthing system made in compliance with the safety standards in force. Check if the electrical system is suitable for the maximum power absorbed by the insert, ensuring in particular that the diameter of cables is appropriate for the power absorbed by the loads. The use of any component that is powered by electricity entails compliance with some basic rules such as:

- do not touch the appliance with wet and/or damp body parts and/or bare feet;
- do not pull the electric cables;
- do not leave the appliance exposed to weathering (rain, sun, etc.);
- do not allow the appliance used by children under 10 or inexperienced persons.

Installation of the stove accessory electrical components requires electrical connection to a 230 V - 50 Hz mains.

NOTICE

- 1. Electrical installation must be carried out by a qualified technician only.
- 2. Before performing connections or any operation on the electrical parts, always disconnect the power supply and make sure it cannot be accidentally reconnected.
- 3. Please note that the insert electrical power line must be fitted with a bipolar switch with a contact gap greater than 3 mm, easy to access, in order to make any maintenance operations quick and safe.
- 4. The power cable must be replaced by authorized technical personnel.
- 5. If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

NOTICE

6. Connection cable between main controller on insert heart and user display is 2 meters long. Position and fix the user display on surrounding wall of insert considering this length. When stove heart is removed for any cleaning or maintenance operation, the free length of this connection cable must ensure safe move of the heart.

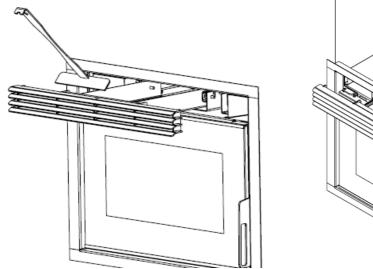
7 INITIAL START-UP

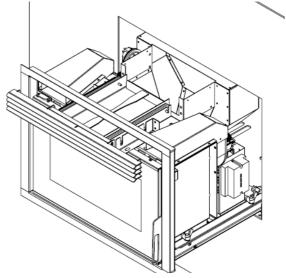
Check that the fire pot is positioned correctly and rests properly on the base. Fire pot ring ensures all pellets will enter the fire pot, protects burning pellets from moving out from the pot.

7.1. Loading the pellets

Pellet feedind tray is behinf the front hot air girille. To load pellets, pull the grille to yourself, pour pellets inside the tray, and move them to fuel silo of insert, by the tool supplied with the product.

You can load pellets either by pulling the heart of insert fully out to reach the fuel container.





7.3. Opening and closing the door

To open the door, use the handle.

WARNING

- 1. The door must be closed properly for the insert to work correctly.
- 2. Use suitable Personal Protective Equipment (eg. gloves) to open the door.
- 3. Do not touch handle, front glass and hot air ventilation grille when the insert is in operation

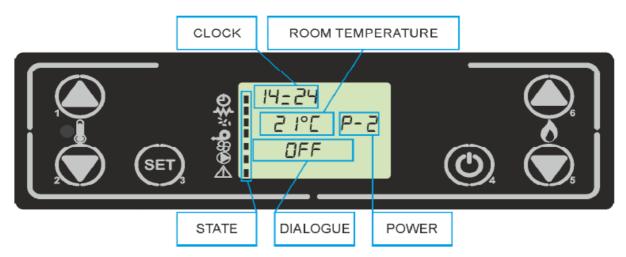
8 OPERATION

8.1. User Interface

Through the console, you can communicate with the control board simply by pressing few buttons. The display and LED indicators inform the operator of the operating status of the insert. In the programming mode, various parameters, which can be modified by pressing the keys.

The console displays information on the working status of the insert. By accessing the menu, you can gain access to different views and change the various available settings based on the access level.

Depending on the operating mode, the various positions on the display can gain different meanings.



The activation of one of the symbols in the "status" area on the display indicates the activation of the corresponding output according to the list below.



Chrono Glow plug Auger

Fume exhaust

Exchanger

Not used

Alarm

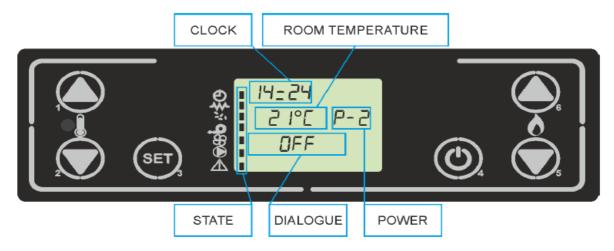
8.2. Buttons Description

Button	Description	Mode	Action
1	Increase	Programming	Adjusting/increasing the value in the selected menu
T	Temperature	ON/OFF	Increasing the temperature value of the ambient thermostat
2	Decrease	Programming	Adjusting/decreasing the value in the selected menu
2	Temperature	ON/OFF	Decrease the temperature value of the room thermostat
		-	Accesses the menu
3	Menu	MENU	Accesses the submenu level
5	Wend	Programming	Saves the value and moves to the next menu
		ON	Hold 2 seconds to switch the insert on when in off mode, or off when in mode
4	ON/OFF unlock	LOCK	Unlock the insert and puts it into off mode
	uniock	MENU Programming	Brings you to the next menu level, any adjustments made will be saved
		ON/OFF	Adjust the power produced by the insert
5	Decrease	MENU	Takes you to the next menu level
5	power	Programming	Takes you to the next submenu, any adjustments made will be saved.
		ON/OFF	Adjust the speed of the exchanger
C	Increase	MENU	Takes you back to the previous menu level
6	Power	Programming	Takes you to the previous submenu, any adjustments made will be saved

8.3. Operation

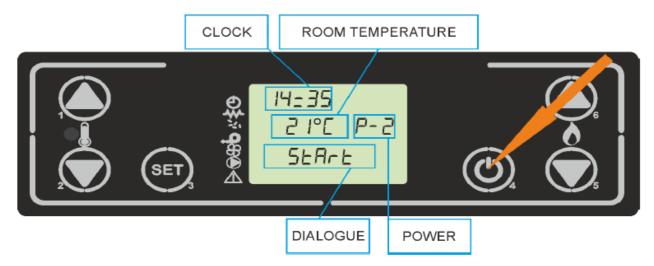
8.3.1. OFF

Display appears as below while insert is "OFF".



8.3.2. Starting the Insert

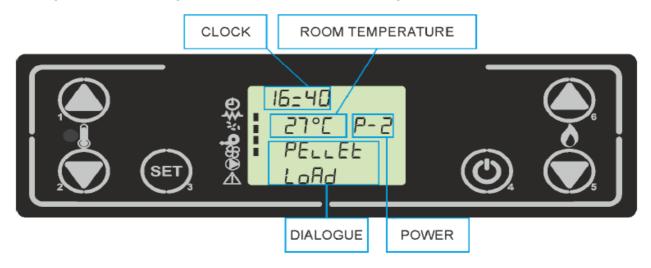
To light the insert, hold the P4 button for a few seconds. Once turned on, the display shows "Start". This phase lasts for a maximum period of time set by factory. The insert enters a state of pre-heating, during which the igniter and exhaust fan both turn on. Any problems during turning on phase will be shown on the display and the inserts alarm will sound.



8.3.3. Pellet Loading

After preheating, the pellet loading phase will begin, the display will show "Pellet Load". During the first phase, the auger loads the pellets into the brazier for a predetermined time while igniter remain on.

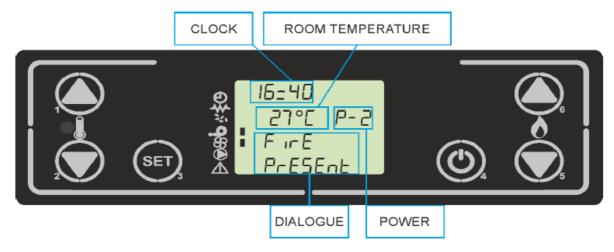
In the second phase, auger will turn off for a predetermined period of time and wait for the fire while both exhaust fan and igniter remain on. If in this time period, the insert does not turn on, the auger will start feeding and exhaust fan speed will change.



