RELAYS | CURRENT SENSORS | POWER SUPPLIES | TRANSFORMERS | POWER MONITORING | WIRELESS DEVICES

RIB® Building Automation

Confidence & Peace of Mind in Every Box®

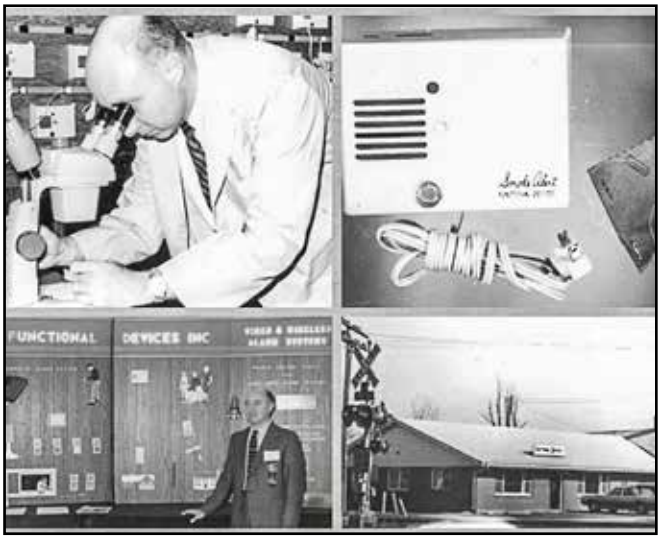
Functional Devices, Inc.®

POWER CONTROL | SPECIALTY PERIPHERAL CONTROLS | ACCESSORIES | ENCLOSURES | INTELLIGENT FIELD DEVICES

Functional Devices, Inc.®

Functional Devices was incorporated on July 28, 1969 by Albert Rittmann, an engineer with a love for tinkering with electronics. The factory opened in September 1969 in Russiaville, Indiana.

Our first day at a second building, now the Company Headquarters, was in September of 2012 when shipping and power supplies manufacturing moved into the facility in Sharpsville, Indiana. Our office and administrative employees transitioned in November 2014. We finalized our move with all production employees and production support moving in December 2015.



Functional Devices Begin Manufacturing Operations

Functional Devices, Inc., a newly established manufacturing firm located at the south end of Russiaville, in the building formerly known as Rodgers Lumber Company, is now in production.

The plant, opened in September and owned by Albert Rittmann, produces smoke and heat detectors under the trade name, "Smoke Alert".

Rittmann expects to market the device by franchised direct sales in the midwest and by wholesale outlets in the east.

There are two different models of Smoke Alert manufactured by the firm. One, a non-transmitter type is similar to a competitive model. It emits a loud warning signal when it senses smoke or heat. The second model, a transmitter, in addition to signalling by noise, sends the warning signal over AC house wiring to a plug-in receiver the size of a large multiple outlet socket which can be located anywhere on the electric system or even in adjacent houses so long as they are all on the same public service transformer. Both types of instrument are solid state units with no tubes to burn out.

The Smoke Alert detector should be installed six to 12 inches from the ceiling in the room in which it is placed, Rittmann advised. The room designated might be the kitchen, furnace room or garage, or wherever high temperature and incidence of fire is great. The device works at a temperature of 135 degrees F, plus or minus five degrees F. The detector operates very efficiently, utilizing a heat element which, due to design, creates what is referred to as a "chimney effect" that is, it causes a steady flow of air through the instrument thereby detecting a very weak concentration of smoke, Rittmann explained.

All the instruments are aged and tested before leaving the plant, Rittmann stated.

Rittmann presently employes three persons, Mrs. Howard (Helen) Laughner, Danny Snyder, and Larry Egelhoff.

Russiaville, Indiana 46979

New Plant

Outside view of Functional Devices Inc. plant.

(OBSERVER PHOTO)

Manufacturing Firm Begins Production at Russiaville

RUSSIAVILLE — A newly established manufacturing firm, Functional Devices, Inc., located at the south end of Russiaville is now in production.

Albert Rittman, owner of the plant which opened in September, produces smoke and heat detectors under the trade name "Smoke Alert." He expects to market the device by franchised direct sales in the midwest and by wholesale outlets in the east.

The firm manufactures two different models of Smoke Alert. One, a non-transmitter type is similar to a competitive model. It emits a loud warning signal when it senses smoke or heat. The second model, a transmitter, in addition to signaling noise, sends the warning signal over AC house wiring to a plug-in receiver the size of a large multiple outlet socket which can be located anywhere on the electric system or even in adjacent houses so long as they are all on the same transformer. Both types of instruments are solid state units.

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All the instruments are aged and tested before leaving the plant, Rittmann stated.

Three persons are presently employed at the plant, Mrs. Howard Laughner, Danny Snyder and Larry Egelhoff.

Indiana Manufacturers Association's IMA

2022 MANUFACTURERS HALL OF FAME

FEATURING THE MANUFACTURING EXCELLENCE AWARDS

Functional Devices was inducted into the 2022 Manufacturers Hall of Fame by the Indiana Manufacturers Association for recognizing our commitment to the Indiana manufacturing community!

Functional Devices Appoints CEO

Functional Devices was pleased to announce the promotion of Mark Fernandes to Chief Executive Officer in 2022.

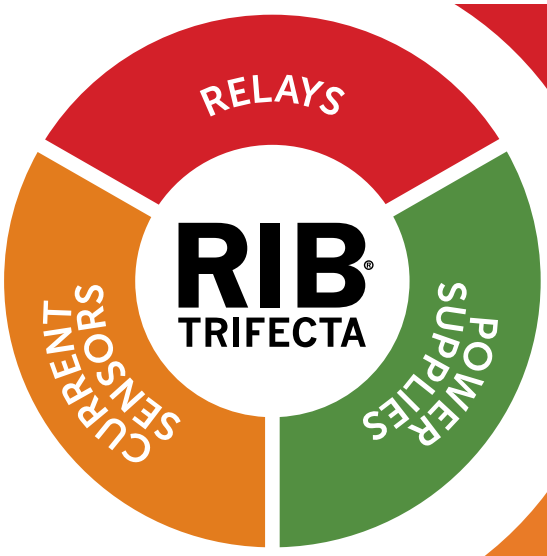
Mark Fernandes joined the Company in 2003 as an engineer. During his tenure at the Company, he has held numerous leadership positions, including Engineering Manager and Vice President of Manufacturing and Engineering. In 2014, Mark assumed the role of President and has overseen several strategic initiatives that have increased productivity, shortened time to market for new products, and maintained Functional Devices' reputation as the leader in product quality.

Named One of Best Places to Work in Manufacturing

We were proud to be recognized on the list of 2022 Best Places to Work in Manufacturing, along with 12 other Indiana manufacturers. This inaugural program was initiated by the Indiana Chamber of Commerce for companies that stand out within the manufacturing industry for creating an outstanding workplace for their employees.

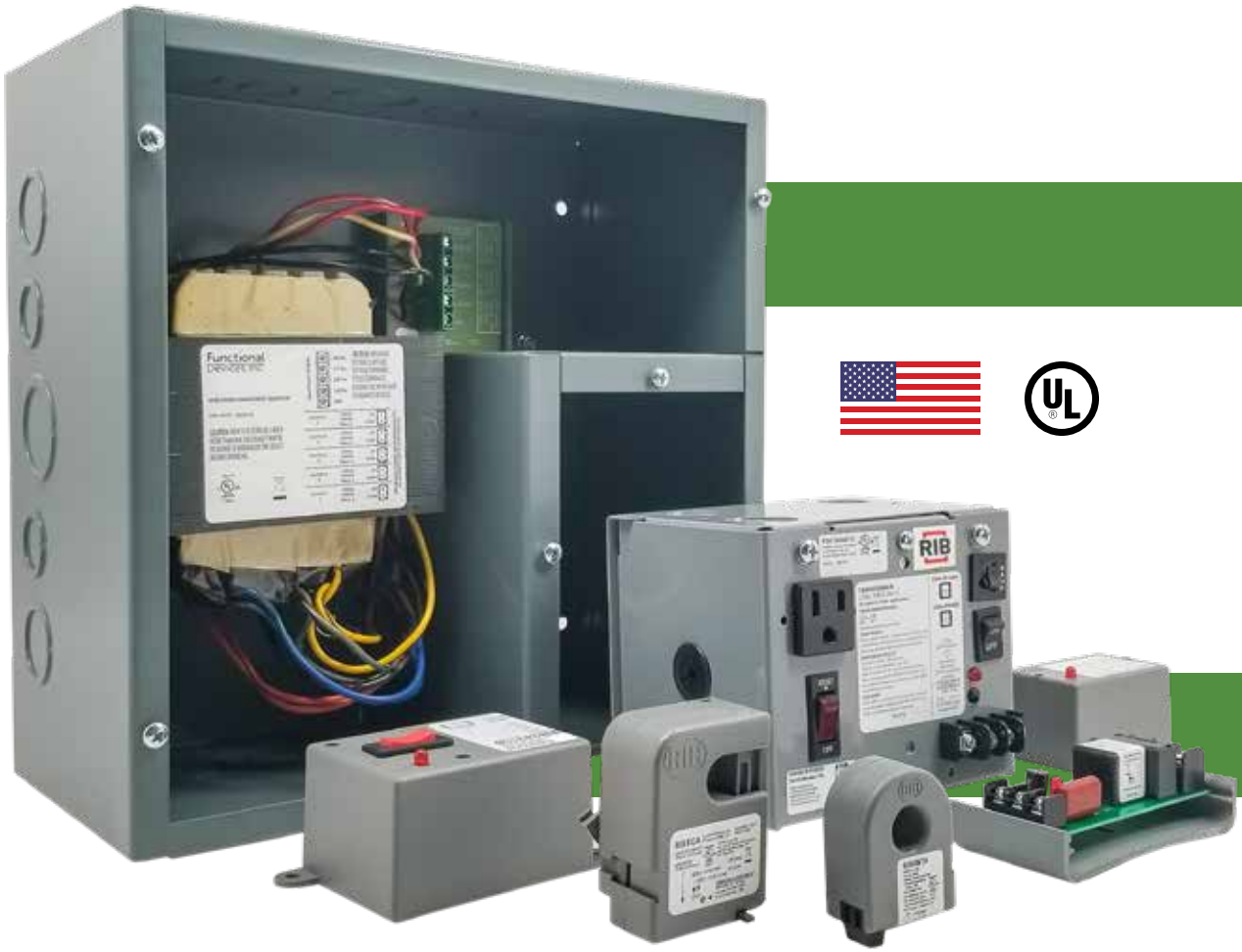
INDIANA BEST PLACES TO WORK IN MANUFACTURING 2022

Functional Devices CEO, Mark Fernandes, was appointed to the Continental Automated Buildings Association (CABA) Board of Directors, an international not-for-profit industry association dedicated to the advancement of connected home and intelligent building technologies.



BUILD THE BEST FOUNDATION

WITH THE RIB® TRIFECTA



RELAYS

- Prepackaged: LED indicator, pre-wired, transient protection, and optional HOA switch
- 10-30 Amp contact ratings
- Coil voltages of 10-30 Vac/dc, 24 Vac/dc, 120 Vac, 208-277 Vac, 347 Vac or 480 Vac
- Dry contact input relays do not need a transformer and operate on a dry contact closure
- Low-input/optoisolated relays require less power from the controller
- Mechanically latching and polarized/alarm relays
- Red & NEMA 4 housings available

CURRENT SENSORS

- Sense currents as low as 0.125 Amp or as high as 150 Amps
- Prepackaged: Sensor, LED indicators, and wires or terminals
- Fixed and adjustable models
- Relay/current sensor combinations available
- Current transducers with 0-5 V, 0-10 V, or 4-20 mA output
- Mini current switches as small as 1.5" x 2"
- Self-calibrating models available

AC POWER SUPPLIES

- AC power supplies: 40 VA-500 VA
- Single and dual transformer models
- 500 VA, 300 VA, and 200 VA Class 2 power supplies (Five or three isolated, 24 Vac outputs)
- LED indicator with circuit breaker / switch on each transformer available on some models
- 120 Vac convenience outlets available, with or without primary 10 Amp circuit breaker
- UL508 models available
- High/Low voltage separation available
- Prepackaged enclosure, power supply, and sub-panel kits

DC POWER SUPPLIES

- 300 mA, 1 Amp, or 2.5 Amp output
- Adjustable output available
- Class 2 models available
- 120 Vac or 24 Vac input
- Isolated and non-isolated
- Enclosed or track mount

DIN RAIL RIB® CONTROL RELAYS
NO SOCKET NEEDED

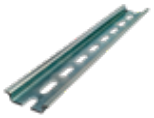
Our DIN RIB® No Socket Relays eliminate the need for a pluggable socket, allowing for the unit to be completely enclosed. These no socket models are priced competitively and available, along with DIN rail mounting accessories.

