

Centrometal

HEATING TECHNIQUE

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ENG

TECHNICAL INSTRUCTIONS

Description and use of BioTec Plus boiler control unit



THE FIRST START-UP MUST BE DONE BY AUTHORIZED PERSON, OTHERWISE PRODUCT WARRANTY IS NOT VALID.

BioTec Plus

BOOK 2/2

CONTROL UNIT SWITCHING ON

After turning on the main switch, screen will display language selection menu and software version. To select the language, press the flag of language you want.



If in the main menu - "DISPLAY", the option "LANGUAGE SELECTION" is "DISABLED", the initial message will appear on the screen (see figure below). The message will be displayed as long as it is set in the menu "INITIAL MESSAGE TIME" or until the "OK" button is pressed.



When turning on the main switch, the screen should not be pressed (by finger...). If the screen is pressed (during the main switch turn on) on the screen will be displayed the message "Firmware update" and control unit is in "software update" mode (this option can be used only by an authorized person). If this happens, it is necessary to turn off the main switch and restart without any pressure on the screen.

BOILER USE

Boiler must not be used in flammable and explosive environment.

It must not be used by children or disabled persons (either physically or mentally), as well as by person without knowledge or experience, unless they are under control or trained by a person responsible for their safety. Children must be supervised in the vicinity of the product. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Protective gloves are obligatory.

Check whether boiler and equipment are installed and connected in accordance with these Technical instructions. Check whether chimney meets requirements described in point 3.0 BioTec Plus boiler instructions - BOOK 1/2. Check whether boiler room meets all requirements therein. Check if fuel fulfils all requirements therein. Check whether the boiler and the entire heating system are filled with water and vented.

Note:

Before every use check if the boiler doors and cover door are closed.

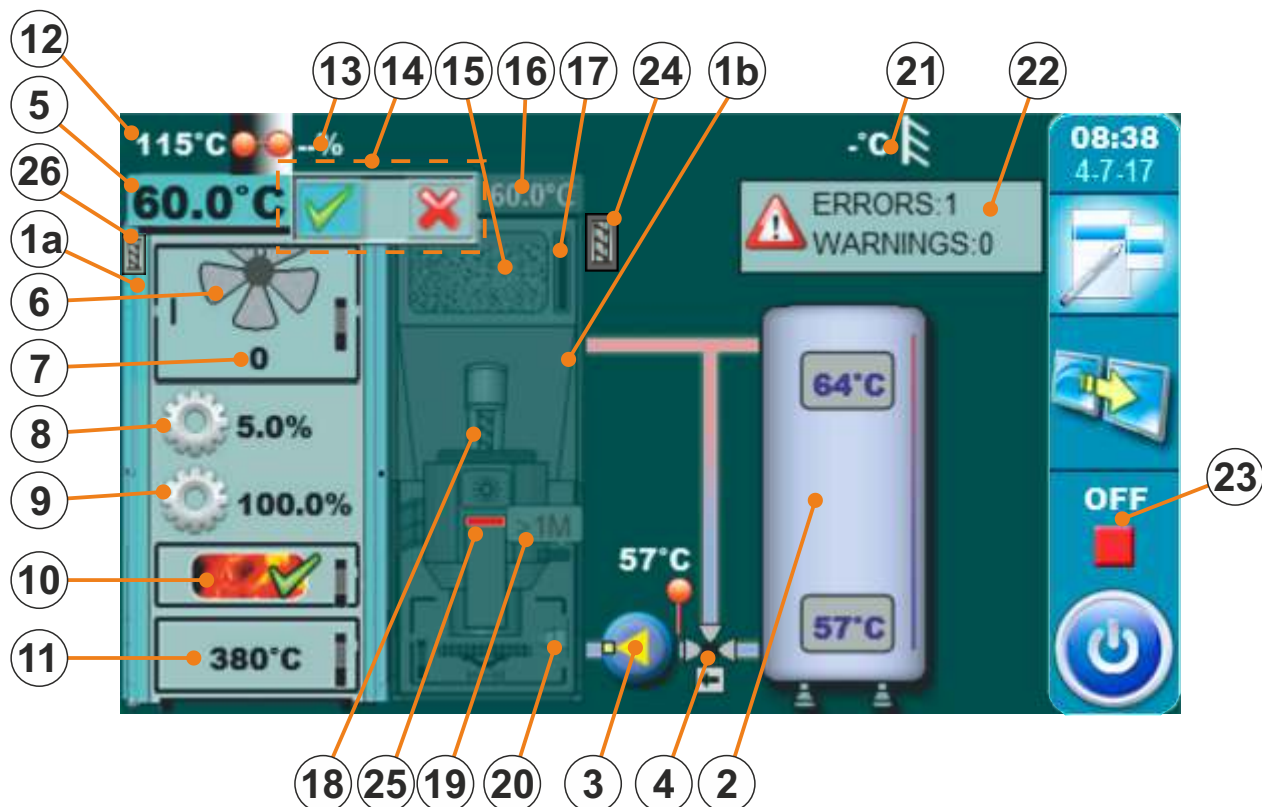
If you smell flue gas:

- shut down the heating system
- Ventilate the boiler room
- Close all doors leading to the living space



Flue gas can lead to life-threatening poisoning!

MAIN SCREEN



- | | |
|---|--|
| 1a - Boiler (Wood firing side) | 11 - Combustion chamber temperature |
| 1b - Boiler (Pellet firing side) | 12 - Flue gas temperature |
| 2 - Buffer tank | 13 - The percentage of oxygen in the flue gases (lambda probe) |
| 3 - Boiler pump P1 | 14 - Boiler side activity indicator |
| 4 - 3 - way protection valve (thermic or with actuator) | 15 - Wood pellet tank |
| 5 - Boiler temperature (Wood firing side) | 16 - Boiler temperature (Wood pellet firing side) |
| 6 - Symbol of fan operation (symbol is rotate when fan working) | 17 - Fuel level sensor (Wood pellets) |
| 7 - Fan speed (rpm) | 18 - Feeder screw |
| 8 - Symbol and opening percentage of primary air actuator | 19 - Photocell |
| 9 - Symbol and opening percentage of secondary air actuator | 20 - Electric heater |
| 10 - Glow option (if is enabled) | 21 - Outdoor temperature |
| | 22 - Errors and warnings |
| | 23 - Boiler working phase |
| | 24 - Screw refill (additional equipment) |
| | 25 - Magnetic valve |
| | 26 - Automatic flue gas tubes cleaning (Flue pass. Cleaner) (additional equipment) |

SYMBOLS



Pump (when pump is working symbol is rotating, otherwise idle)



The pump has a request for work (next to the pump symbol bright yellow square when the consumer gives the demand for pump operation, the pump does not work if all the conditions for work are not met, for example: low temp. in the boiler, otherwise the pump works normally)



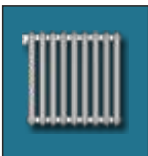
Room thermostat



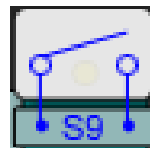
Next to the room thermostat symbol bright blue circle (the room thermostat has requested for the pump operation, the pump does not work if all the conditions for its operation are not met, for example: low temp. in the boiler, otherwise works normally)



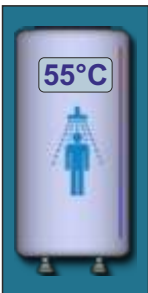
Accumulation (buffer) tank with current temperature at top of the tank and at the bottom of the tank.



Heating circuit



Burner operation is not required by external control (this symbol is visible only if external control is installed and configured)



Domestic hot water tank with current temperature



External control requires burner operation (this symbol is visible only if external control is installed and configured)



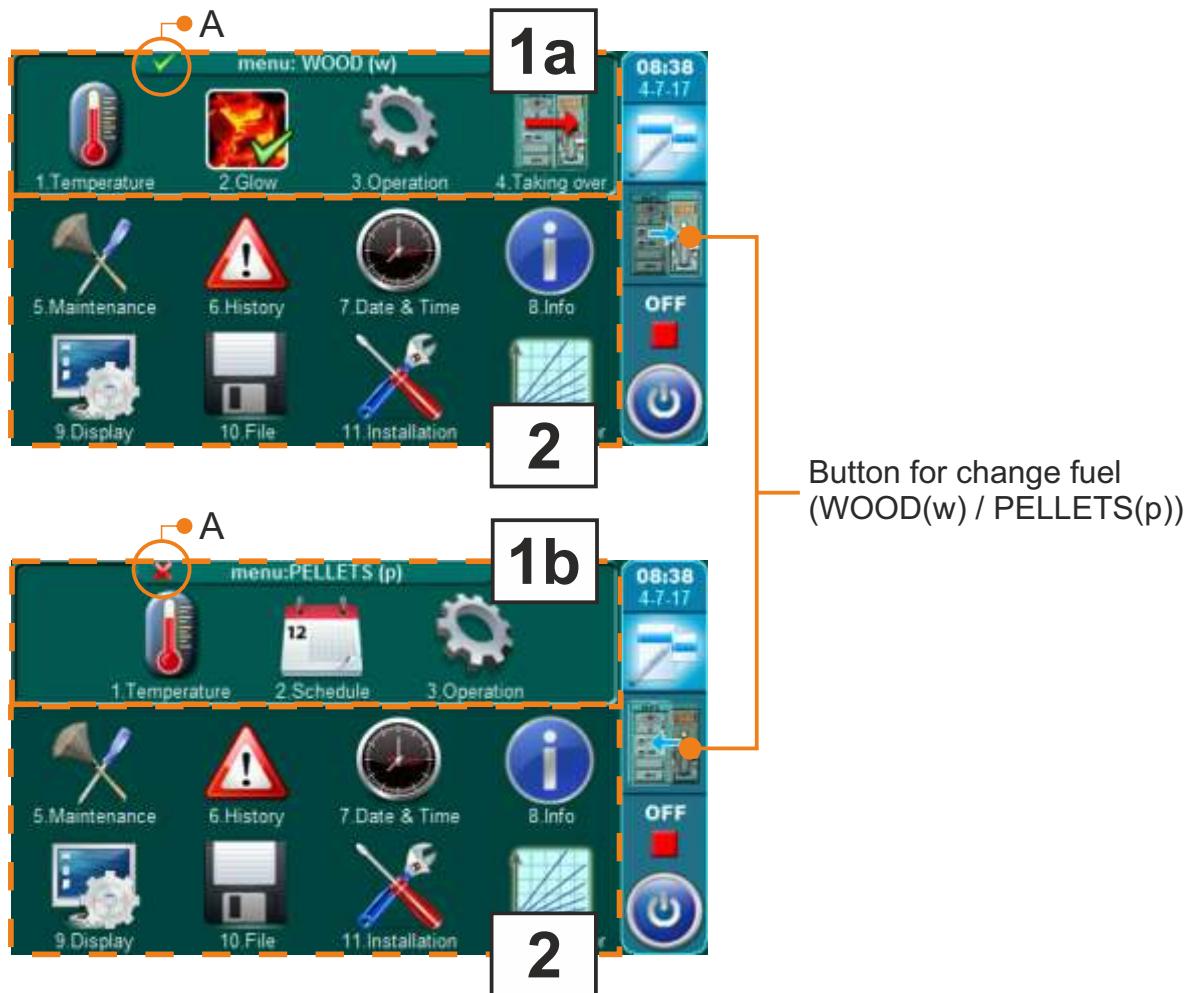
Automatic flue gas tubes cleaning (Flue pass. Cleaner) (additional equipment) (this symbol is located in left side - wood)



Screw refill (additional equipment) (this symbol is located in right side - pellets)

1.0 MAIN MENU

Main menu on BioTec Plus boiler control unit is composed of two parts - changeable part (1a and 1b) and static part (2). By pressing button for change fuel (see image below) displayed parameter will be changed. Displaying parameters can be changed regardless of boiler working phase and which fuel are chosen as active for work.



- 1a - WOOD(w) menu (changeable menu) - menu for using parameters at wood firing (left side of the boiler)
- 1b - PELLETS(p) menu (changeable menu) - menu for using parameters at wood pellet firing (right side of the boiler)
- 2 - static part of main menu - this part of main menu is always the same

BUTTONS



Button **"ON / OFF"**
options: on / off boiler operation"



Button **"DISPLAY SELECTION"**
options: main menu / work



Button **"BOILER OPERATION DISPLAY"**
options: graphic / numeric



Button **"ENTER"**



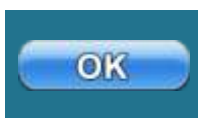
Button **"BACK"**



Button **"PREVIOUS SCREEN"**



Button **"NEXT SCREEN"**



Button **"OK"**



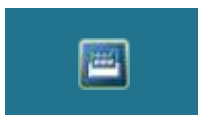
Button **"START"/"STOP"**



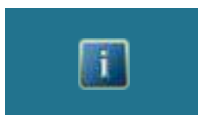
Navigation buttons:
"LEFT", "RIGHT", "UP", "DOWN"



Button **"DELETE"**



Button **"FACTORY SETTINGS"**



Button **"INFORMATION"**



Button **"COPY"**



Button **"PASTE"**

1.1 CHOOSING BOILER SIDE (choosing fuel)

Using of BioTec Plus boiler are consist of using of left part of the boiler (fuel: wood) and using of right part of the boiler (fuel: wood pellets). On boiler control unit is necessary to choose which side of the boiler will be used (which fuel will be used). Below is shown procedure for choosing boiler side for work when is boiler turned off (working phase „OFF”).

PROCEDURE FOR CHOOSING BOILER SIDE FOR WORK (USED FUEL): Example: Selecting wood pellets for active fuel (right side of the boiler).