8.3.4. Fire ON

After the exhaust temperature has reached and surpassed the predetermined level, the system will enter the on mode and display "Fire Present" on the display.

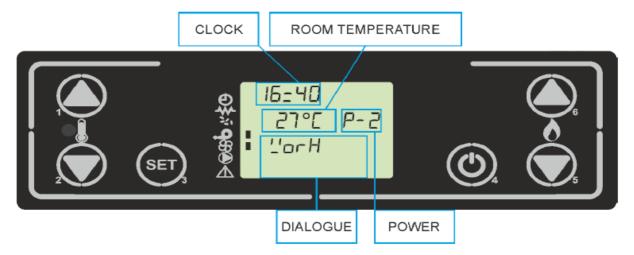
In this phase, the temperature should remain stable. The igniter will switch off, exhaust fan and auger will work on predetermined levels. Any problems during this phase will stop the insert and an error message will show.



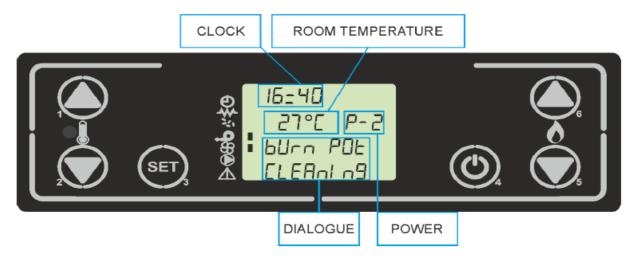
8.3.5. Working Mode

After the exhaust temperature has reached and surpassed the level and remain, the insert will enter the work mode. Which is its normal function. The display will show "Work" Power can be adjusted by pressing the P5 or P6 buttons and ambient temperature by pressing P1 or P2 buttons.

If temperature of the exhaust gas reaches the threshold, air exchanger fans will switch on.

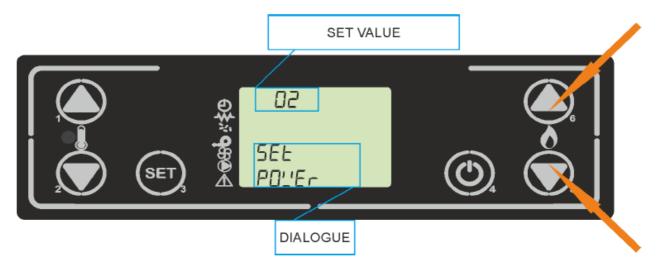


In this phase, after a period of time, the insert will clean out the burning pot. The display will show "Burn Pot Cleaning". Fuel feeding will slow down and exhaust fan speed will increase. After burning pot cleaning phase end, insert will return to work mode.



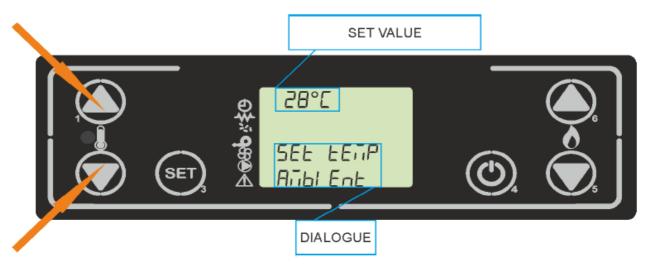
8.3.6. Adjusting the Power

To adjust the power setting, simply press the P5 or P6 button from the home screen. The display shows the power set (SET power). Pressing P5 (to reduce) and P6 (to increase) will change this number. After 5 seconds, the number entered will be memorizer by insert and the display returns to home screen. Alternatively, you can press P3 or P4 to exit.



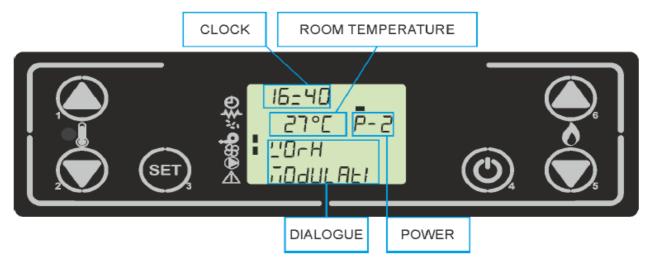
8.3.7. Adjusting Room Temperature

To adjust the room temperature setting, simply press the P1 or P2 button from the home screen. The display shows the room temperature set (SET temperature). Pressing P2 (to reduce) and P1 (to increase) will change this number. After 5 seconds, the number entered will be memorizer by insert and the display returns to home screen. Alternatively, you can press P3 or P4 to exit.



8.3.8. Room Temperature Reaches the Set Temperature

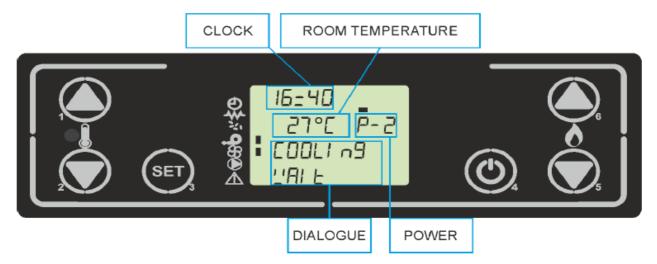
When ambient temperature has reached the level set, the power of the insert automatically reduces to the minimum level. At this point, the display will show the message "Work modulation". If the room temperature drops below the set temperature, the insert will return to working mode at the power previously set.



8.3.9. Stand-by

If enabled in the menu, the stand-by function allows you to turn off the insert once the following conditions are satisfied.

If for a time, the ambient temperature is higher than the set temperature by a few degrees, the display will show "Cooling Wait". In this state, the auger motor will turn off. The air exchanger will turn off only when exhaust temperature drops below a threshold.

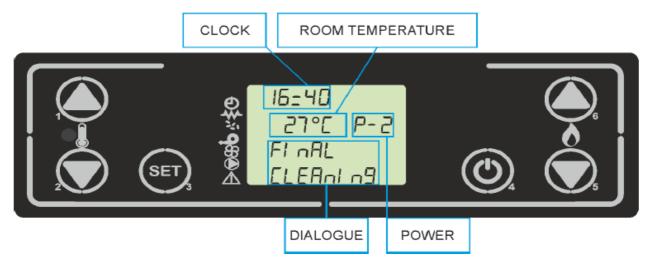


When the temperature of the exhaust gas drops below a threshold, the insert enters stand-by mode. The auger motor and the exhaust fan will turn off.

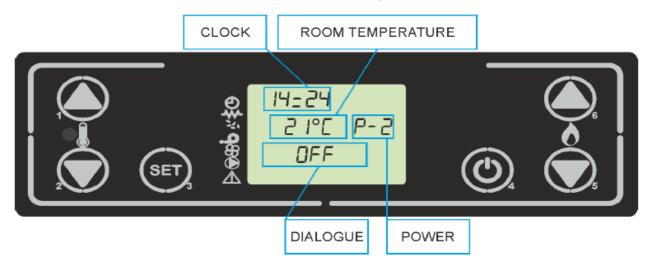
If the ambient temperature drops below set temperature, the insert will turn back on.

8.3.10. Switching OFF the Insert

To turn off the insert, press and hold the P4 button. The display will show "Final Cleaning" and the auger motor will turn off, the exhaust fan speed will increase.



The air exchanger fan and its LED will remain on until the temperature of the air drops below the predetermined threshold. After a period of time, if the temperature of the exhaust gases are below the threshold, the insert will turn off and display will show "OFF".