Product Features

- Prepackaged for your convenience
- 10 Amp contact rating
- 10-30 Vac/dc or 24 Vac/dc coil voltage
- Transient protection
- Models available with override switch
- Current sensor models with adjustable threshold
- UL Listed

Benefits

- Suitable for a wide variety of applications
- Compact enclosure allows for smaller footprint on the rail
- Relay & current sensor models save space in terminations



ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

DIN MOUNT NO SOCKET RELAYS

		COIL VOLTAGE			CONTACT RATINGS				
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	OVERRIDE SWITCH	TRACK MOUNT ^
RIBRL1C-NS	•	10-30		1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240/277 Vac		DIN Rail
RIBRL1S-NS	•	10-30		1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240/277 Vac	1 #	DIN Rail
RIBR24D-NS	•	24		1 DPDT	10 A @ 277 Vac	1/2 HP @ 120-240 Vac (N/O)	B300		DIN Rail
RIBR24SD-NS	•	24		1 DPDT	10 A @ 277 Vac	1/2 HP @ 120-240 Vac (N/O)	B300	1 #	DIN Rail

DIN MOUNT AC SENSORS WITH NO SOCKET RELAYS

MODEL #		COIL VOLTAGE	RELAY CONTACTS	OVERRIDE SWITCH	RESISTIVE	SENSING RANGE	TYPE *	THRESHOLD	SENSOR CONTACT TYPE	SWITCHING VOLTAGE RANGE	MAX. SWITCHING CURRENT	TRACK MOUNT ^
RIBRXLCF-NS	•	10-30 Vac/dc	1 SPST		10 A @ 277 Vac	.25-10 A	Internal	Fixed, .25 A	Solid State Switch Contact	30 Vac/dc	.4 Amps Max	DIN Rail
RIBRXLSA-NS	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	.25-10 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max	DIN Rail

UL = UL Listed - see data sheet for specific Listing # = Coil side relay override (requires unit to be powered) * = Internal current sensor monitors current through common contact of relay ^ = Track mount sold separately

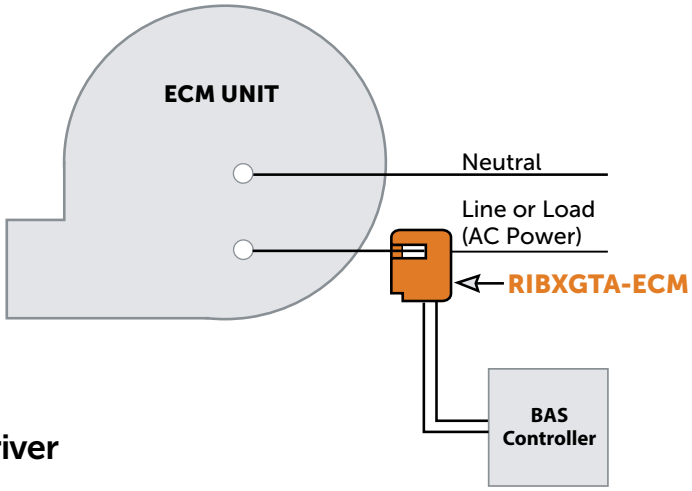
DIN Rail (ADIN35) and pair of end stops (ADIN35ES) sold separately.

FOR MORE PRODUCT INFORMATION, SEE PAGES 32-33 & 101.

LOW THRESHOLD CURRENT SWITCH FOR ECM APPLICATIONS

Our Low Threshold Current Switch is designed to sense the increasingly low current consumption of ECM units. This ensures that an accurate status feedback of the ECM unit is transmitted back to the controller.

- Low 0.25 Amp adjustable threshold
- Sense loads up to 150 Amps
- Low hysteresis of 10%
- Requires no external power supply
- Normally open (N/O) contact output
- Prepackaged: Terminals, Two LED indicators
- Can be used in any application with lower than average current consumption
- Simple installation - only requires a screwdriver
- UL Listed



ECM SENSOR
VIEW VIDEO

RELAYS
RIB TRIFECTA
CURRENT SENSORS
POWER SUPPLIES

Ratcheting clamp tightens around wire	Foot mounting insert included	Slide opening helps with installation in small spaces

FOR MORE PRODUCT INFORMATION, SEE PAGE 88.

NEW! RIB® CURRENT SENSORS

SPLIT OR SOLID CORE CURRENT SWITCHES
WITH UP TO 1 AMP SWITCHING CURRENT

Our new **Current Switches,** with a fixed or adjustable threshold, allow **up to 30 Vac/dc output with switching current rated at 1 Amp maximum.** These are **great for switching larger loads like starters and contactors.** The **split core model is available with a low sensing range down to 0.125 Amp** for monitoring high efficiency motors.

SOLID CORE: RIBXKNUTA ..... PAGE 87

SPLIT CORE: RIBXGNTF-125 ..... PAGE 90

SPLIT CORE TRUE RMS TRANSDUCER
WITH SELECTABLE RANGE

Our **True RMS Current Transducer can measure the current of waveforms that are not purely sinusoidal.** This enables them to be used in applications involving **VFDs, phase angle dimmers, switching power supplies** and more. **A selectable range makes this great for various applications: 10, 20, or 50 Amps.**

RIBXGT420-RMS ..... PAGE 94

PREPACKAGED AC POWER SUPPLIES OFFER EASY & CONVENIENT INSTALLATION

If you're planning to install a controller and other peripheral devices, it is important to **consider where the items will be placed within an enclosure** and how they will be powered. These kits address those needs to include a **Metal Enclosure, Power Supply and Sub-panel with several prepackaged options** to meet your specific needs.

HI VOLTAGE SEPARATION LO

RELAYS · POWER SUPPLIES · CURRENT SENSORS — RIB® TRIFECTA

Wide Enclosure
Single 100 VA Power Supply
Perforated Steel Sub-Panel

Narrow Enclosure
Single 100 VA Power Supply
Perforated Steel Sub-Panel

Narrow Enclosure
Dual 100 VA Power Supply
Polymetal Sub-Panel

Power Supply

- Enclosed single or dual 100 VA
- 10 Amp on/off circuit breaker switch(es)
- 120 Vac convenience outlets
- 24 Vac output terminal strip(s)
- High/low voltage separation

Enclosure

- Two size choices
- Reversible door with key latch
- Sturdy 14-Gauge steel

Sub-Panel

- Perforated steel or polymetal
- Easily removable for mounting equipment

AC POWER SUPPLY PREPACKAGED KITS

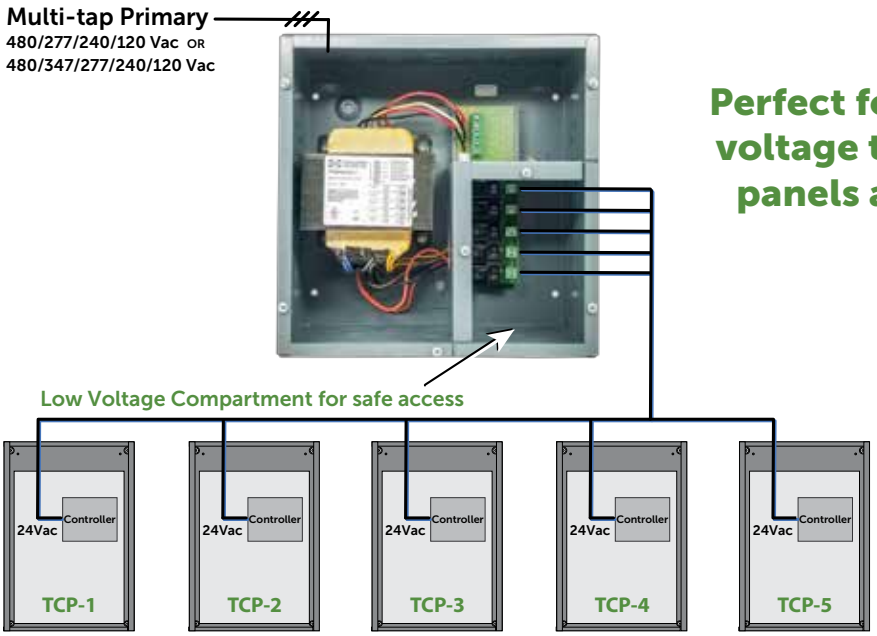
MODEL #	TRANS-FORMER(S)	INPUT POWER	HEIGHT	WIDTH	DEPTH	120 VAC OUTLETS	AUX OUT-PUT WIRE	ON/OFF SWITCH	MAIN BREAKER ON INPUT POWER *	SECONDARY CONFIGURATION	METAL HOUSING	SUB-PANEL / TRACK MOUNT
CTRL-PS	40 VA	120 Vac	14.500″	7.700″	3.900″			•			MH1000	MT212-4 included
MHP3903100AB10	100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3803S (Polymetal)
MHP3903100A100AB10	100 VA, 100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3803S (Polymetal)
MHP3904100AB10	100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3804S (Perforated)
MHP3904100A100AB10	100 VA, 100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3804S (Perforated)
MHP4604100AB10	100 VA	120 Vac	16.150″	20.000″	6.720″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH4600	SP4604 (Perforated)
MHP4604100A100AB10	100 VA, 100 VA	120 Vac	16.150″	20.000″	6.720″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH4600	SP4604 (Perforated)

* = Kills power to entire unit: Outlets, Aux. Output, & Transformer; Total Combined Output 9A

FOR MORE PRODUCT INFORMATION, SEE PAGES 120-122.

AC POWER SUPPLIES
WITH LOW VOLTAGE COMPARTMENT

Eliminate high voltage in your control panel and the need for personal protective equipment (PPE) by using our **Low Voltage Compartment Power Supplies.** This series of products has a **separate wiring compartment** (with removable cover) to safely access the removable terminal blocks.



Perfect for providing Class 2 low voltage to central power supply panels and peripheral devices

HI VOLTAGE SEPARATION LO™

Features

- Three or five isolated 100 VA Class 2, 24 Vac outputs with 4 Amp Breaker and individual On/Off switches. Also available with five 40 VA outputs (See chart below)
- NEMA 1 metal enclosure has separate low voltage compartment with cover
- Multi-tap primaries: 480/277/240/120 Vac or 480/347/277/240/120 Vac
- Seismic Certification of Equipment and Components: OSP-0201-10
- UL Listed

RELAYS · POWER SUPPLIES · CURRENT SENSORS — RIB® TRIFECTA

AC POWER SUPPLIES WITH LOW VOLTAGE COMPARTMENT

MODEL #	UL	TRANSFORMER(S)	INPUT POWER	HEIGHT	WIDTH	DEPTH	120 VAC OUTLET #	BREAKER PER OUTPUT	SECONDARY CONFIGURATION	HOUSING STYLE
PSH500A-LVC	•	500 VA (five 100 VA Outputs)	480/277/240/120 Vac	12.125″	12.125″	6.000″		5 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment
PSH300A-LVC	•	300 VA (three 100 VA Outputs)	480/277/240/120 Vac	12.125″	12.125″	6.000″		3 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment
PSH200A-LVC	•	200 VA (five 40 VA Outputs)	480/347/277/240/120 Vac	12.125″	12.125″	6.000″		5 x 2 Amp	Terminals	Enclosed with Low Voltage Compartment
PSH500AB10-LVC	•	500 VA (five 100 VA Outputs)	120 Vac	12.125″	12.125″	6.000″	•	5 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment
PSH300AB10-LVC	•	300 VA (three 100 VA Outputs)	120 Vac	12.125″	12.125″	6.000″	•	3 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment
PSH200AB10-LVC	•	200 VA (five 40 VA Outputs)	120 Vac	12.125″	12.125″	6.000″	•	5 x 2 Amp	Terminals	Enclosed with Low Voltage Compartment

UL = Class 2 UL Listed - see data sheet for specific Listing

= Convenience outlet has 4 Amp Breaker

FOR MORE PRODUCT INFORMATION, SEE PAGE 115-119.

RIB® DC POWER SUPPLIES
WITH SINGLE OR DUAL 100 VA TRANSFORMERS

- Output Power: 24 Vdc @ 2.5 Amp
- Isolation, circuit breaker, status LED, ON/OFF switch, convenience outlets
- Class 2 DC Power Supply
- Input Power: 120 Vac

FOR MORE PRODUCT INFORMATION, SEE PAGE 126.

DIN RAIL MOUNT DC POWER SUPPLIES

DIN MOUNT DC POWER SUPPLIES

MODEL #	UL	VOLTAGE INPUT	VOLTAGE OUTPUT	OUTPUT CURRENT	ON/OFF SWITCH	HEIGHT	WIDTH	DEPTH	HOUSING STYLE / TRACK MOUNT
PULS-ML15-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	600 mA		2.950″	0.890″	3.580″	DIN Mount
PULS-PIC120-241D	•	100-120 Vac; 200-240 Vac	Adjustable 24-28 Vdc ; Isolated	5 Amp		4.880″	1.540″	4.880″	DIN Mount
PULS-PIC240-241D	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	10 Amp		4.880″	1.930″	4.880″	DIN Mount
PULS-PIM36-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	1.5 Amp		3.540″	0.860″	3.580″	DIN Mount
PULS-PIM60-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	2.5 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM60-245	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	2.5 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM90-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	3.8 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM90-245	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	3.8 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM90-245-L1	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	3.8 Amp		3.540″	1.420″	3.580″	DIN Mount

UL = Class 2 UL Listed - see data sheet for specific Listing

* = Kills power to entire unit: Outlets, Aux. Output, & Transformer; Total Combined Output 9A

FOR MORE PRODUCT INFORMATION, SEE WEBSITE.

