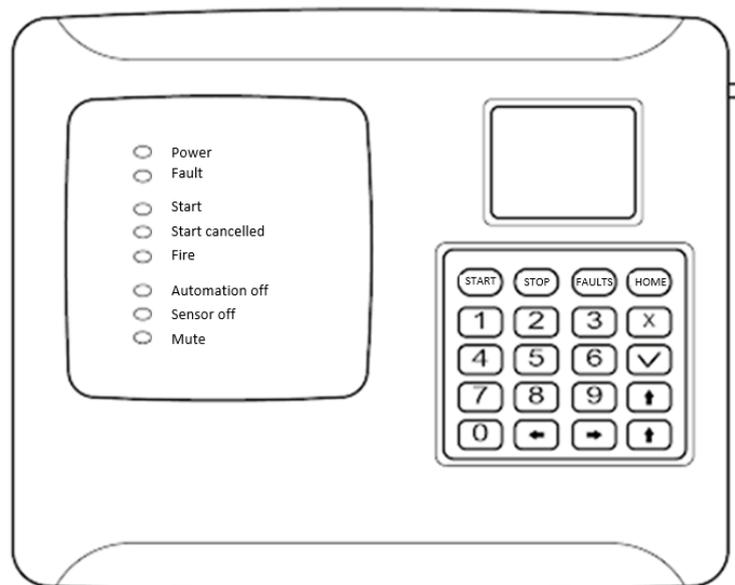


MANUAL

ADDRESSABLE FIRE ALARM CP-1-(X) «RUBETEK»



Complies with:
EN 54-2
EN 54-25

Hardware version: PPK-02-19.rev2
Software version: 2023-03-13
Document version: 2023-03-13

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Introduction

This operating manual is intended to study the device, the principle of operation, configuration, installation and operation of the addressable fire alarm control panel CP-1-(X) «RUBETEK» (hereinafter referred to as the device).

Read the instructions in this manual carefully before connecting, setting up, operating or servicing the instrument.

Installation and operation of the device must be carried out by technical personnel who have studied this manual.

List of accepted abbreviations:

- CC - control cabinet;
- CP, device - addressable fire alarm control panel CP-1-(X) «RUBETEK»;
- DEVs - alarm and notification devices;
- FA - fire alarm;
- FF - firefighting;
- FP - flameproof;
- IM - addressable input module;
- IO - addressable input output module;
- LS - limit switches;
- PC - personal computer;
- PLC - power line communication;
- RC - relay contact;
- RE - radio extender module;
- RF (radio frequency) - radio frequency;
- RM - interface repeater module;
- MCP (Y, O, G) - wireless addressable manual call point;
- SC-1 - system controller;
- SCS - short-circuit state;
- SM - switching module;
- UPS - uninterruptible power supply;
- VA - voice annunciator;
- LSS - light and sound signals.

1. Description and operation

1.1. Purpose

Addressable fire alarm control panel CP-1-(X) «RUBETEK» is designed for autonomous and centralized protection of buildings and structures from fires.

The control panel operates as part of the RUBETEK wired and radio channel automatic fire alarm system. The device provides:

- reception, processing of signals and control of the state of the DEVs;
- control and monitoring of the state of actuators of smoke exhaust dampers, LSS, smoke exhaust fan control cabinets and smoke boost fan control;
- sound and light signaling of the operating modes of the device and system;
- automatic generation of notifications «Fire», «Fault», «Opening» and registration of events in the log.

CP functionality:

- redundant CAN interface for networking up to 128 CP;
- RS-485 ring interface for system segment control (up to 30 controllers);
- PLC ring interface for controlling addressable devices;
- automatic control of PLC integrity and serviceability of addressable devices;
- RF 868 interface for controlling radio channel devices;
- own address space for connecting 250 addressable devices;
- management of fire firefighting and smoke damping systems;
- LSS systems management;
- control of fire dumper valves (up to 7);
- 2 freely programmable inputs/outputs;
- 2 controlled RC outputs;
- light and sound indication of operating modes;
- liquid crystal display.

The device is recoverable, controlled, reusable, serviceable, multifunctional.



ATTENTION! Work on the installation, installation and maintenance of the device must be allowed to persons with the necessary qualifications and permission to work with electrical installations up to 1000 V.

1.2. Modifications

Depending on the version, the CP controls a different number of fire firefighting (hereinafter FF). CP versions are shown in table 1.

Table 1 - Instrument modifications

Modification	CP-1-0	CP-1-2	CP-1-4	CP-1-7
Number of connected valve actuators FF	0	2	4	7

1.3. Specifications

Table 2 - Basic parameters

Parameter	Meaning
Supply voltage, V	main: DC 24 ± 20% standby: DC 24 ± 20%

Own consumption current, A, no more	in standby mode: no more than 0,22 in the «Fire» mode: no more than 0,32
Communication interface	CAN, RF 868 MHz, RS-485, PLC, Wi-Fi
Number of CAN interfaces, pcs.	2
Number of devices in the FA system connected via the CAN interface, pcs.	128
Maximum length of the CAN interface, excluding repeaters, m	250
Number of RS-485 interfaces, pcs	2
Number of controllers connected to the CP via the RS-485 interface, pcs, no more	30
Maximum interface length between RS-485 segments, m	150
Number of PLC interfaces, pcs.	2
Maximum PLC load current for each channel, A	0,65
Maximum length of PLC interface, m	1200
Number of addressable devices connected to the device via PLC interface and RF-868 MHz, pcs.	250
Radio channel interface operating frequency, MHz	868
Number of channels within the frequency range, pcs.	5
Signal encryption	XTEA 128 bit
Radiation power, mW, no more	25
Maximum communication range between devices and radio channel DEVs via RF 868 MHz interface, in open area, m	900
Number of smoke exhaust valves, fire dampers controlled by the device, pcs	7 (depends on performance)
Maximum switching current of smoke exhaust dampers, fire dampers, A	2
Supply voltage for smoke exhaust dampers, fire dampers, V	AC 220/230 (50/60 Hz)
Connectable valve types	electromagnetic reversible with return spring
Number of freely programmable inputs, pcs	2
Maximum voltage at freely programmable input, V	20 ± 5%
Maximum line control current of a freely programmable input, mA	5
Number of controlled outputs «Relay contact», pcs.	2
Maximum voltage at the output of the RC, V	220
Maximum switching current at the «Relay contact» output, A	2
Number of outputs with line monitoring for breakage and SCS, pcs.	2
Output voltage, V	24 ± 20%
Maximum switching current for each output, A	0,45

Wi-Fi interface operating frequency, MHz	2400
Number of protected zones	32
Maximum communication range (in open area), m	50
Operating temperature range, °C	from -10 to + 55
Relative humidity	up to 93% at +40°C
Case protection degree	IP 20
Dimensions, mm	245 × 197 × 32
Weight, kg	no more 0,69 ± 5%
Average service life, years	10
Mean time between failures, h	60000
Probability of no-failure operation per 1000 h	0,98

1.4. Appearance of the device

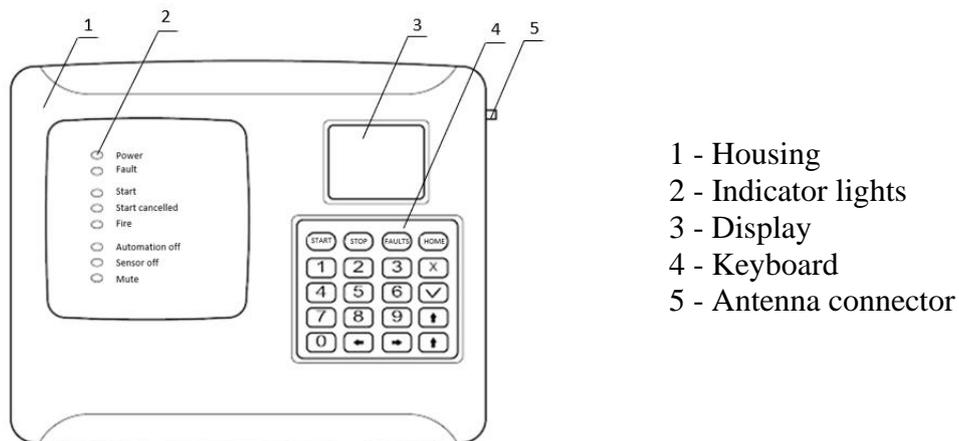
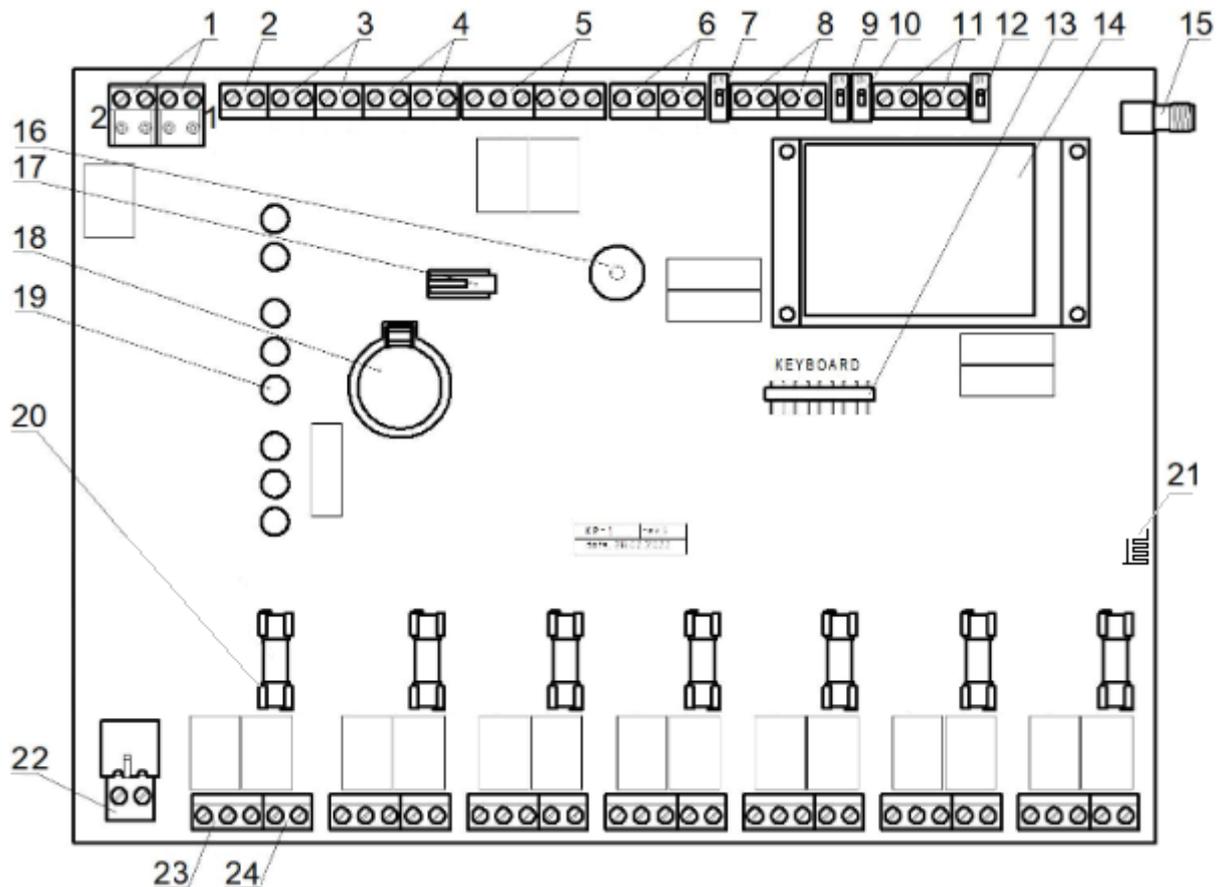


Figure 1 - Appearance of the CP

1.5. Internal organization

1.5.1. The internal structure of the device is shown in figure 2.



- | | |
|--|--|
| 1 - Input of the main and backup power supply; | 13 - Keyboard connector; |
| 2 - Output 24 V power supply RE; | 14 - Screen; |
| 3 - Freely programmable inputs IN1, IN2; | 15 - SMA connector for antenna connection; |
| 4 - Wired communication line PLC1, PLC2; | 16 - Sound emitter; |
| 5 - Outputs of the RC; | 17 - Case opening sensor (tamper); |
| 6 - Outputs for connecting the FA; | 18 - Battery CR2032; |
| 7 - Switch of the terminal resistor (terminator) of the CAN1 interface; | 19 - Light indicators; |
| 8 - Interfaces CAN1, CAN2; | 20 - Fuse for the supply line of the FP valve; |
| 9 - Switch of the terminal resistor (terminator) of the CAN2 interface; | 21 - Wi-Fi antenna; |
| 10 - Switch of the terminal resistor (terminator) of the RS-485-1 interface; | 22 - Supply line for FP valves; |
| 11 - Interfaces RS-485-1, RS-485-2; | 23 - Contacts for connecting the valve FF; |
| 12 - Switch of the terminal resistor (terminator) of the CAN1 interface; | 24 - Control inputs for LS valves. |

Figure 2 - Internal structure of the device

1.5.2. Instrument terminal marking

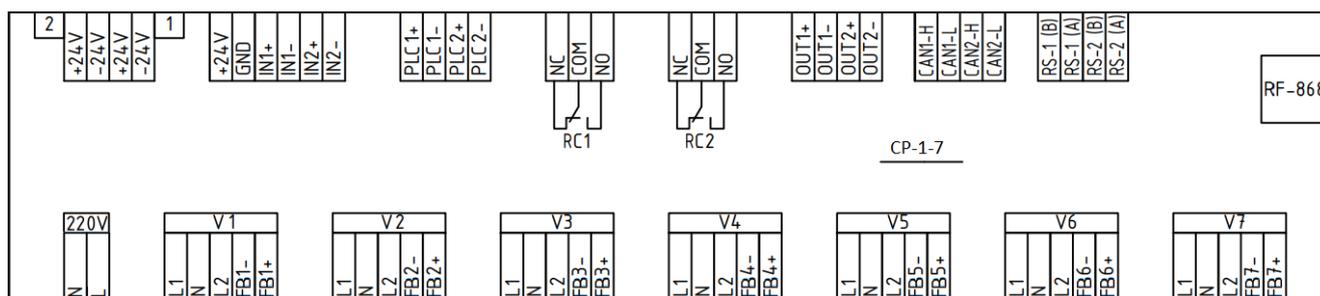


Figure 3 - Marking of the terminals of the device

1.5.3. Assignment of the terminals of the device

Table 3 - Assignment of device contacts

Purpose	Designation on board	Contact Description
Power line 24 V from the main source	2	+24 V - positive pole of the main power supply -24 V - negative pole of the main power supply
Power line 24 V from a backup source	1	+24 V - positive pole of the backup power supply -24 V - negative pole of the backup power supply
Power output RE	24V	+24 V - positive power supply pole RE (connection of no more than 6 RE is allowed) GND - common wire
Freely programmable input #1	In_1	⊕ - positive contact of input 1 ⊖ - negative contact of input 1
Freely programmable input #2	In_2	⊕ - positive contact of input 2 ⊖ - negative contact of input 2
Power line communication	PLC1	⊕ - positive contact PLC1 ⊖ - negative contact PLC1
Power line communication	PLC2	⊕ - positive contact PLC2 ⊖ - negative contact PLC2
Relay contact 1	RC_1	NC - normally closed contact COM - common contact RC NO - normally open contact
Relay contact 2	RC_2	NC - normally closed contact COM - common contact RC NO - normally open contact
Output LSS-1	OUT1	⊕ - power contact +24 V LSS-1 ⊖ - power contact -24 V LSS-1
Output LSS-2	OUT2	⊕ - power contact +24 V LSS-2 ⊖ - power contact -24 V LSS-2

CAN 1	CAN1	H - line «H» of the CAN interface L - line «L» of the CAN interface
CAN 2	CAN2	H - line «H» of the CAN interface L - line «L» of the CAN interface
RS-485 1	RS-1	B - inverting line of RS-485 interface A - non-inverting RS-485 interface line
RS-485 2	RS-2	B - inverting line of RS-485 interface A - non-inverting RS-485 interface line
Antenna 868 MHz	RF-868	SMA connector for connecting an 868 MHz antenna cable with a characteristic impedance of 50 ohms
Access levels connector	KEYBOARD	Access levels cable connection
Supply line for valves FP 220 V 50 Hz	220V	N - neutral electrical network 220 V 50 Hz L - phase of the electrical network 220 V 50 Hz It is possible to connect valve actuators with a supply voltage of 24V.
Valve supply output X, where X is the valve number	V_X	L1 - power line (phase) of the valve. Moves the damper to the working position N - common supply line (neutral) of the valve L2 - power line (phase) of the valve. Moves the damper to the standby position
Control of the LS line of the FB_X valve, where X is the number of the valve	FB_X	⊖ - negative contact of the control input of the LS valve ⊕ - positive contact of the LS control input of the valve Can be used as freely programmable inputs, provided that the control inputs of the LS valves are not used or occupied.

1.6. Completeness

Table 4 - Completeness of the device

Name	Quantity, pcs.	Note
Addressable fire alarm control panel CP-1-X «RUBETEK»	1	X - number of connected valves FF
Resistor kit	0-7	Quantity depends on device version
Fuse 5×20 mm 2 A 250 V	1-3	Quantity depends on device version

Battery CR2032	1	Quantity depends on device version
Antenna 868 MHz	1	
Mounting kit	1	
Datasheet	1	
Individual packing	1	

2. Intended use

2.1. Preparation for use



ATTENTION! If the CP was in conditions of negative temperature, it is necessary to withstand it for at least 4 hours at room temperature ($25\pm 10^{\circ}\text{C}$) to prevent moisture condensation.

Open the package, make sure that the completeness of the CP corresponds to table 4.

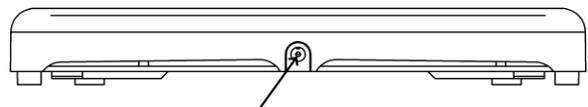
Carry out an external inspection, make sure that there are no visible mechanical damages (chips, cracks, dents) and traces of moisture.



ATTENTION! The protective film is removed from the device only after the commissioning and commissioning of the object.

Prepare the device for connection:

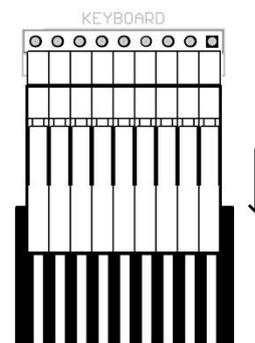
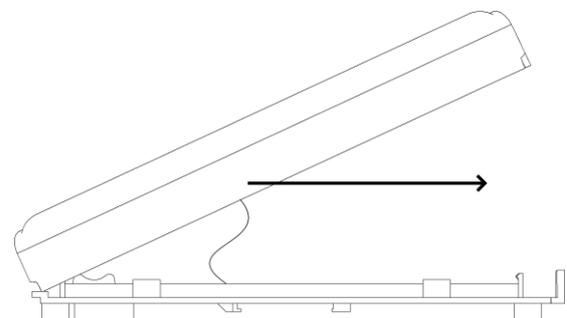
Open the body of the device. To do this, unscrew the screw securing the front cover of the device.



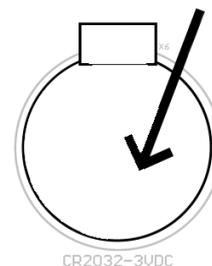
Carefully lift the front cover, slide it down along the device and disconnect the access levels cable by pulling on the plastic base of the connector.

Pulling the cable is not allowed, in order to avoid damage!

Remove the device cover completely.



Remove the insulating film of the battery to activate it.



2.2. Accommodation



ATTENTION! The technical requirements and test methods of the CP comply with the European standard EN 54-25 «Fire detection and fire alarm systems. Part 25: Components using radio links».

The device is installed inside the protected object in places protected from the effects of atmospheric precipitation, possible mechanical damage and access by unauthorized persons.

The place of installation must ensure the convenience of working with the device and connection to the mains.



ATTENTION! If radio channel sensors are directly connected to the CP, then the distance required to connect the antenna (directly or via cable) should be taken into account when placing it. On average, this distance is 40-50 mm. Excessive bending of the cable must be avoided.

2.3. Mounting

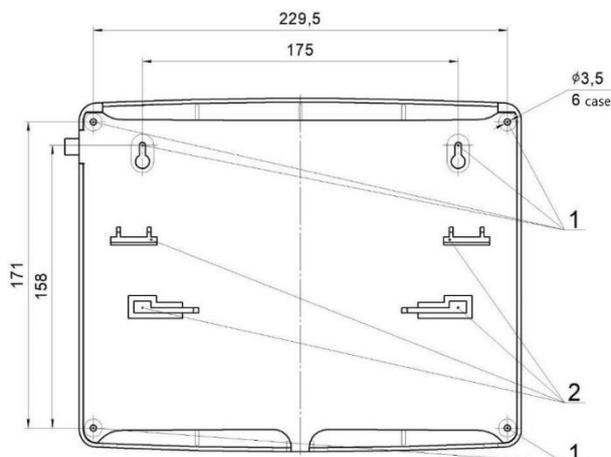


ATTENTION! Work on the installation, installation and maintenance of the device must be allowed to persons with the necessary qualifications and permission to work with electrical installations up to 1000 V.

The body of the device has mounting holes for mounting it on a wall 1 and a mount for mounting on a DIN rail 2.

To mount on the wall, you need:

- Make markings at the installation site of the device.
- Drill holes in the wall.
- Fasten the device using the fixing kit from the accessory kit.



- 1 - Mounting holes for screws DIN7981 2.9×25;
- 2 - Fasteners for DIN-rail.

2.4. Connecting



ATTENTION! Do not use wires with a cross section of more than 1.5 mm² to avoid damage to the terminal blocks. If it is necessary to use wires of large cross sections, it is recommended to use adapter blocks in order to reduce the cross section of the connected wire.

2.4.1. PLC connection

The PLC provides communication with wired DEVs, as well as their power supply.

When organizing a PLC line, topologies «Bus», «Star», «Ring» and their combinations can be used. PLC connection diagrams for various topologies are shown in figure 4.

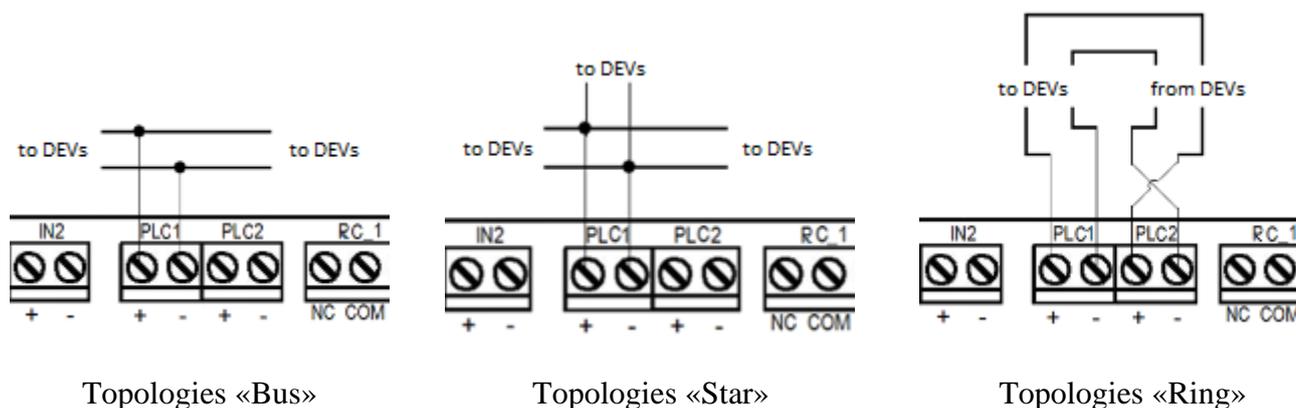


Figure 4 - PLC connection diagrams

Connect the PLC to the CP observing the polarity.

! *ATTENTION! Branching of the PLC is carried out using junction boxes or SCI.*

Basic requirements for the organization of PLC:

- cable lines must be made with fire-resistant cables with copper conductors that do not spread combustion when laid in groups with low smoke and gas emission (LSFR) or halogen-free (HFFR);
- it is allowed to connect to the PLC no more than 250 pcs. DEVs with uniform distribution;
- the maximum length of the line from the controller to the end device should not exceed 1200 meters with a section of 1.5 mm², 700 meters with a section of 0.9 mm², 600 meters with a section of 0.75 mm², 400 meters with a section of 0.5 mm², 160 meters with a cross section of 0.2 mm².

