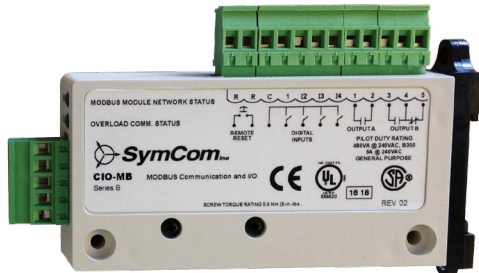


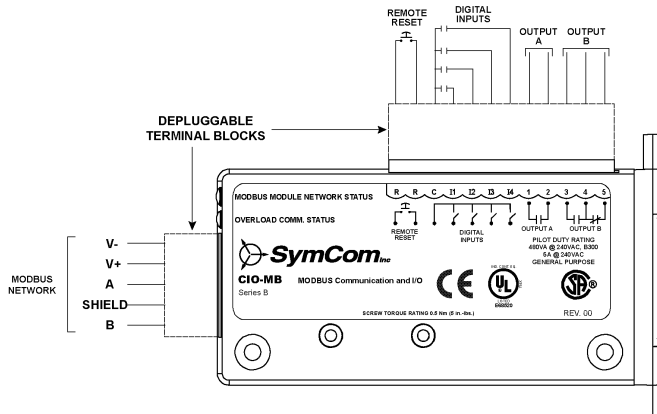
## CIO-MB/CIO-120-MB

Communication link to PLC/SCADA/  
monitoring systems

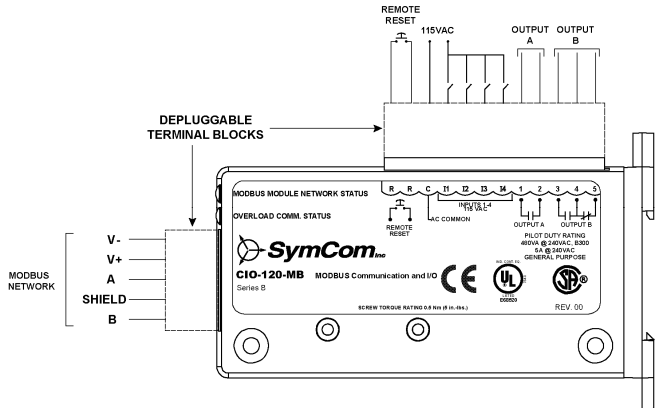


### Wiring Diagram

TYPICAL WIRING FOR CIO-MB



TYPICAL WIRING FOR CIO-120-MB



### Ordering Information

| MODEL      | LINE VOLTAGE |
|------------|--------------|
| CIO-MB     | 12 to 24VDC  |
| CIO-120-MB | 90 to 130VAC |

### Description

The CIO-MB/CIO-120-MB Modules are convenient and cost-effective Modbus-RTU interfaces capable of providing discrete control and monitoring of an overload relay over a Modbus network.

### Features & Benefits

| FEATURES                                                                                                                      | BENEFITS                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <b>Compact size</b><br>3.46" H x 1.0" W x 5.0" D                                                                              | Easily adapts to existing as well as new applications                                          |
| <b>Flexible addressing standard allows function as stand-alone interface or in conjunction with 777 series overload relay</b> | Provides flexibility for control and monitoring                                                |
| <b>Remote reset option</b>                                                                                                    | Additional remote reset input allows user to reset 777 series relays without opening the panel |
| <b>DIN rail or surface mountable</b>                                                                                          | Allows installation flexibility                                                                |
| <b>Unpluggable terminal block connections</b>                                                                                 | Allows user to wire terminal blocks before installing the module and reduces field wiring      |

### Specifications

#### Functional Specifications

##### Remote Reset (for use with optional 777 Series)

Normally open pushbutton rated 24VDC, 10mA (min.)

#### Power Requirements:

|                                       |                               |
|---------------------------------------|-------------------------------|
| <b>Voltage</b>                        | 24VDC +10%                    |
| <b>Current</b>                        | 95mA (max.) 70mA (typical)    |
| <b>Power</b>                          | 2.28 W (max.) 1.7 W (typical) |
| <b>Ethernet Controller Capability</b> | IEEE 802.3 10Base-T           |

#### Input Characteristics General Purpose (4)

##### Voltage Range:

|                   |               |
|-------------------|---------------|
| <b>CIO-MB</b>     | 12-24VDC      |
| <b>CIO-120-MB</b> | 90-130VAC     |
| <b>Current</b>    | 2mA (typical) |

#### Output Characteristics

##### SPDT (1), SPST (1)

|                        |                      |
|------------------------|----------------------|
| <b>Pilot Duty</b>      | 480VA & 240VAC, B300 |
| <b>General Purpose</b> | 5A @ 240VAC          |

#### General Characteristics

##### Ambient Operating

|                    |                             |
|--------------------|-----------------------------|
| <b>Temperature</b> | -20° to 70°C (-4° to 158°F) |
|--------------------|-----------------------------|

##### Terminal (depluggable terminal block)

|                 |                   |
|-----------------|-------------------|
| <b>Torque</b>   | 3 in.-lbs. (max.) |
| <b>Wire AWG</b> | 12-20 AWG         |

##### Class of Protection

|                          |                                       |
|--------------------------|---------------------------------------|
| <b>Relative Humidity</b> | 10-95%, non-condensing per IEC 68-2-3 |
|--------------------------|---------------------------------------|

# CIO-MB/CIO-120-MB

## Standards Passed

|                                               |                                                                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Electrostatic Discharge (ESD)</b>          | IEC 61000-4-2, Level 3, 6kV contact, 8kV air                                                                      |
| <b>Radio Frequency Immunity,<br/>Radiated</b> | 150 MHz, 10V/m                                                                                                    |
| <b>Fast Transient Burst</b>                   | IEC 61000-4-4, Level 3, 4kV input power                                                                           |
| <b>Hi-Potential Test</b>                      | Meets UL508 (2 x rated V + 1000V for 1 min)                                                                       |
| <b>Surge</b>                                  |                                                                                                                   |
| <b>Input Power</b>                            | IEC 61000-4-5, Level 1                                                                                            |
| <b>Inputs/Data Lines</b>                      | IEC 61000-4-5, Level 2                                                                                            |
| <b>Safety Marks</b>                           |                                                                                                                   |
| <b>UL</b>                                     | UL508 (File #E68520)                                                                                              |
| <b>CSA</b>                                    | C22.2 (File #46510)                                                                                               |
| <b>CE</b>                                     | IEC 60947-6-2                                                                                                     |
| <b>Enclosure</b>                              | Polycarbonate                                                                                                     |
| <b>Dimensions</b>                             | <b>H</b> 86.36 mm (3.40"); <b>W</b> 25.40 mm (1.00");<br><b>D</b> 138.68 mm (5.46")<br>(w/depluggable connectors) |
| <b>Weight</b>                                 | 0.25 lb. (4 oz., 113.4 g)                                                                                         |
| <b>Mounting Methods</b>                       | DIN Rail or surface mount (w/two #8 screws)                                                                       |