WARNING!!!

WE INFORM THAT THE OFFERED CONTROL UNIT CAN BE ONLY APPLIED TO THE FITTING DEVICES. THE REQUIREMENTS OF THE TECHNICAL AND BUILDING STANDARDS CONCERNING THE CORRECTNESS OF STOVE-FITTER AND HEATING SYSTEMS HANDLING THE FIREPLACE INPUTS MUST BE MET.

WRONG USAGE OF THE CONTROL UNIT CAN LEAD BOTH TO ITS DAMAGE AND IN EXTREME CASES TO THE DAMAGE OF THE FIREPLACE INPUT AND HEATING SYSTEM CONTROLLED BY THE FIREPLACE AS WELL , ALONG WITH THE DEVICES THAT COOPERATE WITH THE HEATING SYSTEM.

Zakład elektroniczny TATAREK Jerzy Tatarek

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Zakład elektroniczny TATAREK Jerzy Tatarek

USER MANUAL

Program version 3.0 (30.07.2012)

FIREPLACE LUX (RT-08G-BUF-SOLAR)

CONTROL UNIT OF THE HEATING SYSTEM WITH THE FIREPLACE CONTROLLED BY THE AIR DAMPER

The RT-08G-BUF -SOLAR control unit controls the heating system based on the water jacket fireplace that is a heat source, in which the combustion process is controlled by the air damper. The heat receivers is the buffer container (BUF), which is additionally loaded up from the solar collector (KSL).

! The control unit is equipped with its own emergency power source - breaks in power supplying up to 8 secs do not interrupt its operation (over the time the emergency buffering power source is activated).

1.Basic technical parameters

Power	230V/50Hz
Power consumption without load	5W
Max connection power	750W
Operation conditions	0-50°C, humidity 10-90% (no condensation)
Housing protection class	IP41
Fuse	6,3A/250V
Number of outputs to control pumps	3 * 250W/230V/50Hz
Number of nonvoltage outputs	1
Number of outputs to control the air damper drive	1 * 5V/500mA/DC
Number of water temperature sensors	3 * PT1000 (-50...+200°C)
Temperature measurement precision	2°C
Temperature measurement resolution	0,5°C

2. Principle of Operation

The main function of the control unit is to keep temperature in the water jacket at the preset value. The task is realized by measuring temperature (T3) and controlling the cold air choke valve (PP) properly. Fireplace operation temperature is defined by the **<20> "FIREPLACE Temp."** parameter (see PARAMETERS LEVEL 1).
If the fireplace temperature (T3) is higher than the **<20> "FIREPLACE Temp."** parameter the choke valve is gradually shut off limiting air supply, and if the temperature (T3) is lower than the **<20> "FIREPLACE Temp."** parameter the choke valve is gradually opened up.
The second function is control the loading pump of the BUF container (P2). The pump P2 runs if the fireplace temperature exceeds "**BUFF ON**" and is above the buffer temperature (T1) by the **<61> DeltaBUF** parameter (see see PARAMETERS LEVEL 1).

The third function is controlling the loading pump of the BUF container from the solar collector KSL (P1). The pump of the collector P1 runs if the temperature of the collector (T2) exceeds the temperature of the buffer (T1) by the parameter value "<64>DeltaKSL".

The next function is to control the circulating pump (P3) of central heating system. The pump works if the buffer temperature exceeds the **CH ON** value.

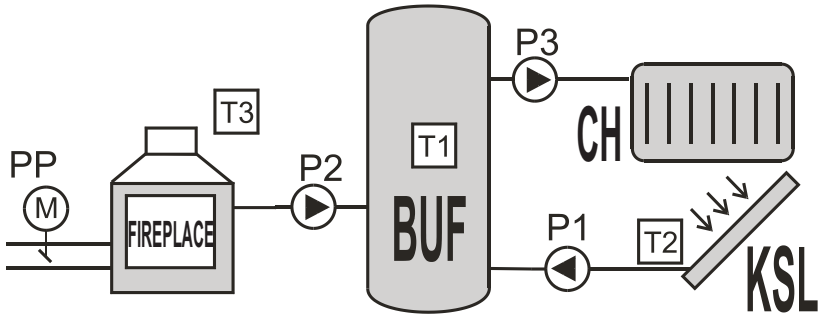

Fig. 1 Basic operation configuration of the control unit

WAW- Warm Applicable Water container (boiler)
FIREPLACE- Water jacket fireplace
BUF- Buffer container
KSL- Solar collector (or another heat source)
CH- Central heating system

