### General Specifications
- **NEMA 1 Enclosure**: NEMA 4X-204g (17.8 oz)
- **Airflow**
  - **Flow:** 6.8 ft³/min (0.098 m³/min)
  - **Max windage pressure:** 0.17 inH2O (13.7 Pa)
  - **Max pressure difference:** 0.02 inH2O (0.265 Pa)
- **Mounting Restrictions**
  - **Minimum from Wire Duct:** 12" (305mm) for 230 VAC models
  - **Minimum from 230 VAC models:** 18" (457mm)
  - **Minimum from 24 VAC models:** 18" (457mm)
  - **Minimum from Enclosure or 24 VAC models:** 12" (305mm)

### CPU Specifications
- **3.5mm Port**
  - **Data Rates:** 4, 2400, 4800, 9600, 19200, 38400, 57600, and 115200 bps
  - **Protocol:** RS-232, RS-485, Industrial Ethernet
- **10/100 BASE-T Ethernet Port**
- **Agency Approvals**
  - **CE Compliance (EN61131-2-1)**
  - **UL File E181039 Canada and USA**
  - **ISO 9001:2008 Certification**

### Built-in RS-232/485 Port Specifications
- **Serial Ports**
  - **100mA (Yellow LED) and 105mA (Green LED)**
  - **Coupling Options:**
    - Do-more Protocol
    - EtherCAT (Explicit Messaging)
    - EtherCAT (Embedded Messaging)
    - EtherCAT (TCP/IP)
    - Modbus TCP/IP (Client & Server)
    - Modbus TCP/IP (Embedded Messaging)
    - Modbus TCP/IP (TCP/IP)
    - Ethernet Remote I/O
- **Transfer Rate**
  - **ELN, DOP, and ODBD Modes:** 100Mbps (Green LED)
  - **Do-more Protocol:** 100Mbps (Yellow LED and 105mA (Green LED))
  - **DCP and DSB:** 20Mbps
- **Port Status LED**
  - **Do-more Protocol (Default):** L24V power inputs to ground

### CPU Mode Switch Functions
- **RUN** position
  - **CPU** is in RUN Mode
- **STOP** position
  - **CPU** is forced into STOP Mode

### Built-in Ethernet Specifications
- **Port**: RJ45, category 5,
- **Port Name**: Ethernet
- **Description**: Standard Ethernet network port with built-in surge protection
- **Data Rate**: 100Mbps (Yellow LED) and 105mA (Green LED)
- **Transfer Rate**: Max 100Mbps
- **Port Status LED**: Green LED
- **Supported Protocols**: Do-more Protocol, EtherCAT (Explicit Messaging), Modbus TCP/IP (Client & Server), Modbus TCP/IP (Embedded Messaging), Modbus TCP/IP (TCP/IP), Modbus TCP/IP (UDP)
- **Cable Recommendations**: RS-232 uses L9772-XXX available from AutomationDirect.com

### Terminal Block Connection Options
- **Part Number**: BX-RTB36
  - **Terminal Block**: 90-degree screw type, fits all BRX models

### Terminal Block Connector Specifications
- **Part Number**: BX-RTB36
- **Wire Gauge**: 28-14 AWG
- **Recommended Screw Size**: 0.24" (6mm)
- **Recommended Wire Strip Length**: 0.244" (6.2mm)
- **Recommended Wire Duct**: 0.02 (5mm)

### Power Supply Specifications
- **Input Voltage Range (Tolerance)**: 85-264 VAC
- **Rated Operating Frequency**: 41.6 Hz
- **Maximum Input Power**: 50VA
- **Cold Start Inrush Current**: 1.5A, 2.2X
- **Input Fuse Protection**: Micro fuse 250V, 2A Non-replaceable
- **Heat Dissipation**: 27.6W Max
- **Input Voltage**: 240V @ 6.3A max, +1V P-P Ripple, Integrate self-resetting short circuit protection

### CPU Status Indicators
- **ERR**: CPU fault indicator
  - **Description**: Determined by memory card information
- **RUN**: CPU in STOP Mode
  - **Description**: CPU is in RUN Mode
- **PSW**: Power SW
  - **Description**: Indicated by power switch status
- **VLD**: LED Indicator
  - **Description**: Indicated by LED indicator status

### Important Notes
- **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 for the product design, installation, or operation.
- **WARNING**: If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-944-4200.

**Do-more BRX Manual available at www.automationdirect.com/prdvoc/to manual/BX-DM1E-36ER3**

**Note:** This device cannot be Hot Swapped.
**Discrete Input Specifications**

<table>
<thead>
<tr>
<th>Input Type</th>
<th>Total Inputs/Projects</th>
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</tr>
</thead>
<tbody>
<tr>
<td>16-24VAC/DC</td>
<td>20 Total (2-8 High Speed [X10-X19])</td>
<td>16-24VDC</td>
<td>10 Standard [X10-X19]</td>
</tr>
<tr>
<td>Nominal Voltage</td>
<td>2.4 (per channel)</td>
<td>Maximum Voltage</td>
<td>30 VAC/DC</td>
</tr>
<tr>
<td>DC Frequency</td>
<td>0-25kHz</td>
<td>Maximum Pulse Width</td>
<td>0.5 μs</td>
</tr>
<tr>
<td>AC Frequency</td>
<td>47-62 Hz</td>
<td>Minimum Voltage Level</td>
<td>9.5 VAC/DC</td>
</tr>
<tr>
<td>AC/DC Voltage</td>
<td>9.5 VAC/DC</td>
<td>OFF Voltage Level</td>
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**Discrete Output Specifications**

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<tr>
<td>16 Relay</td>
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</tr>
<tr>
<td>Nominal Voltage Ratings</td>
<td>12-48 VDC, 24-240 VAC</td>
<td>Operating Voltage Range</td>
<td>3-30 VDC, 240VAC/DC</td>
</tr>
<tr>
<td>Maximum Voltage</td>
<td>60VDC, 24VAC</td>
<td>Minimum Output Current</td>
<td>0.1mA @ 24VDC/AC</td>
</tr>
<tr>
<td>Maximum Output Current</td>
<td>2A</td>
<td>Maximum Leakage Current</td>
<td>1μA (DC), 300μA (AC) due to RC snubber</td>
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<tr>
<td>Status Indicators</td>
<td>Logic Side, Green</td>
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**High Speed Input (HSI) Functions**

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<tr>
<th>Input Function</th>
<th>Available Inputs/Projects</th>
<th>Input Required/Available</th>
</tr>
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<tbody>
<tr>
<td>High-Speed Counting</td>
<td>2</td>
<td>Up/Down counters</td>
</tr>
<tr>
<td>Position Setting/Reporting</td>
<td>2</td>
<td>Pulse/Detection (Bidirectional) counters</td>
</tr>
<tr>
<td>Frequency Measurement</td>
<td>2</td>
<td>Quadrature (A and B) counters</td>
</tr>
<tr>
<td>Minimum Interval</td>
<td>3</td>
<td>Quadrature (A and B with 2) counters</td>
</tr>
<tr>
<td>Measurement</td>
<td>4</td>
<td>Single Input (Edge) counters</td>
</tr>
<tr>
<td>Table-Driven Outputs/1</td>
<td>4</td>
<td>Programmable limit switches</td>
</tr>
<tr>
<td>Interrupt(s)/0</td>
<td>0</td>
<td>Rise time interrupts</td>
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**Analog Input Specifications**

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**I/O Wiring**

- **Discrete Input Wiring**
- **Discrete Output Wiring**
- **Sourcing Input**
- **Supply Power Wiring**