IGNIS 1240 FIRE ALARM CONTROL PANEL

Overview

The conventional type IGNIS 1240 microprocessor based fire alarm control panel is designed for detecting and signalling a fire hazard after receiving information from interoperating detectors and manual fire call points. It enables connection of additional signal transmitting devices as well as forwarding the signal to the fire alarm monitoring system (e.g. to the Fire Department). This product - made using the SMD technology - is equipped with extensively developed diagnostics and self-testing units, and guarantees long and unfailing operation of the fire detection system.
The IGNIS 1240 is designated to protect mid-size buildings, e.g. warehouses, stores, shops, offices, etc., against fire.

The following elements can be assembled in the detection line:
a/ fire detectors of the 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:
- indoor type -ROP-63,
- outdoor type - ROP-63H.

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

Characteristic features

- 16 or 24 detector lines (zones) with a possibility to connect to any line up to 32 fire detectors or one (1) smoke detector or 10 manual call points;
- 2 or 3 lines to outdoor signalling devices;
- 2 or 3 supervising lines for additionally connected external devices;
- the RS 232 series interface that enables forwarding of occurrences saved in the control panel's memory to a PC;
- 1 or 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 an alarm criterion from one or any number of zones;
- output to power supply of external devices connected;
- 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 signalization of full battery discharge;
- real-time clock;
- memory of 512 occurrences;
- fire alarm counter of 9,999 records;
- possibility to program different alarm variants:
  - single-state,
  - 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 block 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 1240 fire alarm control panel - is in a shape of a cabinet, which can be fastened to the wall. The cabinet has a door, on which there are 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 need to be ordered sepa-rately.

The exact information for installers and supervising personnel of the IGNIS 1240 may be found in the technical documentation and the User Manual, which are included in the package with the ordered unit.

Technical specifications

Operation voltage:	
- mains	230 V + 10 % - 15 %/50 Hz
- reserve: batteries 2 x 12 V	17 Ah
Consumption current from secondary battery in quiescent mode	170/228 mA
Number of detector lines	16 or 24
Number of lines for signalling devices	2 or 3
Number of controlling lines	2 or 3
Resistance of detector line	max 2 x 120 Ω
Isolation resistance of the detector line	≥ 100 kΩ
End of monitoring line resistor	5.6 kΩ ± 5 % 0.5 W
Allowable total quiescent current of the fire detectors in detector line	max 2 mA
Signalling line load current	0.14 A/24 V
Signalling line load resistance	from 200 Ω to 10 kΩ
End of controlling line resistor	10 kΩ ± 5 %
Number of output relays – change-over contacts:	
- 2nd stage main alarm	1 or 2
- main fault	1
- 1st stage alarm in zones	16 or 24
Alarm transmission delay time	from 0 to 10 min
Relay output load current	1 A/30 V
External device power supply output load	0.8 A/24 V
Operation temperature range	from -5 °C up to +40 °C
Ingress protection	IP 30
Mass (without secondary battery)	< 11 kg
Dimensions	392 x 482 x 190 mm