



PELLET BOILER

COMPACT

INSTALLATION AND USER MANUAL



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Contents

1. GENERAL INFORMATION	3
1.1. Proper use of the appliance	3
1.2. Safety warnings	3
1.3. Data label	3
1.4. Document information	3
2. TECHNICAL FEATURES AND DIMENSIONS	4
2.1. Technical data	4
2.2. Pellet fuel	4
3. BOILER MOUNTING	5
3.1. Transportation and delivery	5
3.2. General requirements	5
3.3. Chimney	6
3.4. Air intake	7
4. INSTALLATION	8
4.1. Boiler connections	8
4.2. Return temperature protection	9
4.3. Filling the system	9
4.4. Electrical connections	9
5. CONTROLLER	10
5.1. General description	10
5.2. Operation functions	10
5.3. Menu functions	13
5.4. Error signals	16
6. BOILER START-UP	17
6.1. Initial lighting checks	17
6.2. Start-up of the boiler	17
7. BOILER STOP	18
8. SERVICE AND MAINTENANCE	19
8.1. Cleaning the boiler	19
8.2. Maintenance intervals	19

1. GENERAL INFORMATION

1.1. Proper use of the appliance

Before you make use of this appliance make sure you have read and fully understood the instructions included in this manual.

The installation and use of the appliance must be performed according to the instructions indicated in this manual in combination with the current national safety regulations.

The appliance is designed for use in pumped hot water central heating systems. Any other use is considered improper and is prohibited. THERMOSTAHL ROMANIA declines any responsibility for damages or injuries caused by improper use; in this case the risk is completely at the user's responsibility.

To ensure an efficient and flawless function of the appliance, it is strongly recommended that you have performed an annual service by a qualified technician.

1.2. Safety warnings

All installation and maintenance procedures must be carried out by professional and authorized personnel, in compliance with the indications in the present manual and national regulations. Any failure to correctly install this appliance could cause damage or injuries!

Do not make modifications to parts of the appliance, unless you have contacted the company and an authorized service contractor.

Only original accessories and spare parts must be used to ensure correct and safe function.

Make sure you respect the cleaning and maintenance procedures on the corresponding intervals. Failure to do so can cause malfunction to the appliance and possible damages.

The boiler is design to function on the fuels indicated in the corresponding paragraph. Any other fuel is prohibited. Do not use explosive or flammable substances! Do not store such substances inside the boiler room.

The working pressure varies according to the model. Make sure you use the appropriate water pressure.



Working in a pressure higher than the one indicated in this manual is strictly prohibited and dangerous!

1.3. Data label

The data label of the appliance is placed on the boiler's back cover, on the external part. Make sure that it is properly placed and readable.

On the label it is indicated the serial number and the manufacturing year of the appliance.

1.4. Document information

This document is an integral and indispensable part of the product and must be retained in good condition by the user. Keep it in a safe place for future reference.

If the appliance is sold or transferred to another person, this manual has to always follow the appliance and handed to the new user or installer.

2. TECHNICAL FEATURES AND DIMENSIONS

2.1. Technical data

Boiler type		COMPACT 25	COMPACT 35
Nominal power ¹	<i>kW</i>	25	35
Global power (max-min)	<i>kW</i>	27,8-9,9	35,0-10,6
Pellet consumption (max-min)	<i>kg/h</i>	5,5-2,2	7,7-3,1
Efficiency (max-min)	<i>%</i>	94,5-93,0	94,5-93,0
Max working pressure	<i>bar</i>	3	3
Max working temperature	<i>°C</i>	85	85
Exhaust gas temperature	<i>°C</i>	160	160
Water contents	<i>lit</i>	28	40
Chimney diameter	<i>mm</i>	80	80
Air intake diameter	<i>mm</i>	60	60
Fuel tank	<i>kg</i>	55	70
Fuel autonomy	<i>h</i>	20	20
Weight (empty)	<i>kg</i>	175	200
Dimensions LxWxH	<i>mm</i>	860x590x1190	880x590x1355
Power consumption (max-min)	<i>W</i>	525-225	540-240
Electrical connections	<i>V/Hz</i>	230/50	230/50

1. Nominal power output is obtained with fuel type C, calorific power 4,9 kWh/kg according to standard EN 303-5:2012.

2.2. Pellet fuel

Pellet is used in an automatic way by means of an automatic pellet feeding mechanism. Only wood pellets are to be used with this boiler. No other fuel is allowed to be used in the boiler. The pellet is deposited in the fuel tank at the back of the boiler, and then automatically fed through the feeder, which is controlled by the controller.

As fuel, it is recommended to use only premium quality wood pellet 6-8 mm diameter. Note that if lower quality pellet is used, the ash produced can be significantly bigger and the cleaning interval more often. The pellet bags must be stored in a dry, not too cold environment.

