

# DC-9504E Base Mount Isolator

## Features

- Isolation of short circuit, automatic restore when short circuit is corrected.
- ♦ Used as detector base.
- ♦ Standard: EN54-17.

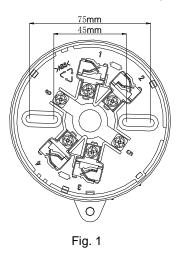
# Description

In loop type fire alarm system, such condition often occurs that partial short circuit of loop affects the whole system. DC-9504E 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 both Class A and Class B fire alarm systems.

# **Connection and Wiring**

Terminals on the isolator are shown in Fig. 1.



1, 3: Loop output cable, 1 is positive and 3 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 positive.

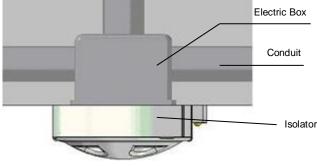
#### **Recommended Wiring:**

1.0mm<sup>2</sup> or above fire cable for loops, subject to local codes.

## Installation

The mounting of DC-9504E isolator is shown in Fig. 2.







#### Application

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

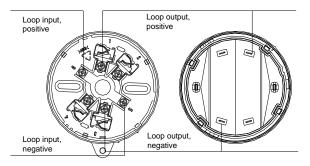
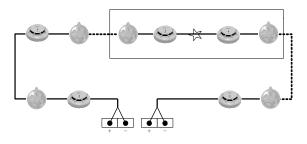


Fig. 3

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





Application of the isolator base in Class B loop is shown in Fig. 5.

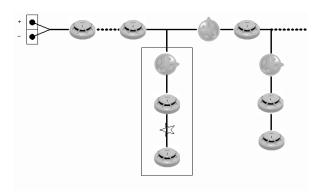


Fig. 5

## **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.

## **WEEE Information**



2012/19/EU (WEEE directive): Products marked with this symbol cannot be **disposed** of as unsorted municipal waste in the European Union. For proper recycling, return this product to your

local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points.