BACnet® COMPATIBLE FAN SAFETY ALARM CIRCUIT & GENERAL PURPOSE LOGIC BOARD

Our BACnet® Compatible Fan Safety Alarm Circuit & General Purpose Logic Board **combines all the relay logic to facilitate fan status, fan safety control, and damper actuator control.** It is intended for use in a circuit that will control fan start/stop and fan safety shut-down circuit **monitors critical inputs:**

- **Low-limit freeze protection** (to stop fan and remove power from damper actuator)
- **Static pressure** (to monitor for high/low pressure condition)
- **Smoke detector/fire alarm**

Fan Safety Mode (Factory Default)

- 6 BI's for Safety Devices
- 1 BI for Fan Status
- 1 BO for Fan Shutdown (Safeties)
- 1 BO for Fan Start
- 24Vac/dc
- 3 Amp Field Device Power (Actuator)
- Local/Remote Reset
- Latch/Unlatch DIP Switch Selectable

Benefits

- UL864 Safety Device
- Approved California State Fire Marshal
- Reduces Controller I/O
- Saves Field Installation Cost
- Standardized Safety Design
- Local/Remote Alarm Identification
- Local/Remote Reset
- Stand Alone Operation

General Purpose Mode

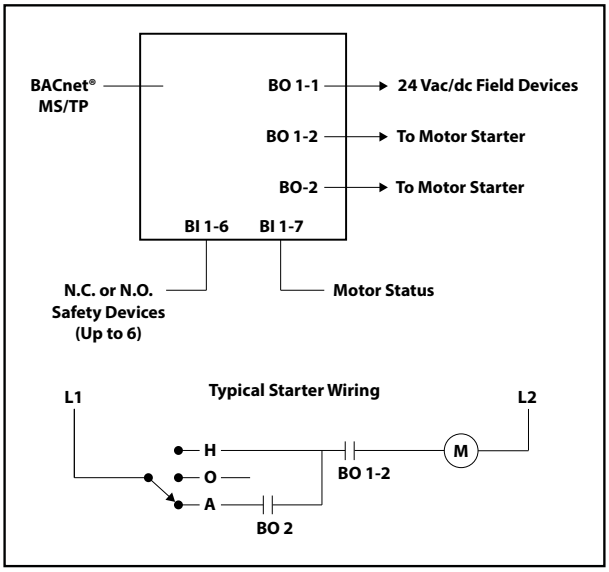
- 7 BI's
- 2 BO's with override: 1 SPDT 10A Relay; 1 SPDT 20A Ballast Rated Relay)

RIBTWLB-7-BC
NEMA 1 Housing

Shown without cover

RIBMNWLB-7-BC
Track Mount

Fan Safety Application



Air Handling Unit Fan Safety Shutdown

VIEW VIDEO

FOR MORE PRODUCT INFORMATION, SEE PAGE 134.

PREPACKAGED ASHRAE BACnet™ DEVICES MAKE THE JOB EASY

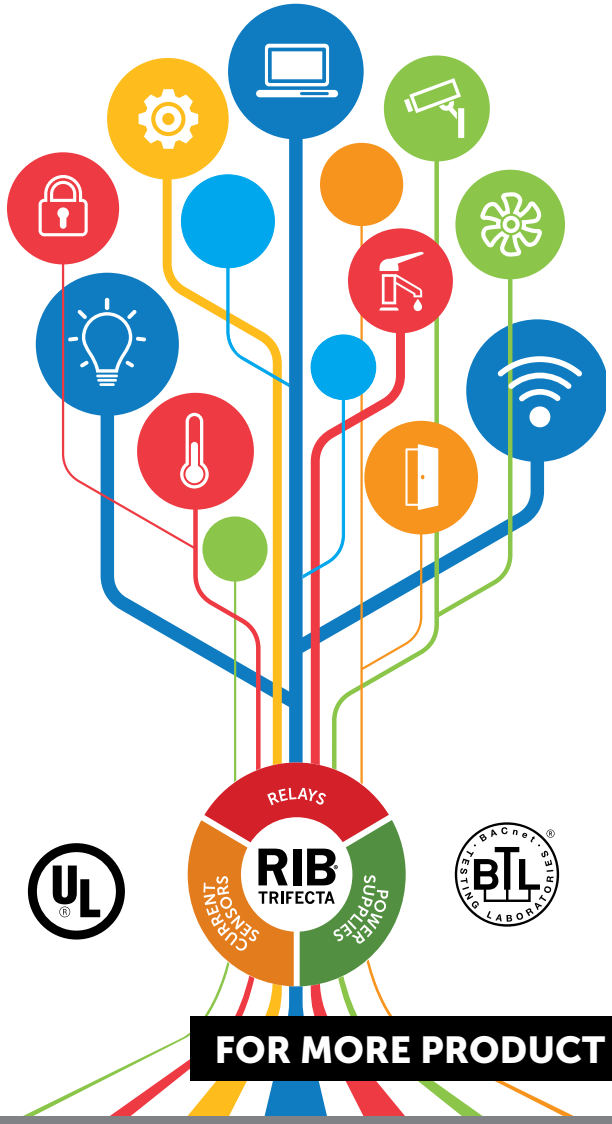
Use these products to save I/O space on costly DDC controllers.


RIBTWX2402B-BC


RIBTW2401B-BC


RIBMNW24B-BCAI


PSH600-UPS-BC



Features

- MS/TP network
- One binary output (20 Amp)
- One binary input (dry contact)
- Field addressable
- DIP switch selectable baud rate
- Power inputs: 24 Vac/dc or 120 / 208-277 Vac
- Enclosed or track mount models
- UL Listed
- BTL Certified

Several Devices with Varying Options

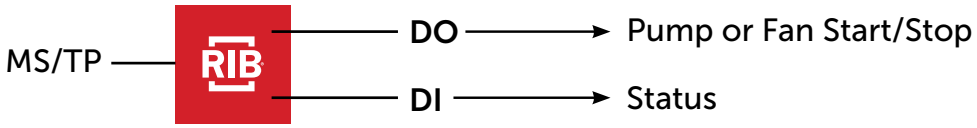
- Relays
- Relay & current sensor combinations
- Expansion module
- Analog input
- Analog output
- Thermistor input
- Accumulator input
- 600 VA UPS power supply kit
- Fan safety alarm circuit/general purpose logic board

FOR MORE PRODUCT INFORMATION, SEE PAGE 142-155.

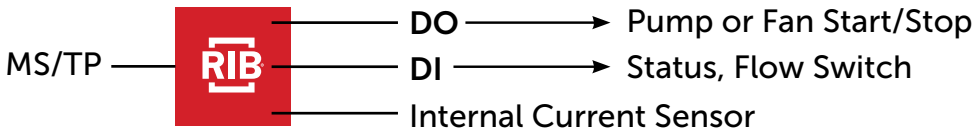
BACnet™ COMPATIBLE DEVICES APPLICATIONS

Mounting your controller and peripheral devices is easy and convenient in our prepackaged solution.

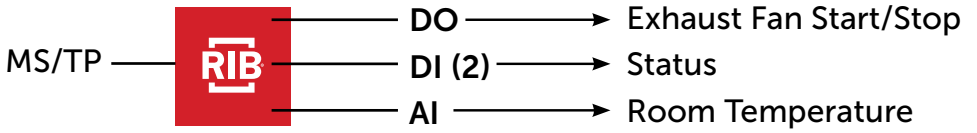
RIBTW2401B-BC, RIBTW2402B-BC



RIBMNWX2401B-BC, RIBTWX2401B-BC, RIBMNWX2402B-BC, RIBTWX2402B-BC

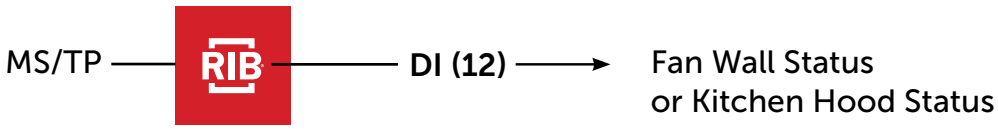


RIBMNW24B-BCAI, RIBTW24B-BCAI

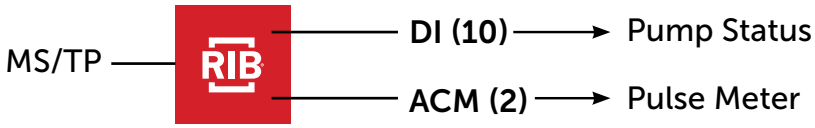


RIBTW24B-BCAO

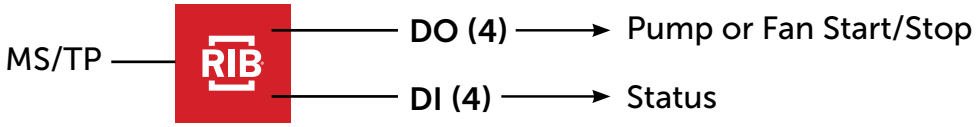
RIBMNWD12-BCDI



RIBMNWD12-BC



RIBMW24B-44-BC



Local Logic BACnet Network Devices with Set Point Function for binary output

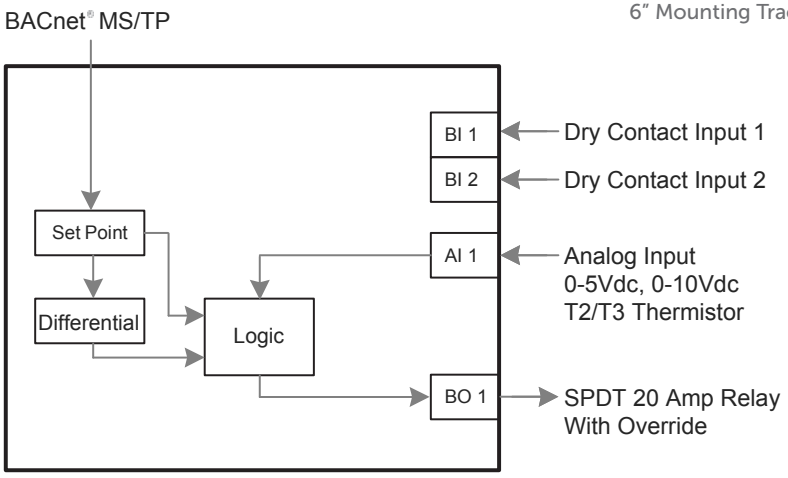
Designed for remote/local applications: Cabinet unit heater, cooler/freezer, exhaust fan, fluid level - sump pump, building pressure, etc.

Features

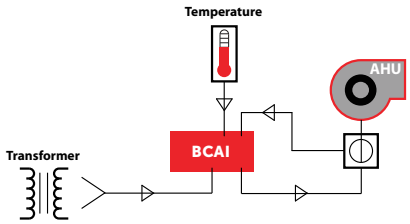
- BACnet® MS/TP network
- One binary output: 20 Amp SPDT + override
- Two binary inputs: Dry contact
- One analog input: Thermistor T2 or T3, 0-5Vdc, 0-10Vdc
- 24 Vac/dc power
- NEMA 1 enclosure, available in NEMA 4 enclosure
- UL Listed

RIBTW24B-BCAI
NEMA 1 Housing

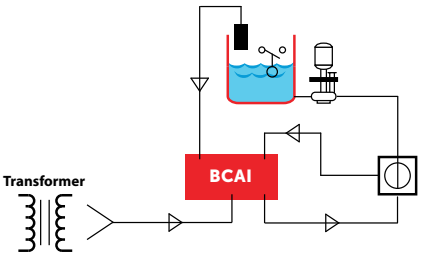
RIBMNW24B-BCAI
6" Mounting Track Included



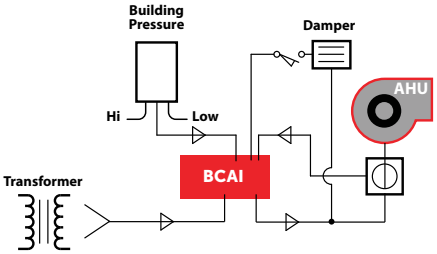
Exhaust Fan



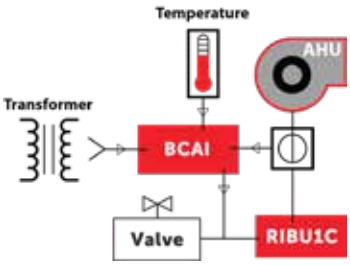
Fluid Level - Sump Pump



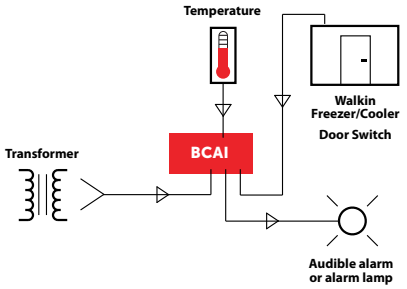
Building Pressure



Cabinet Unit Heater



Cooler/Freezer



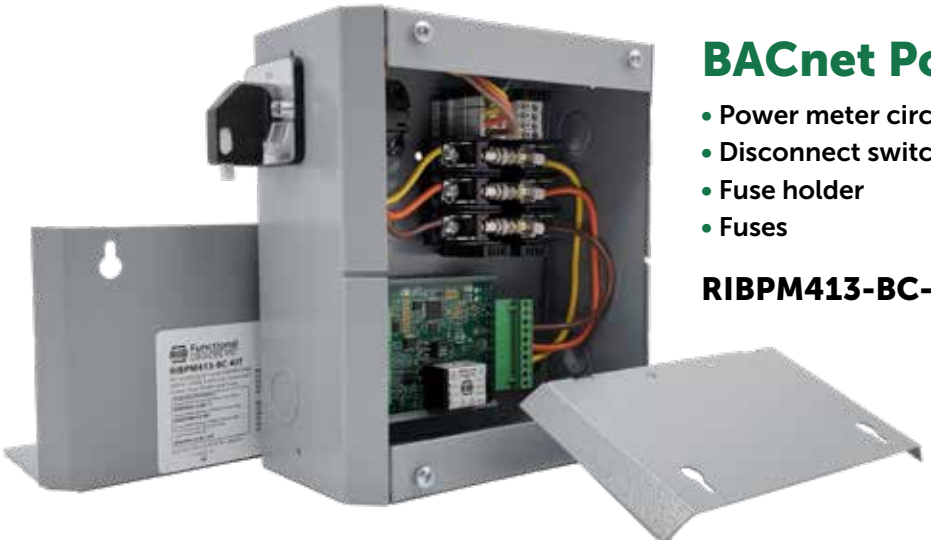
FOR MORE PRODUCT INFORMATION, SEE PAGES 150-151.