Pellet fuel characteristics	
Diameter	6-8 mm
Length	12-30,5 mm
Density	650-700 kg/m ³
Ash content	<1%
Calorific power	>4,8 kWh/kg
Humidity content	<8%

Table 1. Pellet fuel characteristics

 **The quality of the pellets, calorific power, humidity and ash content is very important for the boiler function and efficiency!**

 **It is prohibited to manually feed pellets into the grate!**

 **It is prohibited the use of processed wood pellets, or other chemical treatment.**

 **It is prohibited the use of explosives, inflammable materials, plastic, domestic residues, etc.**

 **NEVER BURN ANY TYPE OF CORN, CHERRY PITS, STICKS OR OTHER TYPES OF FUEL IN THE BURNER.**

3. BOILER MOUNTING

3.1. Transportation and delivery

The boiler is delivered on wood pallet. The loading and unloading of the boiler must be performed with a forklift or a crane.



The boiler is very heavy. Do not try to lift by hands or other unsuitable equipment. Danger of injury! Perform all moves with extreme caution.

Remove the boiler packaging with attention. **Keep the packaging material away from children since it can be dangerous.** After having unpacked everything, make sure that the appliance is intact and undamaged. In case of doubt do not use the appliance and inform the supplier.

The COMPACT boiler is delivered with the following equipment:

- Boiler steel body
- Rockwool insulation mounted on the boiler body
- Metal covers mounted on the boiler body
- Incorporated pellet tank at the back of the boiler
- Fuel feeder system
- Pellet grate made of INOX steel
- Ash box under the grate
- Leveling supports
- Electrical cable with plug

In the documentation folder you will find:

- Technical manual
- Warranty leaflet

3.2. General requirements

The boiler must be installed according to the applicable regulations as far as the chimney installation and safety regulations are concerned. The installation should be performed only by authorized personnel, and special care must be taken for the correct installation and draught of the chimney.

The boiler must be placed on a horizontal plane, with adequate mechanical resistance to support the boiler's weight. The boiler can be installed in a special boiler room, or inside the house. The installation must be performed in such a way so that it is easily accessible from all the sides.

The lack of draught from the chimney, or the obstruction of air intake can affect the correct function of the product, cause error in the ignition, and even emit smoke.

- The regular maintenance of the boiler must be performed at least once a year by an authorized technician.
- Special care must be taken for the air intake of the boiler, especially if the boiler is installed in a narrow space.
- Place a protective fireproof base (metal or ceramic) between the boiler and the floor, especially if the floor is made of flammable material (wood, carpet). This board must be at least **25-30 cm** bigger in all directions than the dimensions of the boiler.
- A safety distance is recommended between the sides of the boiler and walls, of at least **40 cm**. This distance should be even bigger according to the objects close to the boiler (furniture, curtains, decoration, etc.).
- Make sure that the chimney remains clean and free of ash and obstacles at all times.
- Pay attention so that the room temperature sensor positioned at the back of the boiler is not close to the chimney.
- Before every startup, or after an error or blackout, make sure that the grate is not full with ash or pellet and the door is tightly closed.
- After a fault startup, remove the unburnt pellet from the grate before you make a new startup.

BOILER MOUNTING

- It is recommended to always keep clean the grate, in order to ensure long life and correct ignition.
- **Do not ever use inflammable materials for manual ignition of the boiler!**
- Before any work of maintenance is effected, please turn off the boiler and disconnect from electricity.
- **Do not open the boiler door during function!**
- **Do not introduce any other materials for combustion in the pellet tank, or manually in the grate, other than wood pellets!**

3.3. Chimney

The chimney installation must supply sufficient draught, air tightness and protection against condensation.



The appropriate chimney installation is very important for the boiler's efficient and safe function!

The chimney must be vertical, with no changes in the direction. The cross-section of the chimney can be round or rectangular. If the chimney is installed in the exterior, it must be insulated. The cross-section and total height of the chimney must be correctly calculated to ensure natural draught.

The horizontal part connecting the boiler's chimney pipe with the vertical chimney must have maximum length 2 m. If this distance is bigger, it is recommended to have a 15-30° inclination upwards. The connection with the boiler's chimney pipe must be air-tight. **If the total route of the chimney pipe is more than 10 m, it is recommended to use a 100 mm chimney pipe.**



It is prohibited to change the exhaust diameter by any means or reduction between the boiler outlet and the vertical chimney pipe!

The chimney must be equipped with a cleaning door at its base. Also cleaning doors are recommended where there are changes in direction and ash can be accumulated. Tactical cleaning is recommended (every 3 months) for efficient boiler function.

A chimney terminal must be installed at the end of the chimney for protection against weather effects and foreign objects entrance. In areas with strong winds a special anti-downdraught terminal is recommended.



The chimney terminal must always be installed perpendicular to ground!