## **Specification**

| Maximum Operating<br>Voltage (V_MAX)28VDCOperating<br>(VNOM)24VMinimum Operating<br>Voltage (V_SO MAX)16VMaximum Open<br>Voltage (V_SO MAX)11VMaximum Open<br>Voltage (V_SO MAX)8VMinimum Open<br>Voltage (V_SO MIN)4VMaximum Close<br>Voltage (V_SC MAX)1.4VMaximum Continuous<br>Current (I_C MAX)5.AMaximum Leakage<br>Current (I_L MAX)7.5mAMax<br>Closed<br>impedance (Z_C MAX)0.15ΩMax<br>Closed<br>impedance (Z_C MAX)50.1mAAction LEDYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,Ambient Temperature<br>Rating-10°C~+55°CIngress<br>Protection<br>RatingIP33 with cover<br>IP22 without coverRelative Humidity<br>Sps%, non condensing49100mm×39mmMounting<br>SpacingHole<br>About 100g  |                       |                      |
|--|-----------------------|----------------------|
| (VNOM)Image: Second secon |                       | 28VDC                |
| Voltage (V_MIN)I1VMaximum Open<br>Voltage (V_SO MAX)11VMinimum Open<br>Voltage (V_SO MIN)8VMaximum Close<br>Voltage (V_SC MAX)4VMinimum Close<br>Voltage (V_SC MIN)1.4VMaximum Continuous<br>Current(I <sub>C MAX</sub> )1.4VMaximum Transient<br>Output Current(Is<br>MAX)5AMaximum Leakage<br>Current(IL MAX)7.5mAMax closed<br>impedance (Z <sub>C MAX</sub> )0.15ΩStandby Current:<br>Capacity≤0.1mAAction LED<br>RatingYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,<br>IP22 without cover<br>Relative HumiditySpacing45mm~75mmMounting Hole<br>Spacing45mm~75mm   |                       | 24V                  |
| Voltage (Vso Max)8VMinimum Open<br>Voltage(Vso MIN)8VMaximum Close<br>Voltage (Vsc MAX)4VMinimum Close<br>Voltage (Vsc MIN)1.4VMaximum Continuous<br>Current (Ic MAX)1.4Maximum Transient<br>Output Current (Is<br>MAX)5AMaximum Leakage<br>Current (ILMAX)7.5mAMax closed<br>impedance (Zc MAX)0.15ΩStandby Current:<br>Capacity≤0.1mAAction LED<br>RatingYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,Ambient Temperature<br>Rating-10°C~+55°CIngress Protection<br>RatingIP33 with cover<br>IP22 without coverRelative Humidity<br>Spacing≤95%, non condensingMaterial of Enclosure<br>SpacingA5m~75mmMounting Hole<br>Spacing45mm~75mm  |                       | 16V                  |
| Voltage( Vso MIN)4VMaximum Close<br>Voltage( Vsc MAX)4VMinimum Close<br>Voltage ( Vsc MIN)1.4VMaximum Continuous<br>Current( Ic MAX)1AMaximum Transient<br>Output Current( Is<br>MAX)5AMaximum Leakage<br>Current( IL MAX)7.5mAMax closed<br>impedance ( Zc MAX)0.15QStandby Current:<br>Capacity≤0.1mAAction LEDYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,<br>IP33 with cover<br>IP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimensionHole<br>Afsmar75mm   |                       | 11V                  |
| Voltage (V <sub>SC MAX</sub> )Image (V <sub>SC MAX</sub> )Minimum Close<br>Voltage (V <sub>SC MIN</sub> )1.4VMaximum Continuous<br>Current (I <sub>C MAX</sub> )1AMaximum Transient<br>Output Current (Is<br>MAX)5AMaximum Leakage<br>Current (ILMAX)7.5mAMax closed<br>impedance (Z <sub>C MAX</sub> )0.15ΩStandby Current:<br>Capacity≤0.1mAAction LED<br>RatingYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,Ambient Temperature<br>Rating-10°C~+55°CIngress Protection<br>RatingIP33 with cover<br>IP22 without coverRelative Humidity<br>Material of Enclosure≤95%, non condensingMounting<br>SpacingHole<br>45mm~75mm  |                       | 8V                   |
| Voltage (V <sub>SC MIN</sub> )Image (V <sub>SC MIN</sub> )Maximum Continuous<br>Current(I <sub>C MAX</sub> )1AMaximum Transient<br>Output Current(Is<br>MAX)5AMaximum Leakage<br>Current(ILMAX)7.5mAMax closed<br>impedance (Z <sub>C MAX</sub> )0.15ΩStandby Current:<br>Standby Current:≤0.1mAAction LEDYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,Ambient Temperature<br>Rating-10°C~+55°CIngress Protection<br>RatingIP33 with cover<br>IP22 without coverRelative Humidity<br>Dimension≤95%, non condensing<br>4100mm×39mmMounting<br>SpacingHole<br>45mm~75mm   |                       | 4V                   |
| Current(I <sub>C MAX</sub> )SAMaximum Transient<br>Output Current(Is<br>MAX)SAMaximum Leakage<br>Current(ILMAX)7.5mAMax closed<br>impedance (ZCMAX)0.15ΩStandby Current:<br>Standby Current:≤0.1mAAction LED<br>CapacityYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,<br>IP33 with cover<br>IP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimension4100mm×39mmMounting<br>SpacingHole<br>45mm~75mm   |                       | 1.4V                 |
| Output<br>Output<br>Current(<br>I_MAX)IsMaximum<br>Leakage<br>Current(I_LMAX)7.5mAMax<br>impedance (ZCMAX)0.15ΩMax<br>impedance (ZCMAX)≤0.1mAStandby Current:<br>Standby Current:≤0.1mAAction LED<br>CapacityYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,Ambient Temperature<br>Rating-10°C~+55°CIngress<br>RatingIP33 with cover<br>IP22 without coverRelative Humidity<br>Material of Enclosure≤95%, non condensingMaterial of Enclosure<br>SpacingABSDimension\$45mm~75mmMounting<br>SpacingHole<br>Spacing   |                       | 1A                   |
| Current(ILMAX)AMaxclosed<br>impedance (Z_CMAX)0.15ΩStandby Current:≤0.1mAAction LEDYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,Ambient Temperature-10°C~+55°CIngressProtection<br>IP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimensionф100mm×39mmMountingHole<br>Spacing   | Output Current( Is    | 5A                   |
| impedance (Z <sub>C MAX</sub> )   Standby Current: ≤0.1mA   Action LED Yellow. It flashes in standby state, and lights in action.   Capacity Maximum 70 devices,   Ambient Temperature -10°C~+55°C   Ingress Protection   Rating IP33 with cover   Relative Humidity ≤95%, non condensing   Material of Enclosure ABS   Dimension ф100mm×39mm   Mounting Hole   Spacing 45mm~75mm  |                       | 7.5mA                |
| Action LEDYellow. It flashes in standby<br>state, and lights in action.CapacityMaximum 70 devices,Ambient Temperature-10°C~+55°CIngressProtection<br>IP33 with cover<br>IP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimensionф100mm×39mmMountingHole<br>Spacing   |                       | 0.15Ω                |
| State, and lights in action.CapacityMaximum 70 devices,Ambient Temperature-10°C~+55°CIngressProtection<br>IP33 with cover<br>IP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimensionф100mm×39mmMountingHole<br>Spacing  | Standby Current:      | ≤0.1mA               |
| Ambient Temperature-10°C~+55°CIngressProtectionIP33 with coverRatingIP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimensionф100mm×39mmMountingHoleSpacing45mm~75mm  | Action LED            | -                    |
| Ingress<br>RatingProtection<br>ProtectionIP33 with cover<br>IP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimensionφ100mm×39mmMounting<br>SpacingHole45mm~75mm  | Capacity              | Maximum 70 devices,  |
| RatingIP22 without coverRelative Humidity≤95%, non condensingMaterial of EnclosureABSDimensionф100mm×39mmMountingHoleSpacing45mm~75mm  | Ambient Temperature   | -10℃~+55℃            |
| Material of EnclosureABSDimension\$\$\phi100mm\$\$39mm\$MountingHoleSpacing45mm\$\$75mm\$  |                       |                      |
| Dimension $\phi$ 100mm×39mm<br>Mounting Hole 45mm~75mm<br>Spacing  | Relative Humidity     | ≤95%, non condensing |
| Mounting Hole 45mm~75mm<br>Spacing   | Material of Enclosure | ABS                  |
| Spacing  | Dimension             | ф100mm×39mm          |
| Weight About 100g  | 5                     | 45mm~75mm            |
|  | Weight                | About 100g           |

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

#### Gulf Security Technology Co., Ltd.

No. 80, Changjiang East Road, QETDZ, Qinhuangdao, Hebei, P. R. China 066004 Tel: +86 (0) 335 8502434 Fax: +86 (0) 335 8502532

service.gst@fs.utc.com www.gst.com.cn