EN

INSTRUCTION MANUAL PELLET HYDRO STOVES

ISOTTA PELLET COOKING STOVE



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T S S Z U

TP20 PELLET COOKING STOVE

01. TECHNICAL DRAWING





- A = Ø 80 mm Scarico fumi / Flue / Cheminée / Rauchabzug/ Evacuación de humos / Descarga de fumos
- B = Ø 48 mm Ingresso aria primaria / Primary ari inlet / Entreé d'air primaire/ Primärlufteinlass/Entrada aire primario / Admissão de ar primário
- C = Ø 80 mm Scarico fumi superiore / Flue top / Haut de fumée / Top Abgasstutzen / Salida humos superior /Descarga de fumos superior
 D = 3/4 Ritorno riscaldamento / Heating return / Retour chauffage / Heizungsrücklauf
- Retorno calentamiento / Retorno aquecimento E = 3/4 Andata riscaldamento / Heating flow / Départ chauffage / Heizungsvorlauf Ida calentamiento / Partida do aquecimento
- F = 1/2 Carico/scarico impianto / System load/discharge / Remplissage/vidage installation / Be-/Entladen der Anlage / Carga/Descarga instalación / Carga/descarga sistema

02. TECHNICAL DATA

Technical data of the appliance:	TP20 COOKING STOVE / HYDRO MODE		TP20 COOKING STOVE / OVEN MODE			
Designation:	Nominal heat output	Reduced heat output	Nominal heat output	Reduced heat output		
Designazione:	Potenza termica nominale	Potenza termica ridotta	Potenza termica nominale	Potenza termica ridotta		
Fuel throughput				4.50		
Consumo orario (kg/h)	4.3	1.5	4.34	1.52		
Necessary flue draught	10	10	12	10		
Requisiti minimi del tiraggio del camino (Pa)	12	10	12	10		
Flue gas temperature	111	65	164	0 2		
Temperatura fumi (°C)	111	05	104	02		
Flue gas temperature at flue spigot or socket	110	71	173	20		
Temperatura uscita fumi (°C)	115	71	175	85		
Flue gas mass flow	13.4	67	15 1	7.6		
Flusso massico dei fumi (g/s)	13.4	0.7	15.1	7.0		
Efficiency	93 5	95 5	89.0	93 5		
Rendimento (%)	55.5	55.5	05.0	55.5		
Total heating output	18.5	6.5	18.2	6.7		
Potenza termica (Kw)	2010		1012	0.7		
Water heating output	15.5	5.0	11.7	4.2		
Potenza termica resa all'acqua (Kw)						
Space heating output	3.1	1.5	6.5	2.5		
Potenza termica resa all'ambiente (Kw)						
CO emission at 13% of O ₂	0.0113	0.0146	0.0044	0.0174		
Emissioni di CO al 13% di O ₂ (%)						
Maximum water operating pressure	3	3	3	3		
Massima pressione di esercizio dell'acqua (bar)	-	-				
Electrical power supply		2	400			
Potenza elettrica assorbita (W)						
Rated voltage	230					
Tensione nominale (V)						
Rated frequency	50					
Frequenza nominale(Hz)						
Power of oven resistance	1200					
Potenza Resistenza del forno (dove prevista) (W)	(W) 1200		200			
Energy Efficency Class	A+					
Classe di efficienza energetica						
Energy Efficency Index	128					
Indice di efficienza energetica	120					

03. FLUE PIPE

FLUE PIPE CHARACTERISTICS

19 KW PELLET COOKING STOVE			
Chimney flue draught	12	Pa	
Fume temperature	119	°C	
Maximum flue gas flow rate	13.4	g/s	

04. INSTALLATION WARNINGS

04.1 MINIMUM FREE INSTALLATION DISTANCES

If the stove is to be installed in rooms where it is surrounded by combustible materials (e.g. furniture, wood cladding, etc.), the following minimum clearances must be complied with:



	Symbol	(mm)	Convective air (mm)	Isolating shim (mm)
FREE INSTALLATION				
Rear wall (under, above hob)	C1, C2	50 of which	10	40
Side wall (hob irradiation area)	D	600	600	
Floor		0	0	
Front	A	1000	1000	
Above (hob irradiation area)	E	750	750	



