



## EKS-4001W INPUT/OUTPUT DEVICE

### Overview

The EKS-4001W 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: signaling 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-4001W devices have an additional input designated to supervise devices or installations not related to control operations. The EKS-4001W input/output devices operate only in lines/loops of the POLON 4000 system addressable fire alarm control panels.

### Principle of operation

Switching-on the relay in the EKS-4001W takes place at a command from the control panel and is indicated by flashing of its red colour LED diode (inside the housing). 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-4001W devices. The operation method of the element can be programmed and is based on the following settings:

- Monitoring inputs configuration (high voltage, low voltage),
- Monitoring of the continuity of the wire connected to the relay output (ON, OFF),
- Low voltage monitoring inputs operation method (NC, NO),
- High voltage monitoring inputs operation method (voltage present – quiescent mode, lack of voltage – active)

Change on the input is indicated by the panel as a technical alarm

- Relay activation delay time,
- Delay time for monitoring input.

The EKS-4001W 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.

### Desing

The EKS-4001W is a printed circuit board with connectors inside a plastic case. The case in each corner has a hole to install it on the wall. The case provides a very high fire-resistance level which enables to use the device in hard environmental conditions or outdoors. It is equipped with separate cable glands for detection line, monitoring input line and control output line.

### Technical specifications

Operating voltage	16.5 ÷ 24.6 V
Current consumption in stand-by mode	< 250 µA
Load capacity of relay contacts NO/NC	max 2 A/250 V AC/62,5 VA
Controlled device power supply voltage	6 ÷ 220 V DC, 230 V AC
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
Control line supervision current value	< 170 µA (6 ÷ 220 V DC) < 330 µA (230 V AC)
Number of monitoring inputs	2
Activation of monitoring input potential	free NO or NC contact contact under voltage
Cable inlets:	
- detection line, low voltage	cable gland M12
- control wires, high voltage	cable gland M16
Operating temperature range	from -25 °C up to +85 °C
Ingress protection	IP 66
Dimensions	max 180 x 202 x 74 mm
Weight	< 0,5 kg