



ISOLATOR BASE
INSTALLATION AND OPERATION MANUAL

Product Safety

To prevent severe injury and loss of life or property, read the instructions carefully before installing the Isolator to ensure proper and safe operation of the system.



European Union directive

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points.

For more information please visit the website at www.recyclethis.info

EN54 Part 17 Compliance

NFA-T01IB Isolator Base complies with the requirements of EN 54-17:2005.



EN54 Standard Conformity Information



EN54-17:2005
1330f/02

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| EN 54-17:2005 |

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1. Introduction

1.1. Overview

The NFA-T01IB Isolator Base is manufactured in accordance with the requirements of EN 54 Part 17, the European Standard. In the event of a short circuit on the detection loop, the NFA-T01IB Isolator Base on either side of the loop will promptly detect the issue, open the circuit, and isolate the faulty section of the loop. This allows other devices on the unaffected part of the loop to operate normally. The isolator will continuously monitor for the fault to be repaired, and once the fault is resolved, it will automatically reinstate the affected part of the loop

The NFA-T01IB Isolator Base features an aesthetically pleasing and unobtrusive design that seamlessly complements modern building aesthetics. Its plug-in assembly simplifies installation and maintenance for installers. Additionally, the isolator is fully compatible with the NFA-T04FP Intelligent Addressable Fire Alarm Control Panel ensuring seamless addressable communication compatibility.

1.2. Feature and Benefits

- EN54-17 Compliance
- In the event of a short circuit isolates faulty parts of the loop.
- Automatically resetting once the fault has cleared
- Can monitor up to 70 devices
- LED status indicator
- Loop powered device
- Aesthetically pleasing design
- A detector can be mounted directly above the isolator

1.3. Technical Specification

| | |
|--|--|
| • Listed | LPCB Certification |
| • Compliance | EN 54-17:2005 |
| • Maximum Operating Voltage (V MAX) | 28VDC |
| • Operating Voltage (V NOM) | 24V |
| • Minimum Operating Voltage (V MIN) | 16V |
| • Maximum Open Voltage (V SO MAX) | 11V |
| • Minimum Open Voltage (V SO MIN) | 8V |
| • Maximum Close Voltage (V SC MAX) | 3V |
| • Minimum Close Voltage (V SC MIN) | 1.4V |
| • Maximum Continuous Current (I C MAX) | 500mA |
| • Maximum Transient Output Current (I S MAX) | 5A |
| • Maximum Leakage Current (I L MAX) | 2mA |
| • Max closed impedance (Z C MAX) | 0.65 ohms |
| • Current Consumption | Standby 0.15mA, Alarm: 2mA |
| • Protocol | Norden |
| • Number of monitored Max | 70 Devices |
| • Output Impedance | 480 ohms |
| • Indicator Status | Normal: Single blink/Active: Steady-on |
| • Material / Colour | ABS / White Glossy finishing |

- | | |
|---|---|
| <ul style="list-style-type: none"> • Dimension / LWH • Weight • Operating Temperature • Ingress Protection Rating • Humidity | <p>Diameter 100.7mm, Thickness 34mm 108g (with Cover), 91g (without Cover) -10°C to +50°C IP30 0 to 95% Relative Humidity, Non condensing</p> |
|---|---|

2. Installation

2.1. Installation Preparation

This Isolator Base must be installed, commissioned and maintained by a qualified or factory trained service personnel. The installation must be installed in compliance with all local codes having a jurisdiction in your area or BS 5839 Part 1 and EN54.

Norden products have available range of interfaces, each interface isolator is designed for specific application, it is essential to consider the requirement of both sides of the interface to avoid malfunction and typical fault scenario. The main caution is to ensure that the voltage rating of the equipment and interface isolator are compatible.

2.2. Installation and Wiring

1. The appearance of the Isolator Base is shown in Figure 1. Figure 1-a, 1-b and 1-c are front view with a cover, front view without a cover and side view without a cover, respectively.
2. As shown in Figure 1-b, “ZI+” and “ZI-” are the positive and negative terminals of the bus input. ZO+ and ZO- are the positive and negative terminals of the bus output. “L+” and “L-” are used to connect the remote-control lights.
3. Figure 2 is the installation of the isolator Base. The isolator base can be installed on the wall with screws through the mounting holes. The wires are connected to the terminals of the isolator through the cable entry.

