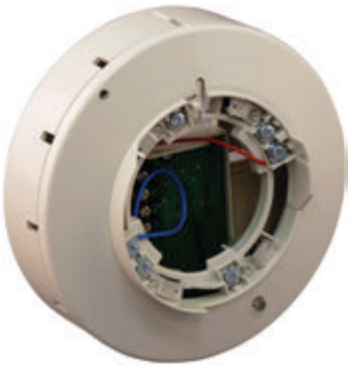
AIB-6

Analog Isolator Detector Base



P/N 99233

Features

- Isolator integrated into Base
- Self Restoring
- Amber LED indication of Short Circuit
- Maximum standby current 250 µA
- Maximum alarm current 1.85 mA
- For JFS-A Series control panels or JFS-IP Series control panels using Nohmi protocol

Description

The Addressable Isolator Base 6" (AIB-6) is a base with an integrated isolator module included. The base has a locking feature for the sensor that may be used or removed in the field. Once the head is removed, the isolator is accessible in the bottom of the unit.

The isolator will open the Signaling Line Circuit down stream when a short circuit is detected. This will provide devices between the control panel and the isolator to continue to operate. The short is indicated by a steady amber LED and once the short is removed the unit will return to normal operation.

Detector Base Mounting

AIB-6 should be mounted directly on the electrical box. The mounting holes are configured for a single gang, double gang, octagon or 4" square box.

Field Wiring Diagram

Typical field wiring diagrams for the Signaling Line Circuit (SLC) are shown in Figure 1. The SLC supports NFPA wiring Styles 4, 6, and 7.

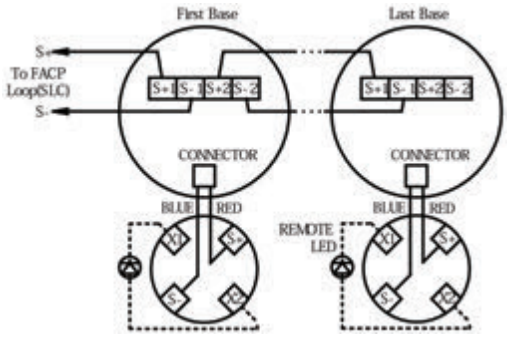


Figure 1: Typical Field Wiring

1. Typical of NFPA Style 4 SLC (S+, S-) wiring arrangement using the AIB is shown in Figure 2. Resistance of wiring connected to the AIB must not exceed 10 ohms. A maximum of 50 addressable detectors and addressable modules can be connected to an AIB.

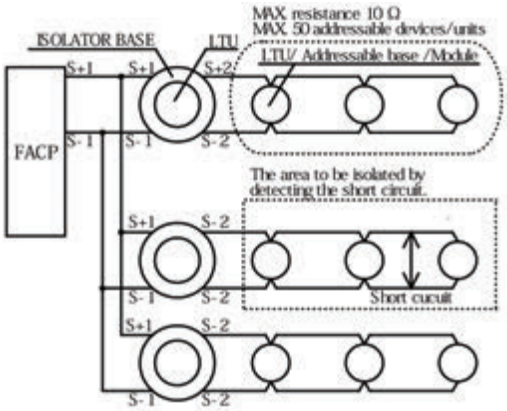


Figure 2: Style 4 SLC Wiring using AIB Base

2. Typical Style 6 arrangement which two separate conductors would return to a listed compatible fire alarm control panel (FACP) from the last base is shown in Figure 3. Resistance of wiring connected to the AIB must not exceed 10 ohms. A maximum of 50 addressable detectors and addressable modules can be connected to the one isolated zone. The AIB next to a FACP shall be installed with in 20 feet from the terminal of the FACP.

