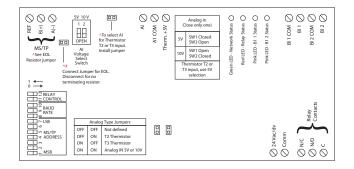


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# **INTELLIGENT FIELD DEVICE**

### **RIBMNW24B-BCAI**

BACnet MS/TP Network Relay Device with Binary Output Set Point, One Binary Output + Override, Two Binary Inputs, One Analog Input, 24 Vac/dc Power Input, 2.75" Track Mount





Code Version 1.5

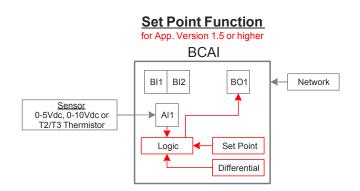


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# Relays & Contact Type:	One (1) SPDT Continuous Duty Coil
Expected Relay Life:	10 million cycles minimum mechanical
<b>Operating Temperature:</b>	-30 to 140° F
Humidity Range:	5 to 95% (noncondensing)
Operate Time:	18ms
Network Communication:	Green LED
Relay Status:	Red LED On = Activated
BI1 Status:	Pink LED On = Activated
	Pink LED On = Activated
	5.68"H x 2.75"W x 1.25"D1/1.75"D2
	See Housing H in housing guide for dimensions
	Made of US and non-US parts
	MT212-6 Mounting Track Provided
	UL Listed, UL916, C-UL, CE, RoHS, BTL Certified
Gold Flash:	
Relay Override Switch:	DIP Switch Control (See Bulletin B1243)
Network Media:	Twisted Pair 22-24AWG, shielded
<b>-</b>	
Terminations:	Functional Devices product installed at both ends of the MS/TP network – Use
	120 $\Omega$ end of line resistors. All other
	cases – Follow instructions from the device installed at the end of the
	MS/TP network
Polarity	
	Network is polarity sensitive 9600, 19200, 38400, 57600, 76800, 115200
Daud Rale:	(DIP Switch Selectable - See Bulletin B1243)
	(DIF SWITCH SElectable - See Dulletin D1245)



Set Point Function must be enabled via the Network for logic to execute. Once configured, the function will continue to operate even if communication is lost (see Bulletin B1243 for setup).

## **Contact Ratings:**

20 Amp Resistive @ 277 Vac 20 Amp Ballast @ 277 Vac 16 Amp Electronic Ballast @ 277 Vac (N/O) 10 Amp Tungsten @ 120 Vac (N/O) 1110 VA Pilot Duty @ 277 Vac 770 VA Pilot Duty @ 120 Vac 2 HP @ 277 Vac 1 HP @ 120 Vac

#### **Power Input Ratings:** 81 mA @ 24 Vdc

111 mA @ 24 Vac

• PIC Statement available on website.

#### Notes:

• For all versions, raw analog default settings are 0 and 1023 (real), respectively. Units default to 95 (no units). For Set Point Function settings, See Bulletin B1243

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• When connecting 24 Vac to both the RIB(s) and a half-wave device, damage to device can occur. Option 1: Use separate transformers for each device. Option 2: Add diode between devices, (See Bulletin B1243 for diagram)

#### **BACnet®** Details:

 MS/TP Address & Baud Rate must be set prior to power up via DIP switches

 Device ID will default to 277XXX where XXX is the MS/TP Address.

Examples:

MS/TP Address - 004 MS/TP Address - 121 Device ID - 277004 Device ID - 277121

· Device ID can be changed via network command. Once changed, it will no longer default to 277XXX.

(MS/TP Address & Device ID must be unique.)

- This model utilizes: BO 1 (Relay output), BI 1 (Dry contact binary input), BI 2 (Dry contact binary input), Al 1 (Analog input), AV1 (Set Point), AV2 (Differential), BV1 (Function Enable), BV2 (Function Mode), BV3
- (Function Status)
- Device Instance changed via Object Identifier Property of Device Object

#### Thermistor Specifications:

 Thermistor Type 2 (T2) Precon 10 K @ 77°F (25°C) PN ST-R24, Model 24, (or equivalent.) Thermistor Type 3 (T3) Precon 10 K @ 77°F (25°C) Model 3, (or equivalent.) Thermistor not included.

- For both T2 and T3, MIN\_PRES\_VAL must be set to -36 (real value) and MAX\_PRES\_VAL must be set to 66.3 (real value) for Celcius. For Fahrenheit, MIN\_PRES\_VAL must be set to -32.8 (real value) and MAX\_PRES\_VAL must be set to 151.34 (real value).
- -35 to 10°C range in 1° steps / -31 to 50°F range in 1.8° steps 10 to 32°C range in 0.1° steps / 50 to 90°F range in 0.18° steps 32 to 100°C range in 1° steps / 90 to 212°F range in 1.8° steps