

### General

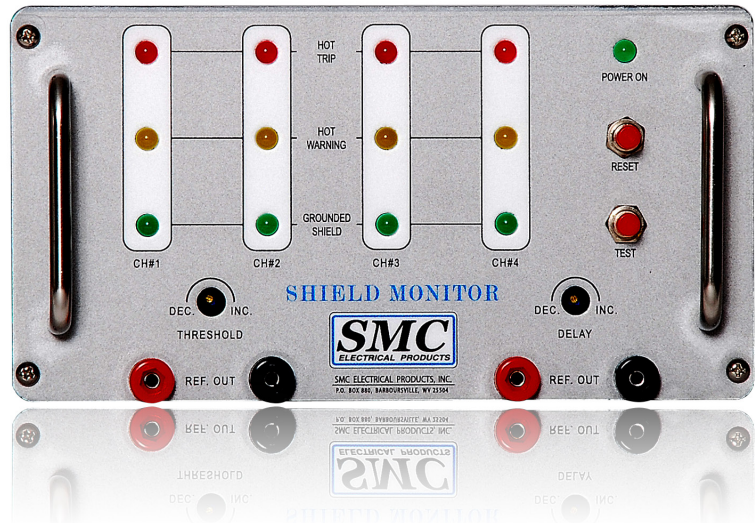
The CSM Shield Monitor is a cost-effective means of monitoring the integrity of a shielded DC feeder cable. This unit maintains a constant vigil, monitoring the shield for possible insulation breakdown to power conductor and/or to the structure. The Shield Monitor, in conjunction with shielded feeder cables, can provide around-the-clock, self-contained protection for DC feeder cables. Each unit has four (4) channels allowing monitoring of feeder cables. Continuous shield monitoring makes periodic “Meggering” a thing of the past.

There are two (2) types of faults that the CSM Shield Monitor will detect; “Hot” shield and “Grounded” shield. A “Hot” shield is defined as a shield that acquires a potential in reference to the negative rail that exceeds a safe margin. This would indicate a breakdown in the insulation of the cable between the main conductor and the shield. When the unit approaches the predetermined limit a yellow LED illuminates and initiates an annunciation output to warn of an impending problem. Once the predetermined limit is reached, a red LED will illuminate and initiate a trip output indicating the insulation is unsafe. The relay will stay in the tripped state (latched) until reset is actuated.

This second type of fault is warning of a breakdown in the insulation of the cable between the structure ground and the shield. This will cause a green LED to illuminate on the front panel and an annunciation output to occur.

The annunciation contact and lights are not latched and if conditions warrant they will return to off.

The green “power on” LED blinks to indicate the relay is powered up and monitoring the cable.



### Specification

<b>Input Power:</b>	125 VDC/125 VAC
<b>Supply Current:</b>	40 ma
<b>Ambient Temperature:</b>	-20 <sup>∞</sup> to +55 <sup>∞</sup>
<b>Trip Contacts:</b>	Form A 12A Contacts, 65 WDC Break at 125 VDC
<b>Annunciation Contacts:</b>	Form B (Held Open) 12A Contacts, 65 WDC Break at 125 VDC

### Common Features

- Panel Mount
- Test Switch
- Reset on cover plate
- Diagnostic indicators on cover plate for each panel
- Latching for hot trip shield inputs
- Ground leakage or hot warning N.C. annunciate output, Held Open (ANN Contacts)
- Sensitivity Delay Adjustment (30 sec - 5 hours)

#### C4330-100 Specific Features

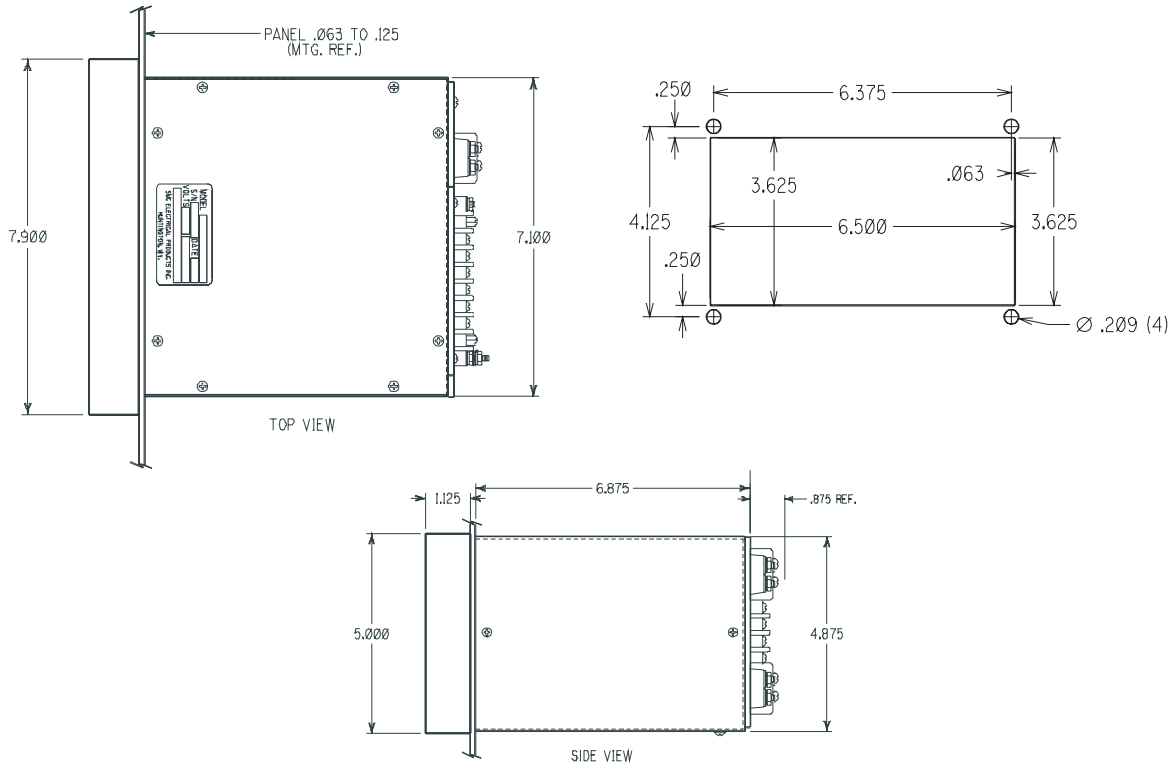
- Four outputs for hot trip, one for each channel (CH1, CH2, CH3, CH4, Trip Contacts)
- Hot Threshold Adjustment (0-50 VDC)

#### C4330-101 Specific Features

- Two N.O. annunciate outputs, Held Closed (CH1, CH2 Trip Contacts)
- Two N.O. outputs for Hot Trip, Trips on any channel (CH3, CH4 Trip Contacts)
- Hot Threshold Adjustment (0-150 VDC)

# Case Dimensions

No unauthorized modification to monitor case or monitor case wiring.



# Typical Connection

