

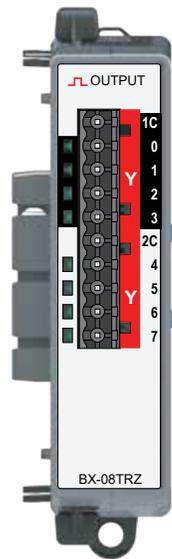
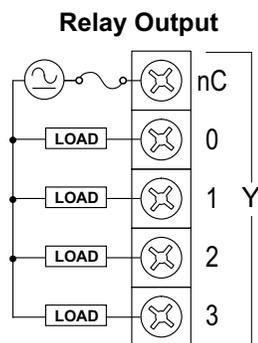
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BRX Expansion Module

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	
Weight	BX-08TRZ	114g (4 oz)
	BX-16TRZ	157g (5.5 oz)
Software Version	Do-more! Designer 2.8 or later	

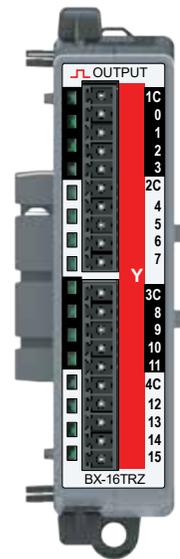
*Meets EMC and Safety requirements. See the D.O.C. for details.

I/O Wiring



BX-08TRZ

Output Module 8-pt,
Relay Form A (SPST)
No surge suppression



BX-16TRZ

Output Module 16-pt,
Relay Form A (SPST)
No surge suppression

ZIPLink Connections system available for this module.
(See Terminal Block Connection Options tables).

Discrete Output Specifications

Output Type	Relay Form A (SPST)	
Outputs per Module	BX-08TRZ	8
	BX-16TRZ	16
Commons	BX-08TRZ	2
	BX-16TRZ	2
Surge Suppression	No	
Maximum current per common	8A	
Nominal Voltage Range	5-48 VDC, 24-240 VAC	
Operating Voltage Range	5-60 VDC, 18-264 VAC	
Maximum Voltage	60VDC, 264VAC	
Minimum Output Current	0.1 mA @24VDC	
Maximum Output Current	2A	
Maximum Inrush Current	5A for 50ms	
Maximum Leakage Current	1nA	
ON Voltage Drop	0.2Vmax	
ON-OFF Response	< 10ms	
OFF-ON Response	< 10ms	
Relay Cycle Life		
Mechanical Endurance	5 Million Operations	
	Electrical Endurance	120,000 Operations
Status Indicators		Logic Side, Green
Backplane Power Consumption	BX-08TRZ	1.7 W
	BX-16TRZ	3.4 W
Heat Dissipation	BX-08TRZ	4.9 W
	BX-16TRZ	9.8 W

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.

This publication is based on information that was available at the time it was printed. At AutomationDirect.com® we constantly strive to improve our products and services, so we reserve the right to make changes to the products and/or publications at any time without notice and without any obligation. This publication may also discuss features that may not be available in certain revisions of the product.

Do-more BRX Manual available at
<http://www.automationdirect.com/pn/doc/manual/BX-USER-M>



IMPORTANT!



Hot-Swapping Information

Note: This device cannot be Hot Swapped.

Document Name	Edition/Revision	Date
BX-xxTRZ	1st Ed. RevA	11/3/2020

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Connector Options – 8 and 12 point

