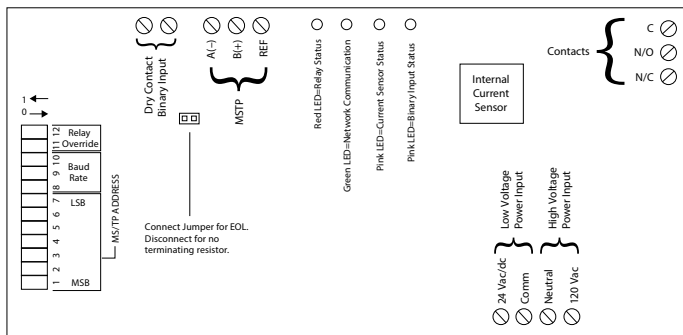


INTELLIGENT FIELD DEVICE - RELAY / CURRENT SENSOR COMBO

RIBTWX2401B-BC

BACnet MS/TP Network Relay Device, One Binary Output + Override, Two Binary Inputs (One Current Sensor Relay Load Sensing & One Dry Contact Digital Input), 24 Vac/dc/120 Vac Power Input, NEMA 1 Housing



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:** 4.28"H x 7.00"W x 2.00"D with 0.75" NPT nipple
- Housing Detail:** See **Housing D** in housing guide for dimensions
- Origin:** Made of US and non-US parts
- Track Mount:** MT212-6 Mounting Track Provided
- Approvals:** CE, UL Listed, UL916, C-UL, RoHS, BTL Certified
- 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.

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

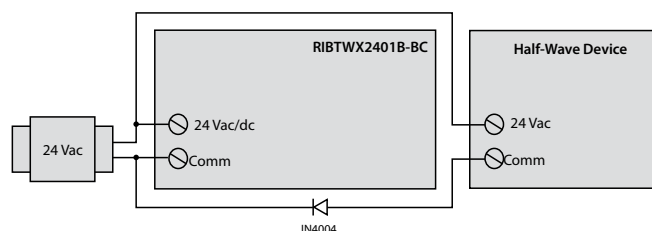
All other combinations=9600 baud

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 (Comm) interconnection between devices. Band on diode faces towards RIB(s).