

### 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)
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2-6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Enclosure Type	Open Equipment
Agency Approvals	UL61010-2 - UL File # E185989 Canada and USA CE Compliant EN61131-2*
Noise Immunity	NEMA ICS3-304
EU Directive	See the "EU Directive" topic in the Help File
Heat Dissipation	8.6W Max
Weight	170g (6 oz)
Software Version	Do-more! Designer 2.3 or later, Nedit 3 Version 3.15 or later

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

### Power Supply Specifications

Nominal Voltage Range*	12–24 VDC
Input Voltage Range (Tolerance)*	10–36 VDC
Maximum Input Voltage Ripple	<+/- 10%
Maximum Input Power	30W
Cold Start Inrush Current	5A, 2ms
Maximum Inrush Current (Hot Start)	5A, 2ms
Internal Input Protection	Reverse Polarity Protection and Undervoltage
Voltage Withstand (dielectric)	1500VAC Power Inputs to Ground applied for 1 minute
Replacement Connector	ADC Part # BX-RTB03

Removable Connector Included			<b>Pinout</b>	<b>Connection</b>
			1	GND
			2	PWR –
			3	PWR +

\*Class 2 or LPS Power Supply required.

### Ethernet Specifications

Port Name	Ethernet	
Description	Standard transformer isolated Ethernet port with built-in surge protection.	
Transfer Rate	10Mbps and 100Mbps	
Port Status LED	LNK LED is solid GREEN when network link is established. ACT LED flashes GREEN when port is active.	
Supported Protocols	Do-more! Ethernet Remote I/O (Server) HOST Ethernet Remote I/O (Server) Modbus TCP/IP (Server)	
Cable Recommendation	C5E-STxxx-xx from AutomationDirect.com	
Port Type	RJ45, Category 5, 10/100 BASE-T, Auto Crossover	
Ethernet Port Numbers:	Do-more! Ethernet Remote I/O (Server)	28784, UDP
	HOST Ethernet Remote I/O (Server)	28784, UDP
	Modbus TCP/IP (Server)	502, TCP

## BX-EBC100-M-D

### BRX Ethernet Base Controller

24 VDC required, Ethernet port.



**Power terminal block included.**

**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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Do-more! BRX Manual available at [www.automationdirect.com/pn/doc/manual/BX-EBC100-M-D](http://www.automationdirect.com/pn/doc/manual/BX-EBC100-M-D)



### IMPORTANT!



#### Hot-Swapping Information

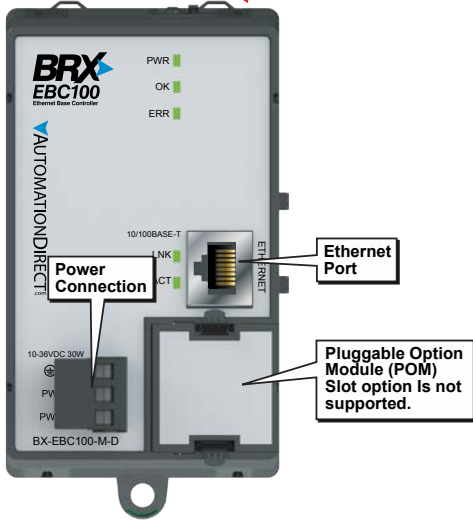
**Note: This device cannot be Hot Swapped.**

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BX-EBC100-M-D	1st Ed. RevB	9/8/2021

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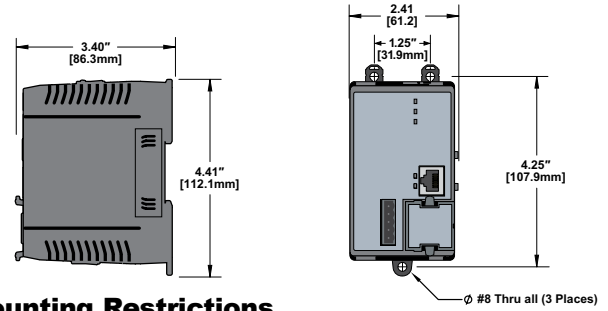


**NOTE:** DIP switches located in this compartment are used for debug and recovery functions only. Please refer to the BRX User Manual for full instructions on using these switches.

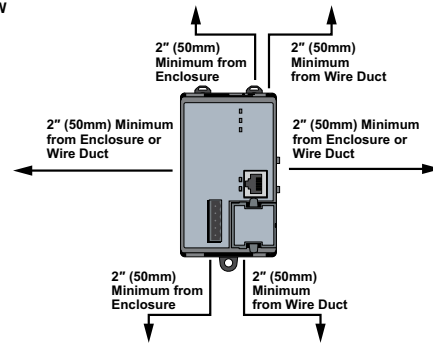
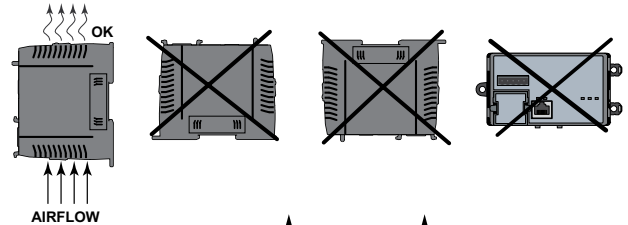


## Dimensional Information

Note: Drawings are for reference only. Shown without terminal blocks.



## Mounting Restrictions



## Status Indicators

Indicator	Status	Description
PWR	OFF	Base Power is OFF
	GREEN	Base Power is Good
OK	GREEN	Controller is Functioning Normally
	GREEN (Blinking)	Reset Mode (Booter without OS)
	YELLOW	Analog Module Mismatch
ERR	OFF	Controller HW Error or Power is Off
	RED (Blinking)	Reset Mode (Booter without OS)
LNK	OFF	No Ethernet Link
	GREEN	Ethernet Link is Good
ACT	OFF	No Ethernet Activity
	GREEN (Blinking)	Ethernet Activity

## Terminal Block Connector Specifications

Part Number	BX-RTB03 (Included)	BX-RTB03-1 (optional)
Connector Type	Screw Type-90°	Spring Clamp Type-180°
Wire Exit	90 degree	180 degree
Pitch	5.0mm	5.0mm
Screw Size	M2.5	N/A
Recommended Screw torque	< 3.98 Lb-in (0.45 N-m)	N/A
Screwdriver Blade Width	3.5mm	3.5mm
Wire Gauge (Single Wire)	28-12 AWG	28-14 AWG
Wire Gauge (Two Wires)	28-16 AWG	28-16 AWG (Dual Wire Ferrule Required)
Wire Strip Length	0.3in (7.5mm)	0.37in (9.5mm)
Equiv. Dinkle part #	5ESDV-03P-BK	5ESDSR-03P-BK