

# TC808E1051 High Temperature Electronic Thermal Sensor

## SPECIFICATION DATA



## FEATURES

- Fixed temperature alarm at 78°C

### Exceptional stability and reliability

- Dual LEDs for 360° visibility
- Sealed against back pressure
- Built-in test switch

### Designed for direct surface or electrical box mounting, optional recess mounting

- Tamper resistant wiring base
- Simple plug-in head
- Optional remote LED annunciation
- Tested and approved to the requirements of EN54 Part 8

## DESCRIPTION

The TC808E1051 High Temperature Electronic Thermal Sensor is an intelligent detection device that provide two-way communication with the Honeywell range of analog addressable fire control panels. All Honeywell panels use a proprietary communication protocol containing both digital and analogue signals which allows each sensor to communicate its individual address, sensor type (e.g. photoelectric, ionization, or thermal), and an analogue value.

The control panel analyses the analogue signal to measure the sensitivity of each sensor and to determine its status: alarm, pre-alarm (needs maintenance) normal, and trouble.

The TC808E thermal sensors are designed to meet the performance requirements of industrial and municipal fire detection systems. The detectors contain a unique dual thermistor sensing circuit which ensures optimum performance and reliability.

The TC808E1051 provides a fixed temperature response at 172°F (78°C) for applications where the average ambient temperature is above 110°F (43°C) or rate of rise detection is not required

The TC808E includes a tamper resistant feature that prevents removal from the base without the use of a tool. The sensor heads are sealed to prevent entry of dust and dirt.

The address for each sensor is set via two direct-dial decade switches on the back of the sensor head. Dual LEDs on the sensors provide 360-degree visual indication. The LEDs pulse whenever the control panel polls the sensor and the LEDs latch on whenever the sensor is in alarm.

Several different mounting bases are available for the TC806E, TC807E and TC808E to accommodate various configurations. If using the mounting base with integral horn, a local audible alarm occurs whenever the sensor is in alarm.

The TC808E1051 meets the requirements of EN-54 Part 8, and has been specifically designed for simple installation and ease of maintenance. A full range of accessories is available, as well as a selection of mounting bases, including a recessed model.

## SPECIFICATIONS

### Construction:

Flame retardant white Noryl plastic

### Dimensions:

2.4" (6cm) H x 4.0" (10.2cm) dia.  
6.0" (15.2cm) diameter when used with flanged base

### Weight:

0.45lb (206g)

### Operating Voltage:

15-32V dc

### Power Consumption:

6.5 mA alarm current with LEDs latched on  
0.3 mA maximum supervisory current

### Temperature Setting:

78°C (172F) - EN54 Part 5 Grade 3

### Environmental Operating Limits:

Temperature:

-10 to +70°C (14 to 158F)

Do not install in locations where normal ambient temperature range extends beyond 0 to 70°C.

Humidity:

10 to 93% rh, non-condensing

### Indicators and Switches:

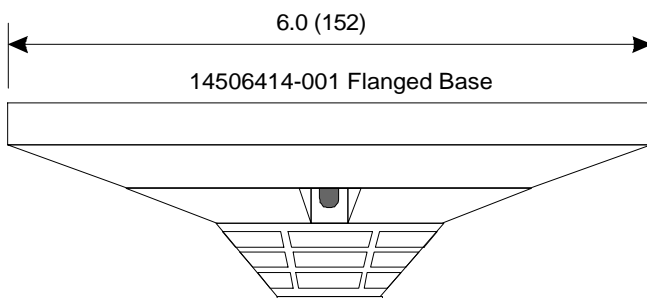
Two LEDs on opposite sides of sensor head for 360° viewing angle. LEDs blink for normal operation and are latched on for alarm condition. As an option, normal blinking can be suppressed for use in a sleeping area. LED Life: LED rated at 40 years

Two decade switches for setting sensor address (01-99)

### Testing:

Built-in magnetic reed switch for testing with magnet

### Dimensions in Inches (Millimeters):



### Mounting:

Surface Mounted on ceiling or wall

### Sensor Placement:

Sensors must be installed in accordance with local codes

### Mounting Bases:

14506414-001:

Mounts on 4 in. square x 1.5 in. deep electrical box or mounts on 3 in. or 4 in. octagonal x 1.5 in. deep electrical box. (for use in the USA)

14506414-007:

Mounts on 50, 60, or 70 mm electrical box (for international use)

14506414-005:

The same as -007 with integral relay to signal external devices

14506414-006:

The same as -007 with a built-in fault isolator

SSDB501BH:

Mounts on 4 in. square x 1-1/2 in. deep electrical box (with integral horn for local audible annunciation; requires external power supply)

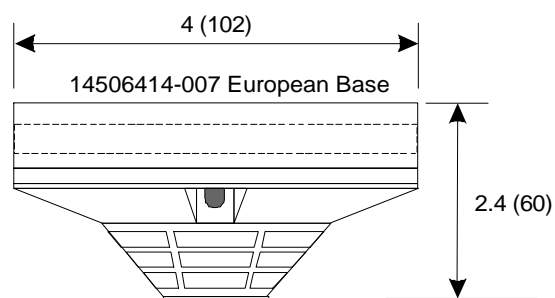
Screw terminals accept up to 12 AWG (3.3 sq mm) wire.

### Accessories:

SSDMOD400R	Field Sensitivity Test Module
SSDMOD45R	Replacement Cord for above
SSDRA400Z	Remote LED Annunciator
SSDRTS451	Remote Test Station
SSDXR5	Detector Removal Tool
SSDXP4	Set of three 1.5m Extension Poles for SSDXR5
SSDRMK400	Recess Mounting Kit
SSDSMK400	Surface Mounting Kit
SSDMO2-04	Test Magnet
SSDAPA451	Remote Piezo Sounder/LED Annunciator
SSDWB1	Weatherproof mounting backbox

### Approvals:

EN-54



**Honeywell**

Comfort from Experience

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