

## Short Circuit Isolator



VF6003

## Application

The VES VF6003 Short Circuit Isolator provides the capability of allowing NFPA SLC Style 7 installations.

## **Standard Features**

- Can be placed at any location on SLC loop
- Checks the line for short circuit at power up; if the line is normal, the relay will be returned on. If a line short is detected, the relay remains open
- Indication of short circuit by a yellow LED

Technical Specifications		
Absolute Maximum Applied Voltage	S, SC 41 VDC	
Supply Voltage Nominal	S, SC 33 VDC	
Normal Current Consumption	270 μΑ	
Average Current Consumption (Short Circuit Condition)	10 mA	
Visual Indicator (Yellow Status LED)	Normal Condition	No indication
	Active (Short) Condition	On Steady
SLC Maximum Resistance		
· · · · · · · · · · · · · · · · · · ·	Active (Short) Condition	
SLC Maximum Resistance	Active (Short) Condition 50 ohms	On Steady
SLC Maximum Resistance Weight	Active (Short) Condition 50 ohms 1.4 oz	On Steady

## Operation

**Class A Configuration Wiring** - The VF6003 short circuit isolator should be located between any devices on the SLC loop. In the event of a short on the SLC loop, 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 an entire loop failure. Upon removal of the short condition, the VF6003 devices will automatically restore the entire loop to the normal operating state.

**Class B Configuration Wiring** - The VF6003 short circuit isolator should be located between any devices on the SLC loop. In the event of a short on the SLC loop, an isolator closest to the shorted section will activate and the LED will be turned on. All the devices beyond the shorted section will be disabled. Upon removal of the short condition, the VF6003 will automatically restore the entire loop to the normal operating state. For the best performance, use class A configuration.

