Description

The SIGA-CR Control Relay Module is an addressable device that provides one Form C dry contact output relay. The relay contacts transfer when the module is activated.

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

Diagnostic LEDs provide visible indication of the state of the module through the cover plate:
- Normal: Green LED flashes
- Alarm/active: Red LED flashes

Personality codes

Use the personality codes described below to configure the SIGA-CR module. See Table 1 for listing information.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>UL 864</th>
<th>CAN/ULC-SS27</th>
<th>EN 54-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Signal - dry contact output</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Personality code 8: Signal - dry contact output. Configures the module as a dry relay contact to control external appliances (door closers, fans, dampers) or equipment shutdown.

Installation

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

**WARNING:** Connecting a device that exceeds this module’s pilot duty contact ratings may cause activation failure. This module does not support capacitive loads. See “Specifications” on page 3 for contact ratings.

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.
- Install the module within the same room as the device it is controlling.

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 in accordance with “Wiring” on page 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.
Wiring

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

Notes

• Refer to the Signature loop controller installation sheet for SLC wiring specifications.
• Each terminal on the module 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. 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.

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Figure 1: Installing the SIGA-CR module

Figure 2: Wiring diagram

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

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(1) Normally open contact (NO)
(2) Common contact (C)
(3) Normally closed contact (NC)
(4) Not supervised. Power-limited unless connected to a nonpower-limited source. If the source is nonpower-limited, eliminate the power-limited mark and maintain a minimum of 0.25 in. (6.4 mm) space from power-limited wiring. For other mounting methods, see enclosure and bracket installation sheets to maintain separation of power-limited and nonpower-limited wiring. The wire size must be capable of handling fault current from nonpower-limited source.
   — or —
   Use type FPL, FPLR, FPLP, or permitted substitute cables, provided these power-limited cable conductors extending beyond the jacket are separated by a minimum of 0.25 in. (6.4 mm) space or by a nonconductive sleeve or nonconductive barrier from all other conductors. Refer to the NFPA 70 National Electrical Code for more details.
(5) Signaling line circuit (SLC) to next device
(6) Signaling line circuit (SLC) from previous device
(7) Power-limited and supervised
Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage</td>
<td>15.20 to 19.95 VDC</td>
</tr>
<tr>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>Standby</td>
<td>85 µA</td>
</tr>
<tr>
<td>Activated</td>
<td>85 µA</td>
</tr>
<tr>
<td>Ground fault impedance</td>
<td>10 kΩ</td>
</tr>
<tr>
<td>Contact ratings (pilot duty)</td>
<td>24 VDC at 2 A</td>
</tr>
<tr>
<td></td>
<td>120 VAC at 0.5 A</td>
</tr>
<tr>
<td>Relay type</td>
<td>Form C, programmable</td>
</tr>
<tr>
<td>Circuit designation</td>
<td></td>
</tr>
<tr>
<td>Signaling line circuits</td>
<td>Class A, Style 6 or Class B, Style 4</td>
</tr>
<tr>
<td>Wire size</td>
<td>12 to 18 AWG (1.0 to 4.0 mm²)</td>
</tr>
<tr>
<td>LPCB/CPR electrical box Requirements</td>
<td>Plastic box with cover plate, no gaps or unused holes</td>
</tr>
<tr>
<td>Minimum size W × H × D</td>
<td>2.4 × 3.5 × 1.5 in. (60 × 85 × 38 mm)</td>
</tr>
<tr>
<td>Compatible electrical boxes</td>
<td>2-1/2 in. (64 mm) deep single-gang box; Standard 4 in. square, 1-1/2 in. (38 mm) deep box</td>
</tr>
<tr>
<td>Operating environment</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>32 to 120°F (0 to 49°C)</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>0 to 93%, noncondensing</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>−4 to 140°F (−20 to 60°C)</td>
</tr>
</tbody>
</table>

Regulatory information

Manufacturer: Edwards, A Division of UTC Fire & Security Americas Corporation, Inc.
8985 Town Center Parkway, Bradenton, FL 34202, USA

Authorized EU manufacturing representative: UTC Fire & Security B.V.
Kelvinstraat 7, 6003 DH Weert, Netherlands

Year of manufacture: The first two digits of the DATE MFG number (located on the product identification label) are the year of manufacture.

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.

North American standards: CAN/ULC-S527, UL 864

EN 54: EN 54-18:2005 Input/output devices

EU compliance: [CE]

CPR certificates: 0832-CPR-F0330

2002/96/EC (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. For more information, see: www.recyclethis.info.

Contact information

For contact information, see www.est-fire.com.