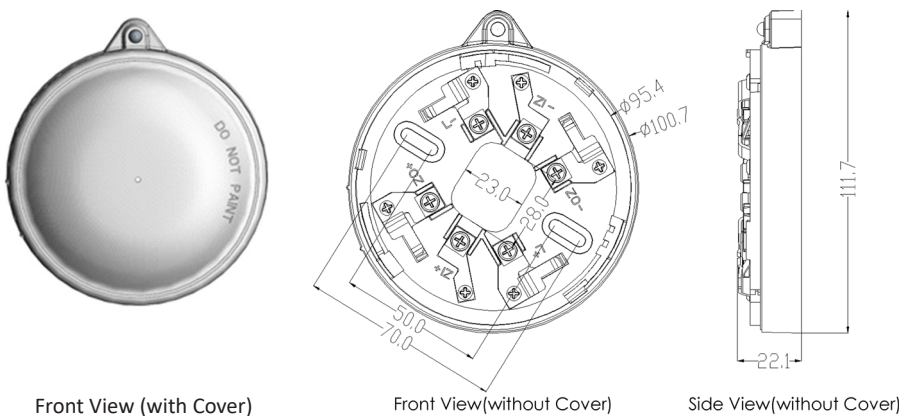


Figure 1 External view of Isolator base

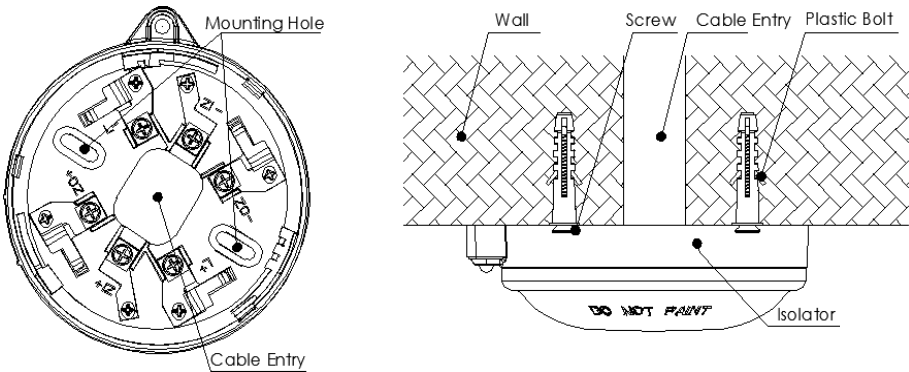


Figure 2 Wiring Diagram

3.General Maintenance

1. Inform the suitable personnel before conducting the maintenance.

Note: Since Isolator cannot disable from the control panel to prevent false alarm, it is recommended to temporarily close the loop once the isolator is removed.
2. Do not attempt to repair the circuitry of the interface isolator, it may affect the operation to respond to a fire condition and will void the manufacturer's warranty.
3. Use a damp cloth to clean the surface.
4. Notify again proper personnel after conducting the maintenance and make sure to enable the interface isolator and confirm if up and running.
5. Perform the maintenance on semi-annually or depending on the site conditions.

4.Troubleshooting Guide

| What you notice | What it means | What to do |
|--------------------------|---|--------------------|
| Panel display loop fault | Wrong wiring or the damage the electronic circuit | Replace the device |

Appendix 1

Limitation of Isolator Base

The isolator Base cannot last forever. To keep it working in good condition, please maintain the equipment continuously according to recommendations from manufacturers and relative nation codes and laws. Take specific maintenance measures on the basis of different environments.

This isolator Base contains electronic parts. Even though it is made to last for a long period of time, any of these parts could fail at any time. Therefore, test your isolator at least every half-year according to national codes or laws. Any interface isolator, fire alarm devices or any other components of the system must be repaired and/or replaced immediately as they fail.



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