

AS6003-00

SHORT CIRCUIT ISOLATOR MODULE



Application

The Avenger AS6003-00 Short Circuit Isolator provides the capability of allowing NFPA SLC Class X installations.

Operation

Class A Configuration Wiring:

The AS6003-00 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 AS6003-00 devices will automatically restore the entire loop to the normal operating state.

Class B Configuration Wiring:

The AS6003-00 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 lose communication.

Upon removal of the short condition, the AS6003-00 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 the 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

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| Supply Voltage (S - SC) | 33 - 41 VDC |
| Average Current Consumption | 270µA Standby 10mA Active Short Condition |
| Visual LED indicator (Yellow) | Normal: OFF Active: ON |
| SCI on Resistance | 40 Ohm Max (Normal Condition) |
| SCI Fault Detection Threshold | 12 Volts (Typical) |
| SCI Isolation Current (Short Circuit Condition) | 10mA (Typical) |
| Operating Temperature Range | 32°F to 120°F (0°C to 49°C) |
| Maximum Humidity | Up to 90% non-condensing |
| Dimensions | 4.2"(W) x 4.7"(H) x 1.4"(D) |
| Mounting | 4" Square Electrical Box |

Engineering Specifications

The contractor shall furnish and install where indicated on the plans, the Avenger AS6003-00 short circuit isolator. The modules shall be UL listed compatible with the Digital Communications Protocol (DCP) supporting control panel loops. The isolator module must be suitable for mounting in a standard 4" square electrical box or double gang. The isolator module must provide a yellow LED for indication of status.

