ecoFOREST

ES MANUAL DE USUARIO

EN USER MANUAL

FR MANUEL D'UTILISATION

IT MANUALE DI INSTRUZIONI

PT MANUAL DO UTILIZADOR

NL GEBRUIKERSHANDLEIDING

DE BEDIENUNGSANLEITUNG

CE

UNE EN 14785

90741/3
CPU 2016

WARNINGS	
	GENERAL DANGER

OBLIGATIONS	
	READ THE INSTRUCTION MANUAL

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Read carefully the manuals provided with the device before installation and use. Only that way, the best performance and maximum safety will be got during its use.

This appliance can be used by children aged from 8 years and above and people with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and if they understand the hazards involved. Children shall not play with the appliance. **Cleaning and user maintenance** shall not be made by children without any supervision.

The glass door and some other surface areas of the appliance may reach high temperatures.

WARNING: Do not open the door while the appliance is operating.

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1. ICONS.

Power button (web). See section 2.	Back to main screen
Back to previous screen	Page info
Drop-down	Room temperature
Thermostat configured as control terminal	Raise - lower power or setpoint temperature
Select language, time zone and DHW / Heating mode (water models with DHW)	Access calendar programming
Access to day template	Access to week template
Access to settings menu	Access the fuel selection menú
Olive pit. Selected fuel / not selected	Almond shell. Selected fuel / not selected
Pellets. Selected fuel / not selected	Access to internet connection menu
Connectivity. Original WiFi network of the machine	Connectivity. Connected to router via WiFi
Connectivity. Connected to router via Ethernet	Acess to software version menu
Access to hydraulic diagram display	Zone setting
Buffer tank configuration	DHW configuration
Access to DHW/ heating selection menu	DHW + heating activated
DHW only activated	Heating only activated
EcoSILENCE mode on / off.	
Network analysis.	Wifi signal strength meter.

Partial user access

Acess to offset menu	Access to menu mode selection

Only accessible by technical support

Access to technical assistance menu	Automatic cleaning system
External silo management	Pneumatic suction selected / not selected
Screw auger 3 probes. Selected / not selected	Screw auger 1 probe. Selected / not selected

2. STATUS OF THE MACHINE.

From the moment it connects to the electricity grid, the stove will change status depending on the programming and instructions it receives from the user. It will adapt its operation to the working conditions that are more suitable at the time.

The status of the stove can be checked using the keyboard or the web interface of a WiFi device by displaying the color of the relevant icon or verifying the status number in the data display screen.

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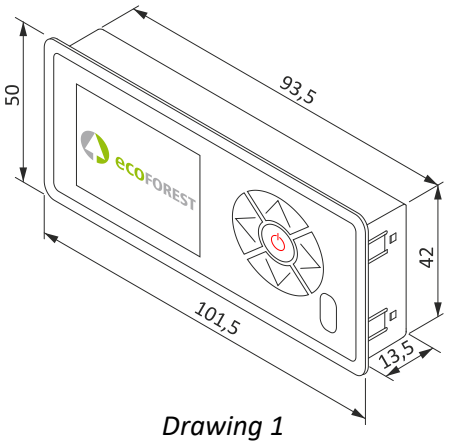
- Keyboard: Color of icon (point ② in *drawing 4)* or checking the numeric value *(drawing 20* in section ***3.15**).*
- Web Interface: Icon ⏻ (*drawing 32*) in the main screen or data display (*drawing 35*).

Icon: Keyboard Web	Color status	Number status	Process
	Red	0	•Stove off. •Al when pressing ⏻, the machine runs a motor check, air depression. •The icon changes to yellow. •The icon changes to orange if an anomaly is detected.
	Yellow	1 2 3 4 10	•Ignition process. •Fuel drop, exhaust and ignition resistance working. •The icon changes to light blue if combustion has started. •The icon changes to navy blue when the machine is waiting for an external command. •The icon changes to orange if it does not start combustion.
	Light blue	5 6	•Process of preheating. •The machine tries to stabilize combustion. •The icon changes to green if it manages to maintain the gas temperature greater than or equal to a value during a certain period of time. •The icon changes to orange if it fails to stabilize the combustion.
	Green	7	•Normal operation of the machine. Automatic regulation of depression and fuel drop according to power demand or set temperature. •The icon will change to grey in the case of an off, alarm or standby command.
	Grey	8 11 -3	•Shutdown process. •The icon changes to red if the shutdown is not due to an alarm or standby. •The icon changes to dark blue if the shutdown occurs by standby due to an external command. •The icon changes to orange if the shutdown is due to an alarm.
	Navy blue	-20	•Standby process. •Waiting for programming or temperature. •The icon changes to red when you press ⏻ The icon changes to yellow if there is demand according to configuration.
	Orange	-4	•Alarma activated. •Such icon comes with the safety message signal. See section ***6*** alarms.

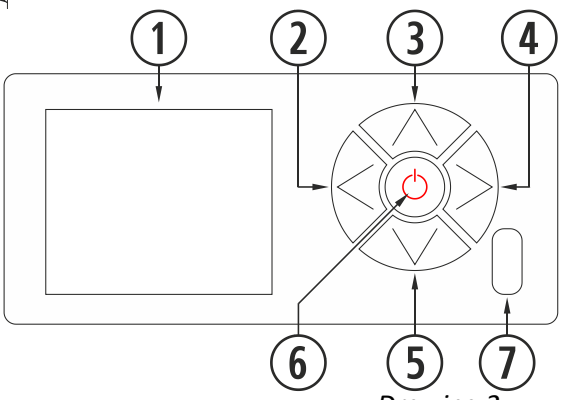
3. KEYBOARD.

3.1. DETAILS OF THE CONTROL PANEL.

Dimensions (mm):



Drawing 1



Drawing 2

①	Display.
②	Back button / leftwards
③	Increase button / upwards
④	Forward button / rightwards
⑤	Decrease button / downwards
⑥	ON - Off button/ confirm
⑦	Infrared receptor.

①	LCD screen. It shows the stove status and reflects the actions taken on the control panel. The sreen's backlight goes off after 30 seconds of inactivity on the control panel.
②	Back button (). It allows access to the menu, data viewing or leftward movement among the icons or the different menus. Lowers the values within the cursor.
③	Increase button / upwards (). Increases the desired power /temperature value according to the operating mode (P or T) and moves the selection upwards in the menus.
④	Forward button / rightwards (). It allows acces to the adjustments menu and returns to the main screen from the menus without modifications. It also accesses the working menu without making any changes and goes to the "working mode" menu from the main screen. Increases the values within the cursor.
⑤	Decrease button / downwards (). Decreases the desired power /temperature value according to the operating mode (P or T) and moves the selection downwards in the menus.
⑥	ON - Off button/ confirm (). Turns the stove on and off from the main screen. It allows confirming the actions taken, within the different menus.
⑦	Infrared detector. Receives the signal sent by the remote control. Disabled.

3.2. CONNECTING TO AND SYNCHRONIZING WITH THE MACHINE.

After installing the stove as described in the "Installation and maintenance manual" available in our website www.ecoforest.es*, the electronic is operating for under 40 seconds from the connection of the stove to the mains

①	Pantalla de arranque.
②	Versión teclado.

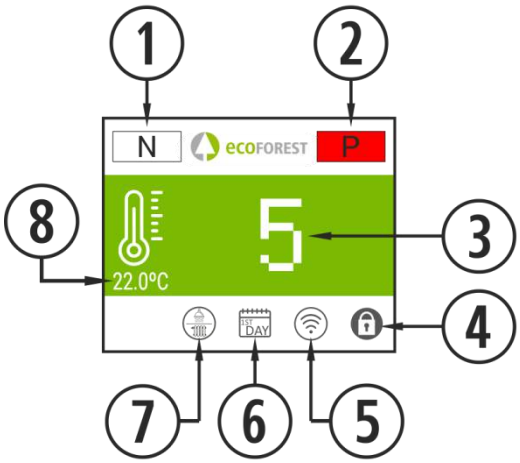
Drawing 3

** Please note that all updated user manuals are available in our website. The last version of the manual will always prevail.*

EN

3.3. MAIN SCREEN.

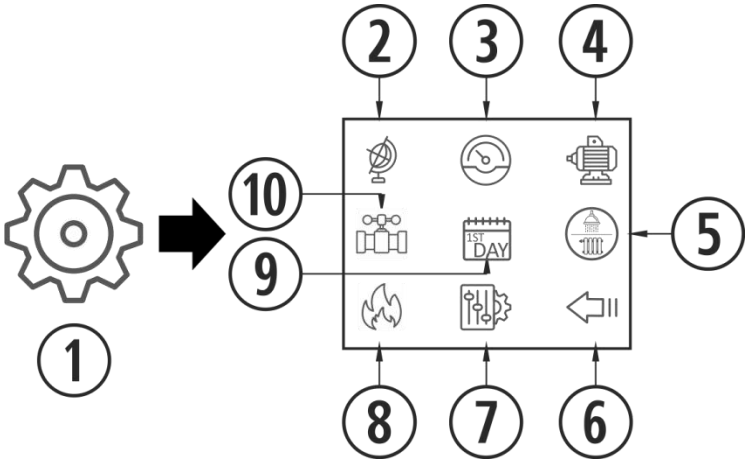
①	Safety message. (N or Axx). Point ***6***
②	Operating mode (P or T) and status color (see point ***2***).
③	Target power/temperature level.
④	Keyboard blocked.
⑤	Configured connectivity mode.
⑥	Enable calendar.
⑦	Hot Water / Heating mode. (WATER MODELS).
⑧	Room temperature.



Drawing 4

3.4. SETTINGS MENU.

①	Icon for configuration access.
②	Language selection (spanish by default).
③	Working mode (P or T).
④	Engine tests (Technical Serv.)
⑤	Selection Hot Water / Heating mode. (WATER MODELS).
⑥	Return to previous screen.
⑦	Offsets setting
⑧	Fuel selection. Pellet, olive pits or almond shells (pellet by default).
⑨	Programming of calendar keypad.
⑩	Display of hydraulic diagram. (WATER MODELS).



Drawing 5

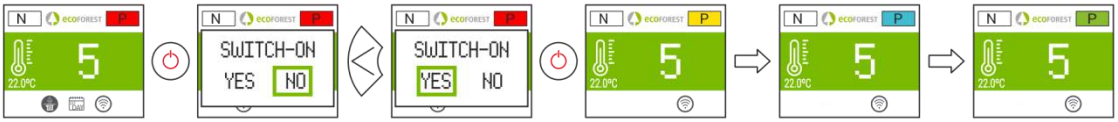
3.5 PLEASE BEWARE THAT…

⚠ Changes made while using or configuring the stove can be simultaneously done using the keyboard and any WiFi device connected to the unit. Regardless of the means used, the **last change made will prevail**.