NOTICE - Improving the combustion

- 1. A good combustion depends on several factors (type of pellet, installation, chimney conditions, draft, and air entrance to burner). If at the end of combustion periods there is too much pellet in the fire pot, or if the color of flame turns to red, or if the insert has difficulty to fire up, it means that some combustion parameters should be re-adjusted according to the real conditions in the field.
- 2. For this purpose, please refer to "pellet type" or chimney type" adjustments in "TROUBLESHOOTING" section.
- 3. Please note that those readjustments can only be performed by skilled technicians

8.4. MENU

To access the menu, press the P3 button.

The menu is subdivided into various levels and items that allows access to the settings and programming of the insert.

The following prospectus briefly describes the structure of the menu.

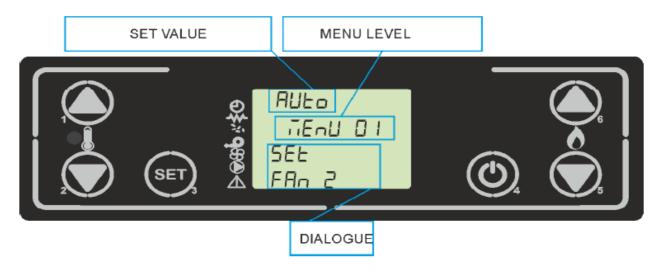
Level 1	Level 2	Level 3	Value
M01 - Fan Adjust	01 - Set Fan 2		1,2,3,4,5,AUTO
	01 - Day week		M-T-W-T-F-S-S
	02 - Time Clock		0-23
	03 - Minutes Clock		0-59
M02 - Set Clock	04 - Day Clock		1-31
	05 - Month Clock		1-12
	06 - Year Clock		00-99
	M-3-1 - Chrono Enable	01 - Chrono Enable	ON/OFF
		01 - Chrono Day	ON/OFF
		02 - Start 1 Day	OFF-0-23:50
	M-3-2 - Program Day	03 - Stop 1 Day	OFF-0-23:50
		04 - Start 2 Day	OFF-0-23:50
		05 - Stop 2 Day	OFF-0-23:50
		01 - Weekly Chrono	ON/OFF
		02 - Start Prog 1	OFF-0-23:50
		03 - Stop Prog 1	OFF-0-23:50
		04 - Monday Prog 1	ON/OFF
		05 - Tuesday Prog 1	ON/OFF
		06 - Wednesday Prog 1	ON/OFF
		07 - Thursday Prog 1	ON/OFF
		08 - Friday Prog 1	ON/OFF
		09 - Saturday Prog 1	ON/OFF
		10 - Sunday Prog 1	ON/OFF
		11 - Start Prog 2	OFF-0-23:50
M03 - Set Chrono		12 - Stop Prog 2	OFF-0-23:50
		13 - Monday Prog 2	ON/OFF
		14 - Tuesday Prog 2	ON/OFF
	M-3-3 - Program Week	15 - Wednesday Prog 2	ON/OFF
		16 - Thursday Prog 2	ON/OFF
		17 - Friday Prog 2	ON/OFF
		18 - Saturday Prog 2	ON/OFF
		19 - Sunday Prog 2	ON/OFF
		20 - Start Prog 3	OFF-0-23:50
		21 - Stop Prog 3	OFF-0-23:50
		22 - Monday Prog 3	ON/OFF
		23 - Tuesday Prog 3	ON/OFF
		24 - Wednesday Prog 3	ON/OFF
		25 - Thursday Prog 3	ON/OFF
		26 - Friday Prog 3	ON/OFF
		27 - Saturday Prog 3	ON/OFF
		28 - Sunday Prog 3	ON/OFF
		29 - Start Prog 4	OFF-0-23:50

		30 - Stop Prog 4	OFF-0-23:50
		31 - Monday Prog 4	ON/OFF
		32 - Tuesday Prog 4	ON/OFF
		33 - Wednesday Prog 4	ON/OFF
		34 - Thursday Prog 4	ON/OFF
		35 - Friday Prog 4	ON/OFF
		36 - Saturday Prog 4	ON/OFF
		37 - Sunday Prog 4	ON/OFF
		01 - Chrono Weekend	ON/OFF
		02 - Start 1 Weekend	OFF-0-23:50
	M-3-4 - Program Weekend	03 - Stop 1 Weekend	OFF-0-23:50
		04 - Start 2 Weekend	OFF-0-23:50
		05 - Stop 2 Weekend	OFF-0-23:50
	01 - Italian		Set
	02- English		Set
MOA Calast Lawrences	03 - Deutsch	Survey Su	Set
M04 - Select Language	04 - Francais		Set
	05 - Espanol		Set
	06 - Portuguese		Set
M05 - Stand-by Mode	01 - Stand-by Mode		ON/OFF
M06 - Buzzer Mode	01 - Buzzer Mode		ON/OFF
M07 - Initial Load	P1 to load		90"
		1.1 - Auger time ON	Seconds
	01 - Page 1	1.2 - Thermostat State	ON/OFF
		1.3 - Working power	Value
		2.1 - Flue temperature	°C
	02 02 02 0	2.2 - RPM Exhaust Fan	rpm
M08 - Stove State	02 - page 2	2.3 - Primary exchanger voltage	V
		2.4 - Secondary exchanger voltage	V
		3.1 - Burn pot cleaning time	Seconds
	03 - page 3	3.2 - Burn pot cleaning interval	Minutes
		3.3 - Alarms delay	Seconds
	04 - page 4	4.1 - Room temperature	°C
M09 - Technical Settings	01 - Access Key		Set
M10 - Pellet Type	01- Pellet Load		Set
M11 - Chimney Type	01 - Exhaust Fan Percentage		Set

8.4.1. Menu M01 - Fan Regulation

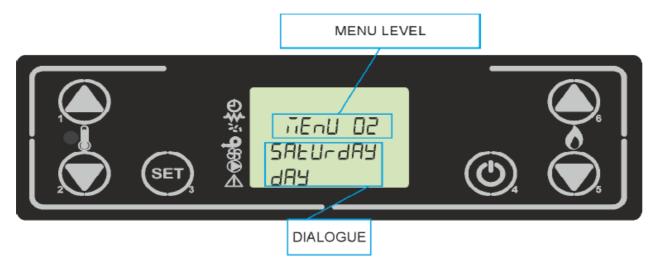
It allows for the independent regulation of the two exchanger fans by regulating second exchanger fan manually. While "1" represents minimum fan power, "5" represents maximum fan power.

Menu Level	Selection	Possible Values
M1	Set Fan 2	AUTO-1-2-3-4-5



8.4.2. Menu M02 - Set Clock

Sets the current time and date. The controller comes equipped with battery that allows the internal clock to have an autonomy of over 3 years. To access the general programming menu, press P3. Pressing P6 (to go down) or P5 (to go up) will select the M02 item. To access to submenu, press P3.



Choose the desired day pressing P2 to go down and P1 to go up. To confirm, press P3. Then set the hour, the minute, day, month and year by pressing P6 to go down and P5 to go up. To confirm, press P3.

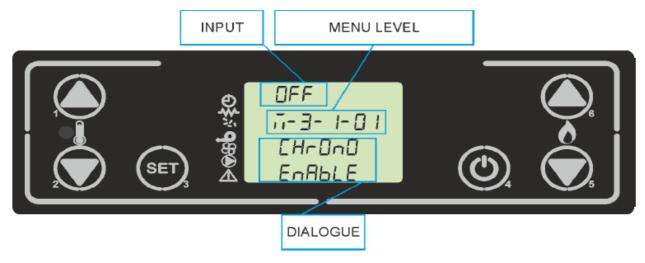
8.4.3. Menu M03 - Set Chrono

SUGGESTIONS:

- 1. In an attempt to avoid confusion and unwanted switch-on and switch-off stages, activate only one program at a time if you are unsure of exactly what is that you wish to obtain.
- 2. Deactivate the daily program if you wish to use weekly program. Always keep the weekend program disabled if using the weekly program.
- 3. Activate the weekend program only after deactivating the weekly program.

