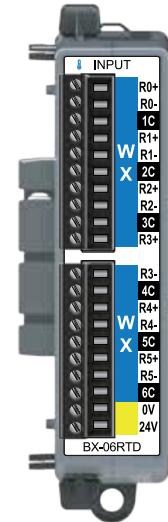


General Specifications	
Operating Temperature	0° to 60°C (32° to 140°F)
Storage Temperature	-20° to 70°C (-4° to 158°F)
Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2-6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Enclosure Type	Open Equipment
Agency Approvals	UL61010-2-201 file E139594, Canada & USA CE (Safety: EN61010-2-201 and Immunity: EN61131-2: 2007)
Noise Immunity	NEMA ICS3-304
EU Directive	See the "EU Directive" topic in the BRX Help File.
Weight	96g (3.4 oz)
Heat Dissipation	0.8W
Software Version Required	Do-more! Designer Version 2.3, or later.

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



BRX-06RTD

Resistance Temperature Detector Input Expansion Module

6-ch, 16-bit

I/O Terminal Blocks included. (See Terminal Block Connector Spec.table inside).
 Not compatible with the ZIPLink Wiring System

RTD Input Specifications	
Input Channels	6 Differential
Commons	6
Resolution	16-bit, ±0.1°C or °F (up to 100Hz filter)
Input Ranges (RTD Types)	Pt100 -200°C/850°F (-328°F/1562°F)
	Pt1000 -200°C/595°F (-328°F/1103°F)
	JPt100 -100°C/450°F (-148°F / 842°F)
	10Ω Cu. -200°C/260°C (-328°F / 500°F) ±3°C
	25Ω Cu. -200°C/260°C (-328°F / 500°F) ±3°C
	120Ω Ni. - 80°C/260°C (-112°F / 500°F)

RTD Input Specifications – Continued	
Input Resistance Ranges	0 – 10,000 Ω
	0 – 6,250 Ω
	0 – 3,125 Ω
	0 – 1,562.5 Ω
	0 – 781.2 Ω
	0 – 390.6 Ω
RTD Linearization	Automatic
Excitation Current (all ranges)	210µA
Accuracy vs. Temperature	±10ppm per °C (maximum)
Full Scale Calibration	±1°C
Offset Calibration Error	±1°C, ±3°C for 10Ω/25Ω Cu.
Maximum Inaccuracy	±1°C, ±3°C for 10Ω/25Ω Cu. maximum (excluding RTD error) (including temperature drift)
Warm-up Time	2 minutes for ±0.2% repeatability
Sample Duration	Dependent on digital Filter Settings – 120ms@16.7Hz, 4ms@470Hz
Filter Characteristics	Digital filter cutoff frequencies: 16.7Hz, 470Hz
All Channel Update Rate	Single channel update rate times the number of enabled channels
Open Circuit Detection Time	Positive full scale reading within 2s
Max. Common Mode Voltage	5VDC
Common Mode Rejection	-90dB min. @ DC, -150dB min. @ 50/60 Hz
Absolute Maximum Ratings	Fault protected input, ±50V
Conversion Method	Sigma-Delta
Backplane Power Consumption	0.1W
External DC Power Required	Class 2 or LPS power supply 24VDC (±20%) 25mA

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-06RTD



IMPORTANT!

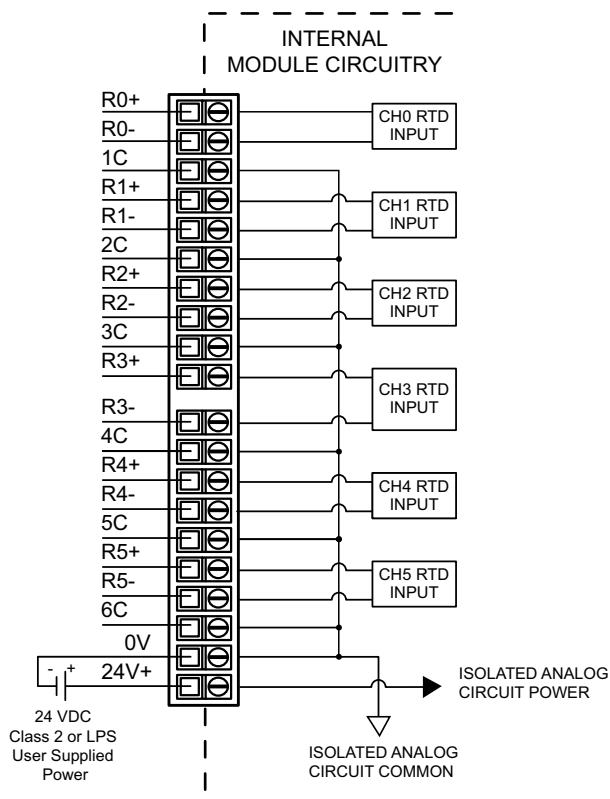


Hot-Swapping Information
Note: This device cannot be Hot Swapped.

