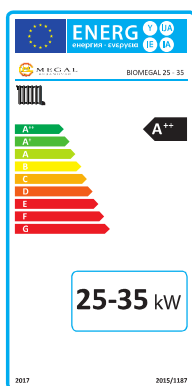




# MEGAL

A.D. BUJANOVAC

## Pellet boiler - Biomegal 25, 35kW



## INSTALLATION, USE AND MAINTENANCE MANUAL

The instruction manual is an indispensable part of the product



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## INTRODUCTION

Please read this manual carefully before using the product.

MEGAL's products are manufactured and tested in accordance with safety standards and current European directives.

The purpose of this manual is to explain the use and maintenance of the product for the owner and installers.

If you have any doubts about the content or any questions, please contact an authorized person service.

## PURPOSE OF MANUAL

The purpose of this manual is to enable the user to take all possible measures and preparation equipment and materials to ensure the safe and proper use of the product.

## 1. IMPORTANT RECOMMENDATIONS

Installation must be carried out by trained personnel or technical support by the manufacturer, giving full responsibility for the final assembly and subsequent smooth operation of the installed product. It is also necessary to take into account all national, regional, provincial and municipal the laws of the country where the product is installed.

The manufacturer will bear no responsibility for disregard for these precautions.

- 1. Electrical connections:** It is recommended that authorized personnel, after each operation carried out at product, pay special attention to electrical connections, especially as far as non-protected parts conductors, which, for whatever reason, must not exit the terminal, avoiding possible contact with cables.
- 2. Types of use:** The boiler should only be used for the purpose for which it was designed.
- 3. Manufacturer's responsibility:** The manufacturer assumes no responsibility for damage caused by incorrect installation, improper use or maintenance.
- 4. Product integrity check:** After unpacking, check the integrity and completeness of the contents. In case of irregularities, contact the seller where the product was purchased.
- 5. Electrical Components:** All electrical components that make up a product, in order to look guarantee proper operation, should be replaced only with original parts only and only from a competent service provider.
- 6. Maintenance:** Monthly and daily maintenance of the product must be performed by the user at least once annually, planning it in advance, only from specialized staff or / and from the technical department of the manufacturer.

## 2. SECURITY

### For security reasons, remember:

- It is forbidden to use the boiler by persons (including children) without any experience or experience reduced physical or mental capacity, unless supervised and managed by persons responsible for their safety.
- It is forbidden to touch the boiler when you are barefoot or with wet body parts.
- It is forbidden to change protective equipment or adjust it without permission or instruction of the manufacturer.
- It is forbidden to pull, cut or twist electrical cables that protrude from the boiler even if it is unplugged.
- We recommend that you place the power cord where it will not come in contact with hot parts of the boiler.
- The power cord should be available after installation.
- Do not close or reduce the size of the ventilation openings at the installation site, as they are necessary for proper combustion.
- Do not leave packaging items near children.
- **During normal product operation, all doors and covers must always be in place hermetically sealed.**
- While the device is running, it is warm when touched, especially on the outside, so we advise that use with caution.
- Make sure that there are no obstructions before turning on the device if it has been turned off drive for a long time.
- In case of especially bad weather (strong wind, frost) it is possible that security systems intervene, excluding it. If this occurs, contact a technician support, but in no case should you turn off the safety devices.
- In the event of a fire on a flue, fire suppression or search is required firefighter intervention.
- This appliance must not be used to burn garbage.
- Do not use flammable materials for burning.
- When filling with pellets, avoid contacting the bags with the boiler.

### 3. INSTALLATION

#### 3.1. INSTALLER'S LIABILITY

It is the responsibility of the authorized installer to inspect the flue gas and inlet air. His it is also a responsibility to ensure compliance with current specific local laws where the boiler is installed.

The use of the boiler should be carried out in accordance with the instructions obtained using this form, security standards and also in accordance with applicable special laws where installed boiler.

According to the standards defining the responsibilities of the installer, he must certify:

- Compatibility with the unit installation space, expressed as a minimum the volume of the installation according to the manufacturer's instructions.
- The instructions of the manufacturer of the boiler regarding the conditions of smoke removal systems (pipe smoke).
- The internal cross-section of the chimney, the material of which it is constructed, are identical cross-sectional dimensions, lack of obstacles inside the chimney.
- The height and vertical extension of the stack.
- Altitude at the point of installation.
- Availability and convenience of tight closure.
- Possibility of external air inlet openings and their size.
- Possibility of parallel use of system generator with pre-existing equipment.

If the results of all checks are positive, then the installation can continue.

Respect careful instructions given by the manufacturer as well as current safety standards for protection against of fire.

When the installation is complete, the entire system must be tested for at least 30-60 minutes to check all features.

Once the installation and test run are completed, the responsible installer should provide the following:

- Unit use and maintenance form, as supplied by the manufacturer (together with the unit)
- Written documentation that is required to comply with applicable standards.

#### 3.2. PERMITTED INSTALLATIONS

At the place where the boiler will be installed it is allowed to already exist or to have installations installed which do not represent any recession (pressure difference) in space relative to the opposite middle.

### 3.3. UNAUTHORIZED INSTALLATIONS

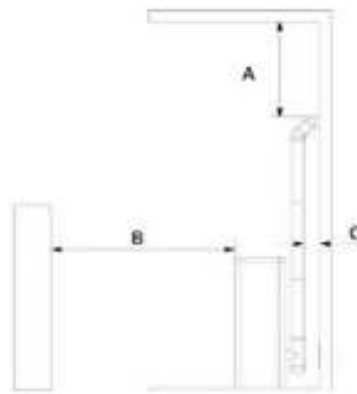
The place where the boiler will be installed is not allowed to exist or be installed:

- Respirator
- Ventilation ducts with suction gas
- In the event that these devices are located on the premises adjacent to the place where the installation was installed, parallel use of the boiler is prohibited, as there is a danger that one of the two locations falls into recession.
- The room where the boiler is installed must be free of moisture due to electrical components installation in the boiler.

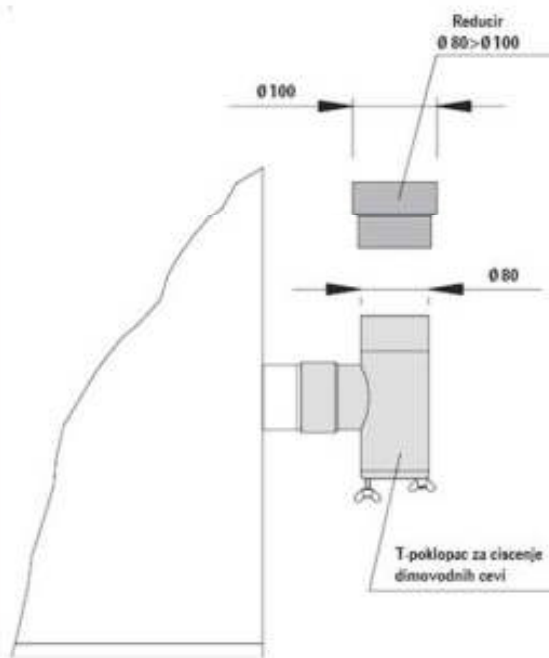
### 3.4. CHIMNEY

- Non-combustible materials suitable for use must be used to assemble the chimney withstand combustion products and their possible condensation.
- It is forbidden to use metal flexible pipes and fiber-cement for connecting chimneys boiler.
- The chimney must not pass through rooms where it is forbidden to place the appliance tanning.
- The installation of the chimney should be done in such a way as to ensure proper working conditions, yes condensate formation conditions are reduced and their input to the appliance is avoided.
- Horizontal sections should be avoided as far as possible (limit up to 3 meters allowed).
- It is recommended that the chimney comprises a chamber for the collection of solid or condensate materials, which should be located below the smoke outlet so that it can be easily opened, inspected and cleaned.
- It is forbidden to place even large dimensions inside the flue pipes, other air or smoke pipes.
- It must be sufficiently and properly spaced from other flammable materials only If there is an insulating compound or adequate insulation.

INDEX	Flammable material	Non-flammable material
A	200 mm	100 mm
B	1500 mm	750 mm



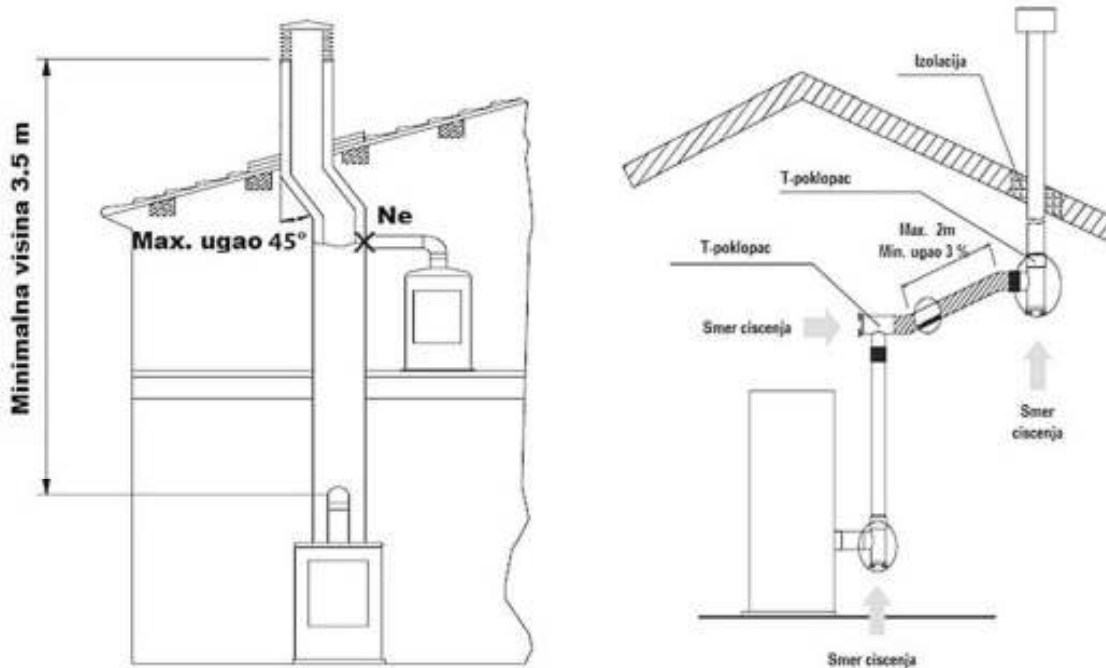
C	200 mm	100 mm
---	--------	--------



- The chimney must only be connected to one appliance.