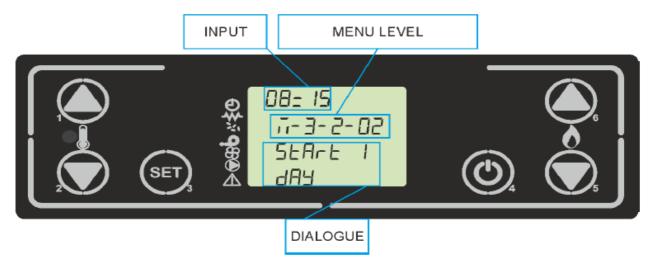
8.4.3.1. Submenu M3-1 - Enable Chrono

The menu shown on the "M03 Set Chrono" display allows you to enable or disable all of the functions of the Chrono management in one go. To enable them, press P3 and then either P1 orP2 for ON or OFF respectively. Confirm by pressing P3.



8.4.3.2. Submenu M3-2 - Program Day

It's possible to set two functioning slots. The first with START1 Day and STOP1 Day and the second with START2 Day and STOP2 Day. These slots can be defined according to the timings set out in the table below, where the OFF setting tells the clock to ignore the command. To modify, use P2 (to go down) and P1 (to go up). Confirm with P3.

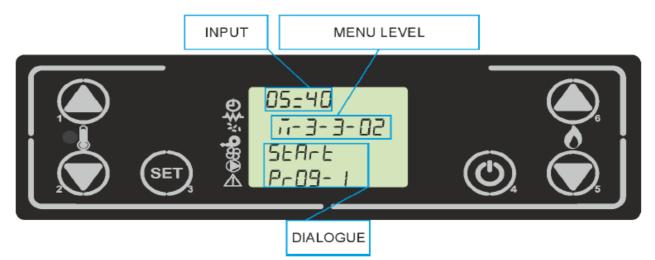


Menu Level	Selection	Meaning	Possible Value
	Chrono	Enable Chrono	
M-3-2-01	Day	Day	ON/OFF
			OFF-0-
M-3-2-02	Start 1 Day	Wake time	23:50
			OFF-0-
M-3-2-03	Stop 1 Day	OFF Time	23:50
			OFF-0-
M-3-2-04	Start 2 Day	Wake time	23:50
			OFF-0-
M-3-2-05	Stop 2 Day	OFF time	23:50

8.4.3.3. Submenu M3-3 - Program Week

The "M03-3 Program Week" menu allows you to enable or disable and set the weekly chrono. The weekly function has 4 independent programs. Additionally, pressing OFF on the timetable will tell the system clock to ignore the corresponding command.

The following tables present the weekly program functions. To get to the next function and select it, press P3. You can exit the menu by pressing P4 button.



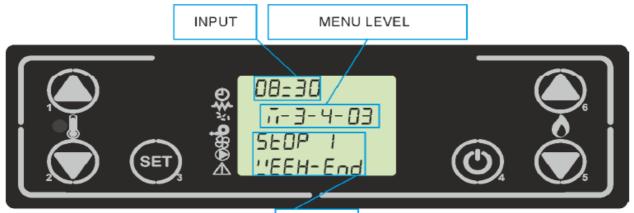
Caution: Carefully select the programming and avoid allowing the activation times or deactivation times to overlap on the same day in different programs.

Menu Level	Selection	Meaning	Possible Values
		Enable Program	
M-3-3-01	Program Week	Week	ON/OFF
M-3-3-02	Start Prog 1	Wake Time	OFF-0-23:50
M-3-3-03	Stop Prog 1	OFF Time	OFF-0-23:50
M-3-3-04	Monday Prog 1		ON/OFF
M-3-3-05	Tuesday Prog 1	-	ON/OFF
M-3-3-06	Wednesday Prog 1		ON/OFF
M-3-3-07	Thursday Prog 1	Referred Day	ON/OFF
M-3-3-08	Friday Prog 1	-	ON/OFF
M-3-3-09	Saturday Prog 1	-	ON/OFF
M-3-3-10	Sunday Prog 1		ON/OFF
M-3-3-11	Start Prog 2	Wake Time	OFF-0-23:50
M-3-3-12	Stop Prog 2	OFF Time	OFF-0-23:50
M-3-3-13	Monday Prog 2		ON/OFF
M-3-3-14	Tuesday Prog 2	-	ON/OFF
M-3-3-15	Wednesday Prog 2	-	ON/OFF
M-3-3-16	Thursday Prog 2	Referred Day	ON/OFF
M-3-3-17	Friday Prog 2	-	ON/OFF
M-3-3-18	Saturday Prog 2	-	ON/OFF
M-3-3-19	Sunday Prog 2		ON/OFF
M-3-3-20	Start Prog 3	Wake Time	OFF-0-23:50
M-3-3-21	Stop Prog 3	OFF Time	OFF-0-23:50
M-3-3-22	Monday Prog 3	Referred Day	ON/OFF

M-3-3-23	Tuesday Prog 3		ON/OFF
M-3-3-24	Wednesday Prog 3		ON/OFF
M-3-3-25	Thursday Prog 3		ON/OFF
M-3-3-26	Friday Prog 3		ON/OFF
M-3-3-27	Saturday Prog 3		ON/OFF
M-3-3-28	Sunday Prog 3		ON/OFF
M-3-3-29	Start Prog 4	Wake Time	OFF-0-23:50
M-3-3-30	Stop Prog 4	OFF Time	OFF-0-23:50
M-3-3-31	Monday Prog 4		ON/OFF
M-3-3-32	Tuesday Prog 4		ON/OFF
M-3-3-33	Wednesday Prog 4		ON/OFF
M-3-3-34	Thursday Prog 4	Referred Day	ON/OFF
M-3-3-35	Friday Prog 4		ON/OFF
M-3-3-36	Saturday Prog 4		ON/OFF
M-3-3-37	Sunday Prog 4		ON/OFF

8.4.3.4. Submenu M3-4 Program Week-End

Allows you to enable/disable and set the chrono functions on the weekend (Saturday and Sunday). To enable, press P3 on the "chrono weekend" item and select "ON" by pressing P2 (to go down) or P1 (to go up). Selecting the items under Start 1 weekend and Stop 1 weekend will set the times that the insert will function on Saturday, while Start 2 weekend and Stop 2 weekend will set the operating times for Sunday.

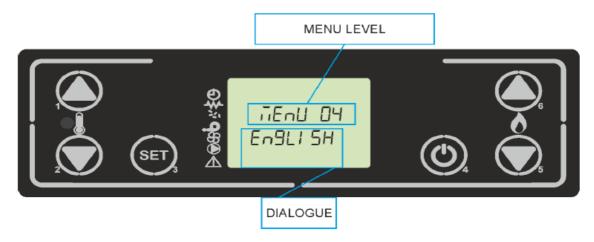


DIALOGUE

Menu Level	Selection	Meaning	Possible Values
M-3-4-01	Chrono Week End	Enable chrono weekend	ON/OFF
M-3-4-02	Start 1 Weekend	Wake Time	OFF-0-23:50
M-3-4-03	Stop 1 Weekend	OFF Time	OFF-0-23:50
M-3-4-04	Start 2 Weekend	Wake Time	OFF-0-23:50
M-3-4-05	Stop 2 Weekend	OFF Time	OFF-0-23:50

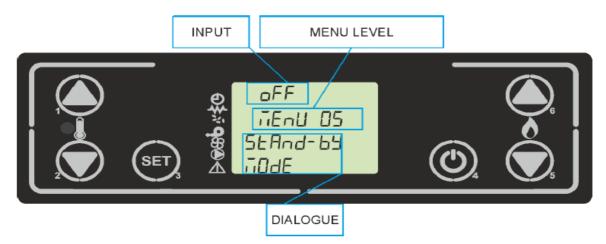
8.4.4. Menu M04 - Language Selection

Allows you to set the language. To move to the next language, press P1 or P2. To confirm and exit, press P4.