! *ATTENTION! It is necessary to form and mark the wires at the connection stage. The connection of the PLC line to the CP is carried out after the completion of its installation and connection of the SCI.*

2.4.2. CAN interface connection

The CAN interface is used to connect devices to a single network and is the main channel for transmitting information between them.

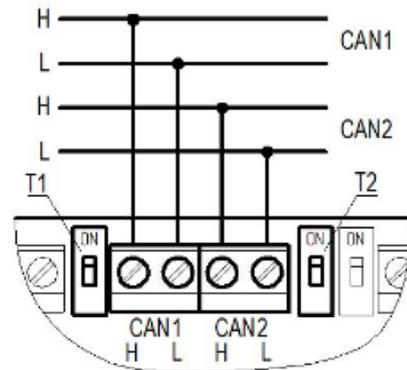
The CAN interface provides high reliability and data transmission speed in networks with a large number of devices.

Connect the CAN interface according to figure 5.

Basic requirements for organizing a CAN interface:

- cable lines must be made with fire-resistant cables with copper conductors that do not spread combustion when laid in groups with low smoke and gas emission (LSFR) or halogen-free (HFFR);
- the total length of the line should not exceed 250 m, excluding RM-1 interface repeaters;

- nominal wire cross-section from 0.5 mm² to 1.5 mm²;
- connection topology «Bus».



T1 – switch of the terminal resistor (terminator) of the CAN1 interface;
T2 – terminal resistor (terminator) switch of CAN2 interface.

Figure 5 - CAN connection

- ⓘ **ATTENTION!** If the device is the terminal on the CAN interface line, you must set the switch to the ON position next to the contact device of the CAN interface line.
- ⓘ **ATTENTION!** It is necessary to form and mark the wires at the connection stage.
- ⓘ **ATTENTION!** To increase the length of the CAN interface, RM-1 interface repeaters are used. The principle of connection and setting is given in the user manual of the interface repeater.
- ⓘ **ATTENTION!** If the CAN interface is interrupted, if the device received the «Fire 1» or «Fire 2» signal before, these signals will be stored until the time / timer expires when communication is lost. The device remembers the last state of other CP, if they were in touch.

ATTENTION! In the event of a break and SCS of one of the ports of the CAN interface, a malfunction of the CP[X] will occur: a CAN malfunction, where the CP[X] is a neighboring CP connected via CAN. If after CP[X] there is another CP, then faults will be detected in all adjacent CP. If a communication break occurs on two ports of the CAN interface, then the malfunction will be reflected in all neighboring CP.

Faults
Faults CAN
46.CP[11]F2.19#11;
Faults CAN
47.CP[33]P2.18#33
communication loss

2.4.3. RS-485 interface connection

The RS-485 interface provides communication between the controller and the CP and has a «Ring» topology.

The scheme of connecting several controllers to the CP on the example of a 5-storey section and location in the FA system is shown in figure 6.

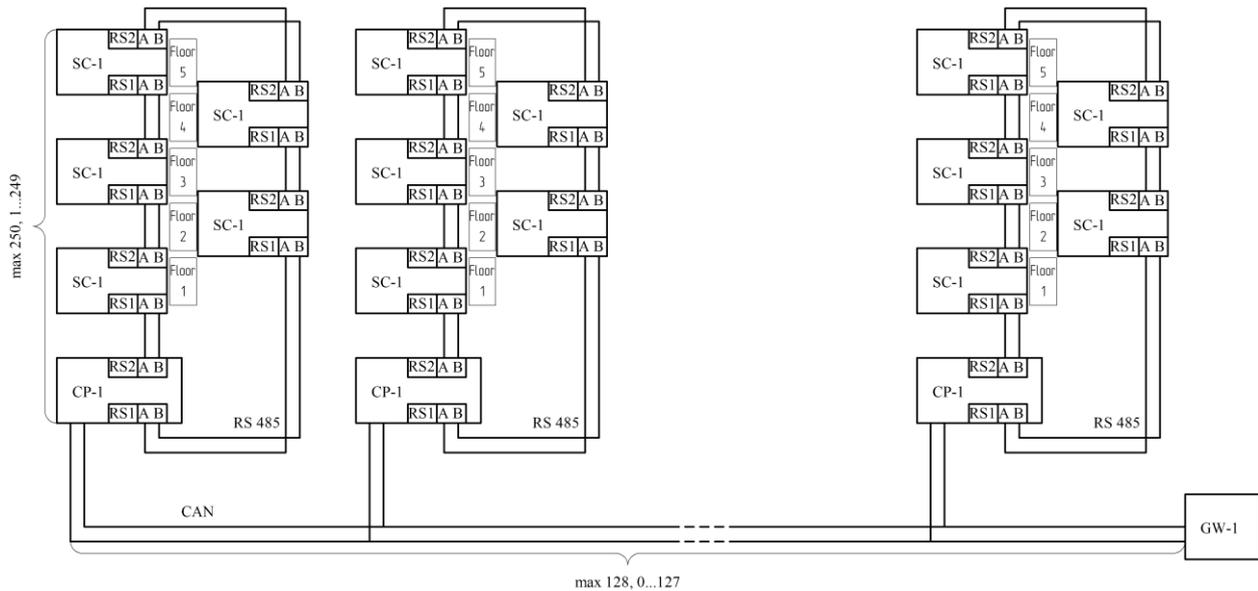


Figure 6 - Scheme of the location of the SC in the system



ATTENTION! RS-485 interfaces with numbers 1 and 2 are functionally equivalent. The length of the RS-485 interface line between neighboring devices should not exceed 150 m.

Basic requirements for RS-485 communication line:

- cable lines must be made with fire-resistant cables with copper conductors that do not spread combustion during group laying with low smoke and gas emission (ng-LSFR) or halogen-free (ng-HFFR);
- nominal wire cross-section from 0.5 mm² to 1.5 mm²;
- capacitance per unit length between wires A and B of the interface must not exceed 60 pF/m.



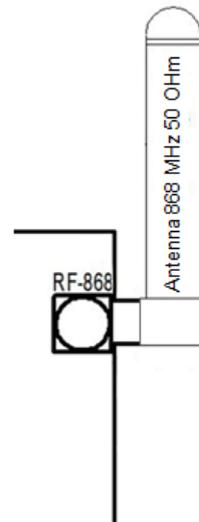
ATTENTION! It is necessary to form and mark the wires at the connection stage.

2.4.4. Antenna connection

The antenna is necessary for data exchange between the radio channel DEVs and the CP, which uses its own transceiver for data exchange. The antenna is connected directly to the CP. An example of connecting an antenna is shown in figure. To connect, you must use the antenna from the CP kit.



ATTENTION! When operating the antenna, it is not allowed to touch the metal parts of the antenna to the grounding elements and the metal parts of cabinets and devices!



ATTENTION! The antenna can only be installed when the CP case is opened.

2.4.5. Connecting power lines

Connect 24 V power lines to the CP from the main and backup sources, observing the polarity, according to figure 7.

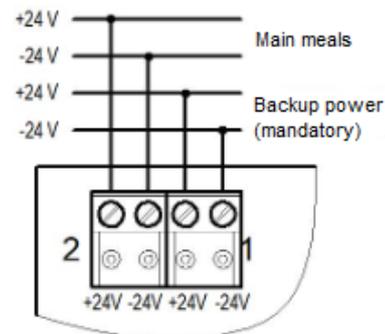


Figure 7 - Connecting the power supply of the CP



ATTENTION! When powering the CP from one redundant power line, it is necessary to use input 1 of the backup power supply and select **single supply** in the menu **Fire Alarm Network / Browse network / CP / Main menu / 2.Configuration / 2. UPS / 3.Power mode**.

UPS	
	27.0 V
3.Power mode:	single supply
4.Control valves supply:	yes

Connect the 220V valve supply line, in accordance with the marking, according to figure 8.

Primary requirements:

- cable lines must be made with fire-resistant cables with copper conductors that do not spread combustion when laid in groups with low smoke and gas emission (LSFR) or halogen-free (HFFR);
- nominal wire cross section from 0,5 mm² to 1,5 mm².

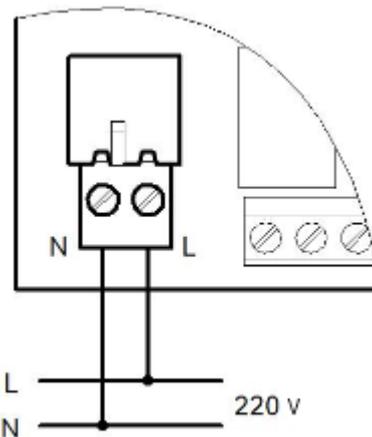


Figure 8 - Valve power connection



ATTENTION! It is necessary to mold and mark the wires at the connection stage in order to avoid breakage of the terminals.

After applying voltage to the power lines, you must make sure that the CP switches to the operating mode. The following information will appear on the screen:

- the name of the CP will be displayed in the top line of the screen;
- in the second and third - date, day of the week and time;
- in the fourth - mode of operation;
- in the fifth and sixth - information about current alarms and malfunctions in the system.

CP-1 (#0, gr.0)

Date: Thu 26.01.2023

Time: 12:56:54

Automatic mode

Alarm: None

Got faults

2.4.6. Description of indicator lights

The description of the light indicators of the CP is given in table 5.



ATTENTION! The LED indication of the device complies with the European standard EN 54-2 «Fire detection and fire alarm systems. Part 2: Control and indicating equipment».

Table 5 - Description of light indicators

Indicator	Glow color	CP status
Power	green	<ul style="list-style-type: none"> – constant glow - the voltage from the main power source is normal, – blinks if any power supply is abnormal or an event is active that generates the «Power Standby» state
Fault	yellow	<ul style="list-style-type: none"> – constant glow - malfunction on the CP: <ul style="list-style-type: none"> - violation in the power supply system of the CP; - violation of the integrity of controlled lines; - receipt of the signal «Fault» from the detector; - loss of communication with detector; - opening of the CP case, etc. – blinking - malfunction by events
Start	yellow	<ul style="list-style-type: none"> – permanent glow if the fire extinguishing direction is started, – flashes if the extinguishing direction is in the countdown before starting, – otherwise redeemed
Start cancelled	green	<ul style="list-style-type: none"> – lights up permanently if the direction lock has been activated, – otherwise redeemed
Fire	red	<ul style="list-style-type: none"> – constant glow - a «Fire 2» signal was received from the detector, from the CAN network, or from external equipment connected to the inputs, or a «Fire» signal from the CP, – blinking - signal «Fire 1» is received from the detector, from the CAN network or external equipment connected to the inputs
Automation off	yellow	<ul style="list-style-type: none"> – constant glow - CP is in manual control mode, – blinking - the CP is in bypass mode or the «automation disabled» event has triggered
Sensor off	yellow	targeted shutdown of detector connected to the CP. Alarms from disabled detector are ignored.
Mute	yellow	buzzer disabled

2.4.7. Application of mounting devices

The CP is structurally made of non-combustible, non-conductive material and assumes adjacent placement in FA cabinets for ease of access and maintenance with a horizontal and vertical distance between them of at least 40 mm and 20 mm, respectively.

2.5. Initial setup of the device



ATTENTION! The configuration and parameters necessary for the operation of the FA equipment are stored in the non-volatile memory of the device, which eliminates the need to re-program them in the event of a power failure and restoration of the mains voltage.

2.5.1. CP menu control

The following navigation buttons are used to navigate the CP menu:

Governing bodies	Button assignment
[←] [→] or [↑] [↓]	transition between menu items
[v]	selection / entry into the menu item, confirmation of the action (OK button)
[x]	cancel action, return to the previous menu (cancel button)
[HOME]	go to main menu
[←] [→]	setting/unchecking the value field
[1]	activating a cell in a table
[0]	deactivate a cell in a table
[START]	transfer of the CP to the FF mode (double click)
[START] + [v]	switching on automatic FF
[STOP]	switching CP from «Fire» mode to standby mode
[FAULTS]	call up the list of current faults

2.5.2. Setting the date and time

Open the **CP menu** on the **CP** screen by pressing the «**X**» button on the keyboard.

In the list that opens, select **8. Date**, press the **OK** button. Enter calendar date, month, year.

Go back one step [**X**] and select item **9. Time** where enter the current time and press **OK**.

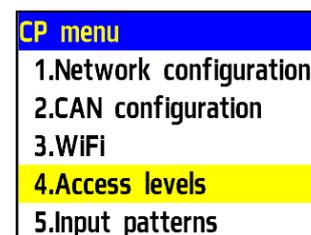


ATTENTION! If the current time and date are not set, then the record of events in the «Archive» will not be displayed correctly!

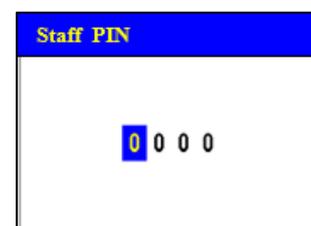
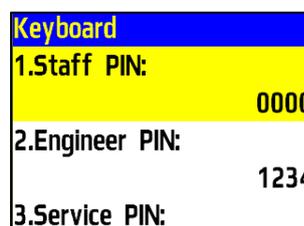
CP menu	
CP's only status	
8.Date:	06.03.23
9.Time:	07:38:42
Date:	
	01.08.22
Time:	
	06:50:01

2.5.3. Customizing access levels options and input patterns

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard. Select item **4.Access levels** and press the **OK** button.



In the list that opens, select the item **1.Staff PIN**, click **OK**, enter a 4-digit password for locking the **CP** access levels and click **OK** to save the data.

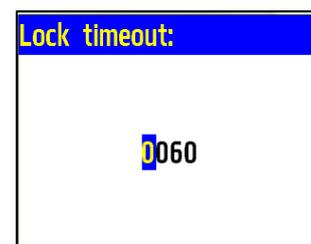


***ATTENTION!** In case of loss of the pin-code, it is necessary to contact the technical support of the «Rubetek» company.*



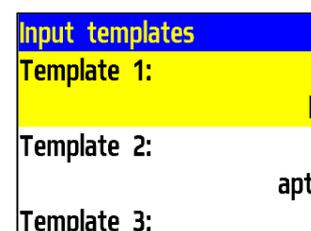
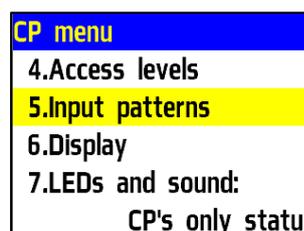
***ATTENTION!** After carrying out the commissioning, it is necessary to replace the factory PIN code in order to exclude the possibility of hacking the system by third parties.*

Go back one step by pressing [X] and select item **4. Lock timeout**, press **OK**, then enter the value in seconds after which the access levels will be blocked and press **OK** to save the data.



Go back one step by pressing [X] and select item **5. Input patterns**, press **OK**, after which a list of 9 available templates will open. Open each item in turn and enter the name used most often.

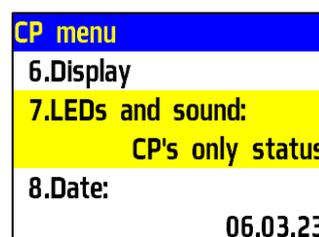
Templates: **level, apartment, vestibule, hall, corridor, living room, kitchen, bedroom, bathroom**, already entered.



***ATTENTION!** To use the created templates at the stage of entering a name for devices, you must hold «0» for 2 seconds on the CP access levels and select a template from the proposed list.*

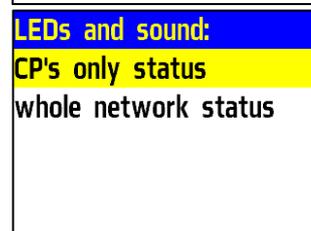
2.5.4. Configuring LED and sound alerts

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard.



In the list that opens, select **7. LEDs and sound**, press the **OK** button.

In the menu that opens, select one of the system alert states. When you select the **CP's only status** item, the LED and sound notification will display only the events and reactions of the **CP** itself. When you select **whole network status**, the LED and sound notification will display the status of all devices connected to this **CP**.



2.5.5. Screen settings

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard. Select item **6.Display** press the **OK** button.

CP menu	Display
4.Access levels	Backlight time: 15
5.Input patterns	
6.Display	Display type: 1.1
7.LEDs and sound: CP's only status	

In the menu that opens, select screen **Backlight time**. Press the **OK** button. Enter values in the range from 5 to 60 seconds. The default value is 15 seconds.

Backlight time:
05



ATTENTION! Increasing the screen backlight time may cause the screen to heat up, shortening the life of the screen.

2.5.6. Setting the CP name, network address and LAN group

The RS-485 interface provides communication between the SC and the CP in the local network.



ATTENTION! Failure to set these parameters can lead to unstable system operation.

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard. Select item **1.Network configuration** and press the **OK** button. Select sub-item **1.CP name** of the **CP**. Press the **OK** button. Use the control buttons to enter the name of the **CP**. Press the **OK** button.

CP menu	Network configuration
1.Network configuration	1.CP name: CP 1#?
2.CAN configuration	
3.WIFI	2.Network address: 122
4.Access levels	
5.Input patterns	3.Group in network:

CP name:
CP - 1
0 1 2 3 4 5 6 7 8 9 , . # - /
A B C D E F G H I J K L M N O P
Q R S T U V W X Y Z ' "
a b c d e f g h i j k l m n o p
q r s t u v w x y z ' "

To set the address in the local network select item **2. Network address** in the menu **Network configuration**. Press the **OK** button. Enter the value of the address. Press the **OK** button. Address range from 1 to 249.

Network configuration	Network address:
1.CP name: CP 1#?	
2.Network address: 122	001
3.Group in network:	



ATTENTION! Each device has an individual address. Addresses must not be repeated on the network. Failure to do so may result in system instability.

To set up a group of devices in the network, select item **3.Group in network** of the menu **Network**. Press the **OK** button. Enter the group number. Press the **OK** button. The system has 16 groups. Number interval from 0 to 15.

Network configuration	Group in network:
CP 1#?	
2.Network address: 122	
3.Group in network: 00	01



ATTENTION! Setting up groups of devices is necessary for setting up events in the system, as well as scheduling and dividing the system. It is described in detail in paragraph 2.8.10 of this manual.

2.5.7. Setting the received events and reactions from other SC and groups in the local network

On the CP, it is possible to configure interaction with the SC in the local network.

To separate reactions and events in the system, according to belonging, the prefix MY-, FOREING is set.

The prefix MY displays events and reactions that are formed only within the current CP

The prefix FOREING displays events and reactions that are formed outside of this device, but affect its state and processing of these events and reactions.



ATTENTION! For the correct operation of the system and management of events and reactions coming from neighboring devices, it is necessary to set the network address and the group in accordance with clause 2.5.6 of this manual.

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard. Select item **1.Network configuration** and press the **OK** button.

CP menu
1.Network configuration
2.CAN configuration
3.WiFi
4.Access levels
5.Input patterns

Setting groups with which the device interacts

Groups that are marked for interaction become visible to the device and it is possible to receive signals and events from them.

To set up groups:

- Select item **4.Receiving groups**. Press the **OK** button.

Network configuration	Receiving groups
4.Receiving groups: 0 selected	<input type="checkbox"/> Group 0
5.Fire 1 from groups: 0 selected	<input type="checkbox"/> Group 1
6.Fire 2 from groups:	<input type="checkbox"/> Group 2
	<input type="checkbox"/> Group 3
	<input type="checkbox"/> Group 4

- In the list that opens, set the groups with which the device will interact.

Items are activated with arrows ← → on the CP access levels. Press the **OK** button to save the changes.

Setting of groups from which signals Fire 1, Fire 2, Fault are received

Select the required reaction point **5.Fire 1 from groups**, **6.Fire 2 from groups** or **7.Faults from groups**. Press the **OK** button.

In the list that opens, set the groups from which the corresponding reactions to the device will come.

Network configuration	Fire 1 from groups
5.Fire 1 from groups: 0 selected	<input checked="" type="checkbox"/> Group 0
6.Fire 2 from groups: 0 selected	<input type="checkbox"/> Group 1
7.Faults from groups:	<input type="checkbox"/> Group 2
	<input type="checkbox"/> Group 3
	<input type="checkbox"/> Group 4

Items are activated with arrows ← → on the CP access levels. Press the **OK** button to save the changes.



ATTENTION! If the marked groups are not selected in the menu item **4.Receiving groups**, then the signal and events from them will not be received.

Setting groups from which events are received

Select item **8.Events from groups**. Press the **OK** button.

In the list that opens, set the groups from which events will be sent to the device.

Items are activated with arrows ← → on the CP Access levels. Press the **OK** button to save the changes.

Network configuration	Events from groups
7.Faults from groups: 0 selected	<input checked="" type="checkbox"/> Group 0
8.Events from groups: 0 selected	<input type="checkbox"/> Group 1
9.Reaction to ind. CPs	<input type="checkbox"/> Group 2
	<input type="checkbox"/> Group 3
	<input type="checkbox"/> Group 4



ATTENTION! If the marked groups are not selected in the menu item **4.Receiving groups**, then the signal and events from them will not be received.

Setting the response to individual CP

We select item **9.Reaction to ind. CPs** press the **OK** button.

In the list that opens, select the desired reaction. Press the **OK** button.

We select the addresses of the devices from which the selected reaction should come.

The device address in the local network is selected using the ←↑→↓ buttons.

Press «1» if you want to activate the selection and «0» if you want to remove the activation.

Click the **OK** button to save the actions.

Network configuration	Reaction to individual CPs
0 selected	My Fire 1: 0 selected
9.Reaction to ind. CPs	My Fire 2: 0 selected
10.Link timeout: 120 min	Foreign Fire 1:
11.Network protection	
Reaction to individual CPs	Foreign Fire 1
0 selected	0 1 2 3 4 5 6 7
Foreign Events: 0 selected	8 9 10 11 12 13 14 15
1st Fire 2: 0 selected	16 17 18 19 20 21 22 23
	24 25 26 27 28 29 30 31
	32 33 34 35 36 37 38 39
	40 41 42 43 44 45 46 47
	48 49 50 51 52 53 54 55
	56 57 58 59 60 61 62 63

Setting the response time from the control panel

The time during which the CP will respond to previously sent events from the neighboring CP with which communication was lost.

To set the interaction time, you must select item **10. Link timeout**. Press the **OK** button. Set the time in the range from 0 to 255. Press the **OK**

Network configuration	Link timeout:
0 selected	
9.Reaction to ind. CPs	
10.Link timeout: 255 min	255
11.Network protection	

button.

2.5.8. Setting up LAN protection

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard.

Select item **1.Network configuration** and press the **OK** button.

Select item **11.Network protection** and press the **OK** button.

CP menu	Network configuration
1.Network configuration	0 selected
2.CAN configuration	9.Reaction to ind. CPs
3.WIFI	10.Link timeout:
4.Access levels	120 min
5.Input patterns	11.Network protection

The **2.Configure devices** menu sets the network key to non-secure devices (those with key=0).

Select item **2.Configure devices**. Press **OK**.

If there are new devices, the process of installing the key on them will start. If no new devices are found, CP will throw an error.

Network protection	Set network key
1.Network key: 123456789	Please wait...
2.Configure devices	Writing data is in progress.
3.Set new network key	

Error
Network key is not set.

The **3.Set new network key** menu allows you to change the key. In this case, first a key is removed from all devices in the network (reset to zero), then a new one is written.

Select item **3.Set new network key** and press the **OK** button. Enter the network key. Press **OK**.

Network key
123456789

 **ATTENTION!** If you need to bind a device with a non-zero code to the network (for example, from another network), then you need to reset its code first.

2.5.9. Setting the CP name, network address and group

The CAN interface is used to connect the control panel to a single network, it is the main channel for transferring information between them and transferring data to the GW-1.

 **ATTENTION!** Failure to set these parameters can lead to unstable system operation and increase the load on the CAN bus.

The prefix FOREING displays events and reactions that are formed outside of this device, but affect its state and processing of these events and reactions.



ATTENTION! For the correct operation of the system and management of events and reactions coming from neighboring devices, it is necessary to set the network address and the group in accordance with clause 2.5.9 of this manual.