	Symbol	(mm)	Convective air (mm)	Isolating shim (mm)
RECESSED INSTALLATION				
Rear wall (under, above hob)	C1, C2	50 of which	10	40
Side wall (under hob)	В	50 of which	10	40
Floor		0	0	
Front	A	1000	1000	
Side (hob irradiation area)	D	600	600	
Above (hob irradiation area)	E	750	750	

TERMOSTUFA PER PRODUZIONE DI ACQUA CALDA SANITARIA

Heating stove for the production of potable hot water Termopoêle pour la production d'eau chaude sanitaire Heizofen zur erzeugung von Warmwasser Termoestufa para la producción de agua caliente sanitaria Termo peč za pripravo tople sanitarne vode



Schemi rappresentati in modo semplificato, gli impianti devono essere eseguiti da personale qualificato rispettando tutte le nome di sicurezza vigenti. These diagrams have been simplified, the systemis must be installed by qualified personnel un compliance with all applicable safety standards. Schemas inprésentes de manière simplifiee, les installations doivent être réalisivées par un personnel qualific, conformément aux normes de sicurité en vigueur. In versinfachter Form dargestellte Pläne. Die Installation der Anlagen muss von qualificato resonnel qualificado respetando totas las normas de securité en vigueur. Los esquemas estan representados de forma simplificada, las instalaciones tiene que efectuarias personal congenommen werden, das siantiche gellenden Sichertheitsvorschriften beachtet. Los esquemas estan representados de forma simplificada, las instalaciones tiene que efectuarias personal cualificado respetando todas las normas de segundad vigentes.

TERMOSTUFA INTERFACCIATA CON CALDAIA E SEPARATORE PER PRODUZIONE DI ACQUA CALDA SANITARIA

Heating stove combined with boiler and separator for the production of potable hot water Thermopoêle interfacé avec chaudière et séparateur pour la production d'eau chaude sanitaire Mit Kessel und Trenner verbundener Heizofen zur erzeugung von Warmwasser Termoestufa conectada mediante interfaz con caldera y separador para la producción de agua caliente sanitaria Termo peč, povezana z grelnikom in razdelilnikom za pripravo tople sanitarne vode



Schemi rappresentati in modo semplificato, gli impianti devono essere eseguiti da personale qualificato rispettando tutte le nome di sicurezza vigenti. These diagrams have been simplified, the systemis must be installed by qualified personnel in compliance with all applicable safety standards. Schemas représentes de manière simplifie, les installations doivent être réalisées par un personnel qualifié, conformément aux normes de sécurité en vigueur. In vereinfacture l'opin d'arguetelle Plane. Die Installation der Anlagen muss von qualifiziertem l'actypersonal vorgenommen werden, das sämliche getenden Sicherheitsvorschriften beachtet. Los esquemas estan représentados de forma simplificada, las instalaciones tiene que efectuanto spersonal cualificado respetando todas las normas de seguridad vigentes. Sheme so poenstaliene.

TERMOSTUFA INTERFACCIATA CON BOLLITORE EVA CALÒR PER PRODUZIONE DI ACQUA CALDA SANITARIA



Heating stove combined with Eva Calòr boiler for the production of potable hot water Thermopoêle interfacé avec chaudière Eva Calòr pour la production d'eau chaude sanitaire Mit Kessel Eva Calòr verbundener Heizofen zur erzeugung von Warmwasser Termoestufa conectada mediante interfaz con hervidor Eva Calòr para la producción de agua caliente sanitaria Termo peč, povezana z grelnikom Eva Calòr za pripravo tople sanitarne vode



Schemi rappresentati in modo semplificato, gli impianti devono essere eseguiti da personale qualificato rispetando tutte le nome di sicurezza vigenti. These diagrams have been simplificat le vigetame munut be installato di guidificato personnel in complicante sutte all'applicable cateda. Schemes représentes de maniere simplificate, les installations doivent être realizées par un personnel qualific, conformément aux normes de sécurité en vigueur. In versintacher l'opm dargetable Plaine. Die Installations doivent être realizées par un personal qualification en de sécurité en vigueur. Los exquemas estan representados de forma simplificada, las instalaciones tiene que efectuardes personal vorgenante en do todas las normas de seguridad vigentes. Sheme so aconstativiene, voradris momo investi supositiva vez veliavre vamonte predicire.

