AMPAC XP95 ISOLATING BASE

PDS201-0125

Features:

- The base is loop powered
- Polarity sensitive
- Uses the XPERT card to set the associated device address
- An integral LED is illuminated in a short circuit condition on the side of the base.
- The Detector associated with the base remains active under short circuit conditions
- Power and communications to the affected sections are restored when the fault is cleared
- Stainless steel contacts that accept solid or stranded cables of up to 2.5mm²

Description

The AMPAC XP95 Isolating Base senses and isolates short circuit faults on XP95 loops and spurs. The Base is loop powered polarity sensitive and accepts the XPERT card to set the associated device address.

Technical

PROTOCOL COMPATIBILITY

The base is intended for use only with control equipment using the Apollo XP95 / Discovery communication protocol.

OPERATION

Under normal operating conditions, a low impedance is present between the –IN and –OUT terminals of the base, so that power and communication signals pass to the next base in line.

If a short circuit or abnormally low impedance occurs, the fall in negative voltage is sensed and the base isolates the negative supply in the direction of the fault. The isolated section is tested using a current pulse every five seconds. When the short circuit is removed the power will automatically be restored.

If it is a requirement that no device is lost in the event of a single short circuit fault, every detector should be fitted with an isolating base. (Refer to Apollo Loop Calculator for loop limitations)

In most applications where it is not necessary to use an isolating base for each detector, up to twenty detectors (Maximum) may be installed between isolating bases and devices that have SCI protection.

Note: Refer to Apollo Document PP2090 for further information and compatibilities.

Specifications

Minimum supply voltage in normal operating conditions	17VDC
Maximum supply voltage	28VDC plus 9VDC protocol pulses
Isolation indicator	Yellow LED illuminated continuously in the isolated / short circuit condition
CURRENT CONSUMPTION	
@ 18V	23uA
@ 28V	43uA
@ 18V and adjacent sector isolated	4mA
MAXIMUM LINE CURRENT	
Non-isolating continuous	1.0A
Transition into isolation	3.0A
Operating temperature	-20℃ to +60℃
Storage temperature	-30℃ to +80℃
Relative humidity (no condensation/icing)	0% to 95%
Design environment	Indoor Use Only
Order Code	201-0125

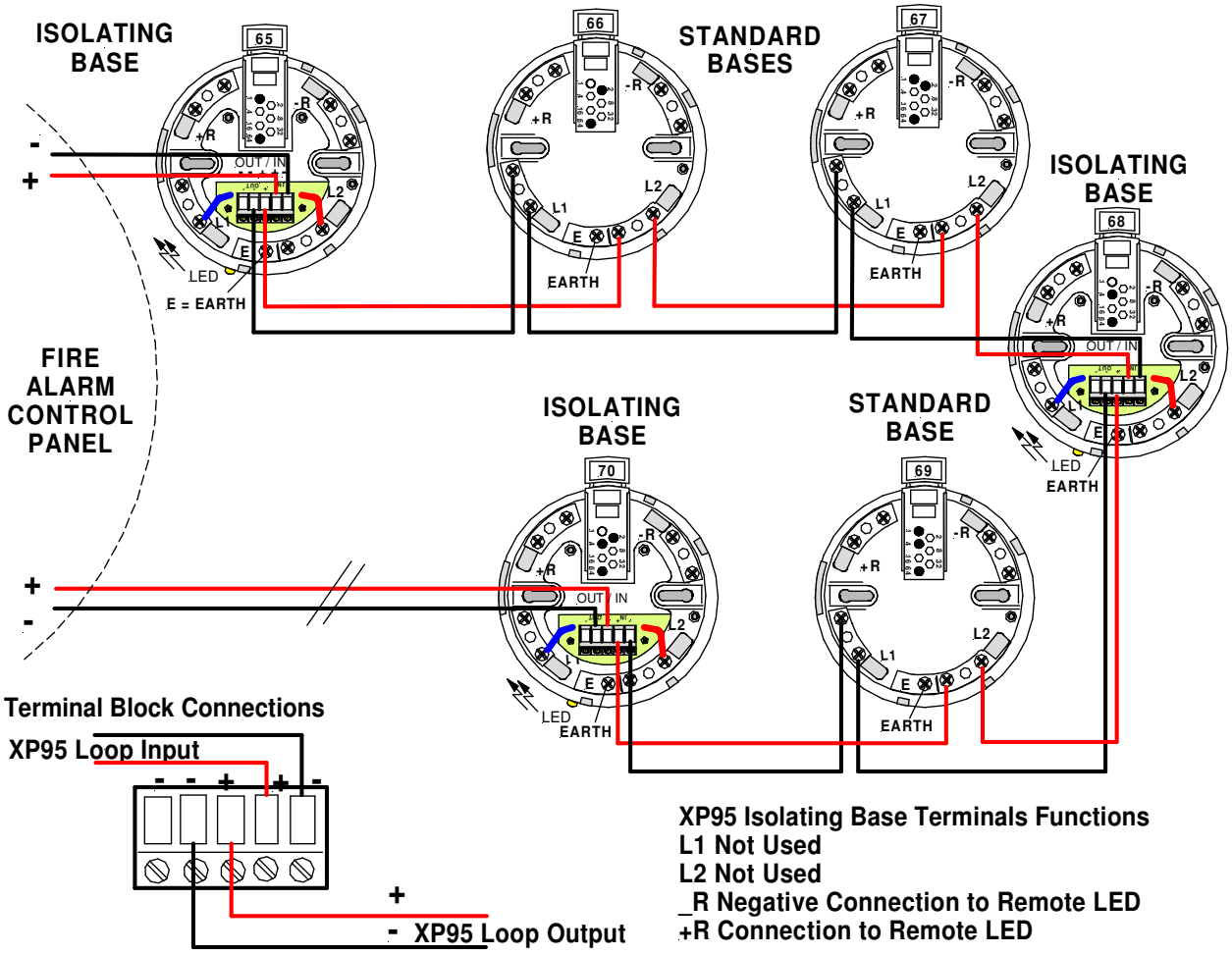

Figure 1: Wiring Diagram

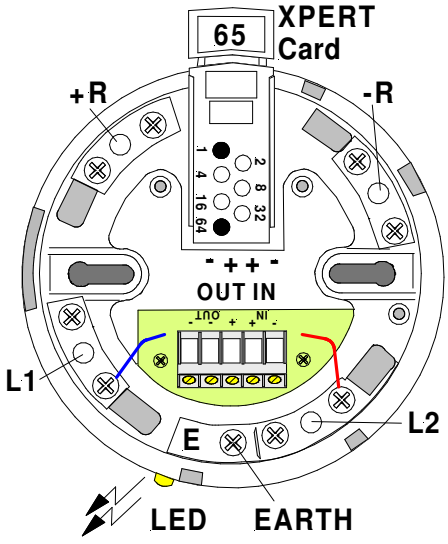

Figure 2: Base Layout