Left and right side of the boiler have indicators (A and B) which shows which of these two side are active (which fuel are choosen). Active side have green indicator, inactive side have red indicator (red „X”). On figure above is example for switching from left side of the boiler to the right side of the boiler (from wood to wood pellets). It's necessary to press and hold for 3 seconds indicator on inactive boiler side (figure 1, indicator B). On display will be displayed message „Do you want choose wood pellets for active fuel?” (figure 2). Press „OK” button (figure 2). Now left side of the boiler have red inactive indicator, right side of the boiler have green indicator of activity (figure 3.).

1.2 TAKING OVER

Note: Option „Taking over” is possible only from left side of the boiler (fuel: wood) to right side of the boiler (fuel: wood pellets) (wood pellets taking over wood).

„Taking over” option is used for automatic switching operation from one fuel to another fuel. Automatic switch is possible only from wood to wood pellets.

For use of „Taking over” option is necessary to activate it (see „Activating „Taking over” option”).

„Taking over” option works on the way that when left part of the boiler (fuel: wood) runs out of the fuel, right side of the boiler (fuel: wood pellets) automatic take over work activity and right side of the boiler (fuel: wood pellets) continues with work.

ACTIVATING „TAKING OVER” OPTION

Activating „Taking over” option can be done on two ways:

- a) through main menu (menu: WOOD(w), „Taking over” submenu)
- b) through main screen by pressing boiler side status indicator

a) activating „Taking over” option through main menu



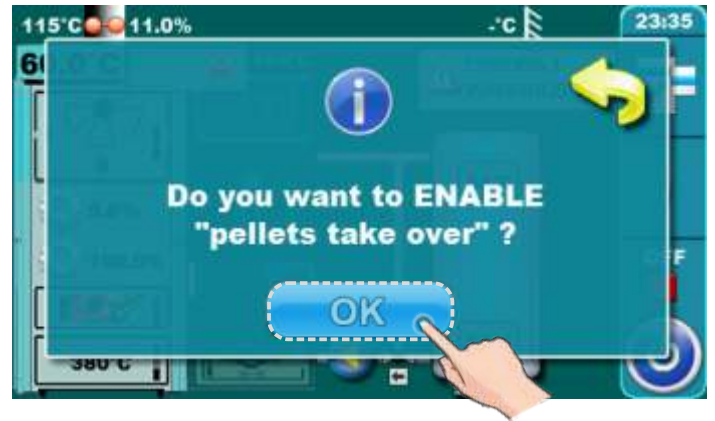
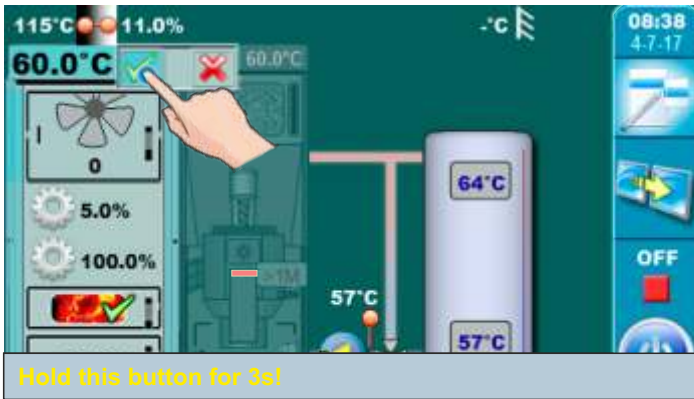
In main menu (menu: WOOD(w)) (see Point „1.0 Main menu” page 6) choose submenu „4. Taking over”, select:

- "Pellet ON" and confirm by pressing the "Confirm" button, if we want the right side of the boiler (fuel: wood pellets) to automatically take over the operation and resume operation immediately depending on the set "p.Max. Boiler temp." and Schedule (if the boiler Schedule is enable the boiler will only work when the boiler Schedule permits).

or

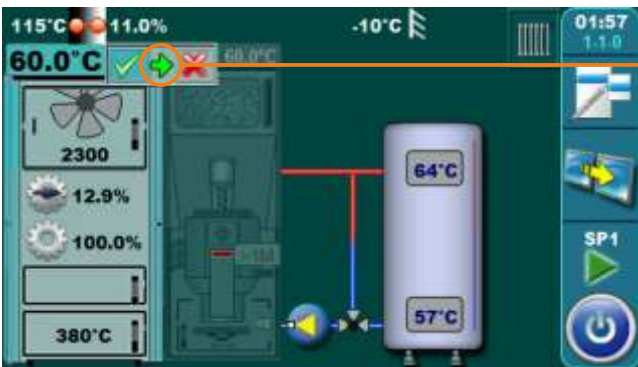
- "Pellet OFF" and confirm by pressing the "Confirm" button (this can only be selected if active Schedule and / or configured Internet supervision and / or Cm GSM is configured), if we want the right side of the boiler (fuel: wooden pellets)) automatically takes over, but only starts working when switch-on Schedule and / or internet supervision and / or Cm GSM activates.

b) activating „Taking over” option through main screen (boiler side activity indicator)

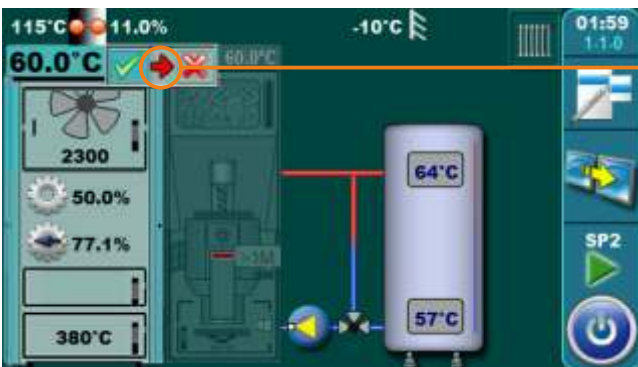


Press green activity indicator on right boiler side (fuel: wood) and hold it for 3 seconds. On display will be displayed „Do you want to ENABLE „pellets take over?”. Confirm it by pressing „Confirm” button.

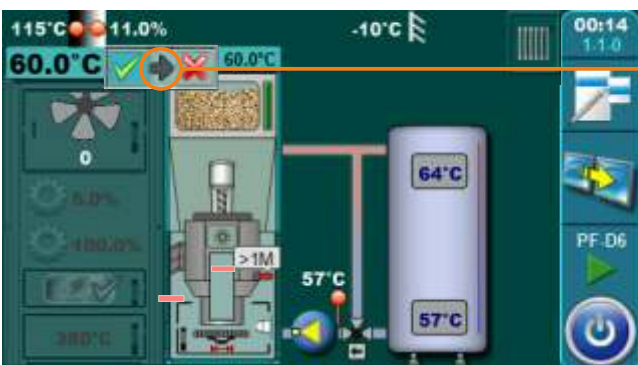
INDICATION THAT "TAKING OVER" IS ACTIVATED OR SWITCHED TO THE PELLET SIDE BASED ON "TAKING OVER"



Green arrow:
"TAKING OVER - Pellet ON" IS ACTIVATED



Red arrow:
"TAKING OVER - Pellet OFF" IS ACTIVATED



Gray arrow:
IT WAS SWITCHED TO THE "PELLET SIDE" BASED ON "TAKING OVER"

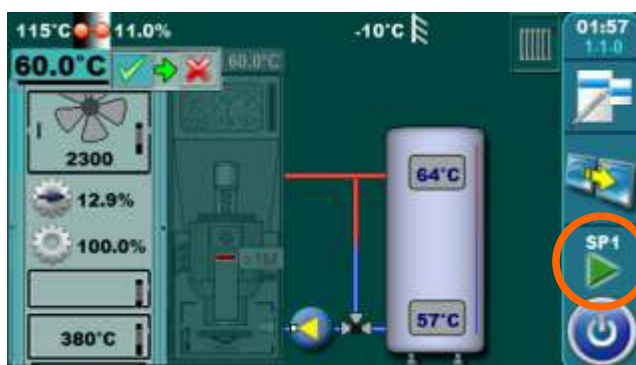
1.3 OPERATION PHASES (STAGES) - SHOWN ON THE SCREEN



IMPORTANT!

Automatically resume boiler operation after the disappearance of electric power (PF phases) is not possible if language selection option is turned on. For disabling option „Language selection“ see point 11.2. „Language selection“.

1.3.1. OPERATION PHASES (STAGES) - left side (fuel: wood)



Operation phases (stages)

Operat. phases	Description
OFF	The boiler is switched off (standby boiler until the next start).
S0	<ul style="list-style-type: none"> - The message on the screen: "IGNITION 1/3". - Fan works on max. speed - Primary / secondary is positioning themselves. - The process continues to the next phase "S1" after the user confirms the message or automatically if the Tfg (flue gas temperature) is higher than 50 °C. If Tfg is higher then 50 °C at the time of starting the operation of the boiler phase "S0" does not appear on the screen (automatically skipped).
S1	<ul style="list-style-type: none"> - The message on the screen: "IGNITION 2/3". - Fan works on max. speed, primary / secondary is positioning themselves. - Waiting for the Tfg > 50°C. <p>When Tfg > 50°C:</p> <ol style="list-style-type: none"> a) The user can confirm the message "IGNITION 2/3" then screen will show the message "IGNITION 3/3" which user also can confirm which exceeds the boiler in the next phase "SP1" or "SP2". b) If the user didn't confirm the message "IGNITION 2/3" or didn't confirm message "IGNITION 3/3" boiler will after 5 minutes automatically switch to the next phase "SP1" and on the screen remains message "IGNITION 3/3" with the inscription "automatic continuation". This message remains on the screen until the confirmation by the user but has no effect on the operation of the boiler.

Operation phases (stages) - shown on the screen

<p>S1</p>	<p>Exceptions:</p> <ol style="list-style-type: none"> 1. If upper boiler door is opened, there is no possibility of manual confirmation of the message "IGNITION 2/3" either is not possible to automatically move to the next message "IGNITION 3/3". Closing the upper boiler door, boiler moves to above described (normal) procedure phase "S1". 2. If upper boiler door is opened when on the screen is displayed message "IGNITION 3/3" move to the next stage ("SP1") or "SP2" is only possible by using manual message confirmation while automatically is not possible.
<p>SP1</p>	<ul style="list-style-type: none"> - Setting the start position primary / secondary is necessary for the next phase "SP2". - When the primary / secondary are adjusted boiler goes into a phase "SP2". - If the required position of primary / secondary had been set earlier, this phase "SP1" doesn't appear on the screen).
<p>SP2</p>	<ul style="list-style-type: none"> - The time of duration this stage "SP2" is factory defined. - Before the end of this stage regulation based on the measured parameters of the boiler operation allows the transition to the next phase "SD6" ("DX") or otherwise records information in history and extends this state "SP2" for factory defined time period after which repeats the comparison of the measured and the required parameters and allow you to move to the next stage "SD6" ("DX") or if the conditions are not satisfy writes an error and stops the operation of the boiler.
<p>SD6</p>	<ul style="list-style-type: none"> - Set the power blades for D6, if the required position primary / secondary had been earlier set this state "SD6" does not appear on the screen.
<p>DX</p>	<ul style="list-style-type: none"> - Stage "DX" is the common name for operation phases of the boiler on "D6", "D5", "D4", "D3". - phase "DX" doesn't appear displayed on the screen but is displayed one of the operation of the boiler "D6", "D5", "D4", "D3" which depends about boiler modulation phase. - These conditions are becoming current when the following conditions are met: <ul style="list-style-type: none"> Tboiler =<(Tboiler_set – 4) => D6 Tboiler =(Tboiler_set – 3) => D5 Tboiler =(Tboiler_set – 2) => D4 Tboiler =(Tboiler_set – 1) => D3 Tboiler >=(Tboiler_set – 0) => shutdown
<p>DOP0 (underphase)</p>	<ul style="list-style-type: none"> - Indicate that the upper boiler door is opened.
<p>DIF1</p>	<ul style="list-style-type: none"> - Turning off the boiler either due to reaching the set temperature of the boiler, too low combustion chamber temperature or too high flue gas temperature (Tfg>300 °C).
<p>DIF2</p>	<ul style="list-style-type: none"> - The boiler wait that the temperature in boiler drops to the set temperature of the boiler reduced by set differential.
<p>DIF3</p>	<ul style="list-style-type: none"> - Blowout while boiler is waiting that temperature in boiler drops to the set temperature of the boiler reduced by set differential.
<p>DIF4</p>	<ul style="list-style-type: none"> - Start boiler-setting primary / secondary, after the boiler temperature dropped to the set temperature of the boiler reduced by set differential.

Operat. phase	Description
GLW1	- Shutting down the boiler for keeping the glow.
GLW2	- Phase of keeping the glow.
GLW3	- Glow blowout in phase of keeping the glow.
GLW4	- Start a new filling, set the primary / secondary.
OFF1	- Shutting down after which the boiler goes into phase „OFF“.
PF-XXXX	- XXXX - Is any phase described above (for example PF-GLW2) - Appears after a power off/power in if there was a power failure. - The prefix "PF" disappears with new start of the boiler or by using option "forced shut down" (it is first displayed on the screen as information for the user)
PF-ON	- This stage is displayed during zeroing primary / secondary and after a power switch off / switch on. It indicates that after zeroing primary / secondary boiler automatically start again.

