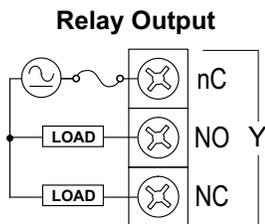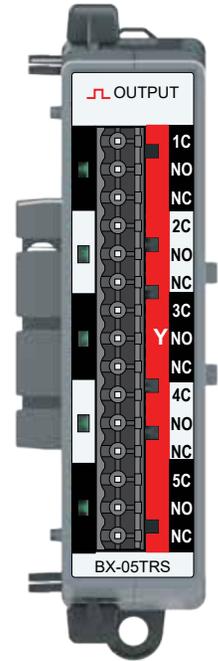## General Specifications

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	134g (4.7 oz)
Software Version	Do-more! Designer 2.0 or later

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

BX-05TRS
Output Expansion Module
5-pt, Relay Form C (SPDT)

I/O Wiring

Relay Output

nC
NO Y
NC

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

Discrete Output Specifications

Output Type	Relay Form C (SPDT)
Outputs per Module	5
Commons	5 Isolated
Maximum Current per Common	2A
Nominal Voltage Range	12–48 VDC, 24–240 VAC
Operating Voltage Range	5–60 VDC, 5–264 VAC
Maximum Voltage	60VDC, 264VAC
Minimum Output Current	0.1 mA @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

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 www.automationdirect.com/pn/doc/manual/BX-05TRS

IMPORTANT!

Hot-Swapping Information
Note: This device cannot be Hot Swapped.

Document Name	Edition/Revision	Date
BX-05TRS	1st Ed. RevG	11/3/2020

Connector Options — 5 point

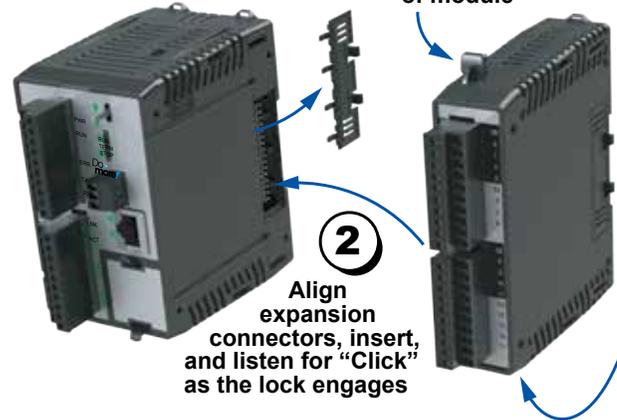|	
BX-RTB08	Terminal Block Kit, 90-degree screw type. For use with BRX 5-point, 8-point, and 12-point expansion modules. Kit includes (3) 5-pin 5mm plugs.
BX-RTB08-1	Terminal Block Kit, 180-degree spring clamp type. For use with BRX 5-point, 8-point, and 12-point expansion modules. Kit includes (3) 5-pin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

Module Installation

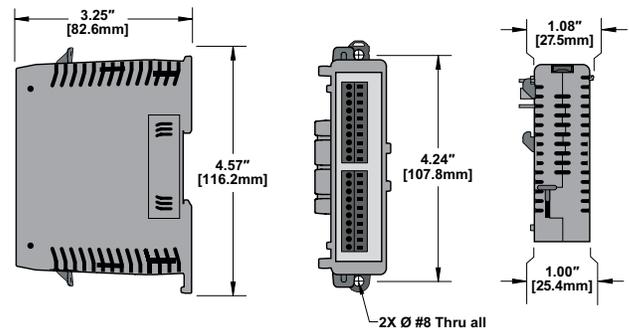**1** **To Install,** remove Connector Cover

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

2 **Align expansion connectors, insert, and listen for "Click" as the lock engages**

Dimensional Information

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

3.25" [82.6mm]

4.57" [116.2mm]

4.24" [107.8mm]

2X Ø #8 Thru all

1.08" [27.5mm]

1.00" [25.4mm]

5 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