TERMOSTUFA INTERFACCIATA CON PUFFER E VARIE FONTI DI RISCALDAMENTO

Heating stove combined with puffer and various heat sources Termopoêle interfacé avec puffer et sources de chauffe diverses Mit Wärmespeicher und sonstigen Heizquellen verbundener Heizofen

Termoestufa conectada mediante interfaz con puffer y diversas fuentes de calentamiento

Termo peč, povezana s hranilnikom toplote in različnimi viri ogrevanja



Schemi rappresentati in modo semplificato, gli impianti devono essere eseguiti da personale qualificato rispettando tutte le norme di sicurezza vigenti. These diagrams have been simplified; the systemis must be installed by qualified personnel in compliance with all applicable safety standards. Schemas representés de maniere simplifiee, les installations doivent ètre réalicées par un personnel qualifié, conformément aux normes de sécurité en vigueur. In vereinfachter Form dargestellte Pläne. Die Installation der Anlagen muss von qualifiziertem Fachersonal vorgenommen werden, das sämtliche geltenden Sicherheitsvorschritten beachtet. Los exquemes estan representados de forma simplificada, las instalaciones éten que efectuarlas personal cualificado respetando todas las normas de seguridad vigentes. Sheme so poenostavijene, vgradnjo mora izvesti usposobljeno osebje, ki uposteva vse vejavne varnostne predpise.



		NOTES
1	DELIVERY	3/4"
2	RETURN	3/4"
3	SYSTEM LOAD / DISCHARGE	1/2"
4	ELECTRONIC PUMP	1" - 230 V 50 Hz
5	BALL VALVE	3/4
6	AUGER MOTOR	5.3 RPM
7	SPARK PLUG	300 W
8	PRESSURE TRANSDUCER 505	3/8"
9	SAFETY AND DISCHARGE VALVE	3 BAR – 1⁄2"
10	EXPANSION TANK	8 litres - 3/8"
11	OVEN BULK (IF ANY)	25 W
12	OVEN HEATING ELEMENT (IF ANY)	1200 W
13	OVEN PROBE	NTC



		NOTES
14	AUTOMATIC RELEASE VALVE	1/2"
15	LCD DISPLAY	
16	FIRE DOOR	
17	OVEN DOOR	
18	OVEN	
19	OVEN ADJUSTMENT ON/OFF	В
20	HYDRO/OVEN ADJUSTMENT	A

In compliance with the current regulations for installation, the pellet heating stove should be installed in a ventilated place with air that is sufficient to ensure correct combustion and therefore good operation. The room must have a volume no less than 20 m³. In order to ensure good combustion (40 m³/h of air) there must be a "combustion air intake" that reaches an external wall or a wall of an adjacent room with an external air intake (Ø 80 mm minimum diameter). The adjacent room must not be a bedroom or bathroom, or contain any fire risks, such as storerooms, garages, combustible materials stores, etc. These air intakes must be made in such a way as to avoid being blocked internally or externally, and should be covered with a grille, metal net or suitable protection, as long as the minimum diameter is not reduced

When it is operational, the pellet heating stove can cause a negative pressure in the room where it is installed. Therefore there should not be in the same room other naked flame devices, with the exception only of type c stoves (watertight) unless they are fitted with their own air flow.

They must not be positioned close to curtains, armchairs, furniture or to other flammable materials.

They must not be installed in explosive or potentially explosive environments which may become explosive due to the presence of machinery, materials or dust that can cause greenhouse gas emissions or which can easily ignite with sparks. Before starting to install the pellet heating stove, bear in mind that all the finishes or any beams in flammable material must be positioned at a safe distance and outside the area of irradiation of the stove itself. Also bear in mind that to avoid compromising correct operation of the appliance it is essential to create a recirculation of air inside its housing, which prevents overheating. This is possible by respecting minimum distances and by creating ventilation holes.

