



AIR PLUS

INSTALLATION AND OPERATION MANUAL

Dear Customer!

We wish to thank you for choosing the UNGARO product!

Our pellet stoves represent continuous innovation in biomass heating. From design to production, every step of the manufacturing process is carried out entirely at our premises, including rigorous testing aimed at assessing and certifying the reliability and sustainability of each model, according to the most stringent European standards regulating emissions and safety.

Simple and elegant forms plus a variety of finishes make our product versatile for any interior design.

In order to get the best performance from your appliance please read carefully this manual before using the stove.

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1. Product Description

The Ungaro stove is a heat generator for domestic use running on wood pellet, intended for local or ducted heating of a home.

Pellet

The efficiency and heating capacity of Ungaro stoves may vary in relation to the type and quality of pellets used.

It's recommended to use pellets that meet requirements of the standard ISO 17225-2, class A1. To ensure good combustion, the pellets must be stored in an area that is free of humidity.

ATTENTION: The use of fuel of inferior quality or not conforming to the specification given above compromises the running of your appliance and can therefore lead to the termination of the guarantee and of the manufacturer's responsibility for the product.

2. General Information

All Ungaro products are built according to the directives:

- 2011/65/EU (RoHS)
- 2014/35 EU (LVD) Electrical safety
- 305/2011 construction materials

- 2014/30 EU (EMCD) compatibility

and according to the normes:

- EN 14785
- EN 13240
- EN 303-5
- EN 60335.2-102
- EN 62233, EN 50581
- EN 55014-1, EN 55014-2,
- EN 61000-3-2, EN 61000-3-3.



This warning sign indicates that the message to which it refers should be carefully read and understood, because failure to comply with what these notices say can cause serious damage to the stove and put the user's safety at risk.



This symbol is used to highlight information which is important for proper stove operation. Failure to comply with these provisions will compromise use of the stove and its operation will not be satisfactory.



In order to get the best performance from your appliance we recommend that you read this manual carefully before installing and lighting the appliance.

- After having removed the package, ensure the appliance integrity and that all the required components have been supplied. In case of non conformity, contact your dealer within 15 days from the date of receipt.

- Do not leave the packaging elements within reach of children or unassisted disabled persons;
- Incorrect installation or faulty maintenance (not conforming to the requirements set out in this manual) can cause harm to people, animals or property. In such cases Ungaro is absolved from any civil or criminal responsibility;
- Hopper lid must be easily accessible to fill the pellets;
- Do not block or reduce the primary air inlet, as this is essential for correct combustion. Failure to heed this warning will void the warranty, with the manufacturer declining all related liability;
- Check the chimney for obstructions before lighting the appliance;
- The safety or control devices must not be modified without the specific authorisation of the manufacturer. Failure to heed this warning will void the warranty, with the manufacturer declining all related liability;
- This appliance can not be used by children 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 shall not play with the appliance;
- The appliance must not be used as an incinerator;
- Do not open the stove door during its operation;
- The stove must not be used as a cooking appliance.

2.1 Electrical Safety

- Make sure the power plug is accessible after installation of the appliance;
- The power cable must not be in contact with hot parts;
- Do not pull, twist or disconnect the electric cables of the stove even if power supply is disconnected;
- Do not wash the appliance with water. The water could get inside the unit and damage the electrical insulation and cause electric shocks;
- Variations in power supply voltage in excess of 10% of the rated value may affect the correct operation of the appliance and can lead to serious faults within stove electrical system;
- Use uninterruptible power supply with frequency 50Hz and pure sine wave or pseudo sine wave;
- The main switch is located on the back part of the stove (*fig. 1*);

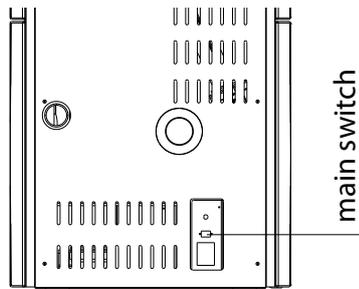


fig. 1 - Main switch

- In case of alarm don't shut the appliance down, turn it off only when signal "off" appears on the display.



The appliance must be connected to an electrical system which is equipped with an earth conductor, as laid down in directives 73/23 EEC and 93/98 EEC.

2.2 Operating Warnings

- During the first operating cycles, regularly vent the room of installation;
- Pellets must not be fed manually into the burning pot;
- Filling the hopper with pellet make sure that the plastic bag doesn't come into contact with the hot surfaces;
- Un-burnt pellets accumulated in the burning pot must be removed before re-lighting. Not observing this may cause detonation in the combustion chamber with harm to people, animals or property;
- Do not touch the stove with wet hands or bare feet in view of the fact that it is an electrical appliance;
- Avoid coming into contact with the hot parts of the appliance;
- Never expose plants or animals directly to the air flow;
- Do not stand for a long time in front of the hot air vent;
- Do not light the appliance with flammable materials. If the ignition system breaks down, please contact the Technical Support in your area;
- Only authorized Ungaro personnel may

access to the electrical or mechanical parts of the appliance.

3. Installation

The installation must be carried out by specialized personnel. The Compliance Certificate must be issued under the responsibility of the installer.

Ungaro S.r.l. will not be held responsible for damage to persons or things in the event of failed or incorrect operation if the aforementioned warnings are not complied with.

3.1 Regulations

Installation must be carried out with reference to the following standards:

UNI 10683

UNI 10412-2

The smoke duct must comply with:

UNI EN 13384-1 Thermal and dynamic fluid calculation methods for chimneys

UNI 7129 - 1...- 4 heating systems for domestic use

UNI EN 1443 chimneys: general requirements.

