



. The main window, the mode of regulation and the status of output devices. After power controller displays the main window. The top line of the display () is shown in the boiler water temperature, in the lower, work mode. (*); Symbol appears in the lower right corner of the detection of flame in the burner. Lights below the display are assigned to the corresponding outputs, and steady light indicates the status of their activation.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B | O | I | L | E | R | T | E | M | P | . | 1 | 0 | 0 | C |
| S | T | O | P | | | | | | | | | | | * |

Basic operation involves setting device set temperature of the boiler. To do this, turning the boiler thermostat knob () to set an appropriate value and confirm it with the OK button (pressing the knob).

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | E | S | I | R | E | B | O | I | L | E | R | | | |
| T | E | M | P | E | R | A | T | U | R | E | ? | 9 | 0 | C |

WARNING! If the heating system has a hot water tank, the water temperature is maintained by the controller during the heating tray may be higher than the set temperature the thermostat knob.

| Working mode. | Description |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| STOP | Boiler control stopped.It can still control heating and domestic hot water pump. |
| CZUWANIE (STANDBY) | It control heating and domestic hot water pump. If will be heat demand, controller will start the ignition. |
| ROZPALANIE (IGNITION) | Automaticly ignition. |
| MOC MAKSYMALNA (MAXIMUM POWER) | Fan control and feeder so try to achieve maximum boiler power |
| MOC MODULOWANA (MODUL. POWER) | The controller reduces the amount of the fuel as it approaches the boiler water temperature to the setpoint. |
| MOC MINIMALNA (MINIMUM POWER) | Fan control and the fuel feeder so as to maintain fire. |
| PRZEDMUCHY (SCAVENGE) | The controller performs blow to remove accumulated gases. |
| WYGASZANIE (EXTINCTION) | No demand for heat. The controller in the boiler furnace extinguishes. |
| NAPELNIANIE (AUGER FILLING) | Manually filling the fuel tray. Control of the boiler stops. Controls the pumps and DHW, but it does not take an automatic firing. |
| GASZENIE (AUGER EXTINGT.) | The ignition of fuel feeder. The controller flushes the stoker. Security alarms and damage sensors. |
| ALARMY | The ignition of fuel feeder. The controller flushes the stoker. Security alarms and damage sensors. |

STOP.

In this mode, the controller only controls the pumps and DHW, and protects the boiler from overheating and ignition of the tray. Short circuited the room thermostat and hot water temperature drop did not cause any action. Pressing the START button () will switch mode regulator STAMDBY.

STANBY.

In this mode, the controller does not take any further action until Dwell room thermostat or water temperature falls. Thermostat contact closure means that the boiler will seek to achieve and maintain the set temperature the thermostat knob. If you need to preheat hot water tank, boiler set temperature is higher than the hot water temperature setpoint by the value programmed in parameter "Increasing the temperature during heating hot water boiler" In the case of simultaneous tripping room thermostat and heating hot water tank regulator will seek to maintain the boiler, the higher of these temperatures. Pressing the STOP () switches to STOP mode.

IGNITION.

The burner of the boiler is switched on at the moment FIRING UP mode, where there is demand for heat, and the controller did not detect the flame. During the fire the controller turns the fan, tray and lighter. Amount of fuel and air is determined by the technician. Firing mode continues until the flame is detected. If the flame is not detected within the specified time, the controller will trigger the alarm no fuel. Pressing the STOP button, opening the contact thermostat or reach the required temperature of water tank while working FIRING UP switches to control the blanking mode.

Maximum power.

In this mode, the controller controls the fuel feeder and the fan so that the boiler was working with maximum power. Amount of fuel and air is determined by the technician. Pressing the STOP button, opening the contact thermostat or reach the required temperature of water in the hot water tank will switch the controller mode, blanking.

Modul. power.

Depending on the preset parameters of the controller when approaching the boiler water temperature to the required value may gradually reduce the dosage of fuel and air volume, thereby reducing the power of the burner. Pressing the STOP button, opening the contact thermostat or reach the required temperature of water in the hot water tank switches to control the blanking mode.

Minimum power.

In this mode, the controller controls the fuel feeder and the fan in order to keep smoking while using the least fuel. Amount of fuel and air is determined by the technician. If, despite the power of the boiler water temperature will rise relative to the set of upper hysteresis value, the controller switches to extinction. Drop in the boiler water temperature below the set temperature will cause the controller to switch the mode of maximum power. Pressing the STOP button, opening the contact thermostat or reach the required temperature of water in the hot water tank switches to control the blanking mode.

Scavenge.