T1- Temperature sensor of the BUF buffer container
T2- Temperature sensor of the KSL solar collector
T3- Temperature sensor of the FIREPLACE fireplace water jacket

P1- Pump loading the BUF from KSL
P2- Pump loading the BUF from FIREPLACE
P3- Circulating pump CH
PP- Electronically controlled air damper of the fireplace

Admission date	Realization date	Signature	Remarks

PRODUCENT ZASILACZY SIECIOWYCH
ISO 9001: 2000

CE CONFORMITY DECLARATION

Ref. No. 58.RT.01.2007/1/B

We, ZAKŁAD ELEKTRONICZNY TATAREK Jerzy Tatarek
75 Swieradowska St. , 50-559 Wroclaw

declare under our sole responsibility that
the following product:
the control unit of the heating system with the fireplace controlled by the air damper

model: RT-08G-BUF-SOLAR

is in conformity with the basic requirements included in Directive EMC 2004/108/WE of 15.12.2004 (the electromagnetic compatibility law of 13.04.07) and Directive LVD 2006/95/WE of 21.08.07 (Laws Journal of 2007 No. 155 pos. 1098) regarding the requirements for electric devices.

To the conformity evaluation the following harmonized standards were used:

PN-EN 60730-2-1: 2002 - Automatic electric control units for house usage and the like. Part 2-1: Specific requirements regarding electric control units for electric house devices
PN-EN 60730-1: 2002 - Automatic electric control units for house usage and the like. Part 1: General requirements.

PN-EN 55022: 2000 - Electromagnetic compatibility (EMC)- IT devices
Characteristics of radioelectric noises. Acceptable levels and measurement methods

Complementary information:
Laboratory IASE 51-618 Wroclaw, 1 Wystawowa st.

Test report No. 39/DL/I/07 of 22.06.2007
41/DL/I/07 of 03.07.2007

Electronic Engineering Plant TATAREK
has initiated management system and complies with the following standard :
ISO9001: 2000 CERTIFICATE No. 133/2004 of 01.2004
Polish Foreign Trade Chamber

The last two digits of the year in which the CE marking was affixed: 07

Place of issue: **Manufacturer representative:**

Wroclaw **Mirosław Zasępa**

Date of issue: **Position:**

08.2007 **Konstruktor**

2.1 Air damper operation

The air damper regulates an air supply to the combustion chamber, which allows the temperature of the fireplace water jacket to be kept at the preset value. The task is realized by comparing the temperature of the water jacket(T3) and preset temperature (the <20>*"FIREPLACE Temp."* parameter) and then by gradual opening/shutting the air damper. The change of the air damper position is done every 20secs
The shutdown of the control unit automatically causes the air damper to be set at the rest position defined by the <50> *ChokeV State OFF* parameter (Default setting is 0% - full shut-off).

2.2 Operation of the loading pump of the buffer (P2)

The control unit controls the pump loading the buffer. The BUF pump (P2) can be switched on if water temperature in the fireplace is above the preset threshold 48°C (*parameter <60> PumpBUFtemp.ON*) and higher than temperature in the container by 1°C (parameter *"<61>DeltaBUF"*).
Turning off the pump below the parameter *<60> PumpBUFtemp.ON* causes a faster heating of the water jacket above the dew point and as a result the longer life time of the fireplace.
After the loading the BUF pump still runs for 1min (parameter "*<63>RundownTimeBUF*")
The control unit protects the system from freezing, automatically turning on the circulating pump if the measured temperature is below 4°C.
The control unit realizes the after season rundown of the pump by switching it on for 1 min if it doesn't operate for a week.

2.3 Operation of the KSL pump (P1)

The collector pump P1 runs if the collector temperature (T2) exceeds the buffer temperature (T1) by the value 5 °C (parameter *"<64>DeltaKSL"*).
! Exceeding the maximum collector temperature (parameter "*<26> ALARM Temp KSL*") causes the KSL pump (P1) to be switched on in order to protect the solar collector against overheating. The KSL protection has a higher priority than limiting the BUF temperature.
The control unit realizes the after season rundown of the pump by switching it on for 1 min if it doesn't operate for a week.

