

2436-01

Brief description

Based on advanced thermistor technology, the heat analogue sensor provides a reliable response to fires in areas where environmental conditions prohibit the use of smoke detection.

The heat analogue sensor is a temperature dependent analogue sensor. It is intended for applications where fluctuations of ambient temperature may be expected for example, over machinery in laundries, or factory locations where industrial processes may cause sharp temperature increases.

Specifications

General information

Designation	Heat analogue sensor
Specification	AS1603 Part 1
Model number	ZP720-3
Part number	1015
Sensitivity	Level 1 58°C fixed temperature Level 2 58°C rate compensated Level 3 75°C rate of rise Level 4 75°C fixed temperature
Mounting	Plugs into surface or semi-recessed base
Area coverage	50m ² , subject to local codes
Wiring	2 core loop or spur
Monitoring	Open and short circuit fault. Sensor removal and device type.
Indication	Alarm LED (red)
Addressing method	7-way Dipswitches in head

Environmental

Application	Indoor use
Temperature range	-10 to +75°C
Operating temperature	58 to +75°C (4 software settings)
Quiescent temperature	-10 to +65°C (75°C setting)
Humidity range	20% to 95% RH (non condensing)
Environmental rating	IP32

Primary supply

Operating voltage	Address line pulsed 20 V (19.5 to 20.5 V). Max line less 4 V
Current (quiescent)	600 µA
Current (alarm)	700 µA

Mechanical details

Material	Moulded ABS
Colour	White
Dimensions (D x H)	106 x 52 mm (excluding base)
Height (from ceiling with base)	ZP7-SB1 surface base – 60 mm ZP7-RB1 recessed based – 38 mm
Weight	85 g (excluding base)

Manufacturer traceability

A barcode label is affixed to each product (see example below). This label reflects, amongst other things, the date of manufacture of the product in the form YYDDD.



These numbers are interpreted as follows:

YY = year of manufacture

DDD = day of manufacture

For example the numbers 07134 would indicate that the product was manufactured on the 134th day of the year 2007, that is 14th May 2007.



Installation instructions

Note: No wiring is required during sensor installation. Refer to base datasheet for line wiring installation. All installation should be in accordance with the requirements of the authority having jurisdiction.

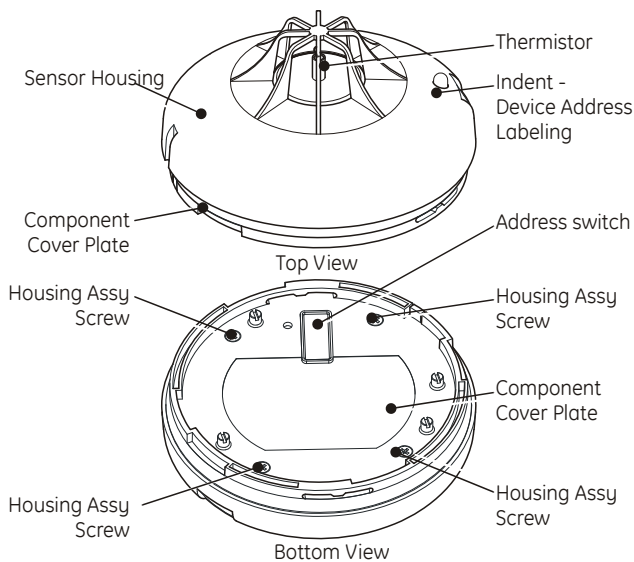
Refer to Figure 1. The sensor attaches to compatible bases with a plug-and-twist action as follows:

1. Align the sensor with the base and turn it slowly until the location lugs and grooves mate, allowing the sensor to slide completely into the base.
2. Rotate the sensor clockwise until it locks. To remove the unit from the base, perform these steps in reverse order.

Note: To prevent unauthorized removal, a plastic breakout tab is provided in the sensor housing. Once the breakout tab is removed the sensor can only be released by use of a special tool.

3. Prior to initial testing remove the yellow plastic dust cover from the sensor and notify the proper authorities that the fire alarm system is undergoing maintenance and will be temporarily out of service.
4. An indent is provided on the sensor exterior for application of Zone number labelling to allow easy zone identification.

Figure 1: Installing the sensor



Setting the address

The heat analogue sensor contains a 7-way dipswitch. The switch is used to set the device address in binary code. The switch may be set to represent any addresses from 1 to 127.

A switch only represents its coded value (i.e. 1st switch = 1, 2nd switch = 2, 4th switch = 8 etc) position. In the OFF position it represents a zero.

To arrive at the address number of a device, add the representative numbers of all switches which are in the ON position: for example 2+4+32=38.

Warnings: This device is intended to be installed in conjunction with, and in applications where, smoke sensors would be likely to give unwanted alarms and should only be used as part of a broad-based life safety system. For further information consult your local fire protection specialist.

Maintenance should be planned in accordance with the requirements of the authority having jurisdiction.