The entire Smoking System **CAN NOT** be connected:

- Chimney to which other sources of smoke are connected (stoves, fireplaces, etc.)
- With exhaust air systems



### 3.5. CHIMNEY TOP

The completion of the chimney must meet the following conditions:

That its inner cross section is equal to that of the chimney.

That its usable cross section of the output is not less than twice the value of the dimension inside chimneys.

To be constructed in such a way as to prevent the penetration of rain, snow, or any foreign bodies and, even in the case of wind of any direction and strength, should guarantee discharge of combustion products.

It must be arranged in such a way as to ensure the proper arrangement and dissolution of the products combustion and necessarily out of the regression position, where otherwise the creation of the reverse is favored pressure (smoke recovery), and these are areas of varying sizes and configurations depending on from the slope angle of the chimney cover.

The end of the chimney must be free of any mechanical suction means.

### 3.6. INSULATIONS, SUBSTANCES AND SAFETY RECOMMENDATIONS

The substrates, regardless of the material of which they are made, must be one self-supporting construction in relation to the heating system and should not be in contact with it. Beams and finishes of wood or other combustible materials must be put out the thermal radiation of the boiler or to be sufficiently insulated. In the event that there are lids above the boiler that are flammable or heat sensitive, they should be flushed protective barrier with insulating or non-flammable material

Elements of combustible material such as wooden furniture, curtains, etc. that are directly exposed to the fire must be placed at a safe distance. Installation of the boiler must guarantee the unobstructed access to clean the unit itself, and flue gas outlet pipes.

### 3.7. NATIONAL, REGIONAL, PROVINCIAL AND MUNICIPAL REGULATIONS

It is also necessary to keep in mind all national, regional, provincial and municipal laws and the regulations of the country where the product is installed.

## 4. PELLET



### ATTENTION!

**USE OF PELLET WITHOUT SPECIFICATIONS NOT IN COMPLETE WITH STANDARDS AS WELL AS THE COMBUSTION OF OTHERS MATERIALS, DESTROY THE FEATURES OF YOUR PRODUCT AND MIGHT CANCEL THE GUARANTEE AND ATTACHED RESPONSIBILITY MANUFACTURERS.**

### 4.1. PELLET QUALITY

The pellet boiler is designed to use compressed wood - pellets . Because there are big number of products of this type, it is important that you choose a high standard pellet. He has established himself in the world one product model of this fuel. Make sure you use good quality pellets that are compact and compact some dust. Ask your dealer for the appropriate pellet, whose diameter should be 6mm and length about 25mm. The proper functioning of the pellet boiler depends directly on the type and quality of the pellets used, and the heat generated from different types of products can have different degrees efficiency. We recommend a pellet with the specifications ÖNORM M1735, DIN plus kao and DIN 51731 .

**The manufacturer assumes no liability in the in cases where an inadequate pellet is used quality of threads for the consequences of failure of work boilers that can cause such pellets .**



**To ensure smooth functioning, you must:**

**Avoid** using pellets with dimensions different from those provided of the manufacturer.

**Avoid** pellets containing shavings, bark, corn, resin, or any chemical, (additives, adhesives, etc.).

**Avoid** use of wet pellets.

AVOID pellets that leave residues other than ashes after combustion.

**The use of unsuitable pellets causes:**

- Clogging of burners and chimneys.
- Increased fuel consumption.
- Efficiency reduction.
- Unsecured device operation.
- Excessive dirt on the glass.
- Unburned debris and heavy ash.

#### 4.2. PELLET STORAGE

The pellet should be stored in a dry and warm place. Essentially, a cool and moist pellet (by temperature below 10°C) reduces the thermal energy of the fuel and requires additional cleaning of the boiler.

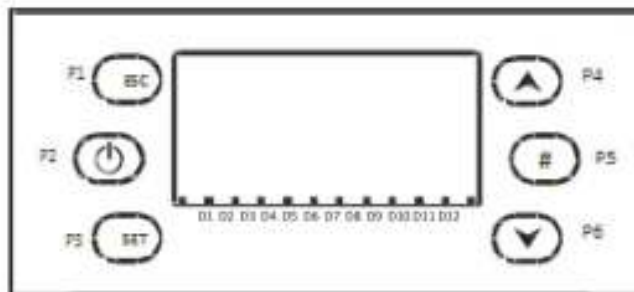
**PELLET SHOULD NOT BE STORED NEAR THE BOILER.**

Keep it at least 0.5m away from the boiler.

#### 4.3. PELLET FILLING

- Caution when loading pellets so as not to break.
- Avoid contact with the boiler body pellets due to the heat.
- Do not use dust or sawdust as this may block the supply system.
- The pellet tank lid must always remain closed and only open when inserted pellets.

### 5. PRODUCT FUNCTION



- **Buttons**

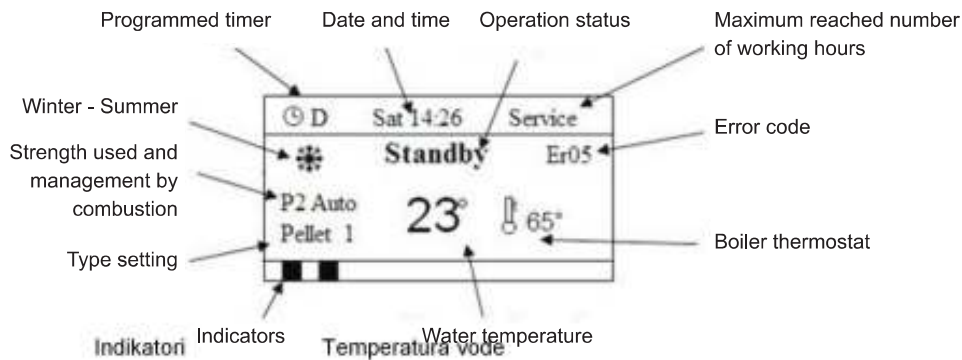
Function	Description	Button
<b>(On/Off)</b>	Turning the boiler on and off by pressing the button for 3 seconds to the sound signal	<b>P2</b>
<b>Unblock</b>	Unlock the system by pressing the key for 3 seconds to beep	
<b>Modify Menu Values</b>	Mode for changing parameter values	<b>P4</b> <b>P6</b>
<b>Run on Menu and Submenu</b>	Launch menus and submenus	
<b>Visualizations</b>	Entering and starting the value display menu	
<b>Esc</b>	Exit function	<b>P1</b>
<b>Menu</b>	Menu entry or submenu function	<b>P3</b>
<b>Modify</b>	Enter menu change mode	
<b>Set</b>	Save the data	
<b>Reset System Maintenance 2Function</b>	Reset timer notifying "clean up" (switches on after 500 hours of boiler operation)	<b>P5</b>

· Indicators (LEDs)

Function	Description	Button
<b>Heating Resistance</b>	Indicator lights: Heater on	<b>D1</b>
<b>Auger</b>	Indicator lights: The screwdriver is working	<b>D2</b>
<b>Pump</b>	Indicator lights: Pump on	<b>D3</b>
<b>Valve</b>	Indicator lights: Valve ON (optional)	<b>D4</b>
<b>Output V2</b>	Indicator lights: V2 output (smoke fan) on	<b>D5</b>
<b>Output Aux2</b>	Indicator lights: Aux2 output switched on (optional)	<b>D6</b>
<b>Output Aux3</b>	Indicator lights: Aux3 output switched on (optional)	<b>D7</b>
<b>Pellet Level</b>	Indicator lights: Lack of pellets (optional)	<b>D10</b>
<b>External Thermostat</b>	Indicator lights: Open contact - Thermostat off	<b>D11</b>
<b>Flow switch</b>	Indicator lights: DHW consumption (optional)	<b>D12</b>

· Display

## - Main screen display



## - Parameter head data display

Date and time, timer programmed (D- Daily , W- Weekly , We- Week-End - Weekend), power, type setting, operating status, fault code, boiler thermostat, water temperature.

## - Work status

Check Up - Checking, Ignition, Stabilization, Modulation, Standby, Safety Extinguishing - Shut Down, RecoverIgnition - Block Ignition, Block - Off .

## - REMOVE ERROR MESSAGE FROM SCREEN

- find and eliminate the cause or causes that caused the security device to intervene
- wait until the lock message is displayed
- press the P2 key for a few seconds until the error message disappears
- restart the boiler by pressing P2

## - Errors

All errors result in blocking the status of the work except Er04 and Er05, which are in Wood mode the result of the security state.