2.4 CH pump operation (P3)

If the buffer temperature exceeds the preset value of 45°C (the <31> *Switch-on Temp. of PUMPS* parameter) the CH pump turns on.
The control unit protects the system from freezing, automatically turning on the circulating pump if the measured temperature is below 4°C.
The control unit realizes the after season rundown of the pump by switching it on for 1 min if it doesn't operate for a week.

2.5 Summer mode CH

You can select "ModeCH"=SUMMER setting, in which the CH pump doesn't run.

SUMMER- Turning off the heating system in summer time (the CH pump doesn't operate). Fireplace only works in the function of loading the BUF buffer.

ON - standard operation

2.6 “CONTROL” output

The control unit is equipped with the CONTROL relay whose contacts can be used e.g. to switch off another heat source when the fireplace works. The **<12> CONTROL Relay** parameter defines the function of the relay more precisely. (see PARAMETERS LEVEL 3)

CONTROL relay turned off

CONTROL relay turned on

3. Service of the control unit

There are elements on the control panel (fig. 2). In the turn-off state only the orange stanby state LED (7) lights and the graphic display shows current temperature of the water jacket and current time. The turn-on of the control unit follows by pressing the button (**3**) ON/OFF . In order to turn it off press once more the button (**3**)and at the same time hold it down for about 1sec. In case of supply voltage decline the control unit comes back to the state before the decline.

The operation state is presented on the graphic display (**2**). The screens inform about the operation of devices, temperature of sensors; they make it possible to change the parameters etc..The change of screen is done by pressing the CHOOSE button (**7**). If this is the screen that is able to change a parameter, press the CONFIRM button (**6**) , which causes blinking of the parameter field to be changed. By pressing “+” (**4**)or “-” (**5**) one can alter its value.

If there are more parameter fields on the screen (e.g. setting the clock) then one will go among them by pressing the CHOOSE button (**7**). By clicking the CONFIRM button (**6**) one confirms the changes - the parameter field stops blinking.

! The changed parameter not confirmed for 10 secs is not accepted by the control unit and it recalls a previous value of the parameter.

! The button F2-ESC (8) is for cancelling a current operation and going over to the screen of the fireplace.

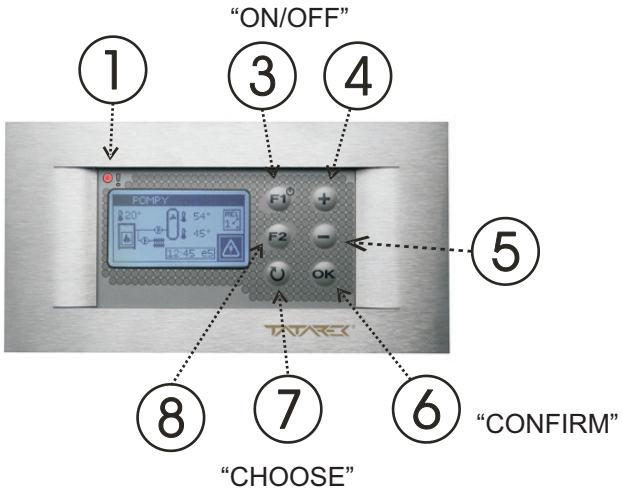

Fig.2 Control panel view

WARRANTY

1.Warranty is valid [24] months from the date of sale.
2.Producer does not take responsibility for any mechanical damages made by user.
3.MAKING REPAIRS OR MODYFYING THE DEVICE BY USER IS FORBIDDEN AND CAUSES WARRANTY CANCELATION
4.Warranty card is valid only with date of sale, seller's signature and stamp
5.Warranty and after-warranty repairs should be done only by producer, damaged regulators should be sent to producer in order to make all repairs needed.
6.Warranty protection includes the EU
7.Warranty does not exclude, not restrict and not suspend buyer’s rights coming from the incompatibility of the article with the agreement (Laws Journal No. 141 Pos. 1176)

WARNING !

ANY MODIFICATION OF THE CONTROL UNIT MADE BY A USER CAN BE THE CAUSE OF SAFETY CONDITIONS DETERIORATION AND CAN EXPOSE THE USER TO ELECTRIC SHOCK OR DAMAGE DEVICES SUPPLIED.

