### General Specifications

- **Operating Temperature**: 0°C to 55°C (32°F to 131°F)
- **Storage Temperature**: -20°C to 80°C (-4°F to 176°F)
- **Humidity**: 5% to 95% (non-condensing)
- **Environmental Air**: Noconte (pass per minute)
- **Vibration**: FCC030822-0 (Test FC)
- **Shock**: FCC030822-07 (Test Ex)
- **Enclosure Type**: Open Equipment
- **Agency Approvals**: CE Compliant EN61131-2
- **EU Directive**: See the “EU Directive” topic in the Help File

### CPU Specifications

- **FLASH memory**:
  - User Data Memory Type: Battery Backed RAM, User configurable
- **Pluggable Option Module**:
  - RS-232, RS-485, Ethernet 10/100 Base-T (1 Mbps up to max (USB 2.0 Type B)
- **Expansion Modules**: 4 expansion modules max
- **Real Time Clock Accuracy**: ±8s per day max (1Mbps throughput max), ±50 seconds per year (100k baud)
- **Programming Software**: Do-more Designer – Ver. 2.0 or higher
- **Custom Label Window Size**: 0.75” x 2.25” (19mm x 57.2mm)

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

- **RS-232**:
  - Line driver, 2-pin terminal strip, 5V logic
  - Max current draw: 5mA
  - Recommended screw torque: 0.45 N·m
- **RS-485**:
  - 20 pin terminal strip, 5V logic
  - Max current draw: 10mA
  - Recommended screw torque: 0.65 N·m

### Power Supply Specifications

- **Nominal Voltage Rating**: 120-240 VAC
- **Input Rated Operating Frequency**: 60 Hz
- **Maximum Input Power**: 480W
- **Cold Start Inrush Current**: 1.5A, 2ms
- **Maximum Input Current (No Start)**: 1.5A, 2ms
- **Internal Input Fuse Protection**: Micro fuse 250V, 2A Non-replaceable
- **Max Solid State Inrush**: 15A, 100ms
- **Min Solid State Inrush**: 15A, 100ms
- **Peak Dissipation**: 165W Max
- **Isolated User 24VDC Output**: 240VAC @ 0.3A max, +1V P-P Ripple, Integrated self-resetting short circuit protection
- **Voltage Withstand (dielectric)**: 4000VAC 1 minute

### Dimensional Information

- **AIRFLOW**: 3.59″ (91.1mm)
- **Minimum from Wire Duct**: 2″ (50mm)
- **Wire Strip Length**: (Dual Wire) 24AWG. 0.5 meter (1.6 ft.) length, 2 required.
- **Wire Gauge (Single Wire)**
  - 28-14 AWG
- **Screw torque**
  - Recommended: 0.45 N·m

### CPU Status Indicators

#### Indicator Status Description

- **FWR**: OFF - Base Power OFF
- **GREEN**: Low Battery
- **YELLOW**: CPU in STOP Mode
- **RUN**: CPU in RUN Mode
- **MOM**: CPU in RUN Mode
- **ERR**: CPU is functioning normally
- **YELLOW**: Fault or Alarm
- **GREEN**: OK
- **RED**: CPU is not functioning

### Terminal Block Connection Options

- **BX-RTB18**
  - Terminal Block Kit: 90-degree screw type, fits all BXK 18-pin PCL Kits includes (3) 3-pin 5mm plugs, (2) 5-pin 5mm plugs, (2) 9-pin 5mm plugs, (2) 15-pin 5mm plugs
- **BX-RTB18-1**
  - Terminal Block Kit: 90-degree screw type, fits all BXK 18-pin PCL Kits includes (3) 3-pin 5mm plugs, (2) 5-pin 5mm plugs, (2) 9-pin 5mm plugs, (2) 15-pin 5mm plugs
- **ZL-RTB15**
  - ZL-RTB Kit: 15-pin terminal block to 3-pin connector, AWG 24 to 20AWG
- **ZL-RTB15-1**
  - ZL-RTB Kit: 15-pin terminal block to 3-pin connector, AWG 24 to 20AWG
- **ZL-RTB15-5**
  - ZL-RTB Kit: 15-pin terminal block to 3-pin connector, AWG 24 to 20AWG
- **ZL-RTB20**
  - ZL-RTB Kit: 20-Lead Feedthrough Module, 20 pole, 35mm DIN mount, 2 required
- **ZL-RTB20-1**
  - ZL-RTB Kit: 20-Lead Feedthrough Module, 20 pole, 35mm DIN mount, 2 required

### Built-in Terminal Blocks sold separately.

- **BRX MPU with Do-more! DM1 technology**
  - 120 VAC required, serial port, microSD slot, Discrete Input: 10-point, sink / source. Discrete Output: 8-point, sinking

### CPU Mode Switch Functions

- **RUN position**: CPU is forced into RUN Mode if no errors are encountered.
- **STOP position**: CPU is forced into STOP Mode.

### Important Notes

- **Data Rates**: 1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200
- **Options**: RS-232 or RS-485 (software selectable). Includes ESD protection and built-in surge protection.
- **Cable Recommendations**: RS-232 use L19772-XXX from AutomationDirect.com or RS-485 use L18927-XXX from AutomationDirect.com
- **Cable Connections**
  - RS-232: 25-pin D-sub, 15-position terminal block to pigtail or 24-pin terminal block to 24-pin terminal block (20 pole, 35mm DIN mount, 2 required)
  - RS-485: 20 pin terminal strip, 5V logic

### Additional Information

- **Tech Support 770-844-4200**
- **Sales 800-633-0405**
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- **IMPORTANT!**
  - 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.
  - 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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