XP95 ISOLATING BASE

XP95 Isolating Base ▲ **Part Number 45681-284**

TECHNICAL DATA

XP95 Isolating Base

Device Part No:
45681-284

Minimum supply voltage in normal operating conditions:
17V DC

Maximum supply voltage:
28V DC plus 9V DC protocol pulses

Isolation indicator:
Yellow LED, lit continuously in isolation condition

Current consumption:

at 18V DC	23µA
at 28V DC	43µA
at 18V DC and adjacent sector isolated	4mA

Maximum line current:
Non-isolating continuous 1.0A
Transition into isolation 3.0A

EMC:
BS 61000–6–3
Emission To BS EN 50081–1
Immunity To BS EN 50130–4

Operating temperature:
–20˚ C to +60˚ C

Storage temperature:
–30˚ C to +80˚ C

Relative humidity (no condensation/icing):
0%–95%

Design environment:
Indoor use only

Dimensions: (diameter x height)
100mm x 24mm
Detector in base:
100mm x 60mm

Weight:
100g

CE
0832

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OPERATING PRINCIPLES

The Isolating Base senses and isolates short circuit faults on XP95 and Discovery loops and spurs.

The base is loop–powered, polarity sensitive and accepts the XPERT card to set the associated device address.

In short-circuit conditions the integral yellow LED is illuminated. The detector associated with the base remains active under short-circuit conditions. Power and signals to the affected section are restored automatically when the fault is cleared.

The Isolating Base is intended for use with equipment using the Apollo XP95 and Discovery communication protocol.

ELECTRICAL DESCRIPTION

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

If a short-circuit or abnormally low impedance occurs, the fall in 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 to an isolating base.

In applications where it is not necessary to use an isolating base for each detector, up to twenty detectors or equivalent surge current may be installed between isolating bases. See PIN sheet PP2090 for full information on loop loading between isolating bases.

Consult engineering guides or PIN sheets for quiescent current values of protected devices.

Approach Directives are also available from the Apollo website or by request.

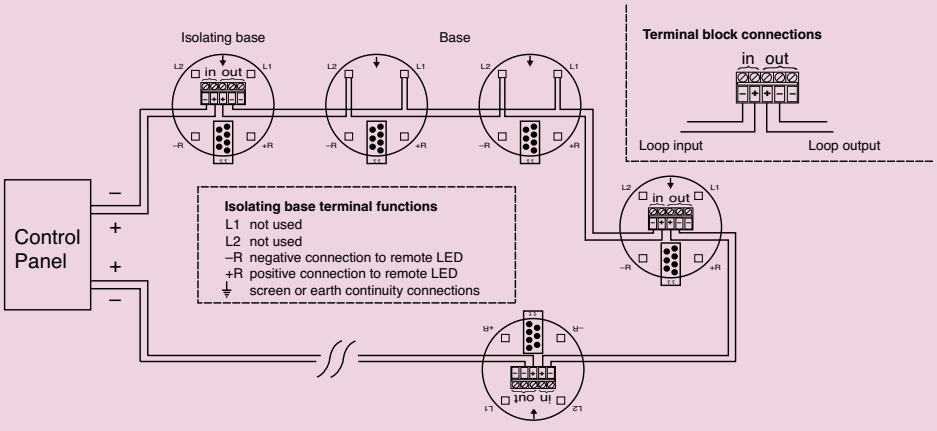

Fig.19 Schematic wiring diagram of Isolating Base