I/O Wiring

**WARNING:** To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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**I/O Terminal Blocks included.** (See Terminal Block Connector Spec table inside). Not compatible with the ZIPLink Wiring System.

**NOTE:** This module is not compatible with Ziplink wiring solutions.

## General Specifications

- **Operating Temperature:** 0° to 60° C (32° to 140° F)
- **Storage Temperature:** -20° to 85° C (-4° to 185° F)
- **Humidity:** 5 to 95% (non-condensing)
- **Enclosure:** IP20
- **Shock:** 63G
- **Vibration:** 0.011G

## Terminal Block Connector Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>BX-RTB10 (included)</th>
<th>BX-RTB10-1*</th>
<th>BX-RTB10-2*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connector Type</strong></td>
<td>Screw Type-90°</td>
<td>Screw Type-180°</td>
<td>Screw Type-180°</td>
</tr>
<tr>
<td><strong>Pitch</strong></td>
<td>3.81mm</td>
<td>3.81mm</td>
<td>3.81mm</td>
</tr>
<tr>
<td><strong>Recommended Screw Torque</strong></td>
<td>0.2 N·m</td>
<td>0.2 N·m</td>
<td>0.2 N·m</td>
</tr>
<tr>
<td><strong>Recommended Blade Width</strong></td>
<td>2.5mm</td>
<td>2.5mm</td>
<td>2.5mm</td>
</tr>
</tbody>
</table>

*Sold separately

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**IMPORTANT!**

- **Hot-Swapping Information**
  - **Note:** This device cannot be Hot Swapped.

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Tech Support 770-844-4200

Sales 800-633-0405

Your Automation Foundation™
Thermocouple Data Range Specifications

<table>
<thead>
<tr>
<th>Thermocouple Type</th>
<th>Temperature Range</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>−270 to 1200 °C</td>
<td>±0.3 °C</td>
</tr>
<tr>
<td>K</td>
<td>−270 to 1300 °C</td>
<td>±0.3 °C</td>
</tr>
<tr>
<td>E</td>
<td>−270 to 660 °C</td>
<td>±0.3 °C</td>
</tr>
<tr>
<td>N</td>
<td>−50 to 1000 °C</td>
<td>±0.3 °C</td>
</tr>
<tr>
<td>R</td>
<td>−50 to 1200 °C</td>
<td>±0.3 °C</td>
</tr>
<tr>
<td>S</td>
<td>−50 to 1000 °C</td>
<td>±0.3 °C</td>
</tr>
</tbody>
</table>

Voltage Selection

- Unipolar 1.0 VDC
- Bipolar 125 mVDC

Thermocouple and Voltage Source Wiring

- Ungrounded/Shielded Thermocouple
- Grounded/Shielded Thermocouple

RTD/Thermistor Wiring

- 2-wire RTD or Thermistor
- 3-wire RTD or Thermistor

Mixed Resitive and Thermocouple Wiring

- Ungrounded/Shielded Thermocouple

Notes for maximum accuracy:
1. All wires to an RTD must be equal length and type.
2. Refer to RTD manufacturer’s recommendations.
3. Do not use cable shield as sensing wire.
4. When applicable, connect shield to RTD connector only, otherwise connect by terminal block to ground at source device.

Module Installation

1. To install, remove Connector Cover
2. Align expansion connector, insert, and listen for “Click” as the lock engages