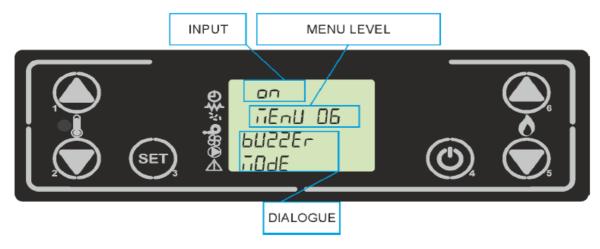
8.4.5. Menu M05 - Stand-by

Allows you to enable or disable Standby mode. Once you have selected the M05 menu using P3 key, press P1 (to go down) or P2 (to go up) to switch between ON - OFF and vice versa.



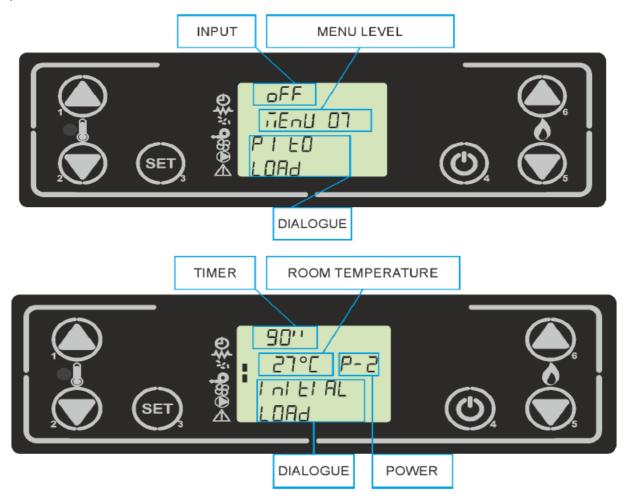
8.4.6. Menu M06 - Buzzer mode

Allows you to enable or disable the acoustic signal. Once you have selected the M06 menu using the P3 key, press P1 or P2 to switch between ON and OFF and vice versa.



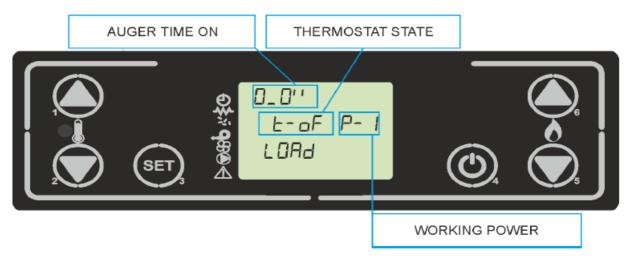
8.4.7. Menu M07 - First charge

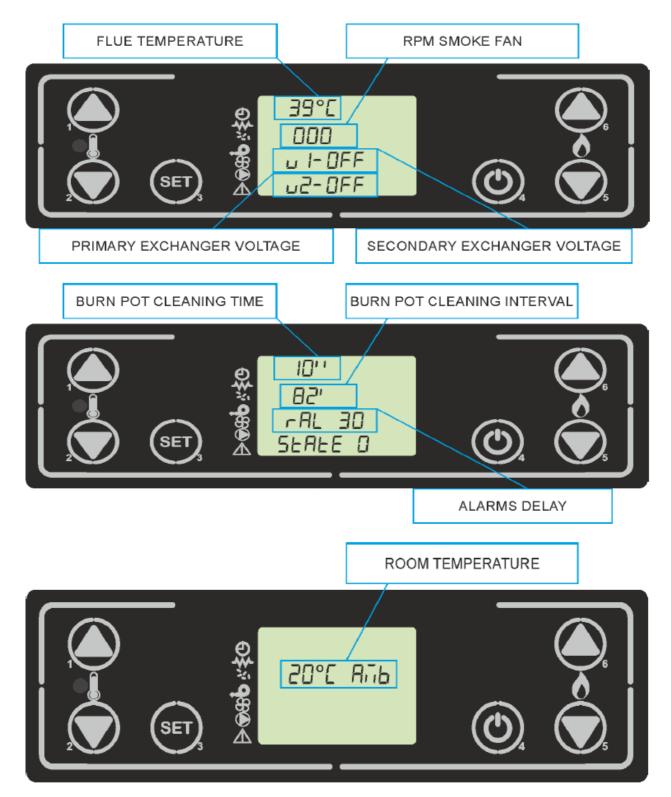
This function is only available when the insert is OFF. It allows the auger to load at the first start of the insert, when the pellet tank is empty. After selecting the M07 menu, the display will show "P1 TO LOAD". Press P1. The exhaust fan will turn on at maximum speed, the auger will turn on and remain on until the end of the time shown on the display or until you press the P4 button.



8.4.8. Menu M08 - Stove status

Visualize the instant status of the insert reporting the status of the various outputs. Several pages are available for viewing in order.



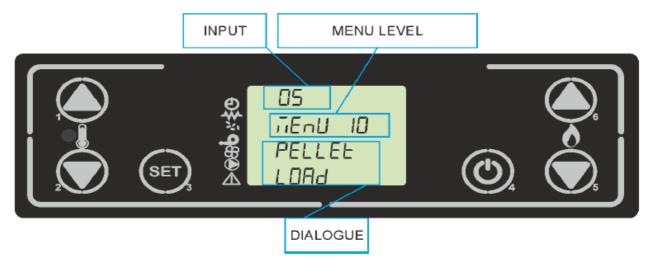


8.4.9. Menu M09 - Technical Settings

This menu is accessible only to the technicians. Once the access key is entered, it allows you to set the various parameters of the insert's operation.

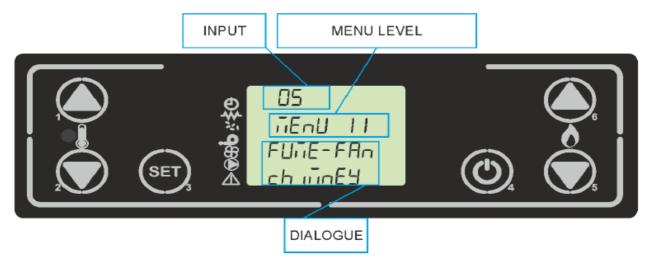
8.4.10. Menu M10 - Pellet Type

Pressing P1 or P2 will modify the pellet loading percentage up to a maximum value of +9 and down to a minimum value of -9. Each step increases or decreases it by around 3% of the total period of the auger, with respect to the default period. The feeding time does not change.



8.4.11. Menu M11 - Chimney Type

Pressing P1 or P2 will modify the exhaust fan speed up to a maximum value of +9 and down to a minimum value of -9. Each step increases or decreases the exhaust fan speed by around 5% with respect to the default speed.



9 SAFETY DEVICES

The product is supplied with the following safety devices

AIR PRESSURE SWITCH

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

SMOKE TEMPERATURE PROBE

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

ELECTRICAL SAFETY

The product is protected against sudden current surges by a main fuse in the power supply panel on the rear part of the product. Other fuses that protect the electronic boards are found on the latter.

BACK FLAME / FIRE SAFETY

A manual reset type safety thermostat protects the stove from any flame back flow to fuel hopper.

SMOKE FAN

If the fan stops, the electronic board promptly shuts off the pellets supply and an alarm message is displayed.

GEAR MOTOR

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

TEMPORARY POWER CUT

If the power cut lasts less than 10" the stove returns to its previous operating status; if it lasts more it carries out a cooling/restart cycle.