1.3.2. OPERATION PHASES (STAGES) - right side (fuel: wood pellets)



Operation phases (stages)

Operat. phase	Description
OFF	Boiler is switched off
S0	Initial fan blowing, waiting for grate position check
S1	Not used
S2	Initial pellet filling
S3	Waiting for flame to appear
S4	Electric heater working after flame appears
S5	Flame developing stage
SP1	Stabilisation stage 1
SP2	Stabilisation stage 2
SP3	Stabilisation stage 3
SP4	Stabilisation stage 4
SP5	Stabilisation stage 5
S6	Additional flame developing stage

Operation phases (stages) - shown on the screen

D0	Power D0
D1	Power D1
D2	Power D2
D3	Power D3
D4	Power D4
D5	Power D5
D6	Power D6
S7	Shuting down stage
S7-1	1st stage of shutting down stage, waiting for flame to dissapear and additional blowing for set time, after which S7-2 stage starts. Flue gas fan works (rpm) according to stage from which boiler entered S7-1 stage.
S7-2	2nd stage of shutting down stage. Final flue gas fan blowing at. max rpms until factory set time passes. After this stage grate cleaning stage starts (C0) and enters S7-3 stage.
S7-3	Burner does not work/standby/pause. Boiler waits demand for start.
PF0	Stage after power supply failure and power supply return, el. heater is started and waits for flame to appear (if flame appears -> PF1, if flame do not appears -> PF4)
PF1	El. heater switches off and enter PF2
PF2	Flame developing stage, enter PF3
PF3	Waits for flame disappearing, enter Pf4
PF4	Final flue gas blowing, boiler restarts or enters OFF stage, depending of the stage when power supply failure occurs
C0	Grate cleaning stage

2.0 USE THE LEFT SIDE OF THE BOILER - FUEL: WOOD

2.1 IGNITION

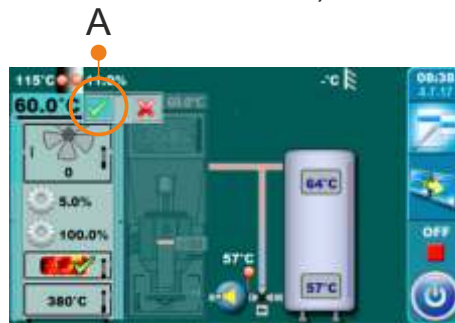
Boiler must not be used in flammable and explosive environment. It must not be used by children or disabled persons (either physically or mentally), as well as by person without knowledge or experience, unless they are under control or trained by a person responsible for their safety. Children must be supervised in the vicinity of the product. Protective gloves must be used!



Protective gloves must be used!

NOTE:

Before ignition make sure that is left side of the boiler selected like active (see indicator „A” on figure below) (for procedure for choosing boiler side for work (used fuel) view point 1.1 „Choosing boiler side (choosing fuel)” in this technical instructions).



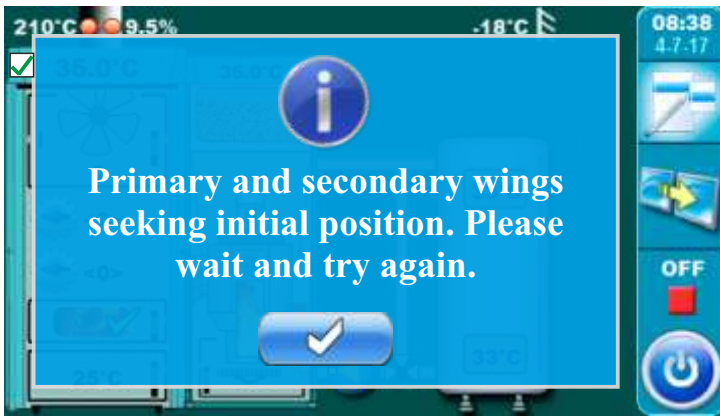
IGNITION PHASE:

- Open upper and middle boiler doors (see pages 4 and 5 in Technical instructions for BioTec Plus boiler - BOOK 1/2)

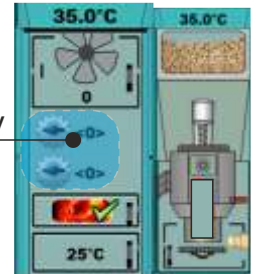
Follow these steps for successful ignition phase:



- press button for boiler start
- on display will be displayed window for boiler start
- press "OK" button



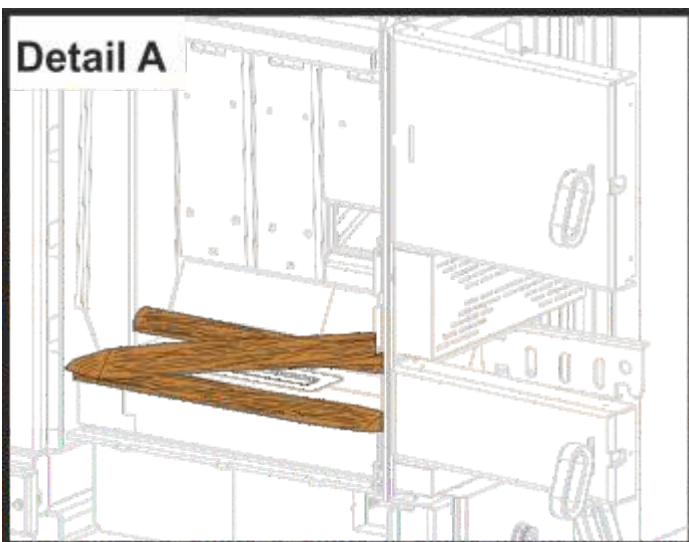
- if this message is shown on display than wait for primary and secondary air actuators
- primary and secondary air is ready for work when indicator stop blinking

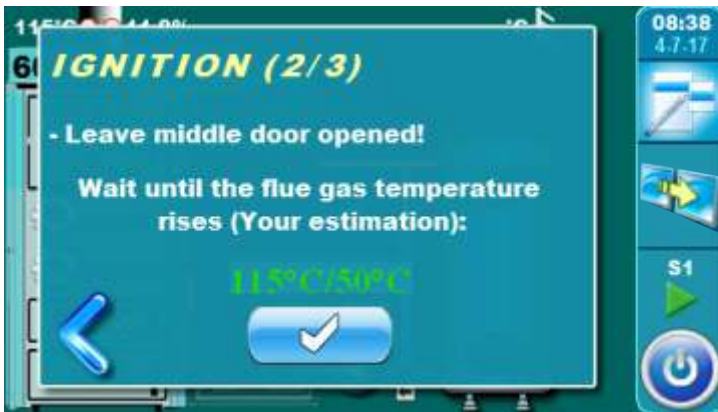
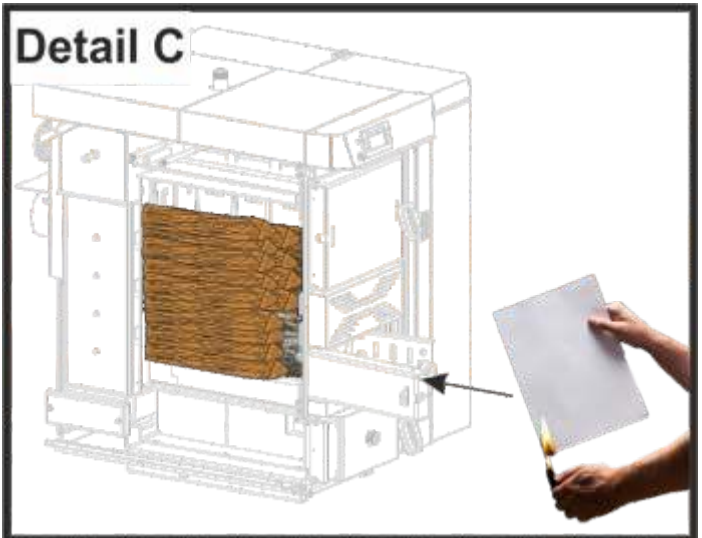
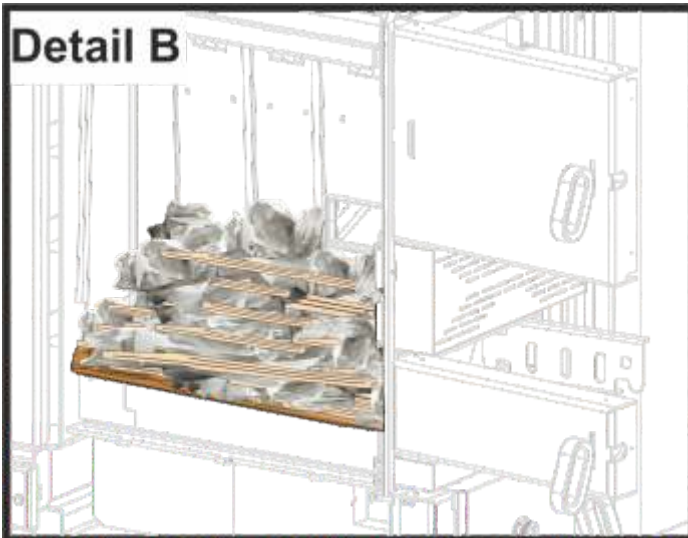


Primary and secondary air indicators.



- on display is displayed message "IGNITION 1/3"
- cover the refractory stone with one row of wood logs (be careful to not plug hole on refractory stone (detail A))
- cover the wood logs with fine chopped wood (use enough fine chopped wood to cover wood logs below)
- height of fine chopped wood layer must conform a approx. height of first row of wood logs
- cover the fine chopped wood with crumpled paper (use enough crumpled paper to cover fine chopped wood) (detail B)
- place the wood logs on crumpled paper
- fill the fuel loading chamber with wood logs (detail C)
- close upper and lower doors
- leave middle door opened
- ignite the fire through middle boiler door (detail C)
- press "enter" button







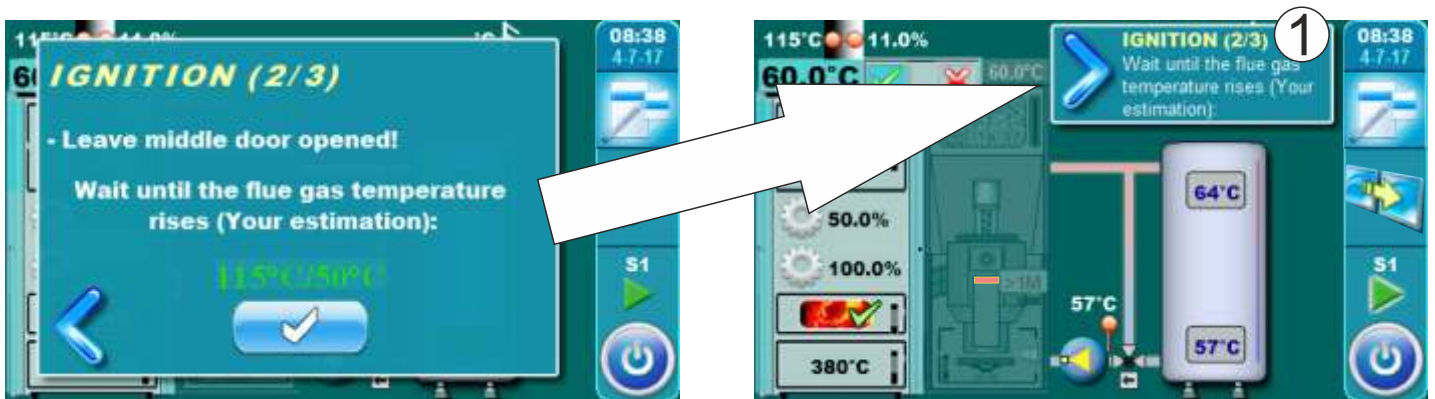
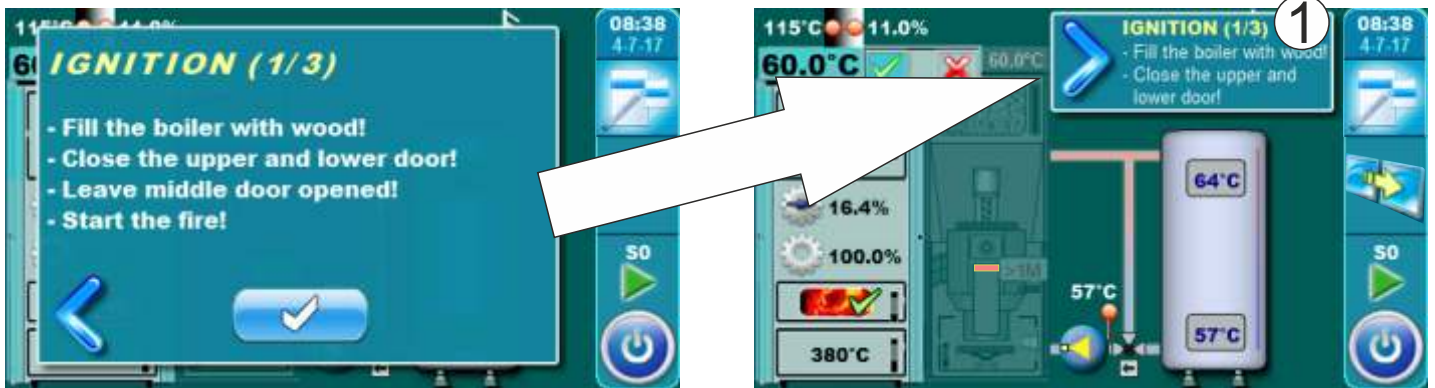
- on display is displayed message "IGNITION 2/3"
- on this step is necessary to wait until flue gas temperature raise 50°C
- middle boiler door must be opened all time
- when is flue gas temperature higher than 50°C press "enter" button



- on display is displayed message "IGNITION 3/3"
- close middle boiler door
- press "enter" button

Additional:

During ignition phase is possible to see main display. It is necessary to press  button. Because ignition phase is on proces, display will be displayed current ignition step to (1). By pressing  button we return to full preview of ignition phase.



