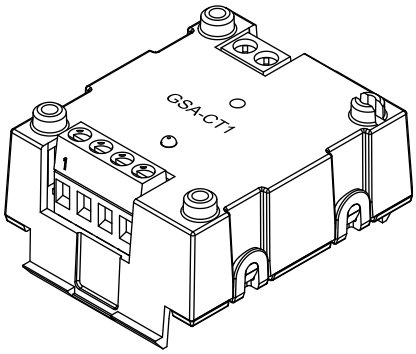
GSA-CT1 Single Input Module Installation Sheet



Description

The GSA-CT1 Single Input Module is an intelligent addressable device used to connect a Class B initiating device circuit (IDC) to a Signature controller module.

The module requires one address on the Signature signaling line circuit (SLC). Addresses are assigned electronically. There are no address switches.

A bicolor LED provides visible indication of the module's status:

- Normal: Flashes green
- Alarm/active: Flashes red

Personality codes

Use the personality codes listed in Table 1 to configure the GSA-CT1 module.

Table 1: Personality codes

Code	Description	UL	ULC
1	Alarm – NO latching (Class B)	P	P
2	Alarm – NO delayed latching (Class B)	P	P
3	Active - NO nonlatching (Class B)	P	P
4	Active - NO latching (Class B)	P	P

Installation

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

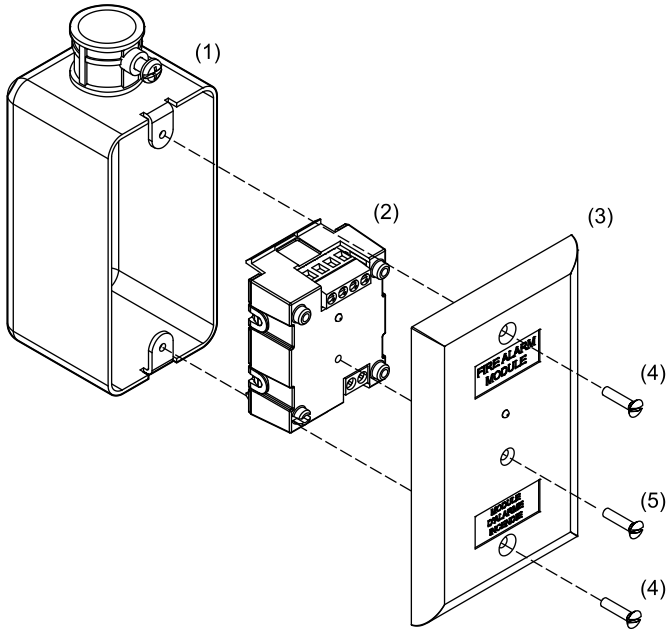
Notes

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

To install the module:

1. 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 module, and then attach it to the project documentation.
2. Wire the module as shown in Figure 2.
3. Using the self-tapping screw provided, attach the wall plate to the module. See Figure 1.
4. Using the two machine screws provided, attach the wall plate and module to the electrical box.

Figure 1: Installing the GSA-CT1 module



(1) Compatible electrical box
(2) GSA-CT1 module
(3) Wall plate
(4) #6-32 × 5/8 machine screw (2X)
(5) #4 × 1/2 self-tapping screw

Wiring

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

Notes

- Refer to the Signature controller module's installation sheet for SLC wiring specifications.
- All wiring is power-limited and supervised.
- A test resistor is supplied with the GSA-CT1 to prevent trouble signals on unused circuits during installation. When connecting field wires, remove the test resistors and install a UL/ULC Listed 47 kΩ EOLR at the end of the circuit.

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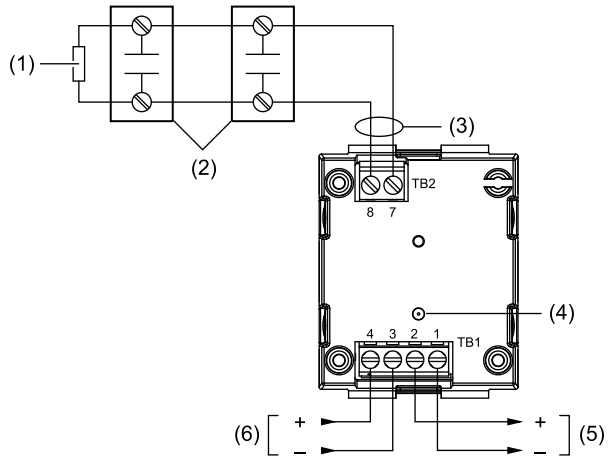
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To wire the module:

1. Verify that all field wiring is free of opens, shorts, and ground faults.
2. Strip 1/4 in. (about 6 mm) from the ends of all wires that connect to the terminal block of the module.

   When stripping wire ends, exposing more wire may cause a ground fault; exposing less wire may result in a faulty connection.
3. Make all wiring connections as shown in Figure 2.

Figure 2: Wiring diagram



(1) EOL resistor (PN EOL-47)
(2) Typical NO initiating device
(3) 10 VDC at 350 µA, max.
(4) Status LED
(5) SLC (to next device)
(6) SLC (from previous device)

Specifications

Operating voltage	15.20 to 19.95 VDC
Current	
Standby	300 µA
Activated	450 µA
Ground fault impedance	10 kΩ
Initiating device circuit (IDC)	
EOL resistor value	47 kΩ, UL/ULC Listed
Circuit resistance	50 Ω (25 Ω per wire), max.
Circuit capacitance	0.1 µF max.
Circuit designation	
Signaling line circuit	Class A/DCLA or Class B/DCLB
Initiating device circuit	Class B
Wire sizes	12 to 18 AWG wire (1.0 to 4.0 mm²)
Compatible electrical boxes	2-1/2 in. (64 mm) deep single-gang box; 4-in. square box 1-1/2 in (38 mm) deep with single-gang cover
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

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.
Industry Canada compliance	This Class A digital apparatus complies with Canadian ICES-003.

Contact information

For contact information, see www.kidde-esfire.com.

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