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I300(A) Fault Isolator Module

Section: Addressable Devices

GENERAL

The Fire-Lite Alarms I300(A) Fault Isolator Module is used with the MS-9200, MS-9200UD, and MS-9600 to protect the system against wire-to-wire short circuits on the SLC loop. The I300(A) should be placed between each device on the SLC loop, to isolate a short-circuit problem between the modules. It is required for true Style 7 operation so that other devices can continue to operate normally in the event of a short-circuit on the SLC.



California State Fire Marshal
7300-0075:159



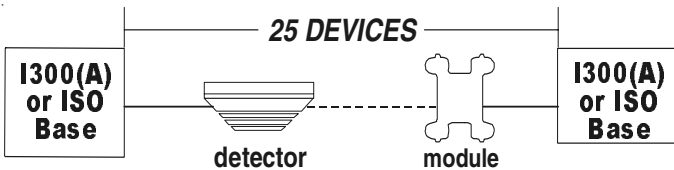
FEATURES

- Powered by SLC loop directly, no external power required.
- Mounts in standard 4" (10.16 cm) square, 2.125" (5.3975 cm) deep junction boxes.
- Integral LED blinks to indicate normal condition. Illuminates steady when short circuit condition is detected.
- High noise (EMF/RFI) immunity.

APPLICATIONS

The Fault Isolator Modules should be spaced between groups of sensors in a loop to protect the rest of the loop. Use to isolate short circuit problems within a section of a loop so that other sections can continue to operate normally. The I300(A) supports a maximum of 25 devices in-between isolators, except when using relay bases.

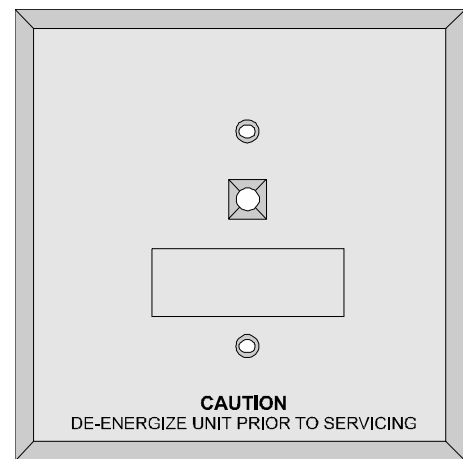
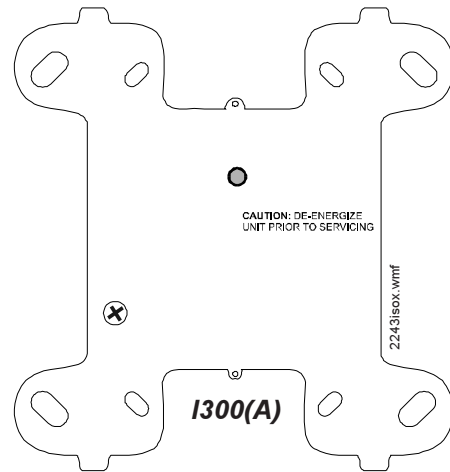
NOTE ON LOADS PER RELAY BASE AND ISOLATORS/ISOLATOR BASES:



The maximum number of addressable devices between isolators (or B224BI isolator bases) is 25 devices.

B224 relay bases draw more current than other intelligent devices. When calculating the 25-device maximum, **B224RB** represents 2.5 DEVICES. See example on page 2.

NOTE ON MAXIMUM NUMBER OF SLC DEVICES: Each isolator module reduces the capacity of an SLC by two address positions. Requirements differ as applied to relay bases (see note



Face plate for I300(A)

Fire-Lite® Alarms is a Honeywell company.

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.



above).

SPECIFICATIONS

- **Operating voltage:** 15 – 28 VDC (peak).
- **Maximum current upon activation due to short circuit:** refer to the manual for the main FACP.
- **Standby current:** 450 μ A maximum; 1300(A) is not isolating – relay closed.
- **Temperature range:** 32°F to 120°F (0°C to 49°C).
- **Relative humidity:** 10% to 93%.
- **Weight:** 150 grams (5 oz.).

CONSTRUCTION

The face plate is made of off-white plastic. Includes yellow LED indicator that pulses when normal and illuminates steady when a short is detected.

OPERATION

Automatically opens circuit when the line voltage drops below four volts. Fault Isolator Modules should be spaced between groups of addressable devices (maximum 25, see notes on page 1) in a loop to protect the rest of the loop. If a short occurs between any two isolators, then both isolators immediately switch to an open circuit state and isolate the groups of sensors between them. The remaining units on the loop continue to fully operate.

In Style 4 loops, the 1300(A) is generally used at each T-tap branch, to limit the effect of short circuits on a branch to the devices on that branch. The LED indicator is on continuously during a short circuit condition.

The 1300(A) Fault Isolator Module automatically restores the shorted portion of the communications loop to normal

condition when the short circuit condition is removed.

INSTALLATION

- Mount on a standard 4" (10.16 cm) mounting junction box which is at least 2.125" (5.398 cm) deep.
- Terminal screws are provided for "in and out" wiring.
- Installation instructions are provided with each module.
- Surface-mount box is available as an option.

ARCHITECTURAL/ ENGINEERING SPECIFICATIONS

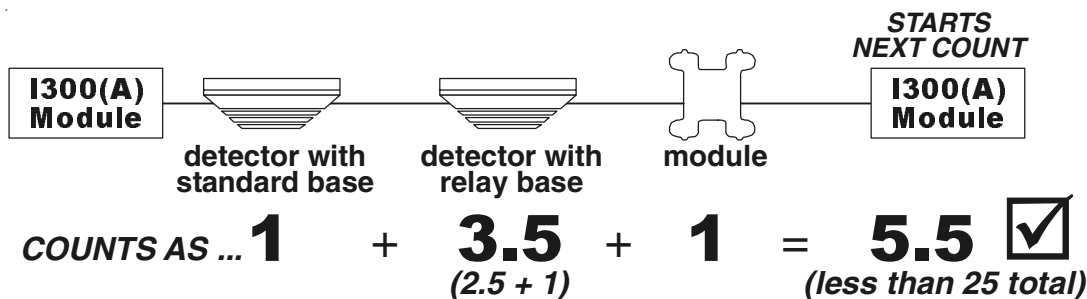
Fault Isolator Modules shall be provided to automatically isolate wire-to-wire short circuits on an SLC loop. The Fault Isolator Module shall limit the number of modules or detectors that may be rendered inoperative by a short circuit fault on the SLC Loop. If a wire-to-wire short occurs, the Fault Isolator Module shall automatically open-circuit (disconnect) the SLC loop. When the short circuit condition is corrected, the Fault Isolator Module shall automatically reconnect the isolated section of the SLC loop. The Fault Isolator Module shall not require any address-setting, and its operations shall be totally automatic. It shall not be necessary to replace or reset an Fault Isolator Module after its normal operation. The Fault Isolator Module shall mount in a standard 4" (10.16 cm) deep electrical box, in a surface-mounted backbox, or in the Fire Alarm Control Panel. It shall provide a single LED which shall flash to indicate that the Isolator is operational and shall illuminate steadily to indicate that a short circuit condition has been detected and isolated.

PRODUCT LINE INFORMATION

- 1300** Isolator module.
- I300A** Isolator module, ULC-Listed.
- SMB500** Optional surface-mount backbox.

EXAMPLE OF DEVICE COUNT

(see notes under Applications on page 1)



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