

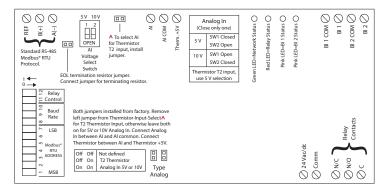
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INTELLIGENT FIELD DEVICE

RIBMNW24B-MBAI

MODbus RTU Network Relay Device, One Binary Output + Override, Two Binary Inputs, One Analog Input, 24 Vac/dc Power Input, 2.75"Track Mount













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: 6.25" x 2.75" x 1.75"

Origin: Made of US and non-US parts

Track Mount: MT212-6 Mounting Track Provided

Approvals: CE, UL Listed, UL916, C-UL, RoHS Gold Flash: No

Relay Override Switch: DIP Switch Control

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 Notes:

• Modbus®Address & Baud Rate must be set prior to power up via DIP switches.

· This model utilizes:

Physical coil 1 (Relay output)
Physical binary input 1 (Dry contact binary input)
Physical binary input 2 (Dry contact binary input)

Physical input register Al 1 (Analog input)
• Thermistor Type 2 (T2) Precon 10 K @ 77°F (25°C)
PN ST-R24, Model 24, (or equivalent.) Thermistor not included. (Range -39 to 187°F)

 For all versions, raw analog default settings are 0 and 1023 (real), respectively.

• 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. AA

 Address and Baud Rate Settings on Bulletin B1676 available on website.

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Network Media: Twisted Pair 22-24AWG, shielded

recommended, EIA/TIA-485 (standard RS485)

Terminations: Functional Devices product installed at both ends of the standard RS485 Modbus® RTU network

– Use 120Ω end of line resistors. All other cases – Follow instructions from the device installed at the end of the Modbus® network.

Polarity: Network is polarity sensitive

Baud Rate: 9600, 19200, 38400, 57600 (DIP Switch Selectable)

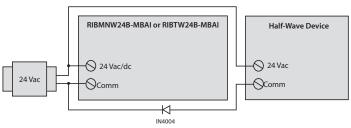
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600

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

• 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 feed back to the network.



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

^{**} Device must be powered for override