

STUFA A PELLETT DEA ECO 12

INSTALLAZIONE, USO E
MANUNTENZIONE, CONSIGLI UTILI

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KLOVER S.R.L.

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Dear Customer,

first of all, we would like to thank you for choosing a “**KLOVER**” stove and hope you will be fully satisfied with your purchase.

Carefully read the warranty certificate on the last page of this *User Guide*; we advise you to contact the authorised Technical Assistance Centre (TAC) for the initial start-up and calibration of your stove.

In thanking you once again for trusting KLOVER products, we also wish to inform you that these models are the result of our forty years experience in the construction of solid-fuel products for domestic heating. Every single detail of the stove is manufactured by qualified staff, using the most advanced equipment.

The manual contains a detailed description of the stove and its operation, alongside instructions for proper installation, basic maintenance and control points, which must be performed regularly; furthermore, it contains practical advice for obtaining maximum performance from the stove with minimum fuel consumption.

The stove's heat output may vary depending on the type of pellets used.

Enjoy heating up with KLOVER!

Technical Support

Klover pellet stoves are imported and distributed by FirePower Heating, Capton, Dartmouth, Devon, TQ6 0JE.

UK technical and product support is provided by FirePower Heating who can be reached on 0844 3320156.

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INTRODUCTION

Important security instructions

Read the following instructions prior to installing and using the product.

- **Stove installation and initial start-up must be performed by expert personnel conscious of the importance of observing the applicable safety standards. Said personnel shall be responsible for the definitive installation of the device and its proper operation thereof. KLOVER srl shall not be held liable if these precautions are not observed.**
- **During installation of the device, all local regulations - included those referring to national and European Standards - must be observed.**
- Connect the flue gas outlet to a flue having the features described in the *Connections* section of this *User Guide*.
- The device is not suitable for installation on a shared flue system.
- If the flue should catch fire, employ appropriate systems for extinguishing the flames or call the fire brigade.
- Connect the product to earthed sockets. Avoid using sockets controlled by switches or automatic timers.
- Do not use a damaged or worn power supply cable.
- If a multiple socket is used, make sure that the total voltage of the connected devices does not exceed the voltage supported by the socket. Furthermore, make sure that the total voltage of all devices connected to the socket does not exceed the maximum allowed level.
- Do not use easily flammable substances to clean the device or its elements.
- Do not leave flammable containers and substances in the room where the stove is installed.
- Do not use the device as an incinerator or for any use other than that for which it was designed.
- Do not use different fuels to those recommended.
- Do not use liquid fuels.
- The device - especially its external surfaces - becomes very hot to the touch during operation; handle it with caution in order to avoid burns.
- Only use original spare parts recommended by the manufacturer.
- Do not perform any unauthorised modification on the device.
- **Using poor-quality pellets or pellets made of any other material may damage the stove's functions, besides voiding the warranty and the manufacturer's liability.**
- The Klover pellet products are not suitable for use in smokeless zones.

A few precautions

- Do not touch any *hot parts* of the product (ceramic glass, flue pipe) during normal operation.
- Use the appropriate button to switch the electrical panel off. Do not disconnect the power supply cable while the stove is operating.
- Keep children away from the stove during normal operation, as they may suffer burns if they touch the stove's *hot parts*.
- Children and inexperienced people must not be allowed to use the device.
- **NEVER open the door of the stove during normal operation.**

Intended use

The automatic operation **DEA ECO** stove by Klover is designed for heating your entire home.

The stove works exclusively with wood pellets and only with the hearth door shut. Never open the door while the device is operating.

The stove comes with a **DOUBLE COMBUSTION** system guaranteeing "clean" flue gas emissions with among the lowest CO₂ values in Europe, alongside excellent mean performance values.

Do not use the stove in ways other than those indicated in this user guide. The stove is designed for indoor use only.

This user guide constitutes an integral part of the stove.

If the product is sold to another user, this manual must be handed down to the new owner.

KLOVER S.R.L. DECLINES ALL LIABILITY IN CASE OF ACCIDENTS DUE TO FAILURE TO COMPLY WITH THE SPECIFICATIONS OF THIS MANUAL.

KLOVER S.R.L. DECLINES ALL LIABILITY DUE TO INCORRECT USE OF THE PRODUCT BY THE USER, UNAUTHORISED MODIFICATION AND/OR REPAIRS, AND USE OF NON-ORIGINAL SPARE PARTS OR SPARE PARTS NOT SPECIFICALLY DESIGNED FOR USE ON THIS PRODUCT MODEL.

KLOVER S.R.L. SHALL NOT BE HELD LIABLE FOR THE STOVE'S INSTALLATION. THE INSTALLER IS THE SOLE PARTY RESPONSIBLE FOR THIS OPERATION AND IS ALSO ENTRUSTED WITH CHECKING THE FLUE, EXTERNAL AIR VENT AND THE CORRECTNESS OF THE PROPOSED INSTALLATION SOLUTIONS. ALL THE SAFETY REGULATIONS CONTAINED IN THE SPECIFIC LAWS IN FORCE IN THE COUNTRY OF THE STOVE'S INSTALLATION MUST BE OBSERVED.

EXTRAORDINARY MAINTENANCE MUST ONLY BE PERFORMED BY AUTHORISED AND QUALIFIED STAFF.

To ensure the validity of the warranty, the user must comply with the indications contained in this guide and, in particular, must:

- **Use the stove within its operational limits;**
 - **Regularly perform all maintenance activities;**
 - **Authorise expert and competent people to use the stove.**
- Failure to comply with the requirements of this guide shall automatically void the warranty.**

Installation Regulations

These operating and instructions cover the basic principles to ensure the correct installation of the pellet stove, although particulars may need modification to reflect local site conditions. In all cases the installation must comply with current Building Regulations, Local Authority By-laws and other regulations that affect the installation of the stove.

The Building Regulations requirements can be met by adopting the relevant recommendations given in British Standards BS 8303, BS 6461 and BS 7566 as an alternative means to achieve an equivalent level of performance to that obtained by following the guidance given in Approved Document J.

Health and Safety

Care must be taken when installing a Klover pellet stove to ensure that the requirements of the Health and Safety at Work Act are met.

Handling

Adequate facilities must be available for loading, unloading and site handling the appliance bearing in mind the weight of the appliance.