Connection cable of the control may be replaced only by producer or his authorized service locations

WARNING!
1. Producer does not take the responsibility for damage caused by atmospheric discharge
2. and overvoltage in the mains
3. Burnt fuses are not subject to warranty replacement

Date of sale **Seller's signature and stamp**

Register No.. GIOS: E 0002240WZ

Worn out electronic and electric devices must be transfered to the utilization collection place, where will be accepted for free

ARGO-FILM
Recycling Plant No. 6
180 Krakowska st., 52-015 Wroclaw
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0 515 122 142

TATAREK®
Zakład elektroniczny TATAREK Jerzy Tatarek
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ph. (071) 367-21-67, 373-14-88, fax 373-14-58; tax index number 899-020-21-48;
Bank account : BZ WBK S.A. O/WROCŁAW 6910901522-0000-0000-5201-9335
www.tatarek.com.pl.; E-mail: tatarek@tatarek.com.pl

4 Installing the control unit

! THE CONTROL UNIT IS SUPPLIED BY 230V/50HZ .
ANY MOVES REGARDING INSTALLATION SHOULD BE MADE AT THE DISCONNECTED MAINS.

! THE CONTROL UNIT HAS TO BE CONNECTED TO THE MAINS WITH THE ZERO-PIN.

! THE CONTROL UNIT SHOULD NOT BE EXPOSED TO WATER AFFECTING. ITS ENVIRONS OUGHT TO BE CLEAN.

! THE PRODUCER DOESN'T TAKE ANY RESPONSIBILITY FOR DAMAGES CAUSED BY WRONG USAGE OF THE CONTROL UNIT .

Connection diagram of the elements of the control unit is presented on fig. 3

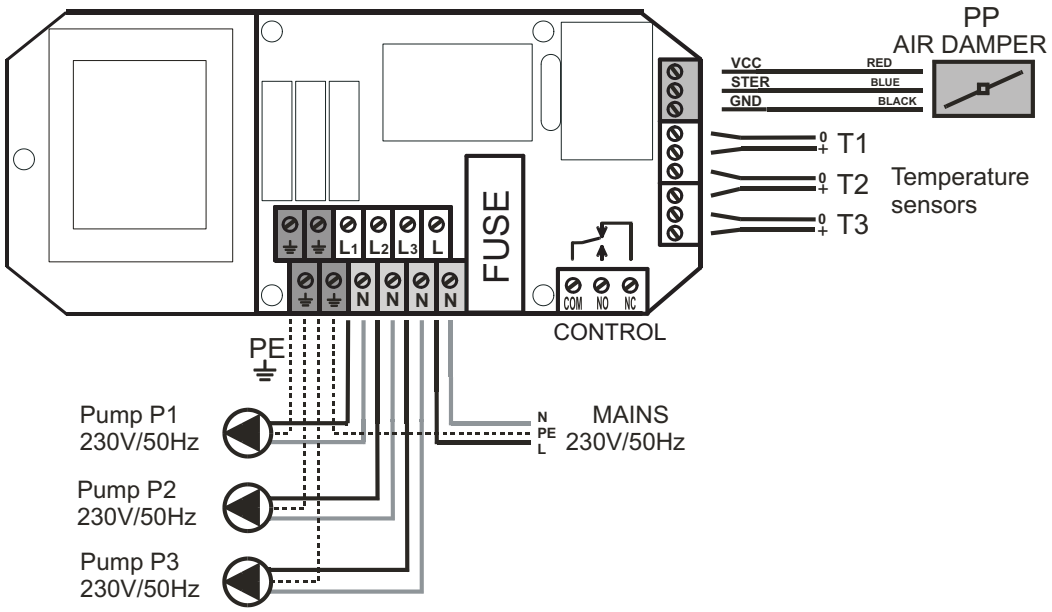


Fig.3 Electrical wiring diagram

PP Air damper
T1 Temperature sensor of the BUF container (buffer container)
T2 Temperature sensor of the KSL collector (solar collector)
T3 Temperature sensor of the fireplace water jacket FIREPLACE
P1 Pump loading the BUF container from KSL
P2 Pump loading the BUF container from FIREPLACE
P3 CH circulating pump

1. Control unit status diode: alarm (red), standby (orange), operation (green), manual MAN (blinking green)
2. Graphic display
3. Button F1: switch-on/off power supply
4. Increase button
5. Decrease button
6. Confirmation button
7. Parameter selection button
8. Button F2 (ESC - return to the main screen)

3.1 Time zones

The control unit is equipped with the clock, which enables the automatic change of the control unit operation at different times of day. 24 hrs are divided into 5 time zones (**$1, $2, $3, e4, e5**) . Each zone has a start time FROM and an end time TO. The same start and end time means the zone isn't active, which doesn't change the settings of the control unit. The time zones can overlap each other in that case binding are the settings for the active zone of higher number.