06.1 HYDRAULIC CONNECTION

Remove the sides to better position the stove and to make the hydraulic connections. They are fixed with quick-release clips.

The cooking stove is internally equipped with all the components for safety: automatic vent valve, 3 bar safety valve, expansion tank, stove safety thermostat, water pressure sensor.

It is however **ADVISABLE** to install an anti-condensation valve and a pressure gauge to read the pressure. Remember to discharge the hydraulic system before switching on the appliance. It is advisable to use hoses that connect the appliance to the hydraulic system, as in the case of

ordinary or extraordinary maintenance, movement is facilitated. It is also advisable to install a dirt separator as

the electronic pump could capture the dirt of the system and become jammed.

See the INSTALLATION WARNINGS chapter for the distance between the hydraulic connections and the size.

The system pressure must range from 0.5 to 2.5 bar. Upon exceeding of these thresholds

the WATER PRESSURE alarm will activate which will cause the product to shut down. The recommended pressure is 1.5 bar



ELECTRICAL CONNECTION

The electrical connection must be performed by qualified personnel who install circuit breakers upstream of the appliance. Special attention should be paid when the operation is a supplementary action and all equipment must operate as planned. Avoid installations with electric cables that run close to fume pipes or hot components that are suitably insulated. The voltage is 230 V while the frequency is 50 Hz. The electrical system, at the connection point, must be have a ground connection as required by EEC Regulation 73/23 and EEC 93/98.

EXTERNAL THERMOSTAT

In this product it is possible to install an external thermostat. This operation may only be performed by authorised personnel. Use a 2-pole cable with everyday double insulation. Connect the two poles to the connector of the TERM pin electronic board. Enabling the external thermostat by bringing to room temperature, T-ON will be present when the thermostat prompts and T-OF when the thermostat is satisfied. If the thermostat is closed, the appliance works at the set heat output. If the thermostat is activated, the appliance will work in the MODULATE state until it is switched off; if it is on STAND-BY, it is active.

07.1 HYDRO MODE

In this mode, the cooking stove uses the heat generated from pellets to heat the home hydraulic system. The cooking stove should be positioned in this manner:



The lever of the Hydro/Oven adjustment must be completely extracted while the Oven adjustment must be turned anti-clockwise until it is completely positioned. In this case, the heat output of the stove is regulated based on the temperature of the water in the stove or the ambient temperature or by an external thermostat.

07.2 OVEN MODE

In this mode the cooking stove uses the heat generated from pellets to heat the top plate and the oven. The cooking stove adjustments should be positioned in this manner:



The lever of the Hydro/Oven adjustment must be completely inserted while the Oven adjustment must be turned clockwise until it is completely positioned. In this case, the heat output of the stove is regulated according to the oven temperature.

ATTENTION: whenever the hydro/oven mode is changed, the board will emit a sound and a message will appear on the display to remind you to reposition the upper adjustment.





CAUTION: The HYDRO/OVEN adjustment lever can be removed by unscrewing it

08.1 HYDRO MODE CONSOLE



The control panel shows the information concerning the stove status. A variety of data can be displayed and settings carried out according to the level of access by using the menu.

Depending on the selected mode and on their position on the display, the data visualised may acquire different meanings.

The meaning of the status indicators on the left side of the display:



Active chrono-thermostat Active ignition spark plug Active auger tube Active exhaust blower Active room ventilation Active pump Alarm

BUTTON 1 (P1) - Temperature increase:

When in programming mode, use this button to modify/increase the selected menu value. When in working mode/switched off, use instead this button to increase the cooking stove temperature value. By keeping button P1 pressed, the pellet loading seconds and the actual stove output will be displayed.

BUTTON 2 (P2) - Temperature decrease:

When in programming mode, use this button to modify/decrease the selected menu value. When in working mode/switched off, use this button to decrease the room thermostat temperature value. Holding button P2 displays the fume temperature and the fume motor rpm.

BUTTON 3 (P3) - Set/menu:

Use this button to access the temperature setting and user and technician parameter menu. After entering the menu, use this button to access the next sub-menu or set the value and move to the next menu item when in programming mode.

