



XP95A Short-circuit Isolator Installation Instructions



General

XP95A Short-circuit Isolators are designed to sense and isolate short-circuits on XP95A loops. The Short-circuit Isolator, part number 55000-750, is used in conjunction with an Isolator Base, part number 45681-211.

Control Panel Compatibility

The Short circuit Isolator and Isolator Base have been listed by Underwriters Laboratories Inc. For details of compatible control panels contact Apollo Fire Detectors Limited. Please check fire control panel literature for compatible Apollo devices.

Installation

The Short-circuit Isolator must be installed in accordance with applicable NFPA standards, local codes and jurisdictional authorities. Failure to follow these instructions may result in failure of the unit or detectors to report an alarm condition. Apollo Fire Detectors Limited is not responsible for equipment which is improperly installed, maintained or tested.

Before installing the Short-circuit Isolator, check continuity, polarity and insulation resistance of all wiring. Check that siting is in accordance with the fire system drawings and conforms to all applicable local codes such as NFPA 72.

Use 3" octagonal box for direct connection to the base. 4" octagonal and 4" square boxes may be used with proper UL listed mounting brackets. Secure the base to the electrical box with appropriate screws. **Do not overtighten the screws.**

Commissioning

It is important that the system be fully tested after installation. In normal operating conditions, apply short-circuits to the supply wiring at various points to confirm the isolators are functioning correctly. Ensure that any applicable local codes are adhered to.

1. When screened loop cable is used, it is vital to connect the screen, also known as the functional earth, in accordance with the instructions of the control panel manufacturer.
2. Always ensure that all segments of the loop cable have continuity of the functional earth (FE) and take care that it is insulated from any building earth (also known as protection earth (PE)) point such as metal work, cable trays or junction boxes.

For more detailed guidance on Functional / Safety Earthing please refer to TSD162.

LED Indicators

Yellow LED illuminated if a short circuit is detected on either side of the isolator.

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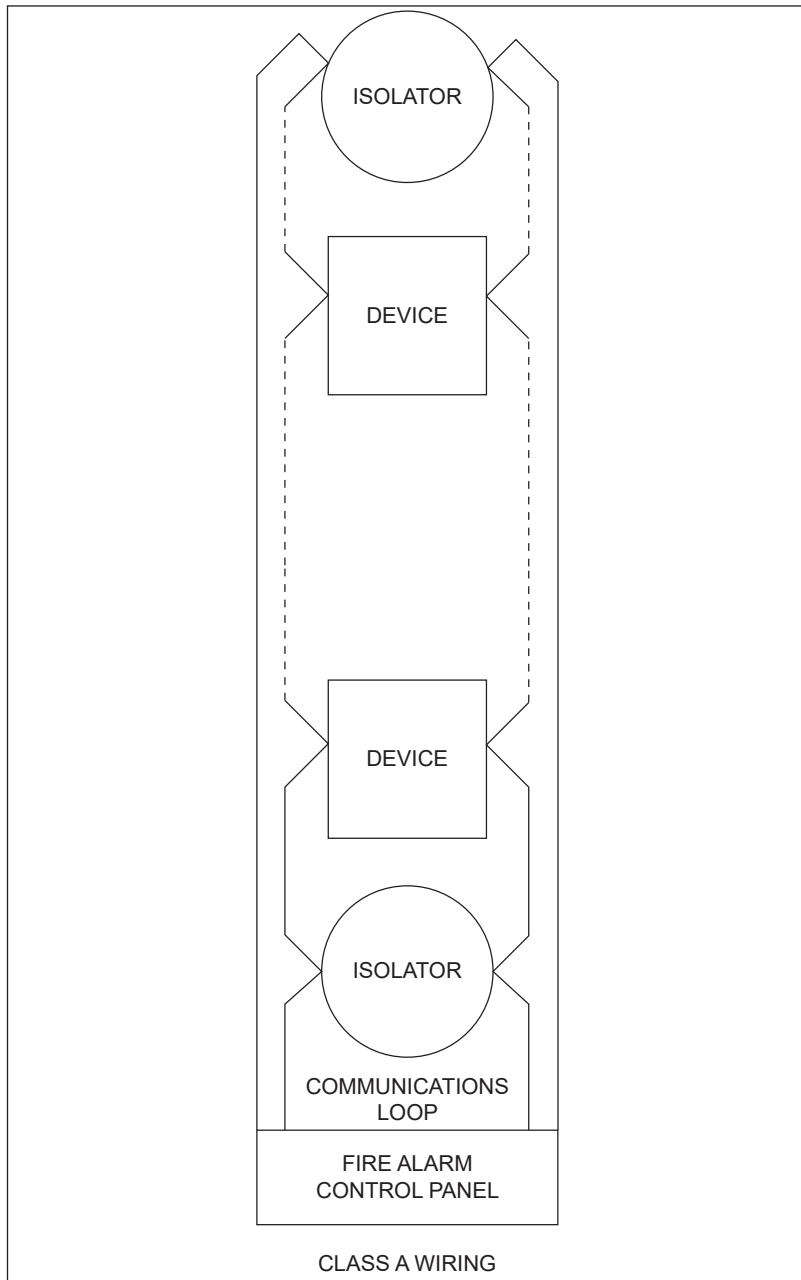


