



DC-M9504 Base Mount Isolator

Features

Isolation of short circuit, automatic restore when short circuit is cleared.

Standards: UL864

NFPA [70,72]

Description

In fire alarm system, such condition often occurs that partial short circuit of loop affects the whole system. DC-M9504 Base Mount Isolator can isolate the shorted circuit from the whole system and light the yellow LED to ensure normal operation of other parts and locate the part in fault. After the fault is cleared, the part of the loop will be re-included into the system.

The isolator is applicable to Class A loop wiring.

Connection and Wiring

Terminals on the isolator are shown in Fig. 1.

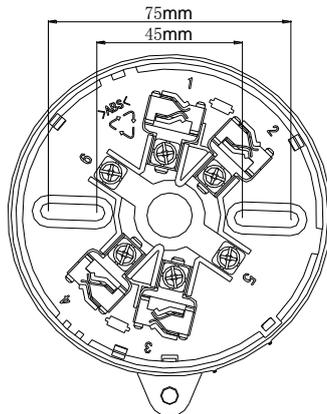


Fig. 1

1, 3: Loop output cable, 1 is positive and 3 is negative.
2, 4: Connecting with remote indicator output (used when connecting to the detector with remote indicator output).

5, 6: Loop input cable, 5 is negative and 6 is positive.

Recommended Cabling

17AWG~14AWG (maximum 14AWG) fire cable, subject to local codes.

Installation

The mounting of DC-M9504 isolator is shown in Fig. 2.

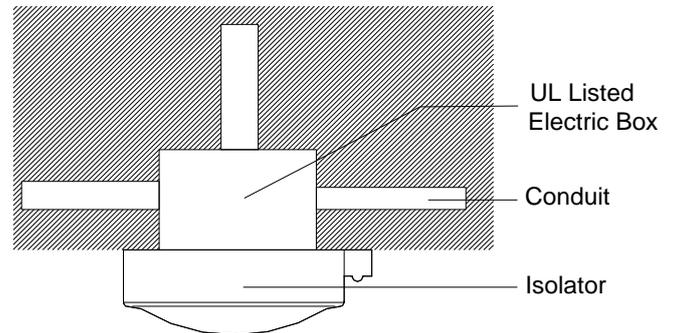


Fig. 2

Application

Electric connection of the isolator base and the detector is shown in Fig. 3. Loop input and output can be reversed.

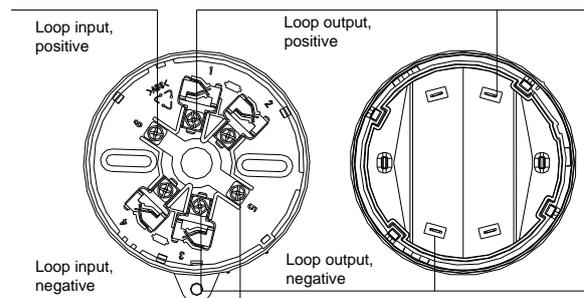


Fig. 3

Application of the isolator in Class A loop is shown in Fig.4.

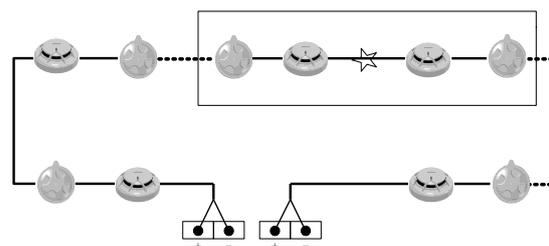


Fig. 4

Appendix

The table hereafter indicates the maximum number of isolators versus maximum length of SLC loop wire of the UL Listed GST-M200 control unit.

For maximum loop current = 70 mA:

Isolator Quantity	2	50	70	100	128
Max length of 17 AWG loop wire(ft)	4000	3200	2900	2400	2000

If 14AWG wire is used, max 128 isolators can be connected within the loop of 4000 ft.

For maximum loop current = 200 mA:

Isolator Quantity	2
Max length of 17 AWG loop wire(ft)	1310

Limited Warranty

GST warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

Specification

Maximum Operating Voltage (V_{MAX})	28VDC
Operating Voltage (V_{NOM})	24V
Minimum Operating Voltage (V_{MIN})	16V
* Maximum Open Voltage ($V_{SO MAX}$)	11V
* Minimum Open Voltage ($V_{SO MIN}$)	8V
* Maximum Close Voltage ($V_{SC MAX}$)	4V
* Minimum Close Voltage ($V_{SC MIN}$)	1.4V
* Maximum Continuous Current ($I_{C MAX}$)	1A
* Maximum Transient Output Current ($I_{S MAX}$)	5A
* Maximum Leakage Current ($I_{L MAX}$)	7.5mA
* Max closed impedance ($Z_{C MAX}$)	0.15Ω
* Ingress Protection Rating	IP33 with cover IP22 without cover
Standby Current:	≤0.15mA
Action Current:	≤2mA
Action LED	Yellow. It flashes in standby state, and lights steady in action.
Capacity	Maximum 70 devices between two isolators
Devices quantity connected to each loop	≤128
Ambient Temperature	0°C ~ +49°C
Relative Humidity	≤93%, non condensing
Material and Color of Enclosure	Flame-retardant ABS (PA-765A), white.
Dimension	φ100mm×39mm
Mounting Hole Spacing	45mm~75mm
Weight	About 100g

The items that are marked with asterisk {*} are EN 54-17 and Ingress Protection (IP) ratings. They have not been evaluated by UL and are not for applications in North America.

This Data Sheet is subject to change without notice. Please contact GST for more information or questions.

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