BUTTON 4 (P4) - ON/OFF release:

Hold this button down for two seconds to manually switch the stove on or off depending on whether it is respectively in on or off status. If alarms have occurred that have resulted in stopping of the cooking stove, the button allows unlocking and subsequent passage to the off status. After accessing the menu or during the programming phase, use this button to access the upper menu level. Any changes are automatically saved.

BUTTON 5 (P5) - Heat output decrease:

When in working mode, use this button to decrease the heat output value. In menu mode, use this button to move to the next menu item or, in programming mode, to go back to the subsequent sub-menu item. Any change is automatically saved. Hold the button P5 to display the temperature of the card and the water pressure.

BUTTON 6 (P6) - Heat output increase:

When in working mode, use this button to modify the exchanger speed. In menu mode, use this button to go back to the previous menu item or, in programming mode, to go back to the previous sub-menu item. Any change is automatically saved.



BUTTON 1 (P1) - Oven temperature SET increase:

The button in working/off mode increases the temperature of the oven SET temperature. By keeping button P1 pressed, the pellet loading seconds and the actual boiler power will be displayed.

BUTTON 2 (P2) - Oven temperature SET decrease:

The button in working/off mode decreases the temperature of the oven SET. Holding button P2 displays the fume temperature and the fume motor rpm.

BUTTON 3 (P3) - Set/menu:

Use this button to access the temperature setting and user and technician parameter menu. After entering the menu, use this button to access the next sub-menu or set the value and move to the next menu item when in programming mode.

BUTTON 4 (P4) - ON/OFF release:

Hold this button down for two seconds to manually switch the stove on or off depending on whether it is respectively in on or off status. If alarms have occurred that have resulted in stopping of the cooking stove, the button allows unlocking and subsequent passage to the off status. After accessing the menu or during the programming phase, use this button to access the upper menu level. Any changes are automatically saved.

BUTTON 5 (P5) - Oven SET display:

The button in working/off mode displays the temperature of the oven SET. Hold the button P5 to display the temperature of the card and the water pressure.

BUTTON 6 (P6) – Oven SET display: The button in working/off mode displays the temperature of the oven SET.

08.3 MENU

Press P3 (Menu) to access the menu.

It includes several items and levels to access settings and control board programming.

The menu items providing access to the technical setting are protected by access code.

Menu 01 – TIMER COOKING (only in Oven mode):

Accessing this menu, it is possible to program the Timer for the oven. The range varies from 1 to 250 minutes. Once the desired time has been programmed (by pressing the P1 and P2 buttons), the time remaining will be displayed on the initial screen. It is possible to increase or decrease the timer by returning to the Cooking Timer menu. Once the time has expired, an acoustic signal will warn you that the time has expired accompanied by the wording END TIMER, which can be reset with any button on the display.

Menu 02 – SET CLOCK

Use this function to set current time and date. The control board is equipped with a lithium battery guaranteeing the internal time clock a 3/5 year-long life.

Menu 03 – SET CHRONO

Sub-menu M3 – 01 ENABLE CHRONO:

Allows all chrono-thermostat functions to be enabled or disabled.

Sub-menu M3 – 02 PROGRAM DAY:

The daily programmable chrono-thermostat functions can be enabled, disabled and set.

It is possible to set two on/off times defined by the times set according to the table below. If the value is set to OFF, the time clock ignores the control:

Selection	Meaning	Available values
START 1	switching-on time	time - OFF
STOP 1	switching-off time	time - OFF
START 2	switching-on time	time - OFF
STOP 2	switching-off time	time - OFF

Sub-menu M3 – 03 PROGRAM WEEK:

The weekly programmable chrono-thermostat functions can be enabled, disabled and set.

The weekly programmer has 4 independent programs whose final effect involves the combination of the 4 individual programs. The weekly programmer can be enabled or disabled.

Moreover, if the time is set to OFF, the time clock ignores the corresponding command.

Caution: set carefully to prevent overlapping of different activation times of different programmes on the same day.

Sub-menu M3 – 04 PROGRAM WEEK-END:

The programmable chrono-thermostat functions can be enabled, disabled and set for the week-end (days 5 and 6, or Saturday and Sunday).

