SIEMENS SLIM Loop Isolator Module Instruction Manual

SIEMENS

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Instruction Manual

Contents

OPERATION

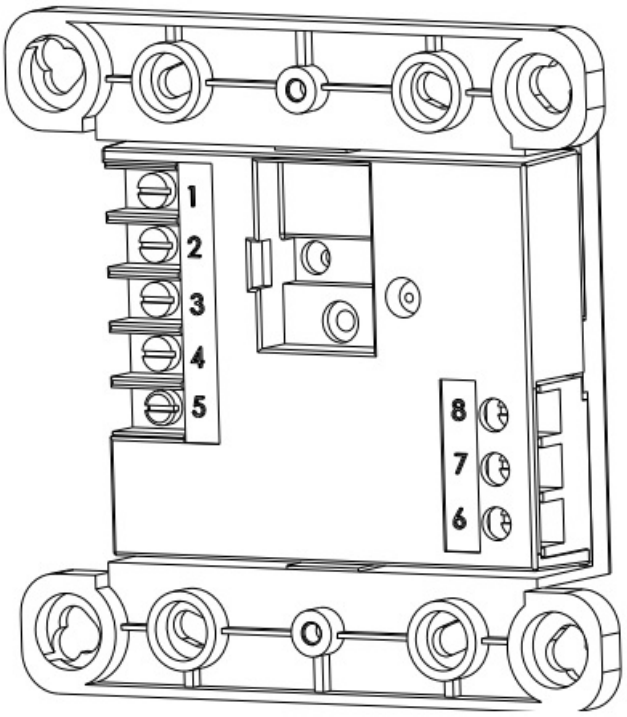

Figure 1 SLIM-1 Module

The Model SLIM Loop Isolator Module from Siemens Industry, Inc. isolates short circuits on FS-250C analog loops. By placing devices between SLIMs during installation, a short in the wiring within that group is disconnected from the rest of the loop.
The remainder of the devices continue to operate.
The SLIM operates in both Class A and Class B circuits.
A yellow LED flashes when a device detects a short circuit. The SLIM then isolates that part of the loop. When the short is removed, the SLIM automatically restores the loop to normal operation. The SLIM does not have a loop address and therefore does not require address programming nor does it reduce the loop capacity below 252 devices.

⚠ Remove all system power before installation, first the battery and then the AC.

ELECTRICAL RATINGS

Voltage:	24 Vdc
Current:	1mA max

INSTALLATION

The SLIM is a polarity insensitive module. Refer to Figure 1 for the location of the two input terminals, two output terminals and earth ground. Line 1 and Line 2 can be either line of the loop.

Terminal Number	Description
1	In — Line 1
2	In — Line 2
3	Out — Line 1
4	Out — Line 2
5	Earth Ground

