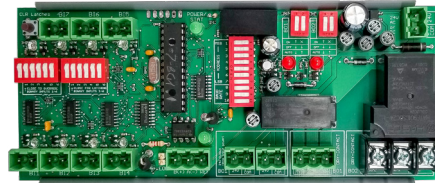


RIBTWLB-7-BC



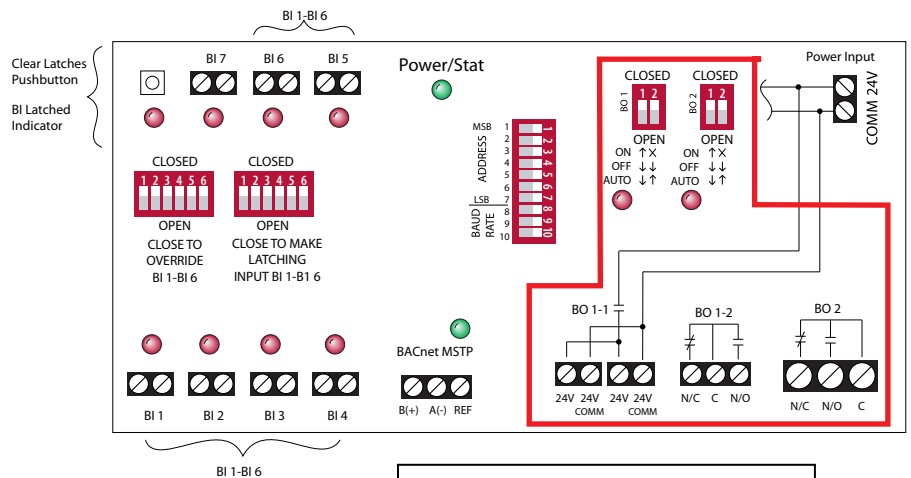
RIBMNLB-7-BC

### UL 864 Fan-Safety-Circuit Mode (Factory Default)

- Operates as AND function. When binary inputs BI 1 – BI 6 are closed, Binary output relay BO 1 will close. Opening any of the 6 binary inputs (as in the case of an alarm condition) will open BO 1 again.
- Binary output relay BO 2 is bound to binary input BI 7 for applications involving a Fan Current Status contact. When BI 7 is closed, BO 2 will activate. BO 2 indicator will illuminate when BO 2 is active and BI 7 indicator will illuminate when BI 7 is closed.

### Two Binary Outputs (2 SPDT relays + Override)

- Relay Rating, BO 1-1:
  - 3 Amp Max @ 24 Vac/dc
- Relay Rating, BO 1-2:
  - 10 Amp Resistive @ 30 Vdc
  - 10 Amp General Use @ 277 Vac
  - 1/2 HP @ 120/240 Vac
- Relay Rating, BO 2:
  - 20 Amp Resistive @ 277 Vac
  - 5 Amp @ 480 Vac
  - 20 Amp Ballast @ 277 Vac
  - 16 Amp Electronic Ballast @ 277 Vac
  - 1 HP @ 120 Vac
  - 2 HP @ 277 Vac



**UL** **us**  
LISTED  
15M6  
13CY

TYPE F, G, EM  
For use with Smoke Control System  
General Signaling Equip. NM  
Dry Indoor Use"

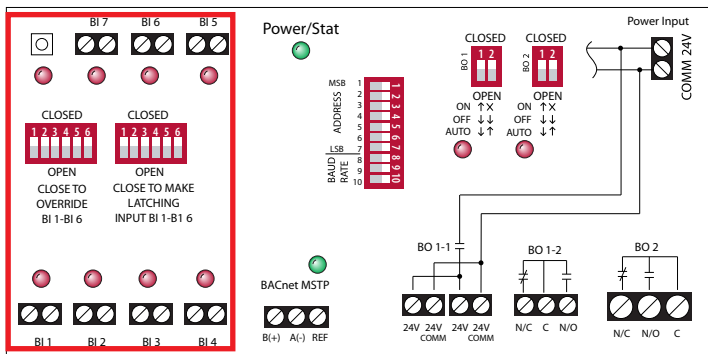
**CAUTION:** RISK OF ELECTRIC SHOCK - MORE THAN ONE  
DISCONNECT MAY BE REQUIRED TO DEENERGIZE  
THE DEVICE BEFORE SERVICING.

FOR SUPPLY CONNECTIONS USE #12AWG WIRES OR LARGER  
RATED FOR AT LEAST 75°C(167°F).