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard.
Select item **2.CAN configuration** and press the **OK** button.

CP menu
1.Network configuration
2.CAN configuration
3.WIFI
4.Access levels
5.Input patterns

Setting of groups from which signals Fire 1, Fire 2

Select the required reaction point **5.Fire 1 from groups**, **6.Fire 2 from groups**. Press the **OK** button.

In the list that opens, set the groups from which the corresponding reactions to the device will come.

CAN configuration	Fire 1 from groups
5.Fire 1 from groups: 0 selected	<input checked="" type="checkbox"/> Group 0
6.Fire 2 from groups: 0 selected	<input type="checkbox"/> Group 1
7.Events from groups: 0 selected	<input type="checkbox"/> Group 2
	<input type="checkbox"/> Group 3
	<input type="checkbox"/> Group 4

Items are activated with arrows ← → on the CP access levels. Press the **OK** button to save the changes.

Setting groups from which events are received

Select item **7.Events from groups**. Press the **OK** button.

In the list that opens, set the groups from which events will be sent to the device.

Items are activated with arrows ← → on the CP Access levels. Press the **OK** button to save the changes.

CAN configuration	Events from groups
0 selected	<input type="checkbox"/> Group 0
6.Fire 2 from groups: 0 selected	<input type="checkbox"/> Group 1
7.Events from groups: 0 selected	<input type="checkbox"/> Group 2
	<input type="checkbox"/> Group 3
	<input type="checkbox"/> Group 4

2.6. Control of FA devices with CP

2.6.1. Selecting the CP for setting and viewing parameters

To select a connected device and further configure it, you must:

- Select item **1.Browse network** fire alarm network menu. Press **OK**.

The list that opens displays data on active network devices.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2



ATTENTION! For devices connected via the RS-485, the network name, (IP address) and the number of faults on that network are displayed. For devices connected directly, the CAN network address range, the number of devices and the number of faults are displayed.

Select the required **Device**. Press **OK**. The main menu will open on the CP, identical to the **main menu** of the CP.

Main menu
1.Information
2.Configuration
3.DEVs
4.Events and reactions
5.Firefighting

2.6.2. Viewing the parameters of the CP

This menu contains information about the status of the device and devices connected to it.

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.

Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

This menu contains information about the status of the device and devices connected to it.

To view information, select **1.Information**. Press the **OK** button.

This menu contains the following items:

- **Active alarms** - list of FA devices from which the signal «Fire-1» or «Fire-2» is received;
- **Active signals** - list of active zones, indicating devices;
- **Faults** - information about current malfunctions on this device;
- **Fire sources** - list of sources/causes of the «Fire-1» or «Fire-2» signal;
- **Bypassed DEV list** - a list of disabled (deactivated) DEVs systems is presented with an indication of the slot number;
- **UPS** - supply voltage parameters: main supply, backup supply;
- **Inputs/outputs** - data on freely programmable inputs, outputs of the LSS, status, data on faults and feedback level are available;
- **Valves** - contains information about the state of the FP valves: name, status, data on faults, commands and feedback level.

Main menu	Information
1.Information	1.Active alarms
2.Configuration	2.Active signals
3.DEVs	3.Faults
4.Events and reactions	4.Fire sources
5.Firefighting	5.Bypassed DEV list
Information	
	4.Fire sources
	5.Bypassed DEV list
	6.UPS
	7.Inputs/outputs
	8.Valves

To view the serial number, factory number of the selected control panel, select the item **9.Serial number** or **10.Factory number**, name in the main menu.

Main menu
9.Serial number: 0305419896
10.Factory number: 12345678901234567890
11.Build version:

Viewing UPS configuration

Select item **6.UPS** from the Information menu.
Press the **OK** button.

This menu displays:

- **Main supply**- main power supply voltage;
- **Backup supply**- backup power supply voltage;
- **Valves supply**- power status (normal, fault).

UPS	
Main supply:	24.2 V
Backup supply:	23.8 V
Valves supply:	

Viewing input/output parameters

Select item **7. Inputs / outputs** of the menu Information. Press the **OK** button. In the list that opens, select the required input / output. Press the **OK** button.

The menu that appears contains the following options:

Inputs/outputs	Input 1
1.Input 1	Status: norm
2.Input 2	Fault: none
3.LSS 1	Feedback:
4.LSS 2	

- **Status**- current entry/exit status;
- **Fault** - the presence of a malfunction at the input / output;
- **Feedback** - the real value of the resistance of the communication line in the current state of the input / output.



ATTENTION! For the outputs of the LSS with the active «Manual» mode on the device, the **command** menu item is active, which allows you to start / stop the LSS.

View valve parameters

Select item **8.Valves** of the view parameters menu. Press the **OK** button. In the list that opens, select the required valve actuator. Press the **OK** button.

The menu that appears contains the following options:

- **Name** - name of the valve installed on the device;
- **Status** - the current state of the valve;
- **Fault** - the presence of a malfunction on the valve;
- **Command** - current state (mode of operation);
- **Feedback** - the real value of the resistance of the communication line in the current state of the valve.

Valves	Valve 1
1.Valve 1 (v.1) closed	Name: Valve 1
2.Valve 2 (v.2) closed	Status: closed
3.Valve 3 (v.3)	Fault:
Valve 1	
Command: none	
Feedback: off	
	line short



ATTENTION! For valves in the active «Manual» mode on the device, the **Command** menu item is active, which allows you to start / stop the valve.

2.6.3. Sound and display settings

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network
1.Browse network
2.Active alarms
3.Alarm causes
4.Faults
5.Bypassed DEVs

Browse network	
[122] CP #?	15 faults
[85] SC	11 faults
[74] SC2	

To set up the sound signaling of the CP, select the main menu item **8.Sound**. Press the **OK** button.

In the menu that opens, select the operating mode.

Main menu	
automatic	
8.Sound:	on
9.Serial number:	305419896

Sound
on
off

To configure the sound signaling of the CP during commissioning, select the main menu item **2.Configuration** and go to section **8.Sound during CW**. Press the **OK** button.

In the menu that opens, select the operating mode. When you select the «off» mode, the device will be put into silent mode for all kinds of events.

Main menu
1.Information
2.Configuration
3.DEVs
4.Events and reactions
5.Firefighting

Configuration	
2 off	
8.Sound during CW:	on
9.System fault	
10.Factory defaults	

Sound during CW:
on
off



ATTENTION! When carrying out commissioning, it is recommended to turn off the sound alarm of the device.



ATTENTION! Turning off the sound alarm of the device does not turn off the LSS.

2.6.4. Supply voltage control setting

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network
1.Browse network
2.Active alarms
3.Alarm causes
4.Faults
5.Bypassed DEVs

Browse network	
[122] CP #?	15 faults
[85] SC	11 faults
[74] SC2	

- Select item **2.Configuration** of the main menu. Press the **OK** button.
- Then select item **2.UPS** and press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

In the list of configuration that opens, we have access to:

- **Min.voltage**- lower value of the device supply voltage;
- **Max.voltage**- the upper value of the supply voltage of the device;
- **Power mode**- number of connected power lines (main and backup, single supply);
- **Control valves supply** - switching on the control of the 220V power supply line of the drives.

UPS	Min. voltage:
1.Min. voltage: 20.0 V	20.0
2.Max.voltage: 27.0 V	
3.Power mode:	

UPS	Control valves supply:
3.Power mode: 27.0 V main and backup	no
4.Control valves supply:	yes
yes	

Select the required item. Press the **OK** button. Set the value and click **OK**. To exit, press the **Home** button.



ATTENTION! If the supply voltage does not match the specified values, the **Fault** indicator lights up on the device.

2.6.5. Setting the input resistance control

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

The CP allows you to set general settings for controlling connected screens and outputs for connecting an VA:

To do this, select item **2. Configuration** of the main menu. Press the **OK** button.

Select item **3. Inputs / outputs**. Press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Select item **6. Resistance inputs**. Press the **OK** button.

In the list that opens, the following configuration are available to us:

- **Short on**- the value of the resistance that the system perceives as a SCS;

Inputs/outputs	Resistance inputs
2.Input 2	1.Short on: 00.2 kOhm
3.LSS 1	2.Break on: 25.0 kOhm
4.LSS 2	3.Precision:
5.Relays	
6.Resistance inputs	

- **Break on**- the value of the resistance that the system perceives as a break;
- **Precision**- permissible error of resistance values, measured in percent.

To configure each parameter, select it and click the **OK** button.

Set the value of the parameter. Press the **OK** button.

2.6.6. Setting the CP name, network address and group



ATTENTION! Failure to set these parameters can lead to unstable system operation.

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

To do this, select item **2. Configuration** of the main menu. Press the **OK** button. Select item **5. Network**. Press the **OK** button. Select sub-item **1.CP name** of the **CP**. Press the **OK** button. Use the control buttons to enter the name of the **CP**. Press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

To set the address in the network select item **2. Network address** in the menu **Network** configuration. Press the **OK** button. Enter the value of the address. Press the **OK** button. Address range from 1 to 249.

Network	CP name:
1.CP name: ППК #?	ППК #?
2.Network address: 122	0 1 2 3 4 5 6 7 8 9 , . # - / A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ' a b c d e f g h i j k l m n o p q r s t u v w x y z '
3.Group in network:	
Network address: 001	



ATTENTION! Each device has an individual address. Addresses must not be repeated on the network. Failure to do so may result in system instability.

To set up a group of devices in the network, select item **3.Group in network** of the menu **Network**. Press the **OK** button. Enter the group number. Press the **OK** button. The system has 16 groups. Number interval from 0 to 15.

Network	Group in network:
2.Network address: 122	
3.Group in network: 00	00



ATTENTION! Setting up groups of devices is necessary for setting up events in the system, as well as scheduling and dividing the system. It is described in detail in paragraph 2.8.10 of this manual.

2.6.7. Setting the received events and reactions from other CP and groups

It is possible to configure the interaction with other CP in the CAN network on the device.

To separate reactions and events in the system, according to belonging, the prefix MY-, FOREING is set.

The prefix MY displays events and reactions that are formed only within the current CP

The prefix FOREING displays events and reactions that are formed outside of this device, but affect its state and processing of these events and reactions.



ATTENTION! For the correct operation of the system and management of events and reactions coming from neighboring devices, it is necessary to set the network address and the group in accordance with clause 2.6.6 of this manual.

Open the **Fire Alarm Network** menu on the CP screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required CP. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

Select item **2. Configuration** of the main menu. Press the **OK** button. Select item **5. Network**. Press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Setting groups with which the device interacts

Groups that are marked for interaction become visible to the device and it is possible to receive signals and events from them.

To set up groups:

- Select item **4.Receiving groups**. Press the **OK** button.

Network	Network configuration
4.Receiving groups: 0 selected	5.Fire 1 from groups: 0 selected
5.Fire 1 from groups: 0 selected	6.Fire 2 from groups: 0 selected
6.Fire 2 from groups:	7.Faults from groups:

- In the list that opens, set the groups with which the device will interact.

Items are activated with arrows ← → on the CP access levels. Press the **OK** button to save the changes.

Setting of groups from which signals Fire 1, Fire 2, Fault are received

Select the required reaction point **5.Fire 1 from groups**, **6.Fire 2 from groups** or **7.Faults from groups**. Press the **OK** button.

In the list that opens, set the groups from which the corresponding reactions to the device will come.

Network	Fire 1 from groups
5.Fire 1 from groups: 0 selected	<input type="checkbox"/> Group 0
6.Fire 2 from groups: 0 selected	<input type="checkbox"/> Group 1
7.Faults from groups:	<input type="checkbox"/> Group 2
	<input type="checkbox"/> Group 3
	<input type="checkbox"/> Group 4

Items are activated with arrows ← → on the CP access levels. Press the **OK** button to save the changes.



ATTENTION! If the marked groups are not selected in the menu item **4.Receiving groups**, then the signal and events from them will not be received.

Setting groups from which events are received

Select item **8.Events from groups**. Press the **OK** button.

In the list that opens, set the groups from which events will be sent to the device.

Items are activated with arrows ← → on the CP Access levels. Press the **OK** button to save the changes.

Network	Events from groups
7.Faults from groups: 0 selected	<input type="checkbox"/> Group 0
8.Events from groups: 0 selected	<input type="checkbox"/> Group 1
9.Reaction to ind. CPs	<input type="checkbox"/> Group 2
	<input type="checkbox"/> Group 3
	<input type="checkbox"/> Group 4



ATTENTION! If the marked groups are not selected in the menu item **4.Receiving groups**, then the signal and events from them will not be received.

Setting the response to individual CP

We select item **9.Reaction to ind. CPs** press the **OK** button.

In the list that opens, select the desired reaction. Press the **OK** button.

We select the addresses of the devices from which the selected reaction should come.

The device address in the network is selected using the ←↑→↓ buttons.

Press «1» if you want to activate the selection and «0» if you want to remove the activation.

Click the **OK** button to save the actions.

Network	Reaction to individual CPs
0 selected	0 selected
9.Reaction to ind. CPs	Foreign Events: 0 selected
10.Link timeout: 120 min	1st Fire 2: 0 selected
11.Firmware clone	
Reaction to individual CPs	Foreign Fire 1
0 selected	0 1 2 3 4 5 6 7
Foreign Events: 0 selected	8 9 10 11 12 13 14 15
1st Fire 2: 0 selected	16 17 18 19 20 21 22 23
	24 25 26 27 28 29 30 31
	32 33 34 35 36 37 38 39
	40 41 42 43 44 45 46 47
	48 49 50 51 52 53 54 55
	56 57 58 59 60 61 62 63

Setting the response time from the control panel

The time during which the CP will respond to previously sent events from the neighboring CP with which communication was lost.

To set the interaction time, you must select item **10. Link timeout**. Press the **OK** button. Set the time in the range from 0 to 255. Press the **OK**

Network	Link timeout:
0 selected	
9.Reaction to ind. CPs	
10.Link timeout: 120 min	255
11.Firmware clone	

button.

2.6.8. Radio setting

Radio channel setting

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

To set up a radio channel with radio channel devices:

- select the main menu item **3.DEVs**. Press the **OK** button.
- select the submenu item **4.Configuration**. Press the **OK** button.
- select the menu item **1. RF channel**. Press the **OK** button.
- on the Access levels, enter the channel number from 0 to 4. Press the **OK** button.
- Press the **Home** button.

The CP is ready to connect detectors.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2
Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:
Configuration	RF channel:
1.RF channel:	2
2.RF security key:	2
3.Link timeout	
4.Voice ann. conditions:	

ATTENTION! One radio channel should be used to connect all RF devices on the floor. To connect RF devices at each subsequent floor should indicate your radio channel. After using all 5 radio channels (0..4), we start numbering again, from 0. If several devices are installed on the floor, then one radio channel is installed on all of them.



ATTENTION! When changing the radio channel on a device with linked sensors, it is necessary to rebind them.



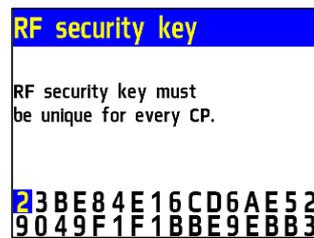
Setting the network key

When binding radio channel devices to the device, there is an exchange of keys for their identification.

ATTENTION! The network key is unique for each CP.



DEV	Configuration
1.Devices list	1.RF channel:
2.Device zones	2
3.Device pairing	2.RF security key:
4.Configuration	3.Link timeout
5.PLC status:	4.Voice ann. conditions:



2.6.9. Setting the «sensors bypass» mode

The bypass mode is used to simultaneously disable all DEVs connected to this CP. At the same time, the binding and configuration of devices is saved. Reactions of disconnected devices are not displayed on the CP and do not trigger events. «Fire1» and «Fire2» signals are transmitted from the detector, but are inactive on the CP.

To set the «sensor bypass» mode on the CP at the commissioning stage, you must:

- In the **main menu** of the device, select item **7.Mode** and press **OK**.
- In the list that opens, select the mode: **sensors bypass** - this mode allows the CP to ignore alarm signals from the detector and click **OK**.

Main menu	Mode:
6.Archive	automatic
7.Mode:	manual
automatic	sensors bypass
8.Sound:	
on	



ATTENTION! In this mode, the «Automation off» indicator flashes, and the «Sensors off» indicator glows yellow.



ATTENTION! We recommend using this mode during commissioning, in order to avoid excessive discharge of the batteries of the RF sensors and the power load on the PLC, until the equipment is transferred to the operating company.

2.6.10. Manual mode setting

In manual mode, the control of the FP valves and the outputs of the LSS is carried out manually from the «View parameters» menu section. In manual mode, the «Automation off» LED lights up yellow.

To set the manual mode on the device, you must:

In the **Main menu** of the device, select item **7.Mode** and press **OK**.

In the list that opens, select the mode: **manual** - this mode allows you to control the activation of the LSS and FP valve drives. Press the **OK** button.

Main menu	Mode:
5.Firefighting	automatic
6.Archive	manual
7.Mode:	sensors bypass
manual	
8.Sound:	



ATTENTION! We recommend using this mode when carrying out commissioning, to check the connection of devices and system configuration.

2.7. Connecting devices to the CP and setting them up



ATTENTION! A detailed algorithm for connecting devices to the CP and their configuration is described in the instruction manual for each device.

2.7.1. Connecting and configuring radio channel DEVs



ATTENTION! No more than 250 radio channel devices can be added to the CP, while the total number of all DEVs connected to the CP should not exceed 250 pieces.

RF fire alarm devices include detector, VA.

When connecting radio channel devices, the distance between the device and the device should be no more than 10 meters.

At the same time, no more than five radio channel devices can be tied to the CP.

Before connecting a radio channel device, it is necessary to prepare it for connection and make sure that it works according to the instruction manual for this device.

The device automatically binds a new radio channel device to the first free slot.

Open the **Fire Alarm Network** menu on the CP screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required CP. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

Before connecting radio channel devices, it is necessary to switch the CP to the mode of searching for available devices. For this:

- in the main menu of the CP, select item **3. DEVs** and press the **OK** button
 - select submenu item **3.Device pairing**. Press the **OK** button.
 - select submenu item **2.Wireless DEVs**. Press the **OK** button.
 - select binding method **1.Through CP/SC / 2.Using RE-PLC**. Press the **OK** button.
- A menu will open with the binding of RF devices.

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:

Device pairing	RF-device pairing
1.Wired DEVs	1.Through CP/SC
2.Wireless DEVs	2.Using RE-PLC (#23)

Device pairing
1.90EB2B SD



ATTENTION! Before connecting radio channel devices, it is necessary to make radio channel settings in accordance with clause 2.7.8 of this manual.

Enter DEVs into programming mode, for this:

- open the case of the device;
- switch the switch on the **PROG** board to the **ON** state (for SD, HD, MCP, MCP (Y,O,G)).

The CP will display the serial number and the time since the device was last detected. If the time is more than 5 seconds, then the device has most likely exited the bind mode.

Select the desired DEVs and press the **OK** button.

After linking a new device, the DEVs settings menu will open.

General configuration for wireless devices (DEVs menu)

If you are making configuration for a previously linked and configured device, you must:

- select item **3.DEVs** and press the **OK** button.
 - select submenu **1. Devices list**. Press the **OK** button.
 - select submenu **2.By number**. Press the **OK** button.
 - select the required slot. Press the **OK** button.
- If settings are made during binding, the DEVs settings menu will be available immediately.

Main menu
1.Information
2.Configuration
3.DEVs
4.Events and reactions
5.Firefighting

Devices list
1.By zone
2.By number

DEV
1.Devices list
2.Device zones
3.Device pairing
4.Configuration
5.PLC status:

Devices list
46.pls-type-68 (#46)
47.pls-type-69 (#47)
48.pls-type-70 (#48)
49.rf-type-1 (#49)
50.rf-type-2 (#50)

- **Name**- device name;
- **Zone**- will allow to unite devices of one fire zone. Number of protected zones - 32;



ATTENTION! For DEVs that do not have a zone set in manual mode, the configuration set in the **Default Zone** will be applied.

- **Device type***- is determined automatically;
- **Status***- the current state of the device (norm, case opening, Fire 1, Fire 2, low battery, link fault). When you select this item and press the **OK** button, a list of faults on the device opens;
- **Bypass mode**- deactivation/activation of the DEVs device in the system;
- **Smoke sensor***- value of the current optical density of the smoke chamber (available only for SD-1, SDW-1);
- **Link***- parameters of CP communication with the device. More details are described in clause 2.7.7 of this manual;
- **Main supply** - main battery voltage;
- **Backup supply ***- backup battery voltage;
- **Serial number***- serial number of the device;
- **Firmware version***- device software version;
- **Device menu**- includes the following items:
 - **Device configuration**- individual device configuration. If you want to configure an already bound DEVs, then you must wait 20 seconds after switching it to the binding mode. The configuration of this item are available for 30 seconds.
 - **Reaction configuration**- a list of signals from the DEVs, which will be processed on the CP. Items are activated with arrows ← → on the CP access levels. This list is the same for all RF devices, but reactions that are not used on this device are marked in gray.
- **Delete**- deleting the device from the CP.

DEV #1	
Name:	rf -type-1
Zone:	No zone
Device type:	

DEV #1	
Status:	Smoke detector
	link fault
Bypass mode:	no

DEV #1	
Smoke sensor:	0
Link:	T:6843s H:0 Q:0/0
Main supply:	

DEV #1	
Backup supply:	0.0 V
	0.0 V
Serial number:	000001

DEV #1	
Firmware version:	000001
	19.18
Device menu	
Delete	



ATTENTION! Options marked with * are not configurable and are for informational purposes only.

#1: rf -type-1
Device configuration
Reaction configuration

Advanced configuration for wireless devices (Device configuration menu)

The following options are available in the **Device configuration** menu:

- **Status period** - time interval (from 10 to 255 sec), after which the DEVs of the communication between the DEVs and the CP will take place. The default is 255 sec.

Device configuration
Status period:
250 sec
Save



ATTENTION! Reducing DEVs polling time will shorten battery life.

Configuring wireless device reactions (Reaction configuration menu)

ATTENTION! List of required active reactions for SD:

- **Fire1 from DEV**- issuing a message to the CP when the chamber is filled with smoke and saved in the archive.
- **Tamper**- issuing a message to the CP when the case is opened with preservation in the archive.
- **Test button** - issuing a message to the CP when you press the «Test» button with saving in the archive.
- **Main low** - issuance of a message to the CP when the main battery is discharged and stored in the archive.
- **Backup low** - issuance of a message to the CP when the backup battery is discharged and stored in the archive.
- **Dust** - issuing a message to the CP in case of high dustiness of the sensor with saving in the archive.
- **Internal fault** - control of a break in the communication line.

Reactions
<input checked="" type="checkbox"/> Fire 1 from DEV
<input type="checkbox"/> Fire 2 from DEV
<input type="checkbox"/> Tamper
<input type="checkbox"/> Test button
<input type="checkbox"/> Main low

Reactions
<input type="checkbox"/> Backup low
<input type="checkbox"/> Fire 1 using CP
<input type="checkbox"/> Fire 2 using CP
<input type="checkbox"/> Event generation
<input checked="" type="checkbox"/> Dust

Reactions
<input type="checkbox"/> Internal fault
<input type="checkbox"/> Output off
<input type="checkbox"/> Output off by fault
<input type="checkbox"/> Signal 1 (warning)
<input checked="" type="checkbox"/> Signal 2 (alarm)

ATTENTION! List of mandatory active MCP reactions:

- **Fire2 from DEV**- issuing a message to the CP when the drive element is activated and stored in the archive.
- **Tamper**- issuing a message to the CP when the case is opened with preservation in the archive.
- **Main low** - issuance of a message to the CP when the main battery is discharged and stored in the archive.
- **Backup low** - issuance of a message to the CP when the backup battery is discharged and stored in the archive.

ATTENTION! List of obligatory active reactions of VA:

- **Tamper**- issuing a message to the CP when the case is opened with preservation in the archive.
- **Test button** - issuing a message to the CP when you press the «Test» button with saving in the archive.

- **Main low** - issuance of a message to the CP when the main battery is discharged and stored in the archive.
- **Backup low** - issuance of a message to the CP when the backup battery is discharged and stored in the archive.

After setting all the configuration, click the **Cancel** button.