UNI EN 1457 Requirements and test methods for clay/ceramic flue terminals.

3.2 Additional documentation

At the end of installation, the installer must

inform the user on how to use the heating system and provide technical documentation for the appliances used in the installation. The installer must fill in:

- Heating system booklet
- Documentation for the installation

The technical documentation includes:

- Reference to the current standards;
- Manufacturers installation indications;
- A rough description or scheme, or photographs of any system modifications made;
- Compliance Certificate;
- The date and the installer's signature.



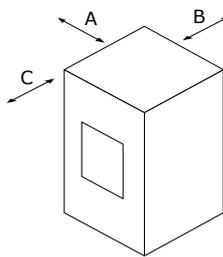
A sign upon receipt of the technical documentation is requested from the user.

3.3 Installation Area

The stove should be positioned on the fire resistant floor. If the flooring is made of flammable material, provide a floor protection surface in compliance with current national standards. Respect the safety clearance as shown on *fig. 2*.



Ungaro S.r.l. will not accept any liability in case of fire for failure to comply with the safety clearance.



	Flammable Materials	Non flammable Materials
A	500 mm	200 mm
B	500 mm	200 mm
C	1500 mm	1500 mm

fig. 2 - Safety clearance

3.4 Heating and ductable air fans

The stove has two fans for forced air heating. The standard configuration for both fans is frontal outlet, heating the room of installation. According to the factory standard, the upper fan can be used for ductable air heating in the remote room. The fan can be spinned positioning the hot air outlet backwards, see the precut indicated on the *fig.3*. Then must the ductable air function must be activated in the control panel. This modification can be made only by an authorized technician. It's recommended to bring the ductable air pipe not longer than 8 linear meters in a single destination.

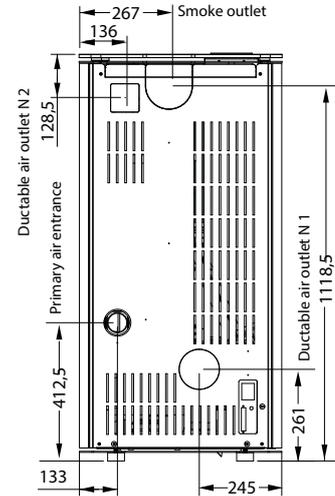


fig. 3 - Ductable air outlets

3.4 Flue Pipe (ref. UNI 10683)

The flue pipe must meet the following requirements:

- Twin wall steel flue, required diameter is 100 mm round;
- It must be resistant to heat, mechanical stress, heat, combustion residues and related condensate;
- It must be installed at a safe distance from eventual combustible materials;
- It must have draft between 11 and 15

Pa (UNI 10683).



The proper draught conditions in the flue is critical for the efficient working of pellet stove. All sections of the flue must be capable of inspection and removable to enable periodic internal cleaning.



The stove must be connected to a flue pipe or a vertical duct which can discharge the fumes at the highest point of the building, conforming to current national regulations (UNI 10683). Failure to comply can lead to the termination of the guarantee and of the manufacturer's responsibility for the product.

3.5 Flue gasses discharge

To discharge the flue gas outside, make a hole of an adequate size to the flue pipe.

A T-element with inspection cap and chimney cowl must be installed on the flue pipe run.

Maximum two accessible 90° bends are allowed on the flue pipe, each of them must have a T-fitting with inspection cap. Maximum permissible flue lengths are 3 meters with an upward slope of 3%.



Flue gasses discharge on the wall is not permitted by current regulations. Failure to comply can lead to the termination of the guarantee and of the manufacturer's responsibility for the product.

Smoke exhaust with existing flue

A chimney cleanout access door is required. Please control and periodically clean the chimney.

Chimney terminal position

For the installation of smoke exhaust ducts consult the technical regulations UNI 10683. As shown on the *fig. 4*, the terminal of the chimney over the roof must have the following quotes ($b > 10^\circ$):

- a = 500 mm
- c = 1300 mm

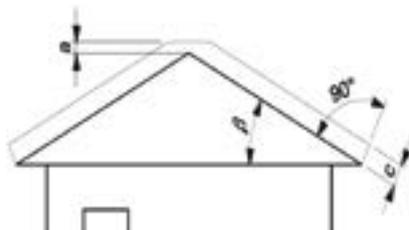


fig. 4 - Chimney

In the case of the flues close to each other, refer to *fig.5 e tab.1*.

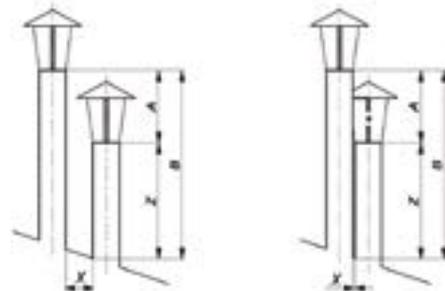


fig. 5 - Near Chimneys

Symbol	Description (mm)	Clearance (mm)
Z	Height	
B	$X \leq 500$	$Z + A$
B	$X > 500$	$Z + A (*)$
A	Height over an obstacle	500

*The symbol * means the useful terminal outlet section.*

tab. 1

Outdoor Chimney (fig. 6)

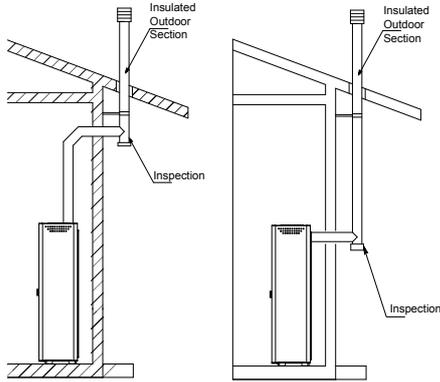


fig. 6 - Outdoor Chimney

Non-condensing insulated chimney system must be used for external applications. A chimney tee comprising a cap should be placed at the bottom of the vertical section of the chimney.

