

# FW2851 ISOLATOR MODULE







# **DESCRIPTION**

The FW2851 isolator module isolates the short point on the signaling line circuit (SLC) or Data Communication Link (DCL). The internal relay will be triggered to cut down the line power where the short trouble is detected. The device two LEDs will indicate the trouble condition from side A (terminal 1/2) and side B (7/8) individually by yellow steady on. A return to normal condition will cause the internal relay to normal position to restore the line power and the device LED indicator will return to the idle condition. The FW2851 does not occupy an address on the Fire Alarm Control Panel's SLC/DCL, so no address programming is required. The FW2851 is a UL listed product according to UL864 and ULC-S527 for Fire Protective Signaling Systems for indoor use.

#### **ATTENTION**



The products must be installed in accordance with the NFPA 72, the CAN/ULC-S524, and the Canadian Electrical Code depending on the country of installation. Check information of equipment used in the system by other

manufacturers for any guidelines or restrictions.

#### NOTE

Do not paint this device.

Any material extrapolated from this document or from Maple Armor's instructions or other documents describing the product for use in promotional or advertising claims, or for any other use, including a description of the product's application, operation, installation, and testing is the sole responsibility of the user. Maple Armor will not assume any liability for such use. In no case will Maple Armor's liability exceed the purchase price paid for a product.

### **SPECIFICATION**

Nominal Voltage	24VDC
Compatibility Voltage Range	13 to 28VDC
Standby Current	≤0.25 mA
Active Current	≤10.8mA
Max. continuous current rating during isolator activation	400 mA
Max. current during normal standby condition	350 mA
Isolator activation	Max. 2.53 V on SLC/DCL
Operating Temperature	32 - 120°F (0 - 49°C)
Operating Humidity	0% to 93% RH Non-condensing
Dimension	120 mm (L) x 120 mm (W) x 45 mm (H)
Weight (with backbox)	8.8 oz (249 g)
Mounting	FW800 / FW801 Base
Wiring Gauge	12 to 18 AWG



### **INSTALLATION**

1. Mount the FW800 / FW801 base onto a 2X4 or 4x4 electrical box using the screws provided, as illustrated in Figure 1.

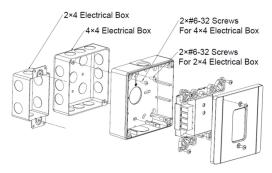
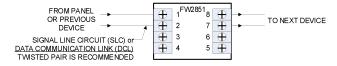


Figure 1. Installation Diagram

Connect the wires, see Figure 2. There is nonpolarity between terminal 1 and terminal 2, and between terminal 7 and 8. All circuits are powerlimited.



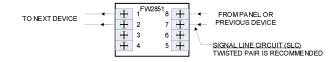
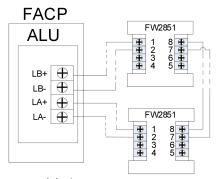
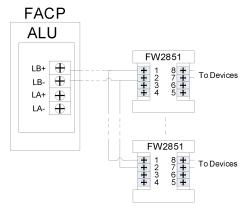


Figure 2. Module Wiring Diagram (SLC/DCL)

3. Wire the SLC/DCL to the module, as illustrated in Figure 3.



(a) Class A or DCLA Circuit



(b) Class B or DCLB Circuit Figure 3. SLC/DCL Wiring Diagram

- 4. Combine the assembled unit to the base using the screws provided.
- 5. Apply power to FACP.

# **TESTING**

- Before testing, inform the proper authorities that the system is undergoing maintenance and will temporarily be put out of service. Disable the system to prevent unwanted alarms.
- 2. Make a short circuit trouble on the SLC/DCL. Check the FW2851 internal relay to see if it is triggered and to verify if the LED turned to steady on.
- Restore the short circuit trouble and check the FW2851 internal relay to see if it is restored to normal position and to verify that the LED turned off
- 4. Once the testing is completed, set the system back to normal operation and inform proper authorities.

# **MAINTENANCE**

Return the module for repair if it fails to flash or alarm during testing. Do not disassemble the module without permission.