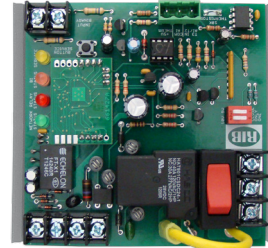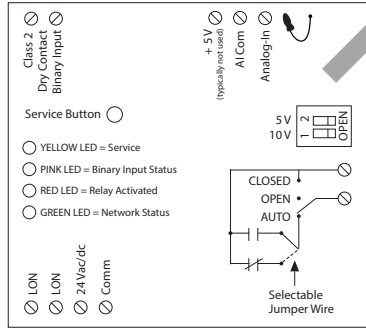## NETWORK COMPATIBLE RELAY / CURRENT SENSOR COMBO

RIBMW24SB-LNAI

4.00˝ Track Mount LonWorks® Twisted-Pair FT-10 Network Three I/O Device; One Binary Output (20 Amp Relay SPST + Override), One Binary Input (Dry Contact, Class 2); One Analog Input (0-5Vdc / 0-10 Vdc); 24 Vac/dc Power Input

SPECIFICATIONS

# Relays & Contact Type:	One (1) SPST 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
Green LED:	Network Status
Red LED:	Relay Status
Yellow LED:	Service Status
Pink LED:	Binary Input Status
Dimensions:	4.00˝ x 4.00˝ x 1.50˝
Track Mount:	MT4-4 Mounting Track Provided
Approvals:	FCC, LonMark®, CE, RoHS UL Listed, UL916, C-UL
Gold Flash:	No
Override Switch:	Yes

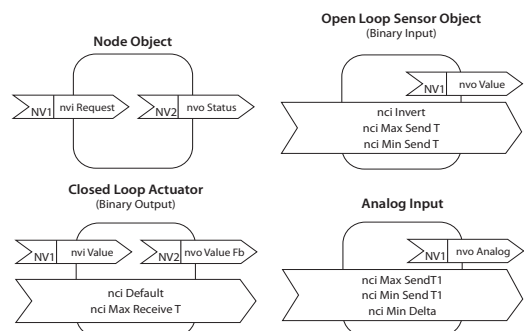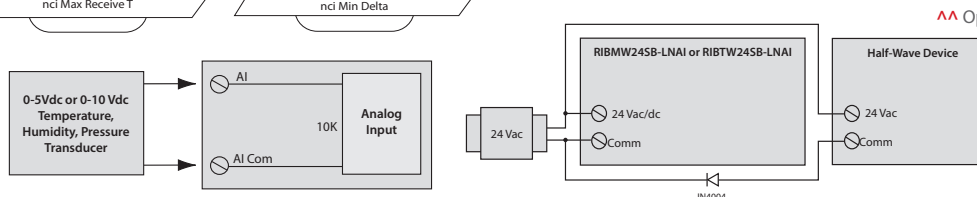|	
Channel:	TP/FT-10
Transceiver Type:	FT5000 Smart Transceiver
Transceiver Compatibility:	FT3120 / FT3150, FTT-10 / FTT-10A, and LPT-10 / LPT-11 Tranceivers
Functional Blocks:	0000 Node Object 0004 Closed Loop Actuator Object 0001 Open Loop Sensor Object 0520 Analog Input
Downloadable Files:	PDF, XIF, APB, VSS and NXE available on website.

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 120/277 Vac (N/O)
10 Amp Ballast @ 120/277 Vac (N/C)
Not rated for Electronic Ballast
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:
111 mA @ 24 Vac
81 mA @ 24 Vdc

Power Input:
24 Vac/dc ; 50-60 Hz

Notes:
• Order with P1 option by adding "-P1" to end of model number. The P1 option is pre-programmed to allow dry contact binary input to command the relay. Contact closure on the BI will activate relay.
• Normally Open or Normally Closed selected by yellow jumper wire.
• Close DIP switch 1 for 0-5 Vdc Analog Input. Close DIP switch 2 for 0-10 Vdc Analog Input.
• 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. ^^
• See RIBMW24SB-LNT2 or RIBMW24SB-LNT3 models if using a thermistor. If using a thermistor on the Analog Input, set DIP switches to the 0-5 Vdc setting. A look-up table must also be made.

DESCRIPTION	SNVT NAME	SNVT TYPE
Command to open/close relay	nvi Value	SNVT_switch
Command status of relay	nvo Value Fb	SNVT_switch
Default state of relay on/off	nci Default	SNVT_switch
Communication timer	nci Max Receive T	SNVT_elapsed_tm
Status of Binary Input	nvo Value	SNVT_switch
Invert status of Binary Input	nci Invert	SNVT_lev_disc
Max time between updates	nci Max Send T	SNVT_elapsed_tm
Min time between updates	nci Min Send T	SNVT_elapsed_tm
Value of Analog-In	nvo Analog	SNVT_lev_percent
Max time between Analog updates	nci Max Send T1	SNVT_elapsed_tm
Min time between Analog updates	nci Min Send T1	SNVT_elapsed_tm
Min change in Analog before updates	nci Min Delta	SNVT_lev_percent

The relay will go to the default state when the communication timer times out. Setting the timer value to zero will cause the communication to never time out.

It is recommended to put a value in nci Max Send T to ensure the RIB re-synchronizes itself on the network after power loss. It is the responsibility of the user to ensure this value does not cause conflicts in network traffic. (No value = No "heartbeat" updates / no re-sychronization; Low Value = Many updates but may cause many traffic collisions; High value = Few updates but many less collisions.)

Node Object

Open Loop Sensor Object
(Binary Input)

Closed Loop Actuator
(Binary Output)

Analog Input

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

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