<b>Er01</b>	High water temperature. At temperature over 100°C safety thermostat is included	<b>Overheating</b> - Wait until the water temperature drops and the system locks - Unblock the water safety thermostat - Press P2 and hold - Restart the system
<b>Er02</b>	Chimney without draft. There is a presostat (subpressure) activated	<b>Low draft</b> Chimney deflection is inadequate or the defect is defective. - Clean the chimney or replace the sump.
<b>Er03</b>	Extinguishing when temperature flue gas outlet drops below set values (70°C)	<b>Low flue gas outlet temperature</b> - The system ran out of fuel. Fill the tank with pellets. - The pellet is not properly transported to the firebox. Screw conveyor blocked due to dust or other obstacles. Clean the dispenser.

<b>Er04</b>	Extinguishing when temperature water yarns set value (90°C)	<b>Water overheating</b> - Wait for the system to lock - Press P2 and hold - Restart the system.
<b>Er05</b>	Turn off when out the temperature exceeds the set point value (280°C)	<b>High temperature exhaust fumes</b> - Wait for the system to lock - Perform monthly maintenance - cleaning - Press P2 and hold - Restart the system.
<b>Er07</b>	Encoder error. He appears in the case lack of encoder	<b>Encoder problem</b> - The control panel does not communicate with the fan encoder flue gas outlet - The encoder must be cleaned - The encoder is broken - The flue exhaust fan is defective.
<b>Er08</b>	Encoder error. Appears in the event of a problem speed settings per minute of fan	
<b>Er09</b>	Low water pressure	
<b>Er10</b>	High water pressure	
<b>Er11</b>	Real time clock error	- Wait for the system to lock - Press P2 and hold - Restart the system.
<b>Er12</b>	Shutting down because of unsuccessful ignition	<b>Ignition failed</b> - Burner cleaning required - The burner is not installed correctly - The power of the ignition heater is poor - The ignition heater is defective - High moisture content of pellets - The pellet tank is empty - The pellet temperature is too low - The ignition heater tube is blocked with ash Clean the burner, press P2 and hold, restart the system
<b>Er15</b>	Absence of voltage	<b>Power outage</b> - Clean the burner - Wait for the system to lock - Press P2 and hold - Restart the system.
<b>Er17</b>	Flow controller error	
<b>Er18</b>	Left without pellets	
<b>Er34</b>	The vacuum below minimum limits	<b>Low vacuum in the firebox</b> - The fire door is open - The fire door is not closed properly - System and chimney cleaning required (monthly maintenance) - Low chimney draft (below 10 Pa) - The flue exhaust fan is defective - Combustion fan power is high Call service

<b>Er35</b>	The vacuum above maximum limits	High vacuum in the firebox Call service
<b>Er39</b>	Air flow regulator sensor	The vacuum sensor is defective Call service
<b>Er41</b>	Minimum air flow in Check Up was not reached	
<b>Er42</b>	Maximum reached air flow	

- **Other messages**

<b>Sond</b>	View status data temperature probes. Message shown in Check-Up indicates that temperature of one or more probes equal to the minimum value (0°C) or maximum (depending on from the probe under consideration). Check that the probes are not open (0°C) or short junction (maximum value at temperature scale).	Check the water probe, room thermostat probe and flue gas exhaust sensors
<b>Service</b>	This message informs that there are scheduled hours of service to service reach. Service is required.	The system needs annual service (cleaning). - Perform annual service. - Reset the timer (System menu > Timers > Reset all timers - Press P2 and hold until the service message displayed disappears.
<b>Clean</b>	This message informs that there are scheduled working hours until cleaning reached (500 hours). Required is boiler cleaning.	- Clean the firebox - Press P5 and hold until the cleaning message displayed disappears.
<b>Ignition Block</b>	This message appears if is a system disconnected from connecting device during ignition status (after Preload - previous hits): The system will stop with work only when he goes to Run mode - Working mode	- Restart the system
<b>Er20</b>	Network sensor open with system in the Pellet modality	
<b>Port</b>	High fuel temperature. The fuel thermostat is on.	Fuel overheating - Perform monthly cleaning - Unlock the fuel safety thermostat by pressing his button - Restart the system - If this error persists, call an authorized representative seller.

<b>Er06</b>	Pellet thermostat opened.	
<b>Link Error</b>	Lack of communication between the system board and keyboards	- Make sure that the cable is pulled out of the LCD or out dashboards.

#### · Display values

By pressing the P4 or P6 key

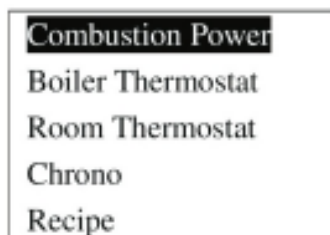
L3 Pump P1 on	Indicator number and pump status
L4 Valve / pump OFF P2	Number of status indicators of the valve
L5 Off The output is not operational	Indicator number and output status V2
L6 Safety valve off	Indicator number and Aux2 output status
L7 Pellet engine off	Indicator number and Aux 3 output status
Exhaust Temp: 103	Flue gas temperature [°]
Boiler Temp: 55	Boiler temperature [°]
Buffer Temp: 52	Buffer Temperature [°] (Option)
Room Temp: 21	Room temperature [°] (Oven only)
Pressure: 1548	Pressure [mbar] (Option)
Air flow: 580	Air Flow [cm / s] (Optional)
Vacuum: 280	Vacuum [Pa]
Fan speed: 1850	Fan Speed [RPM]
Auger: 30	Worm gear speed [%] or worm operating time [s]
Product Code 457-00.00	Product key
FSYSD01000123.0.0	Dashboard software, number and version
PSYSF01000184.0.0	Keyboard software, number and version

## 6. MENU

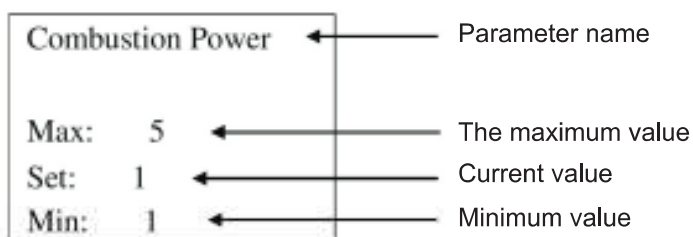
The dashboard menu consists of the User menu and the Technical Menu (system menu) by which the manufacturer can change operating parameters, test outputs, check system history.

#### Search menu :

Press the P3 key to enter the User menu.

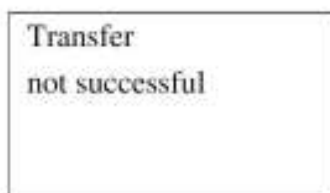


Using the P4 and P6 keys it is possible to select the desired Menu or Submenu.



To increase or decrease the value, press the P4 or P6 keys. To save new value press the P3 key. To cancel any change and return the old parameter values press the P1 key.

If the parameter value is changed, the new value is sent to the control panel. If the transmission fails the following message will appear:



in this case, change the parameter again.

### 6.1. KORISNICKI MENI (User Menu)

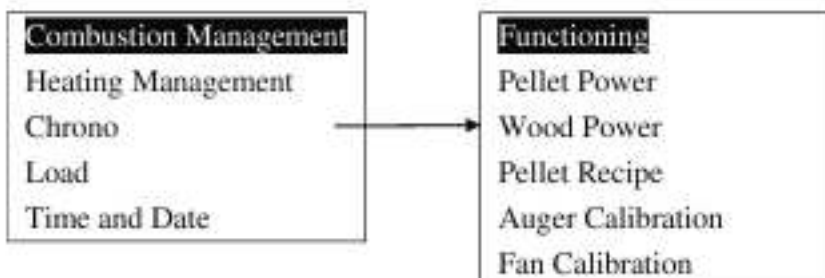
MENI	
Combustion Management	Functioning Funkcionisanje

Upravljanje sagorevanjem	<b>Pellet Power</b> Jačina rada na pelet
	<b>Wood Power</b> Jačina rada na drvo
	<b>Pellet Recipe</b> Tip peleta
	<b>Auger Calibration</b> Podešavanje puža
	<b>Fan Calibration</b> Podešavanje ventilatora
Heating Management Upravljanje zagrevanjem	<b>Boiler Thermostat</b> Termostat kotla
	<b>Buffer Thermostat</b> Termostat bufera
	<b>Room Thermostat</b> Termostat prostorije
	<b>Summer – Winter</b> Leto - Zima
	<b>Heating Power</b> Jačina rada zagrevanja
	<b>Remote Keyboard</b> Daljinski upravljač
<b>Chrono</b> Programiran tajmer	
<b>Load</b> Punjenje gorionika	
<b>Time and Date</b> Vreme i datum	
<b>Language</b> Jezik	
<b>Keyboard Menu</b> Meni displeja	
<b>System Menu</b> Sistemski meni	

### 6.1.1. MENI UPRAVLJANJA SAGOREVANJEM

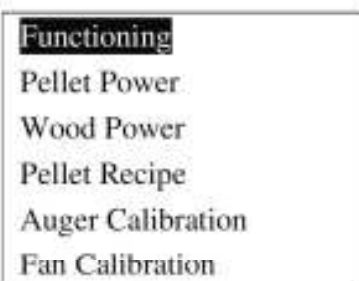
#### COMBUSTION MANAGEMENT MENU

This menu is used to change the combustion parameters. It contains the following submenus:



## FUNCTIONING

This menu is used to change the boiler function between Wood / Pellet / Combi functions



For Pellet stoves only the Pellet option is available.

## PELLET POWER

This menu allows you to set the combustion system in automatic or manual mode. If manual mode is set, the user can select the power (combustion power) between P1 and P6. If automatic mode is selected, the system sets the power automatically.

Combustion	Description
1 - 6	Manually selected output from 1 to 6
Auto	Automatic volume adjustment

## COMBUSTION RECIPE

This menu allows you to select combustion by pellet type in Pellet mode.