DIP Switches		Relay State
1	2	
↑	X	On
↓	↓	Off
↓	↑	AUTO

- Relay Override is selected via DIP switches.
- Red LED is on when corresponding Relay is on.
- The BO1 and BO2 DIP switch override status can read by way of Proprietary Properties DIP\_SW\_BO1 and DIP\_SW\_BO2 (No. 277005) in BO1 and BO2.
- The Priority level of the DIP switch function can be set by way of Proprietary Properties DIP\_SW\_Priority\_BO1 and DIP\_SW\_Priority\_BO2 (No. 277004) in BO1 and BO2.

## Seven Binary Inputs (Dry Contact, Class 2)



- Binary inputs can be N/C (default) or N/O depending on the Polarity setting in the respective BI object. Open is alarm condition for N/C.

## Binary Input Override

- Binary inputs can be overridden with BI Override DIP switches on board.
- Overriding binary inputs for Fan-Safety-Circuit mode only.

## Binary Input Latch

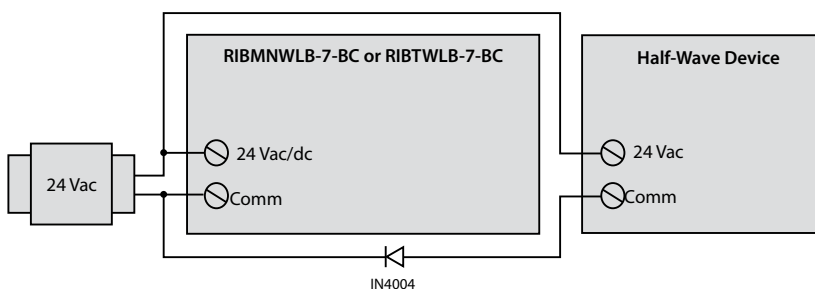
- Binary inputs can be latched with Latch-Select DIP switches on board.
- Latched binary inputs will stay in alarm condition once triggered until input is reset.
- Latch can be reset by local pushbutton, power cycle, or by setting Present\_Value True (1) in Binary Value BV1 (automatically returns to 0 in preparation for future resets.)
- Present Latch-Select DIP switch settings for specific binary inputs can be read by way of Proprietary Property Latch\_Enabled (No. 277008) in respective BI object.
- Latched status (if input is presently latched or not) of specific binary inputs can be read by way of Proprietary Property Input\_Latched (No. 277009) in respective BI object.
- Latching Binary Inputs for Fan-Safety-Circuit mode only.

## 24 Vac/dc Power Input

- Connect to terminal pair 24Vac/dc Input
- When connecting 24Vac to both the RIB(s) and a halfwave device, damage to device can occur.

Option 1: Use separate transformer for each device, or an isolated 24Vdc power supply.

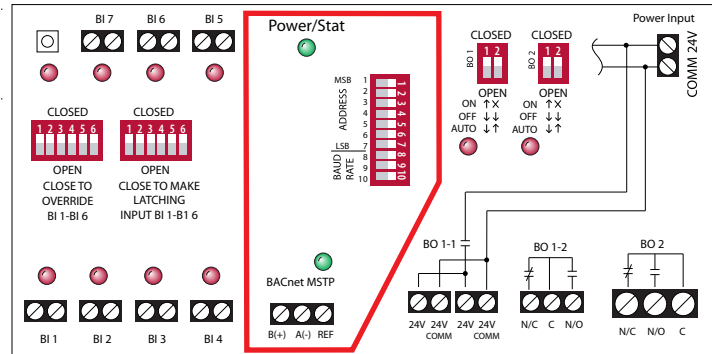
Option 2: Add diode between devices, see diagram.



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

# BACnet® MS/TP Network

- Optional End of Line Resistor (EOL) Included.
- Basic Data
  - 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)



- **MS/TP Addressing, Baud Rate, and ID**
  - 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. (Each MS/TP Address & Device ID must be unique.)
  - Device Instance is changed via Object-Identifier Property of the Device Object

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

\* 0 = Open ; 1 = Closed  
 All other combinations = 9600 Baud

- Address selected via DIP Sw 1 – 7 , see Bulletin B2028

## Additional Features

- **BI 7 and BO 2 Binding Settings**
  - Binary input BI 7 can be unbound from binary out relay BO 2 by way of Proprietary Property Bind\_BI7 (No. 277006) in BO2.
  - Priority level of the Bind function can be set by way of Proprietary Property Bind\_BI7\_Priority (No. 277007) in BO 2.
- **I/O Board Mode**
  - I/O Board mode can be enabled temporarily for troubleshooting purposes by way of Proprietary Property AND\_Function\_Enable (No. 277001).
  - Operates as a logic board with 7 binary inputs and 2 binary output relays. Allows user to test individual inputs and outputs.