LF-X5232

Base Mount Short Circuit Isolator
Installation and Operation Manual

Product Safety

To prevent severe injury and loss of life or property, read the instruction 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

LF-X5232 Base Mount Short Circuit Isolator complies with the requirements of EN 54-17:2005.

EN54 Standard Conformity Information

LOSS PREVENTION CERTIFICATION BOARD
LPCB
EN54-17: 2005
1330f/02

Table of Content

1 Introduction

1.1 Overview

The LF-X5232 manufactured base on the requirement of EN 54 part 17, European Standard. In the event of short circuit on the detection loop the LF-X5232 Isolators either side of the loop will detect the problem and open circuit and isolates the faulty part of the loop, enabling other devices on the unaffected part of the loop to operate normally. The isolator will continue to monitor for the fault to be repaired, once the fault is cleared the isolator will automatically reinstate the effected part of the loop.

The unit is aesthetically pleasing with unobtrusive design that will complement modern building designs and its plug-in type assembles make installation and maintenance more convenient to the installer. The LF-X5232 Isolator is compatible to the LF-X500 Analogue Intelligent Fire Alarm Control Panel, produced by single manufacture LIFECO, to avoid addressable communication compatibility problem.

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	LIFECO
Number of monitored Max	70 Devices
Output Impedance	480 ohms
Indicator Status	Normal: Single blink/Active: Steady-on
Material / Colour	ABS / White Glossy finishing
Dimension / LWH	Diameter 100.7mm, Thickness 34mm
Weight	108g (with Cover), 91g (without Cover)
Operating Temperature	-10°C to +50°C
Ingress Protection Rating	IP30
Humidity	0 to 95% Relative Humidity, Non condensing

2 Installation

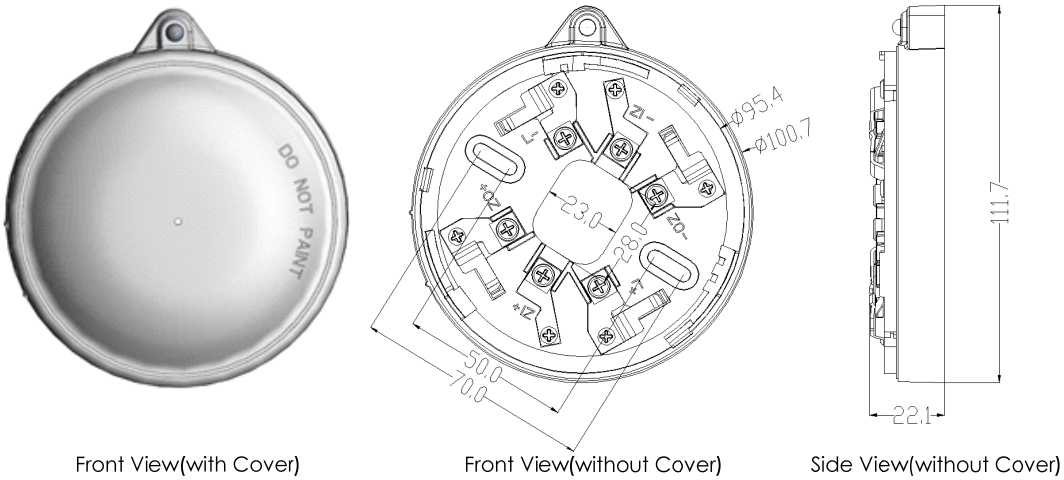
2.1 Installation Preparation

This interface isolator 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.

LIFECO products has 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 Base Mount Short Circuit Isolator 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. The isolator 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.



Front View(with Cover) Front View(without Cover) Side View(without Cover)

Figure 1 External view of Base Mount Short Circuit Isolator

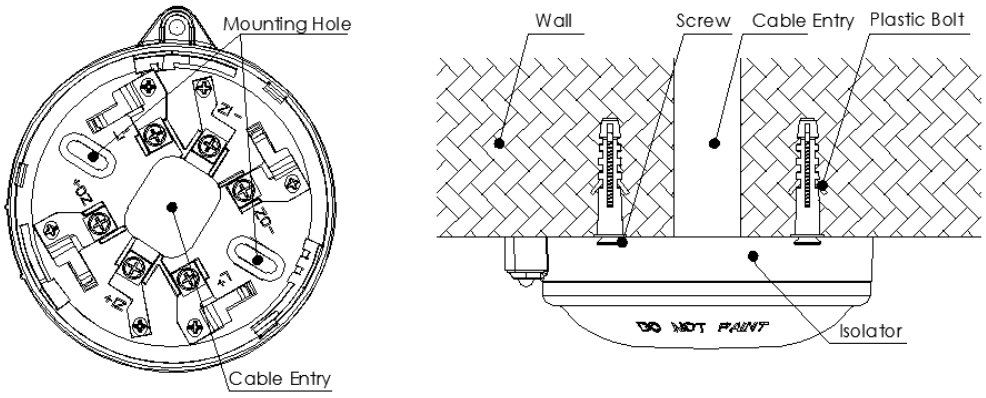


Figure 2 Wiring Diagram

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 Base Mount Short Circuit Isolator

The isolator cannot last forever. In order 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 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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