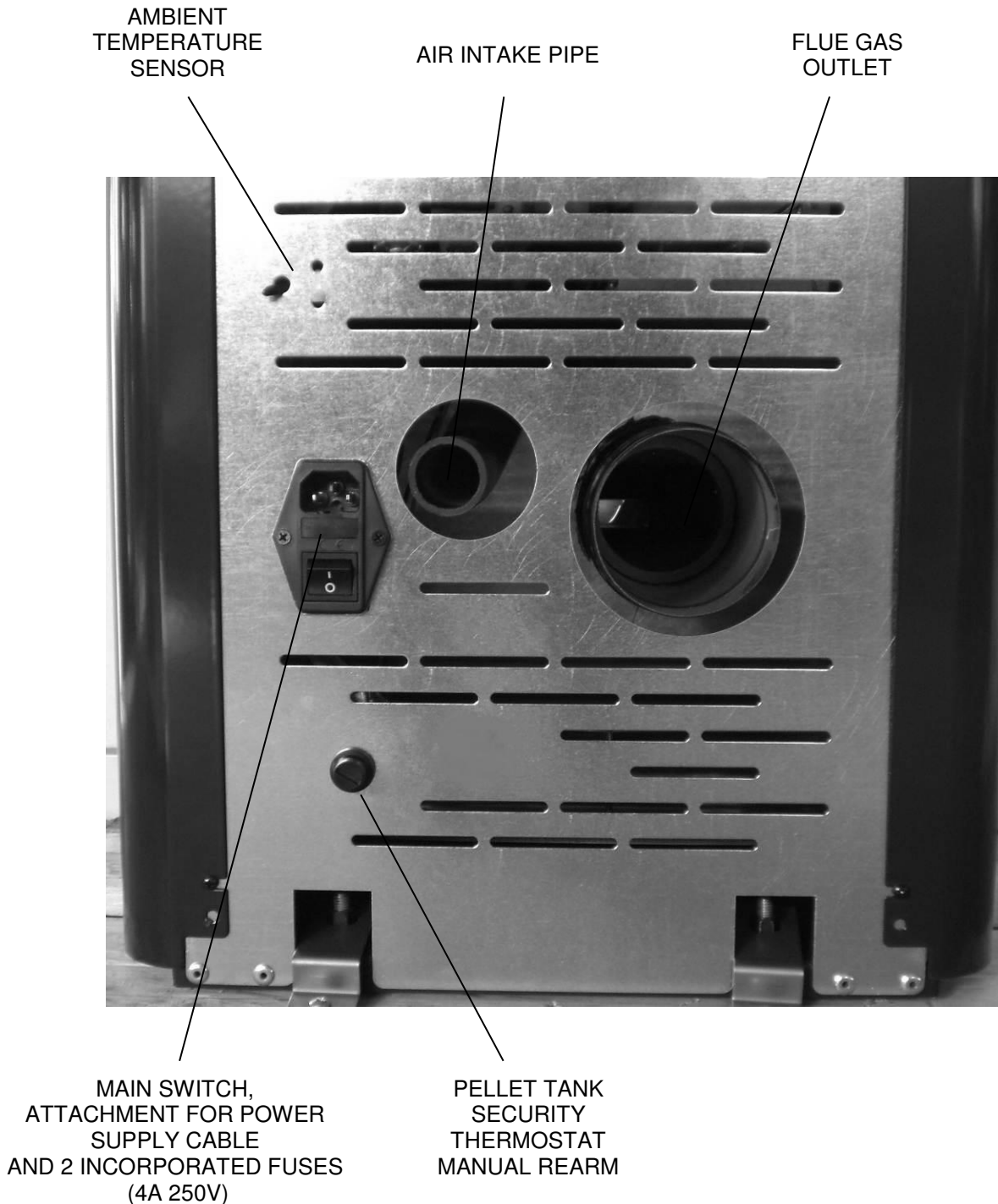
THE MACHINE AND THE PELLETS

Stove components

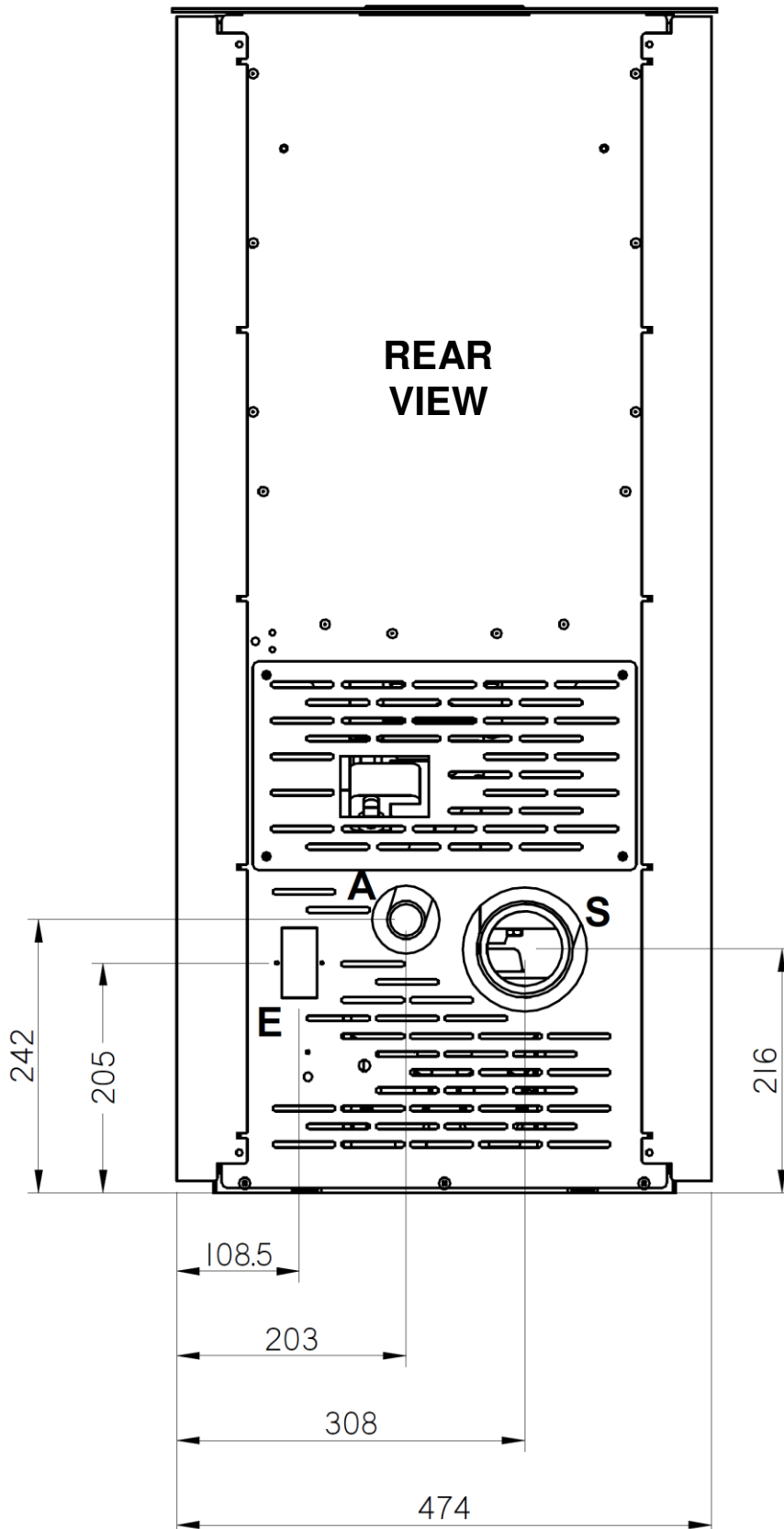
The stove is delivered with the following equipment:

- ONE USE, INSTALLATION AND MAINTENANCE GUIDE;
- ONE WARRANTY COUPON;
- ONE POWER SUPPLY CABLE.

This manual is an integral part of the machine: if the stove is sold, it must be handed down to the new owner.



Connections data sheet



ENGLISH

- S = Ø 80 mm M FLUE GAS OUTLET
- A = Ø 33 mm AIR EXTRACTION DEVICE
- E = SWITCH WITH ELECTRIC CABLE CONNECTION

Technical features

Nominal heat input	kW	13,6 (2,5)
Nominal heat output (reduced)	kW	12,1 (2,3)
(Reduced) nominal output performance	%	89,1 (93,2)
CO at 13% oxygen at (reduced) nominal output	%	0,019 (0,059)
Combustion gas mass at nominal heat output (reduced)	g/s	8,2 (4,4)
Average flue gas temperature at nominal heat output (reduced)	°C	170,2 (53,7)
Heatable volume with 35 Kcal/m ³ demand (45 Kcal/m ³)	m ³	300 (235)
Pellet chimney minimum draught	Pa	12,1 (12,1)
Pellet tank capacity	Kg	27
Pellet min – max hourly consumption	Kg/h	2,81 (0,51)
Operating autonomy at minimum (maximum) output	h	10 (53)
Flue pipe diameter	mm	80
Nominal voltage	V	220
Nominal frequency	Hz	50
* Maximum power absorbed during operation	W	300
Width	mm	485
Height	mm	1050
Depth	mm	600
Weight	Kg	115
Minimum safety distance from flammable materials	mm	200

The data reported above is indicative and not binding. The manufacturer reserves the right to effect any modifications to the product in order to improve its performance.
The heat output may vary according to the type of pellet used.

Pellet features

The stove has been tested with all types of pellets available on the market. The pellets used must also have the following features:

- Diameter 6 mm;
- Maximum length 35 mm;
- Maximum humidity content 8 – 9 %;
- 100% wood. Total absence of additives.
- Maximum ash residue 1.1 %

For optimal stove efficiency, we recommend using good-quality pellets. **The pellets must be introduced into the tank using a shovel and not directly from the bag.**

To identify good-quality pellets, it is necessary that:

- They are manufactured from constant diameter cylinders and have a smooth, shiny surface;
- There is not a lot of sawdust inside the packaging;
- After grabbing a bunch of pellets and placing them into a container filled with water, good-quality pellets will sink and poor-quality will tend to float;
- The quality certification data, in particular conformity to international standards such as EN14961-2, DIN 51731 and O-NORM M7135, are indicated on the packaging;
- The packages are intact, since pellets tend to absorb humidity. Humidity not only reduces the calorific value and increases the amount of flue gases expelled, but also causes swelling of the product which may create problems with the stove.

The international regulations on pellet production must be observed - as already occurs in France, Austria and Germany alongside several Eastern European countries, which must comply with the EN14961-2, DIN 51731 and O-NORM M7135 regulations governing the minimum values for verifying pellet quality. In Italy there is no official standard, although it is advisable to use pellets complying with the aforementioned regulations.

The use of poor-quality pellets or pellets made of other materials can damage the stove's functions, besides voiding the warranty and the manufacturer's liability.

In order to guarantee trouble-free combustion, the pellets must be stored in a humidity-free place.

REQUIREMENTS OF THE PLACE OF INSTALLATION

Positioning

The initial phase for best stove installation is to determine its optimal location; the following elements need to be considered:

- The possibility of including an external air vent;
- The possibility of creating a straight flue, preferably coaxial to the stove outlet;
- The possibility of connecting the stove to a power socket;
- Ease of access for cleaning the stove, the flue gas exhaust pipes and the flue.

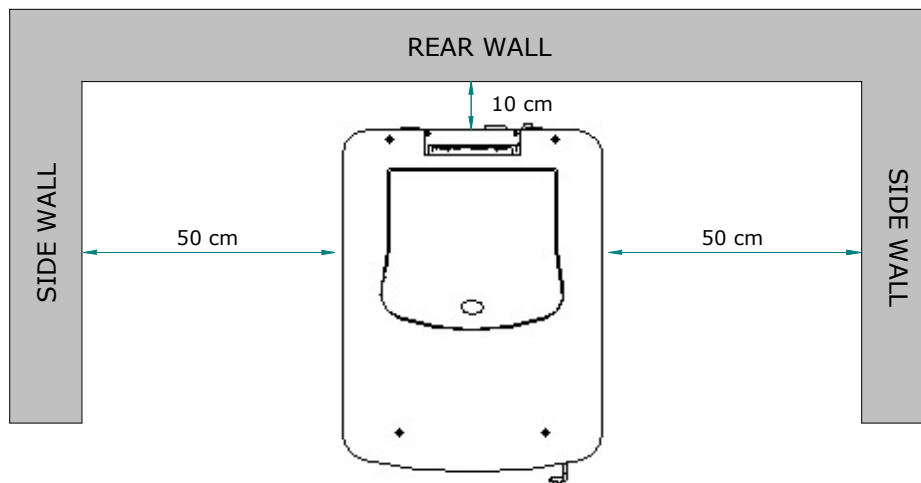
The stove must be installed on a floor with suitable load-bearing capacity. If the existing building does not fulfil this requirement, appropriate measures (e.g. load distribution plate) must be taken.

Once the best location for installing the device has been determined, position the stove according to the indications provided below.

The minimum safety distance from flammable materials must be at least 200 mm from the sides and back of the stove.

Spaces around and above the stove

The figure below indicates the minimum measurements to be observed when positioning the stove in relation to the walls.



Any shelves or false ceilings mounted above the stove must be at least 50 cm away from the latter's upper part.

External air vent

During operation, the stove takes in air from the environment in which it is installed; **It is therefore essential that this air is replaced through an external air vent.**

If the wall behind the stove is on the outside, make a 15 cm diameter hole 20 cm from the ground (see Fig. A).

Furniture and movable objects must be positioned at least 20 cm from the stove's side walls; these objects must be moved when performing maintenance on the stove.

It is forbidden to hang shelves or build false ceilings above the stove less than 50 cm above the stove itself.

Protect all structures that can catch fire from heat radiation.

The hole must be protected externally with a fixed grid. **Periodically check that the grid is not obstructed by leaves or similar, as this may block the passage of air.**

If it is not possible to include an air vent in the wall behind the stove, make a hole in a perimeter wall in the room where the stove is installed.