Existing flue (fig. 7)

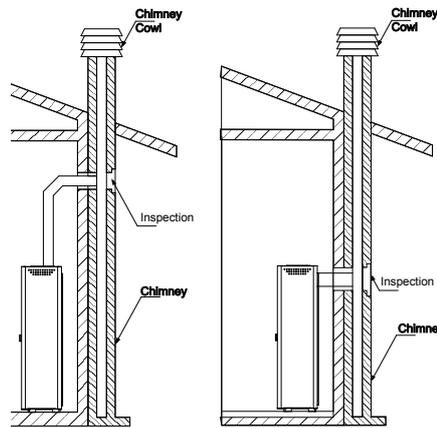


fig. 7 - Existing Flue

At the base of the flue is advisable to install a hermitically sealed cleanout access for collecting ash and condensate, in a position where it can be periodically inspected.



The first section should not be a 90° bend, as ash would block the discharge of flue gasses in a short time, causing draught problems.

3.6 Air intake

For proper functioning, the appliance should be positioned in a location where it is able to take in the air necessary for combustion. Provide an air intake hole Ø100 mm² close to the stove. Protect it with a grill grate from inside and outside (fig. 8).

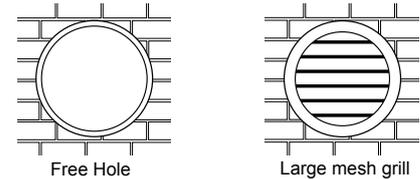


fig. 8 - Air Intake

If there are no perimeter walls in the installation room, the hole should connect the installation room to an adjacent room from which continue the chain until you reach an outside wall.

Unless the installation involves a sealed chamber product, there is no obligation to take the combustion air from the outside of the house through a pipe connected directly to the generator. If this type of installation is deemed necessary, the direct intake of the combustion air must be carried out through the wall immediately behind the generator, using only straight ducts of suitable material with the section not less than the air inlet diameter of the generator. The air intake pipe placed outside must be equipped with a grill grate preventing the

entry of foreign bodies and animals. In case of air intake from adjacent non-external environment, the duct connected to the generator must terminate in the first room different from the room of installation.



If the air inlet is direct from outside in the room of installation, its run should not have changes of direction and small mesh grill, as can be easily clogged.



Refer to the national installation regulations for pellet stoves.

4. Display

4.1 Display



fig. 9 - Display

Button	Description	Function
1	ESC	Exit from menu or submenu
2	ON / OFF, Error reset	Press and hold 3 second
3	SET	Enter menu / submenu; Confirm and save modifications.
4 - 6	Scroll menu	Press the button to choose the desired value
	Modify settings	
5	Alarm	The red light turns on when a code relating to an alarm appears on the display.

On the figure 10 you can see the main screen of the display which appears before ignition.

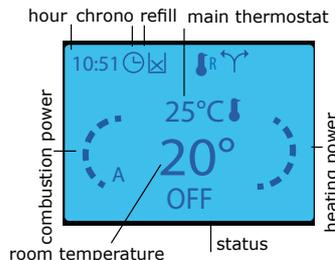


fig. 10 Main screen

4.2 Messages

Message	Description
Sond	Control of sondes in Check Up phase
Cleaning	A careful cleaning of the heater is necessary. Appears automatically after some hours of work
Block state name	The message appears if the appliance was shut down not manually in the ignition phase (after pre-load). The heater will shut down automatically when the working cycle is completed.
Link Error	Missing connection between display and motherboard
Cleaning On	Cleaning in progress
Soft Mode	Soft Mode function
Refill	No pellet in the tank

In the following tables is explained the User Menu N 1 (press **SET** once to access) and the User Menu N 2 (press and hold for a while the button **SET** to access). Press the arrow buttons to choose the desired menu or value, confirm by pressing **SET** once. Press **ESC** to return in the previous menu. The menus protected with **PW** are for Ungaro authorized service technicians. The presence of some options depends on the type of configuration set.

4.3 User Menu N 1

User Menu N 1						
Power	<i>Combustion</i>	In this menu can be modified the combustion power. The menu can be seen only if in the menu "Service" the submenu "Automatic power" is set to "OFF". In the menu "Combustion" if set to "Auto" (recommended) it balances the combustion power to the difference between the settings of the "Room thermostat" and the actual room temperature detected by the temperature probe. A manual setting (value from 1 to 6) indicates the maximum combustion power of the generator. A wrong manual setting can limit the generator and it would not reach the temperature set in the menu "Thermostats". When the temperature set in the menu "Room" is reached, the combustion power will be minimal. At the left of the display screen is indicated the combustion mode (A=automatic, M=manual) and the current power (curve segments).				
	<i>Canalisation</i>	In this menu can be modified the speed of ductable air fan. The speed can be set in manual or in automatic mode. It follows the settings of the menu "Thermostats" - "Remote room" and take as a reference the temperature set in the menu "Remote room". The menu can be seen only if the function of ducting air is enabled by a authorized technician.				
Thermostats	<i>Room</i>	In this menu can be set the desired temperature in the room of installation of the generator. The value is the reference for generated combustion power.				
	<i>Remote room</i>	In this menu can be set the desired temperature in the room with ductable air heating. The menu can be seen only if the function of ducting air is enabled by a authorized technician.				
Chrono	With the chrono is possible to program ignition and extinguishing of the generator. It consists of 2 submenus.					
Chrono	<i>Mode</i>	<p>In this menu the user can choose the desired mode or disable chrono.</p> <ul style="list-style-type: none"> • Enable modification of the menu by pressing the button 3 • Choose the mode (Daily, Weekly or Week-end) • Enable/disable the chrono mode with the button 2 • Confirm the modification pressing the button 3 				
		<table border="1" style="border-collapse: collapse;"> <tr><td style="padding: 2px;">Disabled</td></tr> <tr><td style="padding: 2px;">Daily</td></tr> <tr><td style="padding: 2px;">Weekly</td></tr> <tr style="background-color: #cccccc;"><td style="padding: 2px;">Week-end</td></tr> </table>	Disabled	Daily	Weekly	Week-end
Disabled						
Daily						
Weekly						
Week-end						