At the end of the binding of the device, switch the **PROG** switch to the **OFF** state. Close the device case.

Check the binding of the device to the CP by pressing the **TEST** button.

A message about testing the sensor will appear on the CP within 3 seconds, indicating the slot to which it is bound, and the ID (name) of the device.

Warning !	
DEV test!	
Slot: 43	
ID: rf -type-65	
Zone: No zone	
07.02.2023	09:32:47

2.7.2. Connecting and configuring wired DEVs



ATTENTION! No more than 250 wired DEVs can be added to the CP, while the total number of all DEVs connected to the CP should not exceed 250 pieces.

Wired DEVs fire alarms «RUBETEK» include detector, VA, IM-1 and IO4-1.

When connecting wired devices, it is necessary to take into account the maximum length of the PLC from the CP to the final sensor, which should not exceed 1200 meters.



ATTENTION! Binding of wired devices is performed one by one, i.e. it is necessary to install each detector one by one on the base, then bind this device to the CP and only after that proceed to the installation of the next detector on the base and its binding.

Before connecting a wired device, it is necessary to prepare and make sure that it works according to the instruction manual for this device.



ATTENTION! Before binding the devices, all PLC lines and installation of the bases of the wired DEVs and CP must be completed.

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

In the main menu of the CP, select item **3.DEVs** and press the **OK** button

- select submenu item **3. Device pairing**. Press the **OK** button.

- select item **1.Wired DEVs**. Press the **OK** button.

The CP will automatically search for devices.

After the search is completed, the CP will display a list of found devices.

Select the required device. Press the **OK** button.

The name of the device is followed by its serial

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:

number. The CP automatically binds a new wired device to the first free slot. The device setup menu will open.

In order to send a test to a specific device from the list of bindable devices, select the desired device and hold down «0». After that, the device will be highlighted in color and go into test mode.

Device pairing 1. Wired DEVs 2. Wireless DEVs	Searching PLC devices Please wait while searching PLC devices.
Pairing PLC devices 1. 12345 AB-1	Pairing PLC devices 1. 12345 AB-1 Test

General settings for wired devices (DEVs menu)

If you are making settings for a previously linked and configured device, you must:

- select item **3.DEVs** and press the **OK** button
- select submenu **1.Devices list**. Press the **OK** button.
- select submenu **2.By number**. Press the **OK** button.
- select the desired slot. Press the **OK** button.

If settings are made during linking, the settings menu will be available immediately.

Main menu 1.Information 2.Configuration 3.DEVs 4.Events and reactions 5.Firefighting	DEV 1.Devices list 2.Device zones 3.Device pairing 4.Configuration 5.PLC status:
Devices list 1.By zone 2.By number	Devices list 1.pls-type-1 (#1) 2.pls-type-2 (#2) 3.pls-type-3 (#3) 4.pls-type-20 (#4) 5.pls-type-21 (#5)

The following options are available in the list that opens.

- **Name** - device name;
- **Zone** - allows you to combine the devices of one fire zone. There are 32 protected zones at the CP;
- **Device type*** - detected automatically;
- **Status*** - current state of the device (norm, Fire 1, Fire 2, link fault);
- **Bypass mode** - enable/disable the bypass mode;

DEV #1 Name: pls-type-1 Zone: No zone Device type:	DEV #1 Manual call point Status: link fault Bypass mode: no
DEV #1 Link: T:4895s PLC line: 0.0 V Serial number:	DEV #1 123400 Firmware version: --- Device menu Delete

- **Smoke sensor*** - value of the current optical density of the smoke chamber;
- **Link*** - time since the last connection;
- **PLC line*** - PLC line voltage;
- **Serial number*** - serial number of the device;
- **Firmware version*** - device software version;
- **Device menu** - additional device submenu:

- **Device configuration** - additional device settings;
- **Reaction configuration** - setting up reactions on the device;
- **Send test** - send the Test command to the device.
- **Delete** - remove the device from the CP.

#1: pls-type-1
Device configuration
Reaction configuration
Send test



ATTENTION! Options marked with * are not configurable and are for informational purposes only.

Advanced wired device configuration (Device configuration menu)

The VA of the **Device configuration** menu sets the sound files that will be played during the **Alarm** and **Test** modes, as well as when certain events are triggered. Three events can be set. To set the required value, select the required menu item and press the **OK** button. Enter a value and click **OK** to save the result. After making all the settings, select **Save** and click **OK**.

Voice ann. config	Voice ann. config
Alarm sound file: 0	1
Test sound file: 1	Sound file for event 1: 0
Event 1:	Event 2: 00

For the IM-1, the following options are available in the **Device configuration** menu:

- **R norm** - resistance value at which there will be a norm mode;
- **R warning** - resistance value at which the warning will be activated;
- **R alarm** - resistance value at which the alarm will be activated;
- **Other values** - mode selection for other resistance values;
- **Save** - save the entered parameters.

IM config
R norm: 04.7 kOhm
R warning: 08.2 kOhm
R alarm:

IM config
R alarm: 01.1 kOhm
Other values: Norm
Save

To enter values, you must select the appropriate menu item. Press the **OK** button. Enter a value. Press the **OK** button to save. After entering all the values, press the **OK** button and go to **Reaction Settings**.

Other values:
Norm
Warning
Alarm
Fault



ATTENTION! All settings in this section are stored in the expander's memory.

Wired device response settings (Response Settings menu)

ATTENTION! List of required active reactions for SD:

- **Fire1 from DEV**- issuing a message to the CP when the chamber is filled with smoke and saved in the archive.
- **Tamper**- issuing a message to the CP when the case is opened with preservation in the archive.
- **Test button** - issuing a message to the CP when you press the «Test» button with saving in the archive.
- **Dust** - issuing a message to the CP in case of high dustiness of the sensor with saving in the archive.
- **Internal fault** - control of a break in the communication line.

ATTENTION! List of mandatory active MCP reactions:

- **Fire2 from DEV**- issuing a message to the CP when the drive element is activated and stored in the archive.
- **Tamper**- issuing a message to the CP when the case is opened with preservation in the archive.
- **Test button** - issuing a message to the CP when you press the «Test» button with saving in the archive.

ATTENTION! List of obligatory active reactions of VA:

- **Tamper** - issuing a message to the CP when the case is opened and saved in the archive.
- **Test button** - issuing a message to the CP when pressing the «Test» button with saving in the archive.

ATTENTION! List of mandatory active reactions for IM-1:

- **Fire 1 from DEV** - with the resistance of the communication line, which corresponds to the **Warning** mode, the **Fire1** signal will be triggered.
- **Fire 2 from DEV** - with the resistance of the communication line, which corresponds to the **Alarm** mode, the **Fire2** signal will be triggered.
- **Tamper** - when the case is opened, a corresponding message will be displayed on the CP.

ATTENTION! List of required active reactions for IO4-1:

- **Fire 1 from DEV** - with the resistance of the communication line, which corresponds to the **Warning** mode, the **Fire1** signal will be triggered.
- **Fire 2 from DEV** - with the resistance of the communication line, which corresponds to the **Alarm** mode, the **Fire2** signal will be triggered.
- **Tamper** - when the case is opened, a corresponding message will be displayed on the CP.
- **Test button** - when you press the **Test** button, a corresponding message will be displayed on the CP.
- **Output off** - output is disabled.
- **Output off by fault** - output short circuit.

ATTENTION! List of obligatory active reactions of SC-1:

- **Tamper** - issuing a message to the CP when the case is opened and saved in the archive.
- **Test button** - issuing a message to the CP when pressing the «Test» button with saving in the archive.

After making all the settings, click the **OK** button.

Reactions	
<input checked="" type="checkbox"/>	Fire 1 from DEV
<input type="checkbox"/>	Fire 2 from DEV
<input checked="" type="checkbox"/>	Tamper
<input checked="" type="checkbox"/>	Test button
<input type="checkbox"/>	Main low

Reactions	
<input type="checkbox"/>	Backup low
<input type="checkbox"/>	Fire 1 using CP
<input type="checkbox"/>	Fire 2 using CP
<input type="checkbox"/>	Event generation
<input checked="" type="checkbox"/>	Dust

Reactions	
<input checked="" type="checkbox"/>	Internal fault
<input type="checkbox"/>	Output off
<input type="checkbox"/>	Output off by fault
<input type="checkbox"/>	Signal 1 (warning)
<input type="checkbox"/>	Signal 2 (alarm)

After setting all the settings, click the **Cancel** button.

The device has been configured.

Check the binding of the device to the CP. Activate the **TEST** mode on the device using the **Send Test** command from the **Sensor Menu**. A message about testing the sensor will appear on the CP within 3 seconds, indicating the slot to which it is bound, and the device ID.

Warning !	
DEV test!	
Slot: 43	
ID: plc-type-65	
Zone: No zone	
07.02.2023	09:32:47

2.7.3. PLC line status

View PLC status mode

To view the PLC status:

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

- select the main menu item **3. DEVs** and press **OK**.

- in the list that opens, select the submenu item **5. PLC status**.

PLC states:

- **ring** - if the wires PLC 1 and PLC 2 are interconnected;

- **norm** - the state in which PLC 1 and PLC 2 are connected to the device;

- **disconnected** - in case of malfunctions (open circuit or SCS) or beam connection, that is, part of the DEVs are located on PLC 1, PLC 2 - not used (or vice versa). Part of the DEVs is connected to PLC 1, the other part to PLC 2, but not combined.

Main menu	Main menu
1.Information	1.Information
2.Configuration	2.Configuration
3.DEVs	3.DEVs
4.Events and reactions	4.Events and reactions
5.Firefighting	5.Firefighting

Main menu	DEV
1.Information	5.PLC status: ring
2.Configuration	6.PLC1 channel: ok
3.DEVs	7.PLC2 channel:
4.Events and reactions	
5.Firefighting	

2.7.4. Additional DEVs configuration

Setting the siren activation mode

To set additional configuration for switching on the VA, you must:

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #? 15 faults
2.Active alarms	[85] SC 11 faults
3.Alarm causes	[74] SC2
4.Faults	
5.Bypassed DEVs	

- Select the main menu item **3.DEVs** and press **OK**.
- Select submenu item **4.Configuration** press **OK**.
- Select item **4.Voice ann. conditions** activation mode, press **OK**.
- In the list that opens, select the necessary modes in which the sound notification will be launched. Items are activated by arrows [← →] on the CP access levels.
- Press the **OK** button to save the changes.

Main menu	DEV
1.Information	2.Device zones
2.Configuration	3.Device pairing
3.DEVs	4.Configuration
4.Events and reactions	5.PLC status:
5.Firefighting	ring
Configuration	Voice ann. conditions
3.Link timeout	<input type="checkbox"/> my fire 2
4.Voice ann. conditions:	<input type="checkbox"/> foreign fire 1
2 selected	<input type="checkbox"/> foreign fire 2
5.Voice ann. event:	<input checked="" type="checkbox"/> my event
000	<input checked="" type="checkbox"/> foreign event

If we have set the active modes «**my event**» and/or «**foreign event**», then it is necessary to set the event number in paragraph **5.Voice ann. event**.

2.7.5. Configuration up DEVs zones

The CP provides the possibility of combining DEVs into zones and setting additional configuration for the selected zone.



ATTENTION! All DEVs are automatically assigned a **Default Zone**, unless another zone has been set manually.

Setting the zone name

To set a zone name:

Open the **Fire Alarm Network** menu on the CP screen by pressing the «**V**» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required CP. Press the **OK** button.

- select the main menu item **3.DEVs**. Press the **OK** button.
- select item **2.Device zones**. Press the **OK** button.
- select the desired **Zone**. Press the **OK** button.
- select item **Name**. Press the **OK** button. When setting the zone name, you can use the input templates installed on the CP.
- set name. Press the **OK** button to save the value.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2
Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:
Zones configuration	Zone configuration
Default zone	Name:
Zone 1:	Zone 1
Zone 1	Fire 2 by single det.:
Zone 2:	0060 sec
Zone 2	Fire 2 by two and more:

Setting the triggering of the «Fire 2» signal from one detector

To enable the Fire2 signal triggering mode from one detector, you must:

- select the main menu item **3.DEVs**. Press the **OK** button.
- select item **2.Device zones**. Press the **OK** button.
- select the desired **Zone**. Press the **OK** button.
- select item **Fire 2 by single det.**. Press the **OK** button.
- set value. Default **60** sec. Press the **OK** button to save the value.
- select item **Fire 2 by two and more.**. Press the **OK** button.
- set the value to **off**.

Such configuration implement the following algorithm: when the chamber of one detector is filled with smoke, the «Fire 1» signal is sent to the CP, after 60 seconds, if the state of this detector is unchanged or repeated, the signal «Fire 2» is triggered on the CP, the fire alarm and the configured events are triggered.

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:
Zones configuration	Zone configuration
Default zone	Fire 2 by single det.:
Zone 1:	0060 sec
Zone 2:	Fire 2 by two and more:
	off
	Event for Fire 1:
	Fire 2 by two and more:
	off
	on



ATTENTION! With these configuration, if two or more sensors of the same zone are triggered with an interval of no more than 60 seconds, the CP will automatically start the «Fire 2» signal.

Setting the alarm «Fire 2» from two or more detectors



ATTENTION! The «Fire 2» signal triggering mode from two or more detectors is set by default.

To set this mode, you must:

- select the main menu item **3.DEVs**. Press the **OK** button.
- select item **2.Device zones**. Press the **OK** button.
- select the desired **Zone**. Press the **OK** button.
- select item **Fire 2 by two and more.**. Press the **OK** button.
- set value is **on**. Press the **OK** button to save the value.

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:
Zones configuration	Zone configuration
Default zone	Fire 2 by single det.:
Zone 1:	0060 sec
Zone 2:	Fire 2 by two and more:
	on
	Event for Fire 1:
	Fire 2 by two and more:
	off
	on

Setting generated events by zone

To set events generated by a Device Zones, you must:

- select the main menu item **3.DEVs**. Press the **OK** button.
- select item **2.Device zones**. Press the **OK** button.
- select the desired **Zone**. Press the **OK** button.
- select the appropriate item **Event for...** . Press the **OK** button.
- set the number of the generated event. Press the **OK** button to save the value.

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:
Zones configuration	Zone configuration
Default zone	Event for Fire 1:
Zone 1:	000
Zone 1	Event for Fire 2:
Zone 2:	000
Zone 2	Event for fault:

Blocking responses of devices in a zone

To block reactions received from the DEVs or transmitted to the VA, it is necessary:

- select the main menu item **3.DEVs**. Press the **OK** button.
- select item **2.Device zones**. Press the **OK** button.
- select the desired **Zone**. Press the **OK** button.
- select **Block reactions**. Press the **OK** button.
- in the list that opens, select the necessary reactions. Items are activated by arrows [← →] on the CP access levels. Press the **OK** button to save the value.

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:
Zones configuration	Zone configuration
Default zone	000
Zone 1:	Event for fault:
Zone 1	000
Zone 2:	Block reactions:
Zone 2	0 selected
Block reactions	Block reactions
<input checked="" type="checkbox"/> Fire 1 from DEV	<input type="checkbox"/> Backup low
<input type="checkbox"/> Fire 2 from DEV	<input type="checkbox"/> Fire 1 using CP
<input type="checkbox"/> Tamper	<input type="checkbox"/> Fire 2 using CP
<input type="checkbox"/> Test button	<input type="checkbox"/> Event generation
<input type="checkbox"/> Main low	<input checked="" type="checkbox"/> Dust
Block reactions	
<input type="checkbox"/> Internal fault	
<input type="checkbox"/> Output off	
<input type="checkbox"/> Output off by fault	
<input type="checkbox"/> Signal 1 (warning)	
<input checked="" type="checkbox"/> Signal 2 (alarm)	

2.7.6. DEVs deactivation

When performing installation and maintenance work, it is recommended to switch the DEVs to the deactivation mode. At the same time, the binding of the device to the CP is preserved, but all reactions become inactive, including the «Fire1» and «Fire2» signals.

This mode is used for single device shutdown. To disable all DEVs connected to this CP, use the bypass mode described in clause 2.6.9.

To deactivate the device, you must:

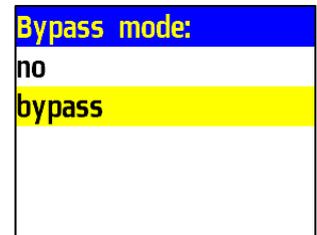
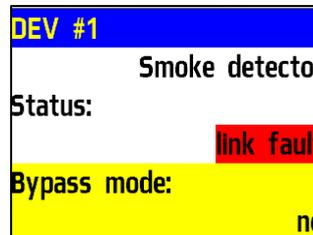
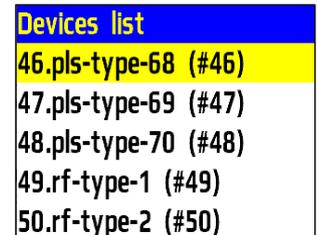
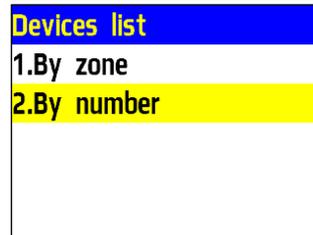
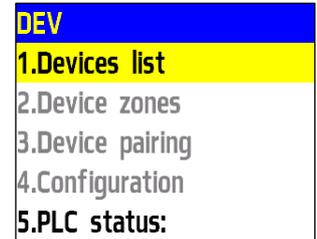
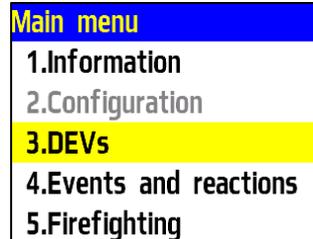
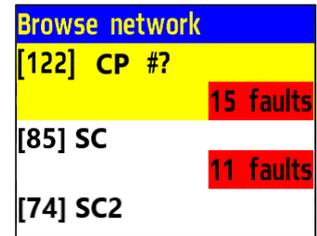
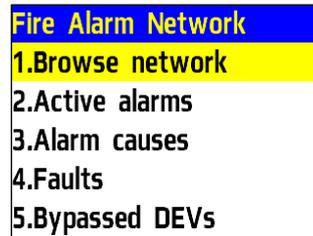
Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

- select the section of the main menu **3.DEVs**. Press the **OK** button.
- select submenu section **1.Devices list**. Press the **OK** button.
- select the type of **DEVs**. (1. By zone, 2. By number). Press the **OK** button.



ATTENTION! Only «occupied» slots are displayed in the device list. To quickly jump to a specific slot, press the «0» button on the access levels and enter the slot number.

- select the required device. Press the **OK** button.
- select the **Bypass mode** item. Press the **OK** button.
- set the **bypass** value.

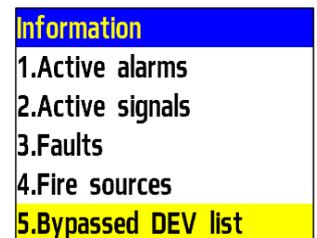
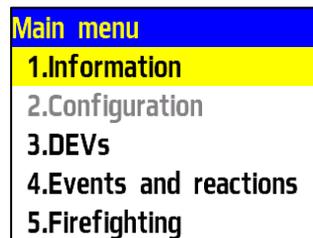


Press the **OK** button to save the value.

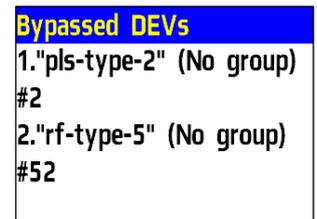
To activate the device, you must set the value to **no**.

To view the list of deactivated DEVs on the CP, you must:

- select the main menu item **1.Information**. Press the **OK** button.
- select item **5.Bypassed DEV list**. Press the **OK** button.



Next, a list of DEVs that are deactivated in the system is displayed with the slot number #X.



2.7.7. Evaluation of the parameters of communication with the DEVs

To view device communication settings:

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	
1.Browse network	
2.Active alarms	
3.Alarm causes	
4.Faults	
5.Bypassed DEVs	

Browse network	
[122] CP #?	
	15 faults
[85] SC	
	11 faults
[74] SC2	

- select the section of the main menu **3.DEVs**. Press the **OK** button.
- select submenu section **1. Devices list**. Press the **OK** button.
- select the type **DEVs** (1. By zone, 2. By number). Press the **OK** button.
- select the required device. Press the **OK** button. In the device menu that opens, select the **Link** item.

Main menu	
1.Information	
2.Configuration	
3.DEVs	
4.Events and reactions	
5.Firefighting	

DEV	
1.Devices list	
2.Device zones	
3.Device pairing	
4.Configuration	
5.PLC status:	

Devices list	
1.By zone	
2.By number	

Devices list	
46.pls-type-68 (#46)	
47.pls-type-69 (#47)	
48.pls-type-70 (#48)	
49.rf-type-1 (#49)	
50.rf-type-2 (#50)	

DEV #1	
Smoke detector	
Status:	link fault
Bypass mode:	no

Devices list	
48.pls-type-70 (#48)	
49.rf-type-1 (#49)	
50.rf-type-2 (#50)	
51.rf-type-3 (#51)	
52.rf-type-5 (#52)	

It displays the parameters of communication between the CP and the device:

- **T**: time elapsed since last contact;
- **H**: symbolic designation of the device to which the connection was made (0-to the CP, 1-15 is the number of the expander through which the connection is made);
- **Q**: the level of communication quality for RF devices (CP-detector / detector-CP or RE). The signal level can range from -109 to +15 dB.

DEV #47	
	no
Link:	T:9403s H:0 Q:0/0
Main supply:	0.0 V

The communication signal quality graph for RF devices is shown in figure 9.

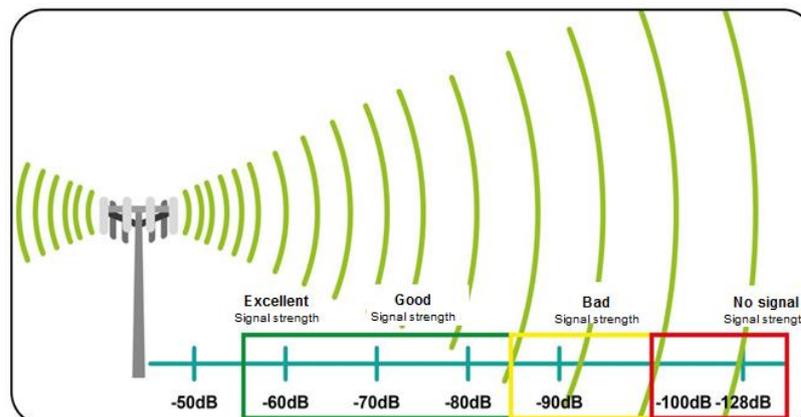


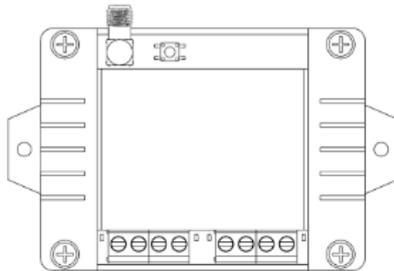
Figure 9 - Graph of the quality of the communication signal

The recommended communication quality at the installation site of the radio channel device should be above -80dB. If the signal level is lower, use one of the solutions:

- reduce the distance between the radio channel device and the CP;
- place the RE between the radio channel device and the CP;
- install a remote antenna on the CP.

2.7.8. Connecting and configuring radio extender module RE-1

Wiring diagram RE-1

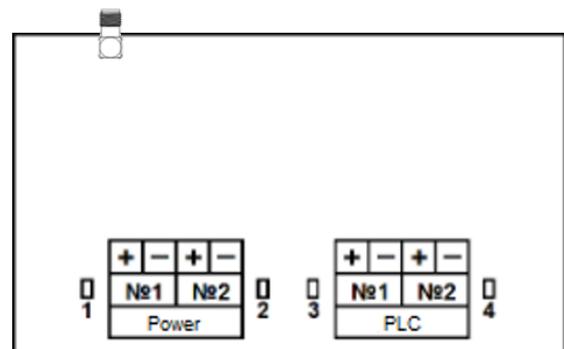


- Connect wires RE-1 to the corresponding terminals of the expander.
- Connect the wires of the power line to the corresponding terminals of the expander.



ATTENTION! Incorrect connection may damage the device.

