**General Specifications**
- Operating Temperature: -30° to 55°C (-2° to 131°F)
- Storage Temperature: -30° to 60°C (-2° to 140°F)
- Relative Humidity: 5 to 95% (non-condensing)
- Environmental Air: 1st contour (gaseous permitted)
- Vibration: IEC68-2-6 (Test F)
- Shock: IEC68-2-27 (test E)
- Enclosure Type: Open Equipment
- Agency Approvals: UL61010-2, IL, File # E162809 Canada and USA
- Isolation: UL1950, C-UL Listed
- EU Directive: See the "EU Directive" topic in the Help File
- Weight: 460g (1.02 lbs)

*Meets EMC and Safety requirements. See the D.O.C. for details.

**Power Supply Specifications**
- Nominal Voltage Rating: 100-240 VAC
- Input Voltage Range (Tolerance): 85–264 VAC
- Rated Operating Frequency: 41-46 Hz
- Maximum Input Power: 100VA
- Cold Start Inrush Current: 1.5A, 2ms
- Maximum Inrush Current (Hot Start): 1.5A, 2ms
- Internal Input Fuse Protection: Micro fuse 250V, 2A Non-replaceable
- Maximum Inrush Current (Hot Start): 1.5A, 2ms
- Input Voltage Range (Tolerance): 85–264 VAC
- Operating Temperature: 0° to 60°C (32° to 140°F)
- Storage Temperature: -20° to 85°C (-4° to 185°F)
- Voltage Withstand (dielectric): 4kV ac 1 minute applied for 1 minute
- 1500VAC Power Inputs to Ground
- Noise Immunity: NEMA ICS3-304

**CPU Specifications**
- Program Memory: 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 throughput), USB 2.0 Type B
- Expansion Modules: 4 expansion modules max
- Real Time Clock Accuracy: 42.68 per day typical at 25°C
- Maximum Inrush Current (Hot Start): 1.5A, 2ms
- Input Voltage Range (Tolerance): 85–264 VAC
- CPU Mode Switch Functions
  - RUN position: CPU is functioning normally
  - PROGRAM position: CPU is in PROGRAM Mode
  - DEBUG position: CPU is in DEBUG Mode
  - STOP position: CPU is forced into STOP Mode

**Built-in RS-232/485 Port Specifications**
- Built-in RS-232/485 Port
  - Description*: Non-isolated serial port that can communicate via RS-232 or RS-485 (software selectable). Includes ESD protection and built-in surge protection.
  - Supported Protocols: Do-more Protocol (Default), Modbus RTU (Master & Slave), K-Sequence (Slave)
  - 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, Station #1
  - Part Type: 3-pin terminal strip: 3.96 mm pitch
  - Port Status LED: Green LED is illuminated when active for TXD and RXD

**CPU Status Indicators**
- **PWR**: Green LED is illuminated when active for power
- **RUN**: Red LED is illuminated when active for RUN
- **MEM**: Red LED is illuminated when active for MEM
- **ERR**: Red LED is illuminated when active for error

**I/O Terminal Blocks sold separately.**
(See Terminal Block Connection Options table).


**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 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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**BX-DM1-36AR**
- BRX MPU with Do-more! DM1 technology
- 120 VAC required, serial port, microSD slot, Discrete Input: 20-point, AC, Discrete Output: 16-point, relay.
**Input Type**
- AC

**Total Inputs per Module**
- 20 Total – 20 Standard (X0-A19)
  - High Speed – MX
  - 5 (4 points/comm) isolated

**Nominal Voltage Rating**
- 120–240 VAC

**Input Voltage Range**
- 85–264 VAC

**Maximum Voltage**
- 264 VAC RMS

**AC Frequency**
- 44–65 Hz

**Input Impedance**
- 180Ω

**ON Voltage Level**
- > 85 VAC

**OFF Voltage Level**
- < 40VAC

**Status Indicators**
- Logic Side, Green

**Discrete Output Specifications**

**Output Type**
- Relay Form A (SPST)

**Total Outputs per Module**
- 16 Relay

**Commons**
- 4 (4 points/comm) isolated

**Nominal Voltage Ratings**
- 12–48 VDC, 24–240 VAC

**Operating Voltage Range**
- 5–50 VDC, 5–264 VAC

**Maximum Voltage**
- 60VDC, 264VAC

**Minimum Output Current**
- 0.1mA @ 24VAC/DC

**Maximum Output Current**
- 2A

**Maximum Leakage Current**
- 1µA (DC), 300µA (AC) due to RC snubber

**Maximum Switching Frequency**
- 10Hz

**Status Indicators**
- Logic Side, Green

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**Discrete Input Specifications**

**Input Type**
- AC

**Total Inputs per Module**
- 20 Total – 20 Standard (X0, A19)
  - High Speed – MX

**Commons**
- 5 (4 points/comm) isolated

**Nominal Voltage Rating**
- 120–240 VAC

**Input Voltage Range**
- 85–264 VAC

**Maximum Voltage**
- 264 VAC RMS

**AC Frequency**
- 44–65 Hz

**Input Impedance**
- 180Ω

**ON Voltage Level**
- > 85 VAC

**OFF Voltage Level**
- < 40VAC

**Status Indicators**
- Logic Side, Green

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**High Speed Output (HSO) Functions**

1. Standard inputs may be used with high-speed functions, but at lower response frequencies of approximately 120Hz.
2. This is the total number of functions. A combination of high-speed outputs and standard outputs may be used this total.

**High Speed Input (HSI) Functions**

1. Standard outputs may be used for high-speed functions, but at lower response frequencies of approximately 110Hz. Use of relay outputs is not recommended.