⚠ Some configurations can only be carried out using a WiFi connection. They must be performed by authorized personnel (password-protected) while the device is off and no alarms have been programmed (status 0).

3.6. SWITCHING ON.

⚠ First switching on: Before switching on the machine, feed the auger from the S.A.T menu until the fuel drops in the burn pot.

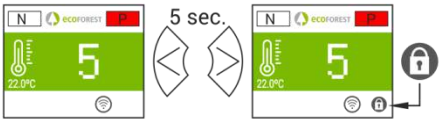


Drawing 6

3.7. SWITCHING OFF.

Drawing 7

3.8. LOCK OR UNLOCK THE KEYBOARD.



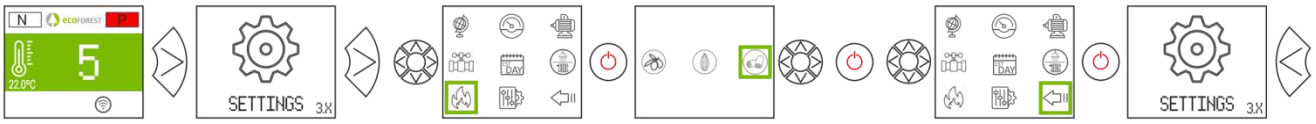
Drawing 8

3.9. LANGUAGE SELECTION.

Drawing 9

3.10. FUEL CHANGE.

⚠ **To access this menu the stove must be turned off and showing no alarm (0 status).**
Refer to section 3 of the "*Installation and Maintenance Manual*". It must be taken into account the fact that a new part may be needed to use the stove with other fuels, different to pellets. Please contact your dealer before applying any changes.

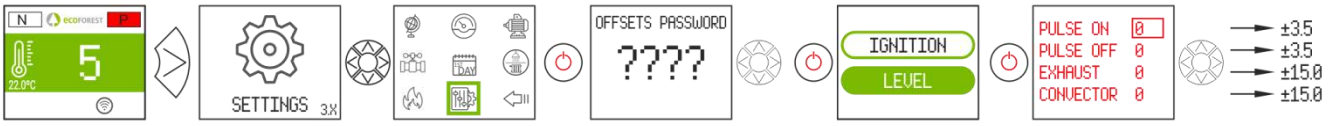


Drawing 10

3.11. OFFSET ADJUSTMENT.

⚠ Such adjustments should be made only once in a while, since the stove adjusts itself automatically. In case you need to change an offset, please contact your dealer.

IGNITION: The settings will affect states 3 and 4. Texts are shown in red.



Drawing 11

LEVEL: The settings will affect state 7.

Drawing 12

3.12. WORKING MODE.

⚠ **To access this menu the stove must be turned off and showing no alarm (0 status).**
The electronics work in two modes: Power or temperature.

Drawing 13

EN

LEVEL	1 - 9	Power level in T mode. See section ***5.6.***
SENSOR	SONDA / THERMOST.	Select zone control terminal.
SCHEDULE	OFF / ON	Enable or disable calendar programming.
STANDBY.	MIN / OFF	Activate work at minimum or on / off by zone control terminal.
dTON	0 - 5	ΔTOFF differential.

For a finer adjustment of this mode, please check point ***5.5***.

3.12.1. POWER MODE.

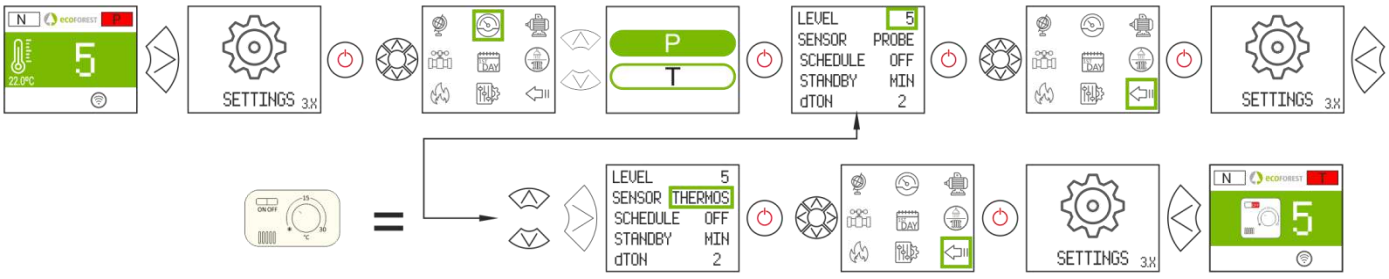
The regulation range goes from level 1 to level 9 (minimum to maximum pellet drop.) To increase the level we'll use the upwards arrow (⌃) while the downwards arrow will be used to decrease (⌄).

Drawing 14

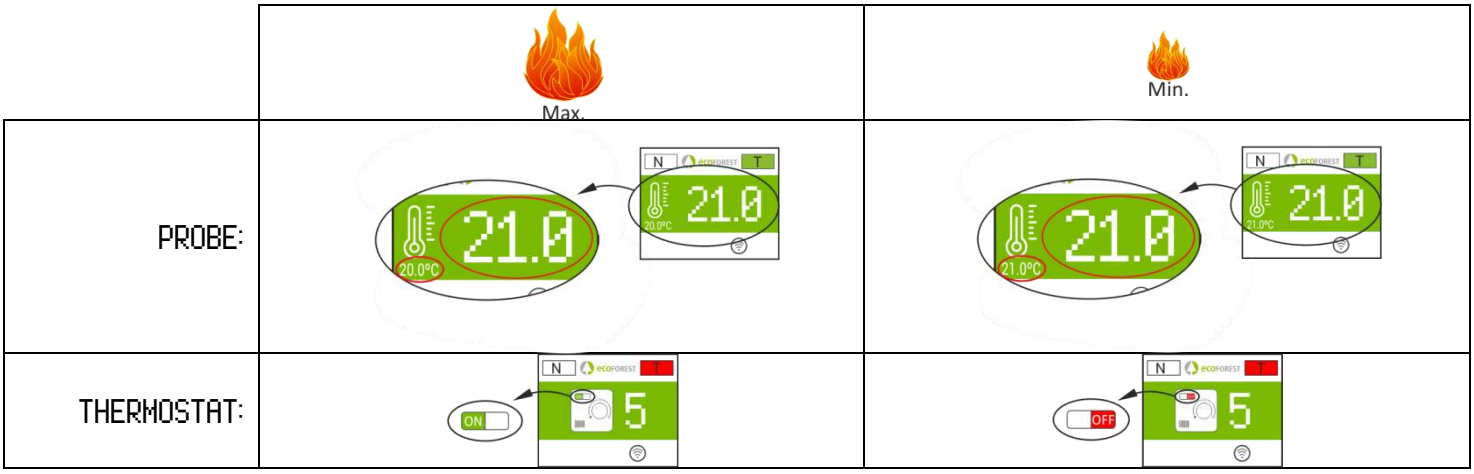
3.12.2. TEMPERATURE MODE.

When choosing the temperature working mode, the P will turn into a T. We should choose this mode, only if the room probe or a tension free thermostat with its adapter is connected.

The regulation with room probe ranges from 12°C to 40°C, being the latter the highest regulating temperature. To increase the temperature we'll push the up arrow (⌃) and the down arrow will be used to decrease (⌄).

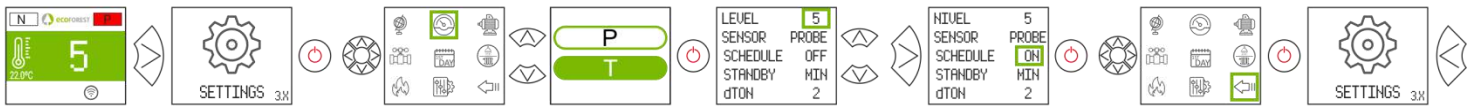


Drawing 15



Drawing 16

3.13. ENABLE / DISABLE TIMETABLE.



Drawing 17

3.14. KEYBOARD PROGRAMMING TIMETABLE.

EN

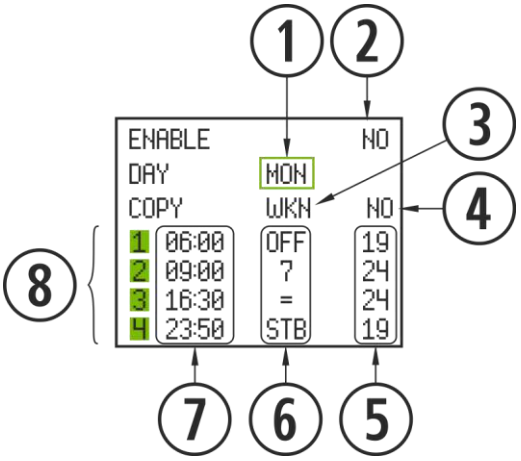
⚠ Before programming the timetable, verify the current time and date and modify them if necessary. The keyboard allows for the day of the week, the date (DD/MM/YY) and the hour (HH:MM, in a 24h format) of the CPU to be modified.

⚠ The keyboard does not change time zones automatically. Therefore, the timetable must always be configured using the same method (via keyboard or WEB). Time offset problems between the keyboard and the Web may arise if the timetable is configured simultaneously using different means (via keyboard and via WEB).

Drawing 18

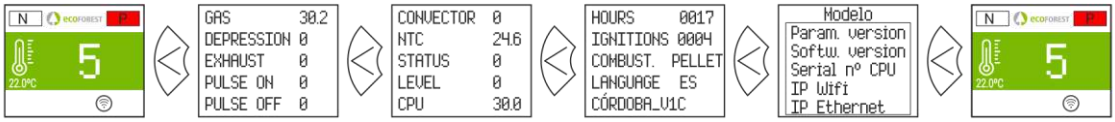
It also enables the user to program up of 4 time slots per day of the week. The slots have 3 configurable columns: Start time, mode (power level, off, stby) and room temperature (depends on the machine configuration).

①	Select the day you wish to program. Each day has its own template. From Sunday to Saturday (Templates 0 to 7, respectively).	
②	Enable or disable timetable.	
③	Copy the template of the selected day to:	
	LUN-DOM	A given day.
	ALL	Everyday
	WKD	Weekdays(Monday to Friday)
	WKN	Weekend (Saturday and Sunday)
④	Enables/disables copying of template.	
⑤	Temperature set point for every time slot.	
⑥	NO	Turn off.
	=	Same as the previous slot.
	STB	Observes stby orders (WATER MODELS).
	1-9	Power level.
⑦	Time slot start.	
⑧	Time slots for every day or template.	