! THIS SOFTWARE VERSION DOES NOT INCLUDE THE TIME ZONES.

3.2 Screens

Alarm screen "ALARM" is not seen till the following alarm situation takes place:

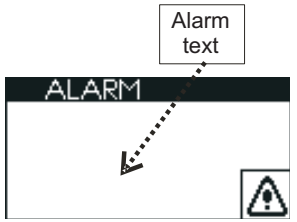
1. Damage of the T1(BUFFER) sensor. The **BUF temp. sensor (T1) damaged** text shows up.

2. Damage of the T2(KSL) sensor . The **KSL temp. sensor (T2) damaged** text shows up.

3. Damage of the T3 sensor of the fireplace. The **Fplace temp. sensor (T3) damaged** text shows up.
4. The exceeding of the limit temperature of the fireplace defined by the **<21> ALARM Temp.** parameter. The **too high temp. of the fireplace** text shows up.

5. The exceeding of the limit temperature of the buffer defined by the **<24> BUF ALARM Temp.** parameter. The **too high temp. of the buffer** text shows up.

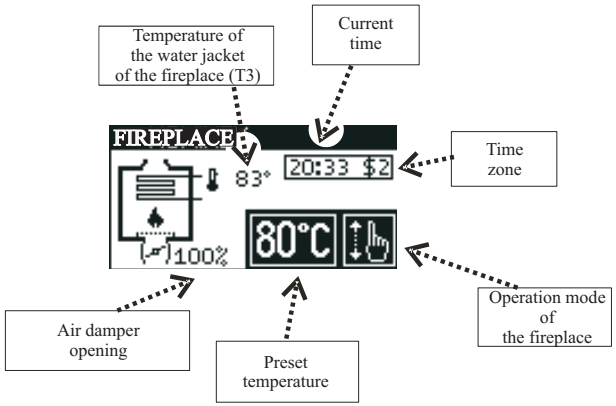
6. The exceeding of the limit temperature of the collector defined by the **<26> ALARM Temp KSL** parameter. The **too high temp. of the collector** text shows up.



Alarm situation is accompanied by a broken sound alarm that can be turned off by pressing the CONFIRM button (6)

! In the emergency of exceeding the temperature the corresponding pumps start to run to cool off the system. The KSL protection ha a higher priority than limiting the BUF temperature.

Screen of the fireplace operation shows the current temperature of the fireplace and the level of air damper opening.



It's a stable state, that is, in order to change it you need to press the CHOOSE button (7)
During appearing this screen you can change the preset temperature of the fireplace (the *<20> FIREPLACE Temp.* parameter). After pressing the CONFIRM button (6) the preset temperature blinks whose value can be altered with the buttons "+" (4) or "-" (5) To confirm the changes you need to press the CONFIRM button (6) once more.

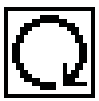
If the manual mode is set (**FIREPLACE MODE=MAN**) (the green LED diode (7) blinks.) you can manually control the air damper-. The "+" button (4) causes the opening of the air damper (one step 10%) and the "+" button (5) causes its closing.

There are the following operation modes of the fireplace:

MAN- Automatic control locked - only manual control of the air damper is available. Green status diode **(1)** blinks.

OFF- Setting the air damper to the rest position (the **<50> ChokeV State OFF** parameter).Green status diode **(1)** doesn't light.

AUTO- Full automatic burning cycle in the fireplace (firing up - operation - burning out).Automatic operation is controlled by pressing the button **(3) "ON/OFF" .** Green status diode **(1)** lights during the fireplace operation and goes out when the burnt-out state is detected. At the end of the burning-out phase the air damper sets to the rest position (**0%, full shut-off)**, which prevents a room from cooling off and protects the water attachment against freezing.



