IGNIS 2040
FIRE ALARM CONTROL PANEL

Purpose

The IGNIS 2040 microprocessor based fire detection and alarm control panel is designed for fire detection and fire danger signalling after receipt of a fire signal from interoperating fire detectors and manual call points.
It enables actuation of additional signalling devices and signal transmission to a fire monitoring system. Executed in the Surface Mount Technology, the panel is equipped with expanded diagnostics and self-monitoring circuits that guarantee long-term and unfailing early fire warning system operation.
The control panel is dedicated for fire protection of small premises: warehouses, stores, small offices, remote telecommunication objects (containers), etc.
The following elements can be installed in the control panel detection lines:
a/ 40 and 30 model range fire detectors:
• DUR type optical smoke detectors,
• DOR type optical smoke detectors,
• TUP type fixed temperature/rate-of-rise detectors,
• DOT type optical and temperature detectors,
• TOP type temperature and flame detectors,
• PUO type flame (ultraviolet) detectors,
• intrinsically safe detectors (pursuant to manufacturer manual),
• DOP beam smoke detectors
b/ manual fire call points (push buttons):
• ROP-63 - for indoor use,
• ROP-63H - for outdoor use.

Main features

• 4 or 6 detection lines/zones (it is possible to use 2 alarm lines as detection lines) with a possibility to install in each line up to 32 fire detectors or one beam smoke detector, or up to 10 manual fire call points;
• 2 lines to external signalling devices (that can be used as 2 detection lines);
• relay outputs from each detection line for external devices control (up to 6 pcs);
• 1 general alarm relay output;
• 1 general fault relay output;
• 1 USB port for a PC connection;
• 1 output for external devices 24 V power supply;
• mains power supply unit with automatic reserve batteries charging circuit;
• internal battery panel for reserve power supply for 72 h (from 3,2 Ah to 7 Ah);
• permanent battery monitoring with automatic switch off and signalling in the case of discharging;
• real time clock;
• events memory (up to 999 events);
• possibility to program each line alarming as:
- one-stage or two stage alarm;
- one-stage alarm with preliminary reset;
- one-stage alarm with zone-time coincidence;
- monitoring outputs delay time programming;
- programming of the control panel operation mode: delays active/disabled;
- permanent monitoring of proper functioning of detection lines and signalling line as to break, short circuit and earth fault;
- possibility to disable outputs to monitoring and acoustic signalling devices;
- detection line disconnection possibility;
- possibility to test signalling elements and detectors installed in detection lines;
- four levels of access to the control panel handling elements using access codes being typed on the control panel keypad;
- comprehensible descriptions and functional servicing elements;
- FIRE general signalling with indication of the zone (line) where a fire has occurred;
- FAULT general signalling with detailed readout on the LCD panel;
- small dimensions (with an internal reserve power supply battery).

Control panel design

The control panel cabinet is designed in the form of a metal cuboid cabinet for wall mounting. All handling and signalling elements as well as a liquid crystal display are located on the cabinet door (front panel of the unit).
Cable seal glands for wire introduction and a USB port are accessible after the control panel casing removal.

NOTE

Reserve power supply batteries are not included in the standard furnishing of the control panel and should be ordered separately.
Detailed information intended for the IGNIS 2040 control panel installers and maintenance technicians is provided in the Operation and Maintenance Documentation (DTR). Basic information necessary for the control panel attending personnel is contained in the operation manual delivered together with the panel.

Specification

Power supply	
- basic	230 V + 10 % - 15 %/50 Hz
- reserve	12 V batteries of 3.2 Ah to 7 Ah capacity
Battery power consumption:	
- in quiescent mode	≤ 69 mA
Number of detection lines	4 to 6
Number of lines to signalling devices	up to 2
Detection line resistance	max. 2 x 100 Ω
Detection line insulation resistance	100 Ω
Detection line end-of-line resistor.	5.6 kΩ ±5 %
Permissible quiescent current of detectors in detection line	max 2 mA
Signalling devices line current	180 mA / 24 V
Permissible signalling devices line resistance	10 % of signalling devices resistance, not more than 100 Ω
Relay outputs	
- general fault	1 A / 30 V NC/NO – 1 pc
- fire alarm	1 A / 30 V NC/NO - 1 pc
- programmable relays	1 A / 30 V NC/NO - 6 pcs.
Alarm transmission delay time	up to 10 min.
External devices power supply output load	400 mA / 24 V
Operation temperature range	from -5 °C to +40 °C
Ingress protection	IP 30
Mass (without batteries)	< 4 kg
Dimensions	312 x 337 x 81 mm