

SIEMENS

Installation Instructions

Model HLIM

Loop Isolator Module

OPERATION

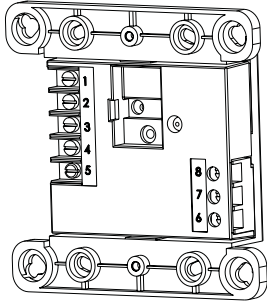


Figure 1
HLIM-1 Module

The Model HLIM Loop Isolator Module from Siemens Industry, Inc. isolates short circuits on FireFinder-XLS or FS-250 analog loops. By placing devices between HLIMs 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 HLIM operates in both Class A and Class B circuits.

A yellow LED flashes when a device detects a short circuit. The HLIM then isolates that part of the loop. When the short is removed, the HLIM automatically restores the loop to normal operation. The HLIM 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

DLC / FS-DLC Loop	
Max. Current	1mA

INSTALLATION

The HLIM 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

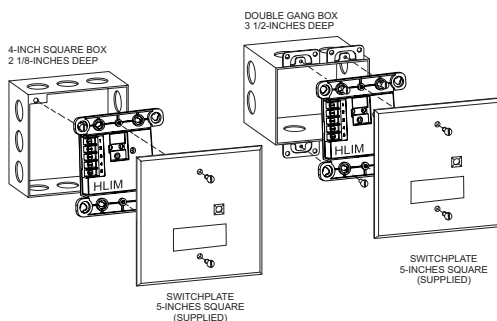


Figure 2
Mounting the HLIM

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 HLIM 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 HLIM may be used in two circuit configurations as follows:

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 HLIM.
3. 18 AWG minimum, 14 AWG maximum.
4. The total wire resistance (both wires) between HLIMs cannot exceed 20 ohms.
5. Do not install more than 15 HLIMs per DLC/FS-DLC loop.
6. All circuits are supervised.
7. Refer to DLC Installation Instructions, P/N 315-033090 or the FS-250 Manual, P/N 315-049353 for the list of compatible devices, as applicable.
8. All terminals are power limited.

(See Figure 3) In Class B wiring each HLIM 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 HLIMs at the enclosure and run each branch independently.

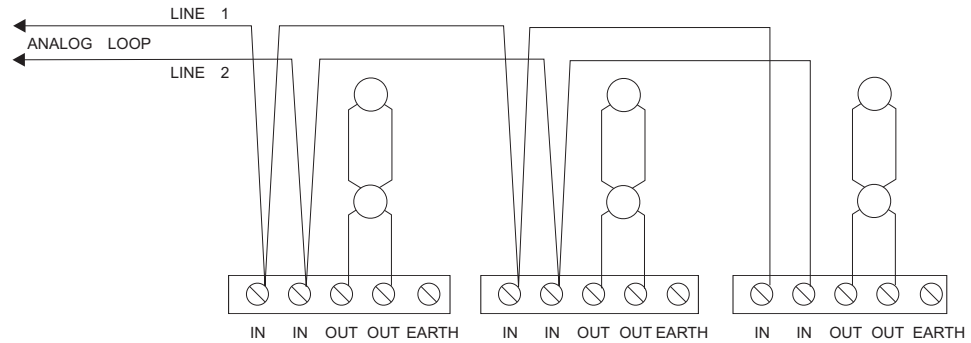


Figure 3
HLIM Wiring Diagram - Class B Installation

Class A Single Loop

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 HLIM.
3. 18 AWG minimum, 14 AWG maximum.
4. The total wire resistance (both wires) between HLIMs cannot exceed 20 ohms.
5. Do not install more than 15 HLIMs per DLC/FS-DLC loop.
6. All circuits are supervised.
7. Refer to DLC Installation Instructions, P/N 315-033090 or the FS-250 Manual, P/N 315-049353 for the list of compatible devices, as applicable.
8. All terminals are power limited.

(See Figure 4) In Class A wiring the HLIMs 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.

- The FireFinder-XLS displays communication errors for the devices and a Class A failure for the loop itself.
- The FS-250 displays the message "DLC Open" and "no response" for devices in the groups on the loop that follow the short.

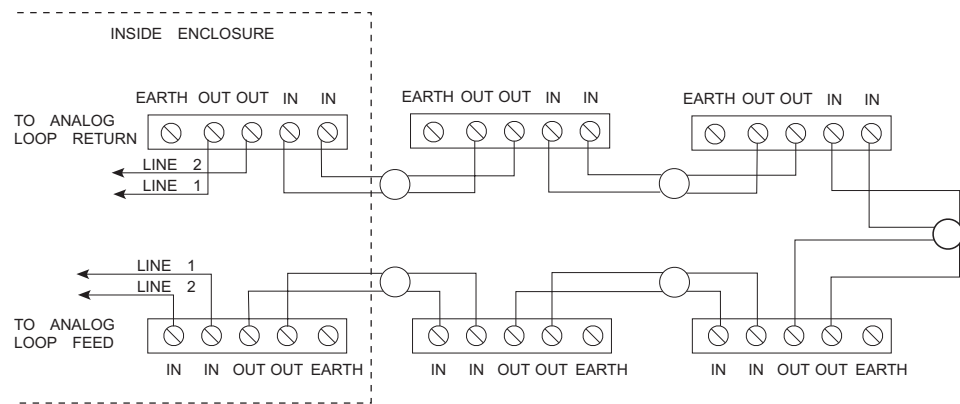


Figure 4
HLIM Wiring Diagram - Class A Installation (Single Loop)