DET-C631

Conventional Optical Smoke Detector

Features and Benefits

EN54-7:2000 +A1:2002 +A2:2006 Compliance
LPCB Approved
Wide operating voltage for both Fire & Security Systems
Error free non- polarized zone input termination
Optional Detector Head locking mechanism incorporated
360-degree visual indicator
Removable chamber against dust and small insect
Ancillary remote indicator output
Aesthetically pleasing design

Overview

It is suitable for general smoke detection, particularly effective in detecting large visible smoke particles such as those produced by smouldering wood, paper, PVC or polyurethane foam.

Location of Smoke Detectors should result from an evaluation based upon engineering judgement or field test. Ceiling shape and surfaces, ceiling height, configuration of contents, burning characteristics and ventilation are some of the factors that must be considered by the Engineer when designing a Fire Alarm System.

The smoke detector detects fire by the scattering of infrared beam, which circuits are consisted of a infrared beam emitter and receiver. The emitting and receiving lens are in the optical sensing chamber, screening any interference from outside lights, without preventing the entrance of smoke particles. In a smokeless condition, it only receives very weak infrared light. When smoke particles enter the chamber, the received light signal will increased due to scattering. When the smoke reaches a predetermined density, it will trigger an alarm signal.
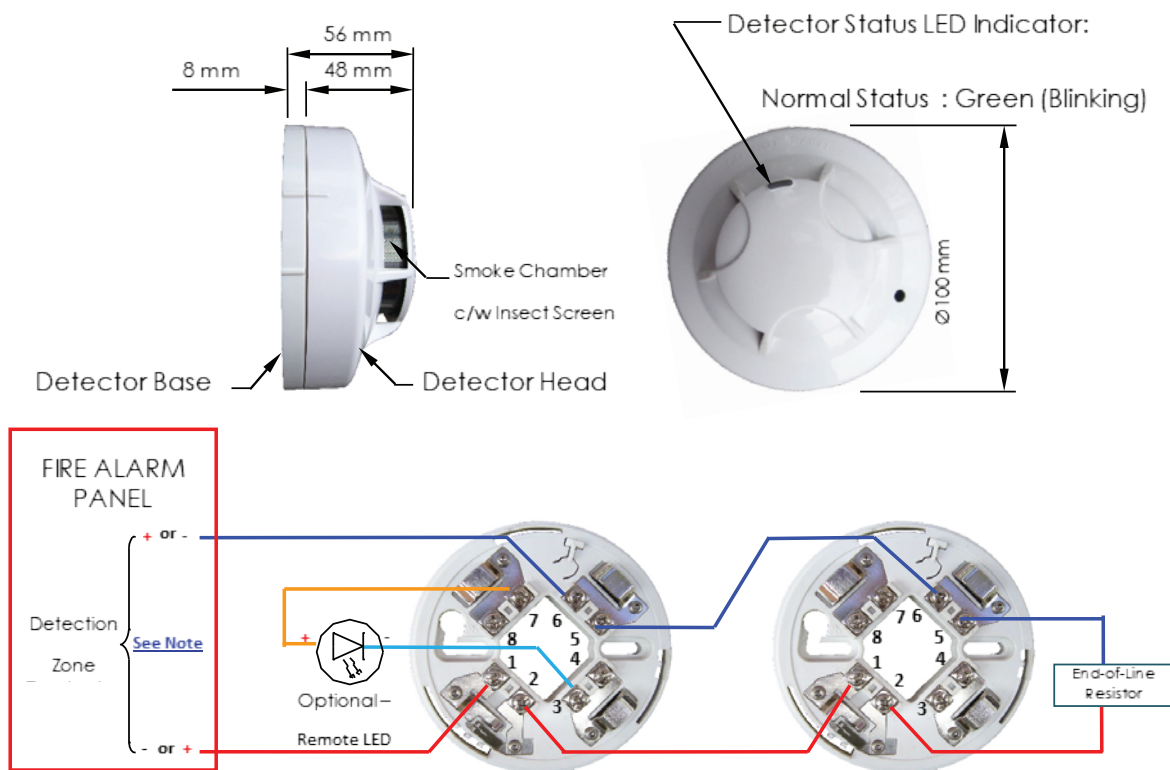
To reduce interference and power consumption, pulsed circuits are used to increase the life of the emitting lens.

Technical Specification

Listed	LPCB / CE
Compliance	EN54-7:2000 +A1:2002 +A2:2006
Power Rating	
Input Voltage	24VDC (Operate: 9.6V to 30V DC)
Current Consumption	Standby 65µA, Alarm: 20mA
Detector	
Sensitivity	As per stipulated standard
Air Velocity	7.6 m/s
Indicator / Current Output	Single LED / 360-degree Visual / 20mA
Material / Colour	ABS Plastic / White Glossy finishing

Dimension / Height	Diameter 99.7 mm / 57 mm
Weight	160g (with Base), 102g (without Base)
Operating Temperature	-10°C to +50°C
Humidity	0 to 95% Relative Humidity, Non condensing

Detector and Wiring Details

Note : Please refers to the Installation manual.