2.2 REFILLING

Boiler must not be used in flammable and explosive environment. It must not be used by children or disabled persons (either physically or mentally), as well as by person without knowledge or experience, unless they are under control or trained by a person responsible for their safety. Children must be supervised in the vicinity of the product. Protective gloves must be used!

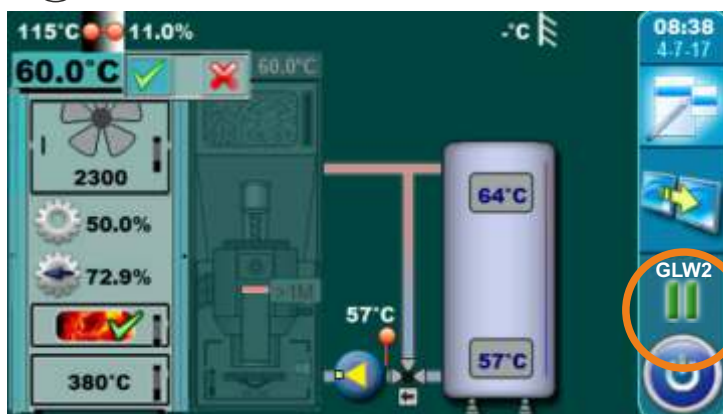


Protective gloves must be used!

PHASE OF REFILLING FUEL LOADING CHAMBER:

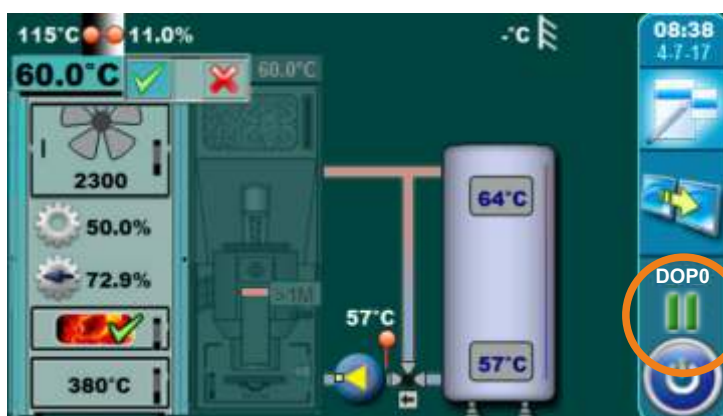
For successful refilling of the fuel loading chamber follow the next steps:

1.



When on display is displaying boiler operating phase „GLW2” that is mean the boiler have spent all the fuel and it's remaining only glow in the fuel loading chamber.

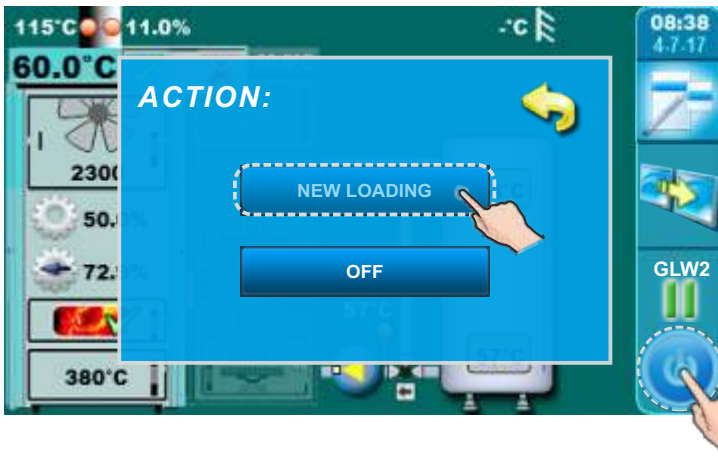
In this step is necessary to open upper boiler door and check if it glow quality good enough for firing continue and refilling wood loading chamber or it is necessary to go on ignition phase again.



When you open upper boiler door (see pages 4 and 5 in Technical instructions for BioTec Plus boiler - BOOK 1/2) than is displayed boiler operation phase „DOP0”.

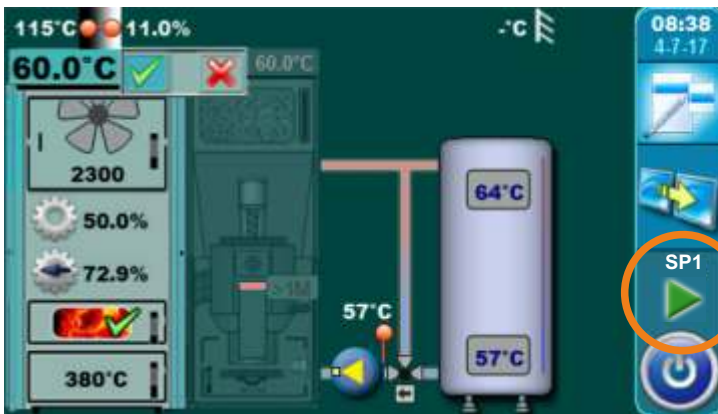
If you estimate that the glow is good enough for refilling wood load chamber with fuel it's necessary to follow next steps. If you estimate that the glow is not good enough for refilling wood load chamber follow steps in point „Procedure if glow is not enough good”. After glow checking is necessary to close upper boiler door.

2.



Press button „START / STOP“, on display will be displayed „WINDOW“ with offered options „NEW LOADING“ and „OFF“. Press button „NEW LOADING“.

3.



On display is displaying boiler operating phase „SP1“.

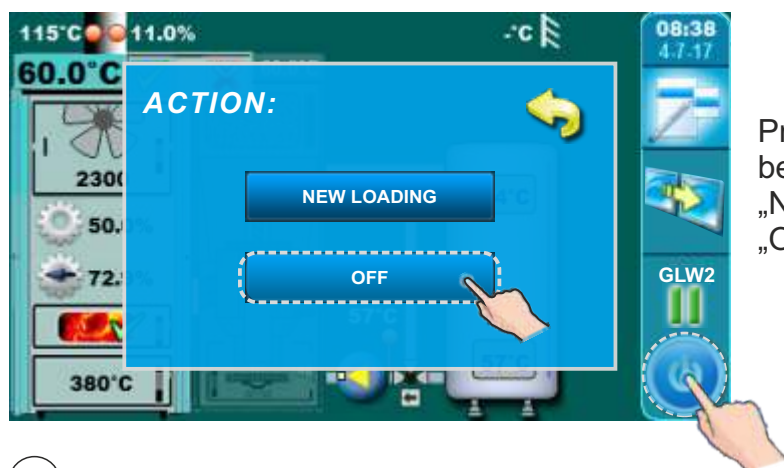
Description of the refilling wood loading chamber:

- open upper boiler door (see pages 4 and 5 in Technical instructions for BioTec Plus boiler - BOOK 1/2)
- align the glow with scraper
- based on estimates of glow quality and amount of glow put more or less dry thin wood (depend about estimate) and after that fill the wood loading chamber with wood
- close upper boiler door (see pages 4 and 5 in Technical instructions for BioTec Plus boiler - BOOK 1/2)

PROCEDURE IF GLOW IS NOT ENOUGH GOOD

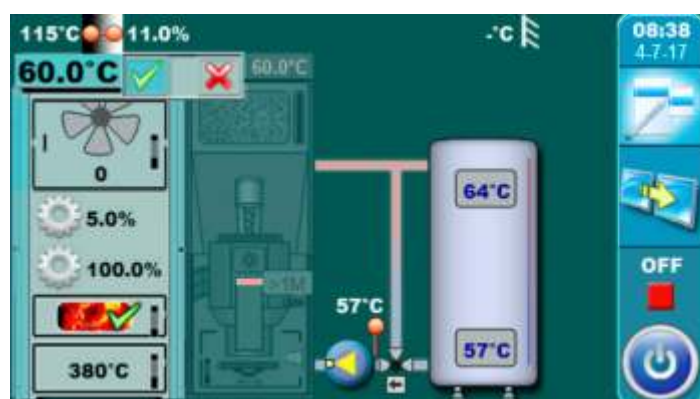
If glow is not enough good for fuel refilling folow the next steps:

1.



Press button „START / STOP“, on display will be displayed window with offered options „NEW LOADING“ and „OFF“. Press button „OFF“.

2.



Wait until on display is displayed boiler operating phase „OFF“.

3.

Go to the ignition phase like is described in point „2.1 IGNITION“ in this technical instructions.

3.0 USE THE RIGHT SIDE OF THE BOILER - FUEL: WOOD PELLETS

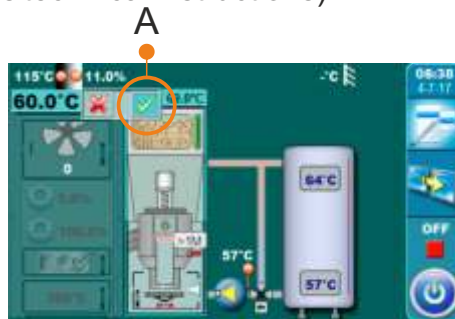
Boiler must not be used in flammable and explosive environment. It must not be used by children or disabled persons (either physically or mentally), as well as by person without knowledge or experience, unless they are under control or trained by a person responsible for their safety. Children must be supervised in the vicinity of the product. Protective gloves must be used!



Protective gloves must be used!

NOTE:

Before ignition make sure that is right side of the boiler selected like active (see indicator „A” on figure below) (for procedure for choosing boiler side for work (used fuel) view point 1.1 „Choosing boiler side (choosing fuel)” in this technical instructions).



BOILER START:

For boiler start is necessary to press ON / OFF button. After pressing ON / OFF button on display will be displayed window for boiler start confirmation. Press „OK” to confirm boiler start.



BOILER STOP:

For boiler stop is necessary to press ON / OFF button. After pressing ON / OFF button on display will be displayed window for boiler stop confirmation. Press „OK” to confirm boiler stop.

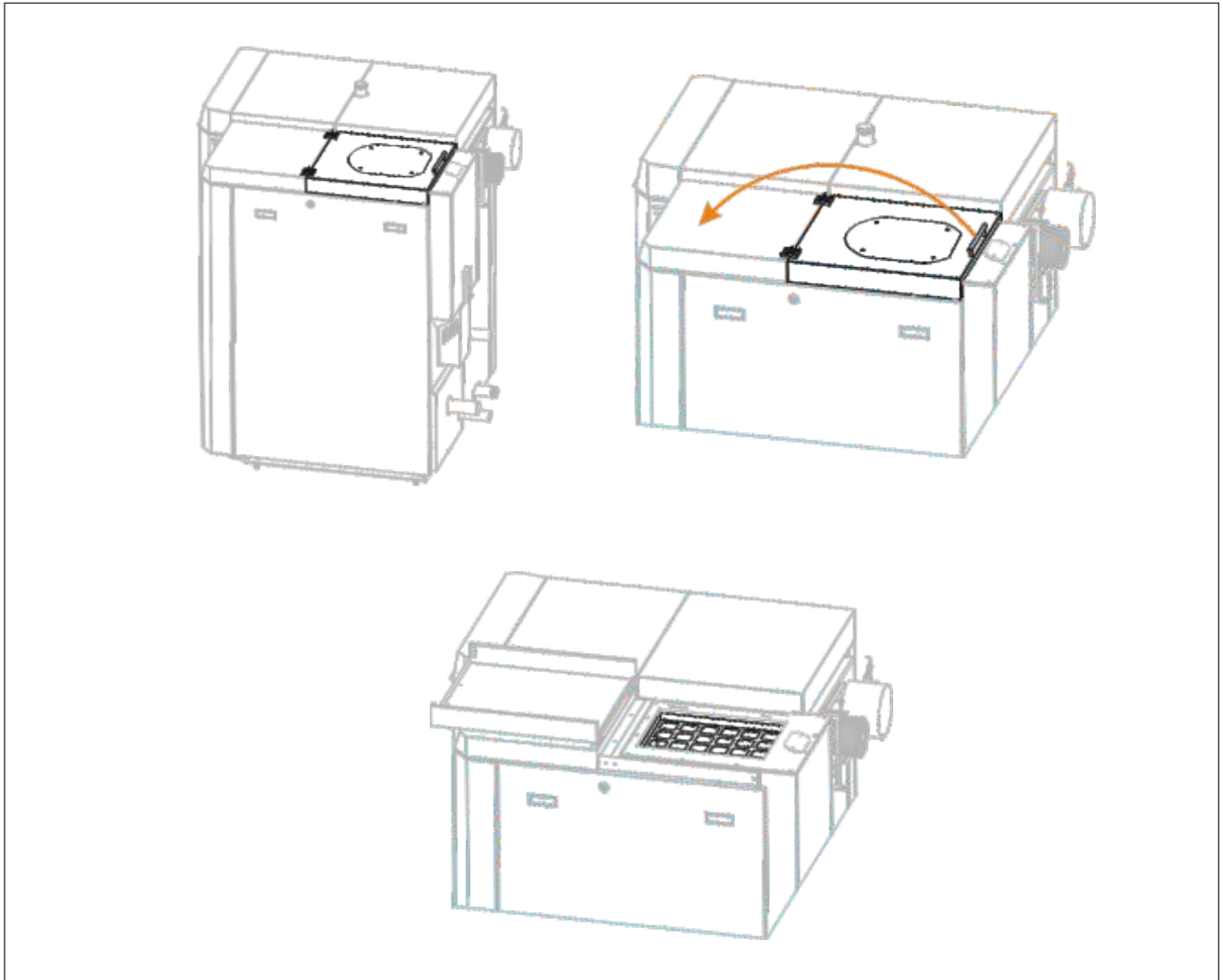


3.1 REFILING OF WOOD PELLETS

Wood pellet is manual filling on right upper side of the boiler (pellet part) (see figure below). It's necessary to open casing cover using the handle.