<u>Tip</u>: In order to avoid confusion and unwanted start-up and shutdown operations, activate only one programme at a time if it is not known exactly what is to be achieved.

Disable the daily programme if you want to use the weekly programme. If you use the weekly programme for 1, 2, 3 and 4 programmes, never enable the weekend programme.

Always disable the weekly programme before enabling the week-end programme.

Menu 04 - SELECT LANGUAGE:

Use this command to select one of the languages available.

Menu 05 - MODE STAND-BY- by default it activates mode 2:

it is used to activate the "STAND-BY" mode which switches the stove off after the stove temperature has remained above the SET beyond the time defined by the pre-set parameter.

Only if the following condition occurs it is then possible to switch the stove back on: TSET < (Tstove-Pr43)

FOR THE INSTALLER:

There are 3 standby modes:

Mode 1:

WITH RESPECT TO THE AMBIENT PROBE AND THE TEMPERATURE OF THE WATER.

Having set the water temperature, commence operation of the stove.

1- With the room set reached, the stove goes into stand-by

2- With the air set not reached, the stove is working.

Nearing Set Water, the stove goes into modulation and remains in modulation.

It goes into stand-by only when the Set Air is reached.

It comes back on when the stove is below the Set Air.

THE ENVIRONMENT PROBE HAS PRIORITY.

Mode 2:

WITH RESPECT ONLY TO THE WATER TEMPERATURE.

Having set the water temperature, commence operation of the stove.

Nearing the Set Water, the stove goes into modulation and when it is passed the Set goes into modulation and then stand-by.

Below Water Set the stove comes on again and resumes operation.

The stove in no way considers the temperature measured by the ambient probe of the same stove.

WATER TAKES PRIORITY

Mode 3:

WITH RESPECT TO THE THERMOSTAT AND TO THE TEMPERATURE OF THE WATER.

Having set the water temperature, commence operation of the stove.

1- With the thermostat open the stove goes into modulation then stand-by.

2- With the thermostat closed the stove is working.

Nearing Set Water, the stove goes into modulation and remains in modulation. It only goes into stand by mode when the thermostat opens the contact. It turns on when the thermostat closes the contact.

The stove in no way considers the temperature measured by the ambient sensor of the same stove.

THE THERMOSTAT TAKES PRIORITY

Menu 06 - MODE BUZZER:

Set it to "OFF" to disable the buzzer.

Menu 07 - LOAD INITIAL:

This function is important if the stove is new or if the stove is off due to the absence of pellets in the hopper. INITIAL IGNITION MUST BE PERFORMED BY AUTHORISED PERSONNEL ONLY, NOT BY THE PURCHASER. CONTACT THE ASSISTANCE CENTRE TO ARRANGE FOR THE SPECIALIST TECHNICIAN TO BE SENT OUT. Use this function to load pellets for a period of 90 seconds when the stove is switched off and cold. Start with button P1 and stop with button P4. The initial load is enabled only if the product is in the Off status.

Menu 08 – STATE STOVE:

This function displays the current status of all the devices connected to the stove. A few examples are included in the following pages. The following will be displayed: status time, including switching on and off, work, etc. pellet loading and output, the fume temperature and the fume rpm, the card temperature and the water pressure.

Menu 09 – SETTINGS TECHNIC:

Menu for technicians, installers only.

Menu 10 – SELECET MODE (only visible in Oven mode):

In this menu it is possible to choose whether to heat the oven with pellets or with the electric heating element (in case you have purchased a cooking stove with heating element and bulb). The cooking stove is equipped with a 1200 W electric heating element. Entering the menu it is possible to choose between THERMO-S mode and STATIC mode:

THERMO-S mode: the cooking stove heats the oven using pellets. It is able to adjust its output according to the set temperature of the oven SET which in this case varies from 80°C to 250°C. The actual stove output and status will be shown on the display

STATIC mode: the cooking stove is turned off. In this case the oven will be heated by the electric heating element inside it. The output of the heating element varies according to the oven SET which in this case varies from 80°C to 230°C. It is also possible to set the oven SET to OFF in order to keep the heating element off. The wording STATIC OVEN will appear on the display.