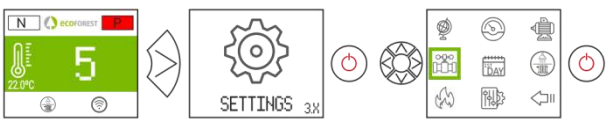
Drawing 19

3.15. DISPLAYING REAL TIME DATA.



Drawing 20

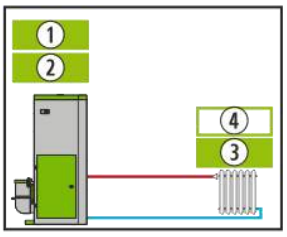
3.16. DISPLAYING HYDRAULIC SCHEME. (WATER MODELS).



Drawing 21

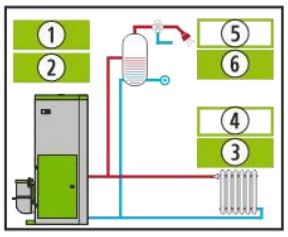
	Real-time value.
	Modified by user.
	Modified by S.A.T.
①	Feed water temperatura.
②	Return water temperature.
③	Ambient temperature / buffer tank.
④	Instruction ambient temperature / buffer tank.
⑤	Instruction DHW temperature.
⑥	DHW tank temperature.

Heating



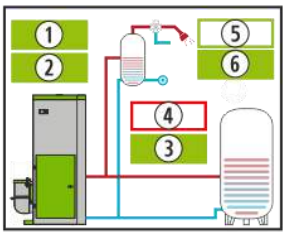
Drawing 22

HSW + Heating



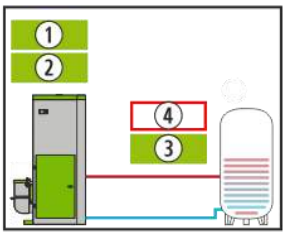
Drawing 23

HSW + Buffer tank



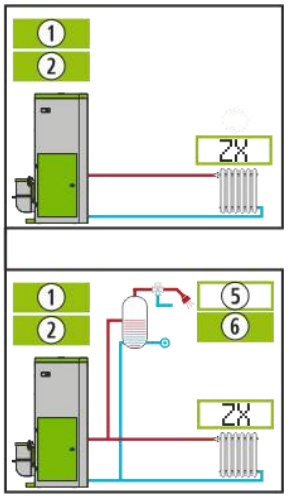
Drawing 24

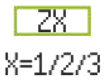
Buffer tank



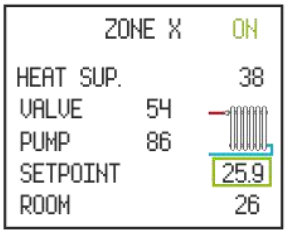
Drawing 25

Multi-zone*
Optional

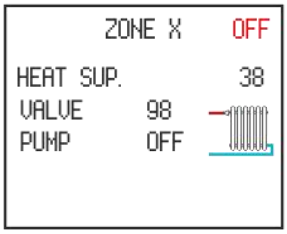




Probe configuration



Thermostat configuration

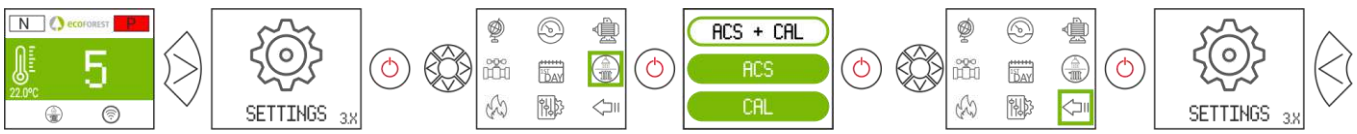


ON / OFF:	With or without demand in the zone
HEAT SUP.	Drive temperatura to the zone
VALVE	Zone Valve Opening Percentage
PUMP	Zone pump operating percentage
SETPOINT	Zone setpoint temperature with room probe
ROOM	Zone temperature with room probe.

Drawing 26

3.17. HOT WATER / HEATING MODE SELECTION. (ONLY WATER MODELS).

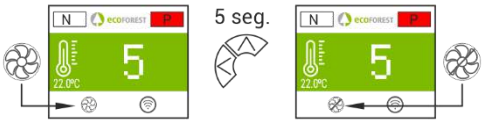
⚠ **To access this menu the stove must be turned off and showing no alarm (status 0).**
Only for stoves whose Hot Water+ Heating is electronically operated by 3-way valves.



Drawing 27

	AC+CAL	Feeds hot water and heating. Priority given to hot water.
	ACS	Only feeds heating.
	CAL	Only feeds hot water.

3.18. EcoSILENCE. (STOVES ONLY).



Drawing 28

On: **Fan crossed out**. It limits the maximum power level of the stove to 3. The convector fan remains off, being able to turn on momentarily only.

EN

4. ACCESS FROM ANY DEVICE THAT ALLOWS WiFi CONNECTIONS.

First of all we need to know the ID of the stove's WiFi net (SSID) and the net's password. These data can be found on a label, similar to the one in figure 5 here below in 3 places:

- Page 1 of this manual.
- In the stove's CPU.
- Next to the label with the stove's serial number.

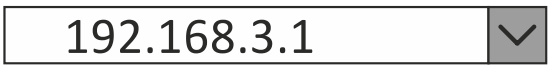
①	SN: CPU serial number - Name - User.
②	SSID: Original WiFi Network.
③	PWD: Password for WiFi network.
④	Password for Access to Stove's website (8 digits)
⑤	NET: Addressing port.
⑥	QR code.

Drawing 29

We have to seek and connect with the stove's WiFi network.To do so, we need to type the password shown in the label, paying special attention to the alphanumeric characters and the lower and upper cases.

If the device used to connect has a camera and an application for QR code scanning, you may directly connect the Wi-Fi or copy the password from the application, focusing on the label's QR

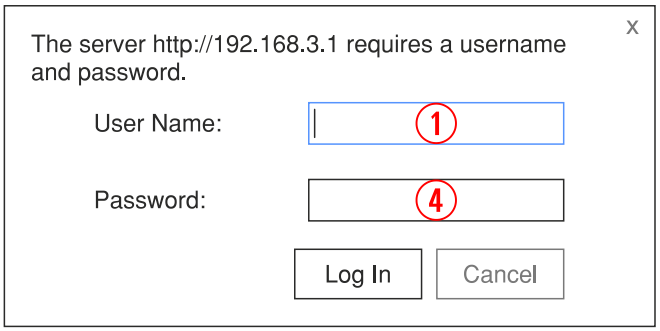
Once the connection has been stablished, we need to introduce in our device's web browser the following URL address: ***192.168.3.1***



Drawing 30

Authentication may be necessary when accessing the web interface.

①	SN: CPU serial number - Name - User.
④	Password for Access to Stove's website (8 digits).



Drawing 31

⚠ **If we use the device with several networks (stove, home's WiFi, work's WiFi, et.c) we must ensure that we are connected to the stove's WiFi network before doing anything in the stove.**

5. WEB INTERFACE.

5.1. MAIN SCREEN.

EN

①	Operating mode (P or T). ***Section 5.5. Power or temperature.***
②	Safety message. (N or AXX). ***Point 6 Alarms (AXXX).***
③	Outside ambient temperatura. *Optional*.
④	Time zone, language and hot water / heating mode. (*only water models with DHW*).
⑤	Hot Water / Heating mode. (WATER MODELS).
⑥	Current date and time.
⑦	Room temperature.
⑧	Demand room temperature. *Water models only in Power mode.*
⑨	Room temperature pre-set / power pre-set.
⑩	Settings.
⑪	Calendar programming.
⑫	Fuel selection.
⑬	ON/OFF. ***Point 2***.

Drawing 32

5.2. SETTING OF LANGUAGE, TIME ZONE AND MODE SELECTION HOT WATER / HEATING.

①	Time zone *.
②	Language.
③	Mode selection Hot Water / Heating mode. (WATER MODELS)**.
*	*The time zone set must always match that of the machine.* *Essential for web-based calendar configurations.*
**	Only for boilers whose Hot Water+ Heating is electronically operated by 3-way valves

Drawing 33

5.3. FUEL SELECTION.

⚠ **To access this menu the stove must be turned off and showing no alarm (status 0).**

To learn more about fuel characteristics and the assembly (if necessary) of mechanical accessories, please refer to section 3 of the "***Installation and Maintenance Manual"***. The selected fuel will appear marked in green.

Drawing 34

5.4. DATA VISUALISATION MENU.

Drawing 35

Message on the screen	***Description***	***Range.***
CPU temperature	CPU Internal temperature	-10 to 70°C
NTC sensor. Temp / Heat sup.	Temperature detecting the convector operation	-10 to 70°C air models. -10 to 83°C in water
Extractor Speed	Voltage percentage (according to the power grid).	0 to 100%
Air intake Dep.	It is the pressure detected in the air intake pipe.	0 to 250Pa (according to model).
Status	Operational status*	from -4 to 20 (check with SAT).
Power on	Number of times the stove has been turned on.	Counted from status 0.
T. pellet ON	Seconds during which the engine works without stopping.	It varies depending on the power level.
Power on Resistance	Power on (1) or off of the resistance (0).	It varies from 0 to 1
Control mode	Operational mode according to power (P) or temperature (T).	See section 3.7 onwards
Alarm message	Alarm message (Axx).	See alarm table.
Inlet temperatura	Temperature that detects the operation of water in the heating return (water models).	--10 to 83°C
Gas temperature	Gas outcome temperature.	-10 to 250°C, according to models.
Room temperature	Room temperature, only if the room sensor is connected.	-10 a 40°C
Convector Speed /Water pump	Voltage percentage (according to the power grid) received by the convection fan/water pump.	0 to 100%
First air dep. level	Value recorded by the manufacturer.	70 to 250Pa (according to model).
Power level	Fuel drop level	from 1 to 9
Total operation	As the name implies, number of operational hours of the stove.	Counted hours from status 0.
T. pellet OFF	Time during which the engine remains off.	It varies depending on the fuel quality.
Model	Model of our stove.	It varies depending on the model.