The chimney height must exceed the roofline by at least 1 m. If there are other obstacles positioned on the roof, the chimney height must exceed them by at least 1 m. If there are multiple chimneys, minimum distance between them is 0,3m.

Each boiler should be connected to an independent chimney. Connection of multiple boilers to the same chimney is not recommended.



It is prohibited to use as a chimney flexible aluminum tube!

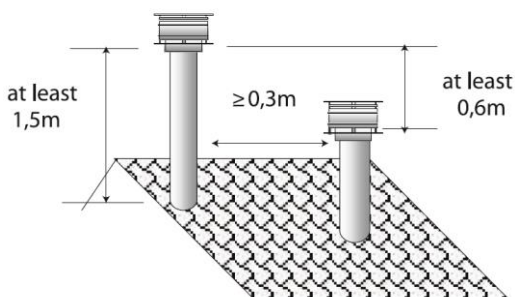
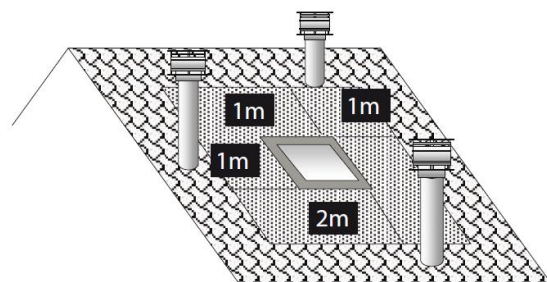


Fig 2. Chimney distances



BOILER MOUNTING

The vertical chimney pipe can be installed partially inside as in Fig 3, with a maximum of two 90° elbows. The vertical chimney pipe must have a height of minimum 2 m. **All chimney connections must be sealed with a temperature resistant silicon gasket.**

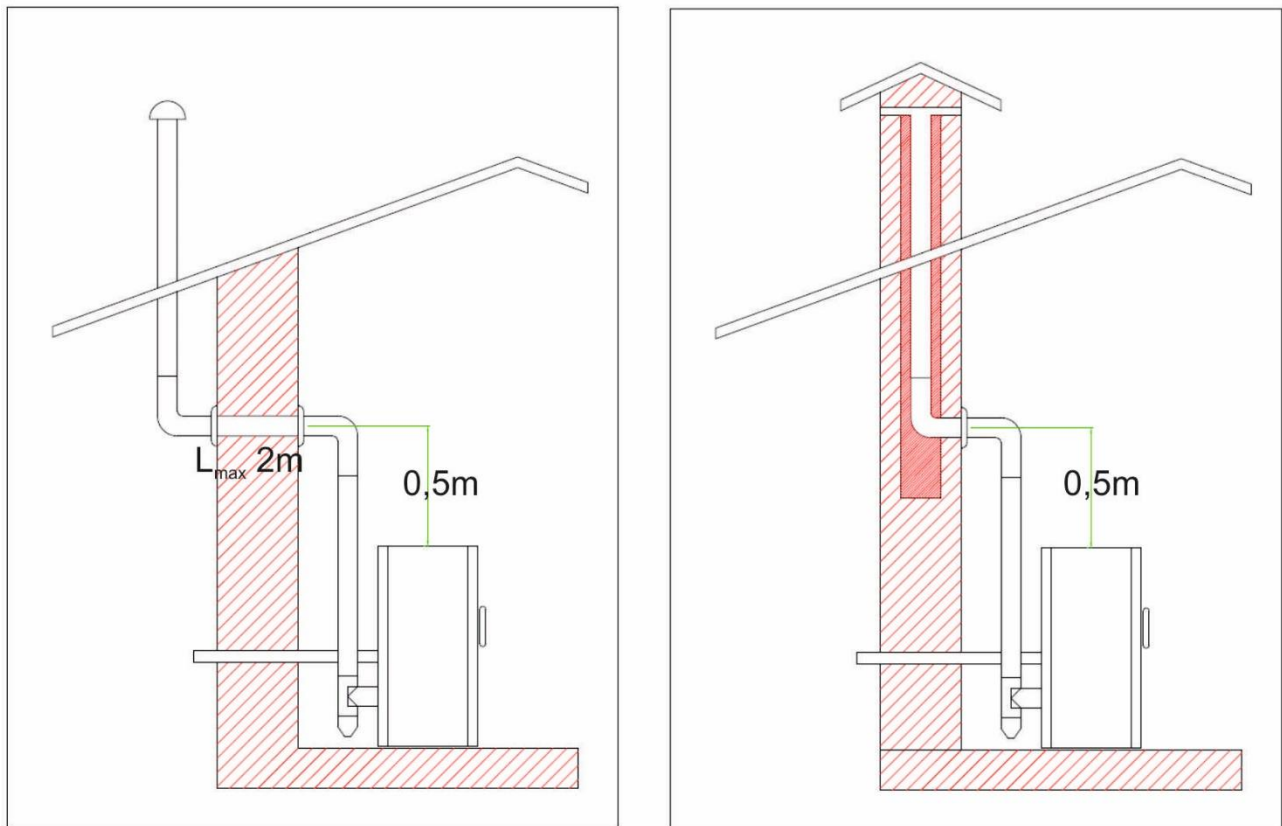


Fig 3. Chimney connection

3.4. Air intake

The necessary for combustion air intake of the boiler is absorbed externally through an air intake pipe that must be installed, as seen above. The air intake pipe must be protected with a grate, according to UNI 10683.

