



VF6003 Short Circuit Isolator



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Application

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

The interrupt driven Digital Communications Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions.

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.

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

Engineering Specifications

The Dealer shall furnish and install where indicated on the plans, the VES VF6003 short circuit isolator.

The modules shall be UL listed compatible with the Digital Communications Protocol (DCP) and eLAN Control Panel Loops. The isolator module must be suitable for mounting in a standard 4" square electrical box.

The isolator module must provide a yellow LED for indication of status.

WIRING:

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

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

MOUNTING REQUIREMENTS: 4" SQ Electrical box.



Specifications

Absolute Max. Applied Voltage	S, SC 41 VDC
Supply Voltage Nominal	S, SC 33VDC
Normal Current Consumption	270µA
Active Current Consumption (Short Circuit Condition)	10mA
Dimensions	4.2"Wx4.7"Hx1.4"D
Maximum Humidity	90% RH Non-Condensing
UL Ambient Installation Temperature Range	32° F to 120° F (0° C to 49° C)
Max. Quantity per Loop	127
Weight	1.4 oz
Visual Indicator (Yellow Status LED)	<input type="checkbox"/> No indication in Normal condition <input type="checkbox"/> On Steady in Active (short) condition

NOTE: SLC maximum resistance is 50 ohms

Typical Wiring Diagrams