CPU Serial number	CPU Serial number, also written in the label of the CPU.	It varies depending on CPU.
Software version	CPU Software version	It varies depending on the CPU.
Fuel	Pellet	Pellet, olive pit, almond shell.
Water pressure	Water pressure in the hydraulic circuit (only water models).	Water pressure in bars

EN

5.5. OPERATING MODES.

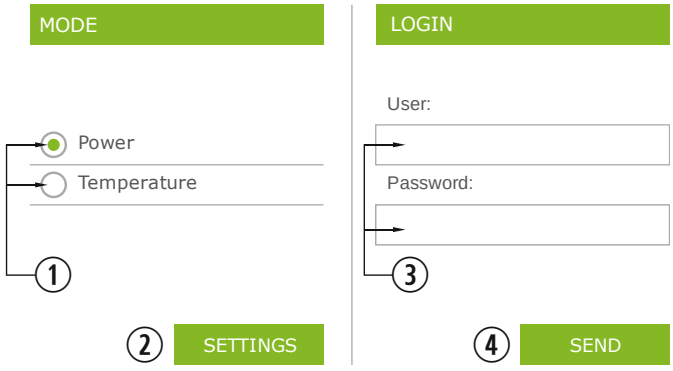
⚠ **To access this menu the stove must be turned off and showing no alarm (status 0).**

The characteristics of the operating modes are set out below.

	TYPE OF APPLIANCE	
	AIR (STOVE)	**WATER (BOILER /HYDROSTOVE)**
POWER	• ***Default configuration.*** • Manual power management. Power level modifiable from keyboard, web or calendar set. 9 power levels, 9 being the maximum level.	• ***Default configuration.*** *Monozone; Room T. = 21 ° C; Heating drive = 65 ° C; T. Stand-by = 82 °C* • Manual power management. Power level modifiable from keyboard, web or calendar set. 9 power levels, 9 being the maximum level. If the demand of the control terminal (room probe, thermostat or THT) or the water supply has been satisfied, it will reduce power to the minimum level. • Room temp. regulation range between 12 ° C and 40 ° C. • Possibility of managing on and off, according to: – Control terminals. – Buffer sensors.
TEMPERATURE	• Automatic power management. According to demand of the control terminal (room probe, thermostat or THT): – Instantaneous power level. – On and off (configurable). • Room temperature regulation range between 12 ° C and 40 °C.	• Automatic power management. According to the supply temperature and the demand of the control terminal (room probe, thermostat or THT). • Possibility of managing on and off, according to: – Control terminals. – Buffer sensors. • Ambient regulation range between 12 ° C and 40 °C.

To select the temperature mode, set the operation mode.

①	Operating mode selection.
②	Access to settings.
③	Password. (Technical assistance)
④	Validate access.



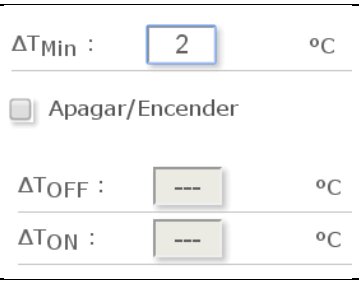
Drawing 36

- The mode configuration from the web is reserved for the technical service, being necessary to enter the corresponding credentials. To configure the mode, select “SETTINGS”.

5.5.1. AIR MODELS.

Drawing 37

When accessing the configuration, the control terminal option must be selected.

Sensor		Tempertatures	
None	Option when no control terminal has been connected (room probe, thermostat or THT).		
Probe	The room probe must be connected in order to operate in this mode and must be away from sources of heat or cold at 1,5m height.		**ΔT_{MIN}**: Default value = 1. The device reduces power when it reaches the room temperature setpoint, regulating it so that the room temperature is maintained between the setpoint and the ΔT_{MIN} value. See *figure 39*.
			Turn off / on enabled. This mode of operation is only advisable in well insulated homes. **ΔT_{OFF}**: Default value = 2. Shutdown differential. If the room temperature exceeds the ΔTOFF value over the ambient temperature, it goes off by standby. **ΔT_{ON}**: Default value = 2 Ignition differential. If the room temperature falls below the ΔTON value below the setpoint, the device switches on. See *figure 40*.
Thermostat	The ON/OFF Mode is meant to operate a thermostat or contact. It shall always operate together with the appropriate connection, such connection shall always be voltage-free.	**Minimum level**	The machine will work at the selected power level with closed contact (demand) and at minimum with open contact (without demand).
		Turned Off	The on / off function will turn on the machine or switch it to standby if the contact is closed (demand) or open (no demand) respectively. To activate this system, press the ⏻ button. Its use is only advisable with a maximum of ignitions/switch offs twice a day.

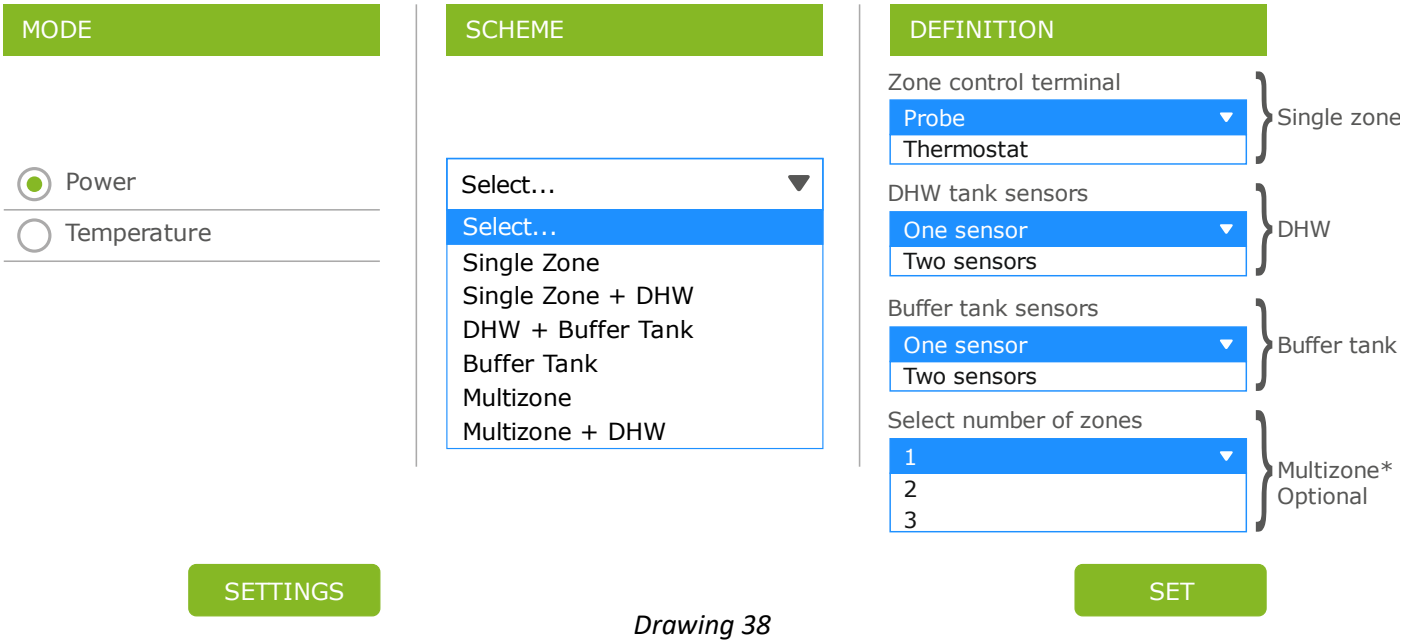
			In order to avoid continuous signals in biomass systems, the thermostat must work with hysteresis, trying to avoid signal changes in the contact in less than 40 minutes

EN

5.5.2. WATER MODELS.

Once we have entered the username and password, we will access the screen for selecting the type of hydraulic scheme, being the single zone selected by default from the factory.

Below are the drop-down menus with the different configurable schemes.



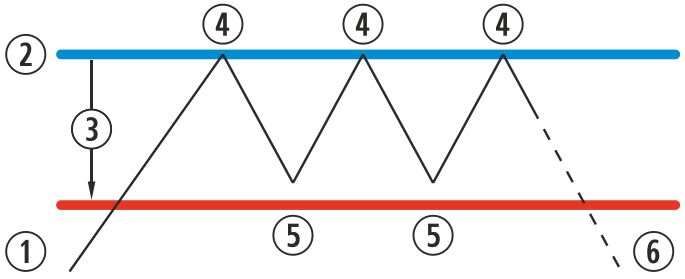
Drawing 38

Once the scheme is selected, press 'SET'. The hydraulic scheme will appear with default values to be modified if they do not meet our needs. In section ***5.8.*** the options shown on the user screen are displayed.

5.5.3. OPERATION AND BEHAVIOR OF ROOM SENSOR CONFIGURATIONS.

Graphical display of room sensor control where the "On/Off" option is disabled:

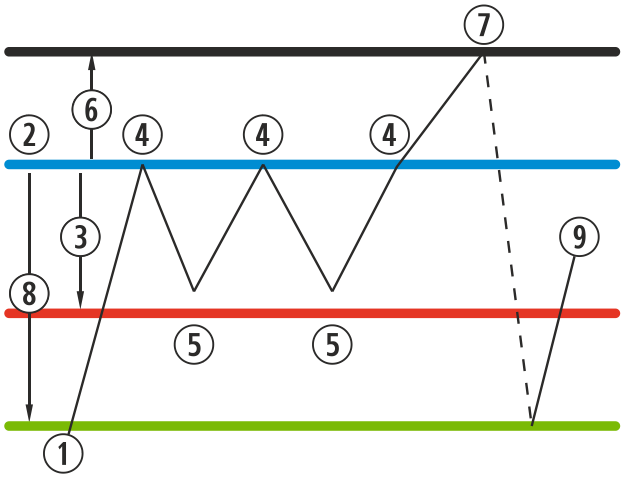
①	The user turns on the stove manually.
②	Target temperature selected in the main menu.
③	ΔT_{MIN} by default 1°C.
④	It changes to level 1 (minimum).
⑤	It changes to working level 9.
⑥	The user turns off the stove manually.



Drawing 39

Graphical display of room sensor control where the "On/Off" option is enabled:

①	The user turns on the stove manually.
②	Target temperature selected in the main menu.
③	ΔTC1 by default 1°C.
④	It changes to level 1 (minimum).
⑤	It changes to working level 9.
⑥	ΔTC_{OFF} Temperature difference for turning the device off.
⑦	Turning off the stove using the room temperature.
⑧	ΔTC_{ON} Temperature difference for turning the device on.
⑨	Turning on the device following the temperature order.