Document Name	Edition/Revision	Date
BX-06RTD	1st Ed.	2/26/2018

I/O Wiring

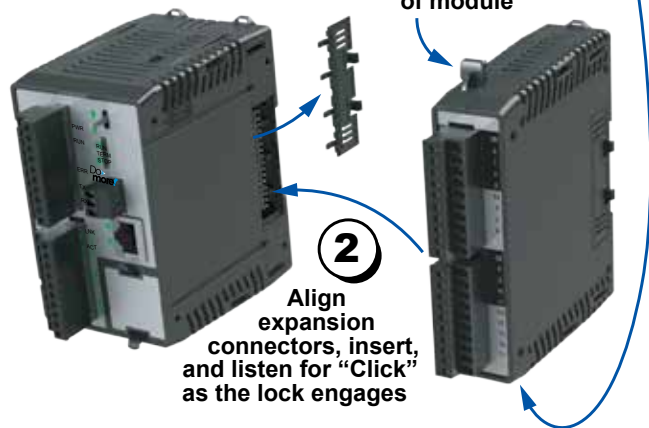
Terminal Block Input Wiring



Module Installation

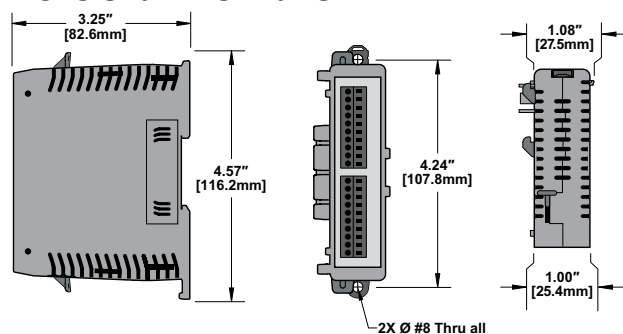
1 To install, remove Connector Cover

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



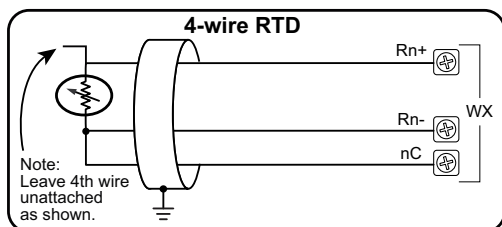
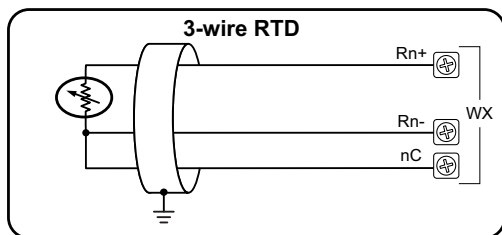
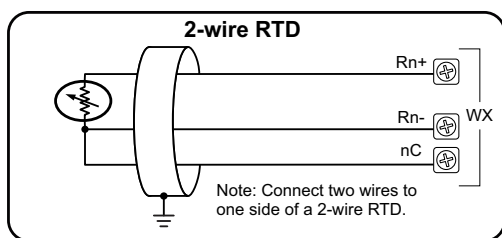
2 Align expansion connectors, insert, and listen for "Click" as the lock engages

Dimensional Information



I/O Wiring

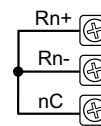
RTD Input Circuits



I/O Wiring

Notes for maximum accuracy:

- For 2-wire RTD, attach a third wire to module common.
- R+, R-, and COM wires to an RTD must be equal length and type. Refer to RTD manufacturer's recommendations.
- Do not use cable shield as sensing wire.
- When applicable, connect shield to RTD common only, otherwise connect to module common only. Do not connect shield to both ends.
- Jumper unused inputs to common.



Terminal Block Connector Specifications

Part Number	BX-RTB10 (Included)	BX-RTB10-1*	BX-RTB10-2*
Connector Type	Screw Type-90°	Spring Clamp Type-180°	Screw Type-180°
Pitch	3.81mm	3.81mm	3.81mm
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
Equiv. Dinkle part #	EC381V-10P-BK	ESC381V-10-BK	EC381F-10P-BK

*Sold separately