The Monitored Output Module (FRRU004-MOM4) provides a programmable source of power to control and operate output devices including notification appliances and releasing devices. Additionally, it continuously supervises wiring connected to terminals A+, A- for open or short circuits and 24+ and 24- when 24VDC is applied. FRRU004-MOM4 employs one red LED to indicate the status. In normal condition, the LED flashes. When the output is activated, the LED will turn on constantly. In case of trouble, the LED will turn off.

Features
- One simple LED for status indication
- NFPA Class A (Styles 6 & 7) and Class B (Style 4) for SLC
- NFPA Class B (Style Y) for NAC
- UL listed with Potter/Amseco®, Gentex®, and Cooper Wheelock® syncro-modules and devices
- Electronic address setting
- Downsized unit
- Easy installation

Description
The Monitored Output Module (FRRU004-MOM4) provides a programmable source of power to control and operate output devices including notification appliances and releasing devices. Additionally, it continuously supervises wiring connected to terminals A+, A- for open or short circuits and 24+ and 24- when 24VDC is applied.

Specifications

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rated voltage range of SLC input power (S+,S-)</td>
<td>22.0 to 24.0V</td>
</tr>
<tr>
<td>2</td>
<td>Maximum SLC 24 VDC standby current (S+,S-)</td>
<td>250µA</td>
</tr>
<tr>
<td>3</td>
<td>Maximum SLC 24 VDC alarm current (S+,S-)</td>
<td>1mA</td>
</tr>
<tr>
<td>4</td>
<td>Rating for connected device power ( Releasing device and NAC)</td>
<td>24VDC, 2A</td>
</tr>
<tr>
<td>5</td>
<td>Max. supervising current for external 24 VDC input power (24+,24-)</td>
<td>1.6mA</td>
</tr>
<tr>
<td>6</td>
<td>Wiring style</td>
<td>NFPA Class B (Style Y)</td>
</tr>
<tr>
<td>7</td>
<td>End-of-line resistor value for notification appliance</td>
<td>5.1kΩ, 1/2W</td>
</tr>
<tr>
<td>8</td>
<td>End-of-line device for releasing device</td>
<td>5.1kΩ, 1/2W with diode</td>
</tr>
<tr>
<td>9</td>
<td>Maximum wiring resistance of output circuit wiring</td>
<td>Refer to Wiring diagram</td>
</tr>
<tr>
<td>10</td>
<td>Maximum wiring capacitance of output circuit wiring</td>
<td>1µF</td>
</tr>
<tr>
<td>11</td>
<td>Operating temperature range</td>
<td>0°C to 49°C (32°F to 120°F)</td>
</tr>
<tr>
<td>12</td>
<td>Operating humidity range</td>
<td>0 to 93% (non-condensing)</td>
</tr>
<tr>
<td>13</td>
<td>Dimensions</td>
<td>106mm (4.17 inches) (H) x 106mm (4.17 inches) (W) x 29mm (1.14 inch) (D)</td>
</tr>
<tr>
<td>14</td>
<td>Applicable electrical box for installation</td>
<td>North American 64mm (2-1/2 inches) deep 2-gang box Standard 4 inches square box 38mm (1-1/2 inch) deep box</td>
</tr>
</tbody>
</table>

Setting the Address
Each addressable module, smoke detector, heat detector and combination detector must have the address set before connecting the device to the Signaling Line Circuit (SLC) loop. The address is set using the hand held device programmer or the addressing feature on the control panel.
**Installation**

Figure 1: Installation into the compatible electrical box

**Wiring Diagram**

Figure 2: Output Connected to a NAC

![Wiring Diagram](image)

Note: 1. The following synchronization modules may be used for strobe synchronization.
   - SM-12/24 (Wheelock)
   - DSM-12/24 (Wheelock)
   - SMD10-3A (AMSECO)
   Refer to respective Sync Module manuals for the proper wire connection method and limitations.

2. When notification appliances are connected to the FRRU004-MOM4, additional FRRU004-MOM4 modules should be separated by a short circuit isolator (SCI). If wiring Class A, Style 7, then each FRRU004-MOM4 is required to have its own listed UL 1481 power supply.

3. When notification appliances are connected to the module, the resistance values of terminals OUT+, OUT- must be less than R max below.

\[ R_{\text{max}} = \frac{(24V - V_{\text{min}})}{lt} \]

- \( V_{\text{min}} \): Min. operating voltage of connected device
- \( lt \): Total of operating current of connected device (ampere)

**Figure 3: Output Connected to a Releasing Device**

Note: 1. Only one Releasing Device can be connected per FRRU004-MOM4 module.

2. When a releasing device is connected to the module, resistance values of terminals OUT+, OUT- must be less than R max below.

\[ R_{\text{max}} = \frac{(24V - V_{\text{min}} - 0.95V)}{lt} \]

- \( V_{\text{min}} \): Min. operating voltage of connected device
- \( lt \): Total of operating current of connected device (ampere)
- 0.95V: Voltage to be dropped in the end-of-line device

**NOTE**

- The information contained herein does not purport to cover all the details or variations of the equipment described, nor to provide for every possible contingency that may be met in connection with its installation, operation or maintenance.
- Specifications are subject to change without notice. Contact Nohmi before relying on the information.
- Actual performance is based on proper application of the product by a qualified professional.
- Should further information be required or should particular concerns arise that are not covered sufficiently for the purchaser’s purposes, the matter should be referred to Nohmi or your nearest distributor.

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