

# INSTALLATION INSTRUCTIONS FOR THE DCP-SCI SHORT CIRCUIT ISOLATOR MODULE

#### FEATURES:

- 1. Can be placed at any location on S-SC line.
- 2. Checks the line for short circuit at power ON. If a line is normal, the relay will be turned on. If a line short is detected, the relay remains open.
- 3. Indication of short circuit by a yellow LED.

# **OPERATION:**

# \* CLASS A CONFIGURATION WIRING

The DCP-SCI short circuit isolator should be located between any devices on the S-SC line. In the event of a short on the S-SC line, the two adjacent isolators (closest isolators to the left and right of the shorted section) will activate and their respective LED indicators will be turned on. All devices between the active short circuit isolators will be dead. This will prevent entire loop failure. Upon removal of the short condition, the DCP-SCIs will automatically restore the entire loop to the normal operating state.

#### **\*\* CLASS B CONFIGURATION WIRING**

The DCP-SCI short circuit isolator should be located between any devices on the S-SC line. In the event of a short on the S-SC line, an isolator closest to the shorted section will activate and the LED will be turned on. <u>All the devices beyond the shorted section will be disabled</u>. Upon removal of the short condition the DCP-SCI will automatically restore the entire loop to the normal operating state.

#### For the best performance of DCP-SCI short circuit isolator, use class A configuration.

### **MOUNTING REQUIREMENTS:**

Mount short circuit isolators as shown in Figure 2 of these instructions.

#### WIRING:

Note: All wiring must conform to local codes, ordinances and regulations.

- 1. Install module wiring in accordance with the job drawings and appropriate wiring diagram (Fig.3).
- 2. Secure the module to an approved electrical box (supplied by installer), as shown in Fig.2

SPECIFICATIONS	
Absolute Maximum Applied Voltage	S, SC: 41 VDC
Supply Voltage Nominal	S, SC: 33 VDC
Normal Current Consumption	270µA (Typical)
Active Current Consumption (Short Circuit Condition)	10mA (Typical)
On Resistance	$50m_{\Omega}Maximum$ (normal condition)
Dimensions	4.2"W x 4.7"H x 1.4"D
Weight	1.4 oz
Visual Indicator	No indication in normal condition.
(Yellow Status LED)	On steady in active (short) condition
Maximum quantity per loop	127
Operation Temperature Range	$0^{\circ}$ C ( $32^{\circ}$ F) ~ $49^{\circ}$ C ( $120^{\circ}$ F) Non-condensing
Storage Temperature	$-30^{\circ}C (-22^{\circ}F) \sim 70^{\circ}C (158^{\circ}F)$
Allowable Ambient Humidity (at 40°C / 104°F)	90% RH Non-condensing