- Install an antenna.
- Connect the PLC interface wires to the corresponding terminals.



ATTENTION! The power line of the device «+24V» is disconnected first, and connected last.



ATTENTION! Select the direction of the antenna, taking into account the recommendations of the operating manual for the radio channel expander.

Linking and configuring the extender

When connecting wired devices, it is necessary to take into account the maximum length of the PLC from the CP to the final sensor, which should not exceed 1200 meters.

Binding of wired devices is done one by one.

Before connecting a wired device, you must prepare it for connection and make sure that it works according to the instruction manual for this device.



ATTENTION! Before binding the devices, all PLC lines and installation of the device bases must be completed.

Open the **Fire Alarm Network** menu on the CP screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

In the main menu of the CP, select item **3.DEVs** and press the **OK** button

- select submenu item **3. Device pairing**. Press the **OK** button.

- select item **1.Wired DEVs**. Press the **OK** button.

The CP will automatically search for devices. After the search is completed, the CP will display a list of found devices.

Select the required device. Press the **OK** button. The name of the device is followed by its serial number.

The CP automatically binds a new wired device to the first free slot.

The device setup menu will open.

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:

Device pairing	Processing query
1.Wired DEVs	Please wait.
2.Wireless DEVs	Remote CP query is in progress.

Pairing PLC devices
1. 12345 AB-1

Device setup

If you are making configuration for a previously linked and configured device, you must:

- select item **3.DEVs** and press the **OK** button
 - select submenu **1. Devices list**. Press the **OK** button.

- select submenu **2.By number**. Press the **OK** button.

- select the required slot. Press the **OK** button.

If configuration are made during linking, the configuration menu will be available immediately.

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:

Devices list	Devices list
1.By zone	47.pls-type-69 (#47)
2.By number	48.pls-type-70 (#48)
	49.rf-type-1 (#49)
	50.rf-type-2 (#50)
	51.rf-type-3 (#51)

The following options are available in the list that opens.

- **Name**- device name;
- **Zone**- will allow to unite devices of one fire zone. There are 32 protected zones at the CP;
- **Device type***- is determined automatically;
- **Status***- current state of the device (norm,

DEV #1	DEV #1
Name:	Manual call point
Zone:	Status:
Device type:	link fault
	Bypass mode:
	no

- Fire 1, Fire 2, link fault);
- **Bypass mode** -enable/disable bypass mode;
- **Smoke sensor***- the value of the current optical density of the smoke chamber;
- **Link***- time since last contact;
- **PLC line***- PLC line voltage;
- **LI status** - current status of the PLC Built-in isolator (normal, PLS1 powered, PLS2 powered);
- **Serial number***- serial number of the device;

DEV #1	DEV #1
no	PLC line: 0.0 V
Smoke sensor: 0	Serial number: 123400
Link: T:8371s H:0 Q:0/0	Firmware version:
DEV #1	
123400	
Firmware version: 19.18	
Device menu	
Delete	

- **Firmware version***- device software version;
- **Device menu**- additional device submenu;
 - **Device configuration**- advanced device configuration;
 - **Reaction configuration**- setting reactions on the device;
 - **Send test**- sending the Test command to the device.
- **Delete**- remove the device from the CP.

#1: pls-type-1
Device configuration
Reaction configuration
Send test



ATTENTION! Options marked with * are not configurable and are for informational purposes only.

Reaction settings (Reaction configuration menu)

ATTENTION! List of required active reactions for the expander:

Test button - issuing a message to the CP when the «Test» mode is activated with saving the record in the archive.

Tamper - issuing a message to the CP when the case is opened and saved in the archive.

Items are activated using arrows ← → on the CP keyboard. After setting the required reactions, click the **OK** button.

Reactions
<input type="checkbox"/> Fire 1 from DEV
<input type="checkbox"/> Fire 2 from DEV
<input checked="" type="checkbox"/> Tamper
<input checked="" type="checkbox"/> Test button
<input type="checkbox"/> Main low

2.7.9. Connection and adjustment of valve actuators FF

The device controls the operation of FP valves of any type: reversible, with a return spring or with an electromagnetic lock, controls the power line of the valve drive and the control line of limit switches.

Connection of valve actuators is carried out only according to the diagrams given in this manual.



ATTENTION! Resistors from the device kit must be connected directly to the contact device of the FP valve.

To connect the FP valve actuators, it is recommended to use fire-resistant installation cables with a cross section of 0.75 mm² to 2.5 mm².

Table 6 - Communication line resistance

Valve position	Resistance
Open	9.2 kOhm
Intermediate	13.9 kOhm
Closed	5.7 kOhm

! *ATTENTION!* Switching on the power supply of the drive is carried out only after it is connected and configured on the device.

! *FORBIDDEN!* Turn on the drive power with the instrument cover open.

FP valve actuator setup menu

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

For valve configuration, select item **2.Configuration** of the main menu. Press the **OK** button. Then select item **4.Valves**. Press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Select the valve to be configured from the list. Valve configuration include:

- **Name**- the name of the valve in the system.
- **Turn-on configuration**- parameters for starting the drive.
- **Turn-off configuration**- parameters for resetting the drive.
- **Control configuration**- parameters at which the drive is turned on.
- **Work mode**- the position of the damper flap in standby and operating modes, respectively.

Valves	Valve configuration
1.Valve 1	1.Name:
2.Valve 2	Valve 1
3.Valve 3	2.Turn-on configuration
4.Valve 4	3.Turn-off configuration
5.Valve 5	4.Control configuration

Valve configuration
4.Control configuration
5.Work mode:
close-open
6.Feedback control:
no

- **Feedback control** - enabling/disabling control of the LS valve line.

Turn-on configuration contains the following items:

- **Relay mode** - relay operation mode (pulse, none (self-on), hold);
- **L1 line check** – no/line break and short/line break only line control L1;
- **Turn-on time** - time interval for applying voltage to L1 (for pulsed mode);

ATTENTION! In the pulse mode, when the feedback resistance reaches the control value, the on-time countdown stops.

Turn-on configuration	Relay mode:
1.Relay mode: pulse	none (self-on)
2.L1 line check: no	hold
3.Turn-on time: 055 sec	
Turn-on configuration	L1 line check:
4.After-hold time: 03 sec	no
5.Feedback: 09.2 kOhm	line break and short line break only

- **After-hold time** - the time interval required to fix the damper in the working position after reaching the feedback resistance of the control value (for the pulsed mode);
- **Feedback** - the resistance value of the control line LS in the operating position of the damper.



*ATTENTION! After setting the line resistance value, it is necessary to correct it, for this you need to transfer the device to the «Manual mode» of control and start it in accordance with clause 2.5.11. In the **Feedback** line of the **Information** menu, after opening the valve, the actual value of the resistance will be displayed. It must be set in line **5.Feedback** of the **Turn-on configuration** menu.*



*ATTENTION! If the control feedback resistance is not reached when the valve is closed, the CP will generate a valve fault, which will be displayed in the main menu **1.Information**, submenu **3.Faults**.*

Turn-off configuration contains the following items:

- **Relay mode**- relay operation mode (pulse, none (self-on), hold);
- **L2 line check** - no/line break and short/line break only monitoring of the L2 line;
- **Turn-off time**- time interval for applying voltage to L2 (for pulsed mode).

Turn-off configuration	Turn-off configuration
1.Relay mode: pulse	045 sec
2.L2 line check: no	4.After-hold time: 03 sec
3.Turn-off time:	5.Feedback: 13.9 kOhm



ATTENTION! In pulse mode, when the feedback resistance reaches the control value, the off time countdown stops.

- **After-hold time** - the time interval required to fix the damper in the standby position after reaching the feedback resistance of the control value (for the pulse mode);
- **Feedback**- resistance value of the control line of the air valve in the standby position of the damper.



*ATTENTION! After setting the line resistance value, it is necessary to correct it. The actual value can be viewed in the **Parameter View** menu. It is described in more detail in clause 3.2.4.*



*ATTENTION! If the control resistance at L2 is not reached when the valve is closed, the instrument will generate a valve fault, which will be displayed in the main menu **1.View parameters**, submenu **2.Faults**.*

Control configuration contains the following items:



***ATTENTION!** If the flag «And my 1st fire2» is selected for the damper, then the remaining flags will work only with an active alarm of their own «Fire 2» on the CP. If the box is not checked, then the valve will work with OR logic.*

Control configuration	Control configuration
1.Conditions: 2 selected	0000 sec
Event number: 012	4.Turn-off delay: 0000 sec
3.Turn-on delay:	5.Work time on fire: 00000 sec
Conditions	Conditions
<input checked="" type="checkbox"/> my fire 2	<input checked="" type="checkbox"/> event during my fire
<input checked="" type="checkbox"/> foreign fire 2	<input type="checkbox"/> event during frgn. fire
<input type="checkbox"/> event without fire	<input checked="" type="checkbox"/> on my event
<input type="checkbox"/> event during my fire	<input type="checkbox"/> on foreign event
<input type="checkbox"/> event during frgn. fire	<input checked="" type="checkbox"/> & my 1st fire 2

- **Event number** - the event at which the LSS is launched;
- **Turn-on delay**- time interval for delaying the activation of the drive after the appearance of the set reaction;
- **Turn-off delay**- time interval for the drive shutdown delay after the appearance of the set reaction;
- **Work time on fire**- the time interval for the drive to be in the operating mode. If the time is set to «0», the drive will be in operation until the «Fire» signal is turned off.

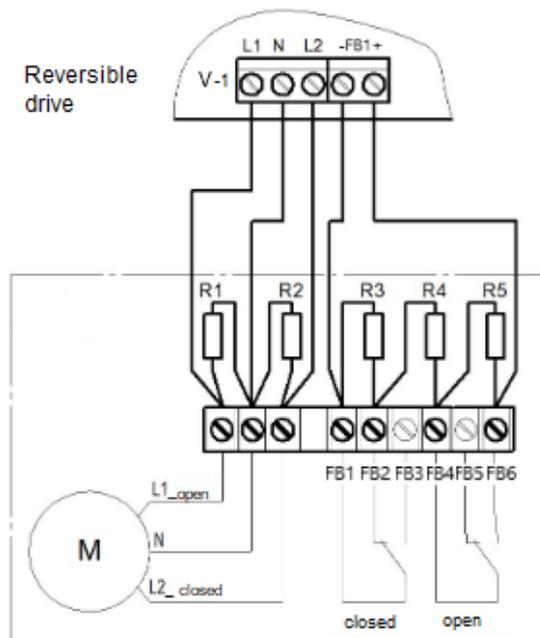
Work mode- sets the start-end position of the valve drive.

Feedback control- sets the need to control the line.

Valve configuration
4.Control configuration
5.Work mode: close-open
6.Feedback control: no

2.7.10. Connecting and setting the reversing drive

The wiring diagram for the reversible actuator of the FP valve is shown in figure 10.



Resistor ratings:
 R1, R2 - 2 W - 56 kOhm ± 5%
 R3 - 0.5 W - 8.2 kOhm ± 5%
 R4 - 0.5 W - 1 kOhm ± 5%
 R5 - 0.5 W - 4.7 kOhm ± 5%

Figure 10 - Reverse drive connection diagram

Reversing drive setting

Select the menu **Turn-on configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** pulse
- **L1 line check:** line break and short
- **Turn-on time:** 55 sec
- **After-hold time:** 3 sec
- **Feedback:** 9.2 kOhm

After filling in all the points, press the **X** button.

Turn-on configuration		Turn-on configuration	
1. Relay mode:	pulse	4. After-hold time:	055 sec
2. L1 line check:	line break and short	5. Feedback:	09.2 kOhm
3. Turn-on time:			

Select the menu **Turn-off configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** pulse
- **L2 line check:** line break and short
- **Turn-off time:** 45 sec
- **After-hold time:** 3 sec
- **Feedback:** 5.7 kOhm

After filling in all the points, press the **X** button.

Turn-off configuration		Turn-off configuration	
1. Relay mode:	pulse	4. After-hold time:	045 sec
2. L2 line check:	line break and short	5. Feedback:	05.7 kOhm
3. Turn-off time:			

Select the **Control configuration** menu item.

Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Conditions:** my fire 2
- **Turn-on delay:** 0
- **Turn-off delay:** 0 sec
- **Work time on fire:** 0 sec

After filling in all the points, press the **X** button.

Control configuration		Control configuration	
1. Conditions:	1 selected	3. Turn-off delay:	0000 sec
2. Turn-on delay:	0000 sec	4. Work time on fire:	00000 sec
3. Turn-off delay:			

Select the menu item **Work mode**. Press the **OK** button. Then select the **Closed-Open** mode, press the **OK** button. To return to the previous menu, press the **X** button.

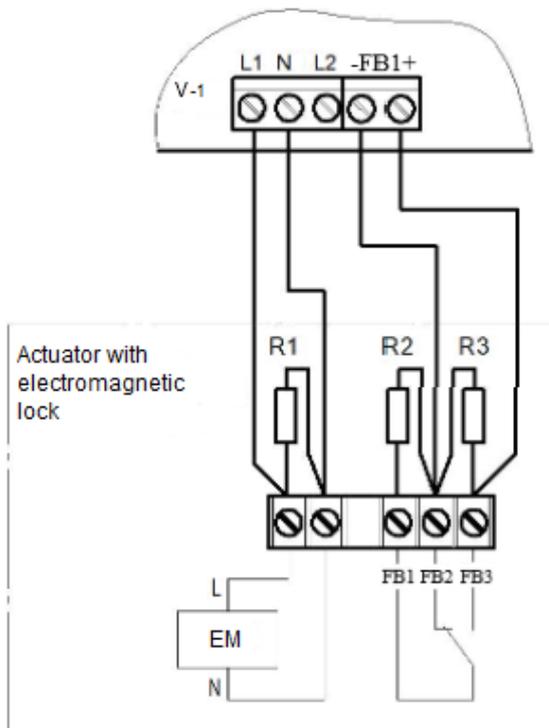
Work mode:
close-open
open-close

Select the menu item **Feedback control**. Press the **OK** button. Then select **Yes**, then click **OK**. To return to the previous menu, press the **X** button.

Feedback control:
no
yes

2.7.11. Connecting and setting up an actuator with an electromagnetic lock

The wiring diagram for the FP valve actuator with an electromagnetic lock is shown in figure 11.



Resistor ratings:

R1 - 2 W - 56 kOhm $\pm 5\%$

R2, R3 - 0,5 W - 8,2 kOhm $\pm 5\%$

Figure 11 - Wiring diagram for a drive with an electromagnetic lock

Adjustment of the drive with electromagnetic detent

Select the menu item **Turn-on configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** pulse
- **L1 line check:** line break only
- **Turn-on time:** 1 sec*
- **After-hold time:** 0 sec*
- **Feedback:** 4.1 kOhm

After filling in all the points, press the **X** button.

Turn-on configuration	Turn-on configuration
1. Relay mode: pulse	001 sec
2. L1 line check: line break only	4. After-hold time: 00 sec
3. Turn-on time:	5. Feedback: 04.1 kOhm

Select the menu item **Turn-off configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** none (self-off)
- **L2 line check:** no
- **Turn-off time:** any
- **After-hold time:** any
- **Feedback:** 8.2 kOhm

After filling in all the points, press the **X** button.

Turn-off configuration	Turn-off configuration
1. Relay mode: none (self-off)	045 sec
2. L2 line check: no	4. After-hold time: 10 sec
3. Turn-off time:	5. Feedback: 08.2 kOhm

Select the **Control configuration** menu item. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Conditions:** my fire 2
- **Turn-on delay:**
 - 0 when the first EM valve is turned on;
 - 6, 12, 18, etc. when switching on subsequent

Control configuration	Control configuration
1. Conditions: 1 selected	0000 sec
2. Turn-on delay: 0000 sec	3. Turn-off delay: 0000 sec
3. Turn-off delay:	4. Work time on fire: 00000 sec

EM valves.*

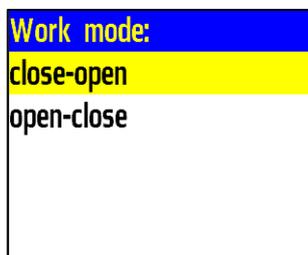
- **Turn-off delay:** 0 sec
- **Work time on fire:** 0 sec

After filling in all the points, press the **X** button.

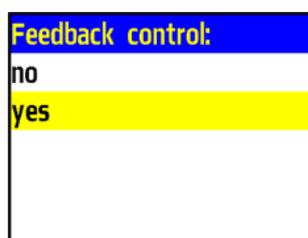


**Failure to comply with the required settings may result in malfunction of the CP.*

Select the menu item **Work mode**. Press the **OK** button. Then select the **Closed-Open** mode, press the **OK** button. To return to the previous menu, press the **X** button.

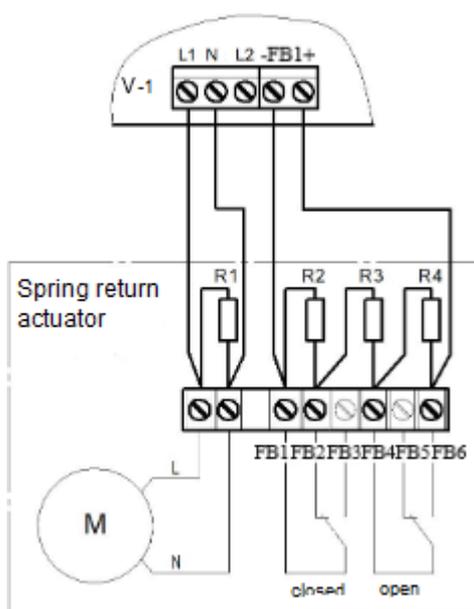


Select the menu item **Feedback control**. Press the **OK** button. Then select **Yes**, then click **OK**. To return to the previous menu, press the **X** button.



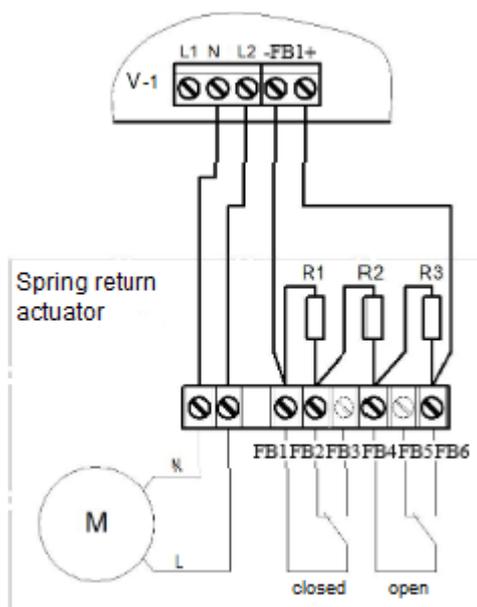
2.7.12. Connecting and setting up a spring return actuator

Connection diagrams for the FP valve actuator with a return spring are shown in figures 12a and 12b.



Resistor ratings:
 R1 - 2 W - 56 kOhm ±5%
 R2 - 0.5 W - 8.2 kOhm ±5%
 R3 - 0.5 W - 1 kOhm ± 5%
 R4 - 0.5 W - 4.7 kOhm ±5%

Figure 12a - Scheme of connecting the drive with a return spring (the spring is not charged in normal mode)



Resistor ratings:
 R1 - 0.5 W - 8.2 kOhm $\pm 5\%$
 R2 - 0.5 W - 1 kOhm $\pm 5\%$
 R3 - 0.5 W - 4.7 kOhm $\pm 5\%$

Figure 12b - Wiring diagram of a drive with a return spring (the spring is charged in normal mode, the drive is constantly energized)

Adjustment of the actuator with a return spring (the spring is not charged in normal mode) figure 12a

Select the menu item **Turn-on configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** hold
- **L1 line check:** line break and short
- **Turn-on time:** any
- **After-hold time:** any
- **Feedback:** 9.2 kOhm

Turn-on configuration	
1. Relay mode:	hold
2. L1 line check:	line break and short
3. Turn-on time:	

Turn-on configuration	
4. After-hold time:	045 sec
5. Feedback:	05.7 kOhm

After filling in all the points, press the **X** button.

Select the menu item **Turn-off configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** none (self-off)
- **L2 line check:** no
- **Turn-off time:** any
- **After-hold time:** any
- **Feedback:** 5.7 kOhm

Turn-off configuration	
1. Relay mode:	none (self-off)
2. L2 line check:	no
3. Turn-off time:	

Turn-off configuration	
4. After-hold time:	03 sec
5. Feedback:	05.7 kOhm

After filling in all the points, press the **X** button.

Select the **Control configuration** menu item. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Conditions:** my fire 2
- **Turn-on delay:** 0
- **Turn-off delay:** 0 sec
- **Work time on fire:** 0 sec

Control configuration	
1. Conditions:	1 selected
2. Turn-on delay:	0000 sec
3. Turn-off delay:	

Control configuration	
3. Turn-off delay:	0000 sec
4. Work time on fire:	00000 sec

After filling in all the points, press the **X** button.

Select the menu item **Work mode**. Press the **OK** button. Then select the **Closed-Open** mode, press the **OK** button. To return to the previous menu, press the **X** button.

Work mode:
close-open
open-close

Select the menu item **Feedback control**. Press the **OK** button. Then select **Yes**, then click **OK**. To return to the previous menu, press the **X** button.

Feedback control:
no
yes

Adjusting the drive with a return spring (the spring is charged in normal mode) figure 12b

Select the menu item **Turn-on configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** no (self-off)
- **L1 line check:** no
- **Turn-on time:** any
- **After-hold time:** any
- **Feedback:** 5.7 kOhm

Turn-on configuration
1. Relay mode: none (self-on)
2. L1 line check: no
3. Turn-on time:

Turn-on configuration
4. After-hold time: 045 sec
5. Feedback: 05.7 kOhm

After filling in all the points, press the **X** button.

Select the menu item **Turn-off configuration**. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Relay mode:** hold
- **L2 line check:** no
- **Turn-off time:** any
- **After-hold time:** any
- **Feedback:** 9.2 kOhm

Turn-off configuration
1. Relay mode: hold
2. L2 line check: no
3. Turn-off time:

Turn-off configuration
4. After-hold time: 045 sec
5. Feedback: 09.2 kOhm

After filling in all the points, press the **X** button.

Select the **Control configuration** menu item. Press the **OK** button. Then select the desired items, click the **OK** button and enter the data.

- **Conditions:** my fire 2
- **Turn-on delay:** 0
- **Turn-off delay:** 0 sec
- **Work time on fire:** 0 sec

Control configuration
1. Conditions: 1 selected
2. Turn-on delay: 0000 sec
3. Turn-off delay:

Control configuration
3. Turn-off delay: 0000 sec
4. Work time on fire: 00000 sec

After filling in all the points, press the **X** button.

Select the menu item **Work mode**. Press the **OK** button. Then select the **Closed-Open** mode, press the **OK** button. To return to the previous menu, press the **X** button.

Work mode:
close-open
open-close

Select the menu item **Feedback control**. Press the **OK** button. Then select **Yes**, then click **OK**. To return to the previous menu, press the **X** button.

Feedback control:
no
yes

2.7.13. Connecting and configuring LSS

The scheme for connecting the lines of light and sound VA to the contacts «OUT-1» and «OUT-2» of the device is shown in figure 13.

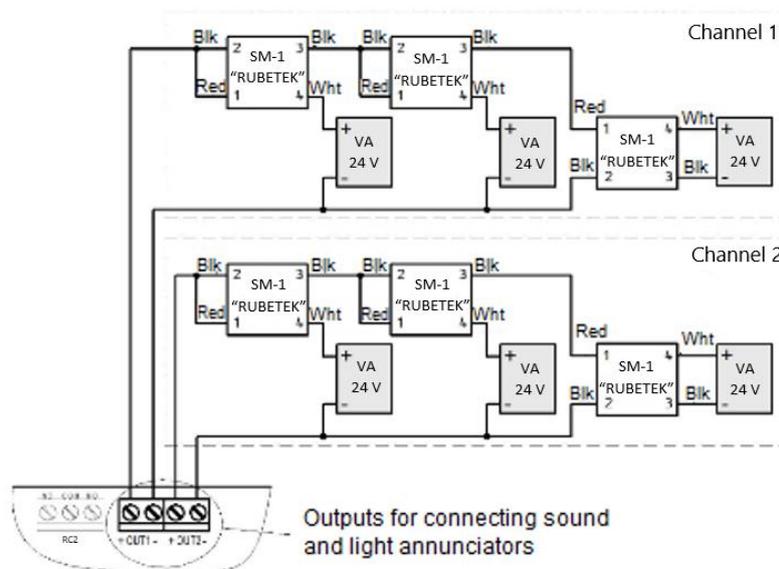


Figure 13 - Scheme for connecting sound and light VA



ATTENTION! It is not allowed to connect an VA with a total current consumption of more than 0,45 A per channel.