POWER METER KIT

Introducing our new BACnet® Compatible Power Meter Kit. This Power Meter Kit includes the BACnet® Compatible Power Meter circuit board, which will collect and send all the data points to the BAS controller. Also included in this Kit is the fuse holder, fuses, and disconnect switch. Everything is prepackaged and prewired in an 18-gauge steel enclosure. This Power Meter Kit is compatible with single or three-phase electrical systems. This Kit is a great solution for revenue-grade power metering applications.

- Revenue Grade Power Meter
- Power Meter input power: 120-277 Vac
- Made in the U.S.A
- Includes 16 Amp rated Disconnect Switch *
- Includes Fuse holder with three 2 Amp rated fuses ^

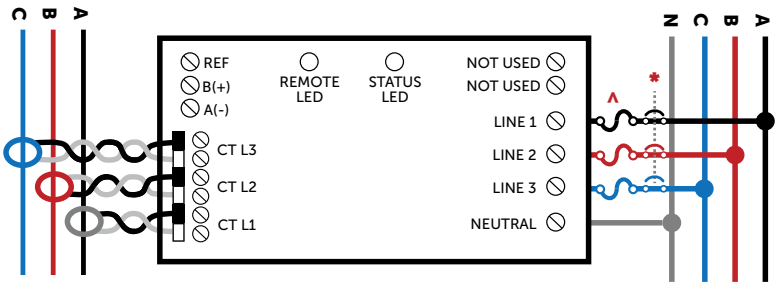
Dimensions: 8.3" H x 7.7" W (9.2" W with switch) x 3.9" D



BACnet Power Meter Kit

- Power meter circuit board
- Disconnect switch
- Fuse holder
- Fuses

RIBPM413-BC-KIT



Current Transformers

See page 163 for available models

FOR MORE PRODUCT INFORMATION, SEE PAGE 160.

RIB® CURRENT TRANSFORMERS


CT-05A0-333


CT-100A2-333


CT-400A4-333


ROPE16-040A-07MV


ROPE24-060A-07MV


ROPE36-080A-07MV


ROPE48-100A-07MV


CT-100A1-333


CT-100A4-333


CT-200A4-333


CT-025A1-333


CT-050A1-333


CTS-100A55-333


MOD1-07-33MV

FDI MODEL	PRIMARY INPUT (A)	SECONDARY OUTPUT (V)	RATIO	ACCURACY	CORE TYPE	WINDOW SIZE
CT-05A0-333	5	0.333	5A/0.333V	0.3	Split	.47" x .45"
CT-025A1-333	25	0.333	25A/0.333V	0.8	Split	.72" x .62"
CT-050A1-333	50	0.333	50A/0.333V	0.5	Split	.72" x .62"
CT-100A1-333	100	0.333	100A/0.333V	0.5	Split	.72" x .62"
CT-100A2-333	100	0.333	100A/0.333V	0.75	Split	1.0" x 1.4"
CT-100A4-333	100	0.333	100A/0.333V	0.5	Split	1.3" x 1.7"
CT-200A4-333	200	0.333	200A/0.333V	0.5	Split	1.3" x 1.7"
CT-400A4-333	400	0.333	400A/0.333V	0.5	Split	1.3" x 1.7"
CT-600A4-333	600	0.333	600A/0.333V	0.5	Split	1.3" x 1.7"
CTS-05A20-333	5	0.333	5A/0.333V	0.2	Solid	.2" diameter
CTS-30A20-333	30	0.333	30A/0.333V	0.2	Solid	.2" diameter
CTS-60A35-333	60	0.333	60A/0.333V	0.2	Solid	.35 diameter
CTS-100A55-333	100	0.333	100A/0.333V	0.2	Solid	.55 diameter
ROPE16-040A-07MV	4,000	0.07	4,000/70mV	0.75	Rope	5.0" diameter
ROPE24-060A-07MV	6,000	0.07	6,000/70mV	0.75	Rope	7.6" diameter
ROPE36-080A-07MV	8,000	0.07	8,000/70mV	0.75	Rope	11.5" diameter
ROPE48-100A-07MV	10,000	0.07	10,000/70mV	0.75	Rope	15.3" diameter

"MOD" & "ROPE" Series

The MOD series of devices are optional modules that connect to the output of the Rogowski Coil CTs (ROPE units) and convert the output to the 0.333 V analog scale for use in other Power Monitoring systems. The MOD series has options for one, two, or three-phase power feeds. The MOD series devices are DIN rail-mountable, are ETL approved, and require 12 Vdc for input voltage.

FDI MODEL	INPUT	SECONDARY OUTPUT (V)	ACCURACY	USED WITH
MOD1-07-33MV	0.07	0.333	0.50	Any "ROPE" CT
MOD2-07-33MV	0.07	0.333	0.50	Any "ROPE" CT
MOD3-07-33MV	0.07	0.333	0.50	Any "ROPE" CT
ROPE16-040A-07MV	4,000	0.07	0.75	Any "MOD" CT
ROPE24-060A-07MV	6,000	0.07	0.75	Any "MOD" CT
ROPE36-080A-07MV	8,000	0.07	0.75	Any "MOD" CT
ROPE48-100A-07MV	10,000	0.07	0.75	Any "MOD" CT

FOR MORE PRODUCT INFORMATION, SEE WEBSITE.

NOTES

PILOT RELAYS: 10–15 AMPS

ENCLOSED PILOT RELAYS

		COIL VOLTAGE			CONTACT RATINGS						
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	HIGH/LOW SEPARATION	OVERRIDE SWITCH	HOUSING STYLE *	SPEC PAGE
RIBU1C	•	10-30	120	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac			A	22
RIBH1C	•	10-30	208-277	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac			A	22
RIBU2C	•	10-30	120	2 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac			B	22
RIBH2C	•	10-30	208-277	2 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac			B	22
RIBL3C	•	10-30		3 SPST	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	23
RIBL4C	•	10-30		3 SPST, 1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	23
RIBU1S	•	10-30	120	1 SPST	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac		1	B	23
RIBH1S	•	10-30	208-277	1 SPST	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac		1	B	23
RIBU1SM-250	•	10-30	120	1 SPST	10 A @ 120/250 Vac	1/3 HP @ 120-240 Vac (N/O)	345 VA @ 120/240 Vac		1+monitor	B	24
RIBH1SM-250	•	10-30	208-277	1 SPST	10 A @ 120/250 Vac	1/3 HP @ 120-240 Vac (N/O)	345 VA @ 120/240 Vac		1+monitor	B	24
RIB2401D	•	24	120	1 DPDT	10 A @ 277 Vac	1/2 HP @ 120/240 Vac (N/O)	B300			A	24
RIB2402D	•	24	208-277	1 DPDT	10 A @ 277 Vac	1/2 HP @ 120/240 Vac (N/O)	B300			A	24
RIBU1SC	•	10-30	120	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac		2+	B	25
RIBH1SC	•	10-30	208-277	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac		2+	B	25
RIBL1C-DC	•	10-30 Vdc only		1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac			A	25
RIB2421C	•	24	120-277	1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	C300			A	26
RIB2401C	•	24	120	1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac			A	26
RIBD2421C~	•	24	120-277	1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	C300	•		C	27
RIBU2SC	•	10-30	120	1 SPST, 1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac		1	B	28
RIBU2S2	•	10-30	120	2 SPST	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	•	2	C	28

UL = UL Listed - see data sheet for specific Listing

* = See Housing Guide on page 201

\# = Coil side relay override (requires unit to be powered)

\+ = SPDT with override requires 2 switches

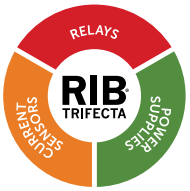
^ = Track mount sold separately

~ = Time Delay

PILOT RELAYS: 10–15 AMPS

Convenient Prepackaging is a Great Time Saver

- LED indicator
- Multiple contact ratings
- Override / HOA switch options available
- High/low voltage separation available
- 10-15 Amp models
- Pre-wired
- Enclosed or track mount
- Time delay models



T STYLE PILOT RELAYS

		COIL VOLTAGE			CONTACT RATINGS						
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	HIGH/LOW SEPARATION	OVERRIDE SWITCH	HOUSING STYLE *	SPEC PAGE
RIBTU1C	•	10-30	120	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	29
RIBTH1C	•	10-30	208-277	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	29
RIBTU2C	•	10-30	120	2 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	29
RIBTH2C	•	10-30	208-277	2 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	29
RIBU1CW	•	10-30	120	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	30
RIBH1CW	•	10-30	208-277	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	30
RIBTU1S	•	10-30	120	1 SPST	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	•	1	C	30
RIBTH1S	•	10-30	208-277	1 SPST	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	•	1	C	30
RIBTU1SC	•	10-30	120	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	•	2 +	C	31
RIBTH1SC	•	10-30	208-277	1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	•	2 +	C	31
RIBT2401D	•	24	120	1 DPDT	10 A @ 277 Vac	1/2 HP @ 120-240 Vac (N/O)	B300	•		C	31

DIN MOUNT PILOT RELAYS

		COIL VOLTAGE			CONTACT RATINGS						
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	OVERRIDE SWITCH	NO SOCKET	TRACK MOUNT ^	SPEC PAGE
RIBRL1C-NS	•	10-30		1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240/277 Vac		•	DIN Rail	32
RIBRL1S-NS	•	10-30		1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240/277 Vac	1 #	•	DIN Rail	32
RIBR24D-NS	•	24		1 DPDT	10 A @ 277 Vac	1/2 HP @ 120-240 Vac (N/O)	B300		•	DIN Rail	33
RIBR24SD-NS	•	24		1 DPDT	10 A @ 277 Vac	1/2 HP @ 120-240 Vac (N/O)	B300	1 #	•	DIN Rail	33
RIBRL1C	•	10-30		1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240/277 Vac			DIN Rail	34
RIBRL1S	•	10-30		1 SPDT	10 A @ 277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240/277 Vac	1 #		DIN Rail	34
RIBR24D	•	24		1 DPDT	10 A @ 277 Vac	1/2 HP @ 120-240 Vac (N/O)	B300			DIN Rail	35
RIBR24SD	•	24		1 DPDT	10 A @ 277 Vac	1/2 HP @ 120-240 Vac (N/O)	B300	1 #		DIN Rail	35

UL = UL Listed - see data sheet for specific Listing

* = See Housing Guide on page 201

\# = Coil side relay override (requires unit to be powered)