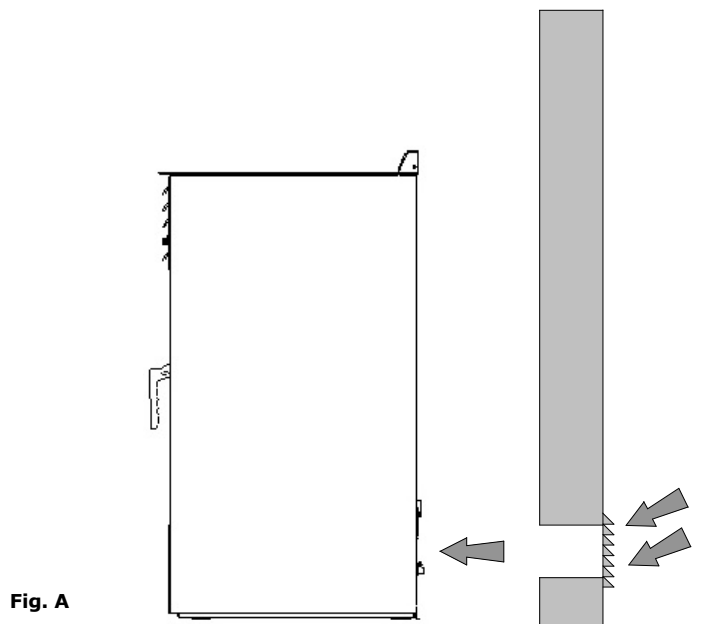
If it not possible to include the external air vent in the same room where the stove is installed, the hole can be made in an adjacent room as long as it is permanently connected by means of a transit hole (15 cm minimum diameter).

The UNI 10683 Standard FORBIDS the withdrawal of combustion air from garages, combustible material warehouses, or from businesses with a fire hazard.

Do not connect the external air vent to the stove through piping. If there are other heating or extraction devices inside the room, the air vents must guarantee a sufficient amount of air for properly operating all the devices.

Only sealed equipment (e.g. C-type gas devices, as defined by the UNI 7129 C standard) or equipment that does not depressurise the room compared to the outside environment can be housed - whether existing or newly installed - in the room where the stove is installed.

Extractor fans can cause operating problems to the stove when they are installed in the same room or space as the device.



ENGLISH

Chimney and Flue pipe

The chimney is essential to the efficient operation of a Klover appliance. The chimney should be designed and constructed according to these instructions, and relevant regulations including Building Regulations Approved Document J.

Shape and size of chimney: A round chimney of 125mm diameter is recommended. 125mm is also the minimum diameter which should be used. If the appliance is DEFRA Exempt then it should be connected to a 125mm chimney as standard (assuming that the outlet is not larger than 125mm). If it is not DEFRA Exempt then a calculation according to BS EN 13384-1:2002 must be completed if it is to be connected to a 125mm diameter chimney.

The maximum recommended round chimney diameter is 150mm.

Square or rectangular cross-sections must have rounded corners with radius not less than to 20 mm

Rectangular cross-sections must have a maximum ratio of 1.5 between the sides.

The chimney must have a constant, and unobstructed, internal cross section

Under no circumstances should the chimney be of a smaller diameter than the appliance outlet.

Connecting flue pipe: Short runs of single skin flue pipe to connect to the chimney may be run in a (minimum) diameter of 100mm (as long as this is not smaller than the appliance outlet).

Existing chimneys: Existing masonry chimneys should be lined with flexible stainless steel liner and the liner should be insulated. All connections must be appropriately sealed.

Existing chimneys must be inspected, be clear of obstruction and have been swept clean immediately before installation of the lining system.

No shared chimneys: Each appliance must connect to its own flue. No other appliance must connect to the same flue or chimney. No other pipes or conduits must pass through the chimney or flue.

Sealed joints and connections: The appliance works with the combustion chamber in negative pressure and the flue pipe under positive pressure; it is essential that all joints and flue and chimney connections are sealed. Single skin and twin wall flue pipe should incorporate silicone seals at each joint. Other connections should be sealed with a suitable sealant (for example high temperature silicone). All seals must be able to withstand 250°C or more.

Suitable materials: Flue and chimney products used, including fixings and components, must be made of suitable, non-combustible materials conforming to the applicable regulations.

Aluminium and fibre cement pipes are forbidden.

Orientation and initial vertical rise: The flue system should run as vertically as possible as any deviations off the vertical can adversely affect the draw. 45° is the maximum off-vertical angle than may be used. Non-vertical sections should make up no more than ¼ of the effective height of the flue or chimney (measured from the appliance outlet to the top of the chimney), and must not be longer than 2,000 mm.

There should be no more than 4 bends in the system, with a tee counting as 2 bends.

Securely fix and support the system to avoid vibration and movement.

90° bends should not be used. When using the rear outlet on the appliance a 90° tee should be used with sweeping access and debris collection space.

When using the rear outlet any horizontal run should not exceed 150mm, including the arm of the tee.

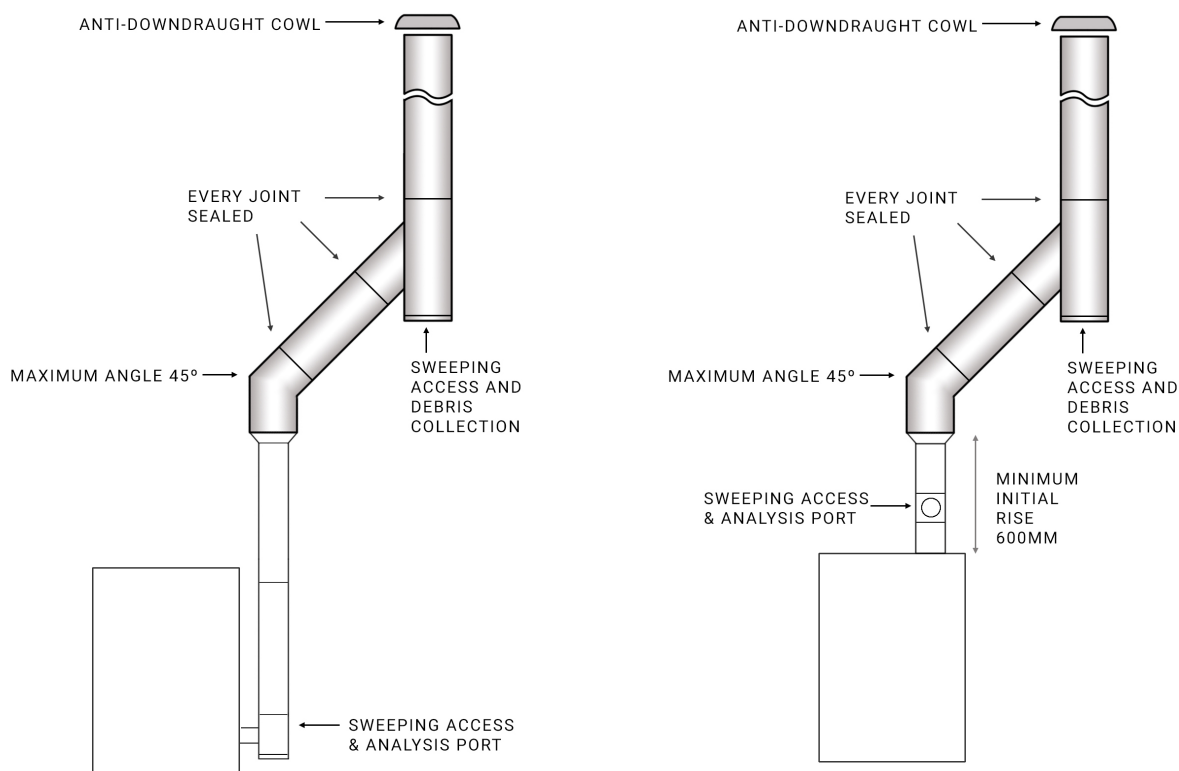
An initial vertical run of 600mm from the appliance is recommended before any change in direction.

Cleaning Access: The system must provide access so that the entire system can be swept and cleaned.

Flue pipes must not pass through rooms in which the installation of combustion devices is prohibited.

IT IS STRICTLY FORBIDDEN TO INSTALL FLUE DAMPERS/BUTTERFLY VALVES.

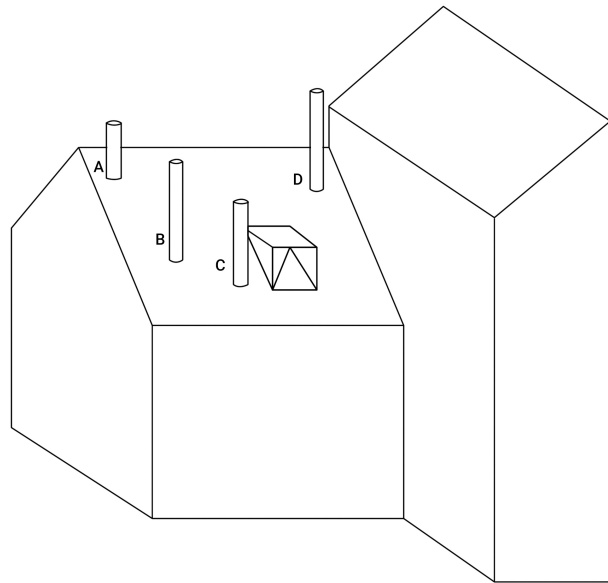
Heat shielding: If combustible materials are present then minimum separation distances will need to be adhered or heat shielding will be required. Please refer to Building Regulations Approved Document J, and also these installation instructions.



Height and draught: In order for the appliance to perform satisfactorily the chimney height must be sufficient to ensure a draught of 12 Pa so as to clear the products of combustion and prevent smoke problems into the room. A chimney height of not less than 4.5 m measured vertically from the outlet of the stove to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in BS EN 13384-1:2002 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J diagram 17 or 18. Please see the diagram below.

Point where flue passes through weather surface (Notes 1, 2)	Clearances to flue outlet
A At or within 600mm of the ridge	At least 600mm above the ridge
B Elsewhere on a roof (whether pitched or flat)	At least 2300mm horizontally from the nearest point on the weather surface and: a) at least 1000mm above the highest point of intersection of the chimney and the weather surface; or b) at least as high as the ridge.
C Below (on a pitched roof) or within 2300mm horizontally to an openable rooflight, dormer window or other opening (Note 3)	At least 1000mm above the top of the opening.
D Within 2300mm of an adjoining or adjacent building, whether or not beyond the boundary (Note 3)	At least 600mm above any part of the adjacent building within 2300mm.
Notes 1) The weather surface is the building external surface, such as its roof, tiles or external walls. 2) A flat roof has a pitch less than 10°. 3) The clearances given for A or B, as appropriate, will also apply. 4) A vertical flue fixed to an outside wall should be treated as equivalent to an inside flue emerging at the nearest edge of the roof.	



