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	95g (3.4 oz)
Software Version	Do-more! Designer v2.11 or later

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

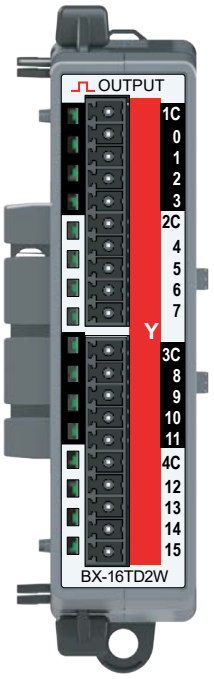
AUTOMATIONDIRECT.com

BRX Expansion Module

BX-16TD2W

Output Module

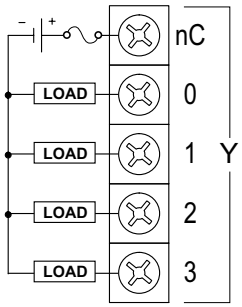
16 pt, 12–24 VDC
with Diagnostics
Sourcing



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

I/O Wiring

Sourcing Output



Discrete Output Specifications	
Output Type	Sourcing
Outputs per Module	16
Commons	4 (4 points/common) Isolated
Maximum Current per Common	8A
Nominal Voltage Range	12–24 VDC
Operating Voltage Range	5–36 VDC
Maximum Voltage	36 VDC
Minimum Output Current	350 mA for accurate fault reporting, 0.1 mA @ 24 VDC
Maximum Output Current	2A/point at 0–40°C to 1A at 60°C
Maximum Inrush Current	10A for 50ms
Maximum Leakage Current	20µA
Status Indicators	Logic Side, Green
Protection	Overcurrent and Overtemperature
Diagnostic Data	Protection or Open/Low Load

NOTE: When a configured fault condition is detected by an output, its associated input will come ON; when the fault is cleared the input will automatically go OFF. Latching a fault condition requires additional ladder logic.

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
http://www.automationdirect.com/pn/doc/manual/BX-16TD2W

IMPORTANT!

Hot-Swapping Information

Note: This device cannot be Hot-Swapped.

Document Name	Edition/Revision	Date
BX-16TD2W	1st Ed.	8/27/2025

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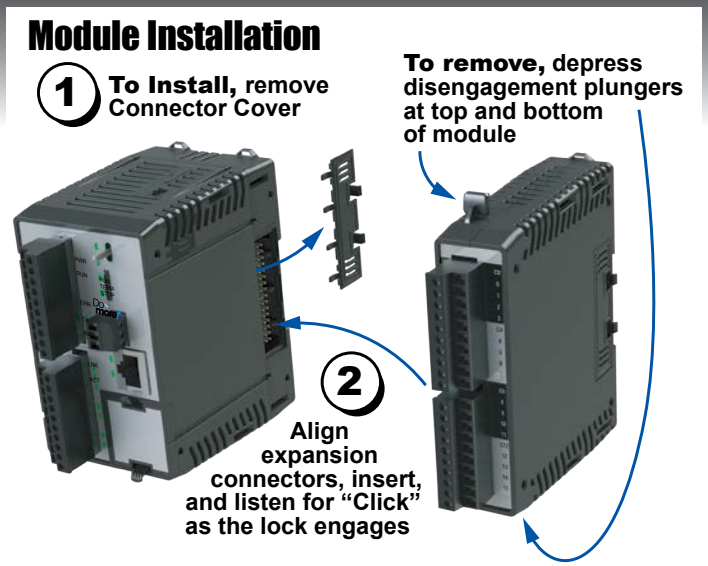
Connector Options — 16 point

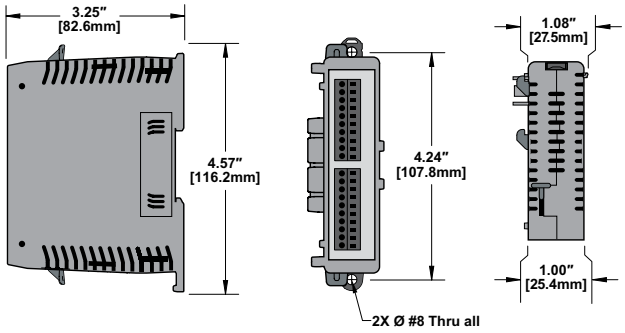
BX-RTB10	Terminal Block Kit, 90-degree screw type. For use with BRX 10-point PLCs and BRX 16-point expansion modules. Kit includes (2) 10-pin 3.8mm plugs.
BX-RTB10-1	Terminal Block Kit, 180-degree spring clamp type. For use with BRX 10-point PLCs and BRX 16-point expansion modules. Kit includes (2) 10-pin 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	***ZIP***Link PLC I/O cable, 20-position terminal block to 24-pin connector, 24AWG, cable length 0.5m (1.6ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-1	***ZIP***Link PLC I/O cable, 20-position terminal block to 24-pin connector, 24AWG, cable length 1m (3.3ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-2	***ZIP***Link PLC I/O cable, 20-position terminal block to 24-pin connector, 24AWG, cable length 2m (6.6ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-1P	***ZIP***Link PLC I/O cable, 20-position terminal block to pigtail connection, 24AWG, cable length 1m (3.3ft). For use with 16-point BRX expansion modules.
ZL-BXEM-CBL20-2P	***ZIP***Link PLC I/O cable, 20-position terminal block to pigtail connection, 24AWG, cable length 2m (6.6ft). For use with 16-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



Dimensional Information

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



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