Connection of the switching module SM-1 to the VA is shown in figure 14.

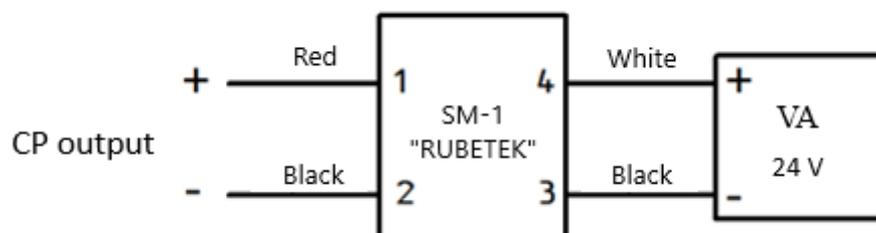


Figure 14 - Scheme of connecting SM-1 to the FA



ATTENTION! Connection of SM-1 is carried out in compliance with the polarity and color marking of the wires.

LSS output setting

Open the **Fire Alarm Network** menu on the CP screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required CP. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

To configure the outputs of the LSS, select item **2.Configuration** of the main menu. Press the **OK** button.

Next, select item **3.Inputs / outputs**. Press the **OK** button.

In the menu that opens, select the item **3.LSS 1** or **4.LSS 2**, depending on the output that we are configuring. Press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Inputs/outputs
1.Input 1
2.Input 2
3.LSS 1
4.LSS 2
5.Relays

LSS configuration include:

- **Conditions**- reactions of the system in which the VA will be switched on (logical OR);
- **Event number**- event at which the LSS is launched;
- **Standby mode**- VA configuration in standby mode;
- **Alarm mode**- VA configuration when the established reactions are triggered;
- **Line check**- the value of the norm of the resistance of the communication line.

LSS 1	LSS 1
1.Conditions: 2 selected	000
2.Event number: 000	3.Standby mode
3.Standby mode	4.Alarm mode
	5.Line check: 08.2 kOhm

Select the **Conditions** option. Press the **OK** button. In the list that opens, we mark the reactions in which the launch of the LSS will occur.

Menu items are selected using the ←→ buttons on the Access levels. After setting all the parameters, click the **OK** button.

Conditions	Conditions
<input type="checkbox"/> alert always	<input checked="" type="checkbox"/> foreign fire 2
<input type="checkbox"/> my fire 1	<input checked="" type="checkbox"/> my event
<input checked="" type="checkbox"/> my fire 2	<input checked="" type="checkbox"/> foreign event
<input type="checkbox"/> foreign fire 1	<input type="checkbox"/> my fault
<input checked="" type="checkbox"/> foreign fire 2	<input type="checkbox"/> foreign fault

ATTENTION! For the selected reactions, the logical OR is valid.

Select the **Standby mode** item. Press the **OK** button.

Select the **Mode** item. Press the **OK** button. We select the mode of operation of the LSS. Press the **OK** button.

Select **Line check**. Press the **OK** button. Set line control mode. Press the **OK** button.

Select **Alert time**. Press the **OK** button. Set glow duration. Press the **OK** button.

Select **Pause time**. Press the **OK** button. Set time without glow. Press the **OK** button.

Select the **Turn-on delay** item. Press the **OK** button. We set the time to delay the return of the LSS to the standby mode. After setting all the parameters, press the **X** button.

Standby mode	Standby mode
1.Mode: off	4.Pause time: 01.0 sec
2.Line check: line check every 60sec	01.0 sec
3.Alert time:	5.Turn-on delay: 0000 sec
Mode: off	Line check: line check every 60sec
on	no line check
flash	
Alert time:	
01.0	

Select the **Alarm mode** item. Press the **OK** button.

Select the **Mode** item. Press the **OK** button. Set the **flash** value. Press the **OK** button.

Select **Line check**. Press the **OK** button. Set line control mode. Press the **OK** button.

Select the **Alert time** option. Press the **OK** button. Set the glow duration. Press the **OK** button.

Select **Pause time**. Press the **OK** button. Set the time without glow. Press the **OK** button.

Select **Turn-off delay**. Press the **OK** button. Set the time to delay the return of the LSS to normal mode. After setting all the parameters, press the **X** button.

Press the **X** button.

Alarm mode	Alarm mode
1.Mode: flash	4.Pause time: 01.0 sec
2.Line check: line check every 60sec	01.0 sec
3.Alert time:	5.Turn-off delay: 0000 sec
Mode: off	Line check: line check every 60sec
on	no line check
flash	
Alert time:	
01.0	

2.7.14. Connecting and configuring the RC

The diagram of connecting external equipment to the RC of the device is shown in figure 15.

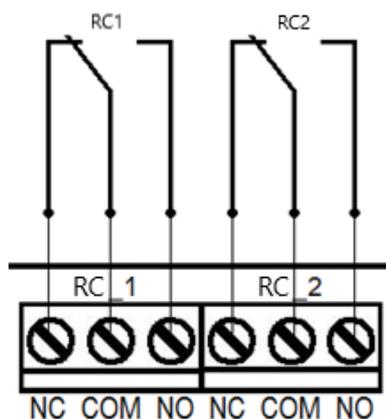


Figure 15 - Scheme of connection to the RC of the device

Setting up the RC device

Open the **Fire Alarm Network** menu on the CP screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required CP. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

To configure the outputs of the RC, select item **2.Configuration** of the main menu. Press the **OK** button.

Next, select item **3.Inputs / outputs**. Press the **OK** button.

In the menu that opens, select item **5.Relays**. Press the **OK** button.

Select the required RC and press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Inputs/outputs	Relays
1.Input 1	1.RC 1:
2.Input 2	2 selected
3.LSS 1	2.RC 2:
4.LSS 2	1 selected
5.Relays	3.Relay inversion:

After choosing a custom RC, we set the reactions for which the trigger will occur.

Menu items are selected using the ←→ buttons on the Access levels. After setting all the parameters, click the **OK** button.

ATTENTION! For the selected reactions, the logical OR is valid.

To set the inversion of the RC, select item **3.Relay inversion**. Press the **OK** button. In the list that opens, select the RC for which you want to set the inversion.

Menu items are selected using the ←→ buttons on the Access levels. After installing the RC, click

Conditions	Conditions
<input type="checkbox"/> norm	<input type="checkbox"/> my fault
<input type="checkbox"/> my fire 1	<input type="checkbox"/> foreign fault
<input type="checkbox"/> foreign fire 1	<input type="checkbox"/> power from mains
<input checked="" type="checkbox"/> my fire 2	<input type="checkbox"/> power from backup
<input checked="" type="checkbox"/> foreign fire 2	<input type="checkbox"/> automation off

Relays	Relay inversion
2 selected	<input type="checkbox"/> RC 1
2.RC 2:	<input checked="" type="checkbox"/> RC 2
1 selected	
3.Relay inversion:	
-2	

the **OK** button.

2.7.15. Connecting and configuring freely programmable inputs

The device has two freely programmable inputs for connecting external equipment with RC outputs.

Connection of external equipment to freely programmable inputs is carried out using SM-2 switching modules.



ATTENTION! The RC of external devices is set up in accordance with the operating manuals for these devices.

The wiring diagram for freely programmable inputs is shown in figure 16.

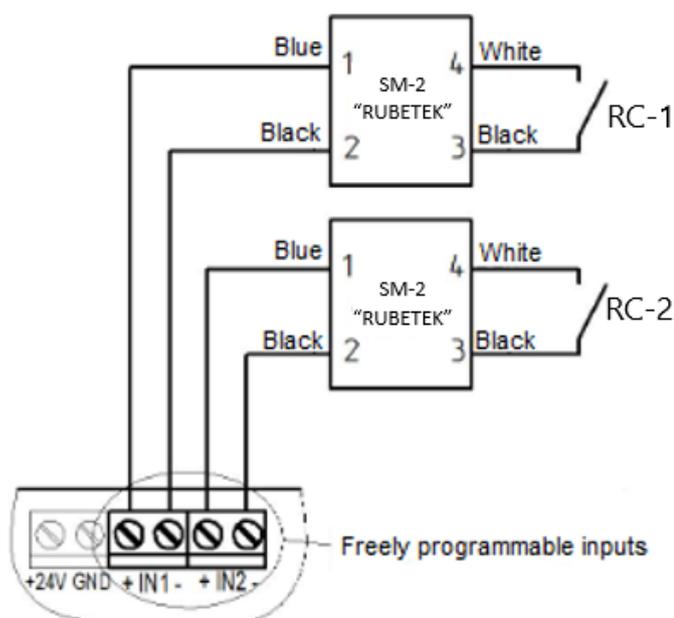


Figure 16 - Wiring diagram of freely programmable inputs

Setting freely programmable inputs

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

For input configuration, select item **2.Configuration** of the main menu. Press the **OK** button.

Next, select item **3.Inputs / outputs**. Press the **OK** button.

In the menu that opens, select the item **1.Input 1** or **2.Input 2**, depending on the input to be

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

configured. Press the **OK** button.

The following options are available for customization:

- **Line check**- resistance value in standby mode;
- **«Alarm» value**- resistance value in operating mode;
- **Reaction**- selection of the action that will take place when the RC of the connected device is triggered:
 - **none** - when triggered, an event will be launched;
 - **fire 1** - when triggered, the signal «Fire 1» will be received;
 - **fire 2** - when triggered, the signal «Fire 2» will be received.

Inputs/outputs	Input 1
1.Input 1	1.Line check:
2.Input 2	08.2 kOhm
3.LSS 1	2."Alarm" value:
4.LSS 2	04.7 kOhm
5.Relays	3.Reaction:
Reaction:	
none	
fire 1	
fire 2	

To set the value of the parameters, select the required item. Press the **OK** button. Enter a value and click the **OK** button.

2.8. Setting up events and reactions

Events are an action generated in the system by the user or generated when certain reactions occur, which allows you to control fire alarm devices (valve actuators, RC, LSS, VA, inputs 1,2) and the system operation mode.

Event setting should be performed only by qualified personnel, taking into account the requirements of the working and project documentation of fire alarms and automation for the facility.

Please read this guide before setting up events.



ATTENTION! It is possible to set 255 events per CP in the system. Events are set in accordance with the working documentation for the object.

2.8.1. Setting the event name

Open the **Fire Alarm Network** menu on the CP screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required CP. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

The name of the event is its identifier in the system, therefore, as a rule, the name contains a link to its source and location. To set the event name:

- Select item **4.Events and reactions** of the main menu. Press the **OK** button.
- Select item **6.Events configuration**. Press the **OK** button.

Main menu	Events and reactions
1.Information	2.Reactions (outputs)
2.Configuration	3.Logical blocks
3.DEVs	4.Active events
4.Events and reactions	5.Used events
5.Firefighting	6.Events configuration

Select **Event names**. Press the **OK** button.
 In the list that opens, select the desired event and click the **OK** button.
 Enter the name of the event. Press the **OK** button to save the data.

Events configuration	Event names
Event names	Event 1
State generation	
Local events:	Event 2
0 selected	
Fix during the fire:	Event 3

2.8.2. Event state generation

State generation allows you to set what state of the device or system will be launched when an event occurs on the device.

To install state generation, you need to:
 Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	
4.Faults	[85] SC
5.Bypassed DEVs	11 faults
	[74] SC2

- Select item **4.Events and reactions** of the main menu. Press the **OK** button.
- Select item **6.Events configuration**. Press the **OK** button.
- Select the item **State generation**. Press the **OK** button.

In the list that opens, the following states are available that can be generated by events:

- **Fire 2,**
- **Work,**
- **Fault,**
- **Auto. off,**
- **On backup.**

Select the required state and click **OK**.
 Select the desired event using the buttons
 ←↑→↓.
 Press «1» if you want to activate the selection and «0» if you want to remove the activation. Press the **OK** button to save the actions.

Main menu	Events and reactions
1.Information	2.Reactions (outputs)
2.Configuration	3.Logical blocks
3.DEVs	4.Active events
4.Events and reactions	5.Used events
5.Firefighting	6.Events configuration
Events configuration	State generation
Event names	"Fire 2":
State generation	0 selected
Local events:	"Work":
0 selected	0 selected
Fix during the fire:	"Fault":
State generation	Fire 2
0 selected	1 2 3 4 5 6 7 8
"Auto. off":	9 10 11 12 13 14 15 16
0 selected	17 18 19 20 21 22 23 24
"On backup":	25 26 27 28 29 30 31 32
0 selected	33 34 35 36 37 38 39 40
	41 42 43 44 45 46 47 48
	49 50 51 52 53 54 55 56
	57 58 59 60 61 62 63 64

2.8.3. Recording events in case of fire

Fixing events in case of fire allows you to set events that will be active in case of fire until it is turned off.

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	
4.Faults	[85] SC
5.Bypassed DEVs	11 faults
	[74] SC2

To set up an event capture, you need to:

- Select item **4.Events and reactions** of the main menu. Press the **OK** button.
- Select item **6.Events configuration**. Press the **OK** button.

Main menu	Events and reactions
1.Information	2.Reactions (outputs)
2.Configuration	3.Logical blocks
3.DEVs	4.Active events
4.Events and reactions	5.Used events
5.Firefighting	6.Events configuration

Events configuration
State generation
Local events:
0 selected
Fix during the fire:
0 selected

Select the item **Fix during the fire**. Press the **OK** button.

In the list that opens, select the desired event using the buttons ←↑→↓.

Press «1» if you want to activate the selection and «0» if you want to remove the activation. Press the **OK** button to save.

Fix during the fire
1 2 3 4 5 6 7 8
9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56
57 58 59 60 61 62 63 64

2.8.4. Setting local events

If the event must be local (act only on the given device without transmission and reception from the CAN bus), then the event is marked in the table of local events. For this:

-open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

- select item **4.Events and reactions** of the main menu. Press the **OK** button.

- select item **6.Event configuration**. Press the **OK** button.

- select **Local events**. Press the **OK** button.

- select the desired event using ←↑→↓.

- press «1» if you want to activate the selection and «0» if you want to remove the activation.

Press the **OK** button.

Main menu	Events and reactions
1.Information	2.Reactions (outputs)
2.Configuration	3.Logical blocks
3.DEVs	4.Active events
4.Events and reactions	5.Used events
5.Firefighting	6.Events configuration

Events configuration	Local events
State generation	1 2 3 4 5 6 7 8
Local events:	9 10 11 12 13 14 15 16
0 selected	17 18 19 20 21 22 23 24
Fix during the fire:	25 26 27 28 29 30 31 32
0 selected	33 34 35 36 37 38 39 40
	41 42 43 44 45 46 47 48
	49 50 51 52 53 54 55 56
	57 58 59 60 61 62 63 64

2.8.5. Setting an event from the MCP (Y,O,G)

To set the generation of an event from the MCP (Y,O,G) you must:

-open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.
 -select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

- select the section of the main menu **3.DEVs**. Press the **OK** button.

- select submenu section **1. Devices list**. Press the **OK** button.

- select item **2.By number**. Press the **OK** button.

- select the required device. Press the **OK** button.

- select the **Device menu** item. Press the **OK** button.

- select **Reaction configuration**. Press the **OK** button.

- in the list that opens, activate the **Signal 1 (warning)** item. Items are activated with arrows ← → on the CP Access levels. Press the **OK** button to save the value.



ATTENTION! *If only an event should be triggered when a detector is triggered, it is recommended to disable other reactions.*

After setting the reaction, the CP will automatically go to the previous menu. Select the **Event for signal 1 / Event for signal 2** item. Press the **OK** button.

In the menu that opens, enter the number of the event that will be triggered. Press the **OK** button to save the configuration.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

Main menu	DEV
1.Information	1.Devices list
2.Configuration	2.Device zones
3.DEVs	3.Device pairing
4.Events and reactions	4.Configuration
5.Firefighting	5.PLC status:

Devices list	Devices list
1.By zone	47.pls-type-69 (#47)
2.By number	48.pls-type-70 (#48)
	49.rf-type-1 (#49)
	50.rf-type-2 (#50)
	51.rf-type-3 (#51)

DEV #45	#45: rf-type-1
432100	Device configuration
Firmware version: ---	Reaction configuration
Device menu	
Delete	

Reaction configuration	Reactions
Reactions: 4 selected	<input type="checkbox"/> Internal fault
	<input type="checkbox"/> Output off
	<input type="checkbox"/> Output off by fault
	<input checked="" type="checkbox"/> Signal 1 (warning)
	<input type="checkbox"/> Signal 2 (alarm)

Reaction configuration	Event for signal 1:
3 selected	
Event for signal 1: 001	001
Event for signal 2: 003	

2.8.6. Setting an event to enable the LSS

To activate the LSS output on an event, you must:

- open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.

- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

OK button.

- Select the main menu item **2.Configuration**. Press the **OK** button.
- Select item **3. Inputs / outputs**. Press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

We select the required output of the **LSS**. Press the **OK** button.

Inputs/outputs
1.Input 1
2.Input 2
3.LSS 1
4.LSS 2
5.Relays

Select the item in section **1.Conditions**. Press the **OK** button.

We activate with the button → the modes **my event** and **foreign event**. Press the **OK** button.

LSS 1	Conditions
1.Conditions: 2 selected	<input checked="" type="checkbox"/> my fire 2
2.Event number: 000	<input type="checkbox"/> foreign fire 1
3.Standby mode	<input checked="" type="checkbox"/> foreign fire 2
	<input checked="" type="checkbox"/> my event
	<input checked="" type="checkbox"/> foreign event

! *ATTENTION! For the selected reactions, the logical OR.*

Automatically go to the previous section of the menu.

! *ATTENTION! If the LSS output is to be activated only by a local event, then only the **my event** mode is activated.*

Select menu item **2.Event number**. Press the **OK** button.

We set the number of the event that activates this LSS output.

LSS 1	Event number:
1.Conditions: 2 selected	
2.Event number: 001	00 1
3.Standby mode	

2.8.7. Setting an event to enable the valve actuator

To activate the valve actuator on an event, you must:

- open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.
- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

- Select the main menu item **2.Configuration**. Press the **OK** button.
- Select item **4.Valves**. Press the **OK** button.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Select the desired **valve**. Press the **OK** button.
 Select the menu item **4.Control configuration** and press the **OK** button.

Valves	Valve configuration
1.Valve 1	1.Name: Valve 1
2.Valve 2	2.Turn-on configuration
3.Valve 3	3.Turn-off configuration
4.Valve 4	4.Control configuration
5.Valve 5	

Select the item in section **1.Conditions**. Press the **OK** button.
 Activate with the → button the modes **on my event** and **on foreign event**. Press the **OK** button.
 Automatically go to the previous section of the menu.

Control configuration	Conditions
1.Conditions: 2 selected	<input type="checkbox"/> event during my fire
2.Turn-on delay: 0000 sec	<input type="checkbox"/> event during frgn. fire
3.Turn-off delay:	<input checked="" type="checkbox"/> on my event
	<input checked="" type="checkbox"/> on foreign event
	<input type="checkbox"/> & my 1st fire 2

Select menu item **Event number**. Press the **OK** button.
 Set the number of the event that activates this valve actuator.
 Press the **OK** button.

Control configuration	Event number:
1.Conditions: 4 selected	
Event number: 004	00 4
3.Turn-on delay:	



ATTENTION! *If the valve actuator is to be activated only by a local event, then only the **on my event** is activated.*

2.8.8. Setting an event to activate the RC

To set the event by which the RC is activated, you must:

-open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.

- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

- Select item **4.Events and reactions** of the main menu. Press the **OK** button.

- Select item **2.Reactions (outputs)**. Press the **OK** button.

Main menu	Events and reactions
1.Information	1.Event inputs
2.Configuration	2.Reactions (outputs)
3.DEVs	3.Logical blocks
4.Events and reactions	4.Active events
5.Firefighting	5.Used events

In the list that opens, select the required **Output «RC 1»**. Press the **OK** button. Select item **1.Event number**. Press the **OK** button. Enter the number of the event that will activate the RC. Press the **OK** button.

Reactions	Output "RC 1"
1.Output "LSS 1"	1.Event number: 000
2.Output "LSS 2"	2.Conditions: 6 selected
3.Output "RC 1"	
4.Output "RC 2"	
5.Output "Valve 1 L1"	
Event number:	
010	

2.8.9. Logical assemblies

Logical assemblies are designed to create new events in the system based on existing ones, using logical operations.

Logical assemblies include logical operations:

- **And** - assembly is performed when all selected events are triggered;
- **OR** - assembly is performed when at least one selected event fires;
- **AND-NOT** - assembly works until all selected events are active.

The device provides the ability to configure 16 logical assemblies.



ATTENTION! Each assembly is a new event in the system, this must be taken into account when adding events, since the number of events in the system is limited.

To install logical assemblies, you must:

- open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.
 - Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #? 15 faults
2.Active alarms	[85] SC 11 faults
3.Alarm causes	[74] SC2
4.Faults	
5.Bypassed DEVs	

- Select item **4.Events and reactions** of the main menu. Press the **OK** button.
 - Select item **3.Logical blocks**. Press the **OK** button.

Main menu	Events and reactions
1.Information	1.Event inputs
2.Configuration	2.Reactions (outputs)
3.DEVs	3.Logical blocks
4.Events and reactions	4.Active events
5.Firefighting	5.Used events

In the list that opens, select the required **blocks**. Press the **OK** button.

The following configuration are available for each build:

Instruction- logical operation by which the events of the selected set will be processed;
Events- a list of events that form a logical set;
Conditions- reactions in which the assembly

Logical blocks	Logical block
Block 1	Instruction: logical "AND"
Block 2	Events: 0 selected
Block 3	Conditions:
Block 4	
Block 5	

will work;

Activation delay- time to delay the operation of the assembly;

Logical block	Logical block
Conditions: 8 selected	000.0 sec
Activation delay: 000.0 sec	Deactivation delay: 000.0 sec
Deactivation delay:	Event generation: 000

Deactivation delay- time to delay assembly shutdown;

Event generation- an event that will be generated when all configured conditions are met.

Select **Instruction**. Press the **OK** button.

The following logical operations are available in the list that appears:

And- assembly is performed when all selected events are triggered;

Logical block	Instruction:
Instruction: logical "OR-NOT"	none
Events: 0 selected	logical "AND"
Conditions:	logical "OR"
	logical "OR-NOT"

OR- assembly is performed when at least one selected event fires;

OR-NOT- assembly works until all selected events are active;

NONE- there is no logical operation to handle the selected events.

Select the required logical operation and click the **OK** button.

Select the **Events** item of the **Logical block** menu. Press the **OK** button.

We select the numbers of events that will be processed in the assembly.

Press «1» if you want to activate the selection and «0» if you want to remove the activation.

Click the **OK** button to save the actions.

Logical block	Events selection
Events: 0 selected	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64
Conditions: 8 selected	
Activation delay:	

Select the **Conditions** item of the **Logical block** menu. Press the **OK** button.

The list that opens displays the reactions that trigger the processing of the logical assembly. Items are activated with arrows ← → on the CP access levels. Press the **OK** button to save the changes.

Logical block	Conditions
Conditions: 8 selected	
Activation delay: 000.0 sec	
Deactivation delay:	
Conditions	Conditions
<input checked="" type="checkbox"/> my fire 1	<input checked="" type="checkbox"/> foreign fire 1
<input checked="" type="checkbox"/> no my fire 1	<input checked="" type="checkbox"/> no foreign fire 1
<input checked="" type="checkbox"/> my fire 2	<input checked="" type="checkbox"/> foreign fire 2
<input checked="" type="checkbox"/> no my fire 2	<input checked="" type="checkbox"/> no foreign fire 2
<input checked="" type="checkbox"/> foreign fire 1	<input checked="" type="checkbox"/> & my 1st fire 2

Select the **Activation delay** item from the **Logical block** menu. Press the **OK** button.

Set the turn-on delay time of the logical assembly. Press the **OK** button.

