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SD350(A)/SD350T(A) Addressable Photoelectric Detectors

Section: Addressable Devices

GENERAL

The SD350 and SD350T Addressable, low-profile plug-in Photoelectric Detectors use a state-of-the-art photoelectric sensing chamber with communications to provide open area protection and are used exclusively with Fire-Lite's MS-9200 and MS-9600 Addressable Fire Alarm Control Panels. The SD350T adds thermal sensors that will alarm at a fixed temperature of 135° F. Since this detector is addressable, it will help emergency personnel quickly locate a fire during its early stages, potentially saving precious rescue time while also reducing property damage. Two LEDs on each sensor light to provide a local, visible sensor indication. Remote LED annunciator capability is available as an optional accessory (Part No. RA400Z).

FEATURES

SLC Loop

- 2-wire loop connection.
- Unit uses base for wiring.

Addressing

- Addressable by device.
- Direct Decade 01-99 (MS-9200) and 01-159 (MS-9600) entry of address

Architecture

- Unique single source, dual chamber design to respond quickly and dependably to a broad range of fires.
- Sleek, low-profile design.
- Integral communications and built-in type identification.
- Built-in tamper-resistant feature.
- Removable cover and insect-resistant screen for simple field cleaning.

Operation

- Withstands air velocities up to 1,500 feet-per-minute without triggering a false alarm.
- Factory preset at 1.5% nominal sensitivity for panel alarm threshold level.
- Visible LED "blinks" when the unit is addressed (communicating with the fire panel) and latches on in alarm.

Mechanicals

- Sealed against back pressure.
- Direct surface mounting or electrical box mounting.
- Mounts to: single-gang box, 3.5" or 4" octagonal box, or 4" square electrical box (using a plaster ring - included).



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SD350

Other System Features

- Fully coated circuit boards and superior RF/transient protection.
- 94-V0 plastic flammability rating.
- Low standby current.

Options

- Remote LED output connection (Part No. RA400Z).

APPLICATIONS

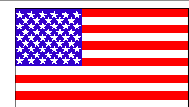
Use photoelectric detectors in life-safety applications to provide a broad range of fire-sensing capability, especially where smoldering fires are anticipated. Ionization detectors are often better than photoelectric detectors at sensing fast, flaming fires.

CONSTRUCTION

These detectors are constructed of LEXAN® in an off-white color. The SD350(T) plug-in low-profile smoke detectors are designed to commercial standards and offer an attractive appearance.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Fire-Lite Alarms, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473, Toll Free FAX: (877) 699-4105, FAX Back:(888) 388-3299.

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INSTALLATION

The SD350(T) Plug-In Detectors use a detachable mounting base to simplify installation, service and maintenance. Mount base on box which is at least 1.5 inches (3.81 cm) deep. Suitable boxes include:

- 4" (10.16 cm) square box with plaster ring.
- 4" (10.16 cm) octagonal box.
- 3.5" (8.89 cm) octagonal box.
- Single-gang box.

NOTE: Because of the inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class B) wiring.

OPERATION

Each SD350(T) uses one of 99 possible addresses on the MS-9200 Signaling Line Circuit (SLC) or up to 318 (159 on each loop) on the MS-9600 SLC. It responds to regular polls from the system and reports its type and status.

The SD350(T) Addressable Photoelectric Sensor™ unique unipolar chamber responds quickly and uniformly to a broad range of smoke conditions and can withstand wind gusts up to 1,500 feet-per-minute without sending an alarm level signal. Because of the unipolar chamber, the SD350(T) is approximately two times more responsive than most photoelectric sensors. This makes it a more stable detector.

DETECTOR SENSITIVITY TEST

Each detector can have their sensitivity tested (required per NFPA 72, Chapter 7 on *Inspection, Testing and Maintenance*) when installed/connected to an MS-9200 or MS-9600 addressable fire alarm control panel. The results of the sensitivity test can be printed off the MS-9200 and MS-9600 for record keeping.

SPECIFICATIONS

Voltage range: 15 - 32 VDC (peak).

Standby current: 300 µA @ 24 VDC.

LED current: 6.5 mA @ 24 VDC (latched "ON").

Air velocity: 1,500 ft./min. (7.6 m/sec.) maximum.

Diameter: 5.0 inches (12.7 cm), 6.2 inches (155 mm) installed in B350LP Base.

Height: 1.7 inches (43 mm) installed in B350LP Base.

Weight: 3.6 oz. (102 g).

Operating Temperature Range: 0° to 49° C (32° to 120°F) SD350.

Operating Temperature Range: 0° to 38° C (32° to 100°F) SD350T.

Temperature: 0° - 49°C (32° - 120°F).

Relative humidity: 10% - 93%, non-condensing.

PRODUCT LINE INFORMATION

SD350(A) Addressable Photoelectric Detector (B350LP base included). (A) model has ULC listing.

SD350T(A) Same as above with thermal element (B350LP base included). (A) model has ULC listing.

RA400Z
B350LP Remote LED. Mounts to a single-gang box. Plug-in detector base (included). Diameter: 6.1" (155 mm). Mounting: 4" (102 mm) square box with or without plastic ring, 4" octagon box, 3 1/2" octagon box or single gang box. All mounting boxes have a minimum depth of 1.5" (38 mm).

B224RB Plug-in System Sensor relay detector base. Diameter: 6.2" (157 mm). Mounting: 4" (102 mm) square box with or without plastic ring, 4" octagon box, 3 1/2" octagon box. All mounting boxes have a minimum depth of 1.5" (38 mm).

B501BH Plug-in System Sensor sounder detector base. Diameter: 6.0" (153 mm). Mounting: 4" (102 mm) square box with or without plastic ring. Mounting box has a minimum depth of 1.5" (38 mm).