ENGLISH

Termination/Cowl: The cowl terminates the chimney and it is recommended that an effective anti-downdraft cowl should always be used. It must have a usable outlet cross-section no less than double that of the flue onto which it is inserted. It must prevent rainwater or snow entry. It must ensure the discharge of combustion by-products even in the event of winds from every direction and inclination.

ELECTRICAL CONNECTION

The electric connection must be performed by **qualified staff** only, in conformity to all general and local safety standards in force.

Check that the power supply voltage and frequency correspond to 220V – 50 Hz.

The device's safety is guaranteed when the latter is properly connected to an efficient earthing system.

In the electric connection to the mains power supply, include a 6 A – Id 30 mA differential magnetothermic circuit breaker switch with suitable breaking load. The electric connections, including earthing, must be made after shutting off the electrical system.

When completing the system, bear in mind that the cables must be placed in an unmovable manner and far from parts subject to high temperatures. During the final wiring of the circuit, only use components with a suitable electrical protection rating.

KLOVER srl declines all responsibility for injury to persons and animals or damage to objects due to failure to connect the stove to earth or to comply with IEC specifications.

The electronic control unit manages and controls all the stove functions, and ensures optimal operation of the device at all times.

The stove can only be installed in a room housing another boiler provided that the latter is a sealed-chamber device.

THE STOVE MUST BE MOUNTED EXCLUSIVELY BY QUALIFIED PERSONNEL. STRICTLY COMPLY WITH THE INSTRUCTIONS CONTAINED IN THIS GUIDE.

THE MANUFACTURER DECLINES ANY RESPONSIBILITY FOR DAMAGES CAUSED BY INCORRECT ASSEMBLY.

DO NOT PASS ELECTRIC CABLES IN THE IMMEDIATE VICINITY OF THE FLUE GAS PIPE, UNLESS THEY ARE INSULATED WITH SUITABLE MATERIALS.

CLEANING AND MAINTENANCE

Precautions before cleaning

Before carrying out any cleaning or maintenance operations, make sure that:

- The stove is turned off and all its parts have cooled down completely;
- The ash is completely cold;
- Before re-starting the stove, re-install all previously removed components.

During cleaning operations, use the personal protection devices specified in Directive 89/391/EEC.

The cleaning frequency depends on the type and quality of the pellets used. The schedule indicated below may therefore vary.

Any problem affecting the stove caused by lack of cleaning will not be covered by the warranty.

Routine cleaning

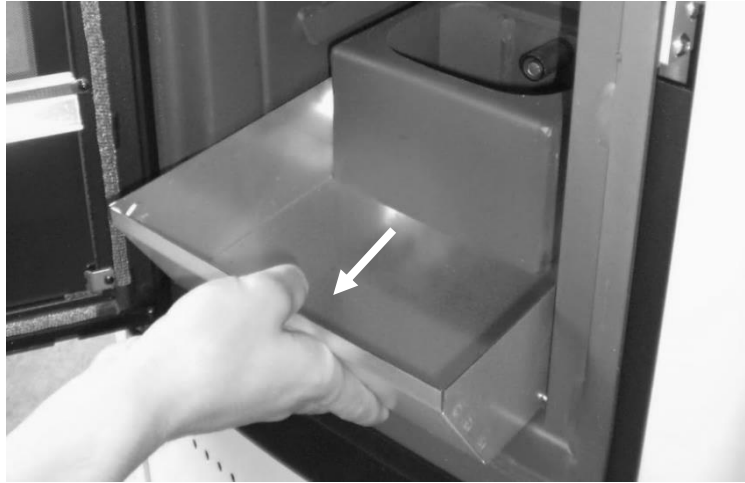
The stove requires regular cleaning at least every 20 days of operation or after 3-4 ignitions, so as to always guarantee efficient performance and optimal operation.



Pull the front knob to clean the ventilated hot air tubes above the combustion chamber. **The knob must only be pulled when the stove is turned off and cold.**



Carefully clean any combustion residues from the brazier, by removing it from its housing. Use an ash vacuum cleaner to remove any ash deposited under the brazier.



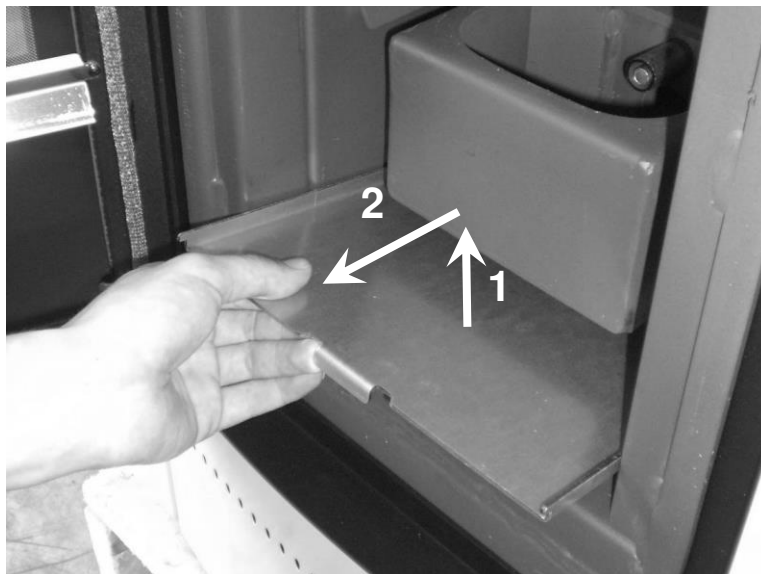
Empty the ash drawer.

ATTENTION: use suitable “bin” type vacuum cleaners equipped with a fine mesh filter, in order to prevent part of the ash from being spilled and thus damaging the cleaner itself.

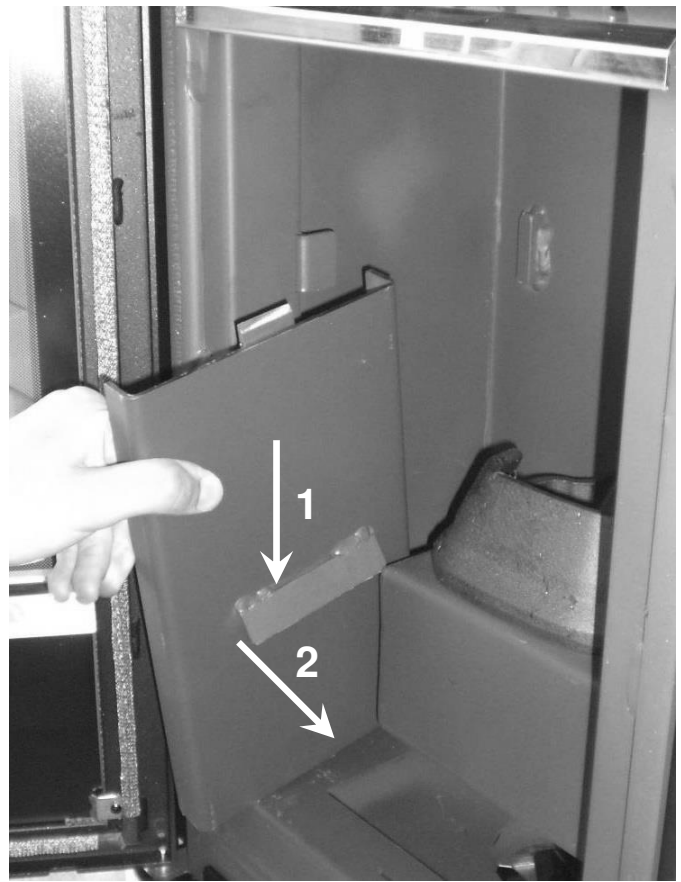
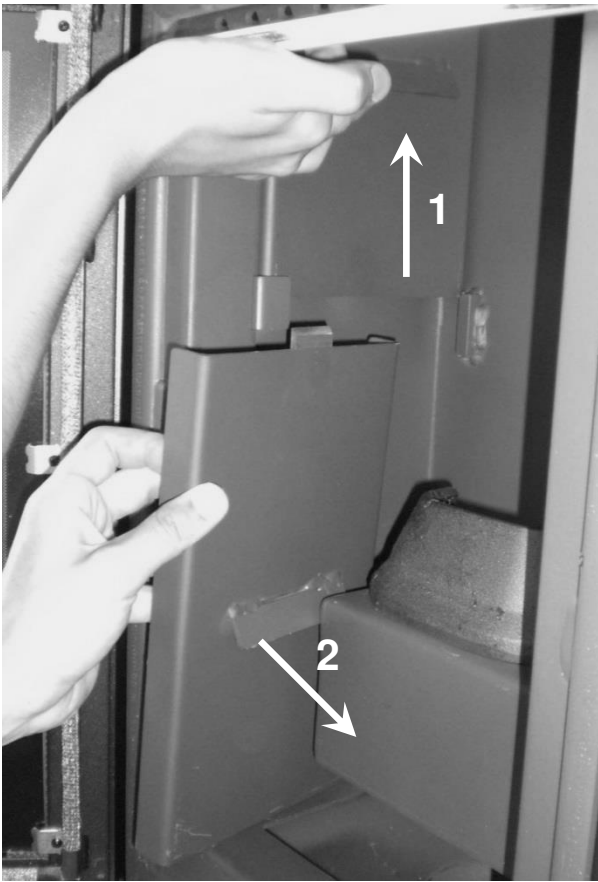
Extraordinary cleaning

To be performed at least every 30 days.

Perform routine cleaning;



After having removed the ash drawer, extract the underlying base.



Dismount the 4 flue diverters (2 on the right and 2 on the left) placed on the combustion chamber sides and scrape the internal walls with a spatula removing any deposit.



Aspirare il deposito all'interno utilizzando un aspiraceneri idoneo e poi riposizionare il fondo ed il cassetto cenere.



**For correct functioning, it is necessary to use a suction device to remove the sawdust deposit on the base of the tank at least every 15 days.
The pellet tank must be emptied at the end of every season.**

Cleaning the ceramic glass

Always clean the glass when the stove is off and completely cold. Use a damp cloth or a detergent specifically formulated for ceramic glass. Do not use abrasive sponges.

