



Dimensional/Line drawings to go here

AC5267

Optical smoke detector

Features

The AC5267 Optical Smoke Detector has a moulded self-extinguishing white polycarbonate case with wind resistant smoke inlets.

Nickel plated stainless steel wiper contacts connect the detector to the base.

Inside the case a printed circuit board has the optical system mounted on one side and the signal processing electronics on the other. The sensing chamber is a black moulding configured as a labyrinth which prevents penetration of ambient light. The labyrinth has a fine gauze insect-resistant cover. The chamber houses an infrared light emitting diode (LED) and a photo-diode which has an integral visible-light filter as extra protection against ambient light.

Every three seconds the LED emits a burst of collimated light, modulated at 4kHz.

When smoke enters the chamber, a fraction of the collimated light is scattered onto the photo-diode. If the resulting signal from the photo-diode is above a preset threshold, the LED emits two more bursts of light, this time at two-second intervals. If light is scattered onto the photo-diode by both these pulses – due to the presence of smoke – the detector signals an alarm state by switching the alarm latch on, increasing the current drawn from the supply from about 40µA to a maximum of 75mA. This fall in the impedance of the detector is recognised by the control panel as an alarm signal. The alarm current also illuminates the detector integral LED.



Technical Specification

Detector Type	Point smoke detector
Supply Voltage	9-33vDC
Alarm Voltage	6-28vDC
Humidity	0% to 95% relative humidity
Detection principal	Photo- electric detection of light scattered by smoke
Dimension	Detector 100 x 42mm (With base 100 x 50mm)
Base	Requires AC5268 Base

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