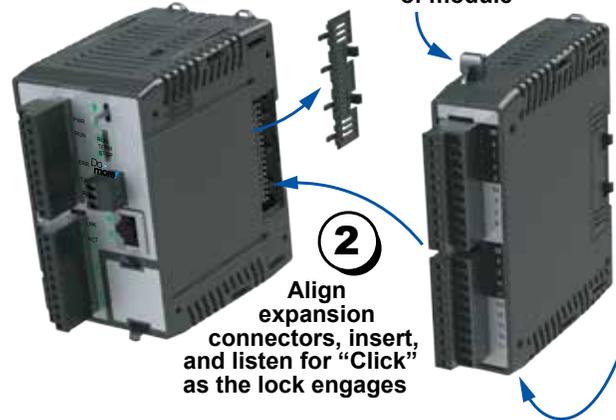
BX-RTB08	Terminal Block Kit, 90-degree screw type. For use with BRX 5-point, 8-point, and 12-point expansion modules. Kit includes (3) 5-pin 5mm plugs.
BX-RTB08-1	Terminal Block Kit, 180-degree spring clamp type. For use with BRX 5-point, 8-point, and 12-point expansion modules. Kit includes (3) 5-pin 5mm plugs.
BX-RTB08-2	Terminal Block Kit, 180-degree screw type. For use with BRX 5-point, 8-point, and 12-point expansion modules. Kit includes (3) 5-pin 5mm plugs.
ZL-BXEM-CBL10	ZIPLink PLC I/O cable, 10-position terminal block to 24-pin connector, 24AWG, cable length 0.5meter (1.6ft). For use with 8-point BRX expansion modules.
ZL-BXEM-CBL10-1	ZIPLink PLC I/O cable, 10-position terminal block to 24-pin connector, 24AWG, cable length 1meter (3.3ft). For use with 8-point BRX expansion modules.
ZL-BXEM-CBL10-2	ZIPLink PLC I/O cable, 10-position terminal block to 24-pin connector, 24AWG, cable length 2meter (6.6ft). For use with 8-point BRX expansion modules.
ZL-BXEM-CBL10-1P	ZIPLink PLC I/O cable, 10-position terminal block to pigtail connection, 24AWG, cable length 1meter (3.3ft). For use with 8-point BRX expansion modules.
ZL-BXEM-CBL10-2P	ZIPLink PLC I/O cable, 10-position terminal block to pigtail connection, 24AWG, cable length 2meter (6.6ft). For use with 8-point BRX expansion modules.
ZL-BXEM-CBL15	ZIPLink PLC I/O cable, 15-position terminal block to 24-pin connector, 24AWG, cable length 1meter (1.6ft). For use with 5-point and 12-point BRX expansion modules.
ZL-BXEM-CBL15-1	ZIPLink PLC I/O cable, 15-position terminal block to 24-pin connector, 24AWG, cable length 1meter (3.3ft). For use with 5-point and 12-point BRX expansion modules.
ZL-BXEM-CBL15-2	ZIPLink PLC I/O cable, 15-position terminal block to 24-pin connector, 24AWG, cable length 2meter (6.6ft). For use with 5-point and 12-point BRX expansion modules.
ZL-BXEM-CBL15-1P	ZIPLink PLC I/O cable, 15-position terminal block to pigtail connection, 24AWG, cable length 1meter (3.3ft). For use with 5-point and 12-point BRX expansion modules.
ZL-BXEM-CBL15-2P	ZIPLink PLC I/O cable, 15-position terminal block to pigtail connection, 24AWG, cable length 2meter (6.6ft). For use with 5-point and 12-point BRX expansion modules.
ZL-RTB20	ZIPLink Two Level Feedthrough Module, 20-pole, 35mm, DIN mount.
ZL-RTB20-1	ZIPLink Three Level Feedthrough Module, 20-pole, 35mm, DIN mount.

Module Installation

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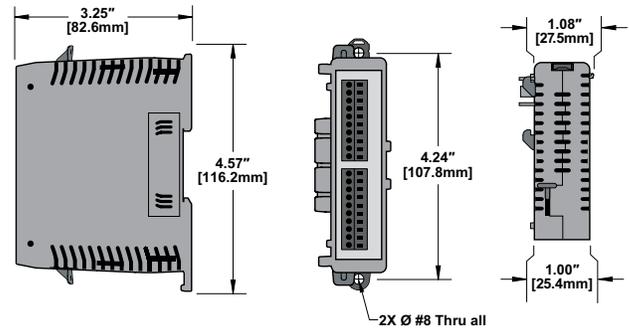
To Install, remove Connector Cover

