

Intelligent Loop Isolator & Isolating Detector Bases

Available in two versions, Loop Isolator only and Isolating Detector Base for Intelligent Detector mounting, the Intelligent Isolators offer superior SLC loop protection. The Intelligent Isolating Bases sense and isolate short-circuit faults associated with Axis AX Series SLC loop wiring.

Under normal operation, the SLC loop power and communications are passed through the Isolators. If a short-circuit or an abnormally low line impedance occurs, the isolator senses the drop in voltage and isolates the negative supply of the SLC loop, in the direction of the fault. The short-circuit fault will be indicated on the Axis AX Series Intelligent Fire Alarm Control Panel's graphical display and on the isolators via an illuminated yellow LED. If an intelligent detector is associated with an active short-circuited isolating base, the detector will continue to function properly. During the isolated condition the isolating base will continually test the circuit, and when the fault is rectified will automatically restore the isolated SLC loop to normal.

If an installation requires that not a single intelligent device be lost in the event of a single short-circuit to an SLC loop ("true" NFPA Style 7 circuit), every device on the Axis AX Series SLC loop should be protected by an isolator. In applications requiring minimal short-circuit protection (not necessary to provide a "true" NFPA Style 7), isolated groups of devices can be created with one Isolator protecting a maximum group of twenty intelligent detectors/ devices. Each Axis AX Series Intelligent Fire Alarm Control Panel's SLC's have built-in isolators.

Isolating Detectors Bases are specifically designed to enable "one-way only" intelligent detector insertion without the need for force. Simply insert the detector and rotate clockwise. Incorporating a high degree of protection against unauthorized removal of detectors, each base can be locked to it's associated detector by a mini-hexagonal screw.

Both the Loop Isolator and the Isolating Dectector Bases have a wide interior diameter for ease of access for wiring to in-out terminals. Though not required for proper operation, each unit has a dedicated earth connection terminal for clean, isolated, and continuity maintenance of an earth ground connection of wire shield when shielded cable is utilized.

Utilizing the Advanced unique method of addressing intelligent detectors, the Intelligent Isolating Detector Base incorporates a patented address ("XPerT") card. The address is quickly and easily set by removing "pips" on the XPerT card according to a chart supplied with each base. To save time during installation pre-addressed XPerT cards are available. Once the address is set on the XPerT card, it is then slid into the base and locked in place. By addressing the detector in the base rather than in the detector, the all-too-common errors associated with detector removal and maintenance are eliminated.

Each Intelligent Isolating Detector Base has the capability of supporting a remote LED. The remote LED is sub-addressable and can be programmed to activate from any cause and effect program of the Axis AX Series Intelligent Fire Alarm Control Panel. The

Features

- Patented XPerT Addressing
- Short-Circuit Isolation
- Meets NFPA Style 7 Requirements
- In-Out Terminals for Ease of Wiring
- Dedicated Terminal for Shielded Cable
- Low-Profile Design
- Built-in Short Circuit Yellow LED Indicator
- 3" or 4" Square or Octagonal Electrical Box Mount
- "One-Way-Only" Detector Insertion
- Base to Detector Locking Mechanism

Listings and Approvals

- CAN/ULC-S527-11 & CAN/ULC-S559-04 Listed: 100780709NYM-001
- ULC Listed: UOXXC.S24460
- ULC Listed: UROXC.S24459

Intelligent Isolating Detector Bases mount on 3” octagonal electrical boxes. To mount to 4” square or octagonal electrical boxes the optional Advanced adapter kit is required. **Intelligent Detector Bases:** Refer to Intelligent Detector Bases data sheet.

Intelligent Isolating Detector Base Wiring, 45681-321ADV

Intelligent Loop Isolator & Base Wiring (Not addressed)
55000-750ADV / 45681-211ADS

Specification

Remote LED Output Current	5 mA (Maximum)
Voltage	17 - 28 VDC
Environment	Indoor, Dry
Operating Temperature	32°-120°F (0°-48°C)
Humidity	10-93% (Non-Condensing)
Dimensions	4"D x 15/16"H
Weight	3.5 oz
Housing	Polycarbonate, 94 V0

Ordering Codes and Options

45681-321AFC	Isolating Detector Base (Fits 3” Octagonal Electrical Box)
55000-750AFC	Loop Isolator (Fits 3” Octagonal Electrical Box)
45681-211AFC	Isolator Base (use with 55000-750ADV)
Optional Adapter Kit:	
38531-830ADS	Mounting Bracket
38531-829ADS	Trim Ring
38531-771	Blank XPerT Card
45682-127	Pre-Addressed XPerT Cards (1-127)

* Refer to Intelligent Detector Bases data sheet for Information and features pertaining to these products.