When working with the power of the maximum or minimum, the regulator in order to remove accumulated gases, can perform blow. They consist of a temporary enclosed fan.

EXTINCTION.

In this mode, the controller turns off the fuel feed, and turns on the fan to burn residual fuel and cool the burner. Power fan in the blanking mode is determined by a service technician. After the blanking mode controller switches to STANDBY or STOP mode, if the extinction was caused by pressing the STOP.

Auger filling.

The user can activate manually filling the feeder. If the device is in STOP mode, pressing and holding for 5 seconds turns filling the START button. Filling takes the time programmed by a technician or a hand-off by pressing the STOP.

AUGER EXTING.

If the feeder is equipped with a temperature sensor, its growth above the threshold set by the service technician to call the alarm point of the tray. After detecting the ignition, the controller turns off the fan and the outer tray. If the burner has an internal tray (stoker), the unit goes further in Fire mode. While fighting an internal tray is run on the time needed to remove the burning fuel from Stoker.

. Alarms.

Regulator RK-2006LP continuously tests the correctness of the work of channels and alarm sensors. In the event of an emergency, an alarm device and take appropriate action. Information about the breakdown is displayed on the display. Additionally, depending on the type of damage can be attached internal sounder and alarm output. In order to reset the alarm should remove its cause and push the STOP button. Attempt to clear the alarm without first removing the cause, will only turn off sirens sound. If you have more than one alarm, information about each of them is displayed alternately.

Alarm out of fuel.

If you FIRING UP mode controller does not detect the presence of the flame for a time determined by the technician, then an alarm is triggered the lack of fuel. To restart the controller should be supplemented fuel, reset the alarm by pressing the STOP button and start the process of adjustment by pressing START

```
A L A R M :   O U T   O F
                F U E L
```

Alarm emergency input.

Depending on the design of the boiler may have a safety sensor (eg sensor flap open tray). Triggering the alarm will turn off the fan and tray, switch mode regulator STANBY.

```
A L A R M :   E M E R G E N C Y
                I N P U T
```

WARNING! This alarm does not cause activation of the internal buzzer, and does not require a reset. After re-entry safety switch short circuit the process of adjustment is continued from the point at which it was interrupted (returns to the state before the onset of the alarm).

Alarm auger ignition.

If the feeder is equipped with a temperature sensor, it exceeded the value set in the parameter service "feeder Flashpoint" will trigger the alarm point of the tray. The controller turns off the main feeder, fan and igniter. Additionally, if the burner is equipped with an internal tray, the device is switched into a Auger Exting.

```
A L A R M :   A U G E R
                I G N I T I O N
```

WARNING! This alarm can be reset by lowering the temperature of the tray. Cancel the alarm before the auger extinct off the only signaling.

```
B O I L E R   T E M P .   1 0 0 C
A U G E R   E X T I N C T .   *
```

Auger sensor damage.

In case of damage to the sensor input, as in the case of ignition, the controller carries out the procedure and invokes the appropriate fire alarm:

```
A L A R M :   A U G E R
T E M P .   S E N S O R
```

WARNING! This alarm can be reset only after removal of the fault in the sensor measuring circuit input. Damage to the burner temperature sensor.

When the temperature controller was connected to a flame detector (CT-1 / 2, or PT-1000), his failure to call the appropriate alarm and the unit into STANDBY mode.

```
A L A R M :   B U R N E R
T E M P .   S E N S O R
```

Overheating protection.

Regulator RK-2006LP has triple protection against overheating of the boiler. If the water temperature reaches a preset value in the parameter service, "Maximum temperature of the boiler", the

controller activates the CH pump absolutely.

The increase in the boiler water temperature to about 93 ° C causes activation of STB hardware system, which mechanically turns on power to pump and cut off power supply fan. Activation of the STB will switch to STANDBY mode regulator. STB system returns to normal operation when the boiler temperature drops below 90 ° C.

The increase in the boiler water temperature to the value programmed in the parameter service "temperature of the boiler overheating" will disable the fan, the pump CO, switch to STOP mode controller without starting the process of extinction, and trigger an alarm:

| |
|-----------------------------------------------|
| A L A R M : B O I L E R O V E R H E A T |
|-----------------------------------------------|

WARNING! This alarm can be reset after the temperature drops below the boiler water temperature overheat.

Boiler sensor damage.

In the case of sensor failure in the boiler water temperature controller turns off the fan, attach the pump CO switches to STOP mode and an alarm:

| |
|------------------------------------------------------------|
| A L A R M : B O I L E R T E M P . S E N S O R |
|------------------------------------------------------------|

WARNING! This alarm can be reset only after removal of the fault in the sensor measuring circuit of boiler.

