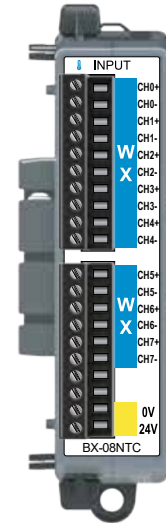


General Specifications	
Operating Temperature	0° to 60°C (32° to 140°F)
Storage Temperature	-20° to 70°C (-4° to 158°F)
Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2-6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Enclosure Type	Open Equipment
Agency 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	98g (3.5 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.



## BX-08NTC

### Thermistor Expansion Module

8-ch, 16-bit

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

Thermistor Input Specifications	
Input Channels	8 Single Ended
Commons	0
Resolution	16-bit, ±0.1°C or °F (up to 100Hz filter)
Thermistor Input Ranges	2252 -40°C to 150°C (-40°F to 302°F) 10K-AN Type 3 -40°C to 150°C (-40°F to 302°F) 10K-CP Type 2 -40°C to 150°C (-40°F to 302°F) 5K -40°C to 150°C (-40°F to 302°F) 3K -40°C to 150°C (-40°F to 302°F) 1.8K -40°C to 150°C (-40°F to 302°F)
Thermistor Linearization	Automatic
Excitation Current (all ranges)	10uA - 210uA autoscaling
Accuracy vs. Temperature	±10ppm per °C (maximum)
Full Scale Calibration	±1°C
Offset Calibration Error	±1°C
Linearity Error (end to end)	Non-Linear
Maximum Inaccuracy	1.0C @ 16.7Hz 2.5C @ 470Hz
Warm-up Time	30 Minutes for ±1°C Repeatability
Sample Duration	120ms@16.7Hz 4ms @ 470Hz
All Channel Update Rate	2.2 s @ 16.7 Hz
Open Circuit Detection Time	Within 2s @ 16.7 Hz
Common Mode Rejection	100dB DC 100dB @ 50/60Hz
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-08NTC](http://www.automationdirect.com/pn/doc/manual/BX-08NTC)



**IMPORTANT!**



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

Document Name	Edition/Revision	Date
BX-08NTC	1st Ed.	2/26/2018

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## Terminal Block Connector Specifications

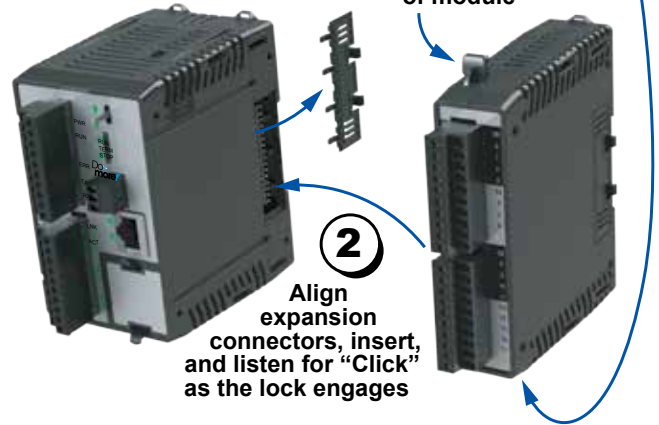
Part Number	BX-RTB10 (Included)	BX-RTB10-1*	BX-RTB10-2*
Connector Type	Screw Type-90°	Spring Clamp Type-180°	Screw Type-180°
Pitch	3.81mm	3.81mm	3.81mm
Recommended Screw torque	<1.77 lb-in (0.2 N·m)	N/A	<1.77 lb-in (0.2 N·m)
Screwdriver Blade Width	2.5mm	2.5mm	2.5mm
Equiv. Dinkle part #	EC381V-10P-BK	ESC381V-10-BK	EC381F-10P-BK

\*Sold separately

## Module Installation

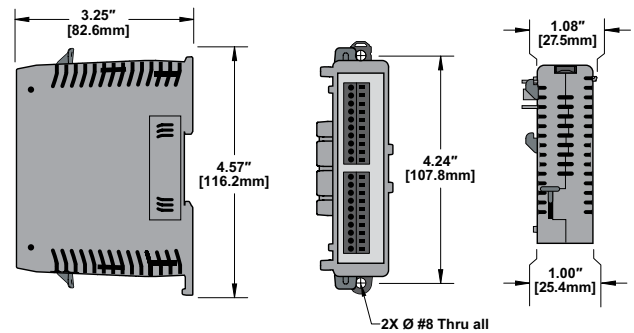
**1** To Install, remove Connector Cover

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



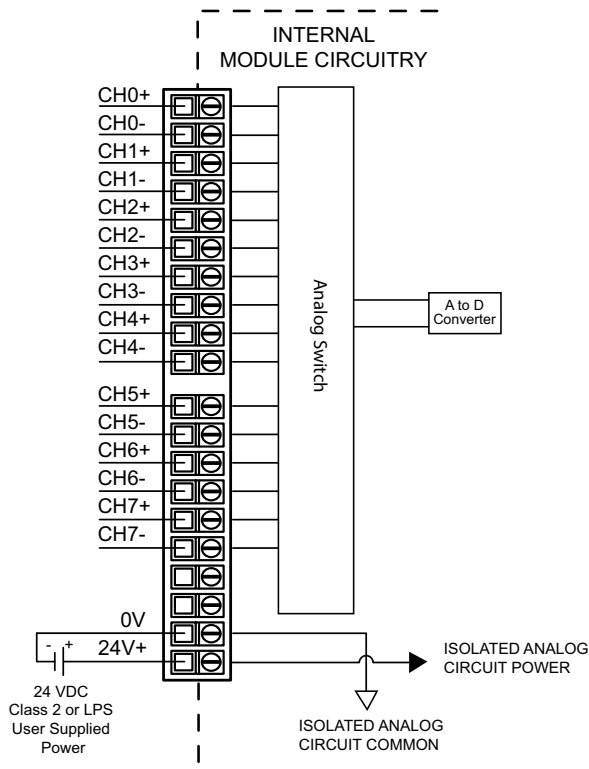
**2** Align expansion connectors, insert, and listen for "Click" as the lock engages

## Dimensional Information



## I/O Wiring

### Terminal Block Input Wiring



## I/O Wiring

### Thermistor Input Circuit