The air intake can also be absorbed from the installation space. In this case, special care must be taken so that sufficient air supply is given to the installation room by means of air intakes surfaces, which must be protected with a grate, according to UNI 10683.

Periodically, the air intake pipes must be controlled against blocking.

4. INSTALLATION

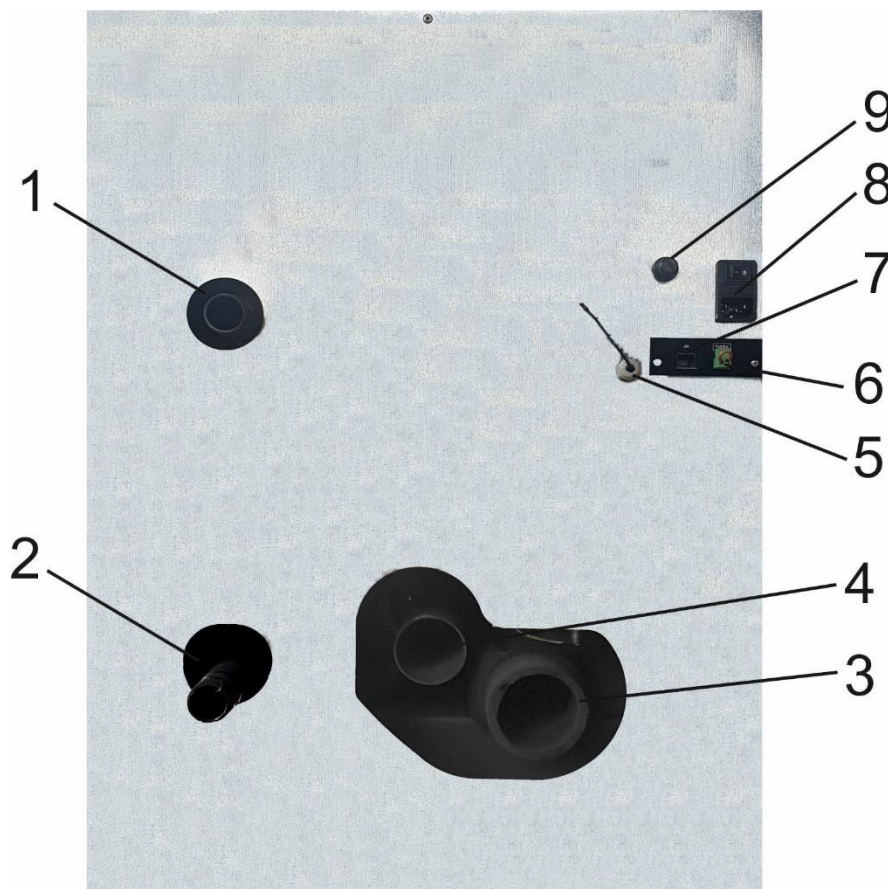
4.1. Boiler connections

The boiler comes preassembled with all necessary for function hydraulic components (pump, expansion vessel, safety valve, air-relief valve). All connections are performed at the back of the boiler. There are two side doors for access inside the hydraulic of components of the boiler.

The boiler is intended for maximum working temperature 85°C and maximum pressure 3 bar.



Safety valve is not installed inside the boiler, it must be installed externally and connected to the drainage!



Legend

- 1 Outlet
- 2 Return
- 3 Chimney pipe
- 4 Air intake pipe
- 5 Room temperature sensor
- 6 External thermostat connection (THERM)
- 7 Service programmer connection (JA)
- 8 General ON/OFF switch and electrical connection
- 9 STB overheating thermostat



External thermostat connection must be simple electrical switch (ON/OFF). Voltage feed in these terminals can destroy the controller!

4.2. Return temperature protection

For the correct function of the boiler and for protection against corrosion it is very important to ensure steady temperature at the return of the boiler of at least 55°C.

This can be ensured by installing a recirculation pump between the boiler outlet and return (see connection diagrams).

An alternative variation is by installing at the return of the boiler a three-way thermostatic valve.



Having a return temperature less than 55°C is very dangerous for the boiler long-life and can cause warranty loss!

