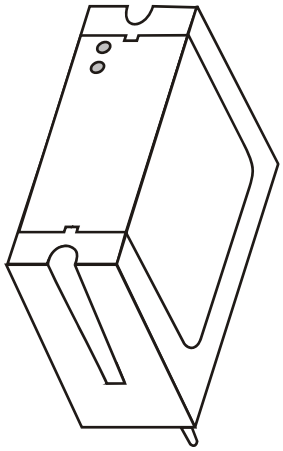
GSA-MCT2 Dual Input Module Installation Sheet



Description

The GSA-MCT2 Dual Input Module is an addressable device that provides one or two Class B, normally-open, dry contact initiating device circuits (IDCs) on a Signature signaling line circuit (SLC).

The module requires two addresses on the SLC. Addresses are assigned electronically. There are no address switches.

Diagnostic LEDs provide a visible indication of the module state.

- Normal: green LED flashes
- Alarm/active: red LED flashes

The GSA-MCT2 plugs into a GSA-UIO2R, GSA-UIO6, or GSA-UIO6R motherboard. Field wiring connections are made using terminals on the motherboard.

Personality codes

A personality code downloaded from the Signature controller determines how the module operates. Table 1 shows the personality codes available for the GSA-MCT2.

Table 1: Personality codes

Code	Description
1	Alarm - NO latching (Class B) [1]
2	Alarm - NO delayed latching (Class B)
3	Active - NO nonlatching (Class B)
4	Active - NO latching (Class B)

[1] Factory default setting

Installation

Install and wire this device in accordance with applicable national and local codes, ordinances, and regulations.

WARNING: Electrocution hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

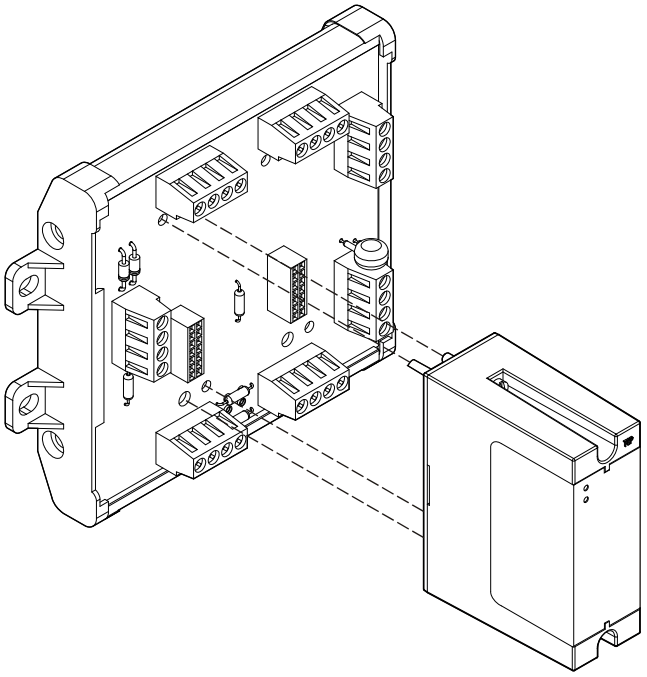
Notes

- The GSA-MCT2 is shipped from the factory as an assembled unit; it contains no user-serviceable parts and should not be disassembled.
- This module will not operate without electrical power. As fires frequently cause power interruption, we suggest that you discuss further safeguards with your local fire protection specialist.
- The GSA-MCT2 does not support conventional smoke detectors.

To install the module:

1. Plug the module into any available position on the motherboard. See Figure 1.
2. Secure the module to the motherboard with the two captive screws.
3. Write the address assigned to the module on the label provided, and then apply the label to the module. Remove the serial number label from the detector, and then attach it to the project documentation.
4. Wire in accordance with “Wiring” below.

Figure 1: Mounting on a UIO2R motherboard



Wiring

Strip 1/4 in. (about 6 mm) from the ends of all wires that connect to the terminal block.

Notes

- When stripping wire ends, exposing more wire may cause a ground fault or circuit malfunction on unsupervised wiring; exposing less wire may result in a faulty connection.
- Refer to the Signature loop controller installation sheet for SLC wiring specifications.
- Each terminal on the motherboard is limited to a single conductor.

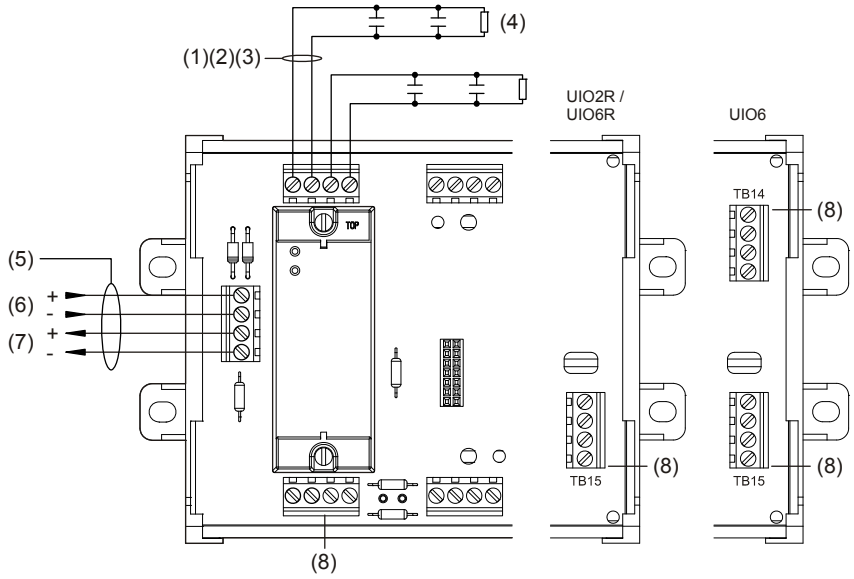
To wire the module:

1. Verify that all field wiring is free of opens, shorts, and ground faults.
2. Make all wiring connections as shown in Figure 2.

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Figure 2: Wiring the module



(1) Class B initiating device circuit
(2) Power-limited and supervised
(3) 50 Ω max. per channel (25 Ω per wire). With EOLR in place, normal terminal voltage is 10 VDC nominal.
(4) 47 kΩ EOLR (P/N EOL-47)
(5) Power-limited and supervised.
(6) Signaling line circuit from previous device
(7) Signaling line circuit to next device
(8) No connection for the GSA-MCT2

Specifications

Voltage	15.20 to 19.95 VDC
Current	
Standby	450 µA
Activated	700 µA
Ground fault impedance	10 kΩ
Initiating device circuit	
EOLR	47 kΩ, UL Listed
Circuit resistance	50 Ω (25 Ω per wire) max.
Circuit capacitance	0.1 µF max.
Signaling line circuit	Class A (Style 6) or Class B (Style 4)
Wire size	12 to 18 AWG (1.0 to 4.0 mm²)
Mounting	UIO2R, UIO6, UIO6R
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing
Storage temperature	−4 to 140°F (−20 to 60°C)

Regulatory information

North American standards	CAN/ULC-S527, UL 864
FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Contact information

For contact information, see www.kiddelifesafety.com.