



EKS-4001 INPUT/OUTPUT DEVICE

Overview

The EKS-4001 input/output devices are designed to react to a signal given off by the control panel to activate the alarm and fire-protection devices, such as: signalling devices, fire dampers, and fire-protection doors etc., using relay contacts. They enable control over the efficiency and proper activation of the controlled unit. The EKS-4001 devices have an additional input designated to supervise devices or installations not related to control operations.

The EKS-4001 input/output devices operate only in lines/loops of the POLON 4000 system addressable fire alarm control panels.

Principles of operation

Switching-on the relay in the EKS-4001 takes place at a command from the control panel and is indicated by flashing of its red colour LED diode. Reset of an activated alarm from the control panel returns the relay contacts to their previous position. It is possible to block switching the relay on in substantiated cases as well as a programmed time delay in the operation of the EKS-4001 devices. The EKS-4001 electronic module controls two independent NC or NO (per choice) inputs of potential-free contacts of external units, connected to input/output devices, the switching of which is signalled by the control panel as a technical alarm. After selecting a desired activation variant the EKS-4001 device's relay operates as a deletion relay. The EKS-4001 device has expanded software, enabling its flexible usage in various applications.

The EKS-4001 device is equipped with internal short-circuit isolators.

Coding of the device address is done automatically from the control panel – the address code is saved in the non-volatile memory of the EKS.

Design and installation

The EKS-4001 input/output device is an interchangeable module with two angle connectors, which is installed in single, dual or quadruple appropriate casings. Casings guarantee a high grade of ingress protection, enabling installation under difficult conditions or in outdoor installations. The casings have appropriate choke inputs, for separate detection and control line wiring.

Technical specifications

| | |
|---|-----------------------------------|
| Operating voltage | 16.5 ÷ 24.6 V |
| Current consumption in stand-by mode | < 165 µA |
| Load capacity of relay contacts | 2 A/30 V, NO or NC |
| Control line current | max 0.6 mA |
| Delay in relay operation | 2 s, 30 s, 60 s, 90 s |
| Time, after which operation of controlled device is checked | not determined, 40 s, 70 s, 130 s |
| Number of monitoring inputs | 2 |
| Activation of monitoring input | potential free NO or NC contact |
| Cable inlets: | |
| - detector line wires | 2 gland seals PG7 |
| - monitoring or control wires | 1 gland seal PG9 per 1 EKS |
| Max. number of elements collaborating with control panel: | |
| - POLON 4100 | 40 |
| - POLON 4200 | 50 |
| - POLON 4900 | 250 |
| - POLON 4500 | 250 |
| Operating temperature range | from -25 °C up to +55 °C |
| Ingress protection | IP 65 |
| Dimensions: | |
| - module without casing | 101 x 52 x 19 mm |
| - case 1xEKS | 125 x 96 x 75 mm |
| - case 2xEKS | 125 x 168 x 75 mm |
| - case 4xEKS | 175 x 168 x 75 mm |
| Mass: | |
| - module without casing | 0.1 kg |
| - case 1xEKS | 0.3 kg |
| - case 2xEKS | 0.4 kg |
| - case 4xEKS | 0.6 kg |