

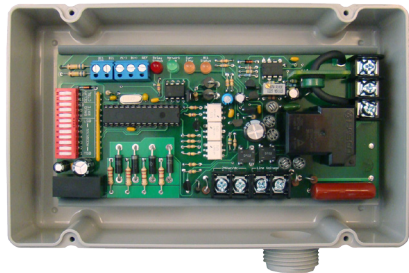
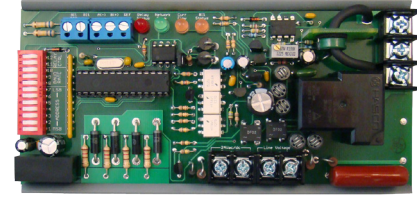
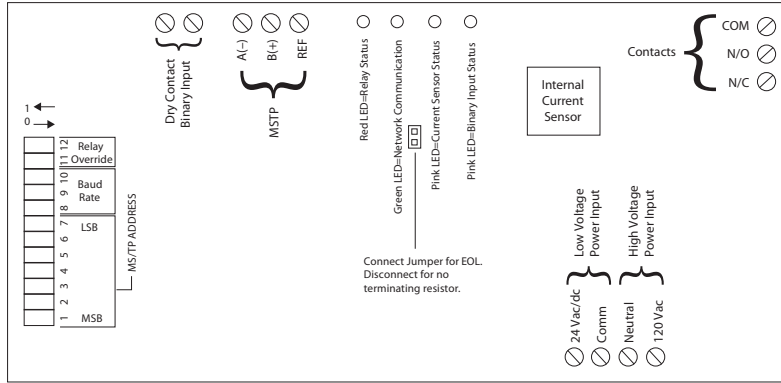
## NETWORK COMPATIBLE RELAY / CURRENT SENSOR COMBOS

### RIBMNWX2401B-BC

2.75" Track Mount BACnet® MS/TP Network Relay Device; One Binary Output (20 Amp Relay SPDT + Override); Two Binary Inputs (One Current Sensor 0.25 - 20 Amp, Relay Load Sensing & One Dry Contact Binary Input), 24 Vac/dc or 120 Vac Power Input, Optional End of Line Resistor (EOL) Included.

### RIBTWX2401B-BC

Enclosed BACnet® MS/TP Network Relay Device; One Binary Output (20 Amp Relay SPDT + Override); Two Binary Inputs (One Current Sensor 0.25 - 20 Amp, Relay Load Sensing & One Dry Contact Binary Input), 24 Vac/dc or 120 Vac Power Input, Optional End of Line Resistor (EOL) Included.



## SPECIFICATIONS

**# Relays & Contact Type:** One (1) SPDT Continuous Duty Coil  
**Expected Relay Life:** 10 million cycles minimum mechanical  
**Operating Temperature:** -30 to 140° F  
**Humidity Range:** 5 to 95% (noncondensing)  
**Operate Time:** 18ms  
**Network Communication:** Green LED  
**Relay Status:** Red LED On = Activated  
**Current Sensor Status:** Pink LED On = Activated  
**Binary Input Status:** Pink LED On = Activated  
**Dimensions:** 6.00" x 2.75" x 1.75" (RIBMNWX2401B-BC)  
 4.28" x 7.00" x 2.00" with .75" NPT Nipple (RIBTWX2401B-BC)  
**Track Mount:** MT212-6 Mounting Track Provided  
**Approvals:** UL Listed, UL916, C-UL  
**Housing Rating:** UL Listed, NEMA 1, C-UL, CE Approved, UL Accepted for Use in Plenum, Also available NEMA 4 / 4X  
**Gold Flash:** No  
**Relay Override Switch:** DIP Switch Control  
**Network Media:** Twisted Pair 22-24AWG, shielded recommended  
**Terminations:** Functional Devices product installed at both ends of the MS/TP network – Use 120 Ω 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  
**Baud Rate:** 9600, 19200, 38400, 57600, 76800, 115200 (DIP Switch Selectable)

**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:**  
 24 Vac/dc ; 120 Vac ; 50/60 Hz

**Power Input Ratings:**  
 105 mA @ 24 Vac  
 78 mA @ 24 Vdc  
 105 mA @ 120 Vac

**Current Sensor Range:**  
 0.25 - 20 Amps  
 Threshold fixed at .25 Amps.

### Notes:

- Device can be powered by either 24 Vac/dc or 120 Vac, but not both.
- Order NEMA 4 housing by adding "-N4" to end of model number. (RIBTWX2401B-BC-N4)
- Order with grey lid by adding "-GY" to end of model number. (RIBTWX2401B-BC-GY)
- Order NEMA 4 housing with grey lid by adding "-N4-GY" to end of model number. (RIBTWX2401B-BC-N4-GY)
- 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 Option 2 note below. ^^

### 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  
 Device ID - 277004

MS/TP Address - 121  
 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 (Internal current sensor input)
- Device Instance changed via Object Identifier Property of Device Object
- PIC Statement available on website.  
[http://www.functionaldevices.com/pdf/pics/RIBxWX240xB-BC\\_PICS.pdf](http://www.functionaldevices.com/pdf/pics/RIBxWX240xB-BC_PICS.pdf)

Or scan QR code with your smart phone.



DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

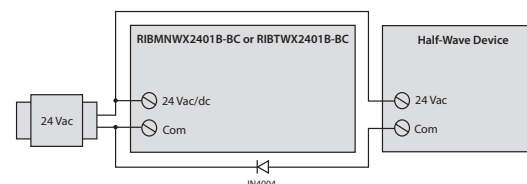
All other combinations=9600 baud

DIP SWITCHES*		RELAY STATE**
11	12	
1	0	Auto
X	1	Override on
0	0	Override off

\* 0 = Open ; 1 = Closed

\*\* Device must be powered for override

• Dry contact binary input is a general purpose input that is not tied to the relay internally. Can be used with any dry contact switching device, such as a current sensor, to report back to the network.



^^ Option 2: Add diode on 24 Vac power (Com) interconnection between devices. Band on diode faces towards RIB(s).