Logical block	Activation delay:
Activation delay: 000.0 sec	
Deactivation delay: 000.0 sec	000.0
Event generation:	

We select the item **Deactivation delay** of the menu **Logical block**. Press the **OK** button. Set the delay time for turning off the logical assembly. Press the **OK** button.

Logical block	Deactivation delay:
000.0 sec	
Deactivation delay:	000.0
000.0 sec	
Event generation:	
000	

Select the **Event generation** item of the **Logical block** menu. Press the **OK** button. Enter the number of the event that will be generated when all configured conditions are met. Press the **OK** button.

Logical block	Event generation:
000.0 sec	
Deactivation delay:	000
000.0 sec	
Event generation:	
000	

2.8.10. View active events

To view active events on the CP, you must:

-open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.

- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

- Select the main menu item **4.Events and reactions**. Press the **OK** button.

- Select submenu item **4.Active events**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

Main menu	Events and reactions
1.Information	1.Event inputs
2.Configuration	2.Reactions (outputs)
3.DEVs	3.Logical blocks
4.Events and reactions	4.Active events
5.Firefighting	5.Used events

Select the desired list and click **OK**.

Events can be viewed by number and by name.

Active events
1.By number (table)
2.By name

2.8.11. Viewing used events

To check the used (busy) events on the CP, you must:

-open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.

- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

OK button.

- Select the main menu item **4.Events and reactions**. Press the **OK** button.
- Select the submenu item **5.Used events**. Press the **OK** button.

Main menu	Events and reactions
1.Information	1.Event inputs
2.Configuration	2.Reactions (outputs)
3.DEVs	3.Logical blocks
4.Events and reactions	4.Active events
5.Firefighting	5.Used events

In the list that opens, events that are already used in the system are marked in red. After checking the list of events, press the **Home** button to return to the main menu.

Used events							
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64

2.8.12. Setting the event for the signal «1st Fire 2»

When the signal «1st Fire 2» appears on the device, an event can be generated.

To generate an event when the «1st Fire 2» signal occurs, you must:

- open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.
- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #? 15 faults
2.Active alarms	[85] SC 11 faults
3.Alarm causes	[74] SC2
4.Faults	
5.Bypassed DEVs	

- Select the main menu item **2.Configuration**. Press the **OK** button.
- Select item **1.Fire1 & Fire2**. Press the **OK** button.
- Select item **2.«My 1st Fire 2» evt.**, if you want to set an event after the occurrence of a Fire 2 signal on the current CP or a signal received from the CP selected in the configuration of the **Network** with the appropriate parameters.

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Fire 1 & Fire 2	
	0060 sec
2."My 1st Fire 2" evt:	000
3."Frqn. 1st Fire2" evt:	000

- Select item **3.«Frqn. 1st Fire2» evt.**, if you want to set an event after the occurrence of the Fire 2 signal from other network devices. Press the **OK** button.
- Set the value of the event. Press the **OK** button.

2.8.13. Firefighting setting on the device

To set up fire extinguishing on the device, you must:

-open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.
 - Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

- select the **5.Firefighting** item in the main menu. Press the **OK** button.
 - select the **Direction** to set fire extinguishing. Press the **OK** button. A total of ten directions are available.

Main menu	Firefighting
1.Information	Direction 1
2.Configuration	Direction 2
3.DEVs	Direction 3
4.Events and reactions	
5.Firefighting	

The following options are available in the **FF direction** configuration menu:

- **Name** - name of direction FF;
- **Automation turn-on delay** - this is the time for which the installation of automation on the CP is delayed;
- **Start delay** - time to delay the start of fire extinguishing after its activation;
- **Activation** - setting an event or a group of DEVs that will activate the direction of the FF;
- **Blocking** - setting events that block the launch of the FF;
- **Event generation** - setting the event that will be generated after the launch of the FF.

FF direction
Name: FF 1
Automation turn-on delay: 0000 sec
Start delay:
FF direction
Start delay: 0000 sec
Activation
Blocking
Event generation

To set the activation of the FF direction, select the **Activation** menu item. Press the **OK** button. Select the DEV and the activation condition (**2 and more Fire 1, Fire 2, Signal 1, Signal 2**) and press the **OK** button.

FF activation	Select DEV
DEV selection: 2 selected	1 2 3 4 5 6 7 8
Conditions: 1 selected	9 10 11 12 13 14 15 16
Conditions	17 18 19 20 21 22 23 24
<input checked="" type="checkbox"/> 2 and more Fire 1	25 26 27 28 29 30 31 32
<input type="checkbox"/> Fire 2	33 34 35 36 37 38 39 40
<input type="checkbox"/> Signal 1	41 42 43 44 45 46 47 48
<input type="checkbox"/> Signal 2	49 50 51 52 53 54 55 56
	57 58 59 60 61 62 63 64



ATTENTION! For the set event and the DEVs group, a logical **OR** is valid.

To set events that block the launch of the FF, select the **Blocking** menu item. Press the **OK** button.

Select the type of event state to block (ignore, block if inactive, block if active). Select an **DEV** to set. Press the **OK** button. Set event number. Press the **OK** button to save the entered data and return to the previous menu.

Four events are available for setting in each group.



ATTENTION! Set events are logically **AND**.

Blocking							
DEV selection:	0 selected						
Signal 1:	Block if inactive						
Signal 2:							
Select DEV							
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64

To set events that block the launch of the FF, select the **Blocking** menu item. Press the **OK** button.

Select the type of state to block (Ignore, Block if inactive, Block if active). Select DEVs to block. Press the **OK** button.



ATTENTION! Set events are logically **AND**.

Signal 1:	
Ignore	
Block if inactive	
Block if active	

Signal 1 is generated by devices: MCP (Y,O,G), MCPW (Y,O,G), IO4-1, IM-1.

Signal 2 is generated by devices: IO4-1, IM-1.

The opening sensor in systems with CP-1 is not used, then which signal the device will generate depends on the setting of the CP reactions to this device. Thus, each of the four IO4-1 inputs and the IM-1 input can be configured to generate both Signal 1 and Signal 2 at the same time.

MCP (Y,O,G), MCPW (Y,O,G) can only generate Signal 1.

The **FF signal** is blocked if communication is lost with **DEVs**, which should generate blocking.

FF direction	
Start delay:	0000 sec
Activation	
Blocking	
Event generation	

One of the areas of FF is **Event generation**:

- **Automation off**: the event with the specified number is active if the FF direction is in the «Automatic off» state. Automation is disabled using the «STOP» button on the CP. If the FF direction is in any other state, the event is deactivated.

- **Automation turn-on delay**: the event for delaying the activation of automation is an event that will be generated during the time for which the delay is set, there are no locks for this event.

- **Countdown**: the event with the specified number is active if there was a command to start the direction of the FF, there are no blockages and a delay in the start of the direction is set. The event remains active for the duration of the delay and deactivates when the delay ends, or when a block occurs or the automation is disabled.

- **Start cancelled**: the event with the specified number is activated if during the countdown or during the operation of the direction, the blocking of the direction of the FF is activated. The event is deactivated if the lock is released and the command to start the FF is given again using the «START» button on the CP.

Event generation	
Automation off:	000
Automation turn-on delay:	000
Countdown:	

Event generation	
Start cancelled:	000
Fault:	000

Event generation	
Fault:	000
Direction start:	000

- **Fault:** the event with the specified number is activated if any of the DEVs used to activate or block the direction of the FF is in a fault state. Deactivated, respectively, when troubleshooting. In this case, the malfunction does not affect the operation of the FF direction in any way.
- **Direction start:** the event with the specified number is activated if the automatic FF direction is enabled, a command to start the FF direction is received, there are no active interlocks, and the start delay has expired if it has been configured. The FF direction is in operation. The event is deactivated when blocking occurs or automation is disabled.

2.8.14. Manual start and shutdown of fire extinguishing

To start fire extinguishing in the system from the device, it is necessary to press the «**START**» button. In the menu that opens, select the direction of the FF that you want to start and press the **OK** button.

To start all directions simultaneously, it is necessary to double-click on the «**START**» button with an interval of 1 second.

FF direction	
FF 1	automation off
FF 2	automation off
FF 3	automation off

1: FF 1	automation off
2: FF 2	automation off
3: FF 3	automation off

1: FF 1	start complete
2: FF 2	automation off
3: FF 3	automation off

To turn off fire extinguishing in the system from the device, it is necessary to press the «**STOP**» button. In the menu that opens, select the direction of the FF that you want to stop and press the **OK** button.

To stop all directions at the same time, it is necessary to double-click on the «**STOP**» button with an interval of 1 second.

1: FF 1	automation off
2: FF 2	automation off
3: FF 3	automation off

1: FF 1	automation off
2: FF 2	automation off
3: FF 3	automation off

2.8.15. System fault settings

Open the **Fire Alarm Network** menu on the **CP** screen by pressing the «**V**» button on the keyboard. Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #? 15 faults
2.Active alarms	[85] SC 11 faults
3.Alarm causes	[74] SC2
4.Faults	
5.Bypassed DEVs	

To configure a system fault, select the main menu item **2.Configuration** and go to section **9.System fault**. Press the **OK** button.

Main menu	Configuration
1.Information	2 off
2.Configuration	8.Sound during CW: on
3.DEVs	9.System fault
4.Events and reactions	10.Factory defaults
5.Firefighting	

2.8.17. Setting access levels

Open the **CP menu** on the **CP** screen by pressing the «X» button on the keyboard. Select item **4.Access levels** press the **OK** button.

CP menu	
1.	Network configuration
2.	CAN configuration
3.	WiFi
4.	Access levels
5.	Input patterns

Settings are available in three levels:

- **staff** – at this access level, the following functions can be performed:

- control (visual and sound) of the states and operating modes of the CP;
- viewing of all relevant messages at the current time, with access to the archive of events, without the possibility of changing it;
- mute the built-in sound signaling device.

Keyboard	
1.Staff PIN:	0000
2.Engineer PIN:	1234
3.Service PIN:	

Keyboard	
	1234
3.Service PIN:	4321
4.Lock timeout:	0060 sec

- **engineer** – designed to take action on incoming events and is intended for the person responsible for ensuring the fire safety of the facility. At this access level, the following functions can be performed:

- performance of the functions available at the level «**Staff**»;
- resetting and/or switching between individual states and modes of operation;
- start (activation) and stop (deactivation) of executive devices;
- testing of optical indication, alphanumeric screen and built-in sound alarm;
- temporary switching off and on of individual communication lines and devices.

- **service** – designed to carry out maintenance, as well as programming and settings (for service organizations). At this access level, the following functions can be performed:

- implementation of the functions available at the levels «**Staff**» and «**Engineer**»;
- reading parameters;
- changing configuration parameters;
- updating or changing the software;
- updating passwords for all access levels;
- repairs that do not require the return of the technical equipment to the manufacturer.

After selecting the **Lock timeout** item and pressing the **OK** button, it becomes possible to enter a value in seconds, after which the keyboard will be locked. Click **OK** to save the data.

You can lock the keyboard, thereby leaving any access level, by holding down the «0» key.

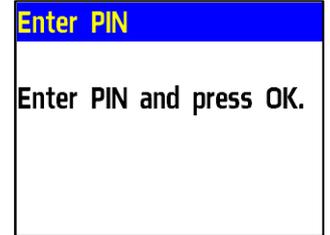
Some menu items may be disabled for certain access levels. Such items are usually not highlighted in color. An inaccessible menu item can only be activated by a user with such rights.

To activate access, you must:

- select an unavailable menu item. Press the **OK** button.
- enter PIN code. Press the **OK** button.

Lock timeout:	
	0060

Main menu	
1.	Information
2.	Configuration
3.	DEVs
4.	Events and reactions
5.	Firefighting



ATTENTION! In case of loss of the pin-code, it is necessary to contact the technical support of Rubetek.

2.9. Viewing fire alarm network settings



ATTENTION! To view the parameters and manage the fire alarm, you must go to the Fire Alarm Network menu. To do this, press the «V» button on the CP keyboard. Then press the OK button.

2.9.1. Browse network

The network view contains data about the devices connected to the CP and active for configuration and control.

A detailed principle of setting up and managing devices connected to the CP is described in paragraph 2.7 of this manual.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

To view connected devices:

Select **1.Browse network** in the fire alarm menu. Press **OK**. The list that opens displays data on network devices.



ATTENTION!! For devices connected via the RS-485, the network name (IP address) and the status of this network (normal, fault, fire) are displayed. For devices connected directly, the CAN network address interval, the number of devices and the device status (normal, fault, fire) are displayed.

2.9.2. Active alarms

Active alarms contain a list of devices of the substation from which the «Fire-1» or «Fire-2» signal is received.

To view the list of active alarms:

- Select item **2. Active alarms** in the fire alarm menu. Press **OK**.

Fire Alarm Network
1.Browse network
2.Active alarms
3.Alarm causes
4.Faults
5.Bypassed DEVs

The list that opens displays the name of the device from which the signal is received, its address in the network (#X), the type of signal (Fire 1, Fire 2) and the type of signal activation (own, someone else's alarm).

2.9.3. Alarm causes

Alarm causes contain a list of sources/causes of the «Fire-1» or «Fire-2» signal.

To view a list of alarm causes:

- Select item **3. Alarm causes** of the fire alarm menu. Press **OK**.

Fire Alarm Network
1.Browse network
2.Active alarms
3.Alarm causes
4.Faults
5.Bypassed DEVs

The list that opens displays the name of the main device on which the signal is activated and its address in the CAN network (#X). The type of signal (Fire 1, Fire 2) and the source of the signal (name and slot for the DEVs) are also indicated.

2.9.4. Faults

To view a list of faults:

- Select item **4. Faults** in the fire alarm network menu. Press **OK**.

Fire Alarm Network	Faults
1.Browse network	CP [122] ППК #?:
2.Active alarms	1.Main supply
3.Alarm causes	2.Backup supply
4.Faults	3.Valves supply
5.Bypassed DEVs	4.RS485 #1 link fault

The list that opens displays the name of the devices (set on it in the External network settings), which has malfunctions, its address in the CAN network (#X) and a list of malfunctions.

2.9.5. Bypassed DEVs

To view disabled sensors in the FA, you must:

- Select item **5. Bypassed DEVs** in the fire alarm network menu. Press **OK**.

Fire Alarm Network	Bypassed DEVs
1.Browse network	CP [122] ППК #?:
2.Active alarms	1."pls-type-2" (No group)
3.Alarm causes	#2
4.Faults	2."pls-type-20" (No group)
5.Bypassed DEVs	#4

The list that opens displays the name of the CP (set on it in the External network settings), which has disabled sensors, its address in the CAN network (#X) and the list of sensors indicating the name (set on the CP to which they are connected) and the slot to which they are connected (#X).

2.9.6. Active events

To view active events:

- Select item **6.Active events** of the fire alarm network menu. Press **OK**.

Fire Alarm Network
2.Active alarms
3.Alarm causes
4.Faults
5.Bypassed DEVs
6.Active events

All active events are displayed in the opened list. For each event, the name that is set on the CP and the number of the event (#X) are indicated.

Select an event from the list and click the **OK** button.

The menu that opens displays the name of the CP (set on it in the External network settings) from which the event was received and its address in the CAN network (#X).

! ***ATTENTION!** Events marked as local in the settings of the CP will not be displayed.*

2.10. Software update

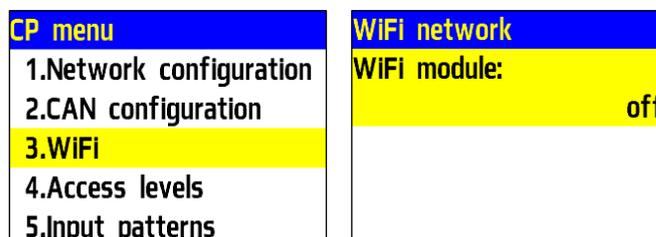
! ***ATTENTION!** The software update can be performed simultaneously for all CP connected to the same CAN network. To do this, you need to update the software for any of the CP connected to the current CAN network, and then start the software cloning according to clause 2.11 of this manual.*

To update the software you will need:

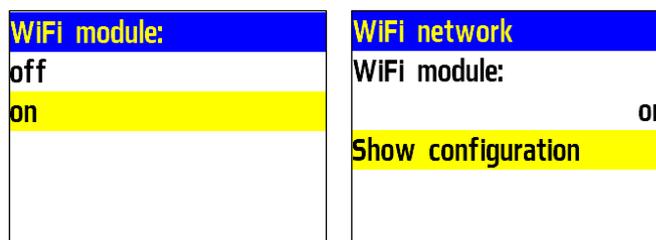
- PC with Wi-Fi adapter;
- Software «Rubetek-Engineer».

! ***ATTENTION!** All the necessary software can be downloaded on the official website of the RUBETEK company.*

First you need to enable Wi-Fi on the updated CP. To do this, select the **3.WiFi** network item in the **CP menu** (if necessary, enter a PIN code for access). Press **OK**.



In the menu that opens, for the **WiFi module** parameter, set the value to **on**. The WiFi connection menu will then display **Show configuration**.



Next, you need to connect to the WiFi network of the CP the computer that will be used to update. The settings for connecting to a network (network name and password) are displayed when you select **Show configuration** in the WiFi connection menu.



Next, you need to run the «Rubetek-Engineer» program on the PC and select the «**Authorization**» section in the left part of the window, where in the «**Connection**» block enter the **IP address 192.168.4.1** and click the **Connect** button (Fig. 17). If the connection is successful, the device will appear in the list on the right and the button name will change to «**Disconnect**».

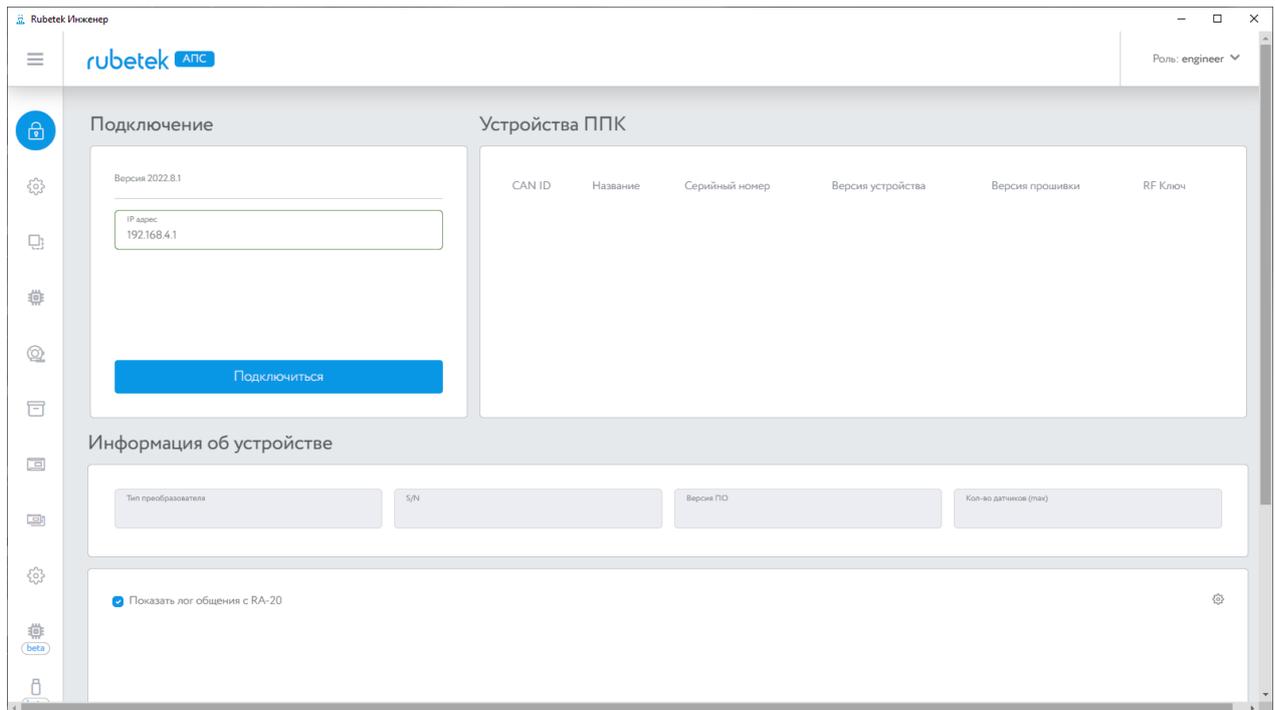


Figure 17 - Connecting to the CP

Next, you need to go to the «beta» section (**CP firmware**). Press the **Select** button and in the Explorer window that opens, specify the path to the required firmware file (**0x10000.bin**). After the file is displayed in the line, click the **Update via WiFi** button, as shown in fig. 18.

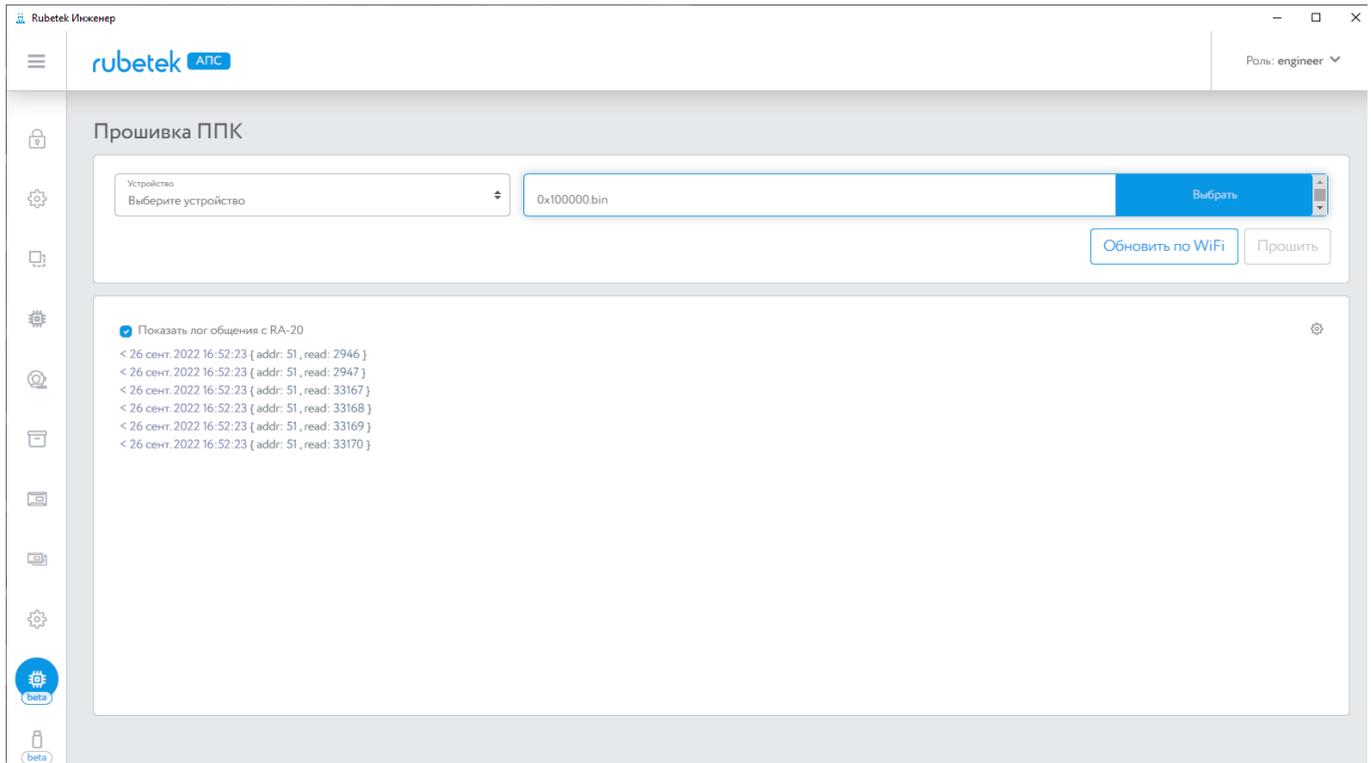
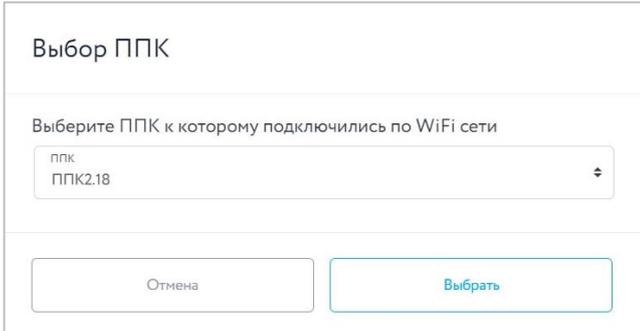


Figure 18 - Selecting the software file

Next, you need to select the CP on which the software will be updated. After selecting the device, click the **Select** button (Fig. 19).