\+ = SPDT with override requires 2 switches

^ = Track mount sold separately

TRACK MOUNT PILOT RELAYS

		COIL VOLTAGE			CONTACT RATINGS					
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	OVERRIDE SWITCH	TRACK MOUNT ^	SPEC PAGE
RIBAN12C	• [2]	12		1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	C300		MT212 Series & DIN Rail	36
RIBAN24C	• [2]	24		1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	C300		MT212 Series & DIN Rail	36
RIBM12C	•	12		1 SPDT	15 A @ 125 Vac	1 HP @ 250 Vac	C300		MT4 Series	37
RIBM12S	•	12		1 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	C300	1	MT4 Series	37
RIBM24C	•	24		1 SPDT	15 A @ 125 Vac	1 HP @ 250 Vac	C300		MT4 Series	37
RIBM24S	•	24		1 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	C300	1	MT4 Series	37
RIBM2401D	•	24	120	1 DPDT	10 A @ 277 Vac	1/2 HP @ 120/240 Vac (N/O)	B300		MT4 Series	38
RIBM2402D	•	24	208-277	1 DPDT	10 A @ 277 Vac	1/2 HP @ 120/240 Vac (N/O)	B300		MT4 Series	38
RIBMU1C	•	10-30	120	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac		MT4 Series	38
RIBMH1C	•	10-30	208-277	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac		MT4 Series	38
RIBMU1S	•	10-30	120	1 SPST	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	1	MT4 Series	39
RIBMH1S	•	10-30	208-277	1 SPST	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	1	MT4 Series	39
RIBMU2C	•	10-30	120	2 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac		MT4 Series	39
RIBMH2C	•	10-30	208-277	2 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac		MT4 Series	39
RIBMU1SM-250	•	10-30	120	1 SPST	15 A @ 125 Vac	1/3 HP @ 120-240 Vac (N/O)	345 VA @ 120/240 Vac (N/O)	1+monitor	MT4 Series	40
RIBMH1SM-250	•	10-30	208-277	1 SPST	15 A @ 125 Vac	1/3 HP @ 120-240 Vac (N/O)	345 VA @ 120/240 Vac (N/O)	1+monitor	MT4 Series	40
RIBMU1SC	•	10-30	120	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	2 +	MT4 Series	40
RIBMH1SC	•	10-30	208-277	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	2 +	MT4 Series	40
RIBMN12C	•	12		1 SPDT	15 A @ 125 Vac	1 HP @ 250 Vac	C300		MT212 Series	41
RIBMN12S	•	12		1 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	C300	1	MT212 Series	41
RIBMN24C	•	24		1 SPDT	15 A @ 125 Vac	1 HP @ 250 Vac	C300		MT212 Series	41
RIBMN24S	•	24		1 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	C300	1	MT212 Series	41
RIBMN24S-J	•	24		1 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	C300	1	MT212 Series	42
RIBMN24C-4T	•	24		4 SPDT	15 A @ 125 Vac	1 HP @ 250 Vac	C300		MT212-6 Included	42
RIBMN24S-4T	•	24		4 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	C300	4	MT212-6 Included	42
RIBMN2401D	•	24	120	1 DPDT	10 A @ 277 Vac	1/2 HP @ 120/240 Vac (N/O)	B300		MT212 Series	43
RIBMNU1C	•	10-30	120	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac		MT212 Series	43
RIBMNH1C	•	10-30	208-277	1 SPDT	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac		MT212 Series	43
RIBMNU1S	•	10-30	120	1 SPST	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	1	MT212 Series	44
RIBMNH1S	•	10-30	208-277	1 SPST	15 A @ 150 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 277 Vac	1	MT212 Series	44
RIBMNU1SM-250	•	10-30	120	1 SPST	15 A @ 125 Vac	1/3 HP @ 120-240 Vac (N/O)	345 VA @ 120/240 Vac (N/O)	1+monitor	MT212 Series	44
RIBMNH1SM-250	•	10-30	208-277	1 SPST	15 A @ 125 Vac	1/3 HP @ 120-240 Vac (N/O)	345 VA @ 120/240 Vac (N/O)	1+monitor	MT212 Series	44

UL = UL Listed - see data sheet for specific Listing

* = See Housing Guide on page 201

\# = Coil side relay override (requires unit to be powered)

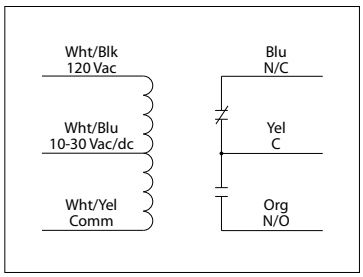
\+ = SPDT with override requires 2 switches

^ = Track mount sold separately

10 AMP PILOT CONTROL RELAYS

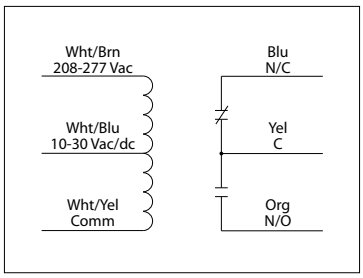
RIBU1C

Pilot Relay, 10 Amp SPDT, 10-30 Vac/dc/
120 Vac Coil, NEMA 1 Housing



RIBH1C

Pilot Relay, 10 Amp SPDT, 10-30 Vac/dc/
208-277 Vac Coil, NEMA 1 Housing



RIBU1C-RD
RIBH1C-RD
• Red housing

RIBU1C-N4
RIBH1C-N4
• NEMA 4X housing

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: 20ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, C-UL, CE, RoHS (All models)
UL916 (RIBU1C, RIBH1C)
UL864, California State Fire Marshal (RIBU1C-RD, RIBH1C-RD)
UL508 (RIBU1C-N4, RIBH1C-N4)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc
28 mA @ 120 Vac (RIBU1C)	
39 mA @ 208-277 Vac (RIBH1C)	

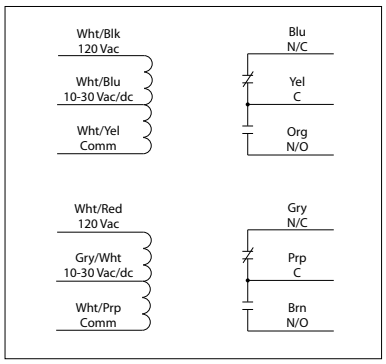
Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBU1C)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBH1C)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Note:
Order packs by adding "-5PACK", "-10PACK", "-25PACK", or "-100PACK" to end of model number.

10 AMP PILOT CONTROL RELAYS

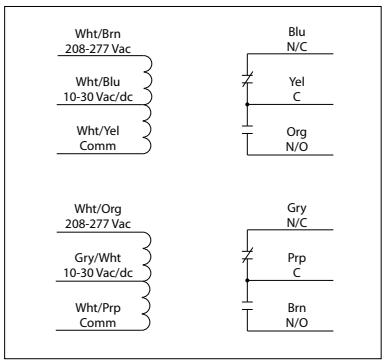
RIBU2C

Pilot Relays, 10 Amp 2 SPDT, 10-30 Vac/dc/
120 Vac Coil, NEMA 1 Housing



RIBH2C

Pilot Relays, 10 Amp 2 SPDT, 10-30 Vac/dc/
208-277 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: Two (2) 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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.75" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

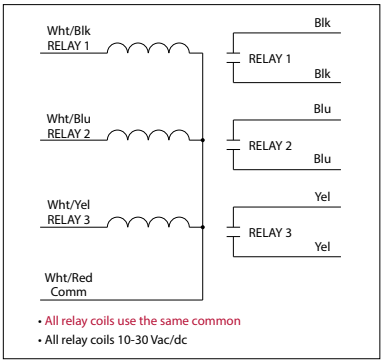
33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc
28 mA @ 120 Vac (RIBU2C)	
39 mA @ 208-277 Vac (RIBH2C)	

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBU2C)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBH2C)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAYS

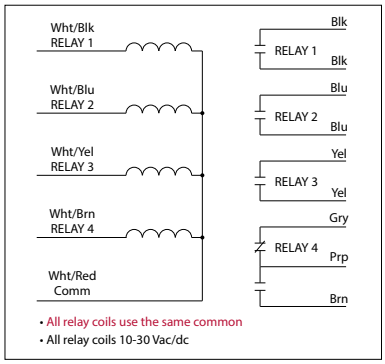
RIBL3C

Pilot Relays, 10 Amp 3 SPST-N/O,
10-30 Vac/dc Coil, NEMA 1 Housing



RIBL4C

Pilot Relays, 10 Amp 3 SPST-N/O + 1 SPDT,
10-30 Vac/dc Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: Three (3) SPST Continuous Duty Coil (RIBL3C)
Three (3) SPST + One (1) SPDT Continuous Duty Coil (RIBL4C)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

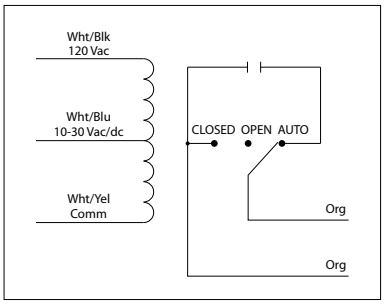
Coil Voltage Input:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Notes:
Order Normally Closed by adding "-NC" to end of model number

10 AMP PILOT CONTROL RELAYS

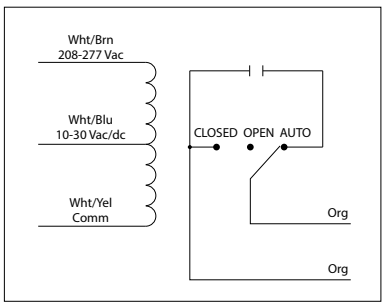
RIBU1S

Pilot Relay, 10 Amp SPST-N/O + Override,
10-30 Vac/dc/120 Vac Coil, NEMA 1 Housing



RIBH1S

Pilot Relay, 10 Amp SPST-N/O + Override,
10-30 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes

Contact Ratings:
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Notes:
Order Normally Closed by adding "-NC" to end of model number

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

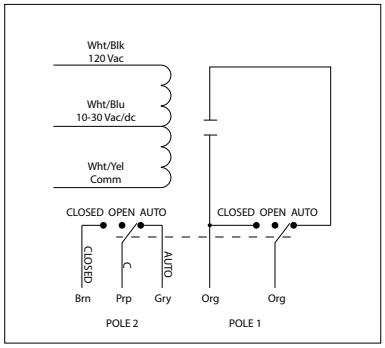
28 mA @ 120 Vac (RIBU1S)
39 mA @ 208-277 Vac (RIBH1S)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBU1S)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBH1S)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAYS

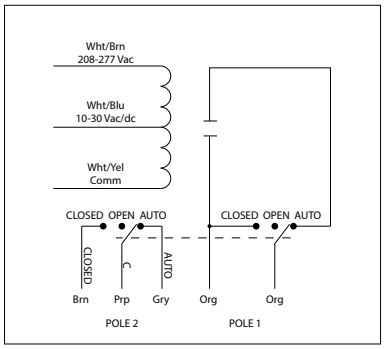
RIBU1SM-250

Pilot Relay, 10 Amp SPST-N/O + Override + Monitor, 10-30 Vac/dc/120 Vac Coil, NEMA 1 Housing



RIBH1SM-250

Pilot Relay, 10 Amp SPST-N/O + Override + Monitor, 10-30 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes + Monitor

Contact Ratings:
10 Amp Resistive @ 120/250 Vac
345 VA Pilot Duty @ 120/240 Vac
211 VA Pilot Duty @ 120/240 Vac
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)

Coil Current:
55 mA @ 30 Vac
28 mA @ 120 Vac (RIBU1SM-250)
39 mA @ 208-277 Vac (RIBH1SM-250)
20 mA @ 30 Vdc

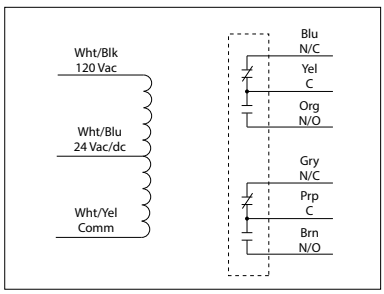
Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBU1SM-250)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBH1SM-250)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Notes:
- Second pole of override switch can be connected to digital-in of controller to report position of override switch
- Rating of second pole is 250 Vac max and 5 Amp max
- Order Normally Closed by adding "-NC" to end of model number

10 AMP PILOT CONTROL RELAYS

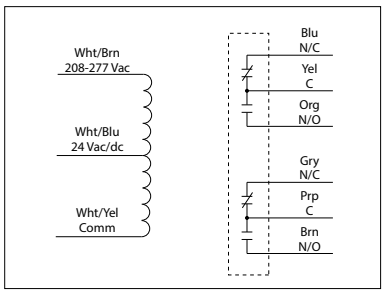
RIB2401D

Pilot Relay, 10 Amp DPDT, 24 Vac/dc/ 120 Vac Coil, NEMA 1 Housing



RIB2402D

Pilot Relay, 10 Amp DPDT, 24 Vac/dc/ 208-277 Vac Coil, NEMA 1 Housing



RIB2401D-RD
RIB2402D-RD
• Red housing

RIB2401D-N4
RIB2402D-N4
• NEMA 4X housing

SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, C-UL, CE, RoHS (All models)
UL916 (RIB2401D, RIB2401D-RD, RIB2402D, RIB2402D-RD)
UL864, California State Fire Marshal (RIB2401D-RD, RIB2402D-RD)
UL508 (RIB2401D-N4, RIB2402D-N4)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120/240 Vac (N/O)
1/3 HP @ 120/240 Vac (N/C)
B300 Pilot Duty
120 Vac 30A Make 3A Break (360 VA)
240 Vac 15 A Make 1.5A Break (360 VA)
208 Vac 17.3A Make 1.73A Break (360 VA)
277 Vac 13A Make 1.3A Break (360 VA)
24 Vac 30A Make 5A Break (120VA) 5A Max

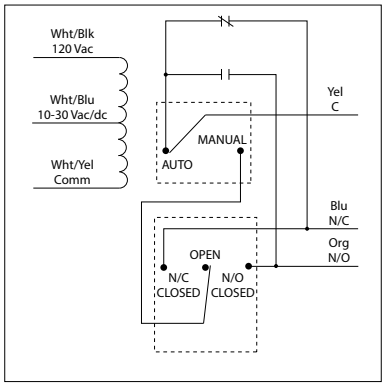
Coil Current:
24 mA @ 18 Vac
32 mA @ 24 Vac
40 mA @ 30 Vac
31 mA @ 120 Vac (RIB2401D)
36 mA @ 208-277 Vac (RIB2402D)
20 mA @ 20 Vdc
24 mA @ 24 Vdc
36 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIB2401D)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIB2402D)
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

