# Alco
intelligent solutions

**CFS-HD300 SERIES
CONVENTIONAL -
HEAT DETECTOR**

## SPECIFICATIONS

| Height | 2.2˝ (55 mm) installed in Base |
|---|---|
| Diameter | 4.0˝ (103 mm) |
| Weight | 5.5 oz. (155 g) |
| Installation Temperatures | 14°F to 122°F (-10°C to50°C) |
| Operating Humidity Range | 10% to 93% Relative Humidity |
| Operating Voltage Range | 9 to 28VDC Volts Non-polarized |
| Standby Current | 40μA @ 24 VDC |
| Maximum Alarm Current (LED on) | ≤30mA @ 24 VDC |
| Fixed Temperature Rating | 135°F (57°C), A1R |

## INSTALLATION DIAGRAM
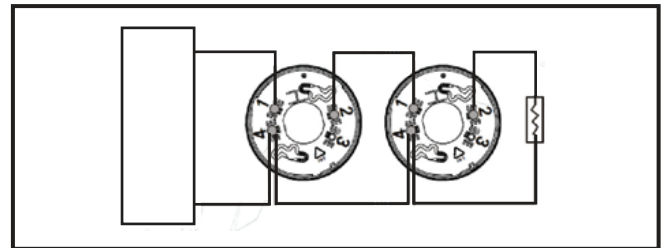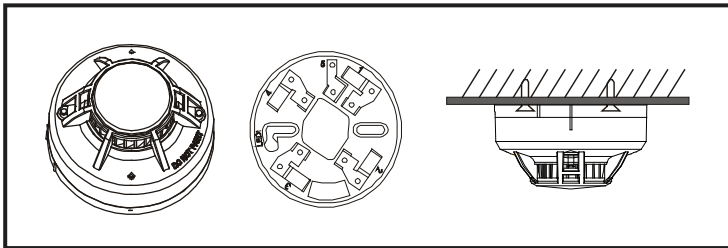


## INSTALLATION

**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
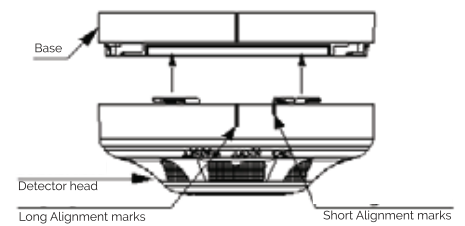
## BEFORE INSTALLING

This detector must be installed in compliance with the control panel installation manual and meet the requirements of the authority having jurisdiction. In addition, The national fire protection association has published codes, standards, and recommended practices for the installation and use of detectors, **NFPA 72.**
Therefore, the installer must be familiar with these requirements, with local codes, and any special requirements of the authority having jurisdiction.



**IMPORTANT**: The detector must be tested and maintained regularly following NFPA 72

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

- Push the sensor into the base while turning it clockwise to secure it in place.
- After all sensors have been installed, apply power to the control unit.
- Test the sensor(s) as described in the **TESTING** section of this manual.
- Notify the proper authorities that the system is in operation.
- Wire the sensor base per the wiring diagram.
- Install the sensor into the sensor base.

**Remove power from initiating-device circuits before installing detectors**

## GENERAL DESCRIPTION

- The device is intelligent sensors that utilize a state-of-the-art thermistor sensing circuit for fast response.
- These sensors are designed to provide open area protection with **50 foot** spacing capability.
- The device is a rate-of-rise temperature sensor with **135°F** fixed temperature alarm.
- The device is a rate-of-rise with fixed temperature alarm thermal detector utilizing a state-of-the-art dual thermistor sensing circuit.
- These detectors are designed to provide open area protection with 50-foot spacing capability, and are to be used with compatible control panels only.
- Two LEDs on each detector light to provide **360°** visibility of the detector indication.

## TAMPER-RESISTANCE

- The device include a tamper-resistant capability that prevents their removal from the bracket without the use of a tool

## TESTING

- Before testing, notify the proper authorities that the system is undergoing maintenance, and will tempo rarely be out of service. Disable the system to prevent unwanted alarms.
- All sensors must be tested after installation and periodically thereafter.
- Testing methods must satisfy the Authority Having Jurisdiction **(AHJ)**.
- Sensors offer maximum performance when tested and maintained in compliance with **NFPA 72.**

### The sensor can be tested in the following ways:

- Direct Heat Method **(Hair dryer of 1000 – 1500 watts)**
  From the side of the detector, direct the heat toward the sensor.
- Hold the heat source about 6 inches **(15cm)** away to prevent damage to the cover during testing.
- The LEDs on the detector should light when the temperature at the detector reaches the alarm set point.
- If the LEDs fail to light, check the power to the detector and the wiring in the detector base.
- Reset the detector at the system control panel.
- Detectors that fail these tests should be cleaned as described under MAINTENANCE and retested. If the detectors still fail these tests they should be returned for repair.

## MAINTENANCE

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

It is recommended that the sensor be removed from its mounting base for easier cleaning and that sensors be cleaned at least once a year. Use a vacuum cleaner to remove dust from the sensing chamber