

# H355(A) Series

## Intelligent Addressable Thermal Detectors



Addressable Devices

### General

The Fire•Lite Alarms H355 Series thermal detectors are addressable sensors that use a state-of-the-art thermistor sensing circuit for fast response. These sensors are designed to provide open-area protection and are intended for use with the Fire•Lite's addressable Fire Alarm Control Panels (FACPs).

The H355(A) and H355R(A) sensors provide fixed temperature alarm detection at 135°F (57°C). The H355R(A) sensor also responds to rate-of-rise conditions of greater than 15°F (8.3°C) per minute. The H355HT(A) is a fixed high-temperature detector that activates at 190°F (88°C). These thermal detectors provide cost effective, addressable property protection in a variety of applications.

Two LEDs on each sensor light to provide a local, visible sensor indication. Remote LED annunciator capability is available as an optional accessory (P/N RA400Z).

### Features

#### SLC loop:

- Two-wire SLC loop connection.
- Unit uses base for wiring.

#### Addressing:

- Addressable by device.
- Direct Decade entry of address: 01 – 159 with MS-9600, 01 – 99 with MS-9200UD.

#### Architecture:

- Sleek, low-profile, stylish design.
- State-of-the-art thermistor technology for fast response.
- Integral communications and built-in device-type identification.
- Built-in tamper resistant feature.
- Built-in functional test switch activated by external magnet.

#### Operation:

- Factory preset at 135°F (57°C) for the H355(A) and H355R(A); 190°F (88°C) for the H355HT(A).
- Rate-of-rise triggers at 15°F (8.3°C) per minute for the H355R(A).
- 360°-field viewing angle of the visual alarm indicators (two bicolor LEDs). LEDs blink green in Normal condition and turn on steady red in Alarm.
- Visible LEDs “blink” every time the unit is addressed.

#### Mechanicals:

- Sealed against back pressure.
- SEMS screws for wiring of the separate base.
- Designed for direct-surface or electrical-box mounting.
- Plugs into separate base for ease of installation and maintenance.
- Separate base allows interchange of photoelectric, ionization and thermal sensors.

#### Other system features:

- Remote test feature from the panel.
- Walk test with address display.
- Low standby current.



H355 with B350LP base

- 94-5V plastic flammability rating.

#### Options:

- Remote LED output connection to optional RA400Z remote LED annunciator.
- Recessed (RMK400) or surface (SMK400E) base mounting kits.

### Installation

H355(A) Series plug-in intelligent thermal detectors use a detachable base to simplify installation, service and maintenance. Installation instructions are shipped with each detector.

Mount base (all base types) on box that is at least 1.5" (3.81 cm) deep. Suitable boxes include:

- 4.0" (10.16 cm) square box.
- 3.5" (8.89 cm) or 4.0" (10.16 cm) octagonal box.
- Single-gang box (except relay or isolator base).

**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 only.

### Applications

Use thermal detectors for protection of property.

### Construction

These detectors are constructed of off-white Bayblend®. The H355(A) Series plug-in intelligent thermal detectors are designed to commercial standards and offer an attractive appearance.

### Operation

Each H355(A) Series detector uses one of 159 (MS-9600) or 99 (MS-9200UD) possible addresses on a control panel SLC loop. It responds to regular polls from the control panel and reports its type and the status. If it receives a test command from the panel (or a local magnet test), it stimulates its electronics and reports an alarm. It blinks its LEDs when polled and turns the LEDs on when commanded by the panel. The H355(A) Series offers features and performance that represent the latest in thermal detector technology.

## Specifications

**Diameter:** 6.1" (15.5 cm) installed in B350LP(A).

**Height:** 2.1" (5.33 cm).

**Weight:** 4.8 oz. (137 g).

**Installation temperature:** -4°F to 100°F (-20°C to 38°C).

**Humidity range:** 10% to 93% relative humidity (noncondensing).

**Voltage range:** 15 to 32 VDC peak.

**Standby current:** 300  $\mu$ A @ 24 VDC (one communication every five seconds with LED blink enabled).

**LED current:** 6.5 mA @ 24 VDC.

**Mounting:** B350LP(A) flanged base, included.

**Fixed-temperature setpoint:** 135°F (57°C) for the H355(A) and H355R(A); 190°F (88°C) for the H355HT(A).

**Rate-of-rise detection:** responds to greater than 15°F (8.3°C) per minute.

## Listings and Approvals

Listings and approvals below apply to the H355(A) Series detectors. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- MEA approved: file 387-02-E
- UL Listed, file S2517
- ULC Listed (models H355A, H355RA, H355HTA)
- CSFM approved: file 7270-0075:195
- FM approved

## Product Line Information

**NOTE:** "A" suffix indicates ULC-Listed model.

**H355:** Intelligent thermal sensor; B350LP base included.

**H355A:** Same as H355 but with ULC Listing (B350LPA base included).

**H355R:** Same as H355 with *rate-of-rise* feature; B350LP base included.

**H355RA:** Same as H355R but with ULC Listing (B350LPA base included).

**H355HT:** Intelligent fixed high-temperature thermal detector; B350LP base included.

**H355HTA:** Same as H355HT but with ULC Listing (B350LPA base included).

**B350LP(A):** Plug-in detector base (included). **Dimensions:** 6.1" (15.5 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plaster ring, 4.0" (10.16 cm) octagonal box, 3.5" (8.89 cm) octagonal box, or single-gang box. All mounting boxes have a minimum depth of 1.5" (3.81 cm).

**B224RB(A):** Plug-in System Sensor *relay* detector base. **Diameter:** 6.2" (15.75 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plaster ring, 4.0" (10.16 cm) octagonal box, or 3.5" (8.89 cm) octagonal box. All mounting boxes have a minimum depth of 1.5" (3.81 cm).

**B224BI(A):** Plug-in System Sensor *isolator* detector base. Maximum 25 devices between isolator bases (*see DF-52389*). **Diameter:** 6.2" (15.75 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plaster ring, 4.0" (10.16 cm) octagonal box, or 3.5" (8.89 cm) octagonal box. All mounting boxes have a minimum depth of 1.5" (3.81 cm).

**B501BH-2(A):** Plug-in System Sensor standard *sounder* base. **Diameter:** 6.0" (15.24 cm). **Mounting:** 4.0" (10.16 cm) square box with or without plaster ring. Mounting boxes have a minimum depth of 1.5" (3.81 cm).

**B501BHT-2(A):** Plug-in System Sensor *temporal tone* sounder base.

### ACCESSORIES:

**RA400Z(A):** Remote LED annunciator. 3 – 32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501(A) and B350LP(A) bases only.

**SMK400E:** Surface mounting kit provides for entry of surface wiring conduit. For use with B501(A) base only.

**RMK400:** Recessed mounting kit. For use with B501(A) base only.

**M02-04-00:** Test magnet.

**M02-09-00:** Test magnet with telescoping handle.

**XR2B:** Detector removal tool. Allows installation and/or removal of detector heads from bases in high ceiling applications.

**XP-4:** Extension pole for XR2B. Comes in three 5-foot (1.524 m) sections.

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