### General Specifications

- **Ambient Temperature:** -20°C to 85°C (-4°F to 185°F)
- **Humidity:** 5% to 95% (non-condensing)
- **Environmental Air:** 10% contamination (presumed)
- **Vibration:** BC60628-2 (Test F)
- **Block:** BC60628-2 (Test Eu)
- **Inrush Current:** Open Equipment
- **Agency Approvals:** UL File E160893 Canada and USA
- **CE Compliance:** EN61131-2
- **EU Directive:** See the “EU Directive” topic in the Help File

### Power Supply Specifications

- **Input Voltage Range:** 10-38 VDC
- **Maximum Input Power:** 30W
- **Cold Start Inrush Current:** 2A, 2ms
- **Internal Input Protection:** Reverse Polarity Protection and Undervoltage
- **峰值 Disruption:** 22.7W Max
- **Voltage Withstand (diellect):** 1500VAC Power Inputs to Ground

### Terminal Block Connection Options

<table>
<thead>
<tr>
<th>BX-RTB36</th>
<th>BX-RTB36-1</th>
<th>ZL-BX-CBL15</th>
<th>ZL-BX-CBL15-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal Block Kit, 90-degree screw type. 60x BRX 26-pin PLCC. Kit includes (12) 2-pin 5mm terminal blocks.</td>
<td>Terminal Block Kit, 180-degree screw type. 60x BRX 36-pin PLCC. Kit includes (12) 2-pin 5mm terminal blocks.</td>
<td>ZLink PLC/CIO cable, 15-position terminal block to 24-pin connector, 2AWG, 1 meter (3.3 ft.), 4 required.</td>
<td>ZLink PLC/CIO cable, 15-position terminal block to 24-pin connector, 2AWG, 2 meter (6.6 ft.), length, 4 required.</td>
</tr>
</tbody>
</table>

### Built-in RS-232/485 Port Specifications

- **Data Rates:** 1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200
- **Default Settings:** RS-232, 115200 bps, No Parity, 8 Data Bits, 1 Stop Bit, 8 Station, 9600
- **Port Type:** 3-pin terminal stop, 3.5mm pitch
- **Port Status LED:** Green LED is illuminated when active for TXD and RXD
- **Port Connections:** 1-247, 1-247 SMD (tin/lead)

### CPU Mode Switch Functions

- **RUN Position:** CPU is forced into RUN Mode if no errors are encountered.
- **TERM Position:** RUN, PROGRAM, and DEBUG modes are available. In this position, the mode of operation can be changed through the Do-more Designer Software.
- **STOP Position:** CPU is forced into STOP Mode.

### Built-in Ethernet Specifications

- **Transfer Rate:** 100Mbps (Yellow LED) and 10Mbps (Green LED)
- **Port Status LED:** 2-color LED to indicate when Ethernet port is connected. LED flashes when port is active (ACT)
- **Supported Protocols:** Do-more Protocol (TCP/UDP), Modbus TCP/IP, EtherCAT, Modbus RTU (Master & Slave), K-Sequence (Slave)

### Expansion Modules

- **Maximum Expansion Modules:** 8
- **Program Memory Type:** FLASH memory
- **User Data Memory Type:** Battery Backed RAM, User configurable
- **Diagram Image:** [Image of expansion modules]

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**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 equipment, 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 of 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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**Discrete Input Specifications**

- **Input Type**: Sink/Source
- **Total Inputs per Module**: 20 Total, 2 High-Speed (X0..X9)
- **Standard (X10..X19)**: All inputs may be used as standard inputs.

  - **Nominal Voltage Rating**: 12–24 VAC/DC
  - **Input Voltage Range**: 9–30 VAC/DC
  - **Maximum Voltage**: 33 VAC/DC
  - **Minimum Pulse Width**: 0.5 μs (High-Speed), 5 μs (Standard)
  - **AC Frequency**: 47–63 Hz (60–240 Hz filter must be set in software)
  - **Input Impedance**: 500 Ω
  - **Minimum OFF Current**: 12 mA @ 30 VAC/DC
  - **Maximum Leakage Current**: 0.5 mA @ 24 VDC
  - **Input Voltage Range**: 9–30 VAC/DC
  - **Frequency**: 249 Ω
  - **Maximum Voltage**: 2.0 VAC/VDC
  - **Output Current**: 0.5 A per output, no derating over temperature range
  - **Operating Voltage Range**: 12–24 VAC/DC
  - **Input Impedance Current Modes**: 0.032 A
  - **Input Impedance**: 249 Ω
  - **Supply Power**: AC or DC, User Supplied

**Discrete Output Specifications**

- **Output Type**: Sink/Sourcing
- **Total Outputs per Module**: 16 Total, 8 High-Speed (X0..X9)*
  - **High-Speed Outputs**: All outputs may be used as standard outputs
  - **Commons**: 4 per output/communication isolated
  - **Nominal Current per Common**: 2 A
  - **Maximum Current per Common**: 20 mA
  - **Operating Voltage Range**: 0–30 VDC
  - **Minimum Pulse Width**: 50 μs
  - **Maximum Leakage Current**: 10 mA
  - **Maximum Switching Frequency**: 30 kHz
  - **Total Outputs per Module**: 25
  - **Commons**: 2 per output
  - **Minimum OFF Current**: 0.12 mA
  - **Input Impedance**: 0.012 A
  - **Input Impedance**: 12 mA
  - **Input Impedance Voltage**: 24 VDC
  - **Input Impedance Current**: 240 mA

**Analog Input Specifications**

- **Input Type**: Analog
- **Input Voltage Range**: Software Selectable ±10 V, ±5 V, 0–10 V, 0–5 V
- **Input Range**: Software Selectable ±20 mA, ±10 mA, ±5 mA
- **Resolution**: 16 bit @ ±10 V, ±5 V
- **Conversion Time**: 1.2 μs
- **Input Impedance Voltage**: 12–24 VAC/DC
- **Input Impedance Current**: 240 mA

**Analog Output Specifications**

- **Output Type**: Current Source/Output
- **Outputs per Module**: 2
- **Output Voltage Range**: Detectable
- **Minimum Voltage Load Impedance**: 4 kΩ
- **Output Current Range**: Software Selectable ±10 mA, ±5 mA, ±2 mA
- **Input Impedance**: 1 kΩ
- **Input Impedance Voltage**: 1 kΩ
- **Input Impedance Current**: 240 mA

**High Speed Input (HSI) Functions**

- **Input Type**: Sink/Sourcing
- **Input Required**: 2
- **Current Required**: 4–20 mA
- **Function**: 2-Wire 4-20 mA Transmitter

**High Speed Output (HSO) Functions**

- **Input Type**: Sink/Sourcing
- **Input Required**: 2
- **Current Required**: 4–20 mA
- **Function**: 2-Wire 4-20 mA Transmitter

**Analogue Current Sinking Input Circuits**

- **Type**: 2-Wire 4-20 mA Transmitter

**Analogue Output Wiring**

- **Type**: Current Source Output

**Analogue Output Wiring**

- **Type**: Current Source Output

**Analog Voltage Input Circuits**

- **Type**: 2-Wire Transmitter

**Analog Output Wiring**

- **Type**: Current Source Output

**Discrete Output Wiring**

- **Type**: Sourcing Output

**Discrete Input Wiring**

- **Type**: Sinking Input

**Input Impedance Current Modes**

*Fuse

**Input Voltage Range**

*Fuse

**Output Current Range**

*Fuse

**Voltage Output**

*Fuse