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FIK-2351TIR Multi-Criteria Photo/Thermal/Infrared Detector

The FIK-2351TIR is an intelligent, multi-criteria detector that combines photoelectric, thermal, and infrared (PTIR) sensors in one unit to sense multiple components of a fire. This approach enables enhanced sensitivity to real fire with heightened immunity to nuisance particulates.

Multiple sensors and communication can significantly reduce nuisance alarms compared to single sensing methods. Sophisticated algorithms maximize the advantages of all four sensor types creating our best detection strategy offering high immunity to nuisance particulate and enhanced sensitivity to a real fire.

FIK-2351TIR in B200S-WH sounder base

- Photoelectric sensor detects airborne particles associated with smoke.

- Thermal sensor detects heat and rate-of-rise (135°F fixed temperature threshold).

- Infrared sensors discern light patterns in the environment as an additional data point for alarm determination.

This ability to reject certain nuisance alarm triggers, such as theater smoke, supports the detector's use in applications where moderate to heavy nuisance conditions exist that might cause single sensing detectors to trigger a false alarm.

The FIK-2351TIR detector meets both UL 268 7th edition and UL 521 listing requirements and can indicate distinct smoke and heat alarms. This dual nature supports a local alarm setting for photoelectric detection and a general evacuation setting based on thermal detection. This can minimize work interruptions in multi-level buildings.

FEATURES

- Multi-criteria detection
- Analog communications
- Low standby current
- Rotary address switches
- Dual LEDs for 360° visibility
- UL 268 7th Edition and UL 521 Listed
- Country of origin: Mexico

AGENCY LISTINGS AND APPROVALS

- UL Listed

- Factory Mutual Approved

- CSFM

For exact certification listings, please reference the respective agency website.

SPECIFICATIONS

Physical/Environmental	
Dimensions:	2" H x 6.2" dia (51 mm H x 156 mm dia.), installed in B300-6 base 4.1" dia. (104 mm dia.), installed in B501 base
Weight:	3.4 oz. (95 G)
Operating Humidity Range:	15% to 90% relative humidity, non-condensing
Operating Temperature Range:	32°F to 100°F (0°C to 38°C)
Air Velocity Range:	0 – 3000 ft/min (0 to 91.4 m/min)
Relative Humidity:	10% to 93%, non-condensing
Electrical	
Operating Voltage Range:	15 – 32 volts DC peak
Operating Current:	200µA @ 24 VDC maximum average (one communication every 5 seconds with LED enabled)
Maximum Alarm Current:	2 mA @ 24 VDC (one communication every 5 seconds with LED enabled)
Maximum Current:	4.5 mA @ 24 VDC maximum average (one communication every 5 seconds with LED enabled)
LED Current:	4.5 mA @ 24 VDC maximum (ON)
Isolator Load Rating:	0.0063

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ORDERING INFORMATION

Part Number	Description
FIK-2351TR	Multi-criteria photoelectric, thermal, and infrared smoke detector, white
Bases	
B300-6	White, standard flanged low-profile mounting base
B300-6-BP	Bulk pack of B300-6, package contains 10
B300-6-IV	Ivory, standard flanged low-profile mounting base
B501-WHITE	White, standard European flangeless mounting base
B501-BL	Black, standard European flangeless mounting base
B501-IV	Ivory, standard European flangeless mounting base
B501-WHITE-BP	Bulk pack of B501-WHITE, package contains 10
B200S-WH	White, intelligent programmable sounder base
B200S-IV	Ivory, intelligent programmable sounder base
B200SR-WH	White, intelligent sounder based for retrofit applications
B200SR-IV	Ivory, intelligent sounder base for retrofit applications
B200S-LF-WH	White, low frequency intelligent programmable sounder base
BS200S-LF-IV	Ivory, low frequency intelligent programmable sounder base
B200SR-LF-WH	White, low frequency intelligent programmable sounder base for retrofit applications
B200SR-LF-IV	Ivory, low frequency intelligent programmable sounder base for retrofit applications
B224RB-WH	White, plug-in relay base
B224RB-IV	Ivory, plug-in relay base
B224BI-WH	White, plug-in isolator base
B224BI-IV	Ivory, plug-in isolator base
Accessories	
SMB600	Surface mounting kit (flanged)
TR300	White, replacement flange for B210LP or B300-6 bases
TR300-IV	Ivory, replacement flange for B210LP or B300-6 bases
RA100Z(A)	Remote 3-32 VDC LED annunciator
M02-04-00	Test magnet
M02-09-00	Test magnet with telescoping handle
CK300-IR	White, IR detector color kit, pack of 10
CK300-IR-IV	Ivory, IR detector color kit, pack of 10
CK300-IR-BL	Black, IR detector color kit, pack of 10