4.3. Filling the system

After completing all the hydraulic connections, the circuit may be filled with water. After filling the system, open the radiators air valves to get rid of the air in the installation.

Verify that the installation pressure is according to the technical features of the boiler. A manometer should be installed on the cold water inlet to verify the cold pressure, at the lowest point of the installation, at a point close to the boiler.

The whole installation must remain under nominal pressure for at least 10 minutes. During this period, check that all the connections are tight and there are no water leakages. Make sure that during this period no pressure drop appears.

After firing the boiler, make sure the network functions properly at working temperature and pressure.



The hardness of the mains water supply affects the boiler's life span. It is recommended to use a water softener if water hardness exceeds 15°f.



Do not fill the system at the working pressure! When the boiler will be heated, the water pressure will raise. Filling pressure must be at least 1 bar lower than working pressure!

4.4. Electrical connections

The electrical connection is performed by the given cable. Plug the one end at the IEC plug at the back of the boiler, and the other end to a 230V plug. The plug where the boiler will be connected must have grounding, and must be ensured that has tension in nominal parameters.

The plug on the boiler is protected with an incorporated electrical fuse and has a general electrical switch ON/OFF.

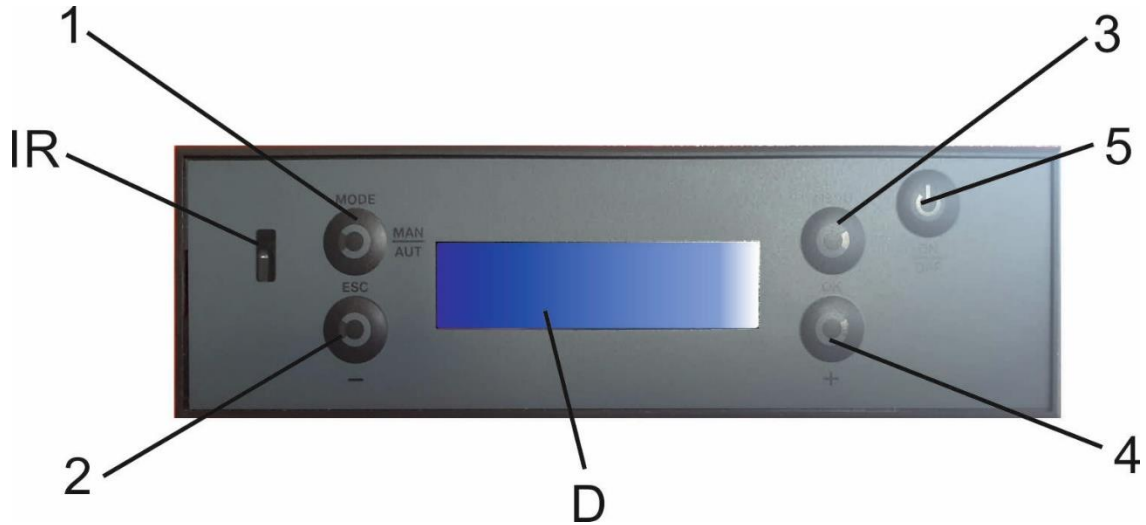
Make sure that the electric cable is not in contact with hot parts of the boiler or the chimney, and is not crushed by heavy parts.




THERMOSTAHL ROMANIA SRL declines any liability for damage caused to people, animals and goods, due to defects caused by faulty electrical connections or lack of connecting the boiler to an efficient grounding system.

5. CONTROLLER

5.1. General description



Description of buttons

Button	Function	
MODE / ESC	1	Mode selection (Manual, Auto) / Keep pressed to exit
-	2	Value decrease / menu navigation
MENU / OK	3	Menu enter / Setting confirmation
+	4	Value increase / menu navigation
	5	Controller ON/OFF button / exit to main menu
IR	Remote control receiver	
D	Display	

5.2. Operation functions

After switching the boiler on from the main switch at back side, press the controller ON/OFF button to activate the controller. The following messages will appear on the display on sequence:

```
2 2 .0 °C          1 1 1 4
T H E R M O S T A H L
```

```
6 5 .0 °C H 2 O    1 1 1 4
< T i p p r o d u s >
```

```
P r e s s          M e n u
F i r e : 5       T e r m : C
```

```
2 8 .0 °C H 2 O    1 1 1 4
O F F
```

CONTROLLER

FUNCTION	DISPLAY MESSAGE	DESCRIPTION
Function menu	Manu	Manual mode
	Auto	Auto mode
	Eco activated	Eco mode
Boiler status	IGNITION	Ignition mode
	ON	Normal operation
	SHUTDOWN	Fire off mode
	OFF	Device stopped
	STOP AFTER BLACKOUT	Device stop after electric blackout
	IGNITION AFTER BLACKOUT	Ignition mode after electric blackout
Chronothermostat	Chrono programmer	Chronothermostat programming activated
	Sleep 12:30	Sleep mode activated
Error	Error**	Automatic error recognition
	ALARM	Alarm activated, boiler stopped

By pressing the **MODE** button the boiler can be changed to one of the available function modes: manual mode (**MANU**), automatic (**AUTO**), economic (**ECO**).

