

Installation Manual: PAD300-IM Isolator Module

NOTICE TO THE INSTALLER

This manual provides an overview and the installation instructions for the PAD300-IM module. This module is only compatible with addressable fire systems that utilize the PAD Addressable Protocol.

All terminals are power limited and should be wired in accordance with the requirements of NFPA 70 (NEC) and NFPA 72 (National Fire Alarm Code). Failure to follow the wiring diagrams in the following pages will cause the system to not operate as intended. For further information, refer to the control panel installation instructions.

The module shall only be installed with listed control panels. Refer to the control panel installation manual for proper system operation.

1. Description

The PAD300-IM does not require an SLC loop address but does consume power from the SLC loop. The module provides protection against short circuits by limiting the number of affected devices. When the PAD300-IM detects a short circuit on the SLC loop, it disconnects the outgoing side of the module to prevent the short from affecting the rest of the SLC loop. The module mounts on either an UL Listed 2-1/2" deep 2-gang box or 1-1/2" deep 4" square box.

The PAD300-IM includes one red LED to indicate the module's status. When the module is shorted, the LED will light continuously. Once the short is removed, the PAD300-IM will automatically restore to a cleared condition.

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to the SLC or device.

- Power to the SLC is removed.
- Field wiring on module is correctly installed.
- Field wiring has no open or short circuits.

2. Technical Specifications

Operating Voltage	24.0V
Max SLC Standby Current	100 μ A
Max SLC Short Circuit Current	3.7mA
Max no. of PAD300-IM on SLC Loop	254 Units
Operating Temperature Range	32° to 120° F (0° to 49° C)
Operating Humidity Range	0 to 93% (non-condensing)
Dimensions	4.17" L x 4.17" W x 1.14" D
Mounting Options	UL Listed 2-1/2" deep 2-gang box or 1-1/2" deep 4" square box
Shipping Weight	0.6 lbs

3. Wiring Diagrams

The wiring diagram shown below illustrates how to wire a PAD300-IM module as Class X. Additionally, an installation diagram shows how to install the module using a UL Listed electrical box.

Figure 1. Example of Installing a PAD300-IM Using a UL Listed Electrical Box

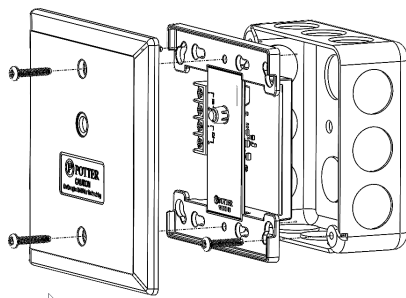


Figure 2. Example of Wiring a PAD300-IM as Class X

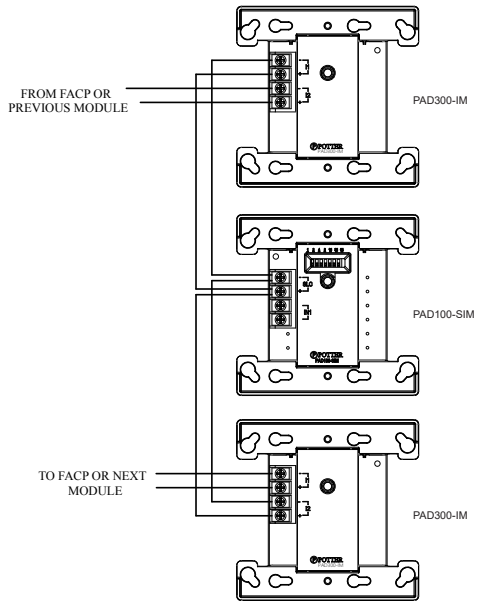


Figure 3. Example of Wiring a PAD300-IM as Class A

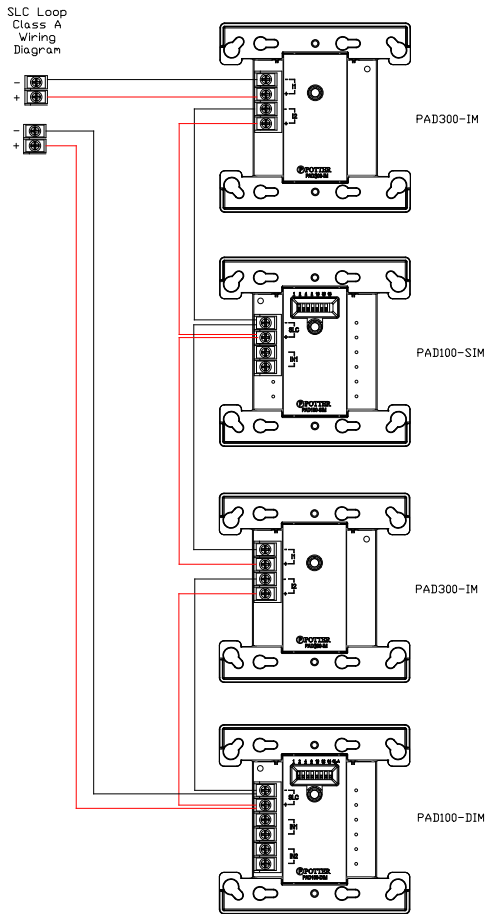
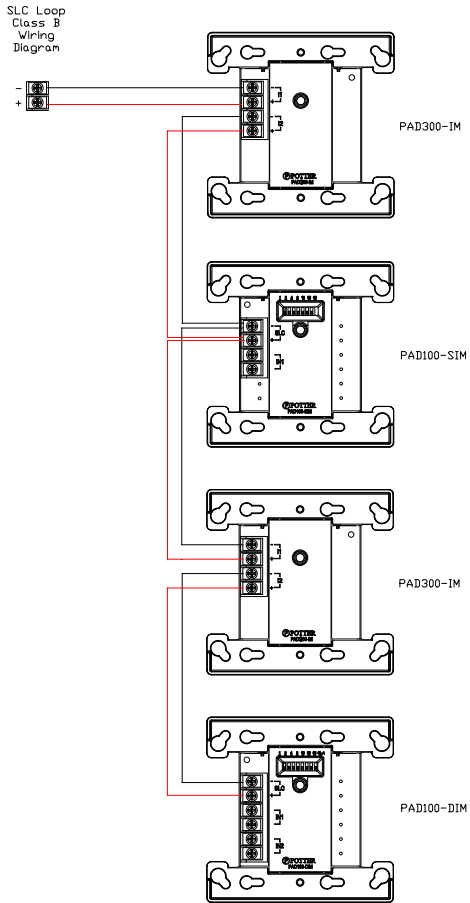


Figure 4. Example of Wiring a PAD300-IM as Class B



Notes:

- Wiring style supports the Class A, Class X and Class B.
- Wiring for terminals (I1 and I2) are supervised.
- Wiring for terminals (I1 and I2) are power limited.
- All wiring is between #12 (max.) and #22 (min.).
- Wire Preparation – Strip all wires 1/4 inch from their edges as shown here:



- Stripping too much insulation may cause a ground fault.
- Stripping too little may cause a poor connection and subsequently an open circuit.

These instructions do not purport to cover all the details or variations in the equipment described, nor provide for every possible contingency to be met in connection with installation, operation and maintenance.

Specifications subject to change without prior notification.

For Technical Assistance contact Potter Electric Signal Company at 866-956-1211.

Actual performance is based on proper application of the product by a qualified professional.

Should further information be desired or should particular problems arise, which are not covered sufficiently for the purchaser's purpose, the matter should be referred to a distributor in your region.