

### Cautions



**ELECTRICAL HAZARD:** Disconnect power from equipment prior to making any internal adjustments. Service should only be performed by qualified personnel.

**FRAGILE:** Inspect the equipment prior to installation. Do not install the equipment if damage is apparent. Do not attempt to disassemble this equipment. If damaged, return to the supplier.

**ELECTROSTATIC HAZARD:** This is sensitive electronic equipment. Apply safe ant-static practices when handling this equipment.

**CIRCUIT LIMITATIONS:** The maximum number of devices connected to a single alarm zone is limited by the control and indicating equipment, and may be limited by local regulations.

### Introduction

The 682 isolator base provides electrical isolation of alarm zone wiring for addressable fire detection control and indicating equipment. The use of the 682 as part of the alarm zone wiring ensures that short-circuit faults in the alarm zone loop wiring disable a minimum number of devices. The 682 isolator base eliminates the need for a separate isolation device where detectors are installed on the loop.

These instructions provide trained installation personnel with details to install and commission 682 isolator bases for optimum performance.

### Preparation

Before commencing installation, ensure all equipment (base and detector) and tools to mount and connect the equipment are available, such as drills, mounting screws, cables and ladders.

682 isolator bases can be installed with addressable devices compatible with Numens control and indicating equipment.

### Installation

#### Base

The base can be mounted directly onto an electrical junction box such as an octagonal (75 mm, 90 mm or 100 mm), a round (75 mm), or a square (100 mm) box without using any type of mechanical adapter.

1. Feed the conductors through the middle of the base for termination to the base contacts.
2. Mount the base on the junction box or directly onto a flat surface.
3. Mount the base to the surface using fixing screws that are suitable to securely fix the base to the surface.

#### Wiring

The terminals accept (0.4 ~ 2.5) mm<sup>2</sup> conductors.

1. Strip the conductor insulation to expose 5 mm of the conductor.
2. Connect the conductors to the base terminals as shown in Fig. 1.



**WARNING:** Take care to ensure the insulation does not get clamped by the terminal contact.

3. Check the wiring for continuity, short circuits and earth faults.

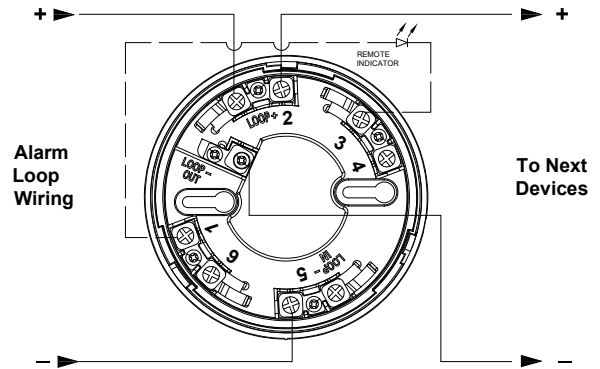


Fig. 1: 682 isolator base wiring connections

#### Detector

Note: Refer also to the relevant detector installation instructions.

1. Align the detector alignment mark with the short alignment mark in the base, as shown in Fig. 2.
2. Mate the detector head onto the base and rotate it clockwise to secure it. The long alignment marks should be aligned.

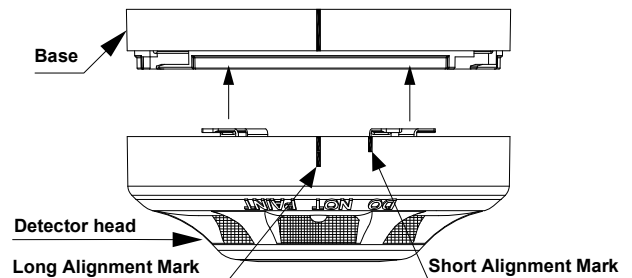


Fig. 2: Fitting the detector to the isolator base

### Commissioning

#### Isolator Base

1. Apply a short circuit to the **Loop Out** wiring.
2. Check that the status of devices connected to the **Loop In** side of the alarm zone wiring remains unchanged at the control and indicating equipment.
3. Remove the short circuit.
4. Check that devices connected to the **Loop Out** side of the alarm zone return to their previous conditions at the control and indicating equipment.

#### Final Conditions

Ensure all the alarm signal services, releasing devices and extinguisher systems disabled for the commissioning are returned to their previous condition.

### References

Document	Description
31-0063	682 isolator base datasheet

View the complete range of products at [www.numens.com](http://www.numens.com)