5.2.1. AUTO mode

In mode **AUTO**, the boiler will automatically adjust the power level according to the temperature settings chosen and the signal from the room temperature sensor (if activated). If the room thermostat contact is open, the boiler **will go to minimum power, but will not shut down**. In **AUTO** mode on the display will appear the following message:

M o d e	A U T O	M e n u
T e m p	2 3 °C	F a n A

By pressing the **Button 2 (-)** the room temperature can be adjusted from 5 to 35°C. By keeping pressed the **Button 2 (-)**, the following message will appear on the display and the same setting can be adjusted here through the **Buttons 2 (-) and 4 (+)**:

e s c	2 3 °C	O k
-	T e m p e r .	+

If the room temperature sensor is deactivated, the message **Temp 0** will be shown instead, the set point for mode AUTO will be the water temperature selected, and the room temperature sensor will behave as an ON/OFF signal.

By pressing the **Button 4 (+)** the power level can be adjusted.

5.2.2. MANUAL mode

In mode **MANU**, the power level of the boiler can be manually selected. **The room thermostat does not function in this mode.** In **MANU** mode on the display will appear the following message:

M o d e	M A N U	M e n u
F i r e	2 3 °C	F a n A

By pressing the **Button 2 (-)** power level can be adjusted from **Fire 1** to **Fire 5**. By keeping pressed the **Button 2 (-)**, the following message will appear on the display and the same setting can be adjusted here through the **Buttons 2 (-) and 4 (+)**:

e s c		O k
-	F i r e	+



The use of MANUAL mode is restricted for service settings and should not be used in normal operation.

5.2.3. ECO mode (recommended)

In mode **ECO**, the power level of the boiler can be manually selected. If the room thermostat contact is open, the boiler **will go to minimum power, and will shut down after a preset time.** In **ECO** mode on the display will appear the following message:

M o d e	E C O	M e n u
T e m p	2 3 °C	F a n A

By pressing the **Button 2 (-)** the room temperature can be adjusted from 5 to 35°C. By keeping pressed the **Button 2 (-)**, the following message will appear on the display and the same setting can be adjusted here through the **Buttons 2 (-) and 4 (+)**:

e s c	2 3 °C	O k
-	T e m p e r .	+

If the room temperature sensor is deactivated, the message **Temp 0** will be shown instead, the set point for mode ECO will be the water temperature selected, and the room temperature sensor will behave as an ON/OFF signal.

By pressing the **Button 4 (+)** the power level can be adjusted.

5.3. Menu functions

By pressing the **Button 3 (MENU/OK)** the different menu windows can be cyclically navigated. There are 5 main menu windows, in order to access the parameters of a menu, press the **Button 3 (MENU/OK)**.

In order to modify a parameter, press the **Button 3 (MENU/OK)** with indication **Set**. At this point, the indication will change to **OK**, and the chosen parameter will blink. Change the value through the **Buttons 2 (-)** and **4 (+)**. Confirm the value by pressing the **Button 3 (MENU/OK)**. After setting the value, use the **Buttons 2 (-)** and **4 (+)** to navigate to the next parameter.

Press the **Button 1 (MODE/ESC)** at any point to go up a menu level. Press the **Button 5 (ON/OFF)** at any point to exit to the main window.

5.3.1. Water temperature

The water temperature for heating and sanitary mode can be set at this menu. On the display the following message will appear:



MENU	PARAMETER	VALUE RANGE	RECOMMENDED SETTING
Water temp.	Heating temp.	40-85°C	65-75°C
	Sanitary temp.	30-65°C	45°C

5.3.2. Date and time

The date and time can be set at this menu. On the display the following message will appear:



MENU	PARAMETER	VALUE RANGE
Date & Time	Time	00-23
	Minutes	0-59
	Day	Mo-Tu-We-Th-Fr-Sa-Su
	Day Number	1-31
	Month	1-12
	Year	2010-2109

5.3.3. Chronothermostat

In this menu, the user can set 6 different programs for each individual day of the week, this meaning that there is a total available of 6*7=42 programs. On the display the following message will appear:

CONTROLLER

```

e s c           S e t
<   C h r o n o   >
  
```

MENU	PARAMETER	VALUE RANGE	RECOMMENDED SETTING	
Chrono	Enable	On / Off	Accordingly	
	Load Profile	1-10	1	
	Reset Chrono	Confirm?	Ok	
	Prog. 1-6 for each individual day	P1 Enable	On / Off	Accordingly
		P1 Start	00.00-23.59 / Off	Accordingly
		P1 Stop	00.00-23.59 / Off	Accordingly
		P1 Air Temp.	5-35°C	18-25°C
		P1 Heat Temp.	40-85°C	60-80°C
		P1 Fire	1-5	Accordingly
P1 Days			Mo-Tu-We-Th-Fr-Sa-Su	

After activating the chronothermostat, the user can choose the individual settings for every program and day of the week. The Reset parameter will null all the settings of the current program.