Hot water sensor damage.

If the heating system is equipped with a circulation of hot water, in the case of sensor failure DHW DHW controller shuts off the pump and an alarm:

| |
|-------------------------------------------------------------------|
| A L A R M : H O T W A T E R T E M P . S E N S O R |
|-------------------------------------------------------------------|

WARNING! This alarm does not require a reset. Is disabled automatically when the failure in the track measuring DHW temperature sensor.

Return temperature sensor damage.

If the heating system has a mixing pump, in case of damage to the return water temperature sensor, the pump is switched off and an alarm controller:

| |
|------------------------------------------------------------|
| A L A R M : R E T U R N T E M P . S E N S O R |
|------------------------------------------------------------|

WARNING! This alarm does not require a reset. Is disabled automatically when the failure of the measuring circuit return water temperature sensor.

Preview and set the user parameters.

Press the selection parameter, we have the ability to view more user parameters. Switching to any of them is indicated by rapid blinking of the lights up. After selecting a particular parameter may be using the OK button to switch to change mode (indicated by the appearance of the symbol ? to the left of the adjustable value). In order to validate the new value, press OK. Abandonment of the procedure to change and restore the previous value of the parameter by pressing the STOP button. If the device is left in a revision or review of parameters for 60 seconds without pressing any buttons, the controller will automatically withdraw the recently introduced modification and switches to display the device status. List of all user parameters is shown in the table. Table Columns information includes: fast-flashing light, the parameter name and value of the minimum and maximum possible settings.

Fuel type.

RK-2006LP controller to set parameters for the four types of burning fuel. The "Fuel

Type" lets you switch between different settings. Changes in the way the fan tray and lighters are stored for the currently selected type of fuel.

| | |
|---------|---|
| F U E L | |
| T Y P E | 0 |

Warning! Changes in fuel type can be made only when the controller is in STOP mode.

Desired boiler temperature.

Desired boiler temperature - this is the temperature to which the regulator will seek input if the room thermostat contacts are closed.

| | |
|---------------------------|---------|
| D E S I R E D B O I L E R | |
| T E M P E R A T U R E | ? 9 0 C |

Maximum boiler power - This parameter allows you to quickly limit the maximum power of the boiler. This restriction is an appropriate dose reduction of fuel at work in the maximum power.

| | |
|---------------------------|---------|
| M A X I M U M B O I L E R | |
| P O W E R | 1 0 0 % |

Hot water parameters.

Parameters described in this section shall determine the manner in which the regulator is preparing hot water. In case the installation does not have a circulation of hot water, you are not able to view and change these parameters.

Desired hot water temperature - This parameter is used to determine the water temperature in the hot water tank to get, which will seek the regulator.

| | |
|-----------------------------|-------|
| D E S I R E D H . W A T E R | |
| T E M P E R A T U R E | 5 0 C |

Hot water priority - This parameter determines how the pumps and DHW in hot water. Working with active priority lies in the fact that during the hot water, hot water pump controller switches off the pump and CO. Such action results in a rapid heating up of water in the tray. When hot water with off priority, and hot water pump at the same time work.

| | |
|-----------------|-------|
| H O T W A T E R | |
| P R I O R I T Y | Y E S |

Bacterial flora liquidation - controller allows manual activation of the liquidation of the bacterial flora in the hot water tank. Programming the value "YES" to start the process by which water in the hot water tank is heated to 75 ° C. After reaching the required temperature controller automatically disables the elimination of bacteria.

| | |
|-----------------------------|-------|
| B A C T E R I A L F L O R A | |
| L I Q U I D A T I O N | Y E S |

WARNING! The function of the liquidation of the bacterial flora should be included in the night or when the water will not be charged with hot water tank to protect users from scalding.

Measured hot water temperature - controller allows you to preview the measured temperature in the hot water tank.

| | |
|-------------------------------|---------|
| M E A S U R E D H . W A T E R | |
| T E M P E R A T U R E | 1 0 0 C |

Measured return temperature.

If the heating circuit is equipped with a mixing pump and the return temperature sensor, this option allows you to preview the measured return temperature. Otherwise, this option is not available.

| | |
|-----------------------|-------------|
| M E A S U R E D | R E T U R N |
| T E M P E R A T U R E | 1 0 0 C |

Flame detection parameters.

