POTTER
The Symbol of Protection

THERMOFLEX® MP Series

Heat Detector

Features

- Dual Action (Rate of Rise/Fixed Temperature) or Fixed Temperature only.
- Available with protective light hazard guard (specify “MPG” when ordering).
- Up to 70’ inter detector spacing.
- Secure fusible link mechanism locks contacts in alarm state when releasing temperature is reached.
- Operating temperature range -40ºF/+250ºF (-40ºC/120ºC).
- Fly leads are factory installed and sealed in corrosion resistant mounting plate.

7270-1110:0100 S2406

Description

The MP Series is a standard THERMOFLEX® single circuit, Normally Open contacts detectors, in which the connectivity is modified with pigtail leads that extend through a seal plate.This provides for enhanced protection against corrosive or moisture-laden environments.

This detector is suitable for use in areas where condensation or corrosion can have harmful effects on circuit wiring connected to standard terminals. Its seal plate (with extended pigtail leads) will mount onto a typical cast exterior back box.The detector is connected to a fire alarm system’s input circuit as an initiating device.The internal contacts are normally open, and will close when the detector operateseither on a rate of temperature increase, or if the releasing temperature is reached. It is often installed with an addressing module if it is to be annunciated as a specific room or space, e.g. electrical room, garbage compactor, etc. With its non-metallic diaphragm, the detector can operate normally at low temperatures, making it suitable for non-heated or chilled environments including garages and carports.

Technical Specifications

Dimensions	4.375” (11.11 cm) x 2.0” (5.08 cm)
Device Weight	.41 lbs (.19 grams)
Contact Ratings	3 Amps at 125VAC 1 Amp at 28VDC 0.3 Amps at 125VDC 0.1 Amps at 250 VDC
Environmental Limitations	-20°F (-30°C) - 250°F (120°C) Exclusive of Operating Temperature
Mounting	4” Round Standard WP Electrical Box

Models CR-135MP, CR-165MP, CR-165MP, and CR-200MP

These models are dual-action types that will respond to a rate of temperature increase at the ceiling of 15º Fahrenheit degrees per minute (8.4º 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 temperatures are not expected.

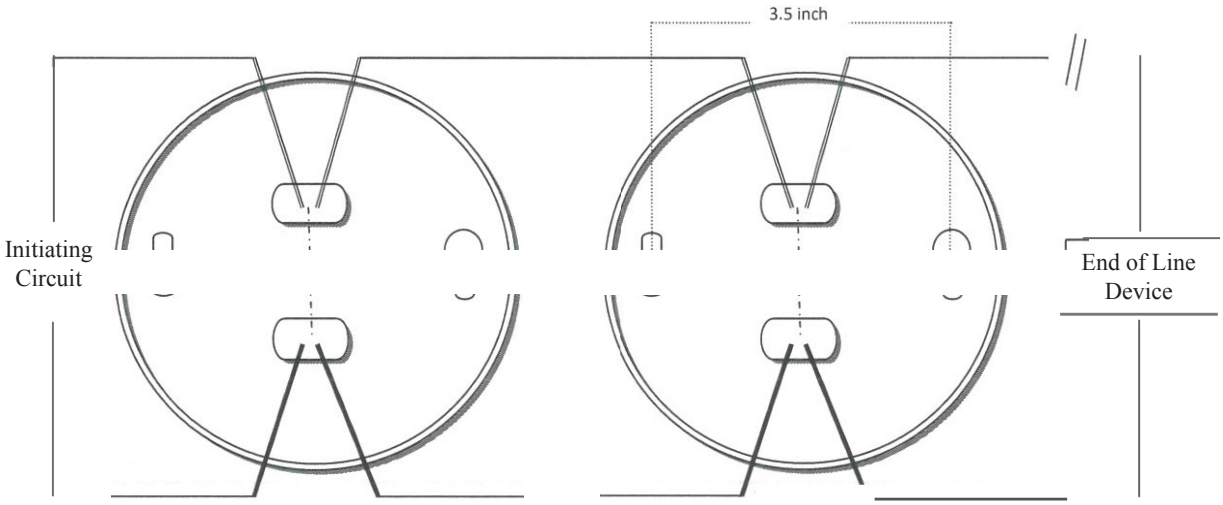
Models CF-135MP, CF-165MP, CF-200MP, and CF-285MP

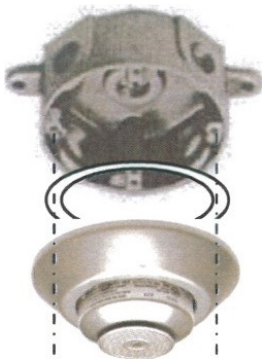
These models are fixed temperature only detectors and should be installed in areas where rapid fluctuations in ceiling temperatures are expected.

Installation

On conventional, initiating circuits, or when using an addressing module, contacts are installed across the circuit such that operation of the detector will create a short circuit condition, required in order to activate the fire alarm control panel (FACP), or addressing module.

Fig 1





The detector is installed using rain-tight conduit and a standard, approved weatherproof electrical enclosure as shown above. A neoprene (or similar gasket supplied with the back box}, is installed between the detector's seal plate and the back box. The wire leads are connected to the initiating circuit inside the enclosure. Unused threaded openings are sealed with threaded plugs. A decorative anodized aluminum cover ring snaps over the detector to complete the installation.

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 wire leads connected to the fire alarm input circuit will confirm the circuit function and Zone identification.

Engineering Specifications

Fire Detection Devices Ltd. heat detectors for fire alarm systems comply with UL 521 Heat Detectors for Fire Protective Signaling Systems and ULC S531 Standard for Heat Actuated Fire Detectors for Fire Alarm Systems. The UL/ULC control number is 41H9, file number S2406. CSFM listing #7270-1110:0100. Detectors featuring wire (pigtail) leads are included in these documents.

The detector is installed using rain-tight conduit and a standard, approved weatherproof electrical enclosure. A neoprene (or similar gasket supplied with the back box), is installed between the detector's seal plate and the back box. The wire leads are connected to the initiating circuit inside the enclosure. Unused threaded openings are sealed with threaded plugs. A decorative anodized aluminum cover ring snaps over the detector to complete the installation.

Ordering Information

Model	Description	Stock Number	Operating Tempurature	Maximum Installation Tempurature	Spacing Betweeen Detectors	Spacing Betweeen Detectors With Guards
CR-135MP	DualAction	1000137	135°F (57°C)	82°F (28°C)	70' (21m)	40' (12m)
CR-165MP	DualAction	1000162	165°F (71°C)	117°F (47°C)	70' (21m)	40' (12m)
CR-200MP	DualAction	1000139	200°F (93°C)	156°F (69°C)	70' (21m)	40' (12m)
CF-135MP	Fixed Temp. Only	1000136	135°F (57°C)	82°F (28°C)	40' (12m)	25' (7.5m)
CF-165MP	Fixed Temp. Only	1000163	165°F (71°C)	117°F (47°C)	25' (7.5m)	20' (6m)
CF-200MP	Fixed Temp. Only	1000138	200°F (93°C)	156°F (69°C)	25' (7.5m)	20' (6m)
CF-285MP	Fixed Temp. Only	1000164	285°F (140°C)	225°F (107.2°C)	25' (7.5m)	20' (6m)