Drawing 40

When the stove is off in any and all temperature mode and it is ready to be restarted, the following icon shall appear on the main screen:

	Navy blue	The icon will remain in navy blue to indicate the stove has been stopped, waiting to be started, either after being programmed or according to temperature.

5.6. OFFSET MENU.

①	Modify offset. (T.S) Technical service
②	Air models: Maximum power level to which the stove will be limited in temperature mode. Water models: Power level at which the machine will start in temperature mode, automatically adjusting to meet the setpoints.

Drawing 41

5.7. WEB PROGRAMMING TIMETABLE.

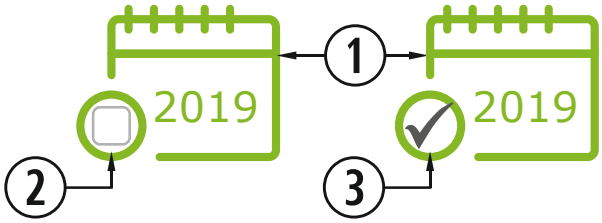
⚠ The keyboard does not change time zones automatically. Therefore, the timetable must always be configured using the same method (via keyboard or WEB). Time offset problems between the keyboard and the Web may arise if the timetable is configured simultaneously using different means (via keyboard and via WEB).

Templates may be used to programme the stove se puede realizar de forma semanal renovable, programmes registered by the manufacturer, which can be totally configured by the user, in a personalised way by selecting the time, temperature and fuel drop range. We can programme hasta 90 days ahead from the current date.

Such programming shall always be performed graphically, configuring the three parameters easily and quickly.

Thus, we have to press the calendar-shaped icon. Once the desired programming has been completed, either using a template or a specific personalized programming, we will activate such programming by pressing second *figure 42*. Such point shall be deselected in order to disabled the programming.

①	Access to programming.
②	Disabled Programming.
③	Enabled Programming.

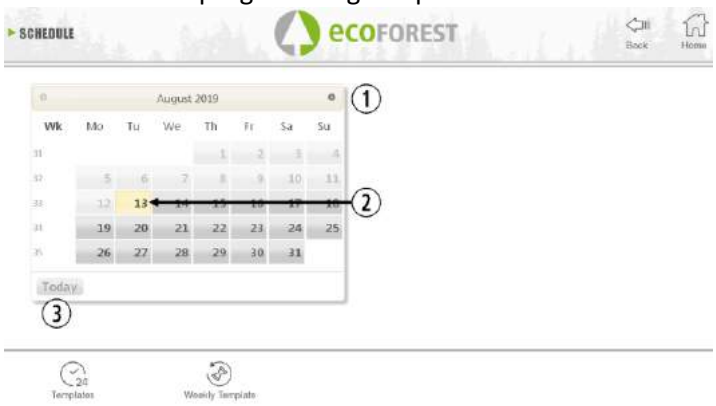


Drawing 42

EN

By pressing the before mentioned icon, we will have access to the programming templates screen.

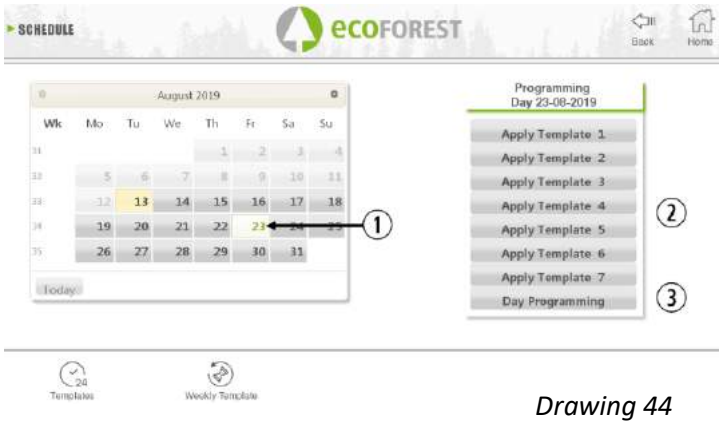
①	Month navigation bar. (60 days).
②	Current day.
③	Back to current month.



Drawing 43

In order to select the daily schedule, we only have to press the day we want to programme, for instance the 23 august 2019 and a new screen will be displayed as shown below:

①	Selected day.
②	Templates available to assign to the selected day.
③	Display settings applied to the selected day.



Drawing 44

The main differences between point ② and point ③ is that, the first one includes programmes predefined by the manufacturer, which, even though they are modifiable, they are already memorised so the user can apply it easily. The “daily programming” will let us modify the schedule predefined for the selected day.

If we only want to programme a certain day, we have to press the icon indicating “Daily programming” (②), and we will have access to the programming schedule predefined for the selected day:

①	Time slots (de las 00 a las 23h).	
②	Temperature column.	
	Equal	Uses the value configured in the previous time slot.
	12-40	Temperature set point (0.5 °C interval). In air stoves, it only involves the Temperature mode.
③	Power column.	
	Equal	Same as the previous slot.
	ST-BY	It only satisfies DHW demand.
	OFF	Machine switched off. Stby mode is not observed.
	1-9	Power level. Power command. If by configuration it depends on other demands that are satisfied, the machine will remain in standby.
④	Save programming ***(IMPORTANT)***	
⑤	Back to previous screen.	
*	Water Models with DHW	
**	Only shown when setting up a template, not shown in Daily Schedule.	

Drawing 45

EN

5.7.1. PROGRAMMING SCHEDULES.

In order to configure any of the schedules, the desired Schedule shall be selected and the desired parameters shall be varied or configured in the same way as applied to the daily programming explained in the previous section.

Is important to validate such programming by selecting the saving option after the programming has been performed.

①	Schedules 1 - 7.
②	Apply this change to previous programming.

Drawing 46

5.7.2. WEEKLY PROGRAMMING USING SCHEDULES.

In order to have access to the weekly programming we have to press its icon and we will have access to the programming screen. There we shall indicate which schedule we want to use for each week day. We have to ***save*** the programming and after, we have to enable the programming as indicated in point ③ of *figure 42*.

This new weekly template will be applied to every day from the current day.

EN

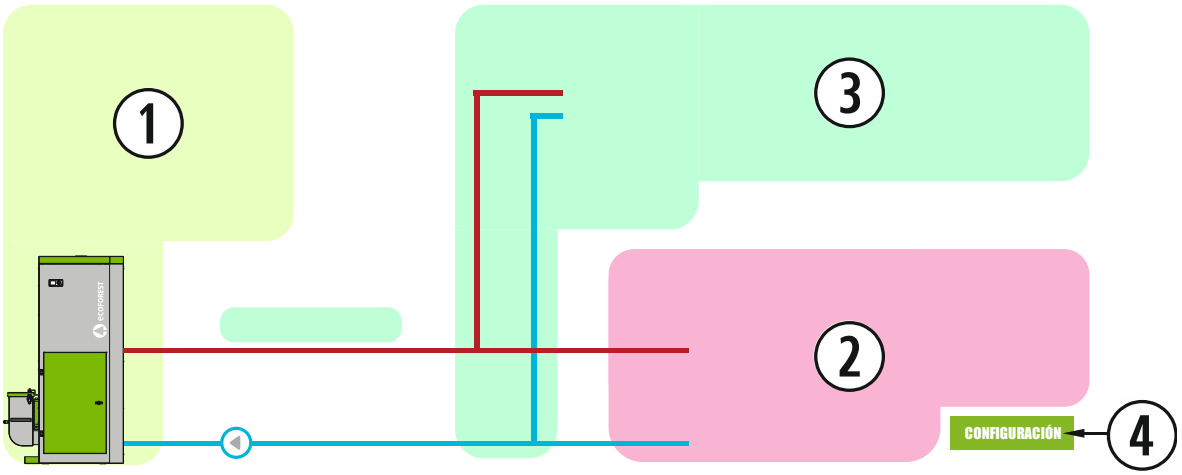
①	Assign desired template to day of the week.
②	Save configuration ***(IMPORTANT).***

Drawing 47

5.8. WEB VISUALIZATION OF HYDRAULIC SCHEME (WATER MODELS ONLY).

⚠ The configuration of the hydraulic scheme must be carried out by an installer or heating professional from point ***5.5.2.*** The scheme display can be divided into 3 superimposed blocks depending on the configuration. Display menu. The user can only make minor modifications to some of the schemes (maximum DHW demand, setpoint of room temperature).

①	Boiler information.
②	Heating information.
③	DHW information.
④	Modification of demands in hydraulic scheme. (Exclusive use of technician).
	User modifiable setpoint.
	Setpoint can be modified by technician.
	Real time value.



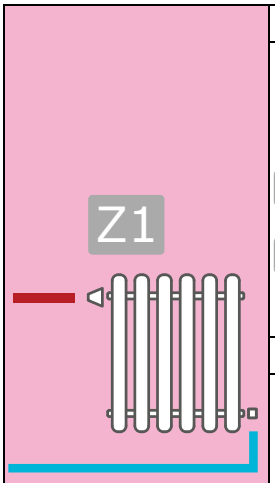
Drawing 48

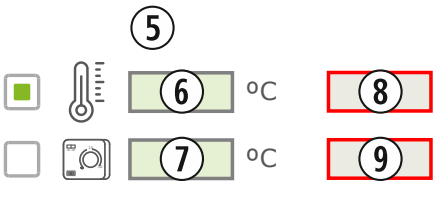
① BOILER

The real-time data of the boiler are displayed, in addition to the drive setpoints to be satisfied.

② HEATING

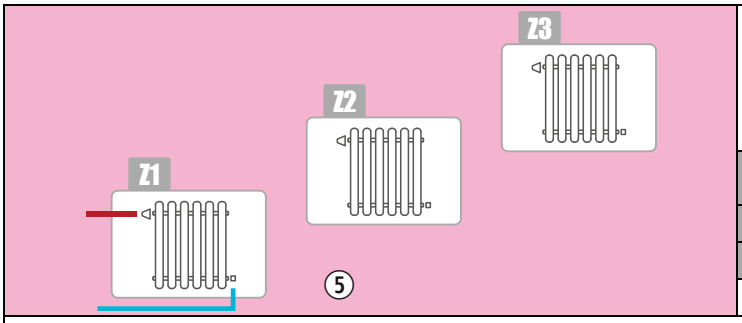
SINGLE ZONE



ROOM TEMPERATURE			
	⑤	Minimum	Regulates power to minimum.
		Turn off / Turn on	Regulates power to a minimum and turns the machine on or off by room temperature.
	⑥	Set room temperature.	
	⑦	Room temperature.	
	⑧	Maximum room temperature (Switch off)	
	⑨	Minimum room temperature.	
THERMOSTAT			
	⑤	Minimum	The machine will work at the selected power level with closed contact (demand) and at minimum with open contact (no demand).
		Turn off / Turn on	It will turn on the machine or switch it to standby if the contact is closed (demand) or open (no demand) respectively.