FAILED START-UP

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

$10\,$ cleaning and maintenance

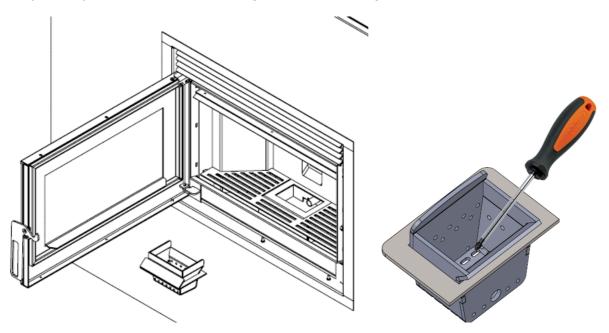
Part of the stove	Every two days	Every 60-90 days	End of season by service technician
Fire pot	0		
Fire pot housing	0		
Ash compartment	0		
Front glass	0		
Heat exchanger		0	
Fuel silo		0	
Flue pipe / connection			0
Electro-mechanical			0
components			
Thermostat / sensor			0
Fibre rope on front door			0

Refer to following table for periodical maintenance and cleaning

10.1. Cleaning to be performed every 2 days by the user

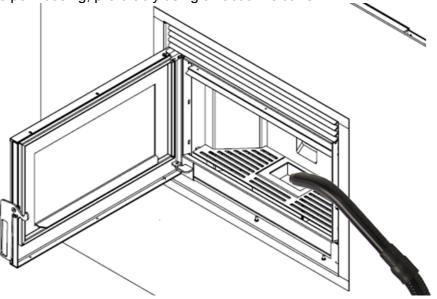
Fire Pot

Remove the burning pot from its compartment and free the holes using the brush supplied with the insert or an appropriate tool. If the pellets in the silo finish, unburned pellets may accumulate in the burning pot, you can also use vacuum cleaner for unburnt pellets removal. Always empty the residue in the burning pot before starting-up.



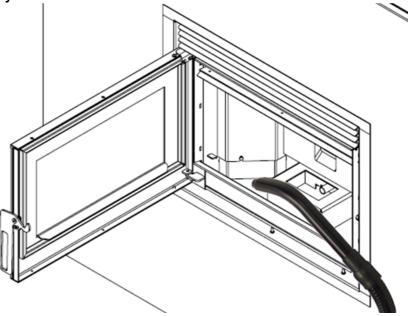
Fire pot housing

Clean the fire pot housing, preferably using a vacuum cleaner.



Ash compartment

Take the grille out from the heart of insert (do not touch the grille by hand when it is hot), and clean the compartment preferably using a vacuum cleaner. Use a drum-type vacuum cleaner that is suitable for picking up particles of a certain size. Experience and the quality of the pellets will determine the cleaning frequency required. However, it is recommended not to exceed 2 or 3 days.



NOTICE

4. REMEMBER THAT ONLY A CORRECTLY POSITIONED AND CLEAN BRAZIER CAN GUARANTEE START-UP AND OPTIMAL OPERATION OF YOUR PELLET STOVE.

NOTICE – Disposal of ashes

- 5. The ashes should be placed in a metal container with a sealed cover. The sealed container should be placed on a noncombustible surface at a safe distance from combustible materials until the cinders have been completely extinguished.
- 6. Only when they have been fully extinguished can the ashes be thrown away with organic waste, assuming that nails or other nonorganic material are not present.
- 7. Make sure that the ash is completely cold before emptying it into a suitable container.

Cleaning the Glass

Clean the glass with a damp cloth or damp paper rubbed in ashes. Rub the glass until it comes clean. Although it is likely that tar will build up on the glass during the lighting stage, it will burn off with the stove in full operation. If, however, the tar is left to build up over a long period it will require more effort to remove. We therefore recommend that the glass be cleaned daily before lighting the stove.

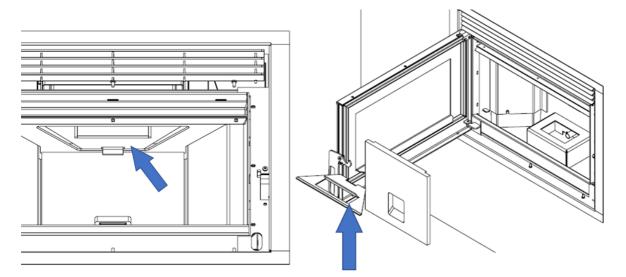
NOTICE

8. Do not clean the glass while the insert is working and the glass is HOT; do not use abrasive sponge and corrosive substance such as solvents.

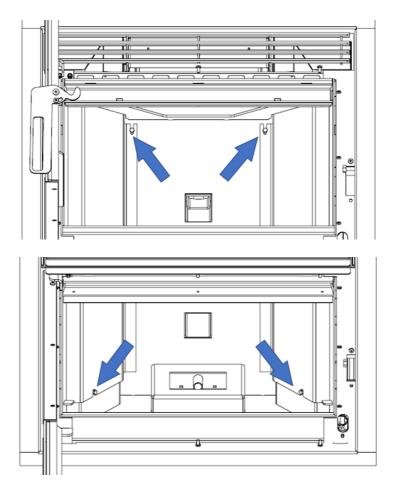
10.2. Monthly cleaning (every 60-90 days)

Heat exchanger

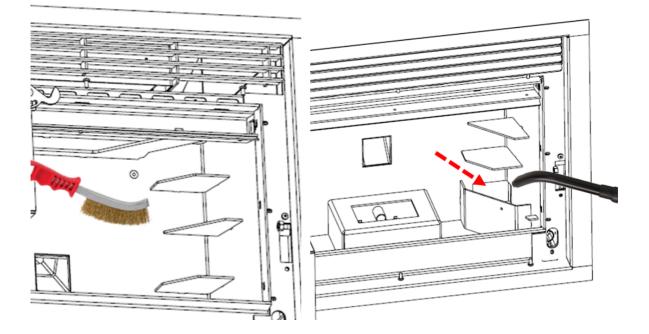
- 1. Remove flame diverter sheet on top of the combustion chamber (shown by arrow)
- 2. Then take combustion chamber board (vermiculite plate) out from the insert



- 3. To remove the second gas passage panels on left and right hand sides of combustion chamber;
 - 1. Loose and remove screws that fix the panels at the top
 - 2. Loose screws that fix the panels at the bottom,
 - 3. Take both panels out



- **4.** Now clean all surfaces around the combustion chamber and second passages with supplied original brush. Move all deposits down into the ash compartment.
- **5.** Try to vacuum as much as ash / residue from the smoke hood through left and right holes on bottom of the second passages
- 6. Remove the deposited ash and combustion products (as much as you can reach) with a help of vacuum cleaner



Silo (fuel container)

Pull heart of the insert to yourself by releasing the safety lock as explained in previous chapters. Take the top covers of fuel container, and clean silo internal volume together with pellets residue inside the feeding profile.

10.3. Periodic maintenance (end of each heating season)

The scheduled maintenance work listed below must be carried out ONCE A YEAR and prior to starting up the appliance or after a long period of inactivity. This work is necessary to ensure that the appliance remains efficient and safe.

- 1. Thorough cleaning of the smoke chamber.
- 2. Check and clean the smoke outlet and flue system.
- 3. Clean away dust and cobwebs from the area inside the cladding.
- 4. Clean moving parts and mechanisms (motors / ventilation fan).
- 5. Check the electrical parts / sensors / thermostats / switches
- 6. Check the tightness and state of the gaskets/seals of the glass door.
- 7. Check the seal and tightness of the joints on flue
- 8. Carry out all maintenance and checks required for correct operation and adaptation to safety regulations.
- 9. Light the insert in accordance with instructions given in the paragraph.

NOTICE

10. All cleaning and maintenance must be carried out with the power cable disconnected from the power supply.

NOTICE

- 11. The frequency with which the smoke exhaust must be cleaned depends on the use of the stove and the type of installation.
- 12. We recommend contacting an authorized service center for end-of-season maintenance and cleaning as the above-mentioned operations will be performed together with a general inspection of the components.