Parameters described in this section determine how to work the optical detector ignition of fuel in the burner. In the case where the installation is equipped with a flame detector temperature is not possible to view and change these parameters. The current brightness of the flame as seen by the photodetector - this parameter shows the current brightness of the flame as measured by the photodetector.

| | |
|---------------------|---------------|
| C U R R E N T | F U R N A C E |
| B R I G H T N E S S | 2 0 4 |

Brightness of the furnace in the absence of a flame - if an indication of the photodetector is equal to or less than the value set in this parameter, the controller determines that the furnace does not have a flame and, if necessary, initiate the procedure for firing.

| | | |
|---------------------|-------|-----|
| I G N I T I O N | O N | A T |
| B R I G H T N E S S | 2 0 4 | |

Brightness of the furnace after firing - if an indication of the photodetector is equal to or greater than the value set in this parameter, the controller will turn off ignition and finds that the furnace was heated.

| | | |
|---------------------|-------|-----|
| I G N I T I O N | O F F | A T |
| B R I G H T N E S S | 2 0 4 | |

Parameters of temperature flame detection.

Parameters described in this section determine how the detector operating temperature of ignition of fuel in the burner. In the case where the installation is equipped with an optical flame detector is not possible to view and change these parameters.

Measured burner temperature - This parameter displays the current temperature of the burner.

| | |
|-----------------------|-------------|
| M E A S U R E D | B U R N E R |
| T E M P E R A T U R E | 5 0 0 C |

The temperature in the absence of a flame burner - the burner if the temperature is equal to or less than the value set in this parameter, the controller determines that the furnace does not have a flame and, if necessary, initiate the procedure for firing.

| | | |
|-----------------------|---------|-----|
| I G N I T I O N | O N | A T |
| T E M P E R A T U R E | 5 0 0 C | |

The temperature of the heating furnace burner - the burner if the temperature is equal to or greater than the value set in this parameter, the controller will turn off ignition and finds that the furnace was heated.

| | | |
|-----------------------|---------|-----|
| I G N I T I O N | O F F | A T |
| T E M P E R A T U R E | 5 0 0 C | |

Burner work informations.

Parameters described in this section are counters collect information about the burner from its first run. The counters can not be deleted.

Auger work time.

An indication of this counter determines how long the burner. Counter is updated after the hour operation at maximum power or minimum power.

| | |
|-------------|------------|
| B U R N E R | W O R K |
| T I M E | 6 5 5 3 5h |

Burner start count.

An indication of this counter determines how many times the ignition was started.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| B | U | R | N | E | R | S | T | A | R | T |
| C | O | U | N | T | | 6 | 5 | 5 | 3 | 5 |

Set parameters - service mode.

Entry into service mode after holding the OK button for 3 seconds. Viewing parameters is possible by pressing buttons to choose the parameters (1 and 2). After selecting a particular parameter may be using the OK button to change mode switch signaled the emergence of the symbol ? to the left of the setting item. In order to validate the new value, press the OK button. Abandonment of the procedure to change and restore the previous value of the parameter by pressing the STOP button. If the device is left in a revision or review of parameters for 60 seconds, the controller will automatically withdraw the recently introduced modification and switches to display the device status. A list of all service parameters is shown in the table. Table Columns information includes a flashing light, the parameter name and value of the minimum and maximum possible settings.

Tabel ..

| Indicator | Parameter | Min | Max |
|------------------------------|-------------------------------------------|---------------------|-------|
| None | Language select. | | |
| Fan | Fan power modulation during boiler start. | NIE | TAK |
| | Minimum fan speed during heating up. | 1% | 100% |
| | Maximum fan speed during heating up. | 1% | 100% |
| | Ignitron modulation start delay. | 0s | 250s |
| | Fan speed during ignition. | 1% | 100% |
| | Fan speed at maximum power. | 1% | 100% |
| | Fan speed at minimum power. | 1% | 100% |
| | Fan speed during extinction. | 1% | 100% |
| | Fan scavenge. | NIE | TAK |
| | Fan scavenge blow time. | 5s | 60s |
| | Fan scavenge blok pause time. | 1min | 99min |
| | Fan speed during scavenge. | 1% | 100% |
| | Auger | Auger filling time. | 1min |
| Initial fuel dose. | | 0s | 250s |
| Auger filling time. | | 1s | 250s |
| Initial fuel dose. | | 0% | 100% |
| Fuel dose for Maximum power. | | 1% | 100% |
| Fuel dose for minimal power. | | 1% | 100% |
| Stoker work mode. | | | |
| Stoker work time. | | 1s | 99s |
| Stoker work pause. | | 1s | 99s |
| Stoker work extra time. | | 1s | 99s |
| Stoker emptying time. | | 1s | 99s |
| Auger ignition detection. | | NIE | TAK |
| Auger ignition temperature. | | 20°C | 99°C |
| Ignition | Flame detector | | |
| | Brightnes measurement frequency. | 1Hz | 10Hz |
| | Fuel ignition time. | 1min | 15min |
| | Ignitron time count. | 1 | 10 |
| | Furnace extinction time. | 1min | 30min |
| Central heating pump | CH Pump work mode. | | |
| | CH pump periodic work. | NIE | TAK |
| | CH pump periodic work time. | 1min | 99min |
| Hot water pump | Hot Water Path | | |

