

XP95 20D ISOLATING BASE

FUNCTION

The XP95 20D isolating base senses and isolates short circuit faults on XP95 loops and spurs.

FEATURES

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.

PROTOCOL COMPATIBILITY

The XP95 20D isolating base is intended for use with equipment using the Apollo Series 90, XP95 and 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 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.



Part no: 45681-321

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 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.

MECHANICAL CONSTRUCTION

The isolating base is a self-extinguishing polycarbonate moulding with nickel-plated steel terminals for connecting a detector. The associated detector can be locked into the base using the normal locking screw.

Dimensions and weight of 20D Isolating Base:

100mm diameter x 24mm high 100g
 100mm diameter x 60mm high (base with detector fitted)

EMC Directive 89/336/EEC

The XP95 20D short-circuit isolating base, part no. 45681-321, complies with the essential requirements of the EMC directive 89/336/EEC, provided that it is used as described in this PIN sheet. A copy of the Declaration of Conformity is available from Apollo on request.

Conformity of the XP95 20D short-circuit isolating base with the EMC directive does not confer compliance with the directive on any apparatus or systems connected to it.

Technical Data

Minimum supply voltage in normal operating conditions	17V
Maximum supply voltage	28V DC plus 9V protocol pulses
Isolation indicator	Yellow LED, lit continuously 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
EMC	
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

CE marked

Schematic Wiring Diagram- 20D Isolating base