Cleaning the flue

This operation must be performed at least twice a year, at the beginning and half-way through the winter season, and - at all events - whenever necessary.

It is important to check for any obstructions in the flue before switching the stove on following long periods of idleness.

If cleaning is not performed, the operation of the stove and its components may be jeopardised.

The cleaning frequency of the stove and flue depend on the quality of the pellets used.

USE HIGH-QUALITY PELLETS FOR BEST RESULTS.

Maintenance

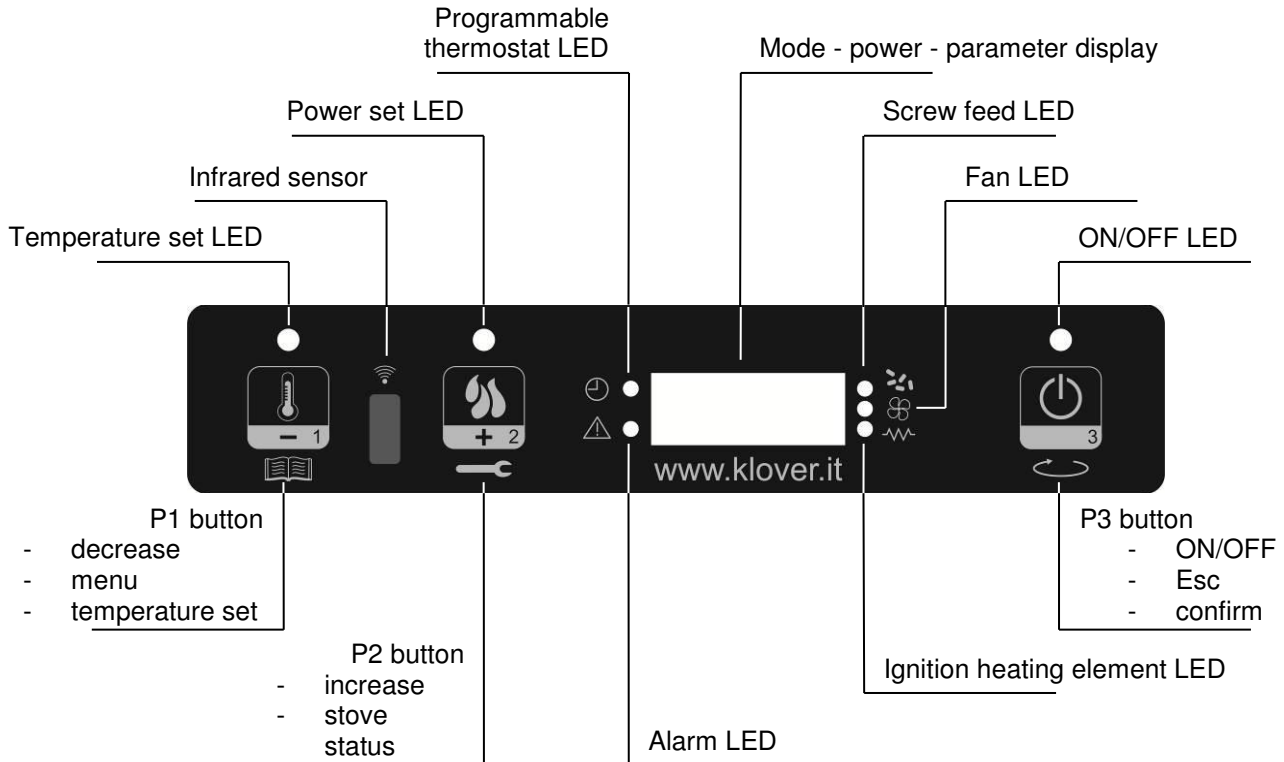
Timely and systematic maintenance is essential for guaranteeing correct operation, optimal heat performance and durability of the device. Therefore, qualified staff should check the stove at least once a year at the beginning of the season.

It is advisable to stipulate an annual contract for product maintenance with the Authorised Technical Assistance Centre (TAC).

THE DISPLAY

The device's operating mode is displayed on the console. After turning on the menu, it is possible to choose many types of visualisations and perform the available settings according to the selected menu.

The picture below describes the meaning of the buttons and LEDs present on the console.



Meaning of the LEDs

LED	MEANING WHEN ON
TEMPERATURE SET	the LED is on when the ambient temperature is being modified
POWER SET	the LED is on when the working power is being modified
PROGRAMMABLE THERMOSTAT	the LED is on when at least one switch on/off programme is active.
SCREW FEED	the LED is on when the pellet loading gearmotor switches on.
FAN	the LED is on when the hot air fan is active.
ON/OFF	the LED flashes during the ignition, switch-off, STOP ECO stand-by and alarm phases. The LED is on during the work phase following ignition.
IGNITION HEATING ELEMENT	the LED is on when ignition heating element is active.
ALARM	the LED is on when the stove is in alarm mode.

Button functions

BUTTON	MODE	ACTION
1	TEMPERATURE SET...	Decreases the TEMPERATURE SET temperature value
	POWER SET...	Decreases the POWER SET value
	MENU...	Moves to the previous menu
	MENU PROGRAMMING...	Decreases the value of the selected menu
	PARAMETERS PROGRAMMING...	Decreases the value of the parameter
2	TEMPERATURE SET...	Increases the TEMPERATURE SET temperature value
	POWER SET...	Increases the POWER SET value
	MENU...	Moves to the successive menu
	MENU PROGRAMMING...	Increases the value of the selected menu
	PARAMETERS PROGRAMMING...	Increases the value of the parameter
3	OFF/WORK MODE...	Ignites or switches off the stove when pressed for 2 seconds
	ALARM BLOCK...	Releases alarm
	MENU...	Allows for accessing the selected menu
	MENU PROGRAMMING...	Allows for accessing/exiting the selected menu
	PARAMETERS PROGRAMMING...	Allows for confirming a parameter and passing on to the next one

BUTTON 1: When first pressed, it allows for accessing the *TEMPERATURE SET* function to set the desired ambient temperature. When held depressed, it allows for accessing the USER MENU.

BUTTON 2: When first pressed, it allows for accessing the *POWER SET* function to set the desired working power. When held depressed, it allows for accessing the technical data relative to the device.

THE MENU

Keeping button 1 pressed for about two seconds allows for accessing the Menu.

The latter is divided into different entries and levels accessing the PCB programming and setting options.

Buttons 1 and 2 allow for scrolling the menus to be modified.

Button 3 allows for selecting the menu to be accessed and/or modified.

The menu entries for accessing the technical programming options (menu *M8 - TECHNICAL CALIBRATIONS*) are protected by an access key (parameters reserved for the Technical Assistance Centre).

Listed below are the menus present on the PCB, with the different explanations.

LEVEL 1	LEVEL 2	LEVEL 3	MEANING
M1 – SET CLOCK	Day of the week		Set the current day.
	Clock hours		Set the current hour.
	Clock minutes		Set the current minutes.
	Clock day		Set the number of the current day.
	Clock month		Set the current month.
	Clock year		Set the current year.
M2 – SET TIMER	M2-1 Activate timer	Activate timer	Enable the programmable thermostat (set to ON if at least one thermostat programme has been set).
	M2-2 Daily prog.	Daily timer	Enable daily programming
		Start 1st day	Switch-on time first daily programme
		Stop 1st day	Switch-off time first daily programme
		Start 2nd day	Switch-on time second daily programme
		Stop 2nd day	Switch-off time second daily programme
		M2-3 Weekly prog.	Weekly timer
	Start Prog.1		Switch-on time first weekly programme
	Stop Prog.1		Switch-off time first weekly programme
	Mon. Prog.1		Enable first programme Monday
	Tue. Prog.1		Enable first programme Tuesday
	Wed. Prog.1		Enable first programme Wednesday
	Thu. Prog.1		Enable first programme Thursday
	Fri. Prog.1		Enable first programme Friday
	Sat. Prog.1		Enable first programme Saturday
	Sun. Prog.1		Enable first programme Sunday
	Start Prog.2		Switch-on time second weekly programme
	Stop Prog.2		Switch-off time second weekly programme
	Mon. Prog.2		Enable second programme Monday
	Tue. Prog.2		Enable second programme Tuesday
	Wed. Prog.2		Enable second programme Wednesday
	Thu. Prog.2		Enable second programme Thursday
	Fri. Prog.2		Enable second programme Friday
	Sat. Prog.2		Enable second programme Saturday
	Sun. Prog.2		Enable second programme Sunday
	Start Prog.3		Switch-on time third weekly programme
	Stop Prog.3		Switch-off time third weekly programme
	Mon. Prog.3		Enable third programme Monday
	Tue. Prog.3		Enable third programme Tuesday
	Wed. Prog.3		Enable third programme Wednesday
	Thu. Prog.3	Enable third programme Thursday	
	Fri. Prog.3	Enable third programme Friday	
	Sat. Prog.3	Enable third programme Saturday	
	Sun. Prog.3	Enable third programme Sunday	
	Start Prog.4	Switch-on time fourth weekly programme	
	Stop Prog.4	Switch-off time fourth weekly programme	
	Mon. Prog.4	Enable fourth programme Monday	
	Tue. Prog.4	Enable fourth programme Tuesday	
	Wed. Prog.4	Enable fourth programme Wednesday	
	Thu. Prog.4	Enable fourth programme Thursday	
	Fri. Prog.4	Enable fourth programme Friday	
	Sat. Prog.4	Enable fourth programme Saturday	
Sun. Prog.4	Enable fourth programme Sunday		

	M2-4 Weekend prog.	Weekend timer	Allows for enabling the weekend programme
		Start 1st weekend	Switch-on time first weekend programme
		Stop 1st weekend	Switch-off time first weekend programme
		Start 2nd weekend	Switch-on time second weekend programme
		Stop 2nd weekend	Switch-off time second weekend programme
	M2-5 Exit		Exit the programmable thermostat
M3 – LANGUAGE	Ita		Italian
	Eng		English
	Fre		French
	Deu		German
M4 – STAND-BY	Stand-by		Enable STAND-BY automatic switch-off
M5 – BUZZER	Buzzer		Enable acoustic signal in case of alarm.
M6 – FIRST LOADING	First loading		Perform brazier pre-loading after emptying the tank
M7 – STOVE STATUS	Stove status		Verification of the stove's current status
		<i>Screw feed time on</i>	
		<i>Time out</i>	
		<i>Thermostat state</i>	
		<i>Flue gas temperature</i>	
	<i>Flue gas extractor speed</i>		
M8 – TECHNICAL CALIBRATIONS	Access key		Menu reserved for Technical Assistance Centre
M9 – EXIT	Exit		Exit from the user menu.

