

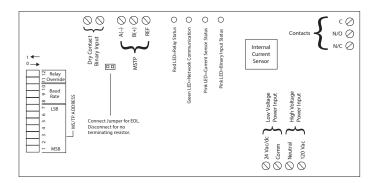
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INTELLIGENT FIELD DEVICE - RELAY / CURRENT SENSOR COMBO

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: $-30 \text{ to } 140^{\circ} \text{ F}$

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

 $\textbf{Baud Rate:}\ \ 9600, 19200, 38400, 57600, 76800, 115200 \ (DIP$

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

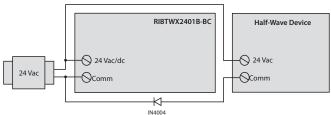
All other combinations=9600 baud

DIP SWITCHES*		RELAY STATE**	
11	12		
1	0	Auto	
Х	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).