10 AMP PILOT CONTROL RELAYS

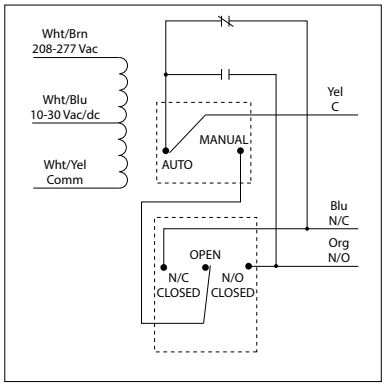
RIBU1SC

Pilot Relay, 10 Amp SPDT + Override,
10-30 Vac/dc/120 Vac Coil, NEMA 1 Housing



RIBH1SC

Pilot Relay, 10 Amp SPDT + Override,
10-30 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes (2)

Contact Ratings:
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

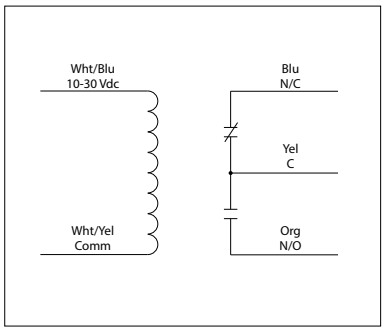
28 mA @ 120 Vac (RIBU1SC)
39 mA @ 208-277 Vac (RIBH1SC)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBU1SC)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBH1SC)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAYS

RIBL1C-DC

Pilot Relay, 10 Amp SPDT, 10-30 Vdc Limited
Inrush Coil, NEMA 1 Housing



RIBL1C-DC-RD
• Red housing

RIBL1C-DC-N4
• NEMA 4X housing

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: 20ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, C-UL, CE, RoHS (All models)
UL916 (RIBL1C-DC)
UL864, California State Fire Marshal (RIBL1C-DC-RD)
UL508 (RIBL1C-DC-N4)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

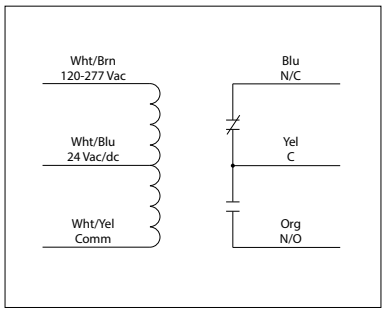
Coil Current:
13 mA @ 10 Vdc
15 mA @ 12 Vdc
18 mA @ 24 Vdc
20 mA @ 30 Vdc

Coil Voltage Input:
10-30 Vdc
Drop Out = 2.8 Vdc
Pull In = 10 Vdc

10 AMP PILOT CONTROL RELAYS

RIB2421C

Pilot Relay, 10 Amp SPDT, 24 Vac/dc/
120-277 Vac Coil, NEMA 1 Housing



GREAT SERVICE TRUCK RELAY
ONE RELAY COVERS MOST APPLICATIONS

RIB2421C-RD
• Red housing

RIB2421C-N4
• NEMA 4X housing

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: 20ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16", 600V Rated
Approvals: UL Listed, C-UL, CE, RoHS (All models)
UL916 (RIB2421C)
UL864, California State Fire Marshal (RIB2421C-RD)
UL508 (RIB2421C-N4)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

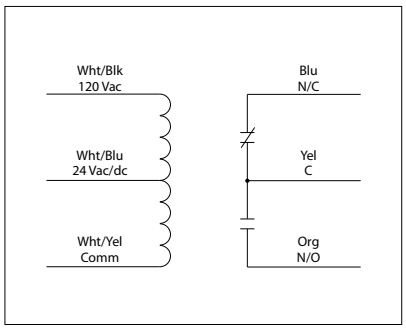
Coil Current:
66 mA @ 24 Vac
38 mA @ 24 Vdc
40 mA @ 120-277 Vac

Coil Voltage Input:
24 Vac/dc ; 120-277 Vac ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

10 AMP TRIVOLT CONTROL RELAYS

RIB2401C

TriVolt Relay, 10 Amp SPDT, 24Vac/dc or
120Vac, NEMA 1 Housing



RIB2401C-RD
• Red housing

RIB2401C-N4
• NEMA 4X housing

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: 6ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16", 600V Rated
Approvals: UL Listed, C-UL, CE, RoHS (All models)
UL916 (RIB2401C)
UL864, California State Fire Marshal (RIB2401C-RD)
UL508 (RIB2401C-N4)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

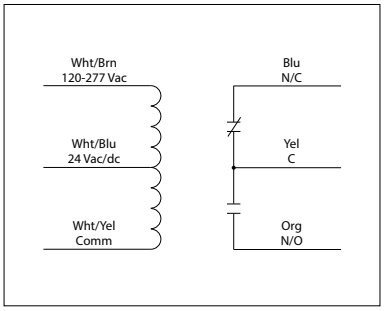
Contact Ratings:
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

Coil Current:
24 mA @ 20 Vac
28 mA @ 24 Vac
44 mA @ 35 Vac
28 mA @ 120 Vac
13 mA @ 20 Vdc
16 mA @ 24 Vdc
25 mA @ 35 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz
Drop Out = 3.0 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

RIBD2421C

Time Delay Pilot Relay, 10 Amp SPDT,
24 Vac/dc/120-277 Vac Coil, NEMA 1 Housing



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: 6ms after time delay
Relay Status: RED LED On = Activated
Time Delay Status: PINK LED FLASHING = Timing
Timing Mode: Delay On Make (N/O)
Timing Range: 6 seconds - 20 minutes
Timing Adjustment: 4 position DIP switch for range selection and single turn potentiometer for timing adjustment within range
Timing Tolerance: Switches 1& 2 = ±10%
Switches 3 & 4 = ±5%
Timing Repeatability: ±1%
Temperature Timing Variance: ±1%
Voltage Timing Variance: ±1%
Recycle Time: 750ms Maximum
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

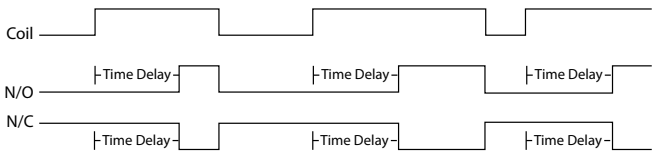
Input Current:
66 mA @ 24 Vac
38 mA @ 24 Vdc
40 mA @ 120-277 Vac

Coil Voltage Input:
24 Vac/dc ; 120-277 Vac ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

TIMING TABLE

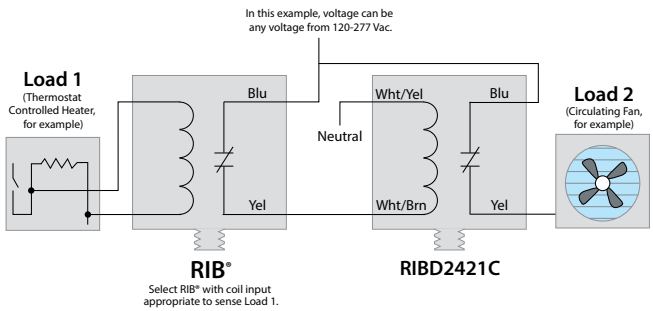
Switch Ranges	Close Dip Switch	Potentiometer Setting A ⟷ B ⟷ C ⟷ D ⟷ E				
6s-20s	1	6s	9s	13s	16s	20s
22s-1min15s	2	22s	36s	50s	1min4s	1min15s
1min30s-5min	3	1min30s	2min10s	3min20s	4min16s	5min
6min-20min	4	6min	9min	13min20s	17min20s	20min

Timing Diagram



Time Delay Application

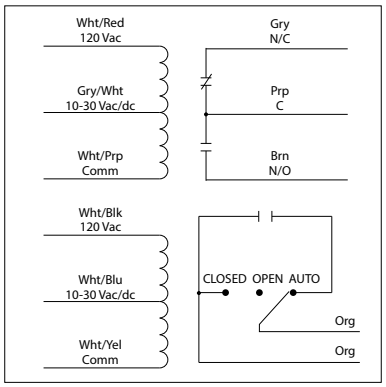
Load 2 stays on selected amount of time after Load 1 goes off.



10 AMP PILOT CONTROL RELAY

RIBU2SC

Pilot Relays, 10 Amp SPST-N/O + Override + 1 SPDT,
10-30 Vac/dc/120 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) SPST + 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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.75" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes

Contact Ratings:
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:
33 mA @ 10 Vac
35 mA @ 12 Vac
46 mA @ 24 Vac
55 mA @ 30 Vac
28 mA @ 120 Vac
13 mA @ 10 Vdc
15 mA @ 12 Vdc
18 mA @ 24 Vdc
20 mA @ 30 Vdc

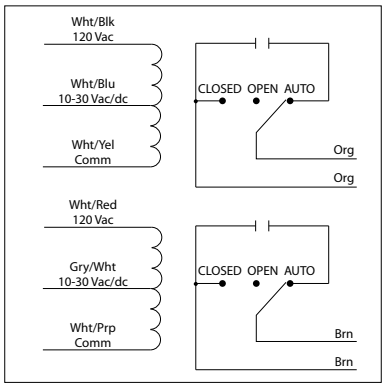
Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Notes:
Order Normally Closed by adding "-NC" to end of model number

10 AMP PILOT CONTROL RELAY

RIBU2S2

Pilot Relays, 10 Amp 2 SPST-N/O + 2 Overrides,
10-30 Vac/dc/120 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: Two (2) 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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes (2)

Contact Ratings:
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:
33 mA @ 10 Vac
35 mA @ 12 Vac
46 mA @ 24 Vac
55 mA @ 30 Vac
28 mA @ 120 Vac
13 mA @ 10 Vdc
15 mA @ 12 Vdc
18 mA @ 24 Vdc
20 mA @ 30 Vdc

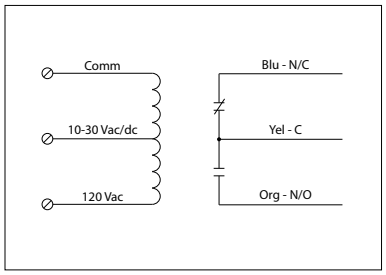
Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Notes:
Order Normally Closed by adding "-NC" to end of model number

10 AMP PILOT CONTROL RELAYS

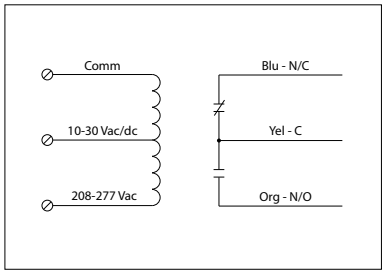
RIBTU1C

Pilot Relay, 10 Amp SPDT, 10-30 Vac/dc/ 120 Vac Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



RIBTH1C

Pilot Relay, 10 Amp SPDT, 10-30 Vac/dc/ 208-277 Vac Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

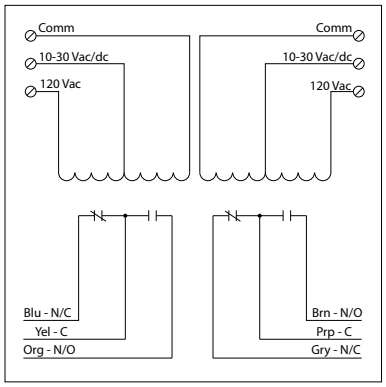
28 mA @ 120 Vac (RIBTU1C)
39 mA @ 208-277 Vac (RIBTH1C)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBTU1C)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBTH1C)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAYS

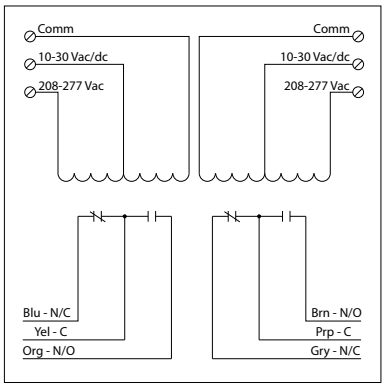
RIBTU2C

Pilot Relays, 10 Amp 2 SPDT, 10-30 Vac/dc/ 120 Vac Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



RIBTH2C

Pilot Relays, 10 Amp 2 SPDT, 10-30 Vac/ dc/208-277 Vac Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: Two (2) 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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

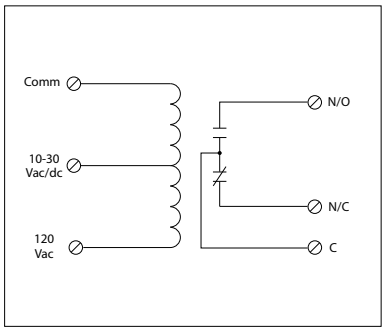
28 mA @ 120 Vac (RIBTU2C)
39 mA @ 208-277 Vac (RIBTH2C)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBTU2C)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBTH2C)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAYS

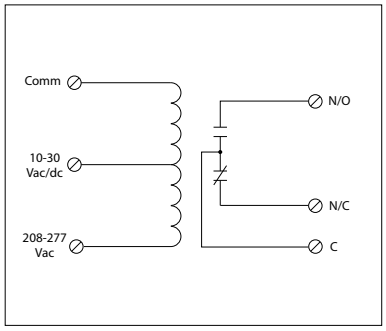
RIBU1CW

Pilot Relay, 15 Amp SPDT, 10-30 Vac/dc/
120 Vac Coil, Hi/Lo Vertical Separation,
NEMA 1 Housing