1. Menu M1 – SET CLOCK

Allows for setting the current date and time.

2. Menu M2 – SET TIMER

Sub-menu M2 – 1 – ENABLE TIMER

Allows for globally enabling and disabling all programmable thermostat functions.

Sub-menu M2 – 2 – DAILY PROGRAMME

Allows for enabling, disabling and setting the daily programmable thermostat functions.

Two operating time slots can be set according to the following table, where OFF signals the clock to ignore the command:

DAILY PROGRAMME			
MENU LEVEL	SELECTION	MEANING	POSSIBLE VALUES
M2-2 Daily prog.	Daily timer	Enable daily programming	ON – OFF
	Start 1st day	Switch-on time first daily programme	Time – OFF
	Stop 1st day	Switch-off time first daily programme	Time – OFF
	Start 2nd day	Switch-on time second daily programme	Time – OFF
	Stop 2nd day	Switch-off time second daily programme	Time – OFF

Sub-menu M2 – 3 – WEEKLY PROGRAMME

Allows for enabling, disabling and setting the weekly programmable thermostat functions.

The weekly programmer has 4 independent programmes, the end effect of which combines the 4 individual settings.

The weekly programmer can be completely activated or deactivated by setting ON or OFF respectively in the menu shown in the table below:

MENU LEVEL	SELECTION	MEANING	POSSIBLE VALUES
M2-3 Weekly prog.	Weekly timer	Enable weekly programming	ON – OFF

Moreover, by setting OFF in the time field, the clock ignores the corresponding command.

WEEKLY PROGRAMME 1			
MENU LEVEL	SELECTION	MEANING	POSSIBLE VALUES
M2-3 Weekly prog.	Start Prog.1	Switch-on time first weekly programme	Time - OFF
	Stop Prog.1	Switch-off time first weekly programme	Time - OFF
	Mon. Prog.1	Enable first programme Monday	ON - OFF
	Tue. Prog.1	Enable first programme Tuesday	ON - OFF
	Wed. Prog.1	Enable first programme Wednesday	ON - OFF
	Thu. Prog.1	Enable first programme Thursday	ON - OFF
	Fri. Prog.1	Enable first programme Friday	ON - OFF
	Sat. Prog.1	Enable first programme Saturday	ON - OFF
	Sun. Prog.1	Enable first programme Sunday	ON - OFF

WEEKLY PROGRAMME 2			
MENU LEVEL	SELECTION	MEANING	POSSIBLE VALUES
M2-3 Weekly prog.	Start Prog.2	Switch-on time second weekly programme	Time - OFF
	Stop Prog.2	Switch-off time second weekly programme	Time - OFF
	Mon. Prog.2	Enable second programme Monday	ON - OFF
	Tue. Prog.2	Enable second programme Tuesday	ON - OFF
	Wed. Prog.2	Enable second programme Wednesday	ON - OFF
	Thu. Prog.2	Enable second programme Thursday	ON - OFF
	Fri. Prog.2	Enable second programme Friday	ON - OFF
	Sat. Prog.2	Enable second programme Saturday	ON - OFF
	Sun. Prog.2	Enable second programme Sunday	ON - OFF

WEEKLY PROGRAMME 3			
MENU LEVEL	SELECTION	MEANING	POSSIBLE VALUES
M2-3 Weekly prog.	Start Prog.3	Switch-on time third weekly programme	Time - OFF
	Stop Prog.3	Switch-off time third weekly programme	Time - OFF
	Mon. Prog.3	Enable third programme Monday	ON - OFF
	Tue. Prog.3	Enable third programme Tuesday	ON - OFF
	Wed. Prog.3	Enable third programme Wednesday	ON - OFF
	Thu. Prog.3	Enable third programme Thursday	ON - OFF
	Fri. Prog.3	Enable third programme Friday	ON - OFF
	Sat. Prog.3	Enable third programme Saturday	ON - OFF
	Sun. Prog.3	Enable third programme Sunday	ON - OFF

WEEKLY PROGRAMME 4			
MENU LEVEL	SELECTION	MEANING	POSSIBLE VALUES
M2-3 Weekly prog.	Start Prog.4	Switch-on time fourth weekly programme	Time - OFF
	Stop Prog.4	Switch-off time fourth weekly programme	Time - OFF
	Mon. Prog.4	Enable fourth programme Monday	ON - OFF
	Tue. Prog.4	Enable fourth programme Tuesday	ON - OFF
	Wed. Prog.4	Enable fourth programme Wednesday	ON - OFF
	Thu. Prog.4	Enable fourth programme Thursday	ON - OFF
	Fri. Prog.4	Enable fourth programme Friday	ON - OFF
	Sat. Prog.4	Enable fourth programme Saturday	ON - OFF
	Sun. Prog.4	Enable fourth programme Sunday	ON - OFF

Sub-menu M2 - 4 - WEEKEND PROGRAMME

Allows for enabling, disabling and setting the weekend (Saturdays and Sundays) programmable thermostat functions.

Two operating time slots can be set according to the following table, where OFF signals the clock to ignore the command:

WEEKEND PROGRAMME			
MENU LEVEL	SELECTION	MEANING	POSSIBLE VALUES
M2-4 Weekend prog.	Weekend timer	Allows for enabling the weekend programme	ON - OFF
	Start 1st weekend	Switch-off time first weekend programme	Time - OFF
	Stop 1st weekend	Switch-off time first weekend programme	Time - OFF
	Start 2nd weekend	Switch-on time second weekend programme	Time - OFF
	Stop 2nd weekend	Switch-off time second weekend programme	Time - OFF

ENGLISH

TIP: in order to avoid confusion and any undesired switching on/off operations, only activate a single programme at a time if you do not know exactly what you desire obtaining.

Deactivate the daily programme if you wish to use the weekly programme instead. Always keep the weekend programme deactivated when using the weekly programmes 1, 2, 3 and 4.

Only activate the weekend programme after having deactivated the weekly programme.

3. Menu M3 – LANGUAGE

Allows for selecting the dialogue language from the available ones (Italian, English, French, German).

4. Menu M4 – STAND-BY

If set to *OFF* (with buttons 1 or 2) it allows for excluding the stove switch-off if the temperature set in the "SET TEMPERATURE" function has been reached. The working power will nonetheless be modulated according to the "MODULATE" value.

If set to *ON* (with buttons 1 or 2) the stove will enter the modulation mode and/or switch off if the temperature set in the "SET TEMPERATURE" function has been reached.

5. Menu M5 – BUZZER

Allows for enabling or disabling acoustic signal in case of alarm.

6. Menu M6 – FIRST LOADING

Allows for performing pellet pre-loading for 90" with the stove off and cold. Start the function with button 2 and stop with button 3. It may be useful in case the stove is switched on after the tank has been completely emptied, or when it is filled for the first time.

7. Menu M7 – STOVE STATUS

It allows for viewing the instantaneous stove state, by showing the state of the various devices connected to it. Several pages are displayed in succession. As the reported data is reserved for the Technical Assistance Centre, we recommend not accessing this menu.

<i>Example of VISUALISED STATE</i>	<i>MEANING</i>
3,1 "	Screw feed gearmotor work time
52'	Time out
Toff	Thermostat state
112°	Flue gas temperature
1490	Flue gas extractor speed

The TIME-OUT state indicates:

<i>during the phase:</i>	<i>MEANING</i>
PELLET LOADING	Maximum time remaining in the PELLET LOADING phase
FIRE PRESENT	Time remaining in the FIRE PRESENT phase
WORK	Time remaining for performing the BRAZIER CLEANING phase

8. Menu M8 – TECHNICAL CALIBRATIONS

Allows for accessing all data reserved for the Technical Assistance Centre. Access is protected by an access key. Unauthorised access may cause severe damage to the device besides harming people and the environment.

9. Menu M9 – EXIT

Allows for exiting the user menu.

INITIAL START-UP

Pellet loading and connection to the electricity network

Perform the following operations:

- Connect the stove to the electrical system using the cable supplied;
- Position the switch on the rear side of the stove on "I" (on);
- Fill the pellet tank; for the initial start-up use that specified in "MENU 06 – FIRST LOADING" in order save the time required for filling up the screw feed channel completely (this operation must be performed every time the stove is without pellets);
- Switch the stove on using the relevant ignition button on the Control Panel. See the instructions below.

We recommend using high-quality pellets so as avoid jeopardising the stove's functionality. Damages caused by poor-quality pellets shall not be covered by the warranty.

Ignition cycle

Pressing button 4 (ON/OFF) for a few seconds, the ignition cycle of the appliance starts. After a while, the display shows "START", and the flue gas intake device and the ignition resistance switch on. After a few seconds, the appliance enters a preheating phase ("PREHEATING") which allows the ignition resistance to get hot enough before the loading of the pellet onto the crucible. The appliance goes into "FLAME STAND-BY" after the pre-load phase, starting to load the pellet onto the crucible at regular intervals of time. Once the flame has been lit, the message "FIRE" is displayed on the screen. This step ensures that the fire is spread evenly across the crucible, and consequently burning all the fuel that stayed unburnt at previous stages. After such phases, the appliance enters the work mode at the pre-set power value.

In case of ignition failure, the alert message "NO IGNITION" is displayed.

The alarm may also occur if the crucible is dirty; in this case, clean the crucible and re-start.

Summary:

The ignition cycle lasts 25 minutes max. and is divided into four steps:

- | | | |
|--------------------|---|--|
| 1 - START | : | Flue-gas exhauster switching on |
| 2 - PREHEATING | : | Waiting the ignition resistance to get hot. |
| 3 - PELLET P-LOAD | : | Pellet pre-load (initial continuous load) and ignition resistance powered on.
(Not preset at the factory) |
| 4 - FLAME STAND-BY | : | pellet load (intermittent load) and ignition resistance working. |
| 5 - FIRE PRESENT | : | Ignition resistance powered off and flame stabilization |

After the ignition cycle the appliance switches into working mode at the power output which was set during ignition via buttons 1 and 2.