<p>Chrono</p>	<p><i>Program</i></p>	<p>Three types of programming are available: Daily, Weekly, Week-end. After having chosen the program:</p> <ul style="list-style-type: none"> • with the arrow buttons 6 or 4 select the time slot to program • enter in modification mode by pressing the button 3 (the time slot starts to blink) • modify the time with the buttons 6 or 4 • to save the programmation press the button 3 • enable (a "√" sign appears) or disable the time slot (a "√" disappears) by pressing the button 2. 	<table border="1"> <tr> <th colspan="2">Monday</th> </tr> <tr> <td>ON</td> <td>OFF</td> </tr> <tr> <td>09:30</td> <td>11:15 ✓</td> </tr> <tr> <td>00:00</td> <td>00:00</td> </tr> <tr> <td>00:00</td> <td>00:00</td> </tr> </table>	Monday		ON	OFF	09:30	11:15 ✓	00:00	00:00	00:00	00:00
Monday													
ON	OFF												
09:30	11:15 ✓												
00:00	00:00												
00:00	00:00												
<p>Chrono</p>	<p><i>Program</i></p>	<p>Daily - Choose the day of the week and set the time slots for ignition and extinguishing. Chrono at midnight - Set the hour of ON of the previous day, for example at 20:30. Set the hour for OFF of the previous day at 23:59. Set the hour for ON of the next day at 00:00. Set the desired hour for OFF of the next day, for example at 06:30. The appliance will start Tuesday at 20:30 and will shut down Wednesday at 6.30. Weekly - For each day of week the programming is the same Week end - The same time slots for ignition and extinguishing on working days Monday-Friday and different operation time slots for Saturday and Sunday.</p>	<table border="1"> <tr> <th>Monday</th> </tr> <tr> <th>Tuesday</th> </tr> <tr> <td>Wednesday</td> </tr> <tr> <td>Thursday</td> </tr> <tr> <td>Friday</td> </tr> <tr> <th>Mon-Fri</th> </tr> <tr> <td>Sat-Sun</td> </tr> </table>	Monday	Tuesday	Wednesday	Thursday	Friday	Mon-Fri	Sat-Sun			
Monday													
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Sat-Sun													
<p>Refill</p>		<p>In this menu can be activated the calculation of the pellet remaining in the tank basing on the current consumption. Four levels of the tank load will be shown on the display: 100% (full tank), 75%, 50%, 25%, 0 (Refill menu disabled). If you wish to use the Refill function, every time after loading pellet, insert an approximate percentage of tank load. If the load is the same as the last percent inserted manually, press and hold for 3 seconds the button ESC to confirm. During the operation of the generator, the function "Refill" will show on the display an alert when the tank load is less than 20%.</p> <p>After 3 hours this message becomes alarm Er18, this error appears when the pellet load in the tank is less than 10%. Make sure to insert the correct percentage of the pellet loaded in the tank, otherwise can appear an alarm Er03 (load overestimated).</p>											
<p>Soft Mode</p>		<p>The Soft Mode can be enabled and disabled in this menu. It introduces reduced power, without taking in consideration the thermal request of the house.</p>											

4.4 User Menu 2

User Menu 2		
Settings	<i>Date and Hour</i>	in this menu can be set time, date, month and year
	<i>Language</i>	change the language of the display
	<i>Radio control</i>	optional with a separate user manual
	<i>Recipe</i>	System operation settings related to the different product types (see technical data), 1= FAP6, 2=FAP9, 3=FAP12
Service	<i>Counters</i>	Operation hours - Hours of operation in Normal, Modulation and Security mode
		Ignitions - Number of ignitions made
		Failed ignitions - Number of failed ignitions
	<i>Errors list</i>	Menu for the exclusive use of the authorized technician Ungaro
	<i>Secondary Information</i>	information related to the real-time operation of the product
	<i>Auger calibration</i>	permits to evenly modify the quantity of pellet feeding for each combustion power. The range of setting values is $-7 \div 7$. Each step is equal to 3% of pellet feeding for each combustion power. The factory setting is 0. It is recommended to modify this parameter only if indicated by an authorised technician and however varying one step at a time and eventually repeating if necessary.
	<i>Stand by</i>	If in this menu is set "OFF", the stove will go in combustion modulation when the value of the "Room" thermostat is reached and overcome. If in the menu is set "ON", the stove will go into standby as soon as the room temperature will be 5° more than the value set in the "Room" thermostat (and with the ductable mode enabled, if in the room with ductable heating the temperature is 5° higher than the value set in the Remote room thermostat).
	<i>Smoke fan calibration</i>	permits to evenly modify the fan speed set by the authorised technician Ungaro during the commissioning and the first ignition. The range of setting values is $-7 \div 7$. The factory setting is 0. At the beginning of the heating season a moderate gain of the parameter could be helpful to remove the small obstructions in the smoke duct in the sections that are not easily accessible. Ungaro S.r.l. recommends to modify this parameter only if indicated by an authorised technician and however varying one step at a time and eventually repeating if necessary.
<i>Automatic power</i>	the menu to set the combustion power in automatic mode. Once the automatic power is enabled, all the menus of the combustion settings will no longer be visible.	