## AUGER CALIBRATION

Menu for changing the speed or running time of the worm gearbox. The system has 10 adjusters steps (0 is factory default). The tuning effect is only valid in Run Mode mode) and Modulation for the liquid pellet type. For each step the value is increased or

reduced by 3% of the setpoints in the Default Settings Menu by System Menu.

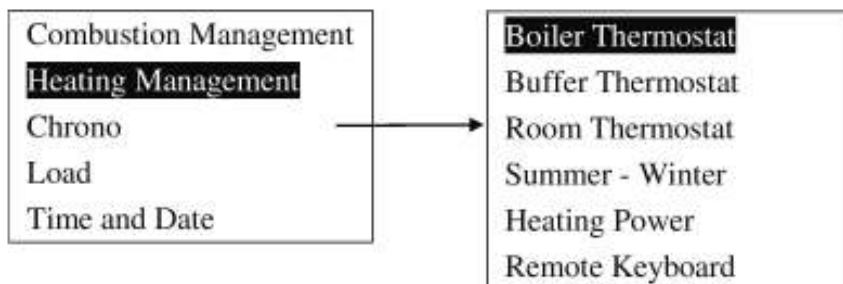
## FAN CALIBRATION

Combustion fan speed change menu. The system has 10 tuning steps (0 is factory default). The setting effect only applies in Run Mode and Modulation for the liquid pellet type. For each step, the value is increased or decreased by 5% of the set values in the Combustion Fan Menu for System Menu.

## 6.1.2. MENI UPRAVLJANJA ZAGREVANJEM

### HEATING MANAGEMENT MENU

reduced by 3% of the setpoints in the Default Settings Menu by System Menu.



## BOILER THERMOSTAT

Menu that allows you to change the boiler thermostat value. Programmable from minimum to maximum boiler thermostat values (30 to 80 [°C]).

## ROOM THERMOSTAT

Menu that allows you to change the room thermostat value (oven only).

## SUMMER - WINTER

A menu that allows you to change that the heating system works according to the season.  
 One of these symbols is displayed on the screen.  
 Summer - when we want to use the boiler as a hot water heater or  
 Winter when we want it we use for heating.

## HEATING POWER

This menu allows you to set the system warm-up function in automatic or manual mode (in which case it is possible for the user to select the heating mode).

Heating	Description
0	Heating fan off
1 - Workload set by the user	Manual heating output from 1 to user selection
Auto	The heating output set by the system

If the user selects an automatic mode, the heat output is proportional to the temperature exhaust.

## REMOTE KEYBOARD


A menu that allows you to set the room thermostat on the remote control.

## 6.1.3. MENI ZA PROGRAMIRANJE TAJMERA

### CHRONO MENU

Menu that allows programming of system on / off.

## CHRONO FUNCTION

Description	Button	Display
The current setting flashes		
Enter modification mode	P3	
Select the desired function	P4   P6	
Rejecting any setting and resetting	P1	
Save the new setting	P3	
Exit the menu	P1	

## CHRONO PROGRAM

SELECTION OF THE PROGRAM	Button	Display
The current setting flashes		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>Daily</b>  Weekly  Week-End </div>
Enter the submenu	<b>P3</b>	
Select the desired function	<b>P4   P6</b>	
Exit the menu	<b>P1</b>	

The three types of programs are stored separately: for example, if a Daily program is set, other programs do not change. After creating the program, you need to select the desired mode for switching the system on / off by Chrono (timer).

Selecting a program type:

**Daily:** Selecting the day of the week and programming the time for switching on and off system. There are 3 terms for each day.

<div><div>Daily</div><div>Weekly</div><div>Week-End</div></div>	<div><div>Monday</div><div>Tuesday</div><div>Wednesday</div><div>Thursday</div><div>Friday</div></div>	<div><div>Monday</div><div>ON</div><div>09:30</div><div>00:00</div><div>00:00</div></div> <div><div>OFF</div><div>11:15 V</div><div>00:00</div><div>00:00</div></div>
---	--	---

Midnight Program : Set Off Time one day at 11:59 pm and Ignition Time for the next day at 00:00.

**Weekly:** programming time for power on and off. systems (there are three terms)

<div style="border: 1px solid black; padding: 5px;"> Daily  <b>Weekly</b>  Week-End </div>	<div style="border: 1px solid black; padding: 5px;"> <b>Mon-Sun</b>  <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">ON</td><td style="width: 50%;">OFF</td></tr> <tr> <td>08:30</td><td>13:15 V</td></tr> <tr> <td>20:00</td><td>22:00</td></tr> <tr> <td>00:00</td><td>00:00</td></tr> </table> </div>	ON	OFF	08:30	13:15 V	20:00	22:00	00:00	00:00
ON	OFF								
08:30	13:15 V								
20:00	22:00								
00:00	00:00								

**Weekend:** Choose between Monday-Friday and Saturday-Sunday. There are three terms for each period.

Daily	Mon-Fri	Mon-Fri
Weekly	Sat-Sun	ON
Week-End		OFF
		10:00
		12:15
		14:00
		16:00
		00:00
		00:00

Timer Programming (CHRONO PROGRAM)	Buttons
After selecting the desired program, select the programming time	P4 or P6
Change mode entry (selected time flashes)	P3
Weather change	P4 or P6
Saving programs	P3
Switch on the program ( V appears ) or switch off the program ( V disappears)	P5
Exit	P1

#### 6.1.4. MENI ZA PUNJENJE GORIONIKA PELETOM

##### LOAD MENU

This menu allows the pellet burner to be filled by manually starting the worm gearbox. The system must be in the OFF state to enable charging. When the gearbox is started starts manually, the flue gas fan is on.

#### 6.1.5. MENI ZA DATUM I VREME

## TIME AND DATE MENU

This menu allows you to set the time and date. Press P4 and P6 to select hours, minutes, year, month and day. Pressing the P3 key enters editing, the P4 and P6 keys are for change values. Pressing the P3 key saves the value and the P1 key exits.

### 6.1.6. MENI ZA IZBOR JEZIKA

## LANGUAGE SELECTION MENU

This menu allows you to change the language on the LCD screen. The highlighted language is currently set. The language to choose from is Spanish, French, German, English, Italian and Greek. The factory setting is English or Greek.

### 6.2. MENI DISPLEJA

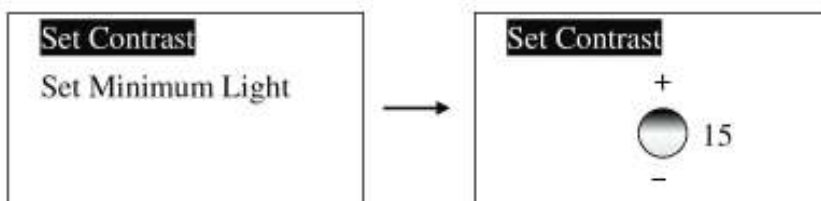
## KEYBOARD MENU

MENU	DESCRIPTION
Contrast Adjustment ( <b>Set Contrast</b> )	LCD Contrast Adjustment Menu
Adjusting Brightness ( <b>Set Minimum Light</b> )	Setup menu on bright LCD screen

### 6.2.1. MENI ZA PODEŠAVANJE KONTRASTA

## SET CONTRAST

This menu allows you to change the contrast on the display.

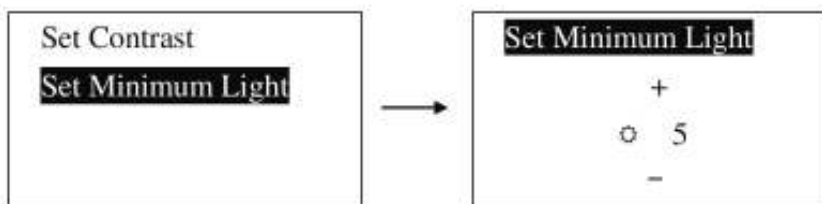


Pressing the P4 and P6 keys increases or decreases the contrast; P3 key to save and exit, P1 key output without saving.

### 6.2.2. MENI ZA PODEŠAVANJE OSVETLJENJA

## SET MINIMUM LIGHT

This menu allows you to change the brightness of the display by pressing any key.

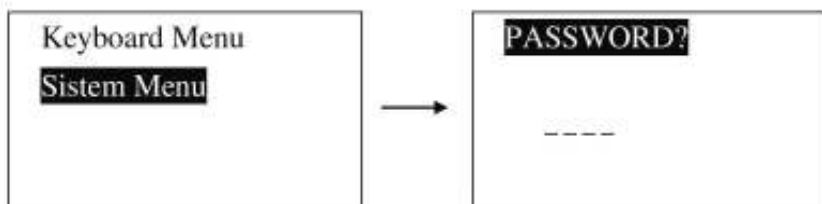


Pressing P4 and P6 increases or decreases the illumination (minimum 0, maximum 20); P3 key to save and exit, P1 key to save without memory.

### 6.3. SISTEMSKI MENI

#### TEHNIICAL MENU

This menu allows you to enter the Technical menu. Access is password protected, (which is known repairers).



Pressing the P3 key enters the setting mode, the P4 and P6 keys to increase or reducing the selected value. Pressing the P3 key saves the value and goes to the next. Pressing P1 cancels the value or exits the Menu.

If the password is correct, the first menu screen will appear.