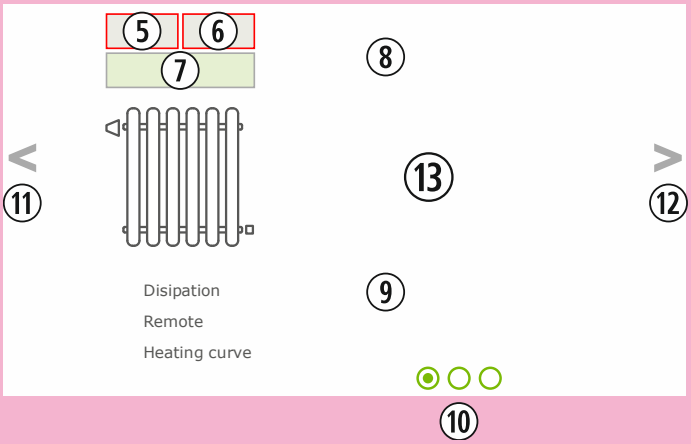
EN

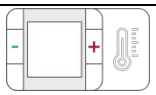
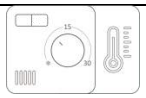
MULTIZONE*

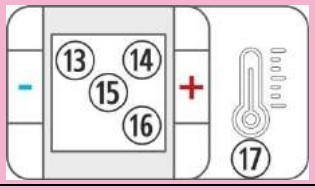


⑤	Minimum	It regulates to minimum.
	Turn off / Turn on	Regulates to a minimum and turns the machine on or off by room temperature.
Z1	Zone 1	
Z2	Zone 2. (2 or 3 zones)	
Z3	Zone 3 (3 zones)	
Clicking on the zone, we access it.		

ZONE 1 – 3



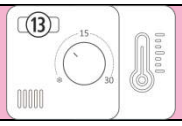
⑤	Group drive temperature	
⑥	Solenoid valve opening percentage.	
⑦	Drive temperature target group	
⑧	Control terminal selected.	
⑨	Disipation	It dissipates in the enabled zone during power off.
	Remote	External thermostat communication.
	Heating curve	Shows heating curve.
⑩	Displayed area	
⑪	Previous zone.	
⑫	Next zone.	
⑬	 THT	 THERMOSTAT ON/OFF



⑬	ON / OFF. Shows if there is demand in the area.
⑭	Maximum temperature. Demand ends.
⑮	Setpoint temperature
⑯	Minimum temperature. Demand starts.
⑰	Zone room temperature.

⑬	Show the heating curve.
⑱	Maximum heating flow limit. Drive temperature according to ⑳
⑲	Minimum heating flow limit. Drive temperature according to ㉑
⑳	Minimum outdoor temperature limit.
㉑	Maximum outdoor temperature limit.

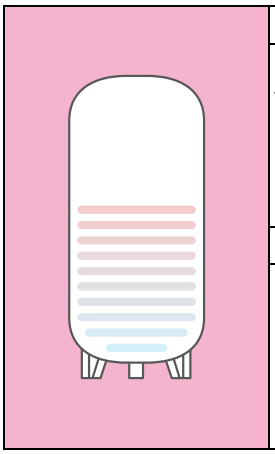
ZONE 1 – 3 ON/OFF THERMOSTAT



⑬	Shows if there is demand in the area.

*OPTIONAL. Zone manager and drive groups necessary.

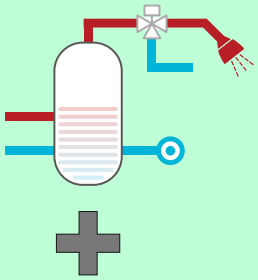
BUFFER TANK



1 PROBE		
T1 ⑤ ºC ⑦ ⑧	⑤	Buffer tank temperatura.
	⑦	Maximum buffer tank temperature setpoint. Demand ends.
	⑧	Minimum buffer tank temperature setpoint. Demand starts.
2 PROBES		
T1 ⑤ ºC ⑦ T2 ⑥ ºC ⑧	⑤	Upper probe tank temperature.
	⑥	Lower probe tank temperature.
	⑦	Set temperature in top tank probe. Demand ends.
	⑧	Set temperature in lower tank probe. Demand starts.

EN

③ DHW



1 PROBE		
T1 ⑤ ºC ⑦ ⑧	⑤	Tank temperature.
	⑦	Maximum tank temperature setpoint. Demand ends.
	⑧	Minimum tank temperature setpoint. Demand starts.
2 PROBES		
T1 ⑤ ºC ⑦ T2 ⑥ ºC ⑧	⑤	Upper probe tank temperature.
	⑥	Lower probe tank temperature.
	⑦	Setpoint temp. Reached in lower tank probe. Demand starts.
	⑧	Setpoint temp. Reached in lower tank probe. Demand starts.
✚	Performs an anti-legionella cycle	
☑ Dissipation DHW	It dissipates the heat produced during the shutdown on the DHW.	
	Boiler covering demand of DHW.	
	Boiler covering heating demand.	

5.9. INTERNET CONNECTION (EASYNET).

If there is internet availability in the machine emplacement the access and control of the machine is possible through internet. Check availability.

FIRST FOR ALL, PLEASE READ SECTION ***5.9.1***, ***5.9.2*** AND ***5.9.4.***
A WRONG CONFIGURATION COULD BLOCK THE WiFi CONNECTION WITH THE MACHINE.
CONSULT YOUR DEALER.

EN

5.9.1. RECOMMENDATIONS.

- Make the connection with the machine switched off.
- If the device is used to connect to different Ecoforest machines, delete browser history and cache or make a private connection from the browser.
- Clarify with customer the connection type between stove / boiler and router. Despite the convenience of the wireless connection, for safety and reliability reasons, Ecoforest TS (Technical service) recommends cable (Ethernet) connection whenever possible. Depending on the connection to be made:
  - WiFi: Check that there is good coverage between the stove and your domestic router.
    If the WiFi device we are going to use to carry out the configuration is within the reach of other WiFi networks to which it can self-connect, we recommend deleting said networks temporarily (until the configuration has completed successfully).
  - Ethernet: Connect a direct ethernet cable (T568A) between CPU and router.

5.9.2. CONFIGURATION.

①	Drop-down selection.
②	WiFi name
③	WiFi password
④	Current WiFi IP
⑤	Current Ethernet IP
⑥	'Test' button.
⑦	'Save' button.

Drawing 49

Drop-down menu:

AP-WiFi Original: Factory settings. The CPU generates its own WiFi network, SSID. Text boxes (②) and (③) are automatically filled with the SSID and PWD of the CPU.

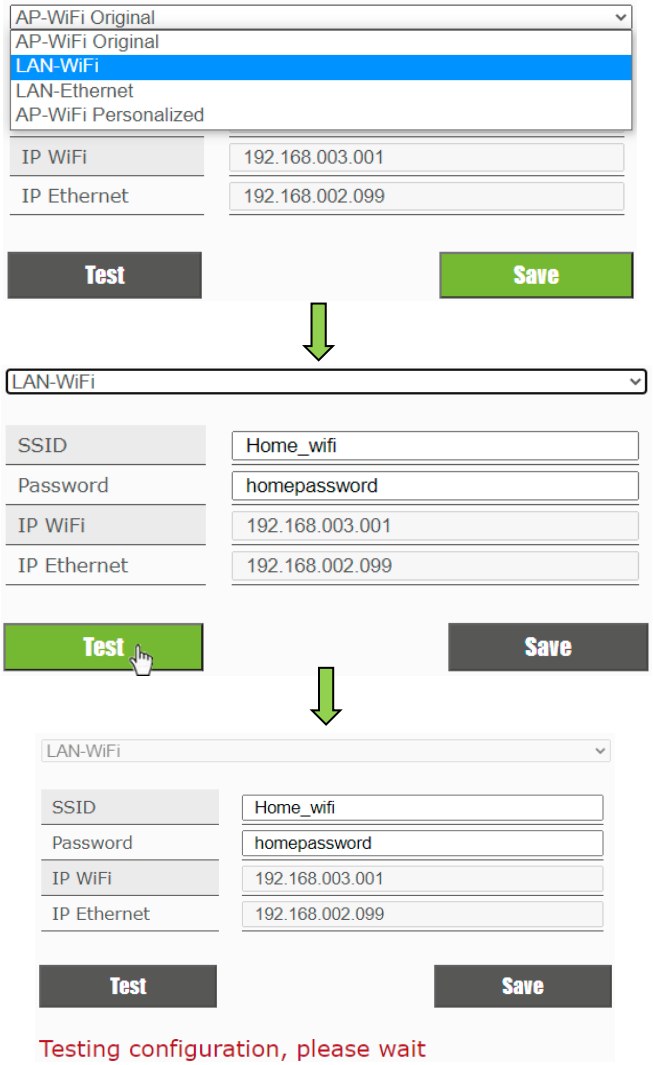
LAN WiFi: Synchronizes the CPU with the external WiFi. Text boxes (②) and (③) are filled with the name of the wireless network of the facility and the WiFi password.

LAN-Ethernet: The CPU will communicate via the Ethernet protocol.

AP-WiFi Personalized: The CPU will create its own WiFi network, SSID. The text boxes (②) and (③) must be filled in according to the SSID and password desired by the user. The SSID must contain a minimum of 4 characters and the password a minimum of 8. Spaces and strange characters must be avoided

CONFIGURATION STEPS BASED ON THE TYPE OF CONNECTION:

WiFi:



Select 'LAN-WiFi".