ON- The air damper is automatically controlled to stabilize temperature of the water jacket. Green status diode **(1)** does light.

Password

The changes of important parameters are possible only at unlocked password. To unlock the password you need to input proper sequence of digits with the buttons "+/-". With the CHOOSE button (7) to change the digits position and CONFIRM button (6) to acknowledge all and finish the procedure of changing the password. The unlocked password is set to "0000". Once again entering into the password change procedure causes a new password to be set.

! PASSWORD „9999" HAS CONSIDERABLE MEANING. IT CAUSES THE REACTIVATION OF THE PREVIOUS PASSWORD IF PRESENT WITHOUT IT BEING EXPOSED.

! PASSWORD OF PRODUCER'S SERVICE IS UNIQUE AND IS NOT DEPENDENT ON THE USER'S PASSWORD- IT SHOUDN'T BE EXPOSED TO THE USER. INSTEAD OF THAT THE SERVICE CAN SET THE USER HIS OWN PASSWORD.

Examples of passwords:

1.The control unit is installed with the unlocked password. The user can enter his own password e.g. "1234". From this moment the important parameters cannot be altered without the password being unlocked (that is, resetting the password "1234"). After changing essential parameters the user can leave the control unit unlocked, set any new password or enter "9999", which activates the password "1234"

2. Producer gives the control unit with the set password. The user cannot alter the important parameters. The servic can change the settings with its own secret password. At the end a serviceman enter the secret password or "9999", the user still hasn't access to the important parameters.

3. Producer gives the control unit with the set password. The user cannot alter the important parameters. The servic can change the settings with its own secret password. At the end a serviceman leaves the control unit unlocked, the user now has access to the important parameters. He can enter his own password like in example No. 1.

4. Producer gives the control unit with the set password. The user cannot alter the important parameters. The servic can change the settings with its own secret password. At the end a serviceman sets the password e.g. "1234" and tells it to the user, the user has access to the important parameters but without knowing the password the other persons cannot make the changes.

5. The user has the unlocked control unit or his own password. Serviceman decides, the user though oughtn't have access to the important parameters. The serviceman locks the control unit with his secret password, which removes the user's password and locks the control unit.

6. Serviceman doesn't have to know the user's password. Always he can use his own secret password and at the end lock with the "9999", which reactivates the user's password.

Demonstration change of the <50> ChokeV State OFF parameter defining the choke valve position after powering off the control unit (Parameters level 3):

Press:

* Repeatedly the button "CHOOSE" till the **PARAMETERS LEVEL** parameter setting screen appears.
* Button "CONFIRM"-> "0" blinks
* 3 times the button "+"-> "3" blinks
* Button "CONFIRM"-> "3" stops blinking (the **Parameters Level 3** has been chosen)
* Button "CHOOSE" -> current value of the **<50> ChokeV State OFF** parameter shows up
* Button "CONFIRM" -> current value, you want to change, starts blinking
* Buttons "+" and "-" -> you set the new value
* Button "CONFIRM" -> we confirm the new value
* Repeatedly the button "CHOOSE" till the "***" parameter end setting screen appears.

PARAMETERS LEVEL 3 PARAMETERS CAN BE CHANGED AT THE UNLOCKED PASSWORD					
No	**NAME**	**RANGE**	**DEFAULT**	**SETTING**	**FUNCTION**
63	Rundown-TimeBUF	0..30mins	1min		Rundown time of the BUF pump. Extending the run time of the pump after ending the loading of the BUF
64	DeltaKSL	0...20 °C	5 °C		Minimal temperature difference between BUF and KSL required for the KSL pump P1 to run.
21	ALARM Temp.	75...95 °C	85 °C		Fireplace temperature (T3) at which the alarm turns on.
24	BUF ALARM Temp.	75...95 °C	85 °C		Buffer limit temperature (T1) at which the alarm generates.
26	ALARM Temp. KSL	80..200°C	175°C		KSL (solar collector) limit temperature (T2) at which the alarm generates.
23	FPLACE OFF Temp.	5...25 °C	10 °C		Decreasing fireplace temperature in relation to preset temperature at whose exceeding the countdown of 30mins begins up to the switch-off of fireplace (stop condition at **FIREPLACE MODE=AUTO**)
12	CONTROL Relay	0...6	2		Switch-on of the CONTROL relay if 0 fireplace temp. higher than "ControlRelayTemp" 1 Buffer temp. higher than "ControlRelayTemp" 2 KSL temperature is higher than "ControlRelayTemp" 3 BUF pump (P2) runs 4 KSL pump (P1) runs 5 CH pump (P3) runs 6 ALARM is turned on (see "Alarm screens")
16	Control-RelayTemp	5..195°C	60 °C		Limit temperature at which the CONTROL relay turns on. (Depending on the <12> CONTROL Relay parameter.)
51	ChokeV Mode	1...2	2		Control type of the air damper 1 Continuous control - servomotor of the air damper is always active. 2 Dynamic control - servomotor of the air damper is active only if the position change of the valve is needed.