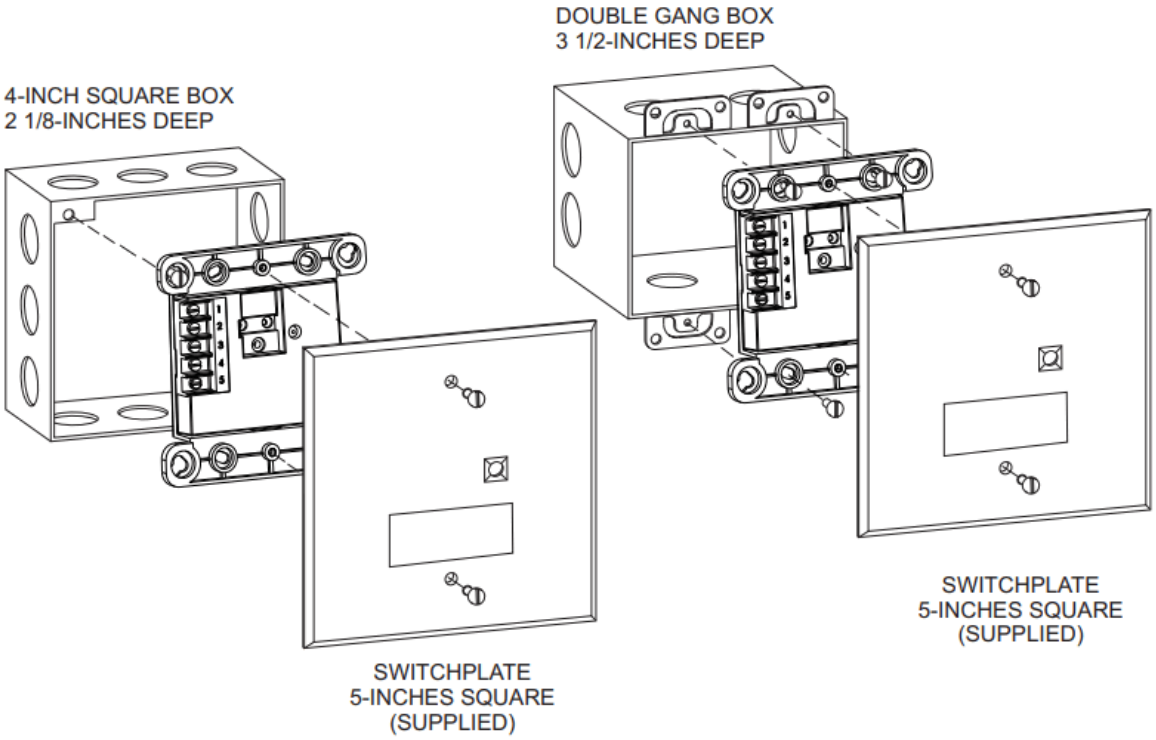

Figure 2 Mounting the SLIM

Mechanical Installation (See Figure 2)

- Use a standard 3 1/2-inch deep, double gang electrical switchbox or a 4-inch square electrical box that is 2 1/8 inches deep.
- Connect the field wiring. Press the SLIM into the box and fasten the module plate to the box.
- Cover the module front plate with the plate supplied and fasten with screws supplied.

The SLIM may be used in two circuit configurations as follows:
(See Figure 3) In Class B wiring each SLIM isolates a branch on the circuit. Note that a short on the main branch causes the entire loop to fail. To prevent this, mount the SLIMs at the enclosure and run each branch independently.

Class B

1. All wiring must comply with national and local codes.
2. In order to provide adequate protection, it is recommended that you do not install more than 20 devices on a single SLIM.
3. Minimum wire gauge is 18 AWG.

4. The total wire resistance (both wires) between SLIMs cannot exceed 20 ohms.
5. Do not install more than 15 SLIMs per FDLC loop.
6. All circuits are supervised.
7. Refer to the FS-250C Manual, P/N 315-049589C for the list of compatible devices.
8. All terminals are power limited.

