

# Isolating Base



## Product Overview

<b>Product Type</b>	Isolating Base
<b>Part No.</b>	45681-284

## Product Information

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 address of the associated device.

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.

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.

## Technical data

All data is supplied subject to change without notice. Specifications are typical at 24 V, 23°C and 50% RH unless otherwise stated.

<b>Supply Voltage</b>	17V -28 V dc plus 9 V dc protocol pulses						
<b>Isolation indicator</b>	Yellow LED, lit continuously in isolation condition						
<b>Current consumption</b>	<table border="0"> <tr> <td>at 18 V dc</td> <td>23 µA</td> </tr> <tr> <td>at 28 V dc</td> <td>43 µA</td> </tr> <tr> <td>at 18 V dc and adjacent sector isolated</td> <td>4 mA</td> </tr> </table>	at 18 V dc	23 µA	at 28 V dc	43 µA	at 18 V dc and adjacent sector isolated	4 mA
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<b>Maximum line current</b>	<table border="0"> <tr> <td>non-isolating continuous</td> <td>1.0 A</td> </tr> <tr> <td>transition into isolation</td> <td>3.0 A</td> </tr> </table>	non-isolating continuous	1.0 A	transition into isolation	3.0 A		
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<b>Operating temperature</b>	-20°C to +60°C						
<b>Storage temperature</b>	-30°C to +80°C						
<b>Humidity (no condensing or icing)</b>	0% to 95% relative humidity						
<b>Approved use</b>	Indoor use only						
<b>Dimensions</b>	100 mm diameter x 24 mm height						
<b>Weight</b>	100 g						
<b>Materials</b>	<table border="0"> <tr> <td><b>Body</b></td> <td>White polycarbonate moulding</td> </tr> <tr> <td><b>Terminals</b></td> <td>Nickel plated stainless steel</td> </tr> </table>	<b>Body</b>	White polycarbonate moulding	<b>Terminals</b>	Nickel plated stainless steel		
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## EMC Directive 2014/30/EU

The Isolating Base complies with the essential requirements of the EMC Directive 2014/30/EU, provided that it is used as described in this data sheet.

A copy of the Declaration of Conformity is available from Apollo on request.

Conformity of the Isolating Base with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to it.

## Construction Products Regulation 305/2011/EU

The Isolating Base complies with the essential requirements of the Construction Products Regulation 305/2011/EU.

A copy of the Declaration of Performance is available from Apollo on request.