

MIX-200 SERIES

Intelligent Low Profile Detectors



Model MIX-2251TB Detector Mounted in a Model MIX-B210LP Base

Description

Mircom's low profile addressable plug-in smoke and heat detectors with integral communications provide features that surpass conventional detectors. Sensitivity is continuously monitored and reported to the panel where the desired detector sensitivity can be programmed. Point ID capability allows each detector's address to be set with decade address switches, providing exact detector locations for selective maintenance when chamber contamination reaches an unacceptable level.

Model MIX-2251B photoelectric smoke detector provides a unique optical sensing chamber that senses smoke produced by a wide range of combustion sources.

Model MIX-2251TB adds dual electronic thermistors to the MIX-2251B to provide 135°F (57°C) fixed temperature thermal sensing.

Model MIX-2251TMB is a multi-criteria photoelectric smoke detector with supplementary 135°F thermal sensing. It uses advanced on-board software to combine the signals from the photoelectric and thermal elements. This software creates a multi-criteria detector capable of rejecting nuisance sources but still responding quickly to real fires. Additionally, this model also adjusts its sensitivity according to the local installed environment.

Features

- Sleek, low profile design
- Analog communications
- Smoke detectors are available with photoelectric or ionization technology
- Photoelectric detectors are available with additional fixed temperature detection or with multi-criteria photo/heat detection operation
- Heat detectors are available as fixed temperature or fixed temperature with rate-of-rise detection
- Low standby current
- Rotary address switches
- Magnetic test feature
- Superior EMI protection

Model MIX-1251B ionization detector incorporates a unique single source, dual chamber design to respond quickly and dependably to a broad range of fires.

Model MIX-5251B uses an innovative thermistor sensing circuit to produce 135°F fixed temperature detection in a low profile package. These thermal detectors provide cost effective, intelligent property protection in a variety of applications.

Model MIX-5251RB provides both 135°F fixed and rate-of-rise thermal detection. These thermal detectors provide cost effective, intelligent property protection in a variety of applications.

Model MIX-5251H provides 190°F (88°C) fixed temperature detection for high temperature applications.



S6295
(MIX-1251B,
MIX-2251B &
MIX-2251TB)
S6299
(MIX-5251B/RB/H)



CS920
(MIX-1251B,
MIX-2251B &
MIX-2251TB)
CS717
(MIX-5251B/RB/H)



7271-1477-122
(MIX-1251B)
7271-1477-117
(MIX-2251B/TB)
7271-1477-114
(MIX-5251B/RB/H)



148-03-E
(MIX-1251B)
219-02-E
(MIX-2251B/TB)
390-02-E
(MIX-5251B/RB/H)



2151
(MIX-1251B)
2131
(MIX-2251B/TB)



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Specifications

Electrical

| | | |
|--|------------------------------|---|
| Voltage Range | | 15 to 32 VDC peak |
| Standby Current (maximum average) | Ion and Thermal | 300 μ A @ 24 VDC |
| | Photo and Photo with Thermal | 360 μ A @ 24 VDC (one communication every 5 sec with LED enabled) |
| LED Current | | 6.5 mA @ 24 VDC maximum |

Environmental

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|------------------------------------|--|--|
| Operating Temperature Range | Ionization and Photo Detectors | 32° to 120°F (0° to 49°C), models MIX-2251B and MIX-1251B |
| | Photo detectors with Thermal Detection | 32° to 100°F (0° to 38°C), models MIX-2251TB and MIX-2251TMB |
| | 135°F Heat Detectors | -4° to 100°F (-20° to 38°C) |
| | 190°F Heat Detectors | -4° to 150°F (-20° to 66°C) |
| Thermal Ratings | Fixed Temperature | 135°F (38°C), models MIX-5251B and MIX-5251RB |
| | | 190°F (88°C), model MIX-5251H |
| | Rate-of-Rise Detection | 15°F/min (8.33°C/min), model MIX-5251RB |
| Humidity Range | | 10 to 93% RH, Noncondensing |

UL Listed Air Velocity Range

| | |
|---------------------------------|--|
| Ionization Detectors | 0 to 1200 fpm (366 m/min) |
| Photo/Photo with Thermal | 0 to 4000 fpm (1220 m/min); suitable for installation in ducts |

Mechanical

| | |
|-------------------------------------|---|
| Dimensions, Detector in Base | 2-1/8" (53 mm) high; 6-1/8" (155 mm) diameter |
|-------------------------------------|---|

Ordering Information

Addressable Detectors

| Model | Description |
|-------------|---|
| MIX-1251B | Ionization Smoke Detector |
| MIX-2251B | Photoelectric Smoke Detector |
| MIX-2251TB | Photoelectric Smoke Detector with 135°F Fixed Temperature Heat Detector |
| MIX-2251TMB | Acclimate™ Multi-Criteria Smoke Detector |
| MIX-5251B | Heat Detector, 135°F fixed temperature |
| MIX-5251RB | Heat Detector, 135°F fixed temperature with rate-of-rise detection |
| MIX-5251H | High Temperature Heat Detector, 190°F fixed temperature |

Note: For Canadian models add suffix "A".

Detector Bases

| Model | Description |
|-------------|--|
| MIX-B210LP* | Intelligent Flanged Mounting Base |
| B224BI | Intelligent Isolator Base |
| B224RB | Intelligent Relay Base |
| B501 | Intelligent Flangeless Mounting Base |
| B501BH | Intelligent Sounder Base |
| B501BHT | Intelligent Temporal Tone Sounder Base |

Note: For Canadian models add suffix "A".