End-of-season shutdown

At the end of season, before shutting down the insert, we recommend completely removing pellets from the hopper with the use of a vacuum cleaner with an extension.

$\boldsymbol{11} \text{ alarms and troubleshooting}$

If a problem is detected during operation, the insert will intervene and alert you by making a noise. Every alarm causes the insert to immediately shut down.

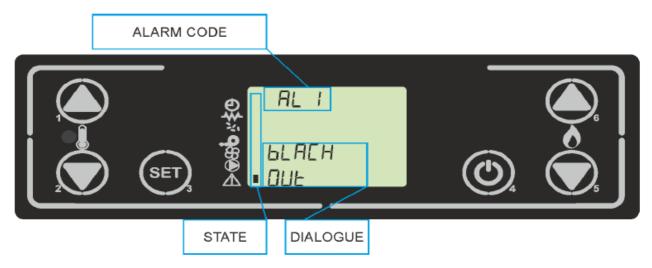
The following alarms could sound:

Origin of the Alarm	Display
Black-out	AL 1 BLACK OUT
Exhaust gas temperature probe	AL 2 FUME PROBE
Exhaust gas over-temperature	AL 3 HOT FUME
Exhaust fan encoder damaged	AL 4 FAN FAILURE
Ignition failed	AL 5 FAILED IGNITION
Pellet absence	AL 6 NO PELLET
Thermal safety over temperature	AL 7 THERMAL SAFETY
Depression absence	AL 8 FAILURE DEPRESS

State of alarm occurs after the period of time defined by factory. Except for black out alarm, all alarms are activated after a period of time and can be reset by pressing and holding P4 button. For security reasons, each time you reset an alarm, insert will automatically be turned off. When the alarm is activated, the corresponding display icon will turn on and where enabled, the buzzer will buzz intermittently. If the alarm is not reset, the insert will turn itself off and the display will continue to show an alarm message.

AL 1 Blackout Alarm

During the inserts work mode, it might run out of energy. When it restarts, if the blackout period was less than 10 seconds, the insert will re-enter the work mode. Otherwise, the alarm will sound. The display will show the message "AL 1 BLACK OUT" and the insert will turn itself off.



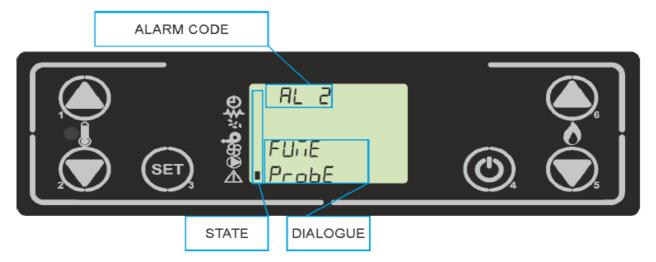
Solution:

Blackouts are not about the product. This alarm state means there is a problem with electrical supply. If you have face with this problem, using a voltage regulator will protect the inserts

electronics. If you are facing with this problem too much, using a UPS can help insert keep running.

AL 2 Exhaust Gas Temperature Probe Alarm

The alarm will sound if the exhaust probe is faulty. The display will show "AL 2 FUME PROBE" and the insert will turn itself off.

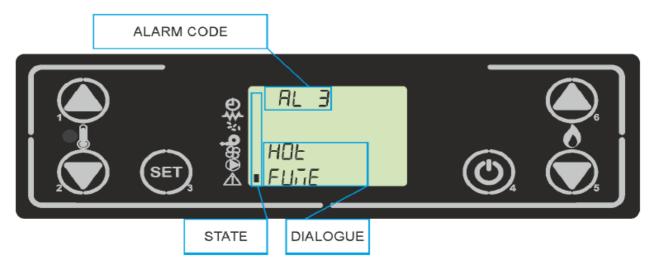


Solution:

Exhaust gas temperature probe has get some damage or there is a connection problem (cable may cut or socket may remove from its spot). Do not try to fix it yourself. Request a service from the installer. Do not use the insert while waiting for the service.

AL 3 Exhaust Gas Over-Temperature Alarm

The alarm will sound if the exhaust probe reaches a temperature higher than the fixed unalterable value. The display will show "AL 3 HOT FUME" and insert will turn itself off.

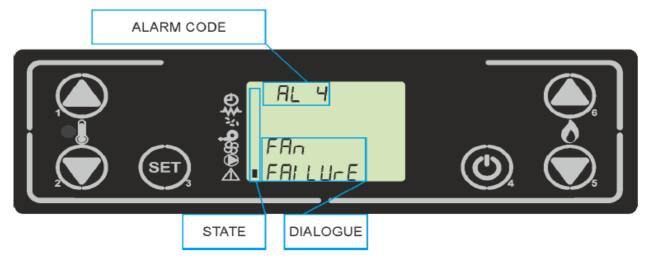


Solution:

Generally, this is happening because too much pellet feeding (small pellet size) or too much draft on chimney. Call the installer and request service for the problem. You can keep using the insert while waiting for the service. To reset the blocking condition and using the insert again, long press to P4 button and wait for extinguishing. Alarm will sound again after a period of time.

AL 4 Exhaust Fan Encoder Alarm

The alarm will sound if the exhaust fan is faulty. The display will show "AL 4 FAN FAILURE".

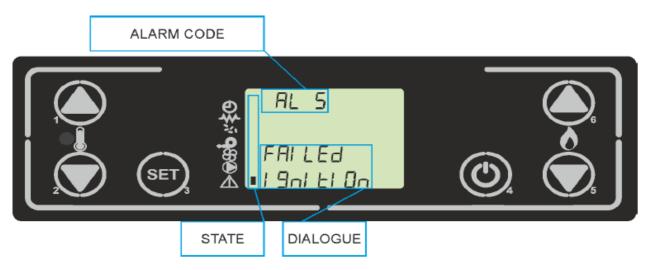


Solution:

Call the installer and request for service. There is no danger to use the insert that way but fuel consumption will increase dramatically, probably insert will not be able to ignite properly, possibly insert can extinguish mistakenly while in work mode.

AL 5 Ignition Failure Alarm

The alarm will sound when the insert fails to turn on properly.

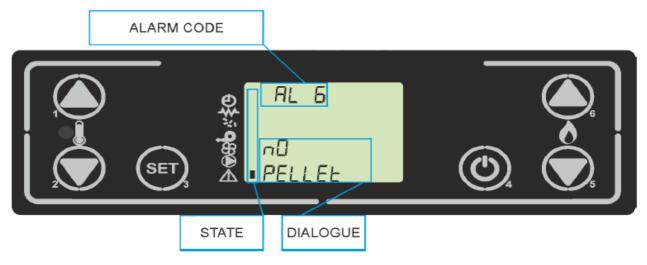


Solution:

Sometimes, it can happen because of dirty burning pot, wind conditions, pellet change, pellet absence or dirty insert. When you see ignition failure alarm, always clean the burning pot, check for pellets and restart the insert. If you see this failure too often, think about wind condition of the day, last cleaning time, last change of the fuel (different brand, size etc.) and last cleaning time of the chimney and try to determine the problem between these options. If you can't determine the problem and fix it, call the installer and ask for a yearly maintenance or service.

AL 6 Pellet Absence Alarm

In work mode, if the temperature of the exhaust gas drops below a certain limit, the alarm will sound. The display will show "AL 6 NO PELLET".



Solution:

Reset the alarm and fill the pellet tank. You can keep using the insert. If you are seeing this alarm while pellet tank is full, call the installer and ask for a service.

AL 7 Over-Temperature Thermal Safety Alarm

The alarm will sound when the security thermostat reaches a temperature higher than the trigger threshold. The thermostat will intervene and turn off the auger motor and the controller will indicate a state of alarm with the display showing "AL 7 THERMAL SAFETY". The insert will turn itself off.



