XP95-LI

Line Isolator

General

The Gamewell-FCI Analog Addressable Systems can be wired as Style 7 (Class A) closed-loop systems. This standard allows these systems to be interrogated from either end of the loop, so that all the devices can remain in operation, in case 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. This feature prevents you from installing other types of XP95 devices in place of the Isolator.

Operation

The Gamewell-FCI XP95-LI Line Isolator uses a patented technique to recognize a wiring short-circuit. This technique monitors a drop in the voltage. In standby operation, the Isolator provides a two-way power and data pathway with a low resistance of 0.4 \pm 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 the voltage, and when you repair the short-circuit, the Isolator automatically reverts to its low-resistance condition.

To determine the ideal number of isolators, refer to the System Layout that allows a maximum of 50 Isolator modules placed on any Signaling Line Circuit (SLC). The Isolators are polarity sensitive, and you must connect the terminals as follows:

- Connect the positive DC supply to terminal "L2 IN/OUT"
- Connect the negative DC supply to terminal "L1 IN/OUT"

Standard Applications

You can use the XP95-LI Line Isolator any time the integrity of the line is essential. Use the XP95-LI in the following conditions:

- in areas within a line that branches off in a unique direction
- in areas to provide additional protection by isolating the zone monitoring devices

Ordering Information

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



XP95-LI

FEATURES & BENEFITS

- 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
- Signals an integral yellow LED
- Mounts in its own unique base
- Offers a low-profile styling design
- Up to 50 circuit isolators can be supported on a single SLC

XP95-LI Technical Specifications

SYSTEM

Device: The device is polarity sensitive: negative line isolated in loop short-circuit **Line Voltage (normal loop operation):** 17 – 41 V

Line Resistance Standby: $0.4 \text{ ohm} \pm 0.1$

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 uA

Current Consumption Operated: 0.0012 A continuous Maximum Permissible Short-Circuit Current: 1.0 A

Switching Voltage: $15 \, \text{V}$

Operating Temperature Range: -20° C to 70° C Power-up Time: 3 seconds (1 – 20 Isolators)

ENGINEER'S SPECIFICATIONS

Where indicated on the plans, the contractor will furnish and install dual chamber ionization sensors with one of the several available addressable mounting base options. The combination sensor head and twist-lock mounting base are UL® Listed as compatible with the Gamewell-FCI, 600 Series or ILI95-E3 Series Analog Addressable FACP. The base permits free interchange of sensor heads without requiring any additional wiring or additional programming of the head or base. The Gamewell-FCI model XP95-I smoke sensor has an LED that turns on when the unit goes into alarm.

STANDARDS

The XP95-LI is designed to comply with the following standard:

UL STANDARDS

UL Standard 864 9th Edition

AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult the factory for the latest listing status.

UL Listed: S1195 FM Approved

FDNY Approved: 149-99-E CSFM: 7300-1703-0153 ISO 9001 Certification

For a complete listing of all compliance approvals and certifications, please visit: http://www.gamewell-fci.com/en-US/documentation/Pages/Listings.aspx

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Country of origin: U.S.A.