MENU	
Auger	Duration of periodic switching on of the worm conveyor
Auger Speed	Worm gear speed
Exhaust Fan	Exhaust fan speed
Secondary Exhaust Fan	Secondary exhaust fan speed
Heating Fan	Building fan speed
Thermostat	Thermostat
Extinguishing Thermostats	Extinguisher thermostat
Timer	Timer
Default Settings	Initial setup
Enables	Possibility
Air Flow Sensor	Air flow sensor
Vacuum Sensor	Vacuum sensor
Delta	Delta

Pressure Sensor	Pressure sensor
Counters	Counters
Output's Test	Output test
Restore Default Values	Restore default values

## 7. OPETRATING CONDITIONS

### Work status

Off, Check Up, Ignition, Stabilization, Recover Ignition, Run Mode, Modulation, Standby (Extinguishing or Maintenance), Standby (Extinguishing or Maintenance), Safety - Security, Extinguishing, Block.

## PELLET MODALITY

### 7.1. Off

Faza	Tajmer	Regulacioni termostati (Control Thermostats)	Sagorevanje (Combustion)		GREJAČ (Heating)
			Ventilator (Fan)	Pužni prenosnik (Auger)	
		exit gas temperature > you set the temp. thermostat Th01 Th01 = 60 [°C] (Min5, Max900)	OFF	OFF	OFF
		water temperature > set temp.sig. Th25 thermostat Th25 = 85 [°C] (Min80, Max99)			

### 7.2. Check Up

Faza	Tajmer	Regulacioni termostati (Control Thermostats)	Sagorevanje (Combustion)		GREJAČ (Heating)
			Ventilator (Fan)	Pužni prenosnik (Auger)	
	T01 default 20 [s]	exit gas temperature > you set the temp. Th09 thermostat Th09 = 120 [°C] (Min5, Max900) and the old regime was Pellet	Max speed	OFF	OFF
		exit gas temperature > you set the temp. thermostat Th01 Th01 = 60 [°C] (Min5, Max900) and the old regime was Wood or Combi			

The regulation at the end of T01 time (after the set T01 = 20 [s]): starts a Ignition.

### 7.3. Ignition

Faza	Tajmer	Regulacioni termostati (Control Thermostats)	Sagorevanje(Combustion)		GREJAČ (Heating)
			Ventilator (Fan)	Pužni prenosnik (Auger)	
<b>Preheating</b>	<b>T02</b> default 120 [s]	exit gas temperature > you set the temp. Th09 thermostat Th09 = 120 [°C] (Min5, Max900)	▶ <b>Run mode</b>	<b>OFF</b>	
<b>Preload</b>	<b>T03</b> default 110[s]	exit gas temperature > you set the temp. Th09 thermostat Th09 = 120 [°C] (Min5, Max900)	▶ <b>Run mode</b>	always <b>ON</b>	<b>ON</b>
<b>Fixed</b>	<b>T04</b> default 180 [s]	exit gas temperature > you set the temp. Th09 thermostat Th09 = 120 [°C] (Min5, Max900)	▶ <b>Run mode</b>	<b>C01</b> (C01 = 0.6 [s]) (Min0, Max60) time work snails in the period	
<b>Variable</b>	<b>T05</b> default 800 [s]	exit gas temperature > you set the temp. Th09 thermostat Th09 = 120 [°C] (Min5, Max900)	▶ <b>Run mode</b>	<b>Ignition 1: C01</b> given (C01 = 0.6 [s])	OFF If the temperature output gases > given temp. Th02 thermostat Th02 = 70 [°C] (Min5, Max900) in the second case ON
		exit gas temperature > you set the temp. Th06 thermostat Th06 = 62 [°C] (Min5, Max900) exit gas temperature > minimum values ▶▶remembered during phase + D41 (D41 = 5 [°C])	▶ <b>Stabilization</b>	<b>Ignition 2: C10</b> given (C10 = 0.5 [s])	

Regulation at the end of T05 time (after the given T05 = 800 [s]): if the output gas temperature is > Th06 (Th06 = 62 [°C]), the system goes to Stabilization , if the temperature is output gas <Th06 system tries again Variable Phase ignition ; in the event of a completed number of attempts, the system goes to Fire-extinguishing with the message Er12

#### 7.4. Stabilization

Faza	Tajmer	Regulacioni termostati(Control Thermostats)	Sagorevanje(Combustion) Ventilator(Fan)	Pužni prenosnik(Auger)	GREJAČ(Heating)
	<b>T06</b> default 600 [s]	exit gas temperature > you set the temp. Th09 thermostat Th09 = 120 [°C] (Min5, Max900)	<b>U02</b> default (U02 = 75) Min0 [V] = 0 [RPM], Max230 [V] = 2800 [min -1]	<b>C02</b> given (C02 = 0.5 [s]) Min0, Max60)	OFF if the temperature output gases > given temp. Th02 thermostat Th02 = 70 [°C] (Min5, Max900) in the second case ON
Regulation at the end of T06 time (after the default T06 = 600 [s]): if the output gas temperature is > (Th06 + D01) (Th06 = 62 [°C], delta D01 = 5 [°C]) the system goes to Operating mode, if the output gas temperature is < (Th06 + D01) the system tries again Variable Phase Ignition ; if the number of attempts is completed, the system goes to Shutting down with the message Er12					

#### 7.5. Recover Ignition

The system goes to Ignition Recovery:  
after a power failure of 1 ÷ 50 minutes, when the system was in On mode and in Pellet mode.  
by pressing the ON / OFF button when the system is in Power Off mode and A10 = 0 (default A10 = 0)

Faza	Tajmer	Regulacioni termostati(Control Thermostats)	Sagorevanje(Combustion)		GREJAČ(Heating)
			Ventilator(Fan)	Pužni prenosnik(Auger)	
Wait	T13 default 120 [s]	exit gas temperature > you set the temp. thermostat Th01 Th01 = 65 [°C] (Min5, Max900)	P23  given (P23 = 75) Min0 [V] = 0 [RPM], Max230 [V] = 2800 [min -1 ]	OFF	OFF
Final Cleaning	T16 default 30 [s]	exit gas temperature > you set the temp. thermostat Th01 and T13 time completed	Max speed		

At the end of regulation time T16 (T16 after a preset = 30 [s]): the system goes into Check-Up

# 7.6. Run Mode

Faza	Tajmer	Regulacioni termostati (Control Thermostats)	Sagorevanje (Combustion)		GREJAČ (Heating)
			Ventilator (Fan)	Pužni prenosnik (Auger)	
	<b>T14</b> default 20 [s]	When the combustion reaches the finish. volume if: (Th03 = 66 [°C]) temp. exc. gas. < temp. Th03 or temp. exc. gas. < temp. quenching for the strength used	▶ starting timer T14 pre-quenching		
		water temp > boiler thermostat or temp. exc. gas. > temp. ts. Th07 (Th07 = 240 [°C]) or A32 = 1 and program. the running time has expired or temp. room > thermostat rooms and A01 = 1 or temp. rooms > ts. rooms at the remote and A52 = 1 (Default A32 = 1, A01 = 1, A52 = 0)	▶ goes to Modulation		
		temp. exc. gas. > temp. ts. Th08 (Th08 = 200 [°C]) or temp. water > temp. ts. Th25 (Th25 = 85 [°C])	▶ goes to Safety		
	<b>T22</b> default 10 [s]	temp. room > thermostat rooms and A01 = 2, 4 or temp. rooms > rooms at remote and A52 = 2, 4 or A32 = 2, 4 and program. work time expired or temp. buffers > buffers Th58 and P26 = 4 or temp. buffers > buffers Th58 and P26 = 2, 3 and Summer mode (Default A01 = 0, A52 = 0, A32 = 1, P26 = 1)	▶ goes to Standby at the end of T22 time		
			User Power	User Power	OFF
At the end of regulation time T14 (T14 after a preset = 20 [s]): the system goes into Shutdown (Extinguishing) with an error message Er03					
			Power 1 U03=65 Power 2 U04=67 Power 3 U05=69 Power 4 U06=71 Power 5 U07=75 Power 6 U08=77	Power 1 C03=0,8 Power 2 C04=1,3 Power 3 C05=1,8 Power 4 C06=2,3 Power 5 C07=2,7 Power 6 C08=3,0	

# 7.7. Modulation

Faza	Tajmer	Regulacioni termostati(Control Thermostats)	Sagorevanje(Combustion)		GREJAC(Heating)
			Ventilator(Fan)	Pužni prenosnik(Auger)	
	<b>T14</b> default 20 [s]	When the combustion reaches the finish. volume if: Th03 = 66 [°C]) temp. exc. gas. < temp. Th03 or temp. exc. gas. < temp. quenching for the strength used			
		temp. exc. gas. > temp. Th08 (Th08 = 200 [°C]) or temp. water > temp. Th25 (Th25 = 85 [°C])			
	<b>T22</b> default 10 [s]	water temp > (boiler + D23) (D23 = 3) and A13 = 1 and T43 = 0 or temp. room > thermostat rooms and A01 = 2, 4 or temp. rooms > rooms at remote and A52 = 2, 4 or A32 = 2, 4 and program . work time expired or temp. buffers > buffers Th58 and P26 = 4 or temp. buffers > ts. buffers Th58 and P26 = 2, 3 and Summer mode (Default A13 = 0, T43 = 60, A01 = 0, A52 = 0, A32 = 1, P26 = 1)	<b>U11</b> (U11=65) zadato (U11=65) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ]  ako je <b>A06=1</b> (zadato A06=1)  u ostalim slučajevima	<b>C11</b> zadato (C11=0,7 [s]) Min0, Max60  ako je <b>A06=1</b> (zadato A06=1)  u ostalim slučajevima	<b>OFF</b>
		water temp > boiler thermostat i temp. exc. gas. < temp. Th07 (Th07 = 240 [°C]) i A32 = 1 and program . the running time has expired and temp. room > thermostat premises and A01 = 1 temp. rooms > rooms at remote and A52 = 1 (Default A32 = 1, A01 = 0, A52 = 0)	<b>U03</b> (U03=65) zadato (U03=65) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ]	<b>C03</b> zadato (C03=0,8 [s]) Min0, Max60	
At the end of regulation time T14 (T14 after a preset = 20 [s]): the system goes into Shutdown (Extinguishing) with an error message Er03					

### 7.8. Stanje Pripravnosti (Standby)

By setting parameter A27 defines whether the boiler needs to Maintenance (Maintenance) or blowout (Extinguishing).