Service	<i>Loading</i>	the menu is for automatic pellet loading. It will stop automatically after 300 seconds. The thermostat must be OFF when this option must be enabled. After the loading has stopped, clean the burn pot with ash vacuum cleaner before starting the ignition.
	<i>Test Loading</i>	This menu is for the exclusive access of Ungaro Technical Support
Display	<i>List nodes</i>	This menu is for the exclusive access of Ungaro Technical Support
	<i>Contrasto</i>	menu to adjust screen contrast
	<i>Min. light</i>	menu to adjust screen brightness
	<i>Sound</i>	in this menu is possible to turn on or off the keyboard sound
System menu		This menu is for the exclusive access of Ungaro Technical Support

5. Operation

5.1 Before ignition

Before turning on the generator the first time, or any other time, check if:

- The power supply cable is connected to the wall socket and to the heat generator. The main switch of the stove must be in the "ON" position. The display must be lit;
- Make sure that on the display appears the message "OFF". Should there be an alarm code, solve its cause and reset the alarm as described in the chapter "Alarms";
- The pellet hopper is full;
- The combustion chamber is clean;
- There is no foreign body or unburnt pellet in the burn pot;
- There is no unburnt pellet in the ash area perfectly in place and the butterfly screws are adequately tightened;

- The technical door and the aesthetic door are closed.

5.2 Settings

Press the button "SET" to access to the programming menu.

- In the menu "Power", submenu "Canalisation", set "Auto" if you wish to proportionate the speed of the upper fan to the combustion power. If you prefer to control the fan manually, set the desired speed value choosing from 1 to 6 (maximum). In menu "Thermostats", submenu "Room" set the desired temperature in the room of installation.
- If the stove has ductable heating, the temperature in the remote room must be set in the submenu "Remote room", it will be detected with the probe placed in the room with ducted hot air. Press and hold the button "Set" to access to the complete

mentary programming.

- In the menu "Service", submenu "Automatic Power", set "ON" (recommended setting) to proportionate the combustion power to the value set in the menu "Room Thermostat" and the actual temperature relieved by the room probe. If the submenu "Automatic Power" is set "OFF", in the menu "Power" will be seen the submenu "Combustion", where can be set the power of combustion of the generator. For any configuration the speed of the fan is always proportionated to the combustion power.

5.3 Ignition

Press and hold the power button until the signal "Check Up" appears on the display. In this phase the stove carries out automatic cleaning, components and security test and draft checking. Completed the test

phase, on the display will appear "Ignition" ("PA1"). The pellet starts falling in the burner and in few minutes the flame appears. Once the flame is present, the display shows "PB", "Stabilization" and then "Normal".

5.4 Operating characteristics

The priority of operation of the stove is the

room temperature. If the fan power is set "Auto, the fan will be automatically synchronised with the actual combustion power. If the combustion power is set "Auto", the flame is automatically regulated according to the temperature in the room of installation read by the temperature probe. If in the menu "Power" is set "1", the relative operational consequences are valid proportionally for any other power level set manually.



It is recommended to set "Auto" in the menu "Power" and to regulate the temperature only in menu "Thermostats". A wrong manual setting, for example, low value of the fan in the menu Remote Room and high power in the menu Combustion with unsatisfied thermostats, can cause alarm related to the high smoke temperature.

Operation characteristics								
Menu Power	Combustion	Auto	Auto	Auto	1	1	6	6
	Canalisation	Auto	Auto	Auto	Auto	6	Auto	6
Menu Thermostats	Room thermostat*	> Room T°	< Room T°	> Room T°	> Room T°	> Room T°	< Room T°	> Room T°
	Remote room thermostat**	> Remote room T°	> Remote room T°	< Remote room T°	> Remote room T°	> Remote room T°	> Remote room T°	< Remote room T°
	Operation	Max combustion, max fans power	Combustion at minimum, fans at minimum	Max combustion, max room fan, ducted fan at minimum	Max combustion, fans at minimum	Combustion at minimum, room fan at minimum, ducted fan at power 6	Combustion at minimum, room fan at minimum, ducted fan at power 6	Combustion at power 6, room fan at power 6, ducted fan at minimum

(*) "Heating" and "Room" referred to the room of installation. The fan is commanded by the temperature probe placed close to the stove.

(**) "Canalisation" and "Remote Room" referred to the room with ducted air heating. The fan is commanded by the probe placed in the room with ducted heating.

5.5 Turn Off

To turn the stove off, press and hold for some seconds the button **ON/OFF**. The

auger will stop feeding pellets. The air fan remain ON until the combustion gas temperature drops below the setpoint. When the stove stops, on the display will appear



Do not disconnect power supply until the stove is completely cooled down.

6. Maintenance

To ensure smooth operation and maintain high performance, clean the stove regularly. The frequency of cleaning is determined by the length of time the appliance has been running and by the type of pellet. The use of pellets that do not comply with the requirements of this user manual involves:

- Poor combustion;
- Glass smoke up;
- Creation of combustion residue in the burn pot and overload of the automatic cleaning mechanism;
- Forfeiture of warranty rights.