RIBH1CW

Pilot Relay, 15 Amp SPDT, 10-30 Vac/dc/
208-277 Vac Coil, Hi/Lo Vertical Separation,
NEMA 1 Housing



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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
15 Amp Resistive @ 150 Vac, 28Vdc
15 Amp Inductive @ 150 Vac
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

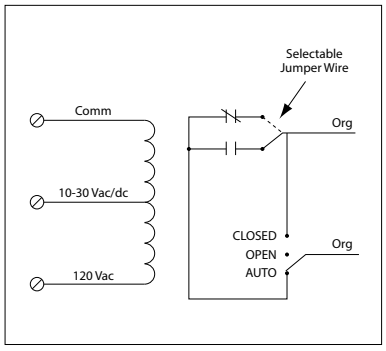
Coil Current:
33 mA @ 10 Vac 13 mA @ 10 Vdc
35 mA @ 12 Vac 15 mA @ 12 Vdc
46 mA @ 24 Vac 18 mA @ 24 Vdc
55 mA @ 30 Vac 20 mA @ 30 Vdc
28 mA @ 120 Vac (RIBU1CW)
39 mA @ 208-277 Vac (RIBH1CW)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBU1CW)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBH1CW)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAYS

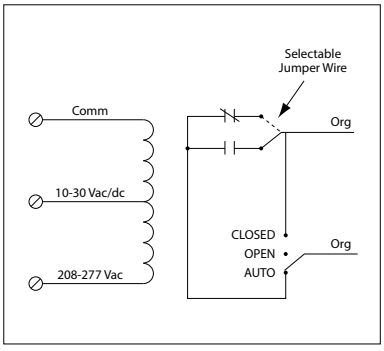
RIBTU1S

Pilot Relay, 10 Amp SPST + Override,
10-30 Vac/dc/120 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



RIBTH1S

Pilot Relay, 10 Amp SPST + Override,
10-30 Vac/dc/208-277 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes

Contact Ratings:
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire

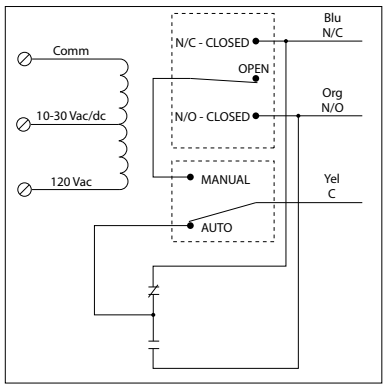
Coil Current:
33 mA @ 10 Vac 13 mA @ 10 Vdc
35 mA @ 12 Vac 15 mA @ 12 Vdc
46 mA @ 24 Vac 18 mA @ 24 Vdc
55 mA @ 30 Vac 20 mA @ 30 Vdc
28 mA @ 120 Vac (RIBTU1S)
39 mA @ 208-277 Vac (RIBTH1S)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBTU1S)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBTH1S)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAYS

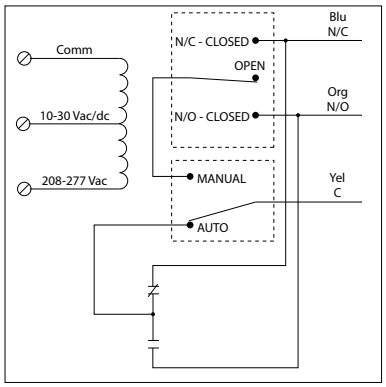
RIBTU1SC

Pilot Relay, 10 Amp SPDT + Override,
10-30 Vac/dc/120 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



RIBTH1SC

Pilot Relay, 10 Amp SPDT + Override,
10-30 Vac/dc/208-277 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes (2)

Contact Ratings:
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

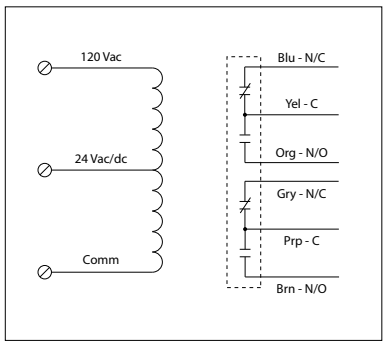
28 mA @ 120 Vac (RIBTU1SC)
39 mA @ 208-277 Vac (RIBTH1SC)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBTU1SC)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBTH1SC)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

10 AMP PILOT CONTROL RELAY

RIBT2401D

Pilot Relay, 10 Amp DPDT, 24 Vac/dc/
120 Vac Coil, Hi/Lo Voltage Separation,
NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120/240 Vac (N/O)
1/3 HP @ 120/240 Vac (N/C)
B300 Pilot Duty
120 Vac 30A Make 3A Break (360 VA)
240 Vac 15 A Make 1.5A Break (360 VA)
208 Vac 17.3A Make 1.73A Break (360 VA)
277 Vac 13A Make 1.3A Break (360 VA)
24 Vac 30A Make 5A Break (120VA) 5A Max

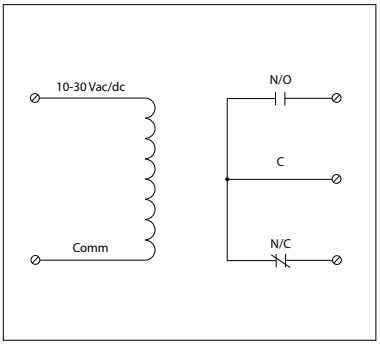
Coil Current:
24 mA @ 18 Vac
32 mA @ 24 Vac
40 mA @ 30 Vac
31 mA @ 120 Vac
20 mA @ 20 Vdc
24 mA @ 24 Vdc
36 mA @ 30 Vdc

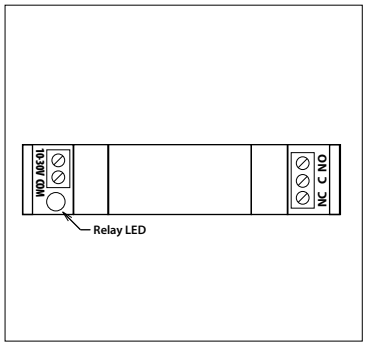
Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

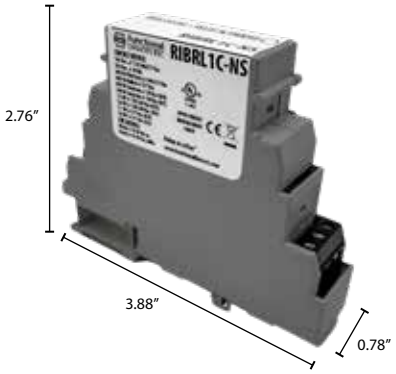
10 AMP PILOT CONTROL RELAY

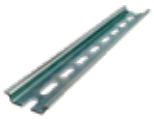
RIBRL1C-NS

DIN Rail Mount Relay, 10 Amp SPDT, 10-30 Vac/dc Coil, No Socket Non-Pluggable Relay









ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76″H x 3.88″W x 0.78″D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 120/240/277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120/240 Vac (N/O)
1/6 HP @ 120/240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

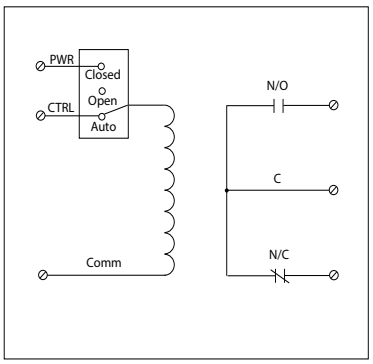
Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

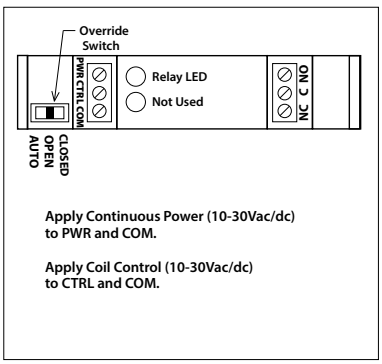
Notes:
Models ADIN35 and ADIN35ES sold separately.

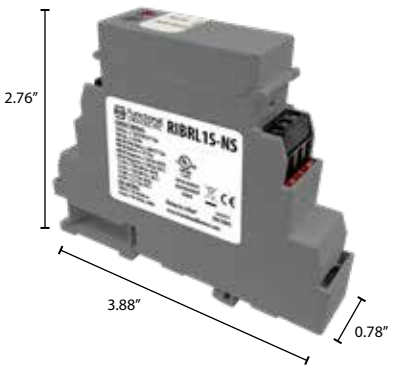
10 AMP PILOT CONTROL RELAY

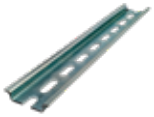
RIBRL1S-NS

DIN Rail Mount Relay, 10 Amp SPDT + Override, 10-30 Vac/dc Coil, No Socket Non-Pluggable Relay









ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76″H x 3.88″W x 0.78″D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

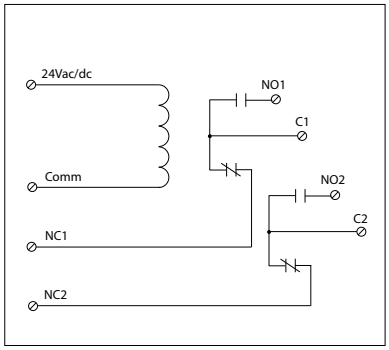
Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

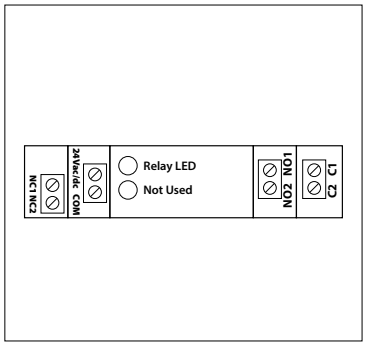
Notes:
Models ADIN35 and ADIN35ES sold separately.

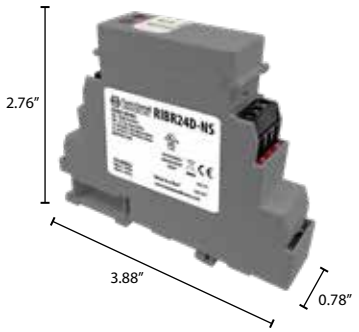
10 AMP PILOT CONTROL RELAY

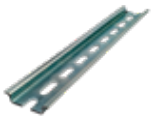
RIBR24D-NS

DIN Rail Mount Relay, 10 Amp DPDT, 24 Vac/dc Coil, No Socket Non-Pluggable Relay









ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 2.76"H x 3.88"W x 0.78"D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120-240 Vac (N/O)
1/3 HP @ 120-240 Vac (N/C)
B300 Pilot Duty
120Vac 30A Make 3A Break (360 VA)
240Vac 15A Make 1.5A Break (360 VA)
208Vac 17.3A Make 1.73A Break (360 VA)
277Vac 13A Make 1.3A Break (360 VA)
24Vac 30A Make 5A Break (120VA) 5A Max

Power and Control Current:

24 mA @ 18 Vac	20 mA @ 20 Vdc
32 mA @ 24 Vac	24 mA @ 24 Vdc
40 mA @ 30 Vac	36 mA @ 24 Vdc

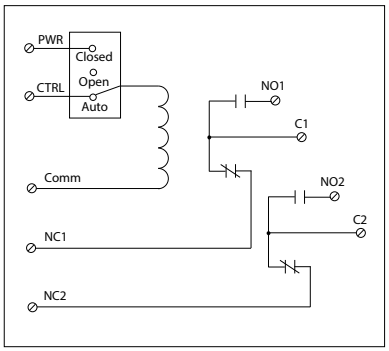
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

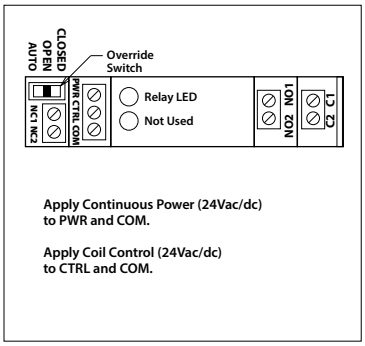
Notes:
Models ADIN35 and ADIN35ES sold separately.