Faza	Tajmer	Regulacioni termostati (Control Thermostats)	Sagorevanje(Combustion)		GREJAČ (Heating)
			Ventilator (Fan)	Pužni prenosnik (Auger)	
(Extinguishing) (A27=0).					
Extinguishing	T57 500 [s]	Combustion quenching	U12 (zadato U12=65) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ]	OFF	OFF
	T58 30 [s]	At the end of T57 time if temp. exc. gas. < temp. Th28 (Th28 = 80 [°C])	Max speed		
Wait			OFF		
When the conditions which brought the system into standby mode (Standby) were not valid, starts a timer T11 (T11 = 10 [s]) (if A26 = 1 from the stage of waiting - Wait phase, if A26 = 0 for any which stages). In the end, the system goes into Provera (Check-Up). Default A26 = 1					
(Maintenance)(A27=1).					
Pause	T32 60 [s]	Combustion extinguishing during T32. Eventually starting Working stages	OFF	OFF	OFF
Work	T33 10 [s]	Combustion during T33. Finally the Pause phase starts	U12 (zadato U12=65) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ]	C12 zadato (C12=0,7 [s]) Min0, Max60	
When the conditions which brought the system into standby mode (Standby) were not valid, starts a timer T11 (T11 = 10 [s]). In the end, the system goes into Provera (Check-Up).					

At all stages if the flue gas temperature > set temperature is thermostat Th08 (Th08 = 300 [C]) or water temperature > set temperature is thermostat TH25 (Th25 = 85 [°C]) the system is in Safety . To reduce the oscillations between Standby Ignition Run Mode Standby, adjust room thermostat hysteresis (given Ih33 = 2) and boiler thermostat hysteresis (given Ih24 = 3). In any case, Standby lasts at least 10 seconds.

### 7.9. Safety

Faza	Tajmer	Regulacioni termostati(Control Thermostats)	Sagorevanje(Combustion)		GREJAČ(Heating)
			Ventilator(Fan)	Pužni prenosnik(Auger)	
<b>Safety from Standby</b>	<b>T15</b> 20 [s]	temp. exit gas. > temp. Th08 Th08 = 300 [°C] (Min5, Max900) or temp. water > temp. Th25 (Th25 = 85 [°C])	<b>P23</b> (P23=75) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ]	<b>OFF</b>	<b>OFF</b>
		temp. exit gas. < temp. Th08 Th08 = 300 [°C] (Min5, Max900) temp. water < temp. Th25 (Th25 = 85 [°C])			
<b>Safety from other States</b>	<b>T15</b> 20 [s]	temp. exit gas. > temp. Th08 Th08 = 300 [°C] (Min5, Max900) or temp. water > temp. Th25 (Th25 = 85 [°C])	<b>U11</b> ( U11=65) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ] if <b>A06=1</b> (A06=1) in other cases <b>U03</b> (U03=65) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ]	<b>C11</b> ( C11=0,7[s]) Min0. Max60 if <b>A06=1</b> ( A06=1) in other cases <b>C03</b> (C03=0,8 [s]) Min0. Max60	<b>OFF</b>
		temp. exit gas. < temp. Th08 Th08 = 300 [°C] (Min5, Max900) temp. water < temp. Th25 (Th25 = 85 [°C])			

The control at the end of T15 time (after the set T15 = 20 [s]): the system goes into Shutdown (Extinguishing) with message errors (error).

### 7.10. Extinguishing

Faza	Tajmer	Regulacioni termostati(Control Thermostats)	Sagorevanje(Combustion)		GREJAČ(Heating)
			Ventilator(Fan)	Pužni prenosnik(Auger)	
<b>Wait</b>	<b>T13</b> 120 [s]	exit gas temperature > you set the temp. thermostat Th01 Th01 = 65 [°C] (Min5, Max900)	<b>P23</b> (P23=75) Min0[V]=0[obr/min]. Max230[V]=2800[ $\text{min}^{-1}$ ]	<b>OFF</b>	<b>OFF</b>
<b>Final Cleaning</b>	<b>T16</b> 30 [s]	output gas temperature < you set the temp. thermostat Th01 and T13 time completed	<b>Max speed</b>		

The control at the end of T15 time (after the set T15 = 20 [s]): the system goes into Shutdown (Extinguishing) with message errors.

**7.11. Block**

Faza	Tajmer	Regulacioni termostati (Control Thermostats)	Sagorevanje (Combustion)		GREJAČ (Heating)
			Ventilator (Fan)	Pužni prenosnik (Auger)	
		exit gas temperature > you set the temp. thermostat Th01 Th01 = 65 [°C] (Min5, Max900)	<b>U11</b> ( U11=65) Min0[V]=0[obr/min], Max230[V]=2800[ $\text{min}^{-1}$ ] if <b>A06=1</b> (A06=1) in other cases <b>U03</b> (U03=65) Min0[V]=0[obr/min], Max230[V]=2800[ $\text{min}^{-1}$ ]	<b>OFF</b>	<b>OFF</b>
		output gas temperature < you set the temp. thermostat Th01 Th01 = 65 [°C] (Min5, Max900)	<b>OFF</b>		

## 8. OTHER FUNCTIONS

After the operating hours set by parameter T66 (default T66 = 0 [h]), the system notifies user to contact the service to check the proper functioning of the system. The display shows the message "Service" and the system goes into Block. It is necessary to unlock the system reset the counters.

After the operating hours set by parameter T67 (default T67 = 500 [h]), the system notifies the user to clean the boiler or stove. The display shows "Clean " and the system gives intermittent beep. Press the P5 key to interrupt the signal .

When the system is off during the Ignition phase (after the Preheat phase - Preheating phase) by an external device or by an internal timer, it really goes into Extinguishing when it enters Run Mode at the end of the Ignition. The display shows the "Block Ignition" message . If an error occurs, the system immediately goes to Extinguishing. If the P2 key is pressed it is possible to get the system in state immediately Extinguishing or Ignition.

In the event of a power failure, the system stores the most important operating data. With the voltage back up power supply, the system evaluates the stored data and: if the interruption lasted less than 60 [s], the system returns to its previous state if the system was able to On and the voltage cutoff is less than 50 [min] and greater than 60 [s], the system goes into Recover Ignition. In the case of a prolonged absence of supply voltage, the system goes to Block with an error message Er15 .

### **IMPORTANT!**

Use the Uninterruptible Power Supplies ( UPS) system to avoid a power failure problem electricity. Damage due to power failure or large fluctuations in the voltage supply are not covered guarantee.

## 9. SPECIFICATIONS

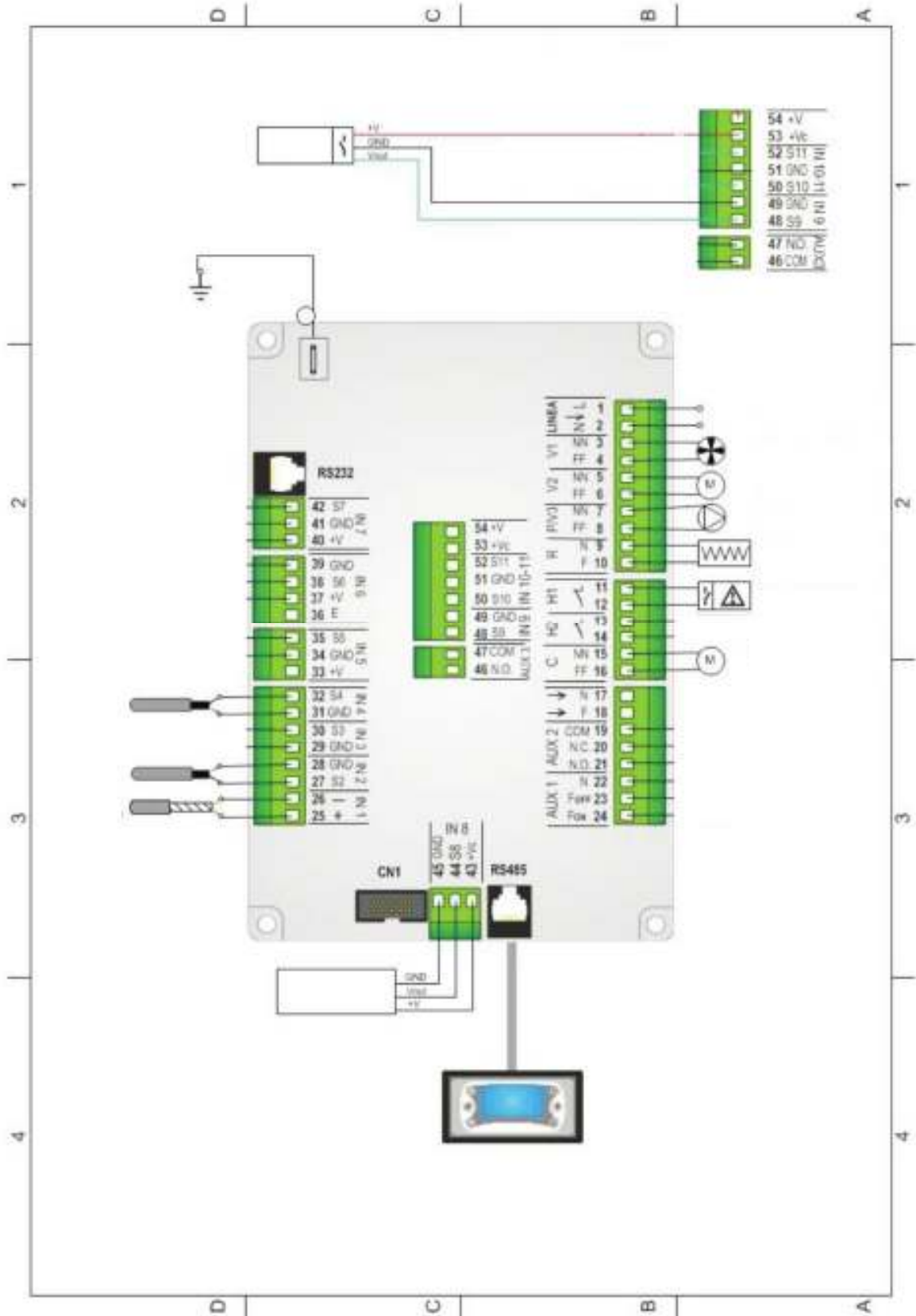
### 9.1.