Fig. 1 Class wiring diagram

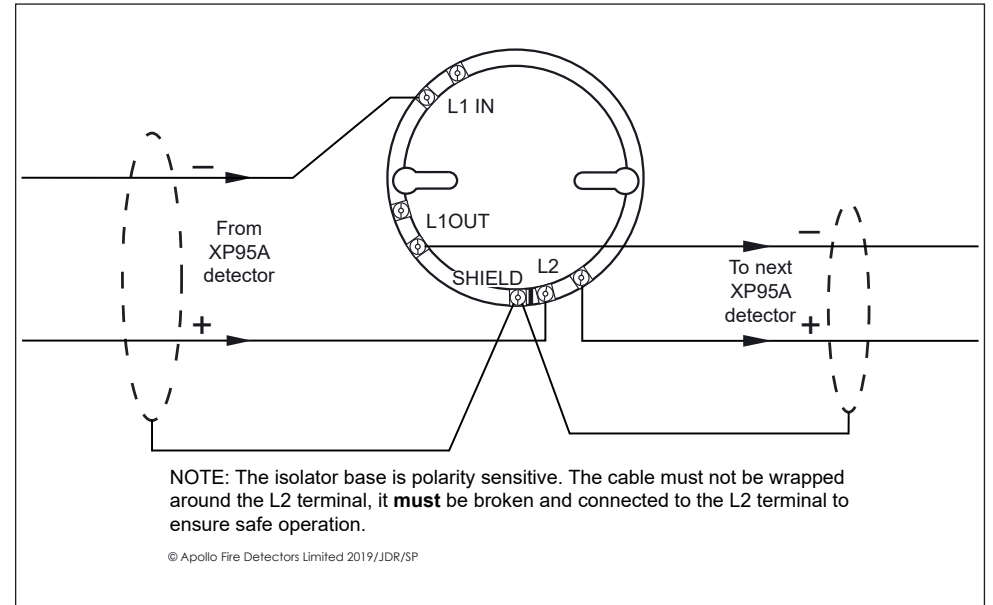


Fig. 2 XP95A Isolator Base wiring diagram

Specifications

Part No	55000-750 (Isolator), 45681-211 (Isolator Base)
Compatibility Identifier	55000-750 (Isolator), 45681-211 (Isolator Base)
Type	Isolator and Isolator Base
Style	Mounting base and twist-in isolator module
Base Material	White polycarbonate, V-0 to UL94
Dimensions	4" x 1 1/4"
Temperature Range	32°F to 100°F (0°C to 38°C)
Humidity	10 to 93% RH Non-condensing
Wiring Size	24AWG - 14AWG
Signal Line Circuit (SLC)	Supervised
Working Voltage	17-28V dc (maximum DC voltage range)
UL Listed to Operate	20-28V dc
Operating Current	Modulation Voltage 5-9V (peak to peak)
	Supervisory Current 110µA
	Surge Current 0mA
	Maximum current drawn 8.5mA
	Maximum line impedance 50Ω

Must be connected to power limited circuit with a maximum loop current of continuous 1A.

For further guidance on the use of Isolators in Addressable Fire Systems, refer to Apollo Document PP2090.