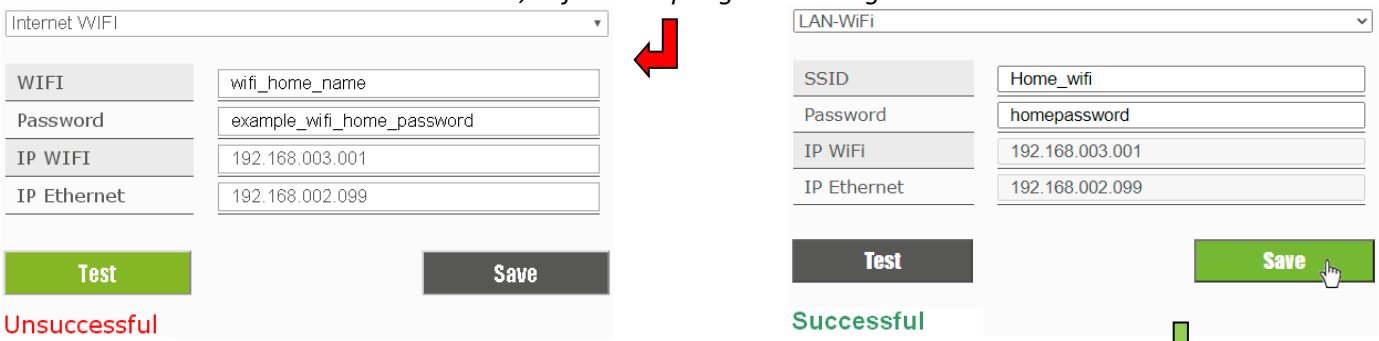
Fill in the corresponding fields with the exact name of the network and the password of the WiFi we want to connect. Press 'Test'.

Check point ***5.9.4.***

The Electronics (CPU) will reboot and the WiFi signal will disappear momentarily.

The following messages may appear:
Communication Failure!!
Make sure you are connected to the same network as the device, before accepting this message

Verify that we have reconnected to the WiFi network of the stove to 'Accept' the message.



Accept the message:
If accepted, you must be connected through this router to access your stove. Please configure your router.

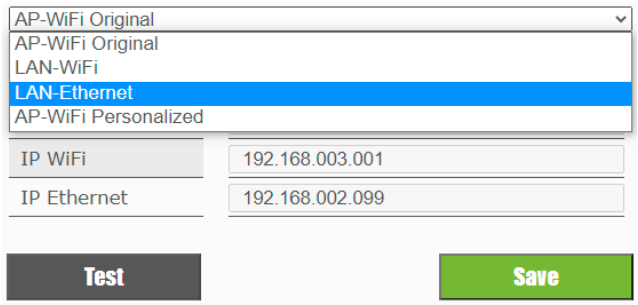
Drawing 50

⚠ By pressing 'Test' the WiFi network will disappear for a few moments, the browser might show us the message "communication failure". Verify that the WiFi network of the machine has returned and that we are connected to it before accepting the message. Also wait for the message "Successful" or "Not Successful" to appear.

ETHERNET:

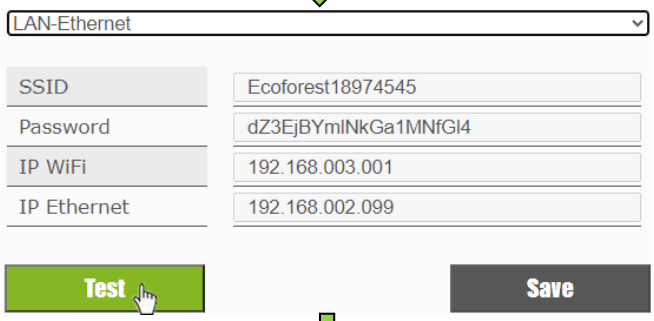
First of all, check that there is a connection via Ethernet, between router and CPU of the stove/boiler. (point ***5.9.1***).

EN



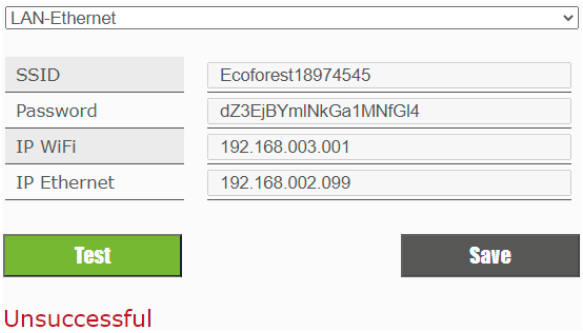
Select 'LAN-Ethernet".

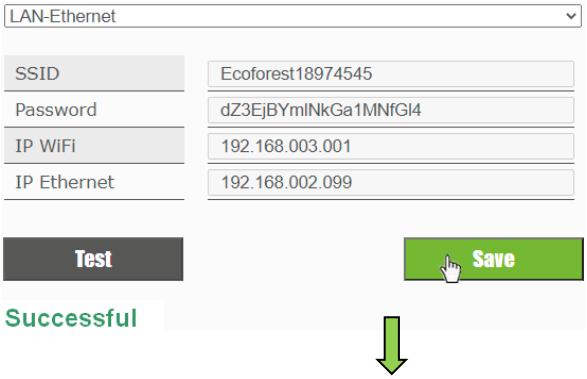
Check cable connection between WiFi and stove.



Press 'Test'.

The electronic checks the cable connection between CPU and router.





Accept the message:

Before accepting, contact your dealer for the ethernet configuration. This action will disable the WIFI connection.

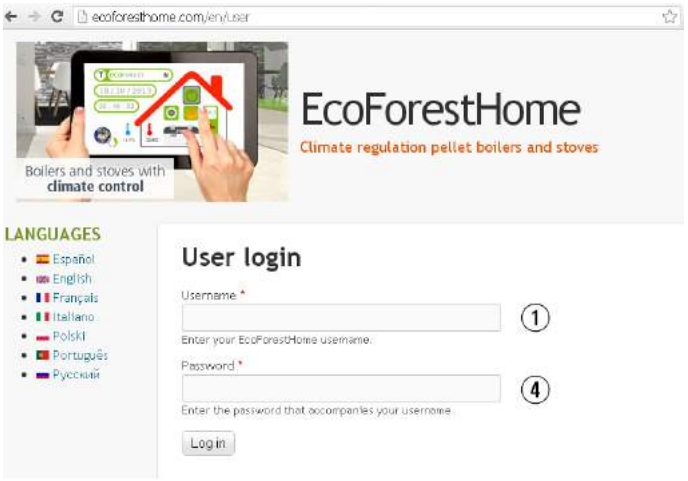
Drawing 51

5.9.3. ACCES FROM INTERNET.

①	Web page.

Drawing 52

①	SN: CPU serial number - Name - User.
④	Password for Access to Stove's website (8 digits)



Drawing 53

①	SN: CPU serial number - Name - User.
②	Access to the machine from anywhere.
③	Access to the machine within range of installation router. Recommended when we are in the installation.

Drawing 54

⚠ If the device has been connected to the internet for the first time, the links may take up to 15 minutes to appear after completing the process indicated in section ***5.9.2.***

5.9.4. PROBLEMS.

Result 'Unsuccesful' in the WiFi configuration:

- Check that there is good coverage between the machine and the router of the installation.
- Review name and password of your wireless home network. Avoid spaces and unusual characters ((/[()¿?{}ºª<>$^¨ "&'#\=/.,;!¡*:]/, etc.). If necessary, modify name and password of your home's wireless network.
- Check type of wireless network security. Supported only: **WPA / WPA2**. Contact ISP to change the type of protection, if necessary.
- If there are signal repeaters in the installation, they must respect the name and password of the main router.
- It is recommended that the router broadcasts on a low emission channel (1-5).
- It is not possible to connect to WiFi 5GHz networks, exclusively 2.4GHz networks.

After 'Successful' and save correctly. There is no local or remote access.

- Verify that the machine and the router or repeaters, if any, are working correctly.
- Verify that the IP shown on the keyboard corresponds to the one assigned by the router, depending on the WiFi or Ethernet connection.
- Verify if any modification has been made to the router (changes in its configuration or in its location).
- Coverage between stove and router if it has been configured via WiFi.
- Check the connection of the Ethernet cable between the machine and the router, as well as the good condition of the cable if the connection is done via Ethernet.

EN

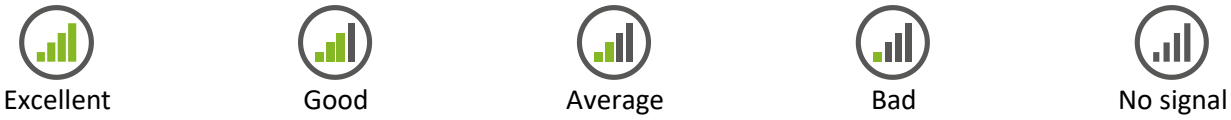
After 'Successful' and save correctly. Accessible in local mode but not in remote mode.

- Contact your distributor.
- Some 4G, WiMax, radio or satellite connections could block the VPN between the machine and the Ecoforest servers. VPN Passthrough and IPsec Passthrough must be enabled on the router. If the network uses CG-NAT protocol, remote access may not be possible. Check these points with your internet service company.

5.9.5. NETWORK DIAGNOSIS.

The quality of external communications with the device depends on various factors. Accessing the WiFi menu and pressing the analyze network icon, a connection diagnosis will be carried out:

- Strength of the signal received by the CPU from the router. According to the icon shown, it is considered:



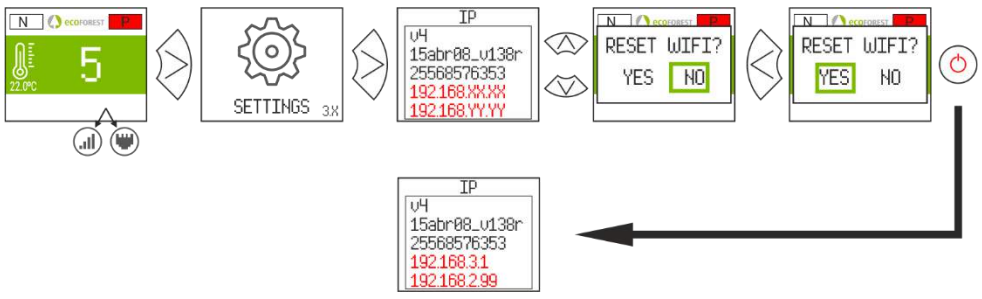
- Report results.

Speed	< 200ms	No communication problems should be encountered.
	> 200ms	Communication problems might be encountered.
%Error	% of frames or data packets lost.	
Result	Pass	Satisfactory report result.
	No Pass	Unsatisfactory report result. Serious communication problems.