! Parameter number (No.) is of auxiliary role - it helps to identify the name e.g. for different language versions

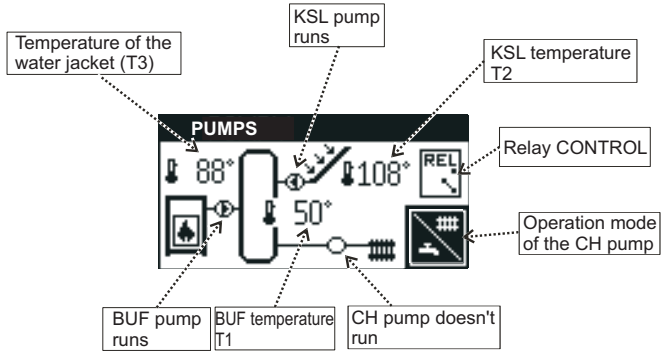
	PARAMETERS LEVEL 4			
No	**NAME**	**RANGE**	**DEFAULT**	**FUNCTION**
90	ProdNo.	0.....n	1	Number of the parameters set - dependent on fireplace producer
91	RESET	OFF/ON	OFF	Setting the value of "ON" causes the recall of all parameters to their default pre-sets and restarts the control unit
92	PASSWORD	0…9999	0000	„0000" PASSWORD OFF ----" PASSWORD ON
99	Service Screen	OFF	OFF	The ON value causes diagnostics screen to be added for servicing.

Automatic operation **AUTO** is activated by pressing the "ON/OFF" button (3) The air damper is fully opened. In 2hrs the fireplace ought to heat itself and reach the preset temperature stabilized by air damper movements. From that moment the temperature fall to the preset temperature by more than 10°C (the **<23> FPLACE OFF Temp.** parameter) existing for 30mins is treated as a burnout of the fireplace. The control unit ends the operation cycle setting the air damper to the rest position. Pressing the "ON/OFF" button (3) once more starts another operation cycle.
The green status diode (1) lights during the fireplace operation and goes out after recognizing the burnout state of the fireplace.

AUTO operation icon in waiting for the start of a new cycle (that is, before its start or after ts end

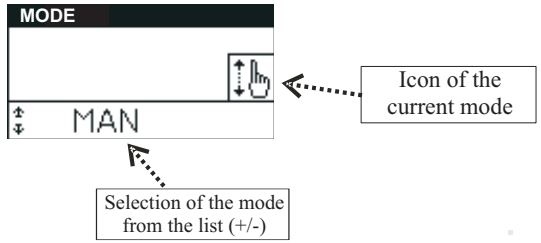
AUTO operation icon during the cycle
It's a stable state, that is, in order to change it you need to press the CHOOSE button.

Operation screen of the whole system
It's a stable state, that is, in order to change it you need to press the CHOOSE button.



Screen of pumps operation for the basic operation configuration

Screen of the operation modes enables changing the operation mode of the fireplace and WAW container.
Possible operation modes of the fireplace are as follows (described above):
MAN/OFF/AUTO/ON
Possible operation modes of the WAW container are as follows (described above):
SUMMER/ON