09. USER FUNCTIONS

Standard functioning of a control board properly installed on a forced air pellet stove is described below with reference to the functions available to users.

Stove ignition

Ensure that there are pellets in the hopper, that the burn pot is correctly positioned and free from any combustion residues and then close the door. To turn on the stove, press button P4 for a few seconds. The display shows that the stove is on.

Start-up phase

The stove performs all the steps of the start-up phase according to the parameters concerning its levels and times. The display will show the wording START, as there is no pellet loading but the exhaust blower is in operation.LOAD PELLET state will occur where the pellets are being loaded into the burn pot. Once the pellets have started to burn and the fume temperature is increased, the display will show FLAME LIGHT, a transition phase between ignition and operating output.

Ignition fault

If the fume temperature has not reached the minimum permitted value after a predefined time, at a rate of 2°C/min, the cooking stove goes into alarm status. If there are unburned pellets inside the burn pot, it is necessary to empty the burn put before switching on the stove again. Pellet waste and potential bursting inside the combustion chamber will thus be avoided.

If the pellets have begun to burn but the alarm state persists, wait until all the pellets are burning and then switch on again.

Check that there are pellets inside the hopper.

Stove working in Hydro Mode

At the end of the start-up phase, if no problems occurred, the stove enters its normal working mode.

Changing set room temperature

Press button P2 to change the set room temperature. The display shows the current SET temperature value.

Changing set stove temperature

Press button P1 to change the set room temperature. The display shows the current SET temperature value. The stove temperature range varies from 50°C to 75°C.

External thermostat/chrono-thermostat use

If you want to use an external programmable thermostat, connect it to the TERM clamps (connector CN7 pin 7-8).

- External thermostat
- External chrono-thermostat

The stove external thermostat is enabled when the contact is closed with stove on.

Room temperature reaches the set value (SET temperature)

When the room temperature has reached its set value, heat output is automatically brought to its minimum value, (MODULAZIONE) status. The word MODULATwill appear on the display.

If the STAND-BY mode has been activated, the stove switches off with a delay equal to a predefined time and after reaching the temperature SET. Re-ignition occurs after occurrence of the following condition: The environment decreases by 2°C with respect to that of SET.

The stove temperature reaches the set temperature (SET temperature)

The same situation is obtained when the stove temperature reaches the same level as that set. The modulation status is evident and, if enabled, STAND-BY status.

The stove is working in Oven Mode operation

Once the start-up phase has been successfully completed, the stove switches to work mode which represents normal operation.

All the caloric output of the pellets is transmitted to the cooking stove plate and to the oven.

Changing the oven temperature setting

To change the oven temperature, simply press the buttons P1 and P2. The display shows the current SET temperature value. If the stove is in THERMO-S mode, the heat output will vary based on the temperature of the oven. If it is in STATIC mode, the heating element will vary its output according to the oven temperature. When the oven mode is active, the stove will never go into STAND-BY.



CAUTION:

In THERMO-S mode it is possible that the cooking stove will need to dispose of the heat produced by the pellet also through the hydraulic system. In this case, when the water temperature reaches a pre-set threshold, the **SMALTIRE** message will appear on the display. It will therefore be necessary to dispose of the water heated by the pellet through a radiator or in any case from the hydraulic system.

Cleaning the burn pot

During normal operation in work mode, the "CLEANING FIRE-POT" mode is activated at set intervals.

Stove switch off

Hold down P4 button for approx. 2 seconds to switch off the stove. The Auger tube stops immediately and the exhaust blower reaches its maximum speed value. The CLEANING FINAL phase is performed.

Stove switched off

The display will show the word OFF. The exhaust blower stops.

Stove re-ignition

It will not be possible to restart the stove until the fume temperature has fallen below a predetermined value and the 10-minute safety time has elapsed.

What happens if ...:

The pellets do not ignite:

In the event of failed ignition, the NO LIGHTIN- alarm message is displayed.

