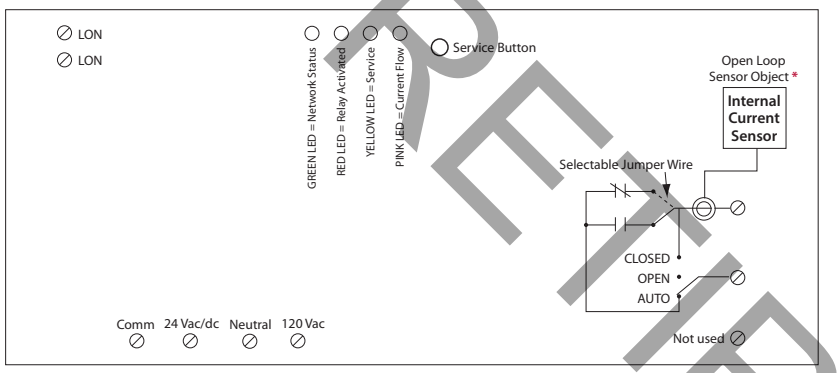
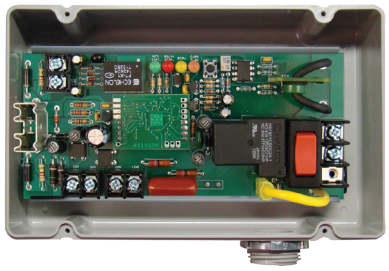
RIB Functional Devices, Inc.™ (800) 888-5538 sales@functionaldevices.com www.functionaldevices.com

NETWORK COMPATIBLE RELAY / CURRENT SENSOR COMBO

RIBTWX2401SB-LN

Enclosed LonWorks® Twisted-Pair FT-10 Network Dual I/O Device; One Binary Output (20 Amp Relay SPST + Override); One Binary Input (Current Sensor 0.25 - 20 Amp, Relay Load Sensing), 24 Vac/dc or 120 Vac 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
Dimensions: 7.00˝ x 4.28˝ x 2.00˝ with .75˝ NPT Nipple
Track Mount: MT212-6 Mounting Track Provided
Approvals: FCC, LonMark®, CE, RoHS
UL Listed, UL916, C-UL
Housing Rating: UL Listed, NEMA 1, C-UL, CE Approved,
UL Accepted for Use in Plenum,
Also available NEMA 4 / 4X
Gold Flash: No
Override Switch: Yes

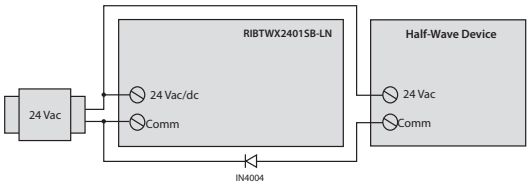
Channel: TP/FT-10
Transceiver Type: FT5000 Smart Transceiver
Functional Blocks: 0000 Node Object
0004 Closed Loop Actuator Object
0001 Open Loop Sensor Object
Downloadable Files: PDF, XIF, APB, VSS and NXE
available on website.

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:
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:
- Normally Open or Normally Closed selected by yellow jumper wire.
- Order NEMA 4 housing by adding "-N4" to end of model number. (RIBTWX2401SB-LN-N4)
- Order with grey lid by adding "-GY" to end of model number. (RIBTWX2401SB-LN-GY)
- Order NEMA 4 housing with grey lid by adding "-N4-GY" to end of model number. (RIBTWX2401SB-LN-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. ^^



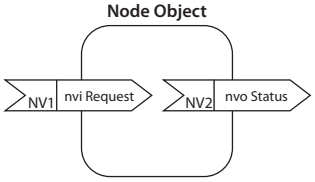
^^ Option 2: Add diode on 24 Vac power (Comm) interconnection between devices. Band on diode faces towards RIB(s).

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

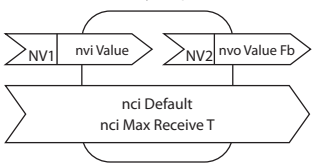
The relay will go to the default state when the communication timer times out. Setting the timer value to zero will cause the communication to never time out.

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



Closed Loop Actuator
(Binary Output)



*** Open Loop Sensor Object**
(Binary Input)