Выбор ППК

Выберите ППК к которому подключились по WiFi сети

ППК
ППК2.18

Отмена Выбрать

Figure 19 - Selection of the updated CP

The firmware process will begin, which will be displayed as a progress bar (Fig. 20).

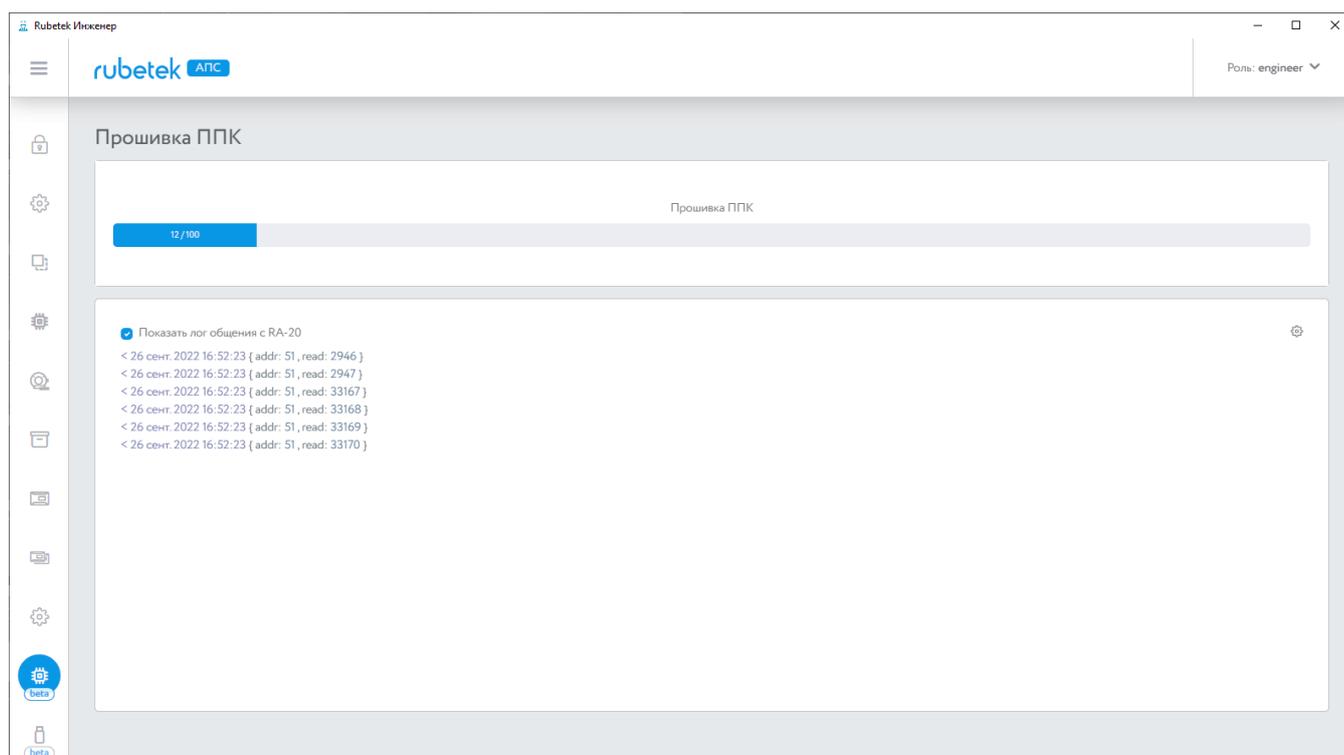


Figure 20 - Software update process

If the firmware is successfully completed, a corresponding message will appear, after which the CP will restart. With further work in the CP menu of the control panel, the software version will change in paragraph 13. **Build version**.



ATTENTION! Updating software for detector, VA, RE connected to the CP is carried out according to FOTA. By default, auto-update is disabled. Activation is carried out in accordance with clause 2.12 of this manual.

2.11. Cloning of CP software via CAN interface

To clone the device software to other devices connected via the CAN bus, you must:

-open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.

- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

- Select item **2.Configuration** the main menu. Press the **OK** button.

- Select the submenu item **5.Network**. Press the **OK** button.

- Select item **11.Firmware clone**. Press the **OK** button.

- Select **start transfer**. Press the **OK** button.



ATTENTION! During cloning, all CP will be disabled.

Fire Alarm Network	Browse network
1.Browse network	[122] CP #?
2.Active alarms	15 faults
3.Alarm causes	[85] SC
4.Faults	11 faults
5.Bypassed DEVs	[74] SC2

Main menu	Configuration
1.Information	1.Fire 1 & Fire 2
2.Configuration	2.UPS
3.DEVs	3.Inputs/outputs
4.Events and reactions	4.Valves
5.Firefighting	5.Network

Network	Firmware clone
0 selected	Service status:
9.Reaction to ind. CPs	transmit error on 0%
10.Link timeout:	Start transfer
120 min	
11.Firmware clone	

The CP screen will display the number of CP on the current CAN network that are ready for software cloning. The CP-Master will display information about the download process.

Processing query	Receiving devices
Please wait.	1.CP 2 (#2)
Remote CP query is in progress.	

Firmware clone	Firmware clone
Service status:	Service status:
transmitting 23%	success
Start transfer	Start transfer

The CP-Slave will display information about the download process.

After a successful firmware update using the cloning method, the CP-Slave will restart and an error message will appear about reading temporary parameters.

Firmware clone
Service status:
receiving 37%
Start transfer



ATTENTION! The request is valid for 10 seconds, after which the CP will return to the previous menu **5.Network**.

! **ATTENTION!**

- a) all CP in the current CAN network must have a unique network number;
- b) all CP in the current CAN network must be in standby mode (software is not cloned on the CP in Fire mode).

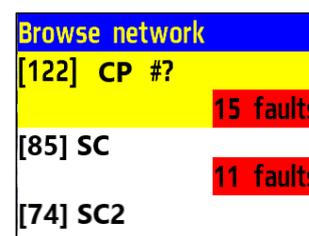
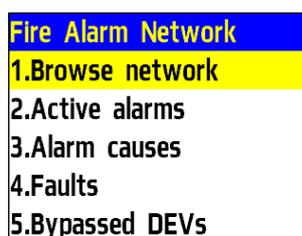
When all CP are found, press the [V] button - to switch to clone mode.

2.12. Software update on DEVs

Activation of update mode on all connected DEVs

To activate the software update mode, you must:
 -open the **Fire Alarm Network** menu on the **CP** screen by pressing the «V» button on the keyboard.

- Select item **1.Browse network** and press the **OK** button. Select the required **CP**. Press the **OK** button.

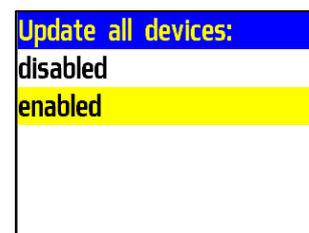
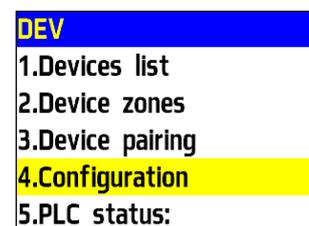


- Select the section of the main menu **3.DEVs**. Press the **OK** button.

- Select submenu section **4.Configuration**. Press the **OK** button.

- Select submenu section **6.DEVs firmware update**. Press the **OK** button.

- Select the item **enabled**. Press the **OK** button. By default, auto-update is disabled.



After downloading the software (CP firmware and DEVs firmware) to the CP, the CP will copy it to the RE connected to it. When communicating with the sensors, the CP will check the software version on the sensor with the downloaded version. If the software version on the sensor is earlier, then the CP or RE will transfer the new version to the sensor.

When the software is updated on the sensor, the indicator flickers red. After a successful update, the sensor will go into standby mode.

The software update time for one sensor is no more than 30 sec.

2.13. Uploading a CP dump

! **ATTENTION!** *The dump is unloaded only from the CP. Logging is performed only from the CP in the remote mode.*

To connect to the CP you need:

- Software «Rubetek-Engineer»;

- PC located in the same local network with GW-1.

! *ATTENTION! All software can be downloaded from the official website of «RUBETEK».*

To remove the dump, you need (figure 21):

- run the software program «Rubetek-Engineer» on the PC and go to the config section;
- specify the necessary data for unloading the dump in the Settings block;
- select the required CP and click the Download configuration button in the Current device section;
- to load a new configuration, select a file on the local drive, to do this, click the Browse button, specify the file to be loaded in Explorer, and click the open button. After that, click the Upload Configuration button;
- to clone the current configuration to other CP located in the same CAN network with the current CP, mark them in the list of the Clone block and click the Clone from device button.

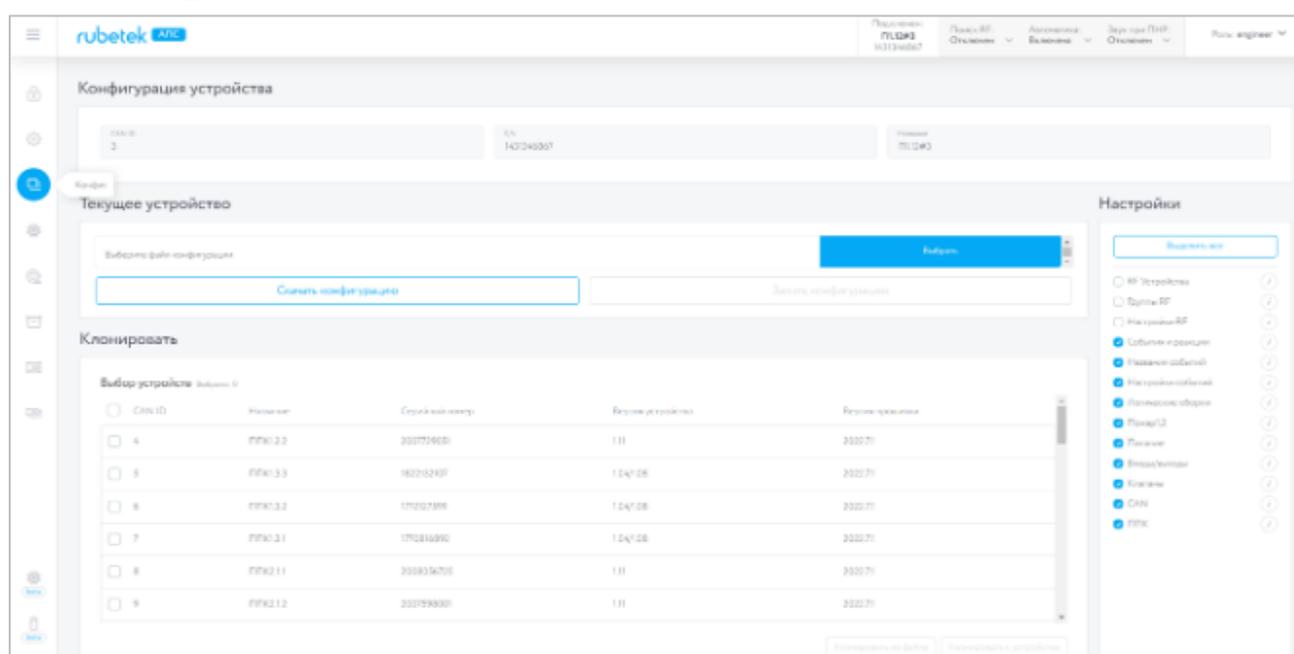


Figure 21 - Uploading the dump

3. Maintenance

3.1. Security measures

- 3.1.1. When carrying out installation work, the lines of the main and backup power supply 24 V and the supply of valves FP 220 V must be de-energized!
- 3.1.2. Work on the installation, installation and maintenance of the device must be allowed to persons with the necessary qualifications and permission to work with electrical installations up to 1000 V.
- 3.1.3. Installation of the device, change of fuses, as well as preventive maintenance and inspection should be carried out only after disconnecting the device from the 220 V mains and 24 V main and backup power sources. This requirement also applies to maintenance work and checking the condition of the device.
- 3.1.4. Electrical wires must be protected from possible damage to the insulation in places where metal edges are rounded. It is forbidden to use homemade fuses and fuses that do not correspond to the nominal value.

- 3.1.5. To ensure safety during the operation of the device, it is prohibited:
- to carry out any work with the device with the connected voltage AC 220 V and DC 24 V;
 - operate the device with damaged wire insulation.

3.2. Health check

Checking the operability of the device should be carried out during scheduled or other checks of the technical condition of the device, but at least once every 6 months. The check should include:

- external inspection of the device for the absence of traces of moisture and mechanical damage;
- checking the indication of the device according to table 5;
- checking the reaction of the device to the opening of the case;
- checking the switching of the power line to the reserve in case of a break in the main line;
- viewing device parameters;
- control start of LSS, valves;
- checking the software version of the device;
- viewing the archive of events.

3.2.1. Checking the CP indication

The indication of the device must correspond to the «Normal» mode, while:

- the «Power» indicator is lit;
- other indicators are off.

3.2.2. Checking the reaction of the device to opening the case

Open the body of the device. To do this, unscrew the screw securing the front cover of the device.

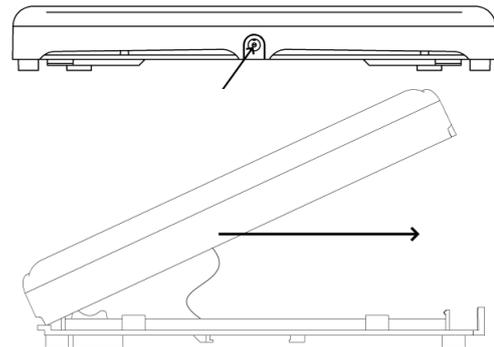
Carefully lift up the front cover.



ATTENTION! Be careful not to damage the Access levels cable when opening the device.

The display of the device should show a message about opening the case.

Replace the instrument cover and secure it with the fixing screw.



3.2.3. Checking the switching of the power line

Open the case according to the algorithm described above.

Disconnect the «-24V» and «+24V» terminals of the main power source on the device.

The device should automatically switch the power line to the backup one without loss of operability.

In this case, the indication must correspond to the «Backup power» and «Fault» modes according to table 5.

Reconnect the power supply line of the device and close the housing.

The indication of the device must correspond to the status of «Norm» and «Power» according to table 5.

3.2.4. Control run of LSS, valve actuator FF

Enabling manual control

To set the manual mode on the device, you must:
In the **Main menu** of the device, select item **7.Mode** and press **OK**.

In the list that opens, select the mode: **manual** and click **OK**.

Main menu	Mode:
6.Archive	automatic
7.Mode:	manual
8.Sound:	sensors bypass
on	

LSS launch

- Select item **1.Information** main menu options. Press the **OK** button.
- Select the menu item **7. Inputs / outputs**. Press the **OK** button.
- Select the required output of **LSS**. Press the **OK** button.
- Select the **Command** item. Press the **OK** button.
- Set the **alarm mode**. Press the **OK** button. VA connected to the output of the LSS must start taking into account the configuration in accordance with clause 2.7.13.

Main menu	Information
1.Information	4.Fire sources
2.Configuration	5.Bypassed DEV list
3.DEVs	6.UPS
4.Events and reactions	7.Inputs/outputs
5.Firefighting	8.Valves
Inputs/outputs	
1.Input 1	
2.Input 2	
3.LSS 1	
4.LSS 2	
LSS 1	Command:
line short	standby mode
Command:	alarm mode
alarm mode	
Feedback:	
line short	

Select the **Standby mode** to return to its original state and press the **OK** button.

Valve start

- Select item **1. Information** main menu options. Press the **OK** button.
- Select the menu item **8.Valves**. Press the **OK** button.
- Select the desired **Valve**. Press the **OK** button.
- Select the **Command** item. Press the **OK** button.
- Set **on**. Press the **OK** button.

The actuator of the FP valve connected to the device must start taking into account the configuration in accordance with clause 2.7.9. Select the **off** command to return to its original

Information	Valves
5.Bypassed DEV list	1.Valve (v.1) opened
6.UPS	2.Valve (v.2) closed
7.Inputs/outputs	3.Valve (v.3)
8.Valves	
9.Network	
Valve 1	Valve 1
Name:	none
Valve	Command:
Status:	off
opened	Feedback:
Fault:	line short

state and click the **OK** button.

Command:
off
on



ATTENTION! The control run of the LSS and FP valve drives allows you to determine the correctness of the connection and configuration.

3.2.5. Viewing the factory number of the CP

To view the factory number of the control panel, select item **12. Factory number** of the **CP menu**.

CP menu
11.Serial number: 305419896
12.Factory number: 12345678901234567890
13.Build version:

3.2.6. Checking the device software version

To check the version of the device, select item **13. Build version** of the **CP menu**.



ATTENTION! The current version can be found in the technical support service of the company «RUBETEK».

CP menu
12345678901234567890
13.Build version: CP CMT 2023-3(10)
14.Build date and time: 07.03.2023 13:33

3.2.7. Viewing the event archive

To view the event archive:

- select item Main menu **6.Archive**. Press the **OK** button.
- select a filter for displaying the archive (all entries, fires, DEVs faults, other faults, events, DEVs bypass). Press the **OK** button.



ATTENTION! The archive contains information about events recorded by the device (fire notifications, malfunctions, changes in the state of connected devices, case opening, etc.). The archive capacity is 10000 events.

Main menu	Archive
6.Archive	1.All entries
7.Mode: automatic	2.Fires
8.Sound: on	3.DEVs faults
	4.Other faults
	5.Events
Archive view	
Record 7396: 12:21:59 31.01.23 DEV valve #42.3:Closed	
Record 7397: 12:21:59 31.01.23 DEV #43:Fault	
Record 7398: 12:22:00 31.01.23 DEV valve #42.3:Closed	
Record 7399: 12:22:00 31.01.23 DEV #43:Fault	

The archive displays:

- record number;
- time and date of recording;
- event source;
- name of the event.

To set up fixing certain events in the archive manually, select the main menu item **4. Events and reactions** and press the **OK** button. Then select item **6.Events configuration**, enter the requested pin-code and select the item **Put to archive** in the list.

In the table of events that opens, you must select those that are to be recorded in the archive by pressing the «1» button.

 **ATTENTION!** To deactivate the event selection, use the «0» button.

 **ATTENTION!** In case of loss of the pin-code, it is necessary to contact the technical support of «Rubetek».

After that, records of the selected events will be recorded in the archive. To view these records in a separate section, select item **6.Archive** of the main menu and then item **5.Events**. After the search for the desired records is completed, they will be displayed on the screen.

The archive section **7. DEVs bypass** allows you to view the time and parameters for switching sensors to bypass mode (paragraph 2.6.9 of this manual). To do this, select item **6. Archive** of the main menu and then item **7. DEVs bypass**. This section will display information about the transfer to the bypass mode of the sensors, both the entire CP and individual DEVs. Also in this section are records about the removal of the bypass mode (time and date of transition to other modes).

3.2.8. Alert test

To start the alert test, select item **12.Alert test** in the main menu. Press the **OK** button. Confirm the launch by selecting **CP/SC test** and clicking the **OK** button.

Main menu	Events and reactions
1.Information	2.Reactions (outputs)
2.Configuration	3.Logical blocks
3.DEVs	4.Active events
4.Events and reactions	5.Used events
5.Firefighting	6.Events configuration

Events configuration	Put to archive
0 selected	1 2 3 4 5 6 7 8
Fix during the fire:	9 10 11 12 13 14 15 16
0 selected	17 18 19 20 21 22 23 24
Put to archive:	25 26 27 28 29 30 31 32
2 selected	33 34 35 36 37 38 39 40
	41 42 43 44 45 46 47 48
	49 50 51 52 53 54 55 56
	57 58 59 60 61 62 63 64

Archive search	Archive view
Please wait...	Date: 25.11.2022
Searching archive record...	Time: 16:30:24
	CP [11] F2.19#11;
	No faults CAN
31 %	

Archive	Sensors bypass
3.DEVs faults	Record 90: 06:26:51 11.01.23
4.Other faults	УСО ИПД 2 (#2): bypass
5.Events	Record 91: 06:26:51 11.01.23
6.Device access	Mode: bypass sensors
7.DEVs bypass	Record 92: 06:26:51 11.01.23
	Mode: automatic
	--- Not found ---

The notification test will be started, checking the indication and sound of the device, as well as the audible notification of the VA.

Main menu	Alert test
12345678901234567890	off
11.Build version:	CP/SC test
2023-03(10)	
12.Alert test	
off	

Alarm test
Alarm test is in progress (indication, sound).

4. Storage

- 4.1. The storage conditions of the CP must comply with conditions:
 - ambient air temperature from plus 5 °C to plus 40 °C;
 - relative air humidity up to 80% at a temperature of plus 25 °C.
- 4.2. The device should be stored on racks in a packaged form.
- 4.3. The distance from the walls and floor of the storage to the packages with the device must be at least 0,1 m.
- 4.4. The distance between the heating devices and the packaging with the device must be at least 0,5 m.
- 4.5. When stacking, it is allowed to stack no more than four packages with the device.
- 4.6. The room must be free of vapors of aggressive substances and conductive dust.

5. Transportation

- 5.1. The packaged device can be transported by all means of transport in covered vehicles and in pressurized aircraft compartments.
- 5.2. Transportation conditions must comply with storage conditions:
 - ambient air temperature from minus 50 °C to plus 50 °C;
 - relative air humidity up to 93% at a temperature of plus 40 °C.
- 5.3. After transportation at negative temperatures or high air humidity, immediately before putting into operation, the device must be kept unpacked for at least 24 hours in a room with normal climatic conditions.
- 5.4. The period of transportation and intermediate storage should not exceed 3 months. It is allowed to increase the period of transportation and intermediate storage of the device during transportation due to the shelf life in stationary conditions.

6. Disposal

- 6.1. All materials used in the device do not pose a danger to human life, health and the environment. After use, they must be disposed of in accordance with current regulations.
- 6.2. Dispose of batteries by handing over used batteries to a trade organization, a service center, an equipment manufacturer or an organization that accepts used batteries and batteries.

7. Manufacturer's warranty

- 7.1. The manufacturer guarantees the compliance of the device with technical requirements, provided that the consumer observes the rules of transportation, storage, installation and operation.
- 7.2. During the warranty period, the replacement of failed devices is carried out by the manufacturer free of charge, provided that the consumer observes the instructions for installation and operation.
- 7.3. Warranty period of operation is 12 months from the date of commissioning, but not more than 24 months from the date of issue.
- 7.4. When sending the device for repair, it must be accompanied by an act describing the malfunctions of the device.
- 7.5. The warranty does not take effect in the following cases:
 - non-compliance with this operating manual;
 - mechanical damage to the device;
 - repair of the device by a person other than the Manufacturer.

- 7.6. The warranty covers only the device. All third party equipment used with the instrument, including batteries, is subject to their own warranties.

8. Information about complaints

- 8.1. Reclamation claims are presented to the supplier in case of detection of defects and malfunctions leading to failure of the device before the warranty period.
- 8.2. In the reclamation report, indicate: the type of device, defects and malfunctions, the conditions under which they were detected, the time from the start of operation of the device.
- 8.3. A copy of the payment document for the device must be attached to the act.

9. Standards compliance

- 9.1. Addressable fire alarm control panel CP-1-(X) «RUBETEK» complies with the European standard EN 54-2 «Fire detection and fire alarm systems. Part 2: Control and indicating equipment » and EN 54-25 «Fire detection and fire alarm systems. Part 25: Components using radio links».

10. Manufacturer information

- 10.1. Name of the manufacturer's organization: DEVICE FACTORY L.L.C
- 10.2. Legal address: 302020, Ippodromny ln 9/24, Orel, Russian Federation
- 10.3. Phone: +7 (4862) 51-10-91
- 10.4. Email: info@zavodpriborov.com

