

ISOLATING BASE

FUNCTION

The Isolating Base senses and isolates short circuit faults on XP95 and Discovery 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 Isolating Base is intended for use with equipment using the Apollo 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: 45681-284

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.



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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 Isolating Base:

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

APPROVALS & REGULATORY COMPLIANCE

The short-circuit Isolating Base, part no. 45681-284, complies with the requirements of all applicable European New Approach Directives such as the EMC Directive 89/336/EEC and the Construction Products Directive 89/106/EEC. The Apollo website www.apollo-fire.co.uk has the EC certificates of conformity issued by various European Notified Bodies for Apollo products. Copies of Declarations of Conformity issued by Apollo for all applicable products under the New Approach Directives are also available from the Apollo website or by request.

The short-circuit Isolating Base complies with the marking requirements of the WEEE Directive 2002/96/EC. For further information on disposing of applicable electrical and electronic waste contact Apollo directly.

Technical Data

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

CE marked

Schematic Wiring Diagram — Isolating Base