5.9.6. RECOVER THE ORIGINAL WiFi NETWORK.

You can restore the original WiFi network of the stove in different ways:

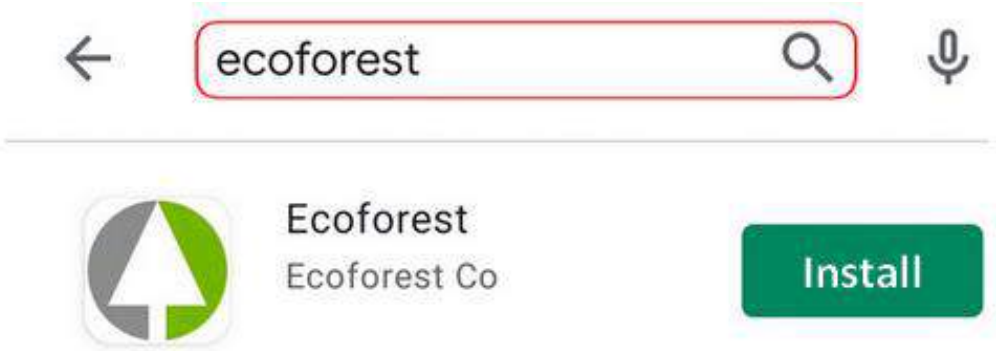
- From the web: In the remote connection menu (point ***5.9.2.***), selecting "AP-WiFi Original " and "Save".
- From the display: Restart from the IP addresses information screen.



Drawing 55

5.10. APPLICATION (app).

Open the corresponding Store, write Ecoforest in the search engine and Install:



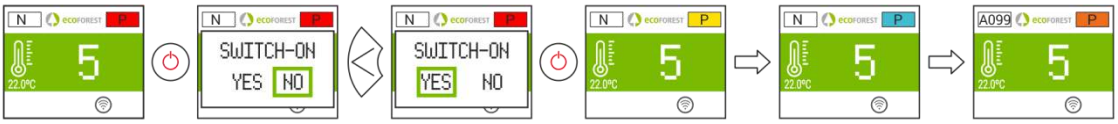
Drawing 56

App configuration:

①	**SN**: CPU serial number - Name - User. Mandatory field. See *figure 29*
②	Password for Access to Stove's website (First 8 characters). Mandatory field. See *figure 29*
③	•Machine with original WiFi: 192.168.3.1. •Machine connected to the internet: IP to which the remote access of ecoforesthome redirects.
④	If the machine is connected to the internet, it automatically fills in the field ③.
⑤	Allows you to manually enter the IP address of the machine in the ③ field.
⑥	If the machine is connected to the internet, and the device is connected to the same network as the machine, it automatically fills in the field ③ from the WiFi network itself.

Drawing 57

6. ALARMS.



Drawing 58

Alarm	*Description*	*Solution*
A000	Will appear if it is unplugged by an active alarm.	•Don´t unplug, use the keyboard.
A001	Low air intake depression.	•Cleaning the stove. •Open door. •Dirty exhaust pipe.
A002	High air intake depression.	•Excess of air during the installation.
A003	Minimum gas output temperature.	•The stove run out of pellet.
A004	Maximum gas output temperature.	•Maximum operating temperature has been reached.

		• Dirty stove. • Too intensive use.
A005	Minimum NTC temperature.	• Badly planned installation in terms of space. • Boiler working at low power levels. • Disconnected NTC.
A006	Maximum NTC temperature.	• Air in the circuit. • Little dissipation of the energy generated. • Too heavily used. • Shortcut in NTC.
A007	Minimum water pressure.	• Filling the heating circuit. • Disconnected Pressure switch. • Broken Pressure switch.
A008	Maximum water pressure.	• Lowering operating pressure between 1.2 and 1.5 bar. • Installing a bigger expansion vessel. • Air in the circuit.
A009	Minimum room temperature.	• Low temperature in the room. • Disabling the room sensor. • Lowering operating temperature.
A010	Maximum room temperature.	• Too much temperature in the room. • Disabling the room sensor. • Increasing operating temperature.
A011	Minimum CPU Temperature.	• CPU Temperature below the minimum.
A012	Maximum CPU Temperature.	• Dirty stove. • Dirty or broken convector. • Inadequate installation of the gas output pipe.
A013	Motor currents below the minimum.	• Reviewing motor connections.
A014	Motor currents above the maximum.	• Reviewing motor short circuits.
A015	Depression air level too low.	• Minimum depression operating conditions. • Dirty stove. • Dirty exhaust pipe. • Housing door or ash box incorrectly closed. • Cleaning outlet left open.
A016	Maximum gas temperature alert	• It has reached the gas output safety. • Temperature and the pellet will drop.
A017	Maximum NTC temperature alert.	• It reduces fuel drop due to excess temperature in convection chamber or water flow.
A018	The extractor works at full capacity but is not able to reach the minimum operatingdepression level.	• Stove/heater dirty. • Need to perform maintenance work.
A019	100% exhaust gas extraction.	• Stove/heater dirty. • Need to perform maintenance work.
A020	Probes error	• Possible sensor change.
A021	Minimum temperature in probe for outside temperature. ***(OPTIONAL, check availability).***	• Temperature below -25°C.
A022	Maximum temperature in probe for outside temperature. ***(OPTIONAL, check availability).***	• Temperature above 55°C.
A023	Minimum temperature in probe for return temperature.	• Installation of boiler badly measured. • Boiler working to low levels of power. • Disconnected NTC. • NTC badly placed.
A024	Maximum temperature in probe for return temperature	• Air in the circuit. • Little dissipation of the energy generated. • Too heavily used. • Shortcut in NTC.

A025	Minimum temperature in “temperature 1 probe”, used to monitor the sanitary hot water tank.	• Installation of boiler badly measured. • Boiler working to low levels of power. • Disconnected NTC. • NTC badly placed.
A026	Maximum temperature in “temperature 1 probe”, used to monitor the hot sanitary water tank.	• Air in the circuit. • Little dissipation of the energy generated. • Too heavily used. • Shortcut in NTC.
A027	Minimum temperature in “temperature 2 probe”, used to monitor the hot sanitary water tank.	• Installation of boiler badly measured. • Boiler working to low levels of power. • Disconnected NTC. • NTC badly placed.
A028	Maximum temperature in “temperature 2 probe”, used to monitor the hot sanitary water tank.	• Air in the circuit. • Little dissipation of the energy generated. • Too heavily used. • Shortcut in NTC.
A029	Minimum temperature in “temperature 1 probe”, used to monitor the buffer tank.	• Installation of boiler badly measured. • Boiler working to low levels of power. • Disconnected NTC. • NTC badly placed.
A030	Maximum temperature in “temperature 1 probe”, used to monitor the buffer tank.	• Air in the circuit. • Little dissipation of the energy generated. • Too heavily used. • Shortcut in NTC.
A031	Minimum temperature in “temperature 2 probe”, used to monitor the buffer tank.	• Installation of boiler badly measured. • Boiler working to low levels of power. • Disconnected NTC. • NTC badly placed.
A032	Maximum temperature in “temperature 2 probe”, used to monitor the buffer tank.	• Air in the circuit. • Little dissipation of the energy generated. • Too heavily used. • Shortcut in NTC.
A033	Burning pot open during cleaning phase.	Burning pot base poorly closed. • Sensor dirty or broken. • Engine broken. • Cable or connector disconnected
A034	Burning pot open during hardware test.	• Open or badly closed basket base. • Sensor dirty or broken. • Engine broken. • Cable or connector disconnected.
A035	Burning pot open during operation.	• Open or badly closed burning pot base. • Sensor dirty or broken. • Engine broken. • Wiring or connector disconnected or loose.
A036	Ashtray drawer open during hardware test.	• Full ashtray drawer, perform maintenance. • Defective sensor. • Defective Periphery. • Wiring or connector disconnected or loose.
A037	Ashtray drawer open during operation.	• Ashtray drawer full, perform maintenance. • Defective sensor. • Defective Periphery. • Wiring or connector disconnected or loose.
A038	Ashtray drawer open during operation (machine off).	• Full ashtray drawer, perform maintenance. • Defective sensor. • Defective Periphery. • Wiring or connector disconnected or loose.

EN

A039	Burning pot cleaning failure. Sensors do not detect opening and closing of the burning pot's lid after 3 cleaning attempts.	•Doors or ash drawer cover badly closed. •Burn pot base open or not properly closed. •Sensor damaged. •Wiring or connector disconnected or loose. •Periphery damaged. •Engine damaged.
A040 A045	MODBUS RS485 communication error between the CPU and its environment.	•Disconnected cable. •Broken cable, replace with a new one.
A041	Zoning Periphery 2	•Zoning Failure 2. •MODBUS cable failure
A042	Zoning periphery 3	•Zoning fault 3. •MODBUS cable failure
A051	Pneumatic silo control without pellets.	•External silo has no pellets. •Pipeline. •Open pneumatic silo lid.
A052 A053	Hopper silo 1 sensor without pellet.	•Sensor defective or badly calibrated. •Without pellet. •Conveyor screw of external silo stuck.
A054	Silo control 3 sensors.	•One of the sensors damaged. •Without pellet.
A055	Burning pot cleaning.	•Burning pot performing configured cleaning. •Burning pot cleaning carried out and awaiting demand.
A099	Lack of pellets, impossible to reach the minimum temperature for gas exhaustion (80 °C).	•Filling the hopper. •Stopped gear motor. •The safety thermostat has tripped.
A101	Maximun flow temperature in zone 1.	•Air in the circuit. •Little dissipation of the energy generated. •Too heavily used. •Shortcut in NTC.
A102	Maximun flow temperature in zone 2.	
A103	Maximun flow temperature in zone 3.	
A104	Minimum flow temperature in zone 1.	•Installation of boiler badly measured. •Boiler working to low levels of power. •Disconnected NTC. •NTC badly placed.
A105	Minimum flow temperature in zone 2.	
A106	Minimum flow temperature in zone 3.	
A107	Maximun room temperature in zone 1.	•Too much temperature in the room. •Disabling the room sensor. •Increasing operating temperature.
A108	Maximun room temperature in zone 2.	
A109	Maximun room temperature in zone 3.	
A110	Minimum room temperature in zone 1.	•Low temperature in the room. •Disabling the room sensor. •Lowering operating temperature.
A111	Minimum room temperature in zone 2.	
A112	Minimum room temperature in zone 3.	
A120	MODBUS RS485 communication error between the CPU and its environment. Zone 1	•Disconnected cable. •Broken cable, replace with a new one.
A121	THT1 does not communicate.	•Review configuration. •Check zone THT connections.
A122	THT2 does not communicate.	
A123	THT3 does not communicate.	

6.1. RESET ALARM.

The switching off process triggered by an alarm depends on the machine's previous state, its configuration and on a series of external factors. Once the alarm process has ended, the unit can be rebooted after having revised the alarm table and taken the necessary measures.

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PLEASE KEEP THIS INSTRUCTIONS FOR FUTURE CONSULTATION.

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