| | | | |
|------------|---------------------------------|------|-------|
| | DHW heating hysteresis. | 1°C | 9°C |
| | Increase temp. On HW heating. | 2°C | 20°C |
| | DHW pump work extensions. | NIE | TAK |
| | DHW pump extend time. | 1min | 10min |
| | Mixing pump engage temperature. | 30°C | 60°C |
| | Mixing pump hysteresis. | 1°C | 9°C |
| Thermostat | Minimum boiler temperature. | 30°C | 69°C |
| | Maximum boiler temperature. | 70°C | 90°C |
| | Boiler upper hysteresis. | 1°C | 20°C |
| | Burner power switch hysteresis. | 1°C | 9°C |
| | Boiler protest hysteresis. | 1°C | 5°C |
| | Boiler overheat temperature. | 90°C | 99°C |
| | Burner power modulation. | NIE | TAK |
| | Modulation Factor. | 1 | 20 |
| None | Service settings. | | |
| | Testing outputs. | | |
| | Exit. | | |

Language select.

RK-2006LP controller is equipped with the ability to change language user interface. Number and type of available languages depend on the software version.

```
L A N G U A G E
E N G L I S H
```

Fan parameters.

Modulation of the firing fan - set this parameter to 'YES'; turns on the fan speed modulation of the fuel firing.

```
F A N M O D . D U R I N G
B O I L E R S T A R T Y E S
```

Minimum fan speed when firing - this parameter is available only when the modulation is turned on the fan during firing. It defines the power at which the fan will operate at the initial stage lighting.

```
M I N . F A N S P E E D
H E A T I N G U P 1 0 0 %
```

Maximum fan speed while firing - this parameter is available only when the modulation is turned on the fan during firing. It defines the strength with which they will operate the fan at the final stage of firing up.

```
M A X . F A N S P E E D
H E A T I N G U P 1 0 0 %
```

Delay modulation during firing - this parameter is available only when the modulation is turned on the fan during firing. It determines how long the fan will operate with speed set in parameter 'Minimum fan speed while firing'; Delay modulation during firing - this parameter is available only when the modulation is turned on the fan during firing. It determines how long the fan will operate with speed set in parameter 'Minimum fan speed while firing';

```
I G N I T I O N M O D U L .
S T A R T D E L A Y 2 5 0 s
```

Fan speed when firing start - a power value at which the fan operates when the fuel firing. If modulation is enabled when firing up the fan speed, this parameter is not available.

| | |
|------------------|------|
| FAN SPEED DURING | |
| IGNITION | 100% |

Fan speed at maximum power burner - this is the power value at which the fan operates the boiler when the burner operates at maximum power.

| | |
|--------------|------|
| FAN SPEED AT | |
| MAX POWER | 100% |

Fan speed at minimum power burner - it is the power value at which the fan operates when the boiler burner is working with the power of the minimum.

| | |
|--------------|------|
| FAN SPEED AT | |
| MIN POWER | 100% |

Fan speed during extinction- It is a power value at which the fan operates during extinction of the burner.

| | |
|------------------|------|
| FAN SPEED DURING | |
| EXTINCTION | 100% |

Fan scavenge - the regulator has the ability to enable blow-. This function is the periodic switching on the fan during operation of the burner. Such action is to remove accumulated gases.

| | |
|----------|-----|
| FAN | |
| SCAVENGE | YES |

Fan scavenge blow time - This parameter specifies the duration of the blow. If you blow-off function, this parameter is not available.

| | |
|--------------|-----|
| FAN SCAVENGE | |
| BLOW TIME | 30s |

Fan scavenge pause time - This parameter determines the time between the blow. If you blow-off function, this parameter is not available.

| | |
|--------------|-------|
| FAN SCAVENGE | |
| PAUSE TIME | 10min |

Fan speed during scavenge - This parameter specifies the power of the fan during purge. If you blow-off function, this parameter is not available.

| | |
|------------------|------|
| FAN SPEED DURING | |
| SCAVENGE | 100% |

Auger parameters.

