



TUN-6046 ADDRESSABLE MULTI-SENSOR DETECTOR

Overview

Analogue universal heat detector TUN-6046 is designed for detection fire factor in any location where at the beginning of fire rise of temperature can occur. The detector can be programmed for the control panel. Depending from chosen temperature class detector can operate as fixed, rate-of-rise and fixed/rate-of-rise heat detector. There is possibility to program one of the following temperature class according to PN-EN 54-5: A1, A2, B, A2S, BS, A1R, A2R or BR.

TUN-6046 detector is dedicated to operation on addressable detection loops of POLON 4000 and POLON 6000 systems fire alarm control panels.

Principle of operation

The universal heat detector TUN-6046 respond to rise of temperature that occurs in case of fire.

When the growth of temperature proceed slowly the detector operates as fixed heat detector and gives fire alarm when certain temperature level is exceeded (depending from the temperature class). When the growth of temperature is rapid, the detector operates as rate-of-rise detector and gives the fire alarm much sooner. The detector can be programmed as fixed heat detector only (class A2S or BS).

Growth of temperature in the vicinity of detector are analyzed by the detector's microprocessor and send to the control panel.

The microprocessor and the detector's software guarantee fast analysis of occurring phenomena in detector's vicinity and elimination of possible false alarms.

Two-wire, addressable fire detection loop is used for the communication between the detector and the control panel. Unique and digital communication protocol enables to exchange information like temperature level with its trend between detector and control panel. The detector can also send to the control panel current value of the temperature.

The microprocessor that control the detector supervises the operation of basic detector's circuits and sends appropriate information to the panel in case of fault.

The detector is equipped with internal short circuit insulator which in case of short circuit insulates the damaged part of the loop from the functional.

Fire alarm condition is indicated with red blinking of two LED

diodes located on the two opposite sides of the detector. The indicator enables personnel to fast location of alarming detector it is helpful during periodical maintenance. When the detector in not well seen or it is installed in place without easy access an external optical indicator WZ-31 can be connected to the detector and enable the detector's identification.

Any fault, technical alarm and activation of internal short circuit insulator is indicated by the yellow blinks of LED indicators.

Addressing of the detector can be made automatically by the control panel – the address is stored in detector's non-volatile memory.

The detector is installed in G-40 base.

Technical specifications

Operation voltage	16,5 ÷ 24,6 V
Max. quiescent current	< 150 µA
Temperature classes according to PN-EN 54-5:	A1, A2, B, A2S, BS, A1R, A2R, BR
Programming detector address	from the control panel level
Operation temperature range:	
- class A1, A2, A2S, A1R, A2R	from -25 °C to +50 °C
- class B, BS, BR	from -25 °C to +65 °C
Static operating temperature:	
- class A1, A2	from 54°C to 65 °C
- class B	from 69 °C to 85 °C
Dimensions (with base)	ø 115 x 61 mm
Mass	0.2 kg