

Discovery Marine

Isolating Base



Technical data

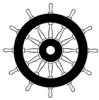
All data is supplied subject to change without notice. Specifications are typical at 24 V, 23°C and 50% RH unless otherwise stated.

<i>Minimum supply voltage in normal operating conditions</i>	17 V dc
<i>Maximum supply voltage</i>	28 V dc plus 9 V dc protocol pulses
<i>Isolation indicator</i>	Yellow LED, lit continuously in isolation condition
<i>Current consumption</i>	
	at 18 V dc 23 µA
	at 28 V dc 43 µA
	at 18 V dc and adjacent sector isolated 4 mA
<i>Maximum line current</i>	
	non-isolating continuous 1.0 A
	transition into isolation 3.0 A
<i>Operating temperature</i>	-20°C to +60°C
<i>Storage temperature</i>	-30°C to +80°C
<i>Humidity (no condensing or icing)</i>	0% to 95% relative humidity
<i>Standards and approvals</i>	MED, LR and ABS
<i>Approved use</i>	Indoor use only
<i>Dimensions</i>	100 mm diameter x 24 mm height
<i>Weight</i>	100 g
<i>Materials</i>	
	Body White polycarbonate moulding
	Terminals Nickel plated stainless steel

Product Overview

Product	Marine Isolating Base
Part No.	45681-286MAR

Approvals



Product Information

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

The Discovery Marine Isolating Base is loop-powered, polarity sensitive and accepts the XPERT 7 address 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.

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 last 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 be automatically restored.

If it is a requirement that no device is lost in the event of a single short-circuit, 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. Full details of short-circuit and loop loading can be found in PP2090 - Short Circuit Isolation - available from www.apollo-fire.co.uk

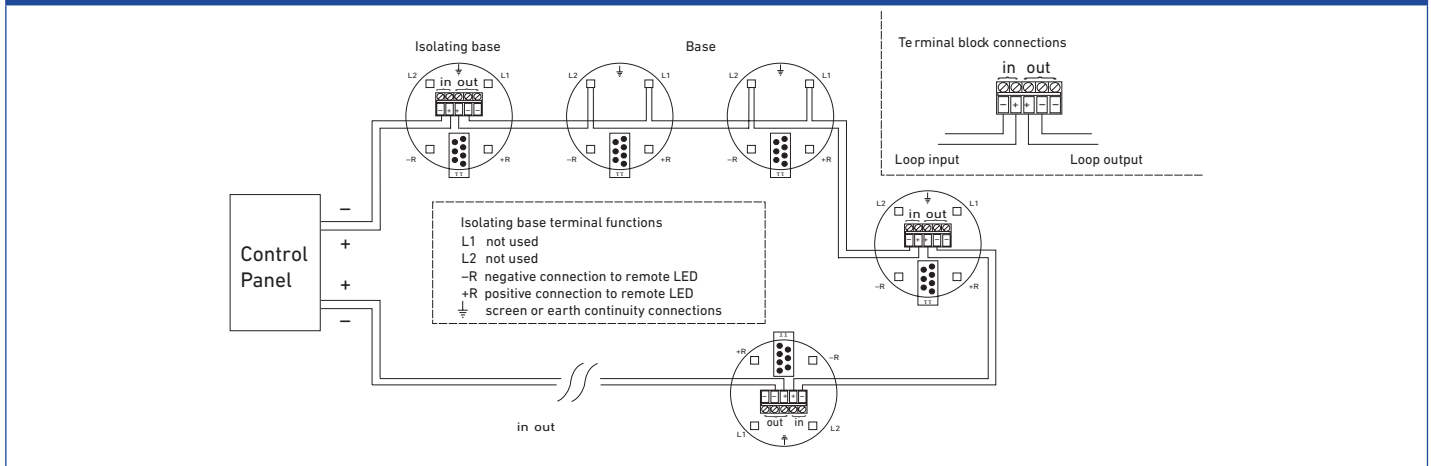
Addressing

Universal address cards, known as XPERT cards, are supplied with all bases. Consult the coding guide in the installation instructions to determine which pips are to be removed from the card to give the correct address.

Lay the card on a flat surface, pips down, insert a screwdriver into the slot on the reverse of the pip to be removed and give a firm twist.

When the card is coded insert it into the slot in the side of the appropriate base making sure that the card locks itself into place. As a detector is inserted into the base the remaining pips operate the address buttons on the detector and the detector electronics read the address. An anti-tamper screw in the lid locks the detector to the mounting base.

Discovery Marine Isolating Base - schematic wiring diagram



Protocol compatibility

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

EMC Directive 2014/30/EU

The Discovery Marine 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 www.apollo-fire.co.uk.

Conformity of the Discovery Marine 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 Discovery Marine 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 www.apollo-fire.co.uk.

Marine Equipment Directive 2014/90/EU

The Discovery Marine Isolating Base complies with the essential requirements of the Marine Equipment Directive 2014/90/EU.