Auger filling time - This parameter determines the time it takes to fill the main fuel feed.

| | |
|---------------|-------|
| AUGER FILLING | |
| TIME | 10min |

| | |
|--------------|------|
| INITIAL FUEL | |
| DOSE | 250s |

Initial fuel dose - This parameter specifies the time by which the fuel will be served before running lighter. Programming the parameter set to "0s"; off-off dose of fuel. In this case, the parameter "amount of fuel for lighting," should be set to a value greater than "0%";.

| | |
|-----------|------|
| FUEL FEED | |
| CYCLE | 250s |

| |
|-----------------------------|
| F U E L D O S E D U R I N G |
| I G N I T I O N 1 0 0 % |

Fuel dose for ignition - This parameter determines what dose the fuel will be supplied to the burner while the lighter. The preset value determines the percentage of time of administration in relation to the time the entire cycle. Setting the parameter to "0" off the fuel feed at work Ignition. In this case, the parameter "starting dose of fuel" should be set to a value greater than"0"

| |
|-------------------------|
| F U E L D O S E F O R |
| M A X P O W E R 1 0 0 % |

Fuel dose for minimal power - This parameter determines what dose the fuel will be supplied to the burner while working with minimal power. The preset value determines the percentage of time of administration relative to time of whole cycle.

| |
|-------------------------|
| F U E L D O S E F O R |
| M I N P O W E R 1 0 0 % |

Mode of operation of the internal tray (Stoker) - this parameter determines how the work of the internal tray (Stoker) :

- „OFF” - means that the burner does not have Stoker.
- „CYCL.” - means a mode in which the stoker is switched periodically, regardless of external input. Working time and stop Stoker set the appropriate parameters.
- „AUTO” - means a mode in which the stoker is switched simultaneously with the feeder outside and off with a delay specified in the parameter "Time to work longer Stoker."

| |
|---------------------|
| S T O K E R W O R K |
| M O D E O F F |

Stoker working time - this parameter specifies the time, which is switched during stoker cyclic mode. If the stoker is off or running in automatic mode, this parameter is not available.

| |
|---------------------|
| S T O K E R W O R K |
| T I M E 9 9 s |

Stoker pause time - this parameter specifies the time interval between cutin Stoker. during cyclic operation. If the stoker is off or running in automatic mode, this parameter is not available.

| |
|-----------------------|
| S T O K E R P A U S E |
| T I M E 9 9 s |

Stoker extra work time - this parameter is available only if the stoker is in automatic mode and determines the amount of time after turning off the main tray will work stoker.

| |
|-----------------------|
| S T O K E R E X T R A |
| W O R K T I M E 9 9 s |

Emptying time Stoker - this parameter determines how much time is needed for this to all the fuel has been removed from Stoker. In case if the stoker is disabled, this parameter is not available.

| |
|-----------------------------|
| S T O K E R E M P T Y I N G |
| T I M E 9 9 s |

Auger ignitron test- This parameter determines the function played by the security entrance"X". If is set to "NO" then input "X"; is used to connect the sensor pin, such as opening the lid or tray indicating that activation of the contact breaker feeder motor overload. Programming the value "YES" means that the input "X" is connected to the sensor input is used to detect ignition.

| |
|---------------------------|
| A U G E R I G N I T I O N |
| T E S T Y E S |

Warning! If not using the safety input parameter "Detection of ignition feed" must be programmed to value "NO"; and short the input terminals "X"

The temperature of the ignition detection input - this parameter determines the temperature input, at which point the controller will trigger the alarm input. This parameter is not available if the parameter "Detection of ignition feed" is set to "NO".

| |
|-----------------|
| AUGER IGNITION |
| TEMPERATURE 85C |

Igniting the fuel and quenching furnace.

Type of flame detector - flame detection can be performed in two ways: measuring the temperature of the burner, or measuring the amount of light. If you use a temperature sensor, depending on where you install it, the range of measured temperatures can range from several dozen to several hundred degrees. If the measured temperature does not exceed 100 ° C is recommended to use the sensor CT-1 or CT-2. At higher values of the temperature sensor, use the PT-1000. To measure the brightness of the flame, use a photodetector FD-2.

| |
|------------------|
| FLAME |
| DETECTOR PT 1000 |

Frequency of measuring the brightness of the burner - this parameter specifies how often the measurement is the brightness of the flame. Average brightness is calculated on the basis of the last 64 measurements. Programming the higher frequency results in faster response regulator to change the brightness, while smaller values result in higher inertia and a lower sensitivity of the controller to temporarily change the brightness. This parameter is available only if you selected the optical flame detector (FD-2).

| |
|------------------|
| BRIGHTNESS MEAS. |
| FREQUENCY 10Hz |

Fuel ignition time - after turning lighter and fan controller examines the increase in temperature or brightness in the selected section of the burner. If the programmed in this parameter when the flame is not detected, the controller repeats the cycle of firing.