Maintenance should be performed only on the appliance shut down and cooled. Don't clean the glass when it is hot. Protect the floor from ash before cleaning the stove.



Faulty stove and flue pipe maintenance can alternate proper functioning and void the warranty, with the manufacturer declining all related liability.

6.1 Automatic Burn Pot Cleaning

In the models with self-cleaning burner the combustion residues are conveyed into the ash box automatically during the ignition phase (*fig. 11*).

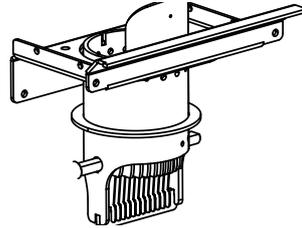


fig. 11 - Automatic burn pot cleaner

In case of failed ignition (Alarm Er12), empty the burn pot with an ash vacuum cleaner and clean the ash box, *fig. 12*.



fig. 12 - Ash box

6.2 Inspection Compartment Cleaning

Periodically empty the inspection compartment, *fig 13*. Remove the lid, clean the space with a ash vacuum cleaner, replace

the lid pushing down the handle. To ensure proper combustion, close tightly the inspection compartment.

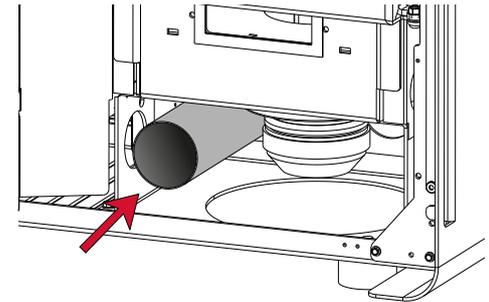
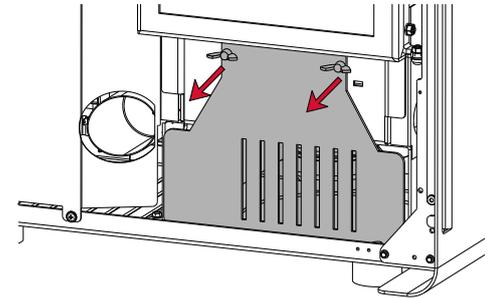


fig. 13 - Inspection compartment

6.3 Hopper Cleaning

Saw residues may block the auger. Therefore, pellet hopper must be emptied and cleaned each 10/20 refills, depends on the quantity of dust in the pellets. Faulty hop-

per cleaning can void the warranty, with the manufacturer declining all related liability.

6.4 Annual service

Annually contact the local Technical Support for service and check up of the following components:

- Door gaskets integrity;
- Heat exchanger cleaning
- Pellet tank cleaning;
- Internal cavities cleaning;
- Internal smoke duct cleaning;
- Air pipeline cleaning;
- Smoke fan cavity cleaning;
- Motherboard cleaning;
- General check up of the components;
- Ignition resistance;
- Integrity of burn pot;
- Motor gear;
- Bushings.

At the end of the maintenance the technician must fill the maintenance report, which is required to maintain the guarantee.



Lack of annual maintenance voids the factory warranty. The annual maintenance is paid by the customer.

7. Notifications and alarms

Any alarm shuts the stove down immediately. To reset an alarm, solve the cause of the problem, then push and hold for 3 se-

conds the button **SET**.

7.1 Service

When on the display appears "**Service**", clean carefully the stove and the pellet tank (*see chap. Maintenance*). It is not an alarm and does not affect the operation of the stove. Press **ESC** button for 3 seconds to reset the notification.

7.2 Over temperature

Alarm "**Er01**" is displayed when the temperature in the pellet tank exceeds the safety limits. The safety thermostat activates and the operation of the heater stops for safety reason.

- Let the stove cool and check the pellet tank;
- Check if the space where the stove is installed is correctly ventilated.
- The thermal security thermostat can be found below the power cable, *fig. 14*. Unscrew the black cap that covers a white button, press the button until hearing a click. At this point the thermostat is reset.