IMPORTANT:

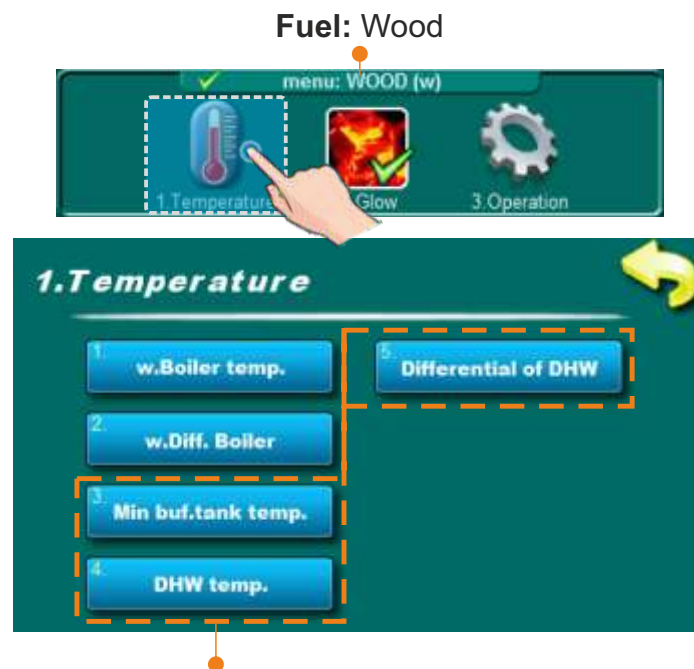
At filling wood pellet tank it must be filled at least 2/3 of capacity for correct work of wood pellet level sensor!



4.0 TEMPERATURE ADJUSTMENT

Temperature adjustment are performed separately for left (fuel: wood) and right (fuel: wood pellets) side of the boiler. For adjustment left side of the boiler (fuel: wood) temperature it's necessary to choose menu for wood firing (WOOD(w)). For adjustment right side of the boiler (fuel: wood pellets) temperature it's necessary to choose menu for wood pellet firing (PELLETS(p)).

TEMPERATURE ADJUSTMENT FOR WOOD FIRING



SUBMENUS:

This submenus depend about DHW configuration

1. w.Boiler temperature

In this submenu is possible to adjust boiler working temperature.

- Factory adjusted: 85°C
- Adjustment range: 75°C - 90°C

2. w.Differential Boiler

In this submenu is possible to adjust differential for boiler working temperature.

- Factory adjusted: 5°C
- Adjustment range: 5°C - 7°C

3. Minimal buffer tank temperature

In this submenu is possible to adjust minimal buffer tank temperature.

- Factory adjusted: 20°C
- Adjustment range: 5°C - 85°C

4. DHW temperature (depend about DHW configuration)

In this submenu is possible to adjust domestic hot water temperature.

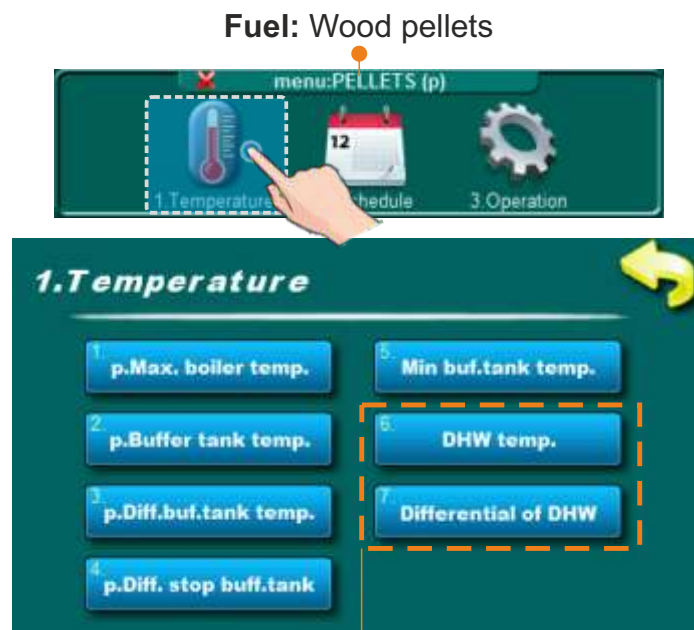
- Factory adjusted: 50°C
- Adjustment range: 40°C - 80°C

5. Differential of DHW (depend about DHW configuration)

In this submenu is possible to adjust differential of domestic hot water temperature.

- Factory adjusted: 5°C
- Adjustment range: 4°C - 40°C

TEMPERATURE ADJUSTMENT FOR WOOD PELLET FIRING



This submenus depend about DHW configuration

Submenus:

1. p.Maximal boiler temperature

In this submenu is possible to adjust maximal boiler working temperature.

- Factory adjusted: 80°C
- Adjustment range: 70°C - 90°C

2. p.Buffer tank temperature

In this submenu is possible to adjust buffer tank temperature.

- Factory adjusted: 80°C
- Adjustment range: 40°C - 85°C

3. p.Differential buffer tank temperature

In this submenu is possible to adjust differential for buffer tank temperature.

- Factory adjusted: 10°C
- Adjustment range: 5°C - 30°C

4. p.Differential stop buffer tank temperature

In this submenu is possible to adjust differential stop for buffer tank temperature.

- Factory adjusted: 5°C
- Adjustment range: 3°C - 30°C

5. Minimal buffer tank temperature

In this submenu is possible to adjust buffer tank temperature.

- Factory adjusted: 20°C
- Adjustment range: 5°C - 85°C

6. DHW temperature (depend about DHW configuration)

In this submenu is possible to adjust domestic hot water temperature.

- Factory adjusted: 50°C
- Adjustment range: 40°C - 80°C

7. Differential of DHW (depend about DHW configuration)

In this submenu is possible to adjust differential for domestic hot water temperature.

- Factory adjusted: 5°C
- Adjustment range: 4°C - 40°C

5.0 GLOW



In the **Glow** menu, the glow maintenance option can be switched ON or OFF (only when selecting "WOOD")

The Glow option keeps the glow in the upper furnace of the boiler (it shuts down the boiler fan a little earlier than in the option without maintaining the glow) so that the next time you can continue working with the newly added fuel, without the need for a new ignition.

Mode of operation with the Glow option: after the ignition is made for the first time and the boiler started working, if we want to continue with the boiler, we turn on the Glow option, which can maintain the glow for the next ignition (up to max 8 hours if using dry, hard wood). If you want to continue heating during this glowing time (GLW operation phase), add some small wood on the glow and new wood to the upper firebox and press the NEW LOADING button. During the grill maintenance phase (GLW...), the boiler fan ON up every hour to ignite the glow in the upper furnace. When we want to clean the boiler, it is advisable to turn OFF the Glow option so that the wood burns completely and as little ash for cleaning remains in the firebox.

6.0 OPERATION



Submenus in "Operation" menu depend of the enabled options in "Installation" menu and depend of the select side of the boiler (wood or pellet).

Fuel: WOOD (w)



Fuel: Pellets (p)

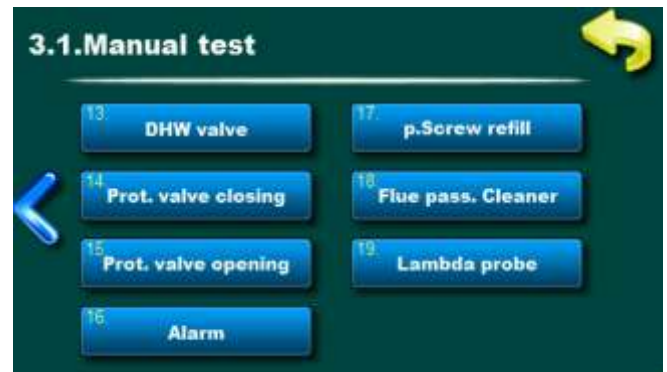
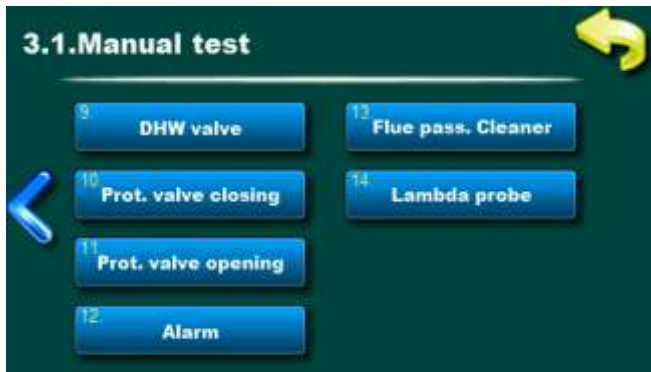
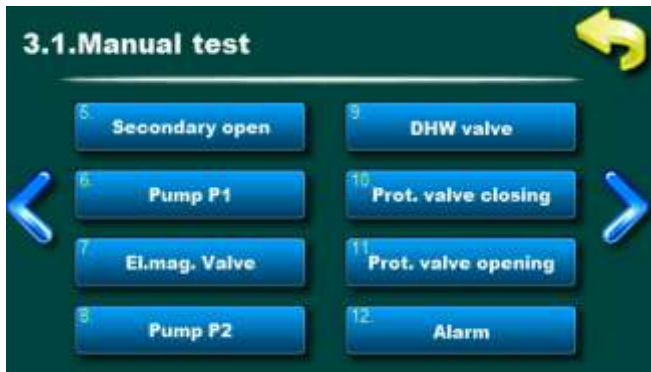
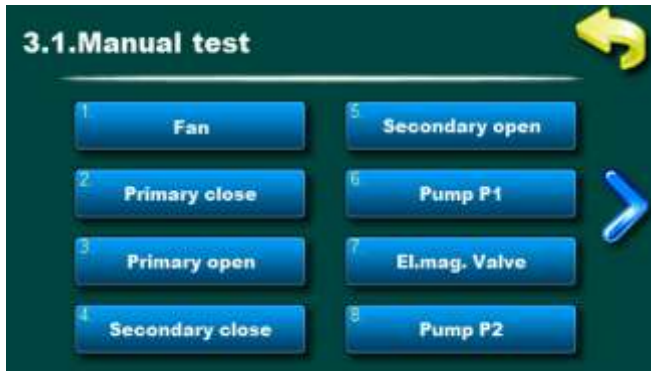


6.1 MANUAL TEST

Manual test is an option which enables testing of all parts of the boiler in order to check their function.

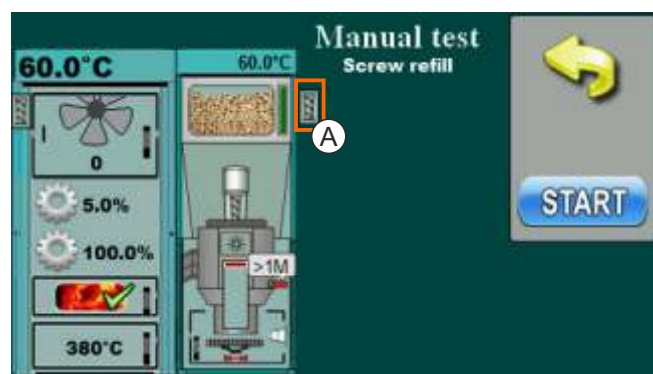
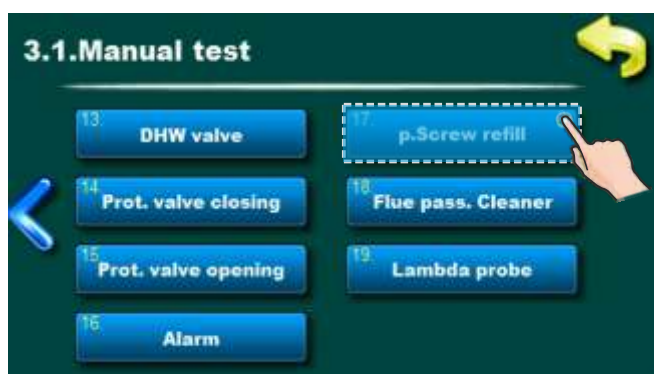


Submenus in "Manual test" menu depend of the enabled options in "Installation" menu and depend of the select side of the boiler (wood or pellet).



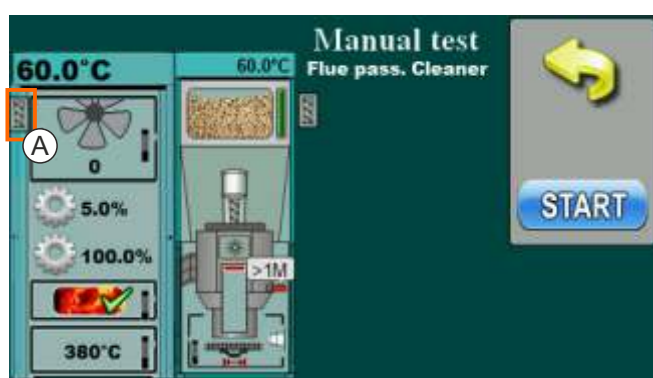
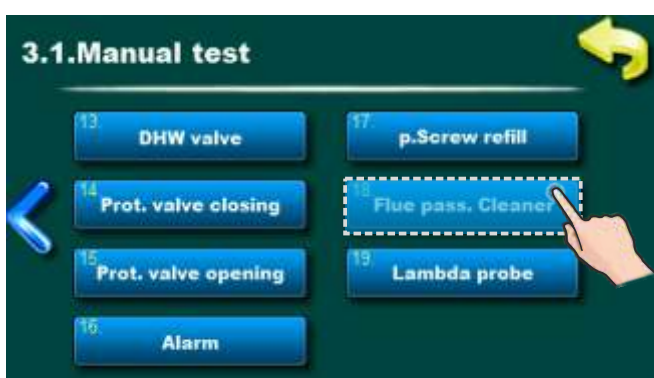
MANUAL TEST IS POSSIBLE ONLY WHEN THE BOILER IS SWITCHED OFF!