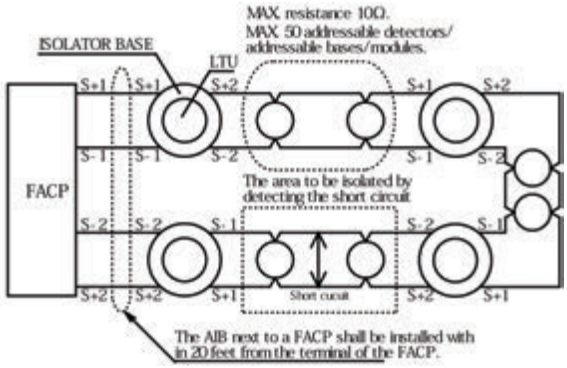


Figure 3: Style 6 SLC Wiring using AIB Base

3. Typical Style 7 arrangement is shown Figure 4. Style 7 is required to use Potter-Nohmi's AIBs or SCIs (Short Circuit Isolator modules). Resistance of wiring connected to the AIB must not exceed 10 ohms. The AIB next to a FACP shall be installed with in 20 feet from the terminal of the FACP.

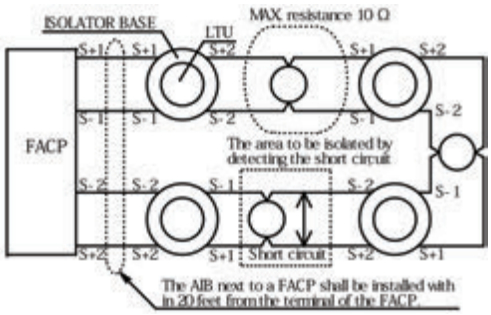


Figure 4: Style 7 SLC Wiring using AIB Base

Specifications			
Working voltage range for SLC	22.0 to 24.0 V	Maximum number of AIB-6s per SLC Loop	Style 4: Number of point of panel divided by 8 Style 6 and 7: Number of points of control panel
Standby current for SLC(1)	250 µA	Maximum number of addressable devices connected to an AIB-6	50 units
Active current (including indicator)	1.85 mA DC (max)	Installation temperature range(2)	32 to 120°F (0 to 49°C)
Active indicator	1 LED (yellow)	Operating relative humidity range	0% to 93% (Non-condensing)
Applicable SLC wiring style	NFPA Style 4, 6 and 7	Color	Eggshell White
Resistance of wiring after an AIB-6 in Style 4	10 Ω (max)	Dimensions (without detector)	Height: 2.13 in (54.4 mm)
Resistance of wiring between an AIB-6 and the next AIB-6 in Style 6 or 7	10 Ω (max)		Diameter: 6.0 inches (150 mm)

(1) The standby current is the current that the device consumes when the device is in a non-activated condition and where no communication current is transmitted to the fire alarm control panel.
(2) FHA with AIB-6 can be installed under 120°F. (Installation temperature range of AIB-6 is 32 to 120°F.)

Locking Feature

The AIB-6 include a locking feature that prevents removal of the detector and removal of the base cover without using a tool.

1. To eliminate this feature, break off the locking tab (refer to Figure 5), and then install the detector.
2. To remove the detector from the base once the locking feature has been activated, insert a small screwdriver into the slot on the base to push the plastic tab while simultaneously turning the detector head counter-clockwise (refer to Figure 6).
3. To remove the base cover from the lower enclosure once the locking feature has been activated, insert a small screwdriver into the slot on the on the base to push the plastic tab while simultaneously turning the detector head counter-clockwise (refer to Figure 7).

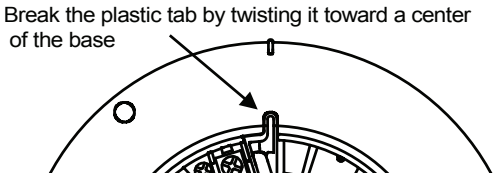


Figure 5: Eliminating the Locking Feature

Figure 6: Removing Detector Head from Base

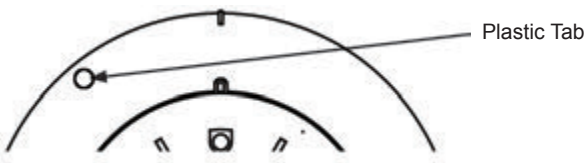


Figure 7: Removing Base Cover from Lower Enclosure

Ordering Information		
Model Number	**Description**	**P/N**
AIB-6	**6” Analog Isolator Base**	**99233**

Note: Approvals/Listings maintained by and manufactured by Potter Electric Signal Company.

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