

# THERMOFLEX® CF/CR Series

Conventional Heat Detectors

#### **Features**

- · Low profile design
- Dual action (rate of rise/fixed temperature) or fixed temperature only
- · White plastic housing
- Up to 70' inter detector spacing
- · Open or closed contact versions available
- Available in single or multiple circuit versions
- Product includes a 5 year warranty









## **Description**

The THERMOFLEX® CF/CR Series standard heat detectors are available in single or multiple circuits with open or closed contact configurations. THERMOFLEX® CF/CR Series detectors are available in 135°F, 165°F, 200°F, and 285°F versions.

#### • THERMOFLEX® CF Series

The CF Series detectors are Fixed Temperature only. They will operate when the detector reaches the applicable temperature. Fixed Temperature detectors are non-restorable.

#### • THERMOFLEX® CR Series

The CR Series detectors are combination Rate-of-Rise and Fixed Temperature. The Rate-of-Rise function allows the detector to operate when the temperature at the detector increases at a rate of 15°F per minute. The Fixed Temperature portion will cause the detector to operate when it reaches the applicable temperature. The Rate-of-Rise portion of the detector is restorable; however the Fixed Temperature portion is non-restorable.

## **A** CAUTION

All wiring must be installed in compliance with the local electrical code using approved cable, AWG 18 minimum. Begin electrical connections by stripping approximately 1" (2.5 cm) from the end of each wire. Insert the stripped end into the wire-retaining hole in the terminal bar, wrap clockwise around the terminal screw, and tighten. Circuit wiring must be broken at each terminal to ensure proper supervision.

## **Technical Specifications**

Dimensions	5.25" x 2"		
Device Weight	0.41 lbs (0.19 kg)		
Shipping Weight	0.6 lbs (0.3 kg)		
Materials	Plastic		
Contact Ratings	3 Amps at 125VAC 1 Amp at 28VDC 0.3 Amps at 125VDC		
Environmental Limitations	-20°F (-30°C) - 250°F (120°C) Exclusive of Operating Temperature		
Mounting	4" Standard Octagon Box		

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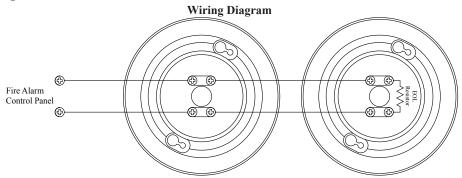


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#### Installation

Fig 1





Devices mount on a 4" octagon backbox. The provided mounting ring covers wall and plaster imperfections.

### **Testing**

#### Testing the "CR" series detector

• Testing the Rate-of-Rise portion, is accomplished by applying heat from a controlled heat source, such as a hair blow dryer, held 8-12 inches away and aimed at the detector. The detector will respond within 6-10 seconds. Providing that the fusible link has not released, the detector will restore as it cools.

NOTE: A heat gun should not be used as the heat output can easily fuse the detector.

- Portable test units designed specifically for this purpose are acceptable, and must be UL listed.
- Care must be taken to not allow the heat source to reach the device's fusing temperature. If the detector's fusing temperature is reached and the plunger is released, the detector will be in permanent alarm and must be replaced.
- Devices using open flame are prohibited from testing heat detectors. (ULC S536, ULC S537).

#### Testing the "CF" series detector

• The Fixed Temperature Only detector cannot be tested by warming the unit as permanent contact closure may result, requiring replacement of the detector. Shorting across the terminals connected to the fire alarm input circuit will prove the circuit function and Zone identification.



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### **Engineering Specifications**

- Models CR 135 W, CR 165 W and CR 200 W detectors are dual-action type, that will respond to a rate of temperature increase at the ceiling of 15 Fahrenheit degrees per minute (8.4 Celsius degrees per minute). These detectors will also respond when the fixed temperature (non restorable) threshold is exceeded. Dual-action detectors are installed in areas where rapid fluctuations in ceiling temperature are not expected.
- In areas where sudden increases in ceiling temperature are normal, specify Fixed Temperature. Only units i.e. C.E 135 W, CF 165 W, CF 200 W or CF 285 W.
- Detectors shall be installed in areas where environmental conditions including dust, vapours, insects, low temperatures, etc., would cause an ionization or photoelectric type detector to initiate a false alarm.
- Detectors shall have a proven operating temperature range of; -20°F/+250°F (-30°C/-120°C), exclusive of releasing temperature.
- The fusible link mechanism, when operated, shall be held firmly in place such that the contacts are prohibited from changing state, i.e. reverting back to the normal position.
- Detector shall provide two (2) terminal screws for each circuit wire connection. (See installation sketch on Page 3).

### **Ordering Information**

Model	Description	Stock Number	Operating Tempurature	Maximum Installation Tempurature	Spacing*
CR-135W	Fixed/ROR, Indoor	1000140	135°F (57°C)	100°F (37.8°C)	70' (21m)
CR-165W	Fixed/ROR, Indoor	1000122	165°F (71°C)	140°F (60°C)	70' (21m)
CR-200W	Fixed/ROR, Indoor	1000141	200°F (93°C)	160°F (71°C)	70' (21m)
CF-135W	Fixed, Indoor	1000142	135°F (57°C)	100°F (37.8°C)	40' (12m)
CF-165W	Fixed, Indoor	1000121	165°F (71°C)	140°F (60°C)	25' (7.5m)
CF-200W	Fixed, Indoor	1000143	200°F (93°C)	160°F (71°C)	25' (7.5m)
CF-285W	Fixed, Indoor	1000152	285°F (140°C)	225°F (107.2°C)	25' (7.5m)
CR-135CW	Fixed/ROR,Indoor, Normally Closed	1000144	135°F (57°C)	100°F (37.8°C)	70'(21m)
CR-165C	Fixed/ROR,Indoor, Normally Closed Aluminum Finish	1000130	165°F (71°C)	140°F (60°C)	70' (21m)
CR-200CW	Fixed/ROR,Indoor, Normally Closed	1000120	200°F (93°C)	160°F (71°C)	70' (21m)
CF-135CW	Fixed Indoor, Normally Closed	1000145	135°F (57°C)	100°F (37.8°C)	40' (12m)
CF-165C	Fixed Indoor, Normally Closed Aluminum Finish	1000124	165°F (71°C)	140°F (60°C)	25' (7.5m)
CF-200CW	Fixed Indoor, Normally Closed	1000123	200°F (93°C)	160°F (71°C)	25' (7.5m)

<sup>\*</sup> Assumes a flat, uninterrupted ceiling at a height not exceeding 10'/3m