Stove work phase

During the work phase, by pressing button 1 first then buttons 1 or 2, it is possible to set a "SET TEMPERATURE" value (general temperature of the room where the stove is installed); when this temperature is reached, the stove enters the economy mode in which fuel consumption is reduced to a minimum.

There are several work conditions available, which are listed below:

- If the "M4 – STAND-BY" menu is set to "OFF", when the temperature set with the "SET TEMPERATURE" function is reached, the stove enters the "MODULATE" economy mode without however switching off.
- If the "M4 – STAND-BY" menu is set to "ON", when the temperature set with the "SET TEMPERATURE" function is reached, the stove enters the "GO STBY" mode in which a countdown (Pr44) starts for automatically switching off the stove. The device then enters the "STOP ECO TEMP GOOD" stand-by mode and will automatically restart once the proper conditions occur again (Pr43 = SET TEMPERATURE – 2.5°C). If restarting occurs while the stove is still performing the switch-off cycle, it is advisable to wait for the latter to finish.

At pre-defined intervals, a brazier cleaning cycle is performed (indicated on the display by "BRAZIER CLEANING") for a pre-defined duration (see parameters table).

ATTENTION:

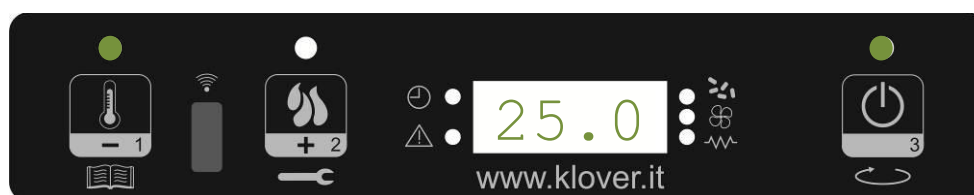
- If you do not wish to control the stove with an ambient temperature, it is advisable to set the "SET TEMPERATURE" value to "MAN" (Manual).
- If the stove is connected to an external ambient thermostat, the latter will only modulate and/or switch off if - provided that the other conditions occur - the temperature set on the external ambient thermostat has been reached (ambient thermostat contact open).

Stove switch-off

Pressing button 3 (ON/OFF) switches the stove off. The display shows "FINAL CLEANING". The flow of pellets is interrupted switching the gearmotor off. The flue gas extractor speed is increased to maximum, and the extractor is switched off stove cools: the word "OFF" will appear on the display.

Modification of ambient temperature setting.

To modify the ambient temperature, simply select the "SET TEMPERATURE" mode by pressing button 1. Press buttons 1 and 2 for increasing or decreasing - respectively - the desired temperature. During this operation, the display will appear as in the picture below.



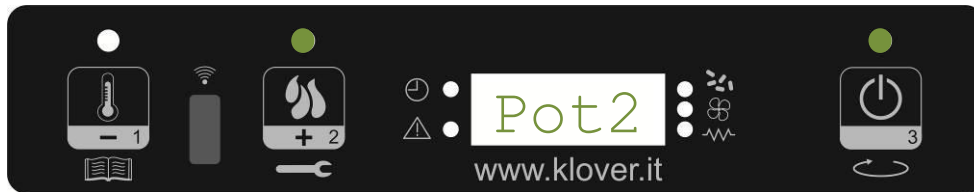
After setting the desired value, press button 3 or wait a few seconds.

The stove will enter the economy mode upon reaching said temperature.

Moreover, it is possible to set the stove to manual operation ("MAN"). In this way, the stove will continue operating at the pre-set working power, regardless of the ambient temperature.

Modifying the working power setting

To modify the ambient temperature, simply select the “*SET POWER*” mode by pressing button 2. Press buttons 1 and 2 for increasing or decreasing - respectively - the desired power. During this operation, the display will appear as in the picture below.



After setting the desired value, press button 3 or wait a few seconds.

Alarm signals

In case of operating anomalies, the PCB intervenes and signals the malfunction by operating in different modes depending on type of alarm. The following alarms are signalled on the PCB.

DISPLAY VISUALISATION	ORIGIN OF ALARM
AL 1 BLACKOUT	During the work phase, the stove may lack electrical power. If the blackout period is inferior to parameter PR48 - the stove restarts the previous work mode, otherwise the alarm intervenes.
AL 2 FLUE GAS SENSOR	Faulty or disconnected flue gas temperature sensor.
AL 3 HOT FLUE GAS	Flue gas over-temperature. When the flue gas temperature exceeds 260°C. The display shows the wording “ <i>HOT FLUE GAS</i> ” before displaying the alarm, or when flue gas maximum temperature is reached (Pr14).
AL 4 FAULTY-EXTRACTOR	Faulty extractor. When the encoder (tachometer) in the extractor detects an extractor speed equal to 0.
AL 5 IGNITION FAILURE	No ignition. When the flue gas minimum temperature (Pr13) is not reached within maximum ignition cycle time (Pr01).
AL 6 NO PELLETS	Sudden switch-off during the work phase. When, during the work phase, the flue gas temperature drops below the minimum threshold (Pr13).
AL 7 SAFETY TEMP.	Pellet tank over-temperature. When the maximum safety temperature is reached inside the tank, with resulting intervention of the safety thermostat with manual rearm. In this case, the stove must be restarted by rearming the safety thermostat.
AL 8 DEPRESS.-FAILURE	Insufficient flue draught. When the flue does not guarantee the minimum draught required for the device's correct operation. In this case, the flue gas pressure switch intervenes.

Every alarm causes the device to switch-off immediately.

The alarm status is reached after the pre-set time and can be reset by pressing button 3.

Useful info....

Listed below is some important information regarding the equipment:

- It is normal for the device to emit a smell of paint during its first few days of operation. We recommend ventilating the installation room during the initial start-up of the device. For the first few days its operation, we also recommend running the device at maximum power.
- The boiler body is treated with anti-oxidant paint to protect the stove against oxidation due to prolonged periods of idleness. After initial start-up, the paint no longer preserves these features and any wearing of the paint inside the combustion chamber must not be regarded as a product defect.
- Any perceived noise may be due to the boiler body's settlement expansion and must not be regarded as a manufacturing defect. This noise is perceived especially when igniting and switching off the device.
- In case of a faulty ventilation fan, the stove should not be switched on for any reason, so as to avoid damages to the device's structure caused by over-temperatures.
- As the temperature sensor is located on the rear side of the device, the detected temperature may not correspond to the actual temperature in the room of installation.

WHAT HAPPENS IF..

...the pellets do not ignite

In case of ignition failure. The *"IGNITION FAILURE"* alarm message appears.

Cancel the alarm by pressing button 3 for a few seconds then restore the stove to the standard conditions.

...the fire door is improperly opened or closed

In case the door is open or closed improperly, the gearmotor cannot be powered electrically, therefore the stove does not switch on. If the fire door is opened during normal operation, the stove burns all the pellets in the brazier before activating the *"NO PELLETS"* alarm.

...the flue is dirty, blocked or not incorrectly manufactured

In case the flue is dirty, blocked or incorrectly manufactured, the gearmotor cannot be powered electrically thus the stove will not switch on. If the flue gets obstructed during normal operation, the stove will burn all the pellets in the brazier before activating the *"DEPRESS.-FAILURE"* alarm.

...the pellet tank goes in over-temperature

In case of over-temperature, the gearmotor is not electrically powered as the manual rearm thermostat intervenes. If this occurs while the stove is operating, the latter enters the *"SAFETY TEMP."* alarm mode. It is therefore necessary to rearm the thermostat before switching the stove on again.

...lack of power (blackout)

If power lacks for a period of time inferior to parameter Pr48, once it returns, the stove immediately restores the operating state it had before the blackout (at the same pre-set working power).

If power lacks for a period of time greater than parameter Pr48, once it returns, the stove enters the *"BLACKOUT"* alarm mode and performs the entire switch-off cycle until it cools down.

PCB PARAMETERS

THE PARAMETERS STORED ON THE PCB ARE ESSENTIAL FOR THE CORRECT OPERATION OF THE STOVE.

THE PARAMETERS SHOWN BELOW ARE STORED DURING THE STOVE TESTING PHASE DIRECTLY AT THE FACTORY.

THESE PARAMETERS STEM FROM ACCURATE TESTS WITH VARIOUS TYPES OF PELLETS AND MUST NOT BE MODIFIED WITHOUT PRIOR AUTHORISATION FROM KLOVER srl, IN ORDER TO AVOID JEOPARDISING THE STOVE'S OPERATION.
THE COMPANY SHALL NOT BE HELD LIABLE FOR ANY DAMAGES CAUSED BY INCORRECT PARAMETER ENTRY.

“Factory calibrations” (Menu M8 – 1) (Firmware H02_250117)

Parameter	Description	Display text	Unit of measurement	Value field	Database o1
Pr01	Ignition cycle maximum time	IGNITION MINUTES	Minutes	5 – 25	20
Pr02	Start time	START MINUTES	Minutes	2 – 20	5
Pr03	Time interval between the two brazier cleaning operations	CLEANING FREQUENCY	Minutes	10 – 255	60
Pr04	Screw feed gearmotor ON time in ignition phase	SCREW FEED ON	Seconds	0.1 – 4.0	1,0
Pr05	Screw feed gearmotor ON time in start phase	SCREW FEED START	Seconds	0.1 – 4.0	0,8
Pr06	Screw feed gearmotor ON time in power 1 work phase	P1 SCREW FEED	Seconds	0.1 – 4.0	0,8
Pr07	Screw feed gearmotor ON time in power 5 work phase	P5 SCREW FEED	Seconds	0.1 – 4.0	2,3
Pr08	Flue gas extraction speed in brazier cleaning phase	EXTRACTOR CLEANING	RPM	700 – 2800	2800
Pr09	Screw feed gearmotor ON time in cleaning phase	CLEANING SCREW FEED	Seconds	0.0 – 4.0	0,8
Pr10	Flue gas extractor switch-off threshold (in switch-off phase)	THRESHOLD OFF	°C	50 – 180	70
Pr11	Alarm delay	ALARMS DELAY	Seconds	20 – 90	30
Pr12	Brazier cleaning duration	CLEANING DURATION	Seconds	0 – 120	60
Pr13	Flue gas minimum temperature for considering the stove on	MINIMUM THRESHOLD	°C	35 – 180	43
Pr14	Flue gas maximum temperature	MAXIMUM THRESHOLD	°C	60 – 280	250
Pr15	Flue gas temperature threshold for starting the heat exchangers	FAN THRESHOLD	°C	50 – 210	60
Pr16	Flue gas extraction speed in ignition phase	EXTRACTOR ON	RPM	500 – 2800	2300
Pr17	Flue gas extraction speed in start phase	EXTRACTOR START	RPM	500 – 2800	2000
Pr18	Flue gas extraction speed in power 1 work phase	EXTRACTOR P1	RPM	500 – 2800	1800
Pr19	Flue gas intake speed in power 5 work phase	EXTRACTOR P5	RPM	500 – 2800	2400
Pr20	Heat exchanger 1 motor speed in power 1 work phase	AIR P1	Volt	65 – 225	190
Pr21	Heat exchanger 1 motor speed in power 5 work phase	AIR P5	Volt	65 – 225	225