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| FUEL IGNITION |
| TIME 15min |

Ignition try count - This parameter specifies how many consecutive, unsuccessful attempts to fire the controller will trigger the alarm and the lack of fuel switches to STOP mode. This alarm is indicated by a corresponding message appears on the display. To restart the controller should be supplemented fuel, reset the alarm by pressing the STOP button and start the process of adjustment by pressing the START.

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| IGNITION TRY |
| COUNT 10 |

Furnace extinc time- If the controller switches to extinction, the blowing fan is switched on the power set in parameter "fan speed with extinction" After extinguishing the burner (flame failure), the fan is still working by the time set in this parameter. Such action is designed to burn residual fuel and cooling of the burner,

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| FURNACE EXTINC. |
| TIME 30min |

The parameters of the CH pump cycle.

CH Pump work mode - This parameter determines how the heating pump is activated. A setting of "THERMOSTAT" means that the heating pump connector will only compact room thermostat terminals and in emergency situations (such as overheating of the boiler). Programming the "AUTO" indicates that the heating pump will work regardless of the room thermostat.

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| C H P U M P W O R K |
| M O D E T H E R M O S T A T |

CH pump periodic work - This parameter allows you to run periodically switching functions in order to pump water in the mixing heating circuit. The pump is switched on for 30 seconds periodically to the time set in parameter "Time periodic switching on pump." This function is available when the pump mode is set to "THERMOSTAT".

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| C H P U M P P E R I O D I C |
| W O R K Y E S |

Time periodic switching pump - this parameter is available only when the pump is working in CH "THERMOSTAT" and periodically switching function is activated pump. The set value determines how often the pump will be switched CH-open contacts with room thermostat.

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| C H P U M P P E R I O D I C |
| W O R K T I M E 1 0 m i n |

DHW path Parameters.

The controller has an additional path designed for hot water. Because not everyone has a heating system and hot water tank charging pump, it is possible to disable this circuit or use it to control the mixing pump in the boiler return water.

Hot water path - set this parameter to "None" turns off the hot water circulation. In this case, the temperature sensor input and control output pump can be disconnected. Setting "EXISTS" unlocks all the parameters and functions for handling hot water circuit. The value "MIXING PUMP" switch in the DHW circuit circulation pump designed to control the mixing. In this case the return temperature sensor must be connected in place of the hot water sensor, and a mixing pump in place of the DHW pump.

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| H O T W A T E R P A T H |
| N O N E |

DHW heating hysteresis - This parameter specifies the value of which must reduce the temperature of the water in the tank for hot water temperature setpoint to charging pump was attached. This parameter is available only if hot water is on EXISTS.

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| H W H E A T I N G |
| H Y S T E R E S I S 5 C |

Increase temp. On DHW heating - thermostat contact closure means that the boiler will seek to achieve and maintain the set temperature the thermostat knob. If you need to preheat hot water tank, boiler set temperature is higher than the hot water temperature setpoint by the value programmed in this parameter. In the case of simultaneous tripping room thermostat and heating hot water tank regulator will seek to maintain the boiler above the required temperature. This parameter is available only if the hot water is on.

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| I N C R E A S E T E M P . O N |
| H W H E A T I N G 2 0 C |

DHW pump work extensions - too quick off the charging pump hot water tank can lead to excessive temperature of the boiler. This parameter enables the DHW pump overrun. This function is only available when DHW path is on t.

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| H W P U M P W O R K |
| E X T E N S I O N Y E S |

DHW pump extend time - This parameter specifies the time after which hot water is turned off after achieving the set temperature in the hot water tank. This parameter is available only if DHW are turned on and run hot water circuit pump

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| H W P U M P E X T E N D |
| T I M E 1 0 m i n |

Mixing pump engage temperature - This parameter specifies the value to which the decrease must return water temperature controller attached to a mixing pump. This parameter is available only if the DHW circuit operates in the return water mixing.

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| M I X I N G P U M P |
| E N G A G E T E M P . 5 0 C |

Mixing pump work hysteresis - This parameter determines if the temperature in the pump mixing water temperature must rise back to the regulator off the mixing pump. This parameter is available only if the circuit operates in hot water mixing return water.

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| M I X I N G P U M P W O R K |
| H Y S T E R E S I S 5 C |

The parameters of the boiler.

Minimum boiler temperature - parameter specifies the boiler temperature at which the regulator should turn off the pump and DHW. It is also the smallest value of boiler temperature setpoint that can be adjusted using the thermostat knob.