Power outage

Pr48 = 0

When the power is resumed after an outage, the stove enters the CLEANING FINAL phase and waits until the fume temperature reaches a value below Pr13

Pr48 = T seconds

After a power outage, one of the following conditions may occur depending on the stove previous status:

previous status	power outage duration	new status			
switched off	any	switched off			
ignition	<t< td=""><td>ignition</td></t<>	ignition			
pellet loading without pre-load	< T	pellet loading			
pellet loading with pre-load	any	switching off			
waiting for flame	<t< td=""><td>waiting for flame</td></t<>	waiting for flame			
working mode	<t< td=""><td>working mode</td></t<>	working mode			
burn pot cleaning	<t< td=""><td>burn pot cleaning</td></t<>	burn pot cleaning			
switching off	<t< td=""><td>switching off</td></t<>	switching off			

If the power outage duration is longer than T, the stove switches off.

10. ALARMS

In the event of a malfunction, the control board indicates the problem and activates various procedures depending on the type of alarm. The possible alarm messages are listed below:

Display shows	No.	Cause
BLACK OUT	(1)	Absence of mains voltage
PROBE EXHAUST	(2)	Fume temperature probe fault
HOT EXHAUST	(3)	Fume overheating
FAN FAILURE	(4)	Exhaust blower fault, not working
NO LIGHTIN-	(5)	Stove does not ignite
NO PELLET	(6)	Shutting down due to insufficient pellets
SAFETY THERMAL	(7)	Safety thermostat activated
FAILURE DEPRESS	(8)	Depressor activated
TRIAC COC FAILURE	(AL B)	The auger tube turns continuously
PROBE WATER	(AL C)	Water probe broken or shorted
HOT WATER	(AL D)	Stove water maximum threshold exceeded
WATER PRESS ALARM	(AL E)	Water pressure too low or too high

In case of alarm, the stove is immediately switched off.

The alarm status can be reset by pressing the P4 button.

FUME TEMPERATURE PROBE ALARM

The alarm is triggered when the fume temperature probe is not working properly or is disconnected. The stove switches off when the alarm is active.

FUME TEMPERATURE OVER ALARM

This occurs if the fume probe detects a temperature greater than 280°C. The stove switching-off phase starts immediately.

NON-IGNITION ALARM

The alarm is triggered whenever ignition fails. The shutdown procedure is immediately activated.

SWITCHING OFF ALARM DURING THE WORK PHASE

If during the work phase the flame goes out and the fume temperature drops below the minimum work threshold, the shutdown procedure is immediately activated.

AUGER SAFETY PRESSURE SWITCH ALARM

If the pressure switch detects a value below the trigger threshold, it immediately switches off the auger tube (to which it is connected in series) while the control board acquires this change in status via the AL2 terminal in CN4. **FAILURE DEPRESS-** is displayed and the system is shut down.

GENERAL THERMOSTAT ALARM

If the general safety thermostat detects a value exceeding the trigger threshold, it immediately switches off the auger tube (to which it is connected in series), while the control board acquires this change in status via the AL1 terminal in CN4. The message **SAFETY THERMAL** is displayed and the system is shut down. Unscrew the black cap at the bottom of the cooking stove under the display and press the button to reset the contact.

FAULTY FUME INTAKE FAN ALARM

In the event that the fume fan fails, the stove stops and the FAN FAILURE message is displayed. The shutdown procedure is immediately activated.

SERVICE MESSAGE

The stove will display the message SERVICE (or SER) during operation depending on the number of hours of operation. The wording does not lock operation of the stove, but non-routine maintenance will be required by an authorised technician, who will reset the service hours.

11. CONNECTIONS



		CODE
1	MOTHERBOARD L023+CHRONO+F.BLACK+RELAY	951066300
2	1200 W 230V OVEN HEATING ELEMENT	95110021100
3	RELAY	951089800
4	OVEN CONTACT	
5	505 PRESSURE TRANSDUCER CABLE	
6	NTC TYPE OVEN PROBE	
7	FUME MOTOR ENCODER	
8	STOVE PROBE	
9	ROOM PROBE	
10	EXTERNAL THERMOSTAT	
11	FUME PROBE	
12	AUGER MOTOR	
13	OVEN BULB	
14	PUMP / CIRCULATOR	
15	DEPRESSOR	
16	SAFETY THERMOSTAT	
17	SPARK PLUG	
18	FUME FAN	



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