PELLET BOILER TYPE - BIOMEGAL	25 KW	35 KW
MAXIMUM PERMITS PERMITTED PRESSURE:	3 [bar]	3 [bar]
DIMENSIONS:	1125 x 560 x 750 [mm]	1375 x 560 x 750 [mm]
SILOS CAPACITY:	59 [L], 45 [ kg]	91 [L], 70 [ kg]
WATER VOLUME:	55 [L]	75 [L]
CHIMNEY DISTANCE:	80 [mm]	100 [mm]
FUEL TYPE:	WOODEN PELLETT	WOODEN PELLETT
MAXIMUM EXTENT OF EXPLOITATION:	92[%]	93[%]

FUEL CONSUMPTION:	1 – 5,5 [kg/h]	1,2 – 7,8 [kg/h]
TOTAL WEIGHT:	225 [kg]	270 [kg]

## 9.2.



## 10. MAINTENANCE

According to the applicable laws on the safety of electrical appliances, for all procedures installation, maintenance or repair of a boiler that requires access to the inside of the boiler or chamber exhaust, you must contact a service center or qualified personnel. The scheduled regular maintenance actions are considered mandatory in order to ensure smooth operation efficient boiler operation.

If these actions are not performed with the expected frequency, they may occur there is a considerable decline in efficiency. The manufacturer is not responsible for any failure or failure due to poor performance boiler / furnace maintenance. All maintenance work (cleaning, possible replacements, etc.) must be done when it is the device is off, cold and out of power.

Do not use materials that could scratch or damage the glass.

Scratches I can extend and cause the glass to break. One damp cloth is sufficient. In addition, do not use non-abrasive cleaning agents. The frequency of these works depends on the regular use of the boiler and the quality of the pellets that you use. Any cleaning or maintenance action must be performed when the boiler is switched off electricity

### 10.1.

Every day and before every kindling, the pellet burner should be cleaned:

Remove the pan from its tray.

Clean the ash and any deposits hardened slag.

Thoroughly clean the holes of the pan with a sharp object.

Clean the heater hose opening for the ignition, located at the back of the container.

Check where the bowl is and remove the ash that he collected there.



**Before firing, make sure that the dish is properly seated and in place moved all the way back to make sure it touches the lighter tube.**

## 10.2. PEPELJARA

**Every 2-3 days** before the ignition, clean the boiler ashtray:

Open the fire door.

Empty the ashtray into a metal one container.

Close the sealing door of the firebox.



## 10.3. KOMORA ZA SAGOREVANJE I DIMOVODI

Approximately every month (or after burning 2 tons of pellets) you have to clean the chamber combustion and chimneys located inside. Clean flues improve the operation of the unit. You may need to purchase a special electric ash vacuum cleaner as well as a pipe cleaning brush. Proceed as follows:

Remove the outer upper boiler cover.

Unscrew the upper boiler cover.

Remove the flue gas cleaner and turbulators.

Remove the accumulated ash from the vacuum cleaner



Scrape the tubes with a brush.

Clean the removal parts and reassemble them, in reverse order.



Open the front flame check door (she having glass)

Suck up ash and debris that has accumulated in the side walls and the top of the firebox.

Close the airtight door again.



**Attention:**

On a model with a cleaning lever, run lever up and down 4-5 times, every 2-3 days and the boiler is cold alone.



Remove the boiler side panel.

Remove the two screws and remove the cover.

Brush clean the accumulated ash.

Reassemble the removed parts in reverse order.

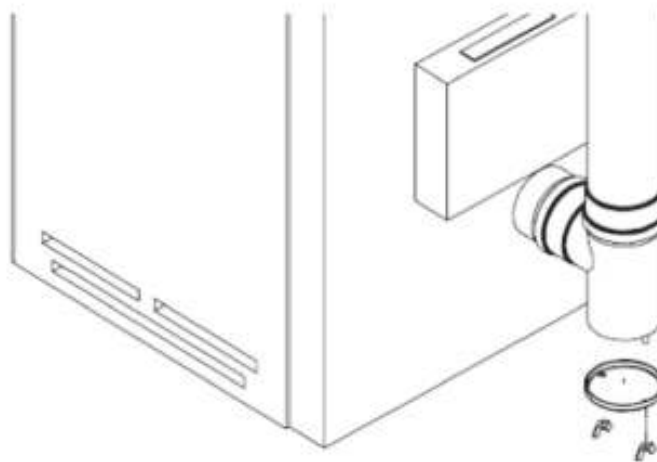


#### 10.4.

**We recommend this maintenance every month .**

Remove the cover and clean the pipes.

Clean the removed parts and re-assemble them in reverse order.



### 10.5.

The boiler has an exhaust fan located at the back of the boiler.

Excessive accumulation of ash or dust on the fan rotor causes loss of balance i it staggers excessive noise during operation. For this reason, you must clean the fan at least once a year .

Because of this cleansing some parts of the device should be disassembled, and we therefore recommend that you call technical support a qualified technician.

### 10.6.

At the end of the period (season) of use , the following actions should be taken:

Remove all pellets from the pan and dispenser.

Clean the boiler thoroughly, boiler front door and ashtray.

Clean the combustion chamber with a brush.

Clean the flue thoroughly. We recommend cleaning by a professional.

Clean dust, cobwebs or ashes once a year at all places in the firebox!

The power cord should always be unplugged.

**Every year**, before using the boiler, after a long period of inactivity, it should improved programmed maintenance. The following activities are necessary for unimpeded and safe function:

Thorough cleaning of the exhaust chamber.

Inspect and clean the exhaust system.

Clean the dust and cobwebs that may exist inside the boiler.

Cleaning of moving parts and mechanisms.

Control of electrical, electronic and hydraulic parts.

Check the water level and pressure of the hydraulic system.

If there is air in the Ventilate radiators freely using the vent valve.

Check that the pump rotor is in good condition. If blocked, peel off the top of the pump with a screwdriver, and unblock it.

Check for possible leaks and damage to the glass seal, the entire hydraulic system and all elements that break down, and possibly replace them.

Check the tightness of the armature and all piping connections.

Check the condition of the thermal fuse and valves if they are activated.  
Make sure they work correctly. Otherwise, replace them.

Take all maintenance and control measures necessary for proper operation and compliance security.

Switch on the boiler once, according to the instructions in the section BURNING THE BOILER.

**Any cleaning and / or servicing work should only be carried out when the unit is OFF ELECTRICAL NETWORKS.**

## 11. PREPARING FOR INSTALLATION

To prevent product accidents or damage, we recommend the following:

unpacking and installation must be carried out by at least two people;

any operation involving the movement of a product must be carried out with the appropriate tool in full compliance with applicable safety regulations;

if ropes, straps or chains are used, ensure that they are able to bear the weight of the package and that they are in good condition;

do not tilt the package excessively to avoid tipping over;

never stand near loading / unloading equipment (forklifts, cranes, etc.).

## 11. INSTALLATION

### 12.1.

This boiler is designed to heat water for a type of hot water heating system.

When the boiler is functioning properly, it produces hot water at a temperature that is obligatory below and the heating system must therefore be designed to be adjusted characteristics of the boiler.

**A qualified plumber must be invited to:**

- check the existing heating installation;
- designs, installs and inspects a new heating installation.

**The size of the heating system must be adapted to the average boiler power and heating requirements object (see "Technical Data").**

The fittings for connecting the boiler to the hot water grid are on its back.

Attachments:

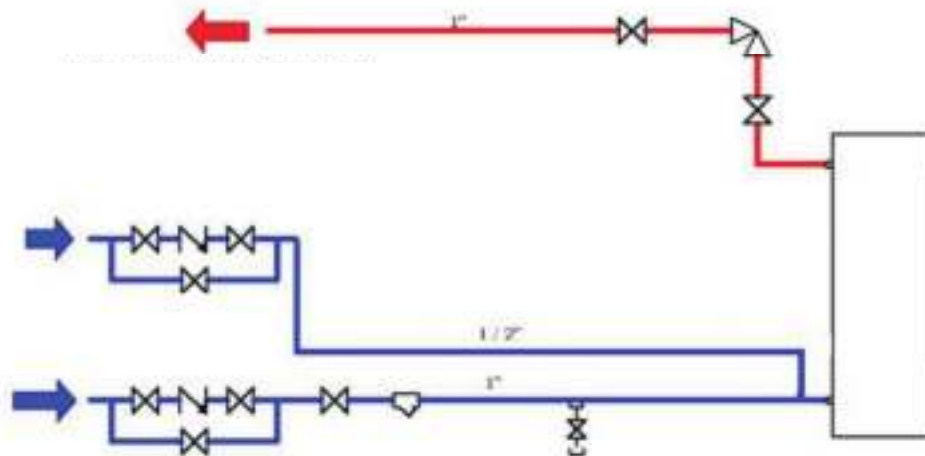
- Connect the boiler to the hot water heating system (supply - return line) by means of a pipe connection and shut-off valve to facilitate future maintenance or discharge of the heating system.