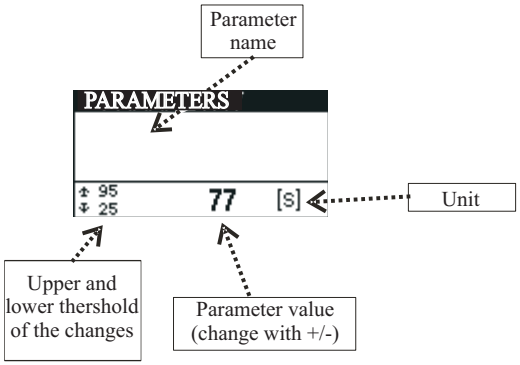


Screen of the clock

The screen shows the current time and the number of the activated time zone.
Time correction is possible after pressing the CONFIRM button (6) and the minutes field begins blinking. The blinking value can be altered with the buttons "+" or "-" Pressing the CHOOSE button (7) you come to the hours field that can be set also with the buttons "+" or "-".
Pressing the CONFIRM button (6) confirms the changes (the clock field will stop blinking).

Screen of setting the parameters

Normally the **parameters level** equals to "0" namely the parameters aren't available.
After changing the level to "1", "2" , "3" or "4" successive screens show the values of the parameters.
The last screen contains "****" after which it comes back to the above mentioned screens.



! PARAMETERS ADJUST THE CONTROL UNIT TO THE PROPERTIES OF THE FIREPLACE AND CENTRAL HEATING SYSTEM. THEIR CHANGE OUGHT TO BE CONSULTED WITH THE FIREPLACE PRODUCER.
ILL-CONSIDERED MODIFICATIONS CAN CAUSE UNSTABLE AND INEFFICIENT OPERATION OF THE SYSTEM

PARAMETERS LEVEL 1

No	NAME	RANGE	DEFAULT	SETTING	FUNCTION
20	FIREPLACE Temp.	45...85 °C	55 °C		Preset temperature of the fireplace kept by the control unit
31	Switch-on Temp. of PUMPS	30...75 °C	45 °C		Minimal temperature of the buffer at which the CH pump P3 can be activated.
60	PumpBUF-temp.ON	30...75 °C	48 °C		Minimal temperature of the fireplace at which the buffer pump P2 (BUF) can be activated.
10	Signal	OFF/ON /ON+ ALARM	ON + ALARM		OFF turns off sound signal ON turns on sound signal ON+ALARM turns on sound and alarm
11	Language	Polish/ English/ Deutsch	Polish		Selection of the language version
13	LCD backlight	OFF/ON	OFF		OFF - backlight is active for 2mins from the last pressing of the button ON -backlight is active when the control unit is switched on. Turning off the backlight means it equals to <15>.next
15	LCD backlight minimum	0...25%	10%		Minimal backlight level of the LCD (it's vital with negative LCD). The value 0% means a full turn-off

PARAMETERS LEVEL 2

No	NAME	RANGE	DEFAULT	SETTING	FUNCTION
14	Time zones	OFF	OFF		OFF - time zones are disabled
70	Zone1 from	0:00...23:45	6:00		Start of the 1st time zone
71	Zone1 to	0:00...23:45	8:00		End of the 1st time zone
72	Zone2 from	0:00...23:45	14:00		Start of the 2nd time zone
73	Zone2 to	0:00...23:45	17:30		End of the 2nd time zone
74	Zone3 from	0:00...23:45	20:00		Start of the 3rd time zone
75	Zone3 to	0:00...23:45	22:30		End of the 3rd time zone
76	ECO4 from	0:00...23:45	23:00		Start of the 4th time zone - economic
77	ECO4 to	0:00...23:45	5:00		End of the 4th time zone - economic
78	ECO5 from	0:00...23:45	8:00		Start of the 5th time zone - economic
79	ECO5 to	0:00...23:45	13:30		End of the 5th time zone - economic

PARAMETERS LEVEL 3
PARAMETERS CAN BE CHANGED AT THE UNLOCKED PASSWORD

No	NAME	RANGE	DEFAULT	SETTING	FUNCTION
50	ChokeV State OFF	0...100%	0%		Position of the choke valve in the power supply state turned off (0%-full shut-off, 100% - full opening)
33	Hysteresis of PUMPS	1...10 °C	1°C		Temperature hysteresis of turning on/off the pumps CH/WAW The temperature difference between turning on and turning off the pumps. It prevents from often switchovers, especially if there's another heat source in the heating system.
61	DeltaBUF	-10...+10°C	1°C		Minimal temperature difference between fireplace and buffer required for the BUF pump (P2) to run. Negative values have application for big buffers with the temperature sensor mounted in the upper zone