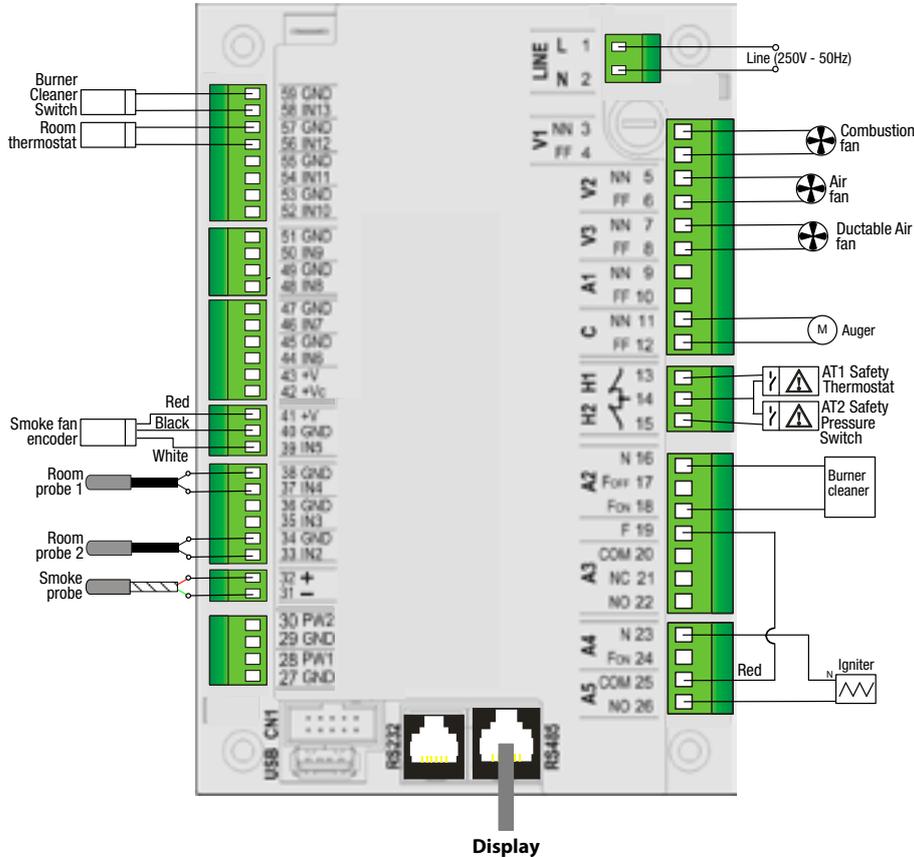


fig. 14 - Termostato di sicurezza

7.3 Troubleshooting

Error	Description	Solution
Er01	Overheated pellet hopper	Let the stove cool and check the pellet tank. Check if the space where the stove is installed is correctly ventilated. Disarm the thermal security thermostat, it can be found below the power cable. Unscrew the black cap that covers a white button, press the button until hearing a click. At this point the thermostat is reset. If there is no click, the thermostat is faulty, contact Customer Support in your area.
	Safety thermostat faulty	
Er02	Low draft in the chimney	Clean the stove carefully, empty the inspection compartment with an ash vacuum cleaner. Make sure that combustion chamber door and inspection compartment are closed tightly. Check if the flue pipe or air intake are clogged.
Er03	Extinguishment due to low smoke temperature	Make sure to have pellets in the tank. Check if the burn-pot is clean (if it's not self-cleaning) and not damaged. Empty the ash drawer, clean the inspection compartment, check if there primary air inlet or flue pipe are clogged.
Er05	Excessive smoke temperature	Clean the stove carefully, pay attention to the inspection compartment where the exhaust fan is situated. Check the flue pipe.
Er07 Er08	Incorrect operation of exhaust fan or control panel	Contact Customer Support in your area
Er11	System clock error	Contact Customer Support in your area
Er12	Failed Ignition	Clean the burner (if it's not self-cleaning). Verify if the pellet in the hopper is dry and has an adequate dimensions. Empty the pellet hopper and check if clogged. Refill the hopper, empty the burner and restart. If the error persists, contact Customer Support in your area
Er15	Loss of voltage for more than 1 minute	If the power supply is missing only at the stove, check the power cable and the fuses at the main switch.
Er16	No signal between display and motherboard	Contact Customer Support in your area
Er18	No pellet	Refill the pellet tank
Er25	Self-cleaning burner problem	Re-start the thermostove. If the error persists, contact Customer Support in your area

8. Motherboard



9. After Sale Service

For any information or problem please contact your Seller.

9.1 Technical intervention

Please read this manual carefully before contacting technical support. The customer support will ask the following data:

1. Dealer/Retailer contact data;
2. Purchase receipt or invoice;
3. Stove serial number (you can find it on the rear panel *fig. 14*);



fig. 14 - Serial Number

9.2 Documents necessary for technician

In case of intervention provide these

documents:

1. Purchase invoice;
2. Electrical Certificate of Compliance;
3. Declaration of Chimney Conformity.

9.3 Documents to ask to Authorized Technician

At the end of intervention the technician will give:

1. Service Log signed;
2. Invoice for the used spare parts for out of warranty interventions.



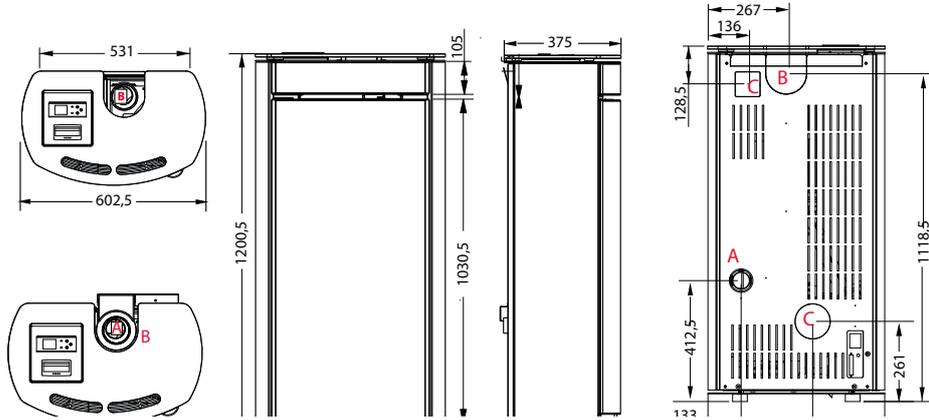
Ungaro S.r.l. reminds that the manufacturer is the holder of the rights provided by Leg. D. 02/06/2002 and the guarantee does not affect these rights.

