

XP95-LI

Line Isolator

Description

The Gamewell-FCI analog addressable systems can be wired as Style 7 (Class A) closed-loop systems. These systems can be interrogated from either end so that all the devices can remain in operation if an open circuit fault in the wiring occurs. A short-circuit fault can potentially disable the whole loop. By placing the Gamewell-FCI XP95-LI Line Isolator modules along the loop, only the small section between the isolators will be affected by the short-circuit fault.

The XP95-LI Line Isolator mounts directly to a unique base for ease of installation. The unique base will not accept any other XP95 products, eliminating the possibility that any other XP95 device could be installed in place of an Isolator.

Operation

The Gamewell-FCI XP95-LI Line Isolator uses a patented technique to recognize a wiring short circuit by monitoring a drop in voltage.

In standby operation, the Isolator provides a two-way power and data pathway with a low resistance of 0.4 ± 0.1 ohms in either direction. If the incoming or outgoing supply voltage falls below 15 V \pm 0.5 V, this is detected and the Line Isolator from the remainder of the SLC isolates the short circuit. The yellow LED on the Isolator will then flash at three-second intervals. The Isolator continues to monitor voltage, and when the short circuit is repaired, the Isolator automatically reverts to its low-resistance condition.

The ideal number of isolators is determined by the system layout with a maximum of 50 Isolator modules placed on any signaling line circuit (SLC).

Isolators are polarity sensitive and the positive DC supply must be connected to terminal "L2 IN/OUT" and the negative DC supply must be connected to terminal "L1 IN/OUT."

Standard Applications

The XP95-LI Line Isolator should be used any time the integrity of the line is essential. The XP95-LI is typically used at areas within a line that branches off in a unique direction, or it can be used to provide additional protection by isolating the zone monitoring devices.



XP95-LI

Features

- Compatible with the following Gamewell-FCI analog addressable fire alarm control panels
 - 600 Series
 - ILI95-E3 Series
- Protects the integrity of the initiating loop should a short-circuit fault occur
- Monitors and controls up to 50 points per circuit
- Mounts in its own unique base
- Up to 50 circuit isolators can be supported on a single SLC
- Offers a low-profile styling design
- Signals an integral yellow LED



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Engineer's Specifications

The contractor shall furnish and install, where indicated on the plans, the XP95-LI Line Isolator. The combination iso-

lator and mounting base shall be UL[®] Listed and UL Listed as compatible with the Gamewell-FCI, 600 Series or ILI95-E3 Series fire alarm control panel.

The mounting base will be unique to the Isolator and will not accept any other device type. The Isolator shall contain a yellow LED that shall flash at three-second intervals when the isolator circuit is switched on. The Line Isolator shall be Gamewell-FCI model XP95-LI.

Specifications

The device is polarity sensitive: negative line isolated in loop short Device: circuit. Line Voltage (normal loop operation): 17 – 41 V Line Resistance Standby: 0.4 ohm ± 0.1 Ambient Temperature: -20° C to 70°C (-4°F to 158°F) Maximum Continuous Load Current: 600 mA Line Resistance Operated: 80K ohm **Current Consumption Standby:** 40 µA **Current Consumption Operated:** 0.0012 A continuous **Maximum Permissible Short Circuit Current:** 1.0 A Switching Voltage: 15 V. **Operating Temperature Range:** -20°C to 70°C **Power-up Time:** 3 seconds (1 - 20 Isolators)

Ordering Information

Part Number Description

Analog XP95 Line Isolator with mounting base (55000-750, 45681-211)

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