

PHOTOELECTRIC SMOKE DETECTORS

PRODUCT FACE



PRODUCT INTRODUCTION

This product named Photoelectric smoke detector (hereinafter called detector) detects the smoke by a couple of infrared diodes. The principle of detecting is granule in the smoke can reflect infrared light. Infrared diodes are placed in the special chamber. The chamber can shield external light, but doesn't affect the smoke into it. While there is no smoke, the diode can receive very weak infrared light. When the smoke entering the chamber, diode can receive more and more light, and the detector can give out alarm signal when the smoke attains the certain density. In order to reduce the interference and lower power consumption, the emitting circuit adopts the pulse signal. The product in accordance with the networking approach is divided into 2-wire and 4-wire detectors.

TECHNICAL SPECIFICATION

PRODUCT CATEGORY	2wire	4wire
OPERATING VOLTAGE	DC 9V~35V	
STANDBY CURRENT	55uA	2mA(relay N.O.) 12mA(relay N.C.)
ALARM CURRENT	40mA@DC12V 83mA@DC 24V	15mA(relay N.O.) 3mA(relay N.C.)
ALARM INDICATION	RED LED ON	
TEMPERATURE RANGE	-10 °C ~ +50 °C	
HUMIDITY	0%~95 % RH(NO CONDENSATION)	
ALARM OUTPUT	REMOTE LED	RELAY OUTPUT
CONTACT RATING	N/A	0.5A@DC28V
SENSITIVITY	2-4% obs/ft	
STANDARD	EN54-7/UL268	
DIMENSION	100 mm diameter*46mm deep	

CONNECTION DESCRIPTION

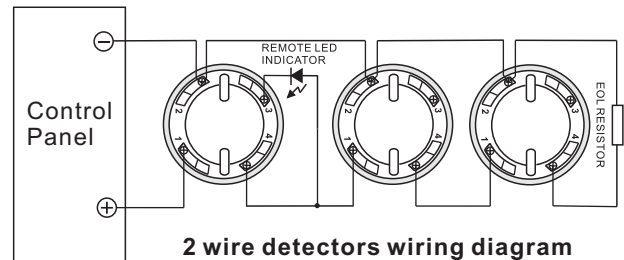
1. 2 wire smoke detectors: base terminals "1" and "2" for DC power input, non-polarized. "1" for DC power positive pole or cathode input, "4" for DC power positive pole or cathode output. "3" for remote indicator cathode. When remote indicator is used "1" in must be connected to the positive line in.

2. 4 wire smoke detectors: base terminals "1" and "2" for DC power input, non-polarized. "3" for relay output com, "4" for relay output N.C. or N.O.

PRODUCT FEATURE

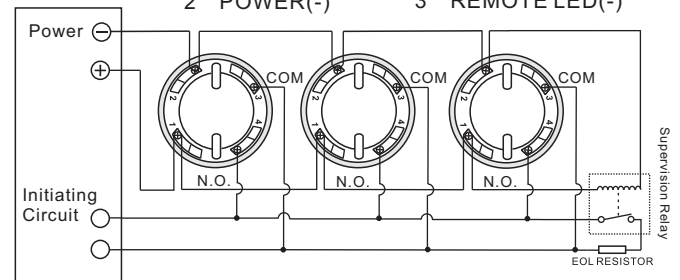
- 9-35VDC WIDE VOLTAGE OPERATING RANGE
- POWER SUPPLY NON-POLARIZED INPUT
- MCU PROCESSING ADOPTED, RESIST FALSE ALARM
- AUTO RESET / POWER OFF RESET OPTIONAL
- ALARM RELAY OUTPUT NC/NO OPTIONAL
- 360 DEGREES VISUAL ALARM LED
- SMT DESIGN, HIGH STABILITY
- REMOTE LED INDICATOR OUTPUT(2-WIRE)
- METAL SHIELD, ANTI-ELECTROMAGNETIC INTERFERENCE

WIRING DIAGRAM



2 wire detectors wiring diagram

- 1 POWER(+)IN
- 2 POWER(-)
- 3 REMOTE LED(-)
- 4 POWER(+)OUT



4 wire detectors wiring diagram

- 1 ANODE INPUT
- 2 CATHODE INPUT
- 3 RELAY OUTPUT(COM)
- 4 RELAY OUTPUT(N.O)

NOTICE

1. The detector can not be installed under worse environment. e.g. coldest, hottest, dusty. Do not move away the dustproof cover until use the detector.
2. Keep the distance between the detector and walls more than 0.5m. Make sure there is no block within 0.5m from the detector.
3. Make sure the distance between detectors be less than 15m. And the distance between the detector and corners must be less than half of that between detectors.
4. Horizontally install the detector. If have to be installed slantingly. Please keep the angle less than 45 degrees.
5. Detector base must be installed solid and wire connections must be reliable.
6. A simulated fire test every 6 months is recommended to test if detectors properly.
7. This detector can reduce accidents happening. But it can not guarantee 100% safe. For safety concern, besides using this detector correctly, please heighten vigilance and build up safe consciousness in daily life.