VF5602-0M

Discovery Heat Detector

Standard Features

- Compatible with Elite and Elite RSM control panels
- 5 operating modes
- Fits into addressable 4" bases or 6" E-Z Fit bases
- Addressable sounder alarm base
- Address is set by X-Pert card and stored in base
- User memory
- Alarm flag for fast alarm reporting
- Fixed point or rate of rise function

Note:

Bases and cards are not included with detectors, please order separately.

UL

US Coast Guard

FM

Overview

The VF5602-0M Discovery Heat Detector has a common profile with the ionization and photo smoke detector, but has a low air flow resistance case made of self extinguishing white polycarbonate.

The VF5602-0M Analog Addressable Thermal Sensors are designed to provide the highest effectiveness by utilizing the latest technology. The sensor is designed for operation with the Elite addressable fire alarm control panels.
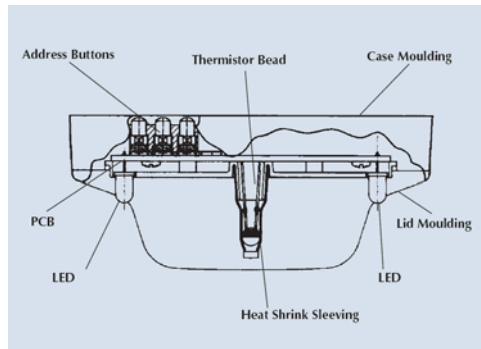
Operation

The VF5602-0M Heat Detector uses a single thermistor to sense the air temperature at the detector position. The thermistor is connected in a resistor network, which produces a voltage output dependent on the temperature. The design of the resistor network, together with processing algorithm in the micro-controller, gives an approximately linear characteristic from 50°F to 176°F. This line-arised signal is further processed, depending on the response mode selected, and converted to an analog output. A detector may be given an "R" or "S" suffix. The "R" suffix indicated that the detector has been shown to have a rate of rise characteristic. Such a detector will still give a rapid response even when starting from an ambient temperature well below its typical application temperature.

This type of detector is therefore suitable for areas such as unheated warehouses in which ambient temperature may be very low for long periods. The "S" suffix indicates that the detector will not respond below its minimum static response temperature even when exposed to high rates of rise of air temperature. This type is therefore suitable for areas such as kitchens and boiler rooms where large, rapid temperature changes are considered normal.

Engineering Specification

The thermal sensor shall be VF5602-0M, where indicated on the plans, with one of the several addressable mounting base options available. The combination sensor head and twist-lock mounting base shall be UL listed and UL Listed as compatible with the Elite addressable fire alarm control panels. The base shall permit free interchange of sensor heads without requiring any additional wiring or additional programming of the head or base. The sensor shall contain an integral LED that shall latch in when the unit goes into alarm.

Technical Specifications

Alarm current: LED Illuminated 3.4mA

Radioactive isotope: Americium 241

Operating voltage: 17-28 VDC

Max. continuous operating temp: 140°F

Min. continuous operating temp: 32°F

Min. Operating temp: -4°F (no condensation/icing)

Storage: -22°F to 176°F

Detector weight: 2.3 oz

Detector with base weight: 3.5 oz

Dimensions: Diameter: 3.94", Height: 1.65", Height in base: 1.96"

Sectional view - Heat Detector

Ordering Codes

Part number	Description
VF5602-0M	Heat Detector
VF5630	4" Mounting Base
VF5633	Isolator Base

Mode	Pre-Alarm (%/fT)	Alarm (° F)	Fixed/ ROR Profile
1	N/A	135°	FT & ROR
2	N/A	150°	FT & ROR
3	N/A	150°	FT
4	N/A	200°	FT & ROR
5	N/A	200°	FT

Heat Detector response modes

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