



## AUTOMATIC EXTINGUISHING CONTROL PANEL IGNIS 2500

### Destiny

The IGNIS 2500 automatic extinguishing control panel is designed for fire detection and control of fixed extinguishing devices containing a gaseous, liquid or aerosol extinguishing agent and for monitoring the automatic extinguishing process.

IGNIS 2500 works with conventional 40 series fire detectors and specialized buttons PU-61 and PW-61, enabling manual start and stop of the extinguishing process, as well as with SE-1 and SW-1 acoustic and optical information signaling devices.

The control panel is offered in two extinguishing versions - one-zone and two-zone. It can also work in a multi-zone set consisting of several control panels and a common extinguishing agent resource.

### Functionality

After detecting a fire, the IGNIS 2500 control panel can perform:

- control of warning signaling with the possibility of programming the evacuation time,
- programming the delay time for air-tight sealing of the room after releasing the extinguishing agent,
- control of technological devices,
- control of fire automation devices (partitions, doors, windows, etc.),
- control of fixed extinguishing devices via the outputs (with programmable duration of current pulses), used to activate the cylinder solenoid valve in the case of a gas extinguishing agent or a water valve for water devices,
- sending alarm signals to the fire monitoring system or to the cooperating fire alarm control panel in the facility.

The automatic fire extinguishing process is initiated by:

- simultaneous actuation of detectors on two detection lines, working in coincidence, with the option of programming initial detector reset,
- pressing PU-61 button (START EXTINGUISHING),
- giving an external control signal to the input of the initiation line.

Activation of detectors on one detection line only will be signaled by the control panel as a fire alarm without starting the extinguishing process.

The automatic fire extinguishing process takes place in two stages:

- WARNING stage - intended for the evacuation of people from the extinguishing zone. Then, acoustic and optical signaling devices will be activated for the programmed time; during this time, you can block the extinguishing process by pressing the EXTINGUISHING BLOCKADE button (in the control panel or an external button) or use the PW-61 button (STOP EXTINGUISHING) connected to the control panel (temporary blockade),
- EXTINGUISHING stage - intended for fire extinguishing as a result of transmitting control signals from the control panel to the device initiating the outflow of gas or other extinguishing agent.

### Input and output circuits

The IGNIS 2500 control panel, in its basic version, is equipped with the following programmable inputs and outputs (for each extinguishing zone), located on the MSG-25 extinguishing control module:

- 6 universal potential-free relay outputs, load capacity 1 A / 30 V, with the connected circuit continuity monitoring system,
- 6 monitoring line inputs, used to supervise devices connected to the control panel by analyzing the monitoring line status,
- 2 potential outputs with a capacity of 2 A / 24 V each, used to control the solenoid valves, with the possibility of reprogramming the operating mode of the outputs to the inputs of the monitoring lines,
- 2 potential outputs with a capacity of 0.7 A / 24 V each, used to control devices such as: solenoid valves (ADDITIONAL), fire dampers, alarm signaling devices, fans, etc., with the possibility of reprogramming the operating mode of the outputs to control line inputs,
- 6 conventional detection lines with the possibility of reprogramming the line operation mode into potential outputs of 0.7 A / 24 V or monitoring line inputs.

The two-zone control panel is equipped with two MSG-25 modules.

It can be additionally equip (after installing the MGR-64 transmission bus in it) with one or two monitoring and control modules (optional):

- MKS-60 - 2 potential lines with a capacity of 0.5 A / 24 V each, 2 relay outputs, potential-free, with a load capacity of 1 A / 24 V;

- MWS-60 - 4 potential outputs with a capacity of 0.5 A / 24 V each;
- MPK-60 - 4 potential-free relay outputs with a load capacity of 1 A / 24 V.

Each IGNIS 2500 control panel can be equipped with an optional MKA-25 transmission module, enabling direct operation of the extinguishing control panel in the POLON 6000 fire alarm control panel detection line / loop (as an addressable element). This allows the automatic fire extinguishing system to be integrated with the general fire detection system in the facility.

The configuration of the control panel and the reading of the event memory is performed via the USB port. It remembers over 1000 last events that were signaled by it and operations related to its operation.

## Cooperating devices

Apart from the fire detectors, the following devices can cooperate with the control panel:

- buttons PU-61 (START EXTINGUISHING), enabling the manual start of the extinguishing process by hitting the glass and pressing the button; the buttons have a yellow casing;
- buttons PW-61 (STOP EXTINGUISHING) - intended to interrupt the automatic extinguishing program; the buttons have a blue housing color;
- SW-1 and SE-1 optical-acoustic information signaling devices, warning people in the room about automatic extinguishing and about the necessity to leave the room; they are installed inside or outside the room;
- warning acoustic signaling devices, type SAW-6101/6106 or other, warning persons about the imminent automatic extinguishing; they are installed inside or outside the extinguishing zone.

The set of devices is complemented by plates with instructions:

- warning - placed inside and outside the extinguishing zone.
- EXTINGUISHING START button (PU-61) - placed near to door of the extinguishing zone.
- EXTINGUISHING STOP button - placed near to door of the extinguishing zone.

If necessary, additional buttons can be used: PD-61 (START EXTENSION) and PB-61 (EXTINGUISHING BLOCKADE).

## Building

The control panel has a housing suitable for wall mounting. Its front consists of a door with signaling and handling elements, an LCD display and a lock with a key that enables the door to be opened. At the rear of the housing there are cable glands for entering installation cables.

## Technical data

Supply voltage:

- basic mains 230V + 10% - 15% / 50 Hz
- backup batteries 2 pcs. 12 V - 18 Ah

- Current consumption from batteries

in quiescent mode (basic version):

- one zone extinguishing 80 mA
- two zones extinguishing 130 mA

Working time with power supply from the backup

sources power 72 h

Output current power supply 3 to 4.2 A / 24 V

Max number of inputs / outputs for a one-zone control panel:

- max number of detection lines 6
- max number of control lines 16
- maximum number of supervised outputs potential 10
- number of exits relay 6

Detection lines resistance 2 x 120 Ω

Detection line terminating resistor 5,6 kΩ

Admissible quiescent current

detectors in the detection line max 2 mA

Trigger control impulse 2 A / 24 V

Working temperature range -5°C up to +40°C

Ingress Protection IP30

Weight (exclude batteries) < 8kg

Dimensions 400 x 403 x 184 mm

Compatibility with standards:

PN-EN 12094-1, PN-EN 54-2, PN-EN 54-4

## Caution

The IGNIS 2500 control panel equipment does not include the backup power supply batteries - they must be ordered separately.

The product has been issued by CNBOP-PIB, notified body No. 1438, a certificate of constancy of performance confirming the possession of technical characteristics / parameters required by the standards PN-EN 12094-1: 2006, PN-EN 54-2: 2002 + A1: 2006, PN-EN 54-4: 2001 + A1: 2002 + A2: 2007.

Product has a certificate of approval issued by CNBOP-PIB.

The manufacturer has issued a declaration of performance for the product.