J2351FC(A) and J2351FC(A)-IV

Multi-Criteria Fire/CO Detector

General Description

The J2351FC series advanced multi-criteria fire/CO detector is a plug-in, addressable device that provides both fire and carbon monoxide (CO) detection. The detector combines four separate sensing elements in one unit to sense multiple components of a fire: smoke, CO, light/flame, and heat. This approach enables enhanced sensitivity to real fire with heightened immunity to nuisance particulates. For CO, the detector's electrochemical sensing cell creates a separate signal for life safety CO detection.

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

- Photoelectric sensors detect airborne particles associated with smoke.
- Thermal sensors detect heat and rate-of-rise (135°F fixed temperature threshold).
- Carbon Monoxide sensors detect this by-product of fire for accurate fire detection.
- 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 use of the fire/CO detector in applications where moderate to heavy nuisance conditions exist that might cause single sensing detectors to false alarm.

The fire/CO detector meets both UL 268 7th edition and UL 521 listing requirements for fire detection as well as the UL 2075 standard for system-connected life safety carbon monoxide detection. Canadian models meet listing requirements of CAN/ULC S529, CAN/ULC S530 and CSA 6.19-01.

Released through the incomplete burning of various fuels, CO is a colorless, odorless and deadly gas that is virtually impossible to detect with the human senses. Because the potential exists for dangerous levels of CO to accumulate in almost any building, legislation mandating the use of CO detection in commercial spaces continues to grow.

B200S series intelligent sounder bases (B200SCOA series in Canada) are recommended for use with J2351FC(A) and J2351FC(A)-IV. These bases can generate either a Temp 3 pattern for fire or a Temp 4 pattern for CO alarm indication. The B200S/B200SCOA series bases recognize the System Sensor synchronization protocol, for use as a component of the general evacuation signal — along with other System Sensor horns, horn strobes, and chimes — when connected to a power supply or Fire Alarm Control Panel (FACP) output capable of generating the System Sensor synchronization pulses.

Features

- Unique ability to detect all four major elements of a fire
- Separate CO detection signal
- Highest nuisance alarm immunity
- Automatic drift compensation for smoke and CO sensors
- Uses only one address on the SLC
- RealTest® CO testing capability
- UL 268 7th edition, UL 521, and UL 2075 listed; CAN/ULC S529, CAN/ULC S530 and CSA 6.19-01 listed



J2351FC Multi-Criteria Fire/CO Detector
installed in B200S-WH sounder base

- Separate audible signal for fire or CO alarm when used with a B200S series base (B200SCOA series in Canada)
- 10-year CO cell with end-of-life warning
- New modern profile
- Expanded color options

Specifications

PHYSICAL

- Height: 2.7" (69 mm) installed in B200S series sounder base
- Diameter: 6.875" (175 mm) installed in B200S series sounder base
- Weight: 3.4 oz. (95 g)
- Color: White (-IV models are ivory)
- Operating Humidity Range: 15% to 90% Relative Humidity, Noncondensing
- Operating Temperature Range: 32°F to 100°F (0°C to 38°C)
- Air Velocity: 0 to 4000 ft./min. (0 to 1219.2 m/min.)

ELECTRICAL SPECIFICATIONS

- Operating Voltage Range: 15 to 32 VDC
- Operating Current @ 24 VDC: 200 uA (one communication every 5 seconds with green LED blink on communication)
- Maximum Alarm Current: 2 mA @ 24 VDC (one communication every 5 seconds with red LED solid on)
- Maximum Current: 4.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on)
- Isolator Load Rating: 0.0063

CO MONITORING UL STANDARD REFERENCE

Alarm thresholds are as follows:

Parts Per Million	Detector Response Time
70 ± 5ppm	60 – 240 min.
150 ± 5ppm	10 – 50 min.
400 ± 10ppm	4 – 15 min.

Standards

Per UL standard 2075, the J2351FC(A) and J2351FC(A)-IV have been tested to the sensitivity limits defined in UL Standard 2034.

UL Standard: UL 268 7th Edition

ULC Standard: CAN/ULC S529

Agency Listings and Approvals

The listings and approvals below apply to the J2351FC(A) and J2351FC(A)-IV. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult the factory for the latest listing status.

UL/ULC: S1948

CSFM: 7272-0554:0505

Ordering Information

J2351FC: Advanced multi-criteria fire/CO detector, FlashScan, white, UL listed. For ivory, order J2351FC-IV.

J2351FCA: Advanced multi-criteria fire/CO detector, FlashScan, white, ULC listed. For ivory, order J2351FCA-IV.

BASES

Note: Canadian CO applications require base B200SCOA-W/-IV.

B501-WHITE: 4" Mounting base, white

B501-WHITE-BP: 4" mounting base, white, 10-pack

B501-IV: 4" Mounting base, ivory

B501-BL: 4" Mounting base, black

B300-6: 6" Flanged mounting base, white

B300-6-BP: 6" Flanged mounting base, white, 10-pack

B300-6-IV: 6" Flanged mounting base, ivory

B200S-WH: Intelligent addressable sounder base, white

B200S-IV: Intelligent addressable sounder base, ivory

B200SCOA-WH: Intelligent addressable sounder base for Canadian CO applications, white, ULC-listed

B200SCOA-IV: Intelligent addressable sounder base for Canadian CO applications, ivory, ULC-listed

B200S-LF-WH: Intelligent addressable sounder base, low-frequency, white, UL-listed

B200S-LF-IV: Intelligent addressable sounder base, low-frequency, ivory, UL-listed

B224BI-WH: Isolator base, white

B224BI-IV: Isolator base, ivory

B224RB-WH: Relay base, white

B224RB-IV: Relay base, ivory

ACCESSORIES

SMB600: Surface mounting kit (flanged)

TR300: Trim ring, white

TR300-IV: Trim ring, ivory

CK300-IR: IR color kit (includes cover and trim ring), white, 10-pack

CK300-IR-IV: IR color kit (includes cover and trim ring), ivory, 10-pack

CK300-IR-BL: IR color kit (includes cover and trim ring), black, 10-pack. *Note: Not for use in Canadian CO applications*

RA100Z(A): Remote LED annunciator

M02-04-00: Detector test magnet

M02-09-00: Telescoping test magnet

ACCESSORIES



RA100Z(A)
Remote LED Annunciator



CK300-IR-BL
Color Kit



TR300
Trim Ring

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