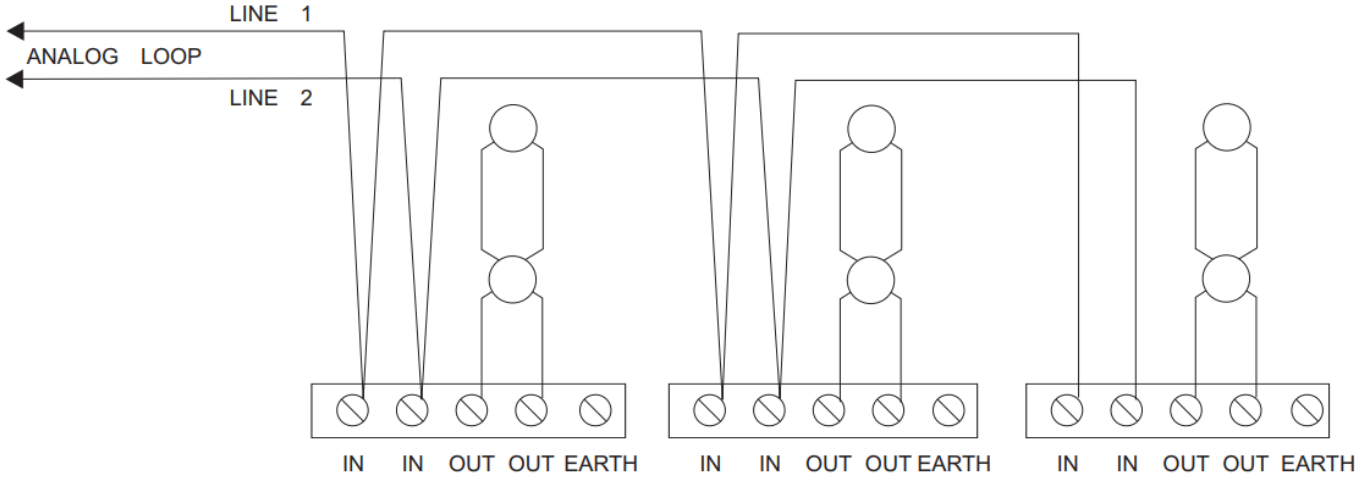

Figure 3 SLIM Wiring Diagram – Class B Installation

Class A Single Loop

(See Figure 4) IIn Class A wiring the SLIMS are wired in series with the loop wiring.
This results in a single continuous loop. If any group in the loop has a short, that group is lost and a Class A circuit failure results.

1. All wiring must comply with national and local codes.
2. In order to provide adequate protection, it is recommended that you do not install more than 20 devices on a single SLIM.
3. Minimum wire gauge is 18 AWG.
4. The total wire resistance (both wires) between SLIMs cannot exceed 20 ohms.
5. Do not install more than 15 SLIMs per FDLC loop.
6. All circuits are supervised.
7. Refer to the FS-250C Manual, P/N 315-049589C for the list of compatible devices, as applicable.
8. All terminals are power limited.

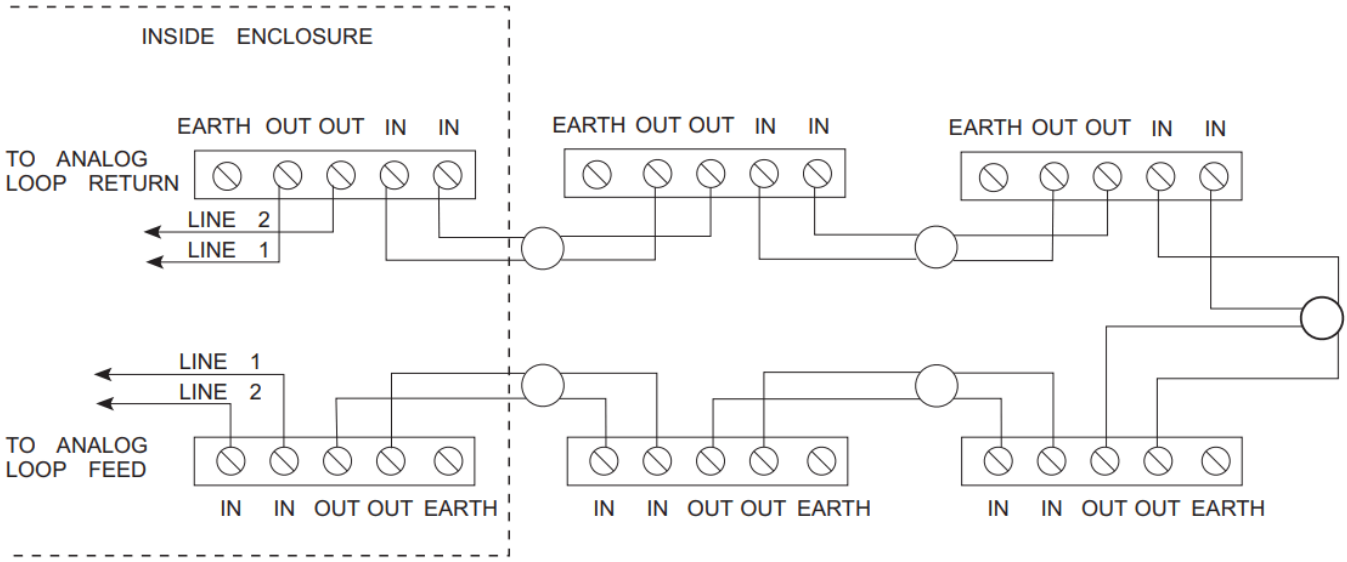

Figure 4 SLIM Wiring Diagram – Class A Installation (Single Loop)

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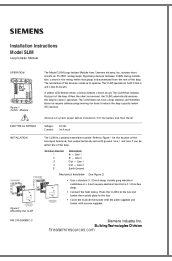
Documents / Resources

	SIEMENS SLIM Loop Isolator Module [pdf] Instruction Manual SLIM Loop Isolator Module, SLIM, Loop Isolator Module, Isolator Module

References

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