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| M I N I M U M B O I L E R |
| T E M P E R A T U R E 4 0 C |

Maximum boiler temperature - parameter specifies the maximum set temperature of the boiler, which can be set using the thermostat knob. It is also the boiler temperature at which the pump is switched absolute CH in order to protect the boiler from overheating.

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| M A X I M U M B O I L E R |
| T E M P E R A T U R E 9 0 C |

Boiler upper hysteresis - if the controller is in operation with minimum power burner, and despite the boiler temperature will increase by the value set in this parameter, the controller will start a series of extinction of the burner.

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| B O I L E R U P P E R |
| H Y S T E R E S I S 1 5 C |

Burner power switch hysteresis - after reaching the water in the boiler set temperature controller switches to work with minimal power. This parameter specifies how much the temperature must be lowered to the water to re-attach the maximum power. After switching to the maximum dose delivered by the fuel and air is determined by taking into account the modulation of the burner.

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| B U R N E R P O W E R S W . |
| H Y S T E R E S I S 4 C |

Boiler protect hysteresis - Regulator protects the minimum and maximum temperatures of the boiler through appropriate control of pumps and DHW. This parameter specifies the hysteresis value to disable protection of the boiler temperature limits.

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| B O I L E R P R O T E C T . |
| H Y S T E R E S I S 4 C |

Boiler overheat temperature - This parameter determines the amount of boiler water, after which the controller disables the achievement of control and cause overheating of the boiler alarm.

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| B O I L E R O V E R H E A T |
| T E M P E R A T U R E 9 8 C |

Burner power modulation- inclusion of modulation causes a gradual reduction of fan speed control and fuel delivery when approaching the boiler water temperature to the temperature.

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| BURNER POWER |
| MODULATION YES |

Modulation Factor - This parameter determines how far the steps before reaching the water in the boiler temperature setpoint adjuster will begin reducing the power of the burner. Burner output is reduced by gradually reducing the dosage of the fuel and reducing fan speed. This parameter is unavailable if the power modulation of the burner is turned off.

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| MODULATION |
| FACTOR 20 |

Service settings.

The setting and confirm with OK value "YES" when you view this option will erase all the parameters and assign values to them pre-programmed by the installer or service technician.

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| SERVICE |
| SETTINGS YES |

Warning! Running this function will return only the service parameters for the current working of a fuel.

Testing outputs.

In order to facilitate validation of the controller it is possible to test each system output. This feature is available only in service mode where process control is stopped, ie the regulator before entering the service mode in STOP mode was. Selecting testing outputs using the knob allows you to select individual outputs indicated by the flashing lights suitable for output and the output name appears on the display. Pressing OK allows you to temporarily attach the selected output. In order to complete the exit test, press STOP.

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| TESTING OUTPUTS |
| FAN 0 |

EXIT.

Selecting this option and its approval by the OK button will exit the service mode. Exit from this mode also occurs if, within 60 seconds no buttons are pressed.

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| - - EXIT - - |
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Room thermostat.

RK-2006LP controller is equipped with input for connecting any room thermostat with contact output. When the room temperature is lower than required (closed contact) is inflammation of the lamp room thermostat. This means that the boiler should maintain the set temperature the boiler thermostat knob. After reaching the required temperature in the room the room thermostat light goes out, and the boiler goes into extinction.

Warning! In case of not entering the room thermostat should remain closed. In this case, the boiler will operate continuously maintaining a set temperature the boiler thermostat knob. Warning! Entry room thermostat is active only while working WINTER.

. Alarm Output DATA.

The controller has an alarm output DATA allows you to connect via the module UM-1 additional alarm indicator. This output is activated in the event: sensor failure of the boiler, the burner sensor, DHW sensor or mixing pump, the boiler overheating or lack of fuel.

. Removing the controller.

If you need to remove the regulator - the boiler and disconnect power from the grid control - remove the regulator from the hole in the boiler, - disconnect the wires from the connector on the controller.. Technical Data.

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|---------------------------------------------------|------------------|------|------|
| Power consumption (without fan and pump) | 230V ± 10%, 50Hz | | |
| | < 4VA | | |
| Temperature measurement range (KTY 81-210) | -9–109°C | ±1°C | |
| Burner temperature measurement range (KTY 81-210) | -9–109°C | ±1°C | |
| Burner temperature measurement range (PT-1000) | -30–500°C | | ±3°C |
| Boiler temperature control range | 30–90°C | ±1°C | |
| Boiler overheating protection software | 90–99°C | ±1°C | |
| STB | >95°C | ±1°C | |
| Total outputs load | max 4A/230V | | |
| dimensions | 96x144x94 | | |