The safety valve is activated at 3 bars! Required to safety valve connect a hose or hose and run outside the boiler so that it does not open in case of valve opening and drainage steam and water in the boiler itself, there was an overheating of the board and other electrical components

- Installation of shut-off valves at inlet and outlet, allows maintenance to be completed without emptying water of the heating system;
- Drain valves at the lowest points of the system make it easy to empty the system if it is necessary;

- Vent valves located at all highest points of the system facilitate venting heating systems;
- Use pipe sections to connect the boiler so that it can move slightly, (check yes some bending does not allow the formation of air pockets);
- To check the operating pressure in the system, install a pressure gauge near, on the supply or return water;
- Connect (temperature / pressure) safety valve to the appropriate funnel (dripping) for separation of water under high pressure and temperature;
- Avoid narrowing in the diameter of the pipeline;
- Avoid using knees or curves with a small radius;
- Provide adequate supports for water pipes so that they do not pressure the fittings;
- Before connecting the boiler, flush the heating system to remove any debris (oils, shavings, drops of weld, hemp, rust) inside the pipeline, which could otherwise be a cause of failure or damage boiler;
- Insulate the connection pipeline appropriately to prevent heat loss and buildup condensation;
- In no case do you start the boiler unless the heating system is complete filled with water;

### Hydraulic scheme



## 12.2.

The boiler is supplied with a power cable to be connected to single-phase electrical 230 V / 50 Hz line.

The efficiency and adequacy of the earthing installation should be checked by a professionally qualified person personnel and the manufacturer is not responsible for damage caused by the lack of grounding installation. In addition, make sure that the electrical installation is adequate for the maximum received power of the appliance, which is indicated in the chapter "Technical data".

Make sure that in the normal position the power cord does not come into contact with any heated parts.

Make sure that the electrical connection is available after the boiler has been installed.

## 12.3.

Fill the heating system with water when the appliance is switched off. Under no circumstances should you start the appliance unless the boiler is full of water.

Water supply characteristics:

- The water supply pressure to the heating system must be between 1 - 3 bar (in case of higher pressure, install pressure reducer).
- The hardness of the supply water affects the operation of the heat exchanger.  
In the case of excessive install a water softener (ion exchanger) between the hardness of the water main connection and boiler.

## 13. USING

- Do not use the boiler as a cooking appliance.
- Ensure that the boiler room is well ventilated (fresh supply air).
- Ensure that all joints in the flue pipes are hermetically sealed with silicone - (non-cement) sealant resistant to temperatures up to 250 ° C and not showing signs of decay.
- Check regularly for the chimney to be clean.
- Under no circumstances should you use any fuel other than pellets.
- Remove any accumulated pellets left after ignition failure before restarting (ignition) of the boiler.

**During operation, some parts of the boiler (door, lever, controller, etc.) can reach high temperatures, so use them carefully and with all necessary precautions, especially in the presence of children, the elderly, the disabled or pets.**

- **Keep flammable objects away from the boiler while it is in use, at a minimum distance of 80 cm from the front.**
- **While the boiler is in use, the door must remain closed and the glass must be installed and undamaged**

**Removing the protective grille inside the pellet container is strictly prohibited.  
When filling the pellet with the boiler running, make sure that the bag does not come in contact with by any hot surface.**

### 13.1.

For filling the pellets in the container, it is advisable to cut the edge of the bag and empty it directly into spramnik. This makes filling easier and avoids spilling pellets above the boiler. Do not allow sawdust to collect at the bottom of the tank. Do not leave pellet residue on the upper surface of the boiler - they may catch fire.

### 13.2.

Before starting the boiler for the first time, make sure that the grate is properly positioned and pushed back. When ignited the first few times the odor is released due to the evaporation of the colors used in During this period, ventilate the room where the boiler is installed and Avoid staying there for a long time as vapors can be harmful to human and animal life health.

The voltages in the boiler body should calm down and the paint completely evaporates after the boiler has been started for the first few times.

Therefore, when using the boiler, follow the instructions given below:

- operate at medium power for the first 5-6 hours after ignition (expansion caused by heat at this stage will allow the calming of the voltage generated during welding of the boiler body);
- after the voltage has subsided, the boiler must operate at maximum power between 4 and 6 hours, depending on the amount of paint on the body of the boiler that has to evaporate.
- The time indicated for operating at maximum power does not have to be continuous, it does can be divided into two periods with an interval of at least 3-4 hours in which the boiler will be extinguished.
- At the end of the recommended period the paint will evaporate and the boiler should be used with the appropriate one power for normal use.
- If necessary, the boiler can be used with maximum power for a longer period in order the complete and final disappearance of all residual colors was ensured.
- When the tank is first filled, it will take time to fill the dispenser worm conveyor; during this period the pellet does not reach the firebox and it is likely that the first attempt at ignition does not succeed. If an alarm is triggered, switch off the boiler by pressing and holding the button for a few seconds ON / OFF, remove the accumulated pellet from the grate, then adjust the boiler for a new ignition process. Throw unburnt pellets out of the firebox.

### Vacuum firebox



The furnace operates by maintaining a vacuum in the furnace over a certain range. Therefore, the firebox door must be firmly closed. If left open, after 50-60 [sec], er34 will be displayed on the screen

### IGNITION PROCEDURE

1. Insert the pellet into the container
2. Check and clean the pellet burner
3. Close the door firmly
4. Select combustion output (1 to 6, or Auto if you want automatic control volume) according to the following steps:
  - a. Press P3 (SET)
  - b. Select " Combustion Management " ( management by burning ) (SET)
  - c. Set the desired power setting (SET)
  - d. Press P1 (ESC) twice
5. Select the desired water temperature in the furnace / boiler:
  - a. Press P3 (SET)
  - b. Select " Heating Management "( Management by heating ) (SET)
  - c. Select " Boiler Thermostat " ( boiler thermostat ) (SET)
  - d. Set the desired water temperature (SET)
  - e. Press P1 (ESC) twice
6. Press P2 ( ) and hold for 3 seconds to switch on the stove / boiler.
  - For half a minute the furnace / boiler performs Check (Check) and Cleaning (cleaning)
  - Ignition and Resistance preheat for 1 - 1.5 minutes (Preheater Heater)
  - After that, the pellet burner is filled
  - A flame lights up (if this does not happen after 25 minutes, a message about Error er12 on the LCD screen)
  - When the flue gas temperature exceeds 45 ° C, the furnace / boiler goes into operating status Stabilization (IS)
  - After 7 - 10 minutes the stove / boiler goes into Run Mode.

**Installation by an expert is recommended.**

**MONTAGING PERFORMED BY:**

Company: .....

Address: .....

Installer: .....

The system has been tested and safe for safe use conditions.

Installer: .....

**GUARANTEED SERVICE TIME**

The manufacturer guarantees the normal operation of the boiler for 24 (twenty-four) months from the day selling the same at a retail store, subject to the rules of transportation, installation and exploitation.

Guaranteed servicing time is in accordance with applicable legal regulations.

In case of changing the model and design of the appliance, the deadline for replacement of the parts that have been changed is within the legal deadline.

After this deadline we will provide the changed parts in new designs.

Contact the dealer from whom the product was purchased, or an authorized service center and to correct defects be sure to enclose a certified warranty certificate.

**WARRANTY CONDITIONS**

The product warranty is valid for a period of 2 years from the date of purchase.

The warranty does not apply to glass, minor shades of color, aesthetic defects that do not affect function and safety of the apparatus, increase in noise (due to aging, irregular attachments, fittings, etc., which do not affect the function and safety of the appliance) and physical damage formed after purchase.

**THE MANUFACTURER RESERVES ALL RIGHTS OF CHANGE.**

The appliance will only function correctly during the warranty period if used in accordance with the instructions for connection and use.

The guarantee shall cease to be valid if it is established that:

- Attachment of the product or repair by an unauthorized person, that is, if installed non-original parts,
- if the appliance is not properly used in accordance with the instructions,
- mechanical damage to the appliance during use,
- if the repair was by an unauthorized person,
- if the appliance was used for commercial purposes,
- if the damage was caused by transport after the sale of the appliance,
- if malfunctions have occurred due to improper installation, improper maintenance or mechanical failure damage by the customer,

- if the failure is due to over or under voltage and due to force majeure.

We can also repair the defects of the appliance beyond the warranty period with the original spare parts to which we also guarantee under the same conditions.

This warranty does not exclude or affect the rights of consumers with regard to the suitability of goods pursuant to legal regulations. If the product delivered does not comply with the contract, the consumer has the right to require the seller to remedy that malpractice by repair or replacement without compensation products in accordance with applicable legal regulations.

**WARNING!**

The guarantee is valid only if the warranty card is completed and signed in clear ink or chemical ink pencil and stamped.

**Manufacturer:**

**MEGAL AD, Lopardinski put bb, Bujanovac**

**WARRANTY SHEET**

MODEL .....

Production date: .....

Factory number: .....

Controlled: .....

The boiler was handed over to the customer correctly: .....

\_\_\_\_\_  
/ name, father's name and customer's name /

Address: .....

Sales clerk: .....

City: .....

Account No. : ..... of ..... / date of sale /

BUYER: .....  
/signature/

SALES CLERK: .....  
/signature and stamp/