6.1.1 SCREW REFILL (ADDITIONAL EQUIPMENT)



This option allows you to check the motor device of screw refill. It is necessary to press the "START" next to the corresponding symbol and check that the motor device of the screw refill is working. After pressing the "STOP" engine will stop working. Each time you press "START" it becomes "STOP" and vice versa. When the option is active, on display will move a symbol of the screw refill (A).

6.1.2 FLUE PASS. CLEANER (ADDITIONAL EQUIPMENT)



This option allows you to check the motor device of flue passage cleaner. It is necessary to press the "START" next to the corresponding symbol and check that the motor device of the flue passage cleaner is working. After pressing the "STOP" engine will stop working. Each time you press "START" it becomes "STOP" and vice versa. When the option is active, on display will move a symbol of the flue passage cleaner (A).

6.2 SCREW REFILL (ADDITIONAL EQUIPMENT)





This option is used to ON or OFF the screw refill.

Factory: ON




Possible selection: ON, OFF



This option is used to set the time of the screw refill. See technical manual "PELLET TANK / CPSP-BP 800" for details.

6.3 INTERNET SUPERVISION - available only from firmware version "v1.09a"

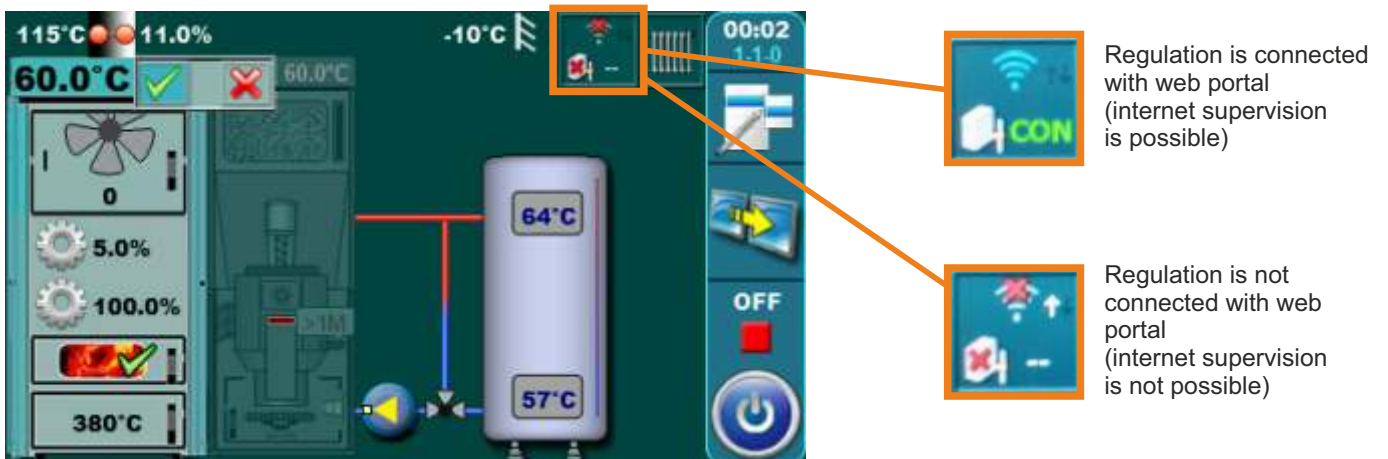
IMPORTANT NOTES:

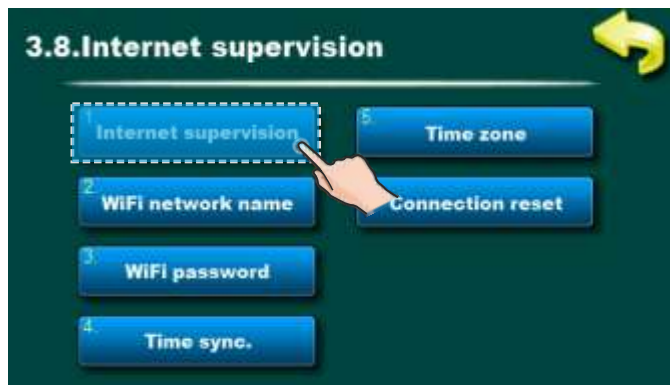
-  **CM WiFi-box requires active DHCP server of Access Point (e.g. router) because manual setting of network parameters is not possible. For more informations contact administrator of your home network.**
-  **To be able to use Cm WiFi box on BioTec Plus boiler, minimum required firmware versions of the boiler regulation must be: v1.09a.**
Boiler version is displayed in the "INFO" menu.
If there is older firmware version, it must be updated to be able to use Cm WiFi box.
For firmware update please contact authorized serviceman.
-  **For detailed configuration of the Cm WiFi box please refer to the Cm WiFi box manual received with the Cm WiFi box.**

This option is used to set the regulation to connect boiler to the internet through local Wi-Fi network.
 This option is used to change internet supervision settings.
 This option is only visible if "Cm WiFi box" is connected to the boiler regulation by UTP cable.



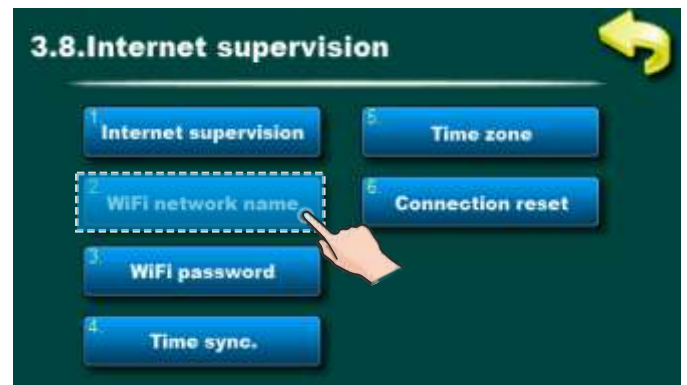
When "Cm WiFi box" is connected to the boiler and internet supervision is enabled, a new icon appears on the main screen showing the status of internet supervision.



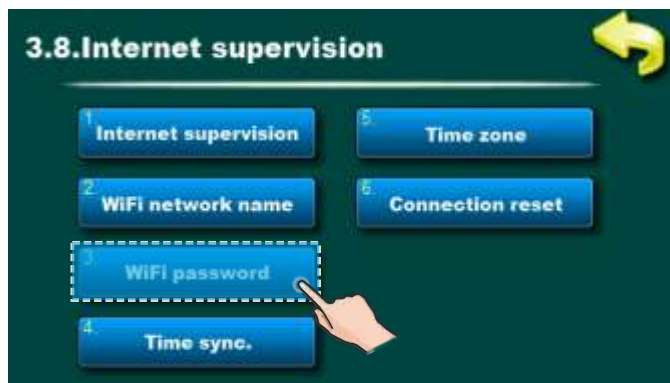


Factory: Supervision + control
OFF, Supervision, Supervision + control

This option is used to set and enable/disable internet supervision.



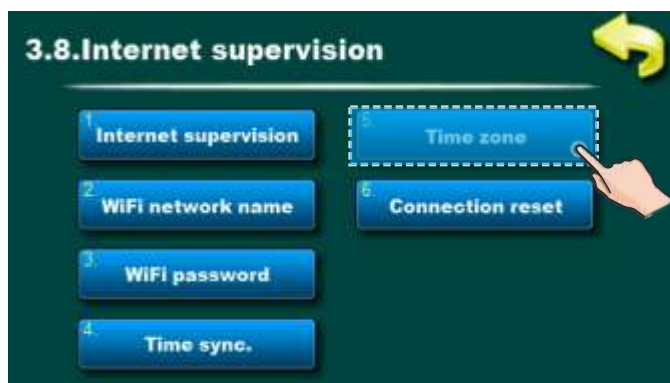
This option allows you to enter the name of WiFi home network to which you want to connect the "Cm WiFi box" and the boiler. You must enter exact WiFi network name or else boiler will not be able to connect to the WiFi network.



This option allows you to enter a password for your home Wi-Fi network. You must enter exact password or else boiler will not be able to connect to the WiFi network.



This option allows boiler time synchronization with web server time (internet time).



This option allows you to set the time zone if the boiler is in a different time zone than the web portal server. (this option must be set if you enable "Time synchronisation option")



This option allows you to reset connection with home network.

7.0 CSK-Touch (additional equipment) - only for authorized service technicians - possible from the software version "v1.10"

The CSK-Touch digital room corrector enables room temperature control and the heating circuit is switched ON and OFF according to the set room temperature and schedules. In addition to measuring and correcting the room temperature, this room corrector allows you to set the min. accumulation (buffer) tank temperatures and boiler and domestic hot water (DHW) temperatures if any, and setting of schedules for the heating circuit.

CSK-Touch can be connected directly to BioTec Plus boilers only via the CM WiFi box or via a router using the CM WiFi box. Wire connection directly to the boiler is not possible.



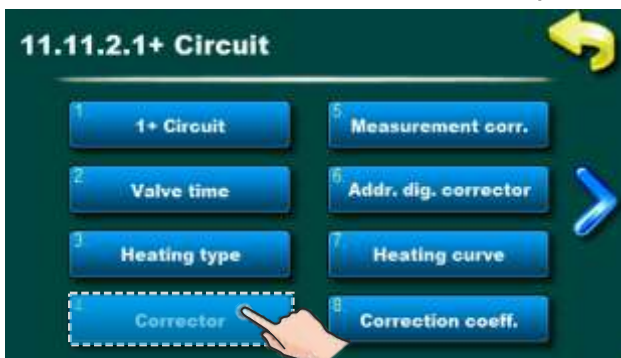
When connected directly to the boiler, the "Circuit 0" must be selected when configuring the heating circuit on the CSK-Touch

The digital room corrector can be connected to BioTec Plus via a CM2K module (if any). The connection to CM2K can be: wired (2 wires), wireless via a CM WiFi box or via a home router. For more details on how to connect the CSK-Touch, see "Technical instructions for installation, use and maintenance CSK-Touch digital room corrector".



To configure the CSK-Touch corrector, it is necessary to configure the heating mixing circuits (on the boiler and/or CM2K module), which must be done by an authorized service technician (by entering the PIN in the Installation menu.)

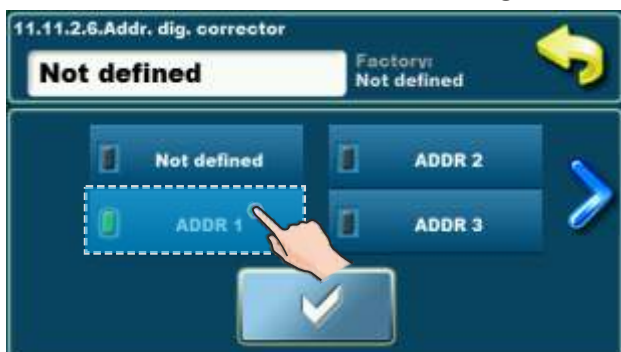
In menu 11, when configuring an individual heating circuit in the "Corrector" menu, it is necessary to select "CSK-Touch" and select its unique address in the "Addr. dig. corrector" menu.



Enable the corrector in the heating circuit



Select the type of corrector used



Select a unique address dig. corrector



After configuring the heating circuits on the CM2K module, it is necessary to open the INFO menu in the CSK-Touch menu and copy/remember the CSK-Touch WiFi ID (1) and Address Codes (2) (depending on the number of installed correctors) that need to be entered in each CSK -Touch when configuring it.



CSK Touch WiFi ID : 335E6F5E ¹

Addr.	Addr. code	Con. type	Status	Signal	Packets
1	Y A o o	Wired	<input checked="" type="checkbox"/>	-	209
2	Wm X X	Router	<input checked="" type="checkbox"/>	42dB	153
3	O i d d	Addr. 1	<input checked="" type="checkbox"/>	-38dB	427
4	0 B G G	-	<input checked="" type="checkbox"/>	-	0
5	9 1 9 9	-	<input checked="" type="checkbox"/>	-	0
6	Wb Y Y	-	<input checked="" type="checkbox"/>	-	0
7	2 z WW	-	<input checked="" type="checkbox"/>	-	0
8	q K O O	-	<input checked="" type="checkbox"/>	-	0

²

According to the user's wishes, certain actions that are factory-enabled for all digital room correctors can be disabled on an individual digital room corrector.