For every program the start time and stop time of the boiler can be set from the corresponding parameters P1 Start and P1 Stop, as well as the air temperature, water temperature, and power level settings for this time interval.

Finally, with the P1 day parameter the day of the week when this program will be applicable can be chosen.

After completing the P1 program, the same procedure is used to set P2-6 programs.

Pay attention during the weekly programming, so that different settings do not interfere for same day and time intervals.

5.3.4. Sleep mode

This option is available only while the device is activated and is in ignition or function mode. In this menu, the user can set the automatic stop of the boiler at a certain time. On the display the following message will appear:

```

e s c   o f f   S e t
<   S l e e p   >
  
```

Use the **Buttons 2 (-)** and **4 (+)** to set the stop time of the boiler and the **Button 3 (MENU/OK)** to save this option.

5.3.5. Settings

In this menu, the user can make general configuration settings of the device. On the display the following message will appear:



MENU	PARAMETER	VALUE RANGE	RECOMMENDED SETTING	
Settings	Language	En-It-Fr-Es-Gr	En	
	Eco	On / Off	On	
	Back Light	01-1000 s	Accordingly	
	Tones	On / Off	On	
	°C / °F / Auto	°C / °F	°C	
	Recipe	Pellet Temp. States	-5...+5	0
		Pellet Power States	-5...+5	0
		Air Flow Temp. States	-10...+10	0
		Air Flow Power States	-10...+10	0
	Thermostat	Activation	On / Off	Accordingly
	Charge Pellets	Activation	Ok	
	Cleaning	Activation	Ok	
	Start Pump	Activation	Ok	

The Eco parameter activates or deactivates the Eco mode.

The Back Light parameter sets the permanent lighting of the display (On) or for a certain amount of time after pressing a button (01-1000 s).

The tones parameter will enable the keyboard sound when pressing a button.

Through the Recipe parameters, the pellet feeding and air supply can be adjusted individually for the ignition mode (Temp. States) and the function mode (Power States). For every unit interval, a 2,5% modification is performed to all the power levels.

Through the Thermostat parameter, the integrated room temperature sensor can be activated (On) or deactivated (Off).

The last three parameters are used to manually activate the individual devices (feeder, cleaning motor, pump), and must be used only during service by authorized technician.

5.4. Error signals

The controller automatically recognizes the corresponding error, and will inform the user by displaying the corresponding error code on the display. The errors are divided in two categories:

5.4.1. Errors

Errors are minor importance faults during operation. By pressing the **Button 3 (MENU/OK)**, the description of the error appears on the display. These minor errors do not stop the function of the boiler. When an error incures, the following message will appear on the display:

```

e s c                               S e t
<      E r r o r                    >
    
```

5.4.2. Alarms

An alarm will be activated when a major safety issue will incur. When an alarm incures, the ALARM message will blink on the display, and an alarm code and description will appear. The following message will appear on the display:

```

i n f o   A L A R M   A 0 1
<      Alarm description            >
    
```

CODE	MESSAGE	SOLUTION
A01	Failed ignition	Clean the grate from pellets and retry ignition
A02	No flame	Fill the tank with pellets
A03	Tank overheating	Check the fuel tank temperature sensor
A04	Exhaust temperature alarm	Check the exhaust temperature sensor and the combustion settings
A05	Chimney block	Check the chimney condition, clean from ash and possible obstacles
A06	Insufficient combustion air	Clean the grate, the air intake, the chimney
A07	Open door	Make sure the door is closed
A08	Exhaust fan damage	Call service
A09	Exhaust temperature damage	Call service
A10	Ignitor damage	Call service
A11	Pellet feed damage	Call service
A13	Controller damage	Call service
A15	Pellet level alarm	Check the fuel level in the tank
A16	Water pressure	Assure correct pressure of the installation
A18	Water temperature overheating	Investigate the causes of overheating

By pressing the **Button 1 (MODE/ESC)**, an indication of the alarm cause will appear, according to the following table:

MESSAGE	DESCRIPTION
Service	Call the service for regular maintenance
Ex. temperature sensor error	The exhaust temperature sensor is damaged
Water temperature sensor error	The boiler water temperature sensor is damaged
Water pressure sensor error	The water pressure sensor is damaged
Water pressure out of limits	The water pressure in the heating installation is out of limits

6. BOILER START-UP

6.1. Initial lighting checks

Before you start the boiler, make the following checks:

- Check all the hydraulic connections and make sure they are tight. Make sure there is no leakage or moisture on the pipes or other equipment.
- Make sure that the connection with the chimney is air-tight and the chimney installation is properly made.
- Make sure that the pressure in the network is correct.
- Check that the boiler pump functions properly.
- Make sure the boiler's separation valves are open.
- Make sure that there is sufficient air supply and natural ventilation in the room.
- Make sure there is pellet in the pellet tank.



