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## ANALOG ADDRESSABLE THERMAL DETECTOR

### GENERAL

The FCI Series intelligent plug-in thermal detectors with integral communication provide features that surpass conventional detectors. Detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the panel. 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. ATD Series thermal detectors use an innovative thermistor sensing circuit to produce 135°F/57°C fixed-temperature (ATD-L2) and rate-of-rise thermal detection (ATD-RL2) in a low-profile package. The ATD-HL2 provides fixed high-temperature detection at 190°F/88°C. These thermal detectors provide cost effective, intelligent property protection in a variety of applications.

### INSTALLATION

ATD-L2 plug-in detectors use a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug in and remove detectors without using a ladder.

Mount base on a box which is at least 1.5" (3.81 cm) deep. Suitable mounting base 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).
- **With B501BH base**, use a 4.0" (10.16 cm) square box.
- **With B224RB or B224BI base**, use a 3.5" (8.89 cm) octagonal box, or a 4.0" (10.16 cm) octagonal or square box.

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

### FEATURES

- *Sleek, low-profile, stylish design.*
- *State-of-the-art thermistor technology for fast response.*
- *Rate-of-rise model (ATD-RL2), 15°F (8.3°C) per minute.*
- *Factory preset at 135°F (57°C); high-temperature model ATD-HL2 at 190°F (88°C).*
- *Addressable by device.*
- *Rotary 01 – 99 address switches*
- *Two-wire loop connection.*
- *Visible LEDs "blink" every time the unit is polled.*
- *360°-field viewing angle of the visual alarm indicators (Two red LEDs). LEDs blink in Normal condition and turn on steady in Alarm.*
- *Integral communications and built-in device-type identification.*
- *Remote test feature from the panel.*
- *Built-in functional test switch activated by external magnet.*
- *Low standby current.*
- *Listed to UL 521.*
- *Built-in tamper-resistant feature.*
- *Designed for direct-surface or electrical-box mounting.*
- *Sealed against back pressure.*
- *Plugs into separate base for ease of installation and maintenance. Separate base allows interchange of photoelectric, ionization and thermal sensors.*
- *SEMS screws for wiring of the separate base.*
- *94-5V plastic flammability rating.*
- *Remote LED output connection to optional RA400Z remote LED annunciator.*
- *Optional sounder, relay, and isolator bases.*



**ATD-L2**



**MEA**



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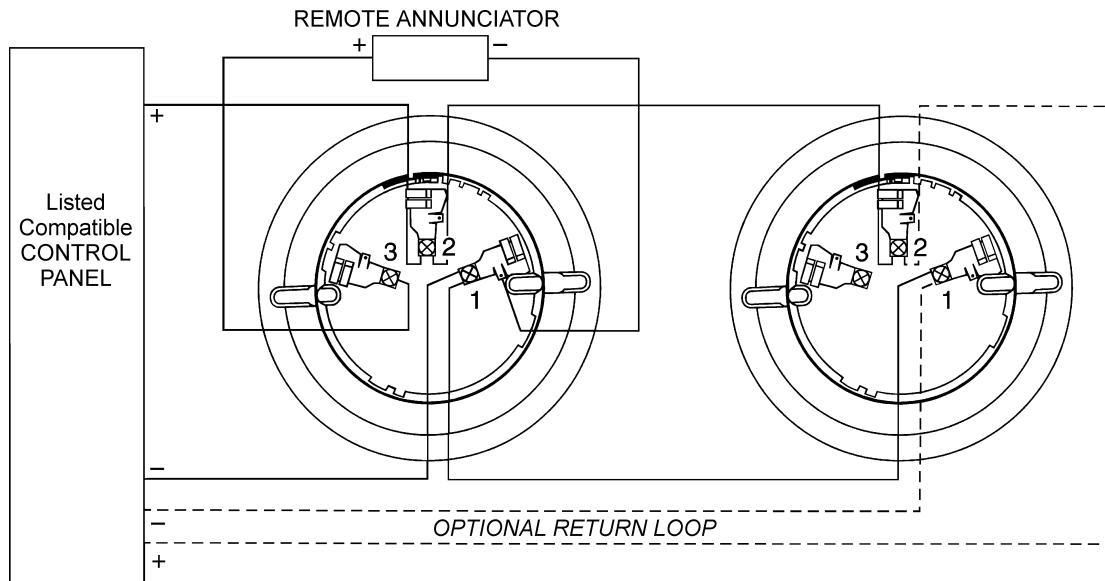
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## SPECIFICATIONS

**Size:** 2.1" (5.1 cm) high x 4.1" (10.4 cm) diameter installed in B50I base, 6.1" (15.5 cm) diameter installed in ADB-FL base.

**Shipping weight:** 4.8 oz. (137 g).

**Operating temperature range:** *ATD-L2, ATD-RL2:* -20°C to 38°C (-4°F to 100°F); *ATD-HL2:* -20°C to 66°C (-4°F to 150°F).

**Detector spacing:** *UL approved* for 50 ft. (15.24 m) center to center. *FM approved* for 25 x 25 ft. (7.62 x 7.62 m) spacing.

**Relative humidity:** 10% – 93% noncondensing.

**Thermal ratings:** fixed-temperature setpoint 135°F (57°C), rate-of-rise detection 15°F (8.3°C) per minute, high temperature heat 190°F (88°C).

## ELECTRICAL SPECIFICATIONS

**Voltage range:** 15 - 32 volts DC peak.

**Standby current (max. avg.):** 200 µA @ 24VDC (without communication); 300 µA @ 24VDC (one communication every 5 seconds with LED enabled).

**LED current (max.):** 6.5 mA @ 24VDC ("ON"). **Voltage range:** 15 - 32 volts DC peak.

## BASES AVAILABLE

**ADB-FL:** 6.1" (15.5 cm) diameter.

**B50I:** 4.1" (10.4 cm) diameter.

**B50IBH or B50IBHT:** Sounder base assembly (B50IBHT produces a Temporal Pattern). Includes B50I base.

**B224RB Relay Base:** **Screw terminals:** up to 14AWG (2.0 mm<sup>2</sup>). **Relay type:** Form-C. **Rating:** 2.0A @ 30VDC resistive; 0.3A @ 110VDC inductive; 1.0A @ 30VDC inductive. **Dimensions:** 6.2" (15.748 cm) x 1.2" (3.048 cm).

**B524BI Isolator Base:** **Dimensions:** 6.2" (15.748 cm) x 1.2" (3.048 cm). **Maximum:** 25 devices between isolator bases.

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