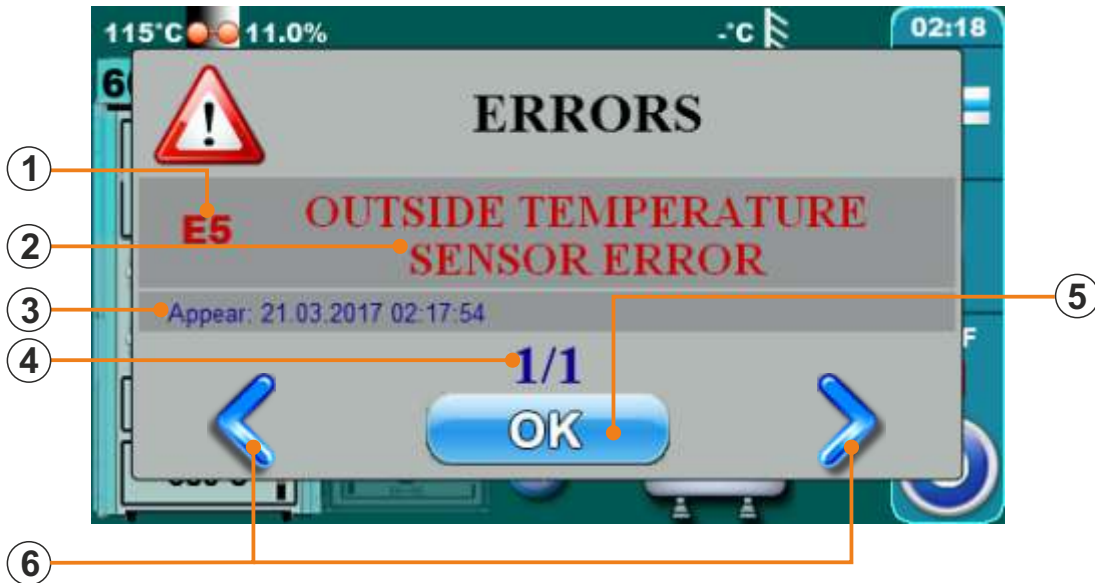
For each corrector can be enabled / disabled:

- CSK-Touch view configuration
- Boiler temperature
- Boiler control
- Boiler Schedule
- Circuit 0...Circuit 8.

For details see instructions: **Technical instructions** for installation, use and maintenance **CSK-Touch** digital room corrector

8.0 MALFUNCTIONS

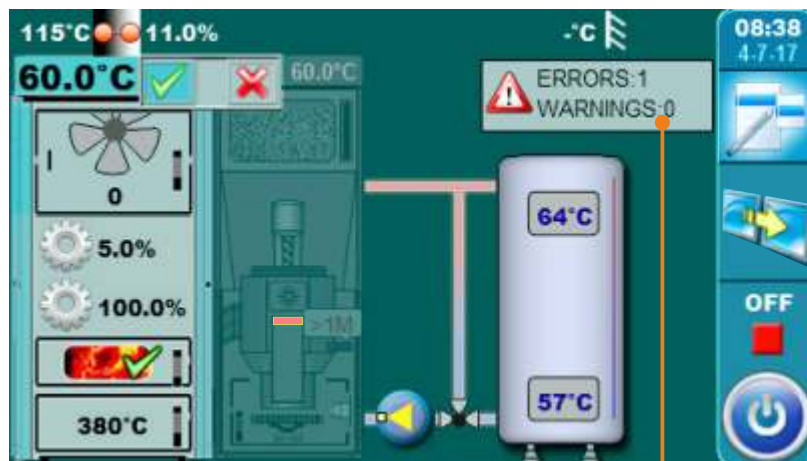
8.1 ERRORS/WARNINGS/INFORMATIONS ON THE MAIN SCREEN



When the error/warning still present, error/warning name and code is painted red, and when error/warning is resolved, text turns green

- ① Error / Warning / Information code
- ② Error / Warning / Information name
- ③ Date and time of error / warning / information occurrence
- ④ Number of errors / warnings / informations
- ⑤ „OK” button
- ⑥ Buttons for scrolling through errors / warning / informations

By pressing „OK” button error window will be minimized and shown on main display.



Minimized window on main display



Errors/warnings are recorded in history (see point 8.2 History)

8.2 HISTORY

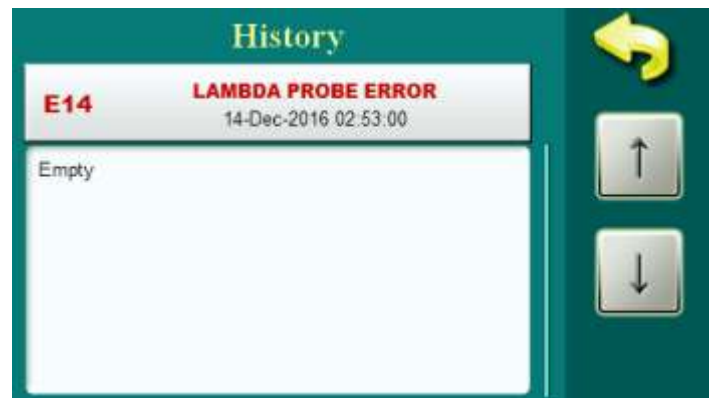
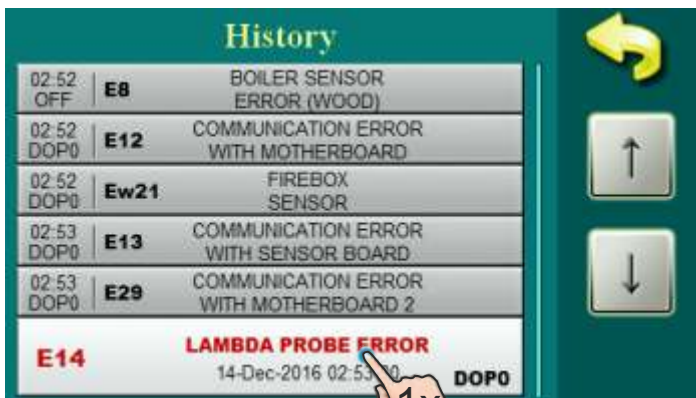


By pressing on „History” button will be opened menu for choosing history list. It can be chosen between error list and warning list. Informations history are placed with error list.

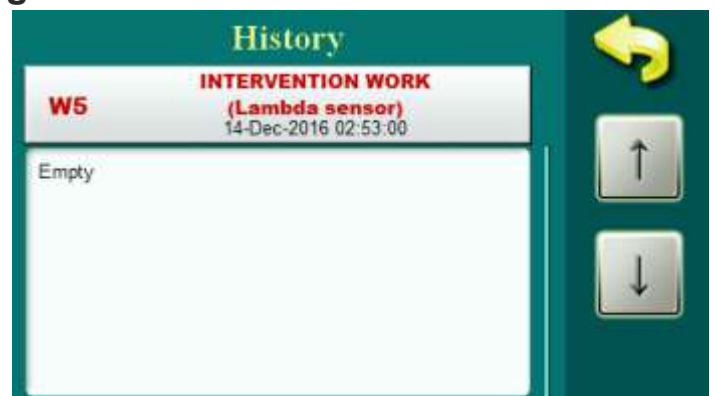
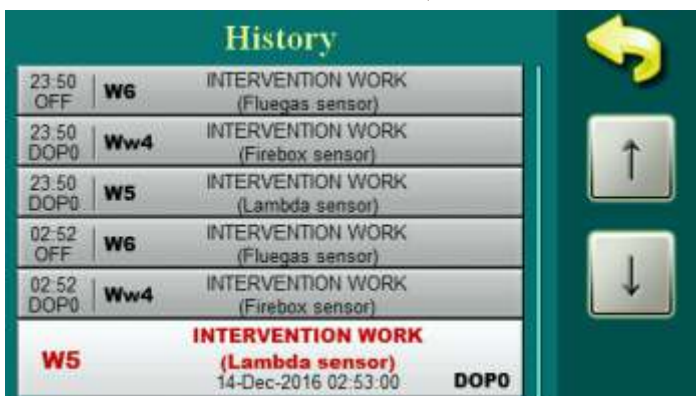
- Written is:**
- time of occurrence errors / warnings / informations
 - error / warning / information code
 - description of the error / warning / information.

The first press on the field error/warning/information field is indicated, in addition to see and date generated errors/warnings/information. The second press on the selected error/warning/information, prints a detailed description of the error/warnings/information and corrective action errors/warnings/information. If for some error/warning/information there is no description on current software version, on the screen will be displayed "empty".

Errors list



Warnings list



8.3 ERROR LIST

MUTUAL ERRORS (WOOD / WOOD PELLETS):

ERROR	NAME	DESCRIPTION
E1	DHW sensor error	Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Interruption on el. connections between sensor and boiler, connection to the boiler, cold connection or DHW sensor is invalid.
E2	Buffer tank sensor error (Up)	Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Interruption on el. connections between sensor and boiler, cold connection or buffer tank sensor (up) is invalid.
E3	Buffer tank sensor error (Down)	Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Interruption on el. connections between sensor and boiler, cold connection or buffer tank sensor (down) is invalid.
E4	Flue gas sensor error	Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Interruption on el. connections between sensor and boiler, cold connection or invalid flue gas sensor.
E5	Outside temperature sensor error	Boiler status: Boiler work normally, problem appears on work of CM2K regulator if is installed. Possible causes: Interruption on el. connections between sensor and boiler (CM2K), cold connection or invalid outside temperature sensor.
E6	Main flow sensor error	Possible causes: Interruption on el. connections between sensor and boiler, cold connection or invalid main flow sensor.
E7	Return flow sensor error	Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Interruption on el. connections between sensor and boiler, connection to the boiler, cold connection or invalid return flow sensor.
E8	Boiler sensor error (Wood)	Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Interruption on el. connections between sensor and boiler, connection to the boiler, cold connection or invalid sensor.
E9	Unknown boiler power	Boiler status: Boiler immediate go to phase OFF. Possible causes: Key for power loading is not installed or recognized, cold connection or invalid key.
E10	Fan error	Boiler status: Boiler immediate go to phase OFF. Possible causes: Invalid fan or rpm counter (integrated in fan housing) or safety thermostat is interrupt el. supply to fan because of too high temperature in the boiler.
E11	Memory error	Possible causes: Call service man!

E12	Communication error with motherboard	Boiler status: Boiler immediate go to phase OFF. Possible causes: Call service man!
E13	Communication error with sensor board	Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Call service man!
E14	Lambda probe error	a) Error occurs in the phase of "OFF" The problem is with el. heater which is integrated into the lambda probe b) Error occurs in all phases except "OFF" The problem is with the communication system within the lambda(Cables, connectors, el. boards, software)
E16	Communication error with CM2K module (1st and 2nd circuit)	Boiler status: Boiler work normally. Possible causes: Interruption in el. connections between boiler and CM2K (between two CM2K's), connection on boiler and CM2K (or two adjacent CM2K's) or CM2K module is invalid.
E17	Sensor CM2K 1. circuit	Boiler status: Pump of 1+ heating circuit doesn't work. Boiler work normally. Possible causes: Error on flow temperature sensor of 1+ heating circuit (on regulator CM2K).
E18	Corrector CM2K 1. circuit	Boiler status: Pump of 1+ heating circuit work in intervention mode by heating curve. Boiler work normally. Possible causes: Error on room corrector of 1+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.
E19	Sensor CM2K 2. circuit	Boiler status: Pump of 2+ heating circuit doesn't work. Boiler work normally. Possible causes: Error on flow temperature sensor of 2+ heating circuit (on regulator CM2K).
E20	Corrector CM2K 2. circuit	Boiler status: Pump of 2+ heating circuit work in intervention mode by heating curve. Boiler work normally. Possible causes: Error on room corrector of 2+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.
E22	Flue gas temperature too high	Boiler status: Boiler goes to phase „OFF”. Possible causes: Flue gas tubes are dirty (wood side), invalid flue gas sensor, bad sealing, open middle boiler door (wood side).
E24	Room corrector	Boiler status: Boiler work normally. Possible causes: Interruption on el. connections between room corrector and boiler, connection to the boiler or room corrector is invalid.
E26	Firebox sensor disconnected	Boiler status: Boiler work normally. Intervention mode: Boiler work to content heating demand but boiler has reduced possibilities. Possible causes: Interruption on el. connections between firebox sensor and boiler or bad connection to the boiler.

E27	Hydraulic crossover sensor error	Boiler status: Boiler work normally. Possible causes: Interruption on el. connections between room corrector and boiler, connection to the boiler or hydraulic crossover sensor is invalid.
E16_1	Communication error with CM2K module (3rd and 4th circuit)	Boiler status: Boiler work normally. Possible causes: Interruption in el. connections between boiler and CM2K (between two CM2K's), connection on boiler and CM2K (or two adjacent CM2K's) or CM2K module is invalid.
E17_1	Sensor CM2K 3. circuit	Boiler status: Pump of 3+ heating circuit doesn't work. Boiler work normally. Possible causes: Error on flow temperature sensor of 3+ heating circuit (on regulator CM2K).
E18_1	Corrector CM2K 3. circuit	Boiler status: Pump of 3+ heating circuit work in intervention mode by heating curve. Boiler work normally. Possible causes: Error on room corrector of 3+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.
E19_1	Sensor CM2K 4. circuit	Boiler status: Pump of 4+ heating circuit doesn't work. Boiler work normally. Possible causes: Error on flow temperature sensor of 4+ heating circuit (on regulator CM2K).
E20_1	Corrector CM2K 4. circuit	Boiler status: Pump of 4+ heating circuit work in intervention mode by heating curve. Boiler work normally. Possible causes: Error on room corrector of 4+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.
E16_2	Communication error with CM2K module (5th and 6th circuit)	Boiler status: Boiler work normally. Possible causes: Interruption in el. connections between boiler and CM2K (between two CM2K's), connection on boiler and CM2K (or two adjacent CM2K's) or CM2K module is invalid.
E17_2	Sensor CM2K 5. circuit	Boiler status: Pump of 5+ heating circuit doesn't work. Boiler work normally. Possible causes: Error on flow temperature sensor of 5+ heating circuit (on regulator CM2K).
E18_2	Corrector CM2K 5. circuit	Boiler status: Pump of 5+ heating circuit work in intervention mode by heating curve. Boiler work normally. Possible causes: Error on room corrector of 5+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.
E19_2	Sensor CM2K 6. circuit	Boiler status: Pump of 6+ heating circuit doesn't work. Boiler work normally. Possible causes: Error on flow temperature sensor of 6+ heating circuit (on regulator CM2K).

