

IGNIS 1080 FIRE ALARM CONTROL PANEL

Overview

The conventional type IGNIS 1080 microprocessor based fire alarm control panel is designed for detecting and signalisation of a fire after receiving information from the interoperating fire detectors and manual fire alarm call points. It enables an initiation of additional signal transmitting equipment as well as forwarding that signal to the fire alarm monitoring system (e.g. to the Fire Department). This product - made using the SMD (Surface Mount Device) technology - is equipped with extensively developed diagnostic and self-test unit and guarantees long and reliable operation.

The IGNIS 1080 control panel is designated to protect small and midsize premises, e.g. warehouses, shops as well as small offices, etc., against fire.

The following elements can be installed in detector lines: a/ fire detectors - 40 (or 30) series models:

- DUR optical smoke detectors,
- DOR optical smoke detectors,
- TUP fixed temperature/rate-of-rise heat detectors,
- DOT multi-sensor detectors,
- TOP multi-sensor detectors,
- PUO flame detectors (UV),
- intrinsically safe (IS) detectors (pursuant to the manufacturer's instructions),
- DOP smoke beam detectors,

b/ manual fire call points:

- indoors ROP-63,
- outdoors ROP-63H.

The control panel meets the requirements of the PN-EN 54-2 European standard.

Characteristic features

- 8 detector lines (zones) with the capability of being con-nected to any line of up to 32 fire detectors or one (1) smoke linear detector or up to 10 manual call points;
- a line to outdoor signalling devices;
- 4 control lines for monitoring additionally connected out-door devices;
- the RS 232 series interface enables forwarding of the occurrences saved in the control panel's memory to a PC;
- 2 general alarm relay outputs with a possibility of activation delay setting;
- general fault/damage relay output;

- relay output from each detector line to control external devices, with a possibility of programming operation activation pursuant to alarm criterion from one or any number of zones;
- output to the external device power supply;
- mains power supply with automatic charging of a standby power supply battery;
- internal secondary battery for a standby 72 hour power supply;
- continuous battery testing with automatic switch-off and signalisation of full battery discharge;
- real-time clock;
- memory of 512 occurrences;
- fire alarm counter for 9,999 records;
- possibility of programming different alarm variants:
- single-stage,
- double-stage,
- with revision of the first signal from the detector,
- with time-zone interdependence,
- programming of the control panel operation in the following modes: personnel present/personnel absent;
- continuous monitoring of detecting, signalling and controlling lines of break, short-circuit and grounding;
- possibility to disable the outputs to the monitoring and to sounders;
- detector lines switching off;
- testing of signalling elements and detectors in detector lines;
- three levels of access to the control panel service elements, one of them is the use of a special key;
- general FIRE alarm with indication of the fire origin zone (line);
- general FAULT signal with indication of the damaged detector line and a possibility of identification of each fault: system, power supply, signalling devices, additional external equipment, grounding;
- clear and concise descriptions and functional service elements:
- small dimensions (with internal batteries to preserve power supply):
- aesthetic cabinet in pastel colour.

Design

The IGNIS 1080 fire alarm control panel - is in a shape of a cabinet, which can be fastened to the wall. The front of the cabinet has a door with signalling and regulating devices, an LCD display, and a lock with a key to select the second access level to reach additional functions of the control panel. Two screws need to be undone to open the door to the cabinet. At the back of the cabinet, there are conduits for wire routing. On the left side, there is an occurrences recording RS 232 interface with a concealing conduit plug.

IMPORTANT

The reserve batteries are not parts of the standard equipment of the control panel and they have to be ordered separately.

The exact information for installers and supervising personnel of the IGNIS 1080 can be found in the technical documentation and the User Manual, which are included in the package with the ordered unit.

Technical specifications

Operating voltage	
- essential: mains	230 V + 10 % - 15 %/50 Hz
- reserve: secondary battery 2 x 12 \	/ 6.5 - 7 Ah
Power current consumption from reserve batteries	
during operation	90 mA
Number of detector lines	8
Number of lines for signalling device	es 1
Number of controlling lines	4
Resistance of detector line	max 2 x 120 Ω
Insulation resistance of detector line	e ≥ 100 kΩ
End of monitoring line resistor	$5.6 \text{ k}\Omega \pm 5 \% 0.5 \text{ W}$
Allowable total operation current of detectors	
in a detector line	max 2 mA
Signalling line load current	0.14 A/24 V
Signalling line load resistance	from 200 Ω to 10 k Ω
End of controlling line resistor	10 kΩ ± 5 %
Alarm transmission delay time	from 0 to 10 min
Relay outputs (changeover contacts):
- 2 nd stage main alarm	2
- main fault	1
- 1st stage alarm in zones	8
Output relay load current	1 A/30 V
External device power supply outpu	t load 0.6 A/24 V
Operation temperature range	from -5 °C up to +40 °C
Ingress protection	IP 30
Mass (without secondary batteries)	< 6 kg
Dimensions	314 x 368 x 106 mm