

## Model 885WP-B Weatherproof Heat Detector with Fixed Temperature Alarm

### Specifications

Diameter:	10.2 cm (4")
Height (including base):	4.8 cm (1.8")
Weight (including base):	170g (6.0 ounce)
Operating Temperature Range:	-15°C to 50°C (5°F to 122°F)
IP Rating:	IP67
Sensitivity:	63°C (146°F) Fixed Temperature
Operating Voltage:	8.5 to 30VDC
Standby Current:	≤50µA
Alarm Current:	Min. 2mA @ 3.1VDC Max. 80mA @ 6.5VDC
Latching Alarm:	Reset by momentary power interruption
Max .Air Velocity	20m/s

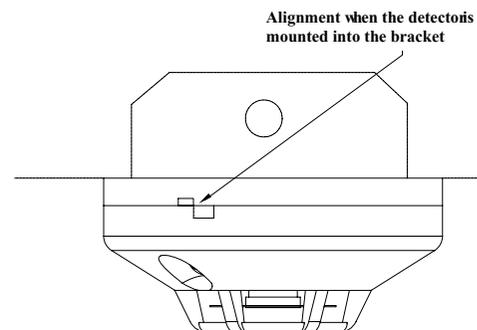
### Before Installing

Please thoroughly read System Sensor manual which provides detailed information on detector spacing, placement, zoning, wiring, and special applications. Copies of this manual are available at no charge from System Sensor.

**NOTICE:** This manual shall be left with the owner/user of this equipment.

**IMPORTANT:** This detector must be tested and maintained regularly in accordance with the requirements of the local standards and regulations. The detector should be cleaned at least once a year.

Figure1. Surface mounting of the 885WP-B weatherproof heat detector into a 50 /60 mm junction box.



### General Description

Model 885WP-B is a 2-wire fixed temperature (63°C) heat detector. This detector is designed to provide open area protection in areas subject to moisture. This detector is sealed against the entry of moisture to a rating of IP67. The LED will latch on when the detector is in alarm.

### Mounting

Each 885WP-B detector is supplied with a mounting bracket that permits the detector to be mounted directly to the ceiling or to a junction box.

### Tamper-resistant Feature

This detector includes a tamper-resistant feature that prevents its removal from the mounting bracket without the use of a key. To make the detector tamper-resistant, remove the tab from the tamper arm on the mounting bracket using a cutting tool. Remove the tamper key from the center of the mounting bracket by twisting it back and forth several times (see **Figure2**). Once the detector is installed, it may be removed from the mounting bracket by inserting the T-shaped end of the key into the slot on the side of the unit and rotating the detector counter-clockwise.

### Wiring Installation Guidelines

This detector provides six wires which are divided into three groups, separately two red, two white and two black wires. Refer to **Figure 3**.

### Terminal Notes:

Red wire: Power / Detector Circuit +ve  
 Black wire: Power / Detector Circuit -ve (the power and the LED uses the same cathode)  
 White wire: Remote LED +ve  
 Wiring Diagram refers to **Figure 4**.

Please refer to insert for the Limitations of Fire Alarm Systems

**Installation**

**NOTE:** All wiring must conform to applicable local codes, ordinances and regulations.

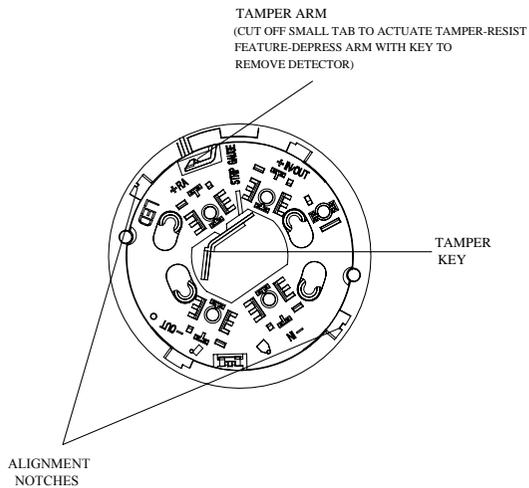
**NOTE:** Verify that all detector bases are installed, that the initiating-device circuits have been tested, and that the wiring is correct.

**WARNING**

Remove power from initiating-device circuits before installing detectors.

1. Place the detector on the mounting base and rotate clockwise until it drops into place.
2. Turn the detector clockwise in the mounting base until it clicks into place.
3. After all detectors have been installed, apply power to the control unit or initiating-device circuits.
4. Test the detector as described in **Testing**.
5. Reset the detector at the system control panel.
6. Notify the proper authorities the system is in operation.

**Figure 2. Module 885WP-B weatherproof Heat Detector Mounting Bracket**



**Testing**

**NOTE:** Before testing, notify the proper authorities that the thermal detector system is undergoing maintenance and will temporarily be out of service. Disable the zone or system undergoing maintenance to prevent unwanted alarms.

Detectors must be tested after installation as well as after each time maintenance is performed.

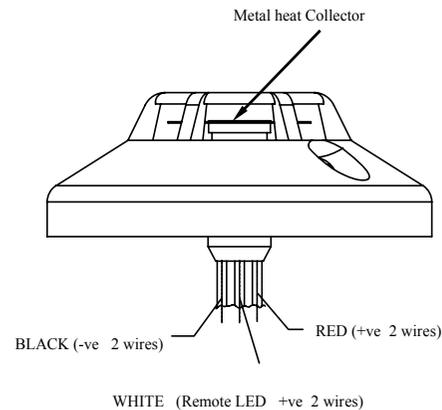
Test the 885WP-B as follows:

To test the 885WP-B you need a hair dryer. From the side of the detector, direct the heat toward the sensor. Hold the heat source about 15 cm away to prevent damage and apply heat to the cover during testing until it alarms.

A detector that fails these tests should first be cleaned as outlined in the **Maintenance** section which follows. If the detector still fails, it should be returned for repair.

Notify the proper authorities the system is back on line.

**Figure 3.**



**Maintenance**

**NOTE:** Before removing the detector, notify the proper authorities that the fire detection system is undergoing maintenance and will temporarily be out of service. Disable the zone or system undergoing maintenance to prevent unwanted alarms.

1. Remove the detector from the mounting base by rotating it counter-clockwise.
2. Vacuum the metal heat collector and surrounding area.
3. Clean the surface of the detector.
4. Reinstall the detector.
5. Test the detector as described in Testing.
6. Notify the proper authorities the system is back in operation.

**Figure 4. Detector Wiring Diagram**