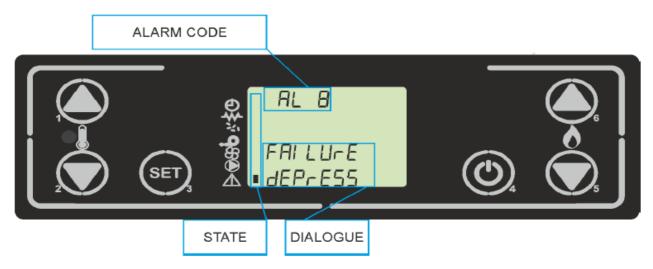
Solution:

Call the installer and ask for service to check possible reasons.

AL 8 Depression Failure Alarm

The alarm will sound when the external pressure switch reaches a pressure reading lower than trigger threshold. The pressure switch will turn off the auger motor and the controller will

indicate a state of alarm, while display showing "AL 8 FAILURE DEPRESS". The insert will turn itself off.



Solution:

This protection is used for blocked chimney condition. If you see this alarm, clean the chimney, call the installer and ask for yearly maintenance.

WARNING

13. During periods of disuse, the insert must be unplugged. For greater safety, especially if there are children around, we recommend removing the supply cable from the rear of the insert.

NOTICE

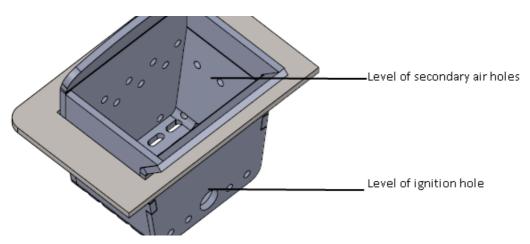
- 14. The insert will be subject to expansion and contraction during the start-up and cooling phases, therefore light creaking noises may be heard. This is absolutely normal as the structure is made of laminated steel and must not be considered a defect.
- 15. It is extremely important to make sure the product is not immediately overheated and the temperature is increased gradually, initially using low power. This will prevent damaging the welds and the steel structure.
- 16. Avoid touching the insert during the initial start-up, as the paint in this stage hardens; by touching the paint, the steel surface may be exposed.
- 17. After a long period of inactivity, remove any pellets left in the hopper (using a vacuum cleaner with a long pipe), as they could have absorbed moisture, thereby altering their original characteristics and no longer being suitable for combustion.

Insert is not Firing-up Automatically (Needs daily cleaning too often)

If the insert can't fire up more than a few times without cleaning and needs cleaning in a few hours of working, it means there could be a problem about fuel or air input or chimney. Please be sure that the air input of the insert is not blocked by any material. To check origin of problem and solve it, please refer to the following steps:

- 1. Perform a cleaning explained on section 10.1 (every 2 days)
- 2. Fire up the insert and watch until the insert burns up. Check for pellet level on a few stages.

- 1. After preloading of pellets and starting to load pellet/wait fire, how high is the pellet level in the burning pot? It must be close to igniter hole. If it's more than that level it means there is too much pellet loading while burning up. This can happen because of the length or diameter of the pellets. It's necessary to make <u>pellet type optimization</u>.
- 2. If there is no problem on preloading section, please keep watching the pellet level until insert goes to maximum power. After you see the fire, if fuel level increases or fuel level goes up to secondary air holes level of burning pot on any stage (before or after fire presents), it means that less air is going into burning pot than insert needs (could be low draft on chimney or blockage on air input of the insert). Please check the air input of the insert, perform a cleaning explained on section 10.2 (Monthly Cleaning) and check the chimney installation explained on section 5. If the chimney is properly installed be sure it's clean too. After that, please retry to start the insert and check for the same process again. If there is still a problem, it's necessary to make chimney type optimization.



Pellet Type Optimization and Chimney Type Optimization Pellet Type Optimization:

This optimization has 2 steps:

First, the preload time must be optimized. From technical settings, you can adjust preload time with M-9-2-03 parameter. Pellet level on burning pot after preload must be close to burning pots ignition holes upper level. If the problem is over loading, pellet loading time must be decreased. Please note the original value and the adjusted value.

Seconds, work phase must be adjusted with noted values. To adjust that please use following formula and following changes.

Percentage = ((Adjusted value / Original value) -1) x 100

Adjust the Pellet Type from M10 menu.

<u>For example:</u>

<u>Noted parameters are:</u> Original value = 50 Adjusted value = 41

<u>Calculations:</u> Percentage = ((41 / 50) - 1) x 100 = (0,82 - 1) x 100 = - 18 % Pellet Type = -18 / 3 = -6

<u>Set Pellet Type to -6</u>

Chimney Type Optimization:

This optimization has 2 steps:

First, ignition fan speed must be optimized. If the problem is pellet level is increasing on the burning pot, fan speed must be increased before work phase. From M9-4 Settings Factory menu you can increase M-9-4-16 and M-9-4-17 parameters to adjust fan speed on needed functioning stages. Please note the original and the adjusted parameters.

Second, use the same logic of the percentage formula to adjust the M11 Chimney Type parameter.

<u>For example:</u> <u>Noted parameters are:</u> Original value = 1500 Adjusted value = 1700

<u>Calculations:</u> Percentage = ((1800 / 1500) - 1) x 100 = (1,2 - 1) x 100 = 20 % Chimney Type = 20 / 5 = +4

Set Chimney Type to +4

Adding Cleaning Phases on Work Phase

After optimizations are made, adding initial cleaning phases will help insert to work for a longer time without daily cleaning needed. To activate the initial cleaning set the following parameters from M9-4 Settings Factory menu.

M9-4-03 = 10 M9-4-12 = 30 M9-4-06 = (Changing according to insert output and optimizations, set it same as M9-4-06)

probe TSP flue DISPLAY ower GLOW PLUG SERIAL nnot PHAS SUPPLY VOLTAGE NEUTRA OPT. EXT. THERM. 230VAC PE BV EI 304 3363 EXCHANGER FLUE ENCODER N

12 INSERT CONTROL PANEL ELECTRICAL SCHEME

START-UP / COMMISSIONING FORM

1/2

END-USER INFORMATION

NAME / SURNAME	:	
ADDRESS	:	
CITY / PROVINCE	:	
COUNTRY	:	
E-MAIL / GSM	:	
SIGNATURE	:	

PRODUCT INFORMATION

:

PRODUCT MODEL

EXTRAS 1	:	
EXTRAS 2 INVOICE DATE and NUMBER	:	
SERIAL NUMBER	:	

COMMISSIONING OF THE DEVICE

DATE OF COMMISSIONING AUTHORIZED COMPANY for COMMISSIONING	:	
ADDRESS	:	
E-MAIL / GSM	:	
SERVISER NAME / SURNAME	:	
SERVISER STAMP and SIGNATURE	:	

- 1. Warranty period is 2 (two) years, and starts with signing of this document
- 2. One copy of this document shall be handed to end-user
- 3. General checks on next page should be completed for future reference

START-UP / COMMISSIONING FORM

	2/2
General Checks	Check
Wall plug voltage measurement	V (AC)

Comments

There is no damage because of transportation

Chimney is clean, functioning well and meets the requirements defined in manuals

Outputs are tested before start-up and working correctly

Plumbing plant installation is made according to manuals, and necessary sensors are installed

Optimization for auger / chimney calibration (if needed) is made

Purchased optional elements are installed correctly, and tested

End-User Notification User is informed about boiler/stove cleaning and service cycles	Check	Comments
User is informed about errors and how to act when they are shown		
User is informed about combustion power selection and setting necessary thermostats		

User is informed about boiler/stove functioning, operating, fuel quality and warranty conditions

REMARKS / DIFFERENCES