Do not store inflammable materials or fuel close to the boiler! Before you light the boiler make sure the room is clear and safe.

6.2. Start-up of the boiler

6.2.1. Manual start-up

Keep pressed the **Button 5 (ON/OFF)** for 2 seconds until the message IGNITION will appear on the display.



6.2.2. Start-up by the room temperature sensor

The boiler will automatically start when the room temperature value is below the set limit. This mode will be enabled only if the room temperature sensor is activated (see paragraph 5.3.5), the AUTO or ECO mode is chosen, and the boiler is activated by the main electrical switch.

6.2.3. Start-up by the chronothermostat

The boiler will automatically start according to the chronothermostat settings (see paragraph 0), given that the AUTO or ECO mode is chosen and the boiler is activated by the main electrical switch.

6.2.4. Start-up by external room thermostat

The boiler will automatically start when signaled from an external room thermostat. This requires an external room thermostat to be connected to the corresponding terminals settings (see paragraph 4.1), given that the AUTO or ECO mode is chosen and the boiler is activated by the main electrical switch.

7. BOILER STOP

7.1.1. Manual stop

Keep pressed the **Button 5 (ON/OFF)** for 2 seconds until the message STOP will appear on the display.



7.1.2. Stop by the room temperature sensor

The boiler will automatically stop when the room temperature value has reached the set limit. This mode will be enabled only if the room temperature sensor is activated (see paragraph 5.3.5), the AUTO or ECO mode is chosen, and the boiler is activated by the main electrical switch.

7.1.3. Stop by the chronothermostat

The boiler will automatically stop according to the chronothermostat settings (see paragraph 0), given that the AUTO or ECO mode is chosen and the boiler is activated by the main electrical switch.

7.1.4. Stop by SLEEP mode

The boiler will automatically stop according to the SLEEP mode settings (see paragraph 5.3.4). The Sleep mode has priority over other settings made in the Chronothermostat menu.

7.1.5. Stop by external room thermostat

The boiler will automatically stop when signaled from an external room thermostat. This requires an external room thermostat to be connected to the corresponding terminals settings (see paragraph 4.1), given that the AUTO or ECO mode is chosen, and the boiler is activated by the main electrical switch.



Do not stop the boiler by means of the main electrical switch ON/OFF! This can cause damage to the boiler and may lead to alarm signals.

8. SERVICE AND MAINTENANCE

8.1. Cleaning the boiler

Solid fuel boilers require regular cleaning in order to function properly and efficient. **Cleaning must be effected at least once a week.**



The boiler function must be stopped before cleaning! Make sure all the devices are stopped, and the boiler has cooled down. It is strictly prohibited to clean the boiler while in function!

8.2. Maintenance intervals

8.2.1. Daily maintenance

The pressure of the network must be daily verified to be within the allowed limits. Make sure that all the safety devices and pumps function properly.

8.2.2. Weekly maintenance

The boiler and the burner must be cleaned every 3-4 days or at least once a week, depending on the ash quantity accumulated. The ashes are collected to the ash box positioned under the grate. Check regularly the quantity of ash accumulated in the ash box.

In order to clean the heat exchanger, open the external door cover and use the lever provided. Push down firmly 3-5 times.



in order to clean the ash, open the external door cover and the internal boiler door. Scrape the ashes from all the surfaces. Empty the ashes from the grate and make sure all the holes are clear of ashes and other obstacles.

The cleaning of the grate and the ash box can be made also by means of a special vacuum cleaner.



All cleaning works should be done when boiler is stopped and cooled!

8.2.3. Periodical maintenance

A periodical maintenance should be effected by an authorized technician. The frequency of this maintenance depends on **pellet quality, function time, chimney installation.**

Call the service whenever the message **Service** appears on the display for periodical maintenance, or there are difficulties on the boiler function.

8.2.4. Annual maintenance

It is obligatory that an annual maintenance is effected by an authorized technician. This includes a general cleaning of the boiler and the heat exchanger, as well as a control of the electrical and mechanical parts and all the safety equipment of the boiler.

Check the doors and the sealing cord. Make sure the contact with the boiler is air-tight. If ash has accumulated on the sealing cord, clean it.

Empty the pellet tank to avoid moisture accumulation that can lead to wet pellets and feeder blockage.

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