E20_2	Corrector CM2K 6. circuit	<p>Boiler status: Pump of 6+ heating circuit work in intervention mode by heating curve. Boiler work normally.</p> <p>Possible causes: Error on room corrector of 6+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.</p>
E16_3	Communication error with CM2K module (7th and 8th circuit)	<p>Boiler status: Boiler work normally.</p> <p>Possible causes: Interruption in el. connections between boiler and CM2K (between two CM2K's), connection on boiler and CM2K (or two adjacent CM2K's) or CM2K module is invalid.</p>
E17_3	Sensor CM2K 7. circuit	<p>Boiler status: Pump of 7+ heating circuit doesn't work. Boiler work normally.</p> <p>Possible causes: Error on flow temperature sensor of 7+ heating circuit (on regulator CM2K).</p>
E18_3	Corrector CM2K 7. circuit	<p>Boiler status: Pump of 7+ heating circuit work in intervention mode by heating curve. Boiler work normally.</p> <p>Possible causes: Error on room corrector of 7+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.</p>
E19_3	Sensor CM2K 8. circuit	<p>Boiler status: Pump of 8+ heating circuit doesn't work. Boiler work normally.</p> <p>Possible causes: Error on flow temperature sensor of 8+ heating circuit (on regulator CM2K).</p>
E20_3	Corrector CM2K 8. circuit	<p>Boiler status: Pump of 8+ heating circuit work in intervention mode by heating curve. Boiler work normally.</p> <p>Possible causes: Error on room corrector of 8+ heating circuit (CM2K regulator), bad corrector connection to the CM2K or room corrector failure.</p>
E28	Communication error with CMGSM	<p>Boiler status: Boiler work normally.</p> <p>Possible causes: Interruption in el. connections between boiler and CMGSM or invalid CMGSM module.</p>
E29	Communication error with motherboard 2	<p>Boiler status: Boiler goes to phase „OFF”.</p> <p>Possible causes: Call service man!</p>
E30	Communication error with WiFi	<p>Boiler status: The boiler works normally. The problem occurs in work of additional equipment internet supervision (WiFi) if is installed.</p> <p>Possible causes: Check the UTP cable and its connections with the electric boards.</p>

WOOD FIRING ERRORS:

ERROR	NAME	DESCRIPTION
Ew21	Firebox sensor	Boiler status: Boiler work normally. Intervention mode: Boiler work to content heating demand but boiler has reduced possibilities. Possible causes: Invalid firebox sensor.

WOOD PELLETS FIRING ERRORS:

ERROR	NAME	DESCRIPTION
Ep31	Photocell error	Boiler status: Boiler go to phase OFF after ending phase S0 (retry start is allowed). Possible cause: Invalid photocell (sending information that flame exist in phase S0).
Ep32	Safety pressure switch	Boiler status: Boiler immediate go to phase OFF. Possible causes: Firebox resistance is too high in phases S2, S3, S4, (S5). It's open any door or opening on boiler. Interruption in el. connection between safety pressure switch and boiler, connection to the boiler, cold connection or invalid safety pressure switch. Interruption or bad sealing of safety pressure switch pipe.
Ep33	No flame in ignition phase	Boiler status: Boiler immediate go to phase OFF.
Ep34	Flame disappeared working phase	Boiler status: Boiler immediate go to phase OFF.
Ep35	Error grate cleaner	Boiler status: Boiler immediate go to phase OFF.
Ep36	Fuel level	Boiler status: Boiler go to phases S7, C0 and OFF.
Ep37	Flame disappeared at ignition stage	Boiler status: Boiler immediate go to phase OFF.
Ep38	Flame disappeared stabilization stage	Boiler status: Boiler immediate go to phase OFF.
Ep39	Fuel sensor	Boiler status: Boiler immediate go to phase OFF.
Ep40	Error flap not closed	Boiler status: Boiler work normally. Possible causes: Check if the flap is blocked with pellets , if the sensor is soiled with dust , if the sensor is about 1 mm distant from the flap , if the sensor reacts on the flap (the LED lamp is switching on the sensor).

<p>Ep41</p>	<p>No pellets</p>	<p>Boiler status: Boiler work normally. Possible causes: Check the pellet level in the big tank/room , check if the flexible tubes are blocked, check if the turbine net is full with dust.</p>
<p>Ep42</p>	<p>Mole or screw not working</p>	<p>Boiler status: Boiler work normally. Possible causes: Check the electric connections on the mole/feeder screw, check the filthiness of the mole/feeder screw.</p>
<p>Ep43</p>	<p>Communication error with CMVAC</p>	<p>Boiler status: Boiler work normally. Possible causes:Check the UTP cable and its connections with the electric boards.</p>
<p>Ep44</p>	<p>Boiler sensor error (pellet)</p>	<p>Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Interruption on el. connections between sensor and boiler, connection to the boiler, cold connection or invalid sensor.</p>
<p>Ep45</p>	<p>Wood in firebox or incorrect adjustment of pellet side.</p>	<p>Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Existing of larger quantity of wood in firebox (wood side) during burner work (wood pellet side) or incorrect adjustment of pellet side.</p>
<p>Ep46</p>	<p>Upper door opened - wood side</p>	<p>Boiler status: Boiler go to phases S7, C0 and OFF. Possible causes: Upper boiler door are opened (wood side) during burner work (wood pellet side) after warning time Wp15 expire, invalid microswitch - upper boiler door (wood side).</p>
<p>Ep47</p>	<p>Screw refill</p>	<p>Boiler status: Boiler work normally. Possible causes: No pellets in CPSP-BP 800 tank for refilling, problem with feeder screw in CPSP-BP 800, interruption on el. connection between boiler and feeder screw, connection to the boiler.</p>

8.4 WARNING LIST

MUTUAL WARNINGS (WOOD / WOOD PELLETS):

WARNING	NAME	DESCRIPTION
W1	Factory setting loaded	Factory settings loaded.
W3	Fan protection	Appear always when fan decrease rotating speed or if turning "OFF" itself because of high flue gas temperature.
W4	Intervention work (Firebox sensor)	The boiler operates without using the firebox sensor.
W5	Intervention work (Lambda sensor)	The boiler operates without using the lambda probe.
W6	Intervention work (Flue gas sensor)	The boiler operates without using the flue gas sensor.
W10	Low return temperature	It can occur only if the configuration contain "Protection valve". The boiler will resume normal work (the cause should be removed because boiler condensation will occur and flue passes will clog up). The problem may be with 3-way mixing valve (protection valve) / motor drive / sensor of return flow temperature.
W12	Low buffer temperature	The temperature accumulation (buffer) tank is lower than the desired which allow pump work.

WOOD FIRING WARNINGS:

WARNING	NAME	DESCRIPTION
Ww2	Flue gas temperature high. Close the upper door!	Boiler working (wood side), upper boiler door is opened and flue gas temperature is too high. It's necessary to close upper boiler door.
Ww7	Intervention work (RPM sensor)	The boiler operates without using the RPM (rotation per minute) sensor.
Ww8	Ignition error	Bad ignition, too damp wood, non-closed middle or lower door, non-closed side covers for cleaning or rear top cover for cleaning), impassable flue pipe from the fan to the chimney, blocked passes for the primary or secondary air between the upper and middle boiler door. Check and close the insufficiently sealed openings and if necessary fill and start the boiler again, if you do not help these actions, call an authorized service to check primary / secondary openings.

Warning list

Ww9	Fan is OFF, flue gas temperature is too high. Close the upper door!	Too high flue gas temperature with the open upper boiler door. Close the upper door and restart the boiler (load fuel if necessary).
Ww11	Out of fuel	No fuel.

WOOD PELLETS FIRING WARNINGS:

WARNING	NAME	DESCRIPTION
Wp13	Fuel level	Boiler status: Boiler will be work for a while, if pellet tank do not be refilled with pellets will be shown „E22 Fuel level” what’s mean that is no enough fuel for continue of boiler work. Possible causes: Low fuel level in pellet tank, enough for short time.
Wp15	Upper door opened - wood side	Upper boiler door are opened (wood side) during burner work (wood pellet side), if time counter expire then will be shown error Ep46.

8.5 INFORMATION LIST

MUTUAL INFORMATIONS (WOOD / WOOD PELLETS):

INFO.	NAME
I5	POWER UP: Electricity back again (POWER DOWN): after power failure

WOOD FIRING INFORMATIONS:

INFO.	NAME
Iw1	Off during ignition
Iw2	Ignition automaticly proceeded
Iw3	Bad ignition
Iw4	Off during stabilization
Iw6	Glow after power up
Iw7	Off after power up

WOOD PELLETS FIRING INFORMATIONS:

INFO.	NAME
Ip8	Refill
Ip9	Flame disappeared in ignition phase
Ip9_1	Retry ignition
Ip10	No flame in stabilization stage
Ip10_1	Retry ignition
Ip11	Pellet supply tube temperature too high
Ip12	Flame disappeared working phase
Ip12_1	Retry ignition

9. DATE & TIME



This option is used to set the date and time. This option is used to set the date and time. It is necessary for starting times, and the recording of errors / warnings (for the occurrence of errors / warnings, remembers the date and time of occurrence). After setting the date and time it is necessary to press the "CONFIRM" for saving date and time. If there is a significant clock delay or clock setting at 00:00 or the date on 1.1.2000. It is necessary to replace the battery on the back of the display (battery type CR 1220). The clock could be faster/slower (the shift could be 2-3 minutes per month), which is considered normal and we recommend that you adjust it periodically.

10. INFO



Menu with general information:

- Statistics
- Software version (boiler power, WiFi ID...)

11.0 DISPLAY



- Screensaver
- Language selection
- Init. message time
- Sound volume
- Sound type
- Sound

11.1 SCREENSAVER

Possible selection: Minimum: 10 seconds, Maksimum: 3600 seconds; **Factory:** 600 seconds

If at some time nothing was pressed on the screen, the screensaver will turn on, to prevent damage on the screen. Once you touch the screen, the screensaver will turn OFF.

11.2 LANGUAGE SELECTION

Possible selection: ON / OFF; **Factory:** ON

This option enables or disables screen with the choice of language regulation when you turn-on main switch. If is marked "OFF", after turning-on the main switch, it will be set on before selected language and after some time, display will show the work display of the boiler (duration of this screen can be adjusted in Section 11.3.).

11.3 INIT. MESSAGE TIME

Possible selection: Minimum: 0 seconds Maximum: 20 seconds; **Factory:** 5 seconds

This option is used to set the desired duration of the initial message after turning on the main switch. This option is only available if the option "LANGUAGE SELECTION" (point 11.2.) is set to "OFF".

11.4 SOUND VOLUME

Possible selection: OFF, volume 1, volume 2, volume 3; **Factory:** Volume 3

This option is used to set speaker volume.

11.5 SOUND TYPE

Possible selection: Type 1, Type 2, Type 3, Type 4, Type 5, Type 6, Type 7, Type 8, Type 9, Type 10; **Factory:** Type 3

This option is used to adjust type of speaker sound. It is possible to choose between 10 different types of sounds.

11.6 SOUND

Possible selection: Display, ERRORS, WARNINGS; **Factory:** Display, ERRORS, WARNINGS

This option is used to turn ON / OFF the control sound for Display, ERRORS, WARNINGS

12.0 FILE



Pressing this option will open a menu with:



- LOAD FACTORY - SAVE
- LOAD SERVICE - LOAD

12.1 LOAD FACTORY

After pressing "LOAD FACTORY" you will see a message "Load FACTORY settings?". Pressing button "OK" will load the default settings of regulation. **IMPORTANT: All settings will return to the factory settings.** Pressing the "BACK" will return to the previous menu.

12.* LOAD SERVICE

After pressing the "Load Service" button, the message "Load serviceman settings?" Will appear. Pressing the "OK" button will load the settings saved by the service technician in the "Installation" service menu. **IMPORTANT: All settings will return to the service settings.** Pressing the "BACK" will return to the previous menu.

12.2 SAVE

After pressing the "SAVE" button, 3 memory locations will be displayed on the screen (Memory 1, 2, 3). Pressing one of the three offered buttons will display the message "Save current settings?" On the screen. Pressing the "OK" button will save the current controller settings. Pressing the "BACK" will return to the previous menu.

12.3 LOAD

After pressing the "LOAD" button, the screen will display 3 memory from which the settings saved by the user or service provider can be loaded. Pressing one of the 3 offered buttons will display the message "Load saved settings?" On the screen. Pressing the "OK" button will save the saved controller settings (which you saved with the "SAVE" button). Pressing the "BACK" will return to the previous menu.

13. INSTALLATION



This option can only be used by authorized persons. To enter the installation menu, you must enter a password (PIN).

14. CM2K



This option is only visible if it is activated in "Installation menu" Access to the Installation menu has only authorized person (by entering PIN)". For more informations about this menu see "CM2K Technical instructions for BioTec Plus boiler".



Company assumes no responsibility for possible inaccuracies in this book originated typographical errors or rewriting, all figures and diagrams are principal and it is necessary to adjust each actual situation on the field, in any case the company reserves the right to enter their own products such modifications as considered necessary.

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