10. Technical Data

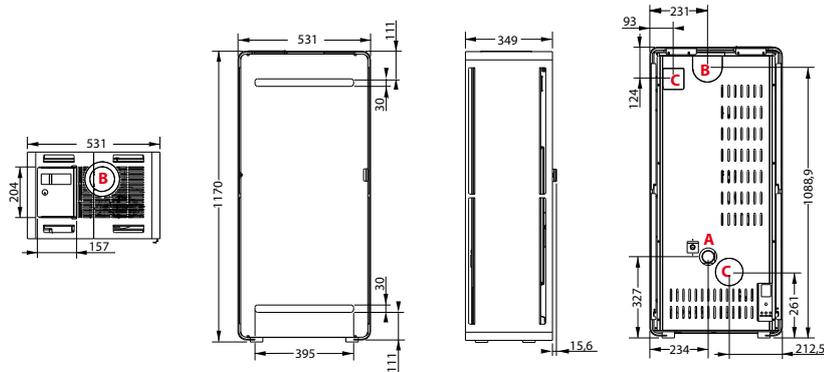
Model			6kW	9kW	12kW
Heat Input	Max	kW	6,3	8,1	11,4
	Min	kW	2,7	2,7	2,7
Air Heat Output	Max	kW	5,7	7,3	10,1
	Min	kW	2,5	2,5	2,5
Efficiency	P.max	%	90,5	90	88,7
	P.min	%	93,2	93,1	92,8
Consumption	P.max	kg/h	1,3	1,7	2,4
	P.min	kg/h	0,5	0,6	0,6
Pellet tank		kg	22	22	22
Flue pipe	A	Ø mm	80		
Primary air pipe	B		60		
Ductable air	C		80		

11. Technical Drawings

FAGIOLO PLUS 6/9/12 kW



ZEFY PLUS 6/9/12 kW



Guarantee

Ungaro S.r.l. declares that the the product purchased is in perfect condition and there are no manufacturing defects. All Ungaro products are singularly tested and covered by guarantee for 24 months. The guarantee is valid from the date of purchase which must be validated by the purchase receipt or invoice. The components that are recognized as defective by the manufacturer will be replaced free of charge by qualified and authorized personnel.

The warranty is valid under conditions:

- **If all the requirements described in this manual are followed;**
- If the appliance is installed by qualified personnel;
- If the Customer has the Certificate of Electrical Compliance of the installation;
- If the appliance is used and serviced as described in this manual;
- **If the appliance is serviced annually by an authorized Ungaro technician;**
- If the flue pipe is installed and serviced as described in this manual and in accordance with the regulations in force in your local area, region and country;
- If used certified pellet conforming to the specification given in this manual;
- If the Customer keeps the warranty registration card filled out, with the receipt of purchase. This document must be shown to the technician in case of intervention

Exclusions:

The guarantee will be invalidated in the event of damage caused by tampering with the appliance, atmospheric chemical agents, natural disasters, electrical discharges, fire, defects in the electrical system, and caused by lack of, or incorrect, maintenance in terms of the manufacturer's instructions.

The guarantee will be invalidated in case of overheating, combustion of non-conforming materials.

The above guarantee does not cover parts subject to normal wear such as gaskets, fibre board on doors, burner pot, ignition resistance, combustion chamber lining, ceramic glass, painted finishes and other external finishes.

The Customer is in charge of eventual costs (repair, transport) arising from improper exercise of warranty rights.

Ungaro S.r.l. is not responsible for damages during transportation and/or handling, please inspect your order immediately upon receipt and contact your retailer for any claims.

This guarantee is valid only for the buyer and cannot be transferred. The replacement of the entire system or the repair of one of its components does not extend the guarantee period.

Expenses incurred from incorrect installation of the stove, ash accumulated, lack of maintenance or unsuitable cleaning are not covered by the guarantee.

The Manufacturer declines all liability for any damage which may be caused, directly or indirectly, due to the use of the product.

The product installation must comply with all applicable laws and regulations (L.n. 37/08 ex.46/90; dpr n 412/93; norms UNI-CIG; prescriptions VV.FF.; ecc.).

The guarantee is not valid if:

- The electric installation is not provided with an earth connection or has no certificate of compliance;
- There is rust or any other corrosion caused by placing the product in a damp site;
- Damages caused by overvoltage, electrical

- discharges, stray currents;
- Damages caused by use of non original spare parts or intervention of non authorized personnel;
- There was a misuse of the product or sabotage.

Any technical interventions at the end of the guarantee period are to be paid by the Customer, including travel costs.

This is the only guarantee Ungaro S.r.l. gives for the product. No one else may give any guarantee, warranty, or condition on Ungaro's behalf.

Ungaro s.r.l. 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 prescription specified in the manual, especially warnings regarding installation, use and maintenance of the appliance.

In order to improve the product, to keep this publication up to date Ungaro S.r.L reserves the right to make modifications without any advance notice.

Purchase Date

Installation Date

Seller

Installer

Stove Data

To cut and to send to Ungaro S.r.l. within 8 days of the date of purchase. Fill in all the fields in readable form.

Last Name

First Name

Street

n°

ZIP

City

Prov.

Telephone

e-mail

Purchase Date

Seller

Installer

Stove Data

The customer declares that he/she has read the guaranty and the user manual.

Date _____ Signature _____

By signing this consent form, I confirm that pursuant to the provision of Art.13 and 23 L.196/2003 on Personal Data Protection, Ungaro S.r.l. personal data above for the purposes of sending marketing communication, and information of commercial and advertising nature and make such data available to a data processor under the terms and conditions set out by the Personal Data Protection Act. I acknowledge my right to access the personal data, edit it, and to withdraw this consent at any time in a written notice delivered to: Ungaro S.r.l. - Via S. Mango 2 - 88040 S. Mango D'Aquino - CZ. Providing my personal data is voluntary; in the lack of them Ungaro S.r.l. cannot provide services mentioned above. *By signing below I express my consent to personal data processing.*

Date _____ Signature _____



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