To remove, depress disengagement plungers at top and bottom of module



Dimensional Information

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



Connector Options – 16 point

BX-RTB10	Terminal Block Kit, 90-degree screw type. For use with BRX 10-point PLCs and BRX 16-point expansion modules. Kit includes (2) 10-pin 3.8mm plugs.
BX-RTB10-1	Terminal Block Kit, 180-degree spring clamp type. For use with BRX 10-point PLCs and BRX 16-point expansion modules. Kit includes (2) 10-pin 3.8mm plugs.
BX-RTB10-2	Terminal Block Kit, 180-degree screw type. For use with BRX 10-point PLCs and BRX 16-point expansion modules. Kit includes (2) 10-pin 3.8mm plugs.
ZL-BXEM-CBL20	ZIPLink PLC I/O cable, 20-position terminal block to 24-pin connector, 24AWG, cable length 0.5meter (1.6ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-1	ZIPLink PLC I/O cable, 20-position terminal block to 24-pin connector, 24AWG, cable length 1meter (3.3ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-2	ZIPLink PLC I/O cable, 20-position terminal block to 24-pin connector, 24AWG, cable length 2meter (6.6ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-1P	ZIPLink PLC I/O cable, 20-position terminal block to pigtail connection, 24AWG, cable length 1meter (3.3ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-2P	ZIPLink PLC I/O cable, 20-position terminal block to pigtail connection, 24AWG, cable length 2meter (6.6ft). For use with 16-point BRX expansion modules.
ZL-RTB20	ZIPLink Two Level Feedthrough Module, 20-pole, 35mm, DIN mount.
ZL-RTB20-1	ZIPLink Three Level Feedthrough Module, 20-pole, 35mm, DIN mount.

8 and 12 point Terminal Block Connector Specifications

Part Number	BX-RTB08	BX-RTB08-1	BX-RTB08-2
Connector Type	Screw Type-90°	Spring Clamp Type-180°	Screw Type-180°
Wire Exit	180°	180°	180°
Pitch	5.0mm	5.0mm	5.0mm
Screw Size	M2.5	N/A	M2.5
Recommended Screw torque	< 3.98 lb-in (0.45 N·m)	N/A	< 3.98 lb-in (0.45 N·m)
Screwdriver Blade Width	3.5mm	3.5mm	3.5mm
Wire Gauge (Single Wire)	28-12 AWG	28-14 AWG	28-12 AWG
Wire Gauge (Two Wires)	28-16 AWG	28-16 AWG (Dual Wire Ferrule Required)	28-16 AWG
Wire Strip Length	0.3in (7.5mm)	0.37in (9.5mm)	0.3in (7.5mm)
Equiv. Dinkle part #	5ESDV-05P-BK	5ESDSR-05P-BK	5ESDF-05P-BK

16 point Terminal Block Connector Specifications

Part Number	BX-RTB10	BX-RTB10-1	BX-RTB10-2
Connector Type	Screw Type-90°	Spring Clamp Type-180°	Screw Type-180°
Wire Exit	180°	180°	180°
Pitch	3.81mm	3.81mm	3.81mm
Screw Size	M2	N/A	M2
Recommended Screw torque	<1.77 lb-in (0.2 N·m)	N/A	<1.77 lb-in (0.2 N·m)
Screwdriver Blade Width	2.5mm	2.5mm	2.5mm
Wire Gauge (Single Wire)	28-16 AWG	28-18 AWG	30-16 AWG
Wire Gauge (Two Wires)	28-18 AWG	30-20 AWG (Dual Wire Ferrule Required)	30-18 AWG
Wire Strip Length	0.24in (6mm)	0.35in (9mm)	0.26in (6.5mm)
Equiv. Dinkle part #	EC381V-10P-BK	ESC381V-10-BK	EC381F-10P-BK