

Rate-of-rise/Fixed Temperature Heat Detectors

CR/CF Series

Overview

CR/CF Series heat detectors offer fixed temperature or combination rate-of-rise and fixed temperature detection.

RATE-OF-RISE: A temperature increase at the sensor of 15°F (9°C) or more per minute activates the rate-of-rise feature. This closes the contacts in the sensor to transmit the alarm condition to the fire alarm control panel. When the rate-of-rise element alone has been activated, the sensor is self-restoring.

FIXED TEMPERATURE: If the temperature of the center disk rises to the sensor's rated temperature, the fixed temperature element activates. This closes contacts in the sensor and transmits an alarm condition to the fire alarm control panel. The fixed temperature element is non-restorable and, when activated, the detector must be replaced. The need for replacement is indicated when the center disk has fallen free from the detector.

Standard Features

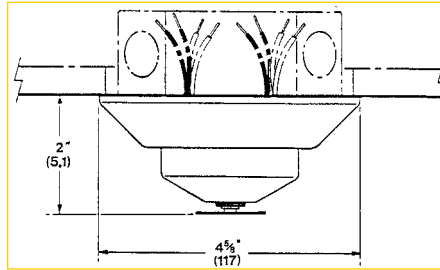
- Double pole — normally open contact
- Low profile
- Aluminum finish
- Mounting flexibility with screw terminals
- Positive alarm indication — for fixed temperature element
- 70 ft. spacing (CR models only)

Application

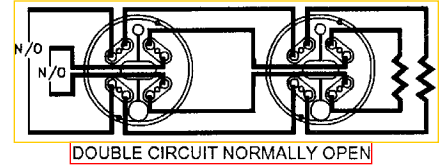
Heat detectors are most suitable for environments where rapid fire development can be expected. When selecting the location on the ceiling for the heat sensor, do not locate it in direct path of hot or cold air flow. Refer to the detector specifications for the recommended maximum spacing. Earlier detector response may be obtained by reducing the spacing between detectors.

Mounting

CR/CF Series heat detectors are supplied with a metal mounting plate. The plate installs directly to a standard North American 3¼ or 4 inch octagon box. Once the mounting plate is fixed, a simple twist will hold the detector in place.



Wiring



Specifications

| Catalog Number | CR135-2 | CR200-2 | CF135-2 | CF200-2 |
|---------------------------------|--|--------------|---|--------------|
| UL Temperature Rating | 135°F (57°C) | 200°F (93°C) | 135°F (57°C) | 200°F (93°C) |
| UL Max Ambient Temp. at Ceiling | 100°F (38°C) | 150°F (66°C) | 100°F (38°C) | 150°F (66°C) |
| Detector Type | Fixed Temperature and Rate-of-Rise Rate-of-rise: 15° F (9° C), self restoring | | Fixed Temperature Only | |
| UL Recommended Coverage* | 4,900 ft. ² (456 m ²) | | 1,600 ft. ² (149 m ²) | |
| UL Recommended Spacing | 70 ft. (21.3 m) | | 40 ft. (12.2 m) | |
| UL Maximum Distance from Wall | 35 ft. (10.5 m) from any wall or projection extending down from the ceiling more than 12 inches (305 mm) | | 20 ft. (6 m) from any wall or projection extending down from the ceiling more than 12 inches (305 mm) | |
| Contacts – Rating | Single Pole Normally Open 3.0 amps at 125 Vac; 1.0 amp at 28 Vdc; 0.3 amps at 125 Vdc; 0.1 amps at 250 Vdc | | | |
| Operating Environment | Indoor – Dry | | | |
| Agency Listings | UL, ULC | | | |

* Maximum detector coverage has been determined by UL to provide detection time equal to sprinkler devices spaced at 10 ft (3.05 m) intervals on a smooth ceiling 15 feet 9 inches (4.8 m) high. Higher ceilings may adversely affect detection time. Earlier detection may be obtained by reducing the spacing between sensors. (See NFPA 72, Chapter 5)

Ordering information

| Catalog Number | Description | Ship Wt. lb. (kg) |
|----------------|---|-------------------|
| CR135-2 | Heat Detector, 135°F (57°C), Combination Rate-of Rise and Fixed Temperature | 1.0 lb (0.5 kg) |
| CR200-2 | Heat Detector, 200°F (93°C), Combination Rate-of Rise and Fixed Temperature | |
| CF135-2 | Heat Detector, 135°F (57°C), Fixed Temperature Only | |
| CF200-2 | Heat Detector, 200°F (93°C), Fixed Temperature Only | |