XP95 MOUNTING BASE

XP95 Mounting Base ▲ **Part Number 45681-210**

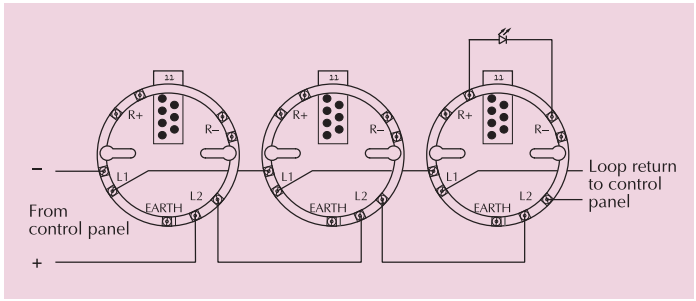

Fig.17 Schematic wiring diagram - XP95 mounting base

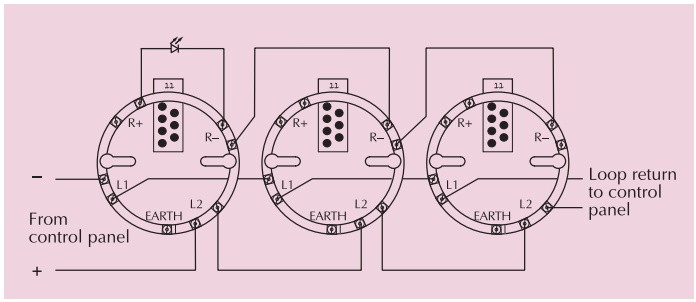

Fig.18 Schematic wiring diagram of XP95 detector circuit with a common remote LED

XP95 Mounting Bases and XPERT cards.

The XP95 smoke and heat detectors all fit the XP95 mounting base. The base is a zero insertion force base with dual finger receptacles of stainless steel into which the detector terminals slide. Cable connections of up to 2.5mm diameter are made via captive cable clamps.

There are four double terminals and one single one.

L1 line IN and OUT, double terminal

L2 line IN and OUT, double terminal

+R remote LED positive supply, double terminal

-R remote LED negative supply, double terminal

The remaining single terminal is isolated and can be used to provide continuity of an earth or shield.

Universal address cards, known as XPERT cards are supplied with all bases. Consult the coding guide to determine which pips are to be removed. Pre-printed and pre-punched address cards that save time and increase accuracy during commissioning are available in sets, part number: 38531-771

The base has a 'one way only' fit and detectors can be locked into the base by a grub screw with the aid of a 1.5mm hexagonal driver, part number: 29600-095.

For more information on Apollo's range of bases, please refer to the Range of Bases & Mounting Accessories brochure, PP1089.

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XP95 20D ISOLATING BASE

XP95 20D Isolating Base ▲ **Part Number 45681-284**

TECHNICAL DATA

XP95 20D Isolating Base

Device Part No:
45681-284

Maximum Loop Operating Voltage:
28V DC plus 9V protocol pulses

Minimum Normal Loop Operating Voltage:
17V DC

Power-up Time:
>10mS

Isolation time, 2Ω load at 28V:
20µs

Isolation Voltage:
14V

Isolation Indicator:
Yellow LED, lit continually in isolation condition

Current Consumption:

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

Maximum Line Current:
Non-isolating continuous 1.0A
Transition into isolation 3.0A

On Resistance:
<0.2Ω

Device Reset Resistance:
300Ω

EMC:
See page 21 for full details

Operating Temperature:
-20°C to +60°C

Storage Temperature:
-30°C to +80°C

Relative Humidity (no condensation/icing):
0% to 95%

Dimensions:
100mm (diameter) x 24mm (height)
100mm (diameter) x 60mm (height) base with detector fitted

Weight:
100g

OPERATING PRINCIPLES

The XP95 20D 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.

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.

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 the 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.

In applications where it is not necessary to use an isolating base for each detector, up to twenty devices (detectors and XP95 interfaces) may be installed between isolating bases, provided that their total switch-on surge current does not exceed 20mA.

Circuits may include spurs, which should be connected between the spare –OUT terminal and the base L2 terminal. Spurs connected in this way appear directly across the loop on the output side of the isolating base. Short-circuit faults on the spur therefore short circuit the loop and vice versa. The effect of such short circuits must be taken into account in the system design and may require the use of extra isolating bases.

For further information on the use of XP95 isolators, please refer to PP2090 Short Circuit Isolation in XP95 and Discovery Fire Systems.

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