“Various calibrations” (Menu M8 – 2) (Firmware H02_250117)

Parameter	Description	Display writing	Measurement	Value field	Database o1
Pr38	Re-ignition block	RE-IGNITION BLOCK	Minutes	0 – 10	5
Pr39	Flue gas extractor switch-off time	EXTRACTOR OFF MINUTES	Minutes	0 – 20	10
Pr40	Pre-loading time in ignition	IGNITION PRE-LOADING	Seconds	0 – 255	0
Pr41	Stand-by time after pre-loading	STAND-BY AFTER PRE-LOADING	Seconds	0 – 255	0
Pr42	Extractor speed in pre-loading phase	EXTRACTOR PRE-LOADING	RPM	600 – 2800	2800
Pr43	“SET AMBIENT” ON temperature hysteresis	DELTA AUTO	°C	0.0 – 15.0	2,0
Pr44	Economy switch-off delay (timer after reaching “SET AMBIENT”)	DELAY AUTO	Minutes	2 – 120	2
Pr45	Power change delay	POWER CHANGE	Seconds	0 – 60	30
Pr46	Enabling of remote control	ENABLE REMOTE	On – off	On – off	OFF
Pr47	Keypad block enabling	KEYS BLOCK-EN	On – off	On – off	OFF
Pr48	Automatic re-ignition after blackout	BLACKOUT	Seconds	0 – 60	30
Pr49	Room sensor calibration	SENSOR OFF-SET	°C	- 9 – 9	0
Pr50	Preheating time	PRE-HEAT TIME	Seconds	0 – 360	300
Pr51	Extractor speed in preheating time	PRE-HEAT GASSPEED	RPM	500 – 2800	2800

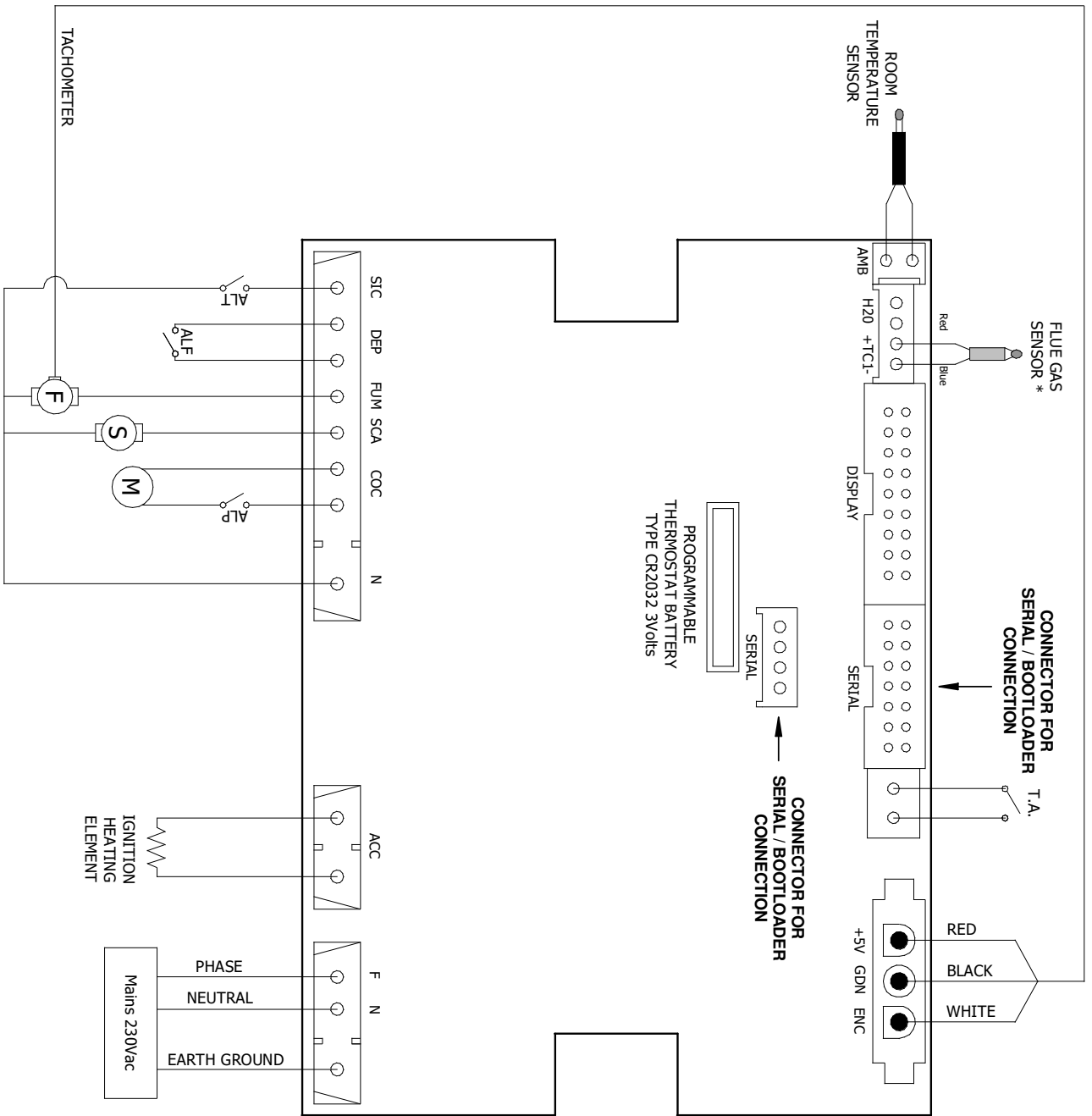
“Pellet type” (Menu M8 – 3) (Firmware H02_250117)

Parameter	Description	Display writing	Measurement	Value field	Database o1
Pr54	Pellet loading percentage at the various working powers	PELLET LOADING	-	- 9 – 9	0

“Chimney type” (Menu M8 – 4) (Firmware H02_250117)

Parameter	Description	Display writing	Measurement	Value field	Database o1
Pr55	Flue gas extraction speed percentage at the various working powers	EXTRACTOR CHIMNEY	-	- 9 – 9	0

WIRING DIAGRAM



SAFETY DEVICE KEY:
 ALP = DOOR CLOSURE MICROM.
 ALF = FLUE GAS PRESSURE SWITCH
 ALT = MANUAL REARM THERMOSTAT

CONNECTED COMPONENT KEY:
 M = GEARMOTOR
 S = VENTILATION FAN
 F = FLUE GAS EXTRACTOR

T.A. = ROOM THERMOSTAT CONNECTION FITTING

* = TO ENSURE CORRECT OPERATION, DO NOT REVERSE THE POLARITY OF THE WIRES (RED + , BLUE -)

WARRANTY

- The warranty takes effect from the date of purchase of the product, which must be demonstrated by means of a delivery document or other document issued by the seller. The document must be shown to the Technical Assistance Centre, if required.
- A copy of the warranty coupon sent to KLOVER s.r.l. must be stored together with the purchase document received.
- KLOVER s.r.l. declines all liability for any accidents due to failure to observe the specifications contained in the use and maintenance manual accompanying the device.
- Furthermore, KLOVER s.r.l. declines all liability deriving from improper use of the product by the user, unauthorised modifications and/or repairs, and the use of non-original spare parts or spare parts not designed for use on this product model.

KLOVER s.r.l. guarantees the quality of materials, good construction and functionality of the product for a period of 2 years, under the following conditions:

1. On its own unquestionable judgement, the device evidencing material or construction faults will be repaired or replaced; with the exception of all costs relating to transport, restoration (hydraulic disassembly and assembly operations, any masonry works and any other necessary intervention) and accessory materials.
2. The warranty does not cover:
 - ceramic glass and ceramic-majolica and/or varnished steel linings, as they are very fragile so they can get accidentally damaged;
 - any part made of ceramic-majolica evidencing altered colour shades, pitting, cracks, shading and slight dimensional variations, as these cannot be regarded as product defects but features deriving from the handmade processing;
 - the cast iron brazier, the cast iron grid and plate, smoke deflector or flame arresters, gaskets, fuses or batteries inside the device's electronic system and any other removable component, if it is proved that their condition is due to a manufacturing defect rather than the effects of wear;
 - electric and electronic parts, in which the malfunction can be traced to a non-conforming electrical connection, natural disaster (lightning, electrical discharges, etc.) and variation or voltage other than the nominal voltage;
 - any parameter calibration intervention due to the type of fuel or installation of the device.
3. The replaced components are guaranteed for the remaining period of the warranty, starting from the date of purchase and/or for a period not exceeding 6 months.
4. The use of poor-quality wood pellets or other fuel could damage the components of the device thereby voiding the relevant warranty and the manufacturer's liability. Therefore, we recommend using the fuel type indicated in our specifications.
5. Incorrect installation carried out by unqualified personnel, tampering with, failure to comply with the instructions contained in this "use and maintenance manual" and those regarding "workmanlike installation" shall void any warranty rights; the same applies to damages deriving from external factors. At all events, any compensation for direct or indirect damages is excluded, regardless of the nature and cause of the damages.
6. Please bear in mind that the goods travel under the customer's responsibility, even if delivered carriage free, therefore we shall not be held liable for any damages due to loading and unloading operations, accidental knocks, storage in unsuitable places, etc.
7. The boiler unit of water-based products only connected to a heating and/or sanitary water system is guaranteed for 5 years, at the above-mentioned conditions.
8. The warranty is only valid if the duly filled-in warranty coupon - clearly legible in all its parts - is mailed in a closed envelope.

The competent law court for settling any disputes is the Court of Verona.