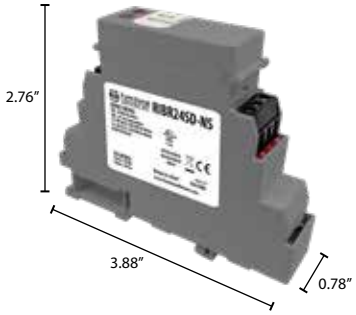
10 AMP PILOT CONTROL RELAY

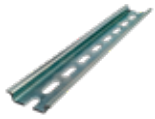
RIBR24SD-NS

DIN Rail Mount Relay, 10 Amp DPDT + Override, 24 Vac/dc Coil, No Socket Non-Pluggable Relay









ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 2.76"H x 3.88"W x 0.78"D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120-240 Vac (N/O)
1/3 HP @ 120-240 Vac (N/C)
B300 Pilot Duty
120Vac 30A Make 3A Break (360 VA)
240Vac 15A Make 1.5A Break (360 VA)
208Vac 17.3A Make 1.73A Break (360 VA)
277Vac 13A Make 1.3A Break (360 VA)
24Vac 30A Make 5A Break (120VA) 5A Max

Power and Control Current:

24 mA @ 18 Vac	20 mA @ 20 Vdc
32 mA @ 24 Vac	24 mA @ 24 Vdc
40 mA @ 30 Vac	36 mA @ 24 Vdc

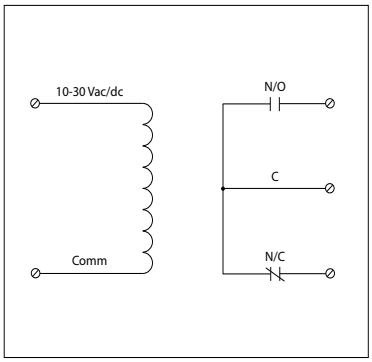
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

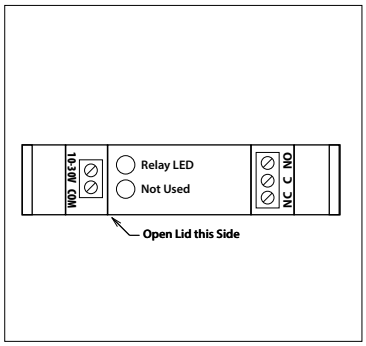
Notes:
Models ADIN35 and ADIN35ES sold separately.

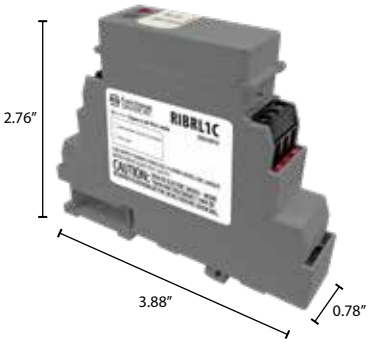
10 AMP PILOT CONTROL RELAY

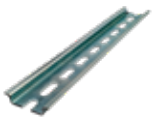
RIBRL1C

DIN Rail Mount Relay, 10 Amp SPDT,
10-30 Vac/dc Coil, Replaceable Relay









ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76″H x 3.88″W x 0.78″D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Replacement Relay: ARL1C
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

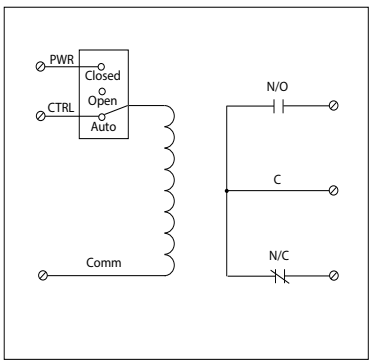
Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

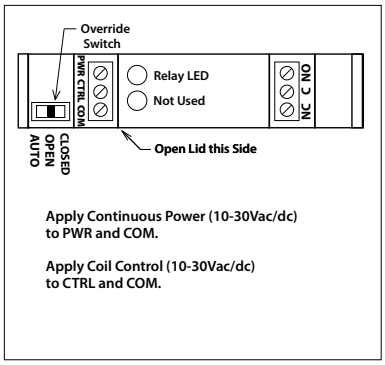
Notes:
Models ADIN35 and ADIN35ES sold separately.

10 AMP PILOT CONTROL RELAY

RIBRL1S

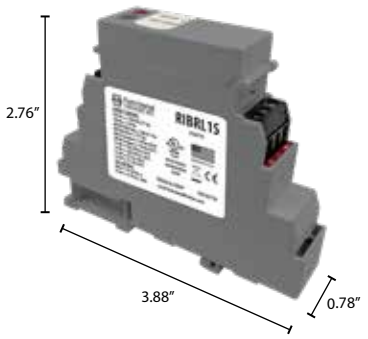
DIN Rail Mount Relay, 10 Amp SPDT +
Override, 10-30 Vac/dc Coil, Replaceable Relay

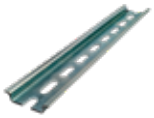




Apply Continuous Power (10-30Vac/dc)
to PWR and COM.

Apply Coil Control (10-30Vac/dc)
to CTRL and COM.





ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76″H x 3.88″W x 0.78″D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Replacement Relay: ARL1C
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

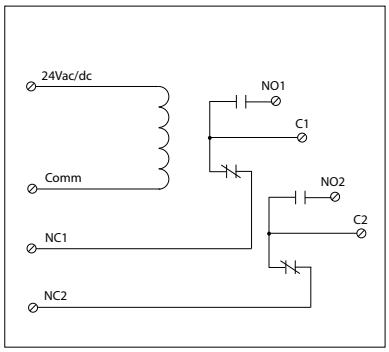
Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

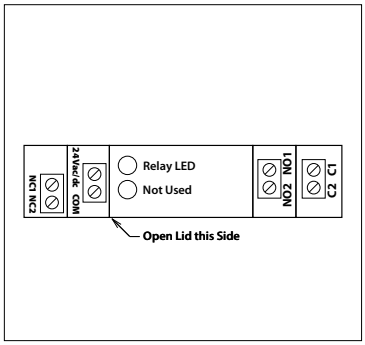
Notes:
Models ADIN35 and ADIN35ES sold separately.

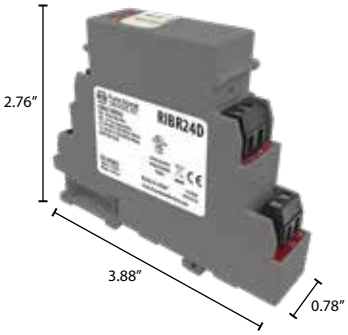
10 AMP PILOT CONTROL RELAY

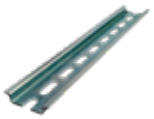
RIBR24D

DIN Rail Mount Relay, 10 Amp DPDT,
24 Vac/dc Coil, Replaceable Relay









ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 2.76″H x 3.88″W x 0.78″D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Replacement Relay: AR24D
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120-240 Vac (N/O)
1/3 HP @ 120-240 Vac (N/C)
B300 Pilot Duty
120Vac 30A Make 3A Break (360 VA)
240Vac 15A Make 1.5A Break (360 VA)
208Vac 17.3A Make 1.73A Break (360 VA)
277Vac 13A Make 1.3A Break (360 VA)
24Vac 30A Make 5A Break (120VA) 5A Max

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

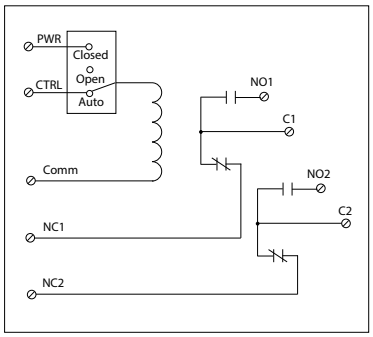
Power and Control Current:
24 mA @ 18 Vac
32 mA @ 24 Vac
40 mA @ 30 Vac
20 mA @ 20 Vdc
24 mA @ 24 Vdc
36 mA @ 24 Vdc

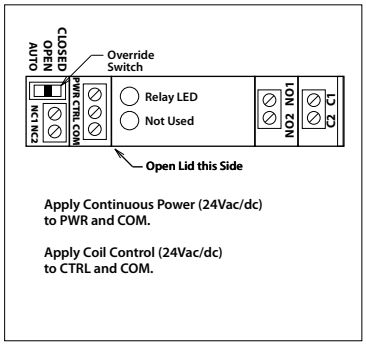
Notes:
Models ADIN35 and ADIN35ES sold separately.

10 AMP PILOT CONTROL RELAY

RIBR24SD

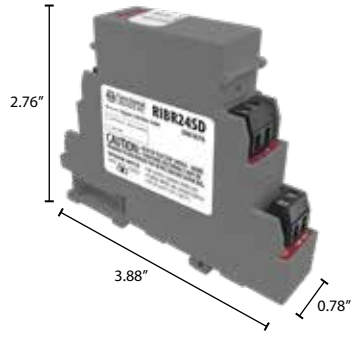
DIN Rail Mount Relay, 10 Amp DPDT +
Override, 24 Vac/dc Coil, Replaceable Relay

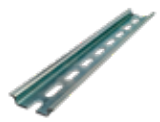




Apply Continuous Power (24Vac/dc)
to PWR and COM.

Apply Coil Control (24Vac/dc)
to CTRL and COM.





ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

ADIN35ES
Pair of End Stops
for 35mm DIN Rail

SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 2.76″H x 3.88″W x 0.78″D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Replacement Relay: AR24D
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120-240 Vac (N/O)
1/3 HP @ 120-240 Vac (N/C)
B300 Pilot Duty
120Vac 30A Make 3A Break (360 VA)
240Vac 15A Make 1.5A Break (360 VA)
208Vac 17.3A Make 1.73A Break (360 VA)
277Vac 13A Make 1.3A Break (360 VA)
24Vac 30A Make 5A Break (120VA) 5A Max

Power and Control Current:
24 mA @ 18 Vac
32 mA @ 24 Vac
40 mA @ 30 Vac
20 mA @ 20 Vdc
24 mA @ 24 Vdc
36 mA @ 24 Vdc

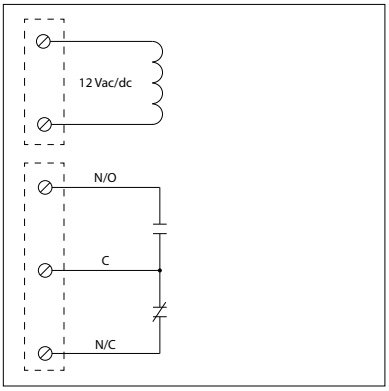
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

Notes:
Models ADIN35 and ADIN35ES sold separately.

10 AMP PILOT CONTROL TRACK OR DIN MOUNT RELAYS

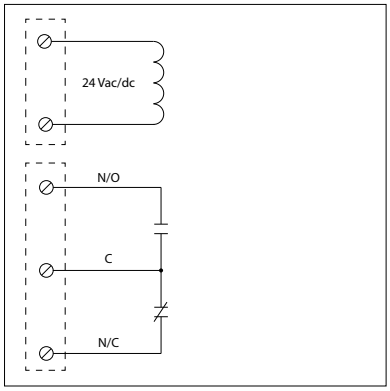
RIBAN12C

Pilot Relay, 10 Amp SPDT, 12 Vac/dc Coil, DIN Rail Mountable, Current Sensor Mount Option, 2.75"Track Mount



RIBAN24C

Pilot Relay, 10 Amp SPDT, 24 Vac/dc Coil, DIN Rail Mountable, Current Sensor Mount Option, 2.75"Track Mount



REMOVABLE TERMINALS

SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 2.85"H x 2.75"W x 1.03"D
Housing Detail: See **Housing I** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminals: Removable, Accepts 22-16 AWG copper wires

Mounting: A: 2.750˝Track Mount
MT212 Mounting Track Sold Separately.
B: 35mm x 7.5mm symmetrical DIN rail EN50022
C: Screw Mount
DS80625 Self-Tapping Drill Screws Sold Separately.
D: Current Sensor Mount
Current Sensors Sold Separately.

Approvals: UL Listed, UL508, C-UL, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

Coil Voltage Input: (RIBAN12C)
12 Vac/dc ; 50-60 Hz
Drop Out = 2 Vac / 2.5 Vdc
Pull In = 9 Vac / 11 Vdc

Coil Current: (RIBAN12C)
53 mA @ 10 Vac
62 mA @ 12 Vac
29 mA @ 11 Vdc
35 mA @ 12 Vdc

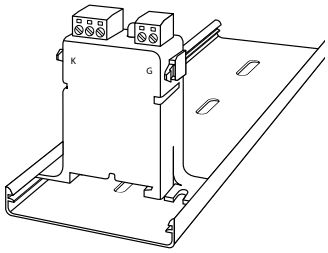
Notes:
- Set of replacement terminals available. Order model number: TS-AN

Coil Voltage Input: (RIBAN24C)
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

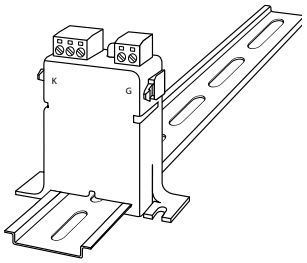
Coil Current: (RIBAN24C)
26 mA @ 20 Vac
31 mA @ 24 Vac
14 mA @ 20 Vdc
18 mA @ 24 Vdc
28 mA @ 35 Vdc

RELAY MOUNTING OPTIONS A & B

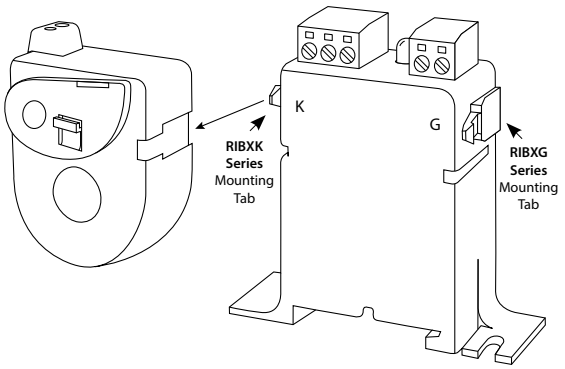
Mounting Option A:
2.75"Track Mount
MT212 Series



Mounting Option B:
35mm x 7.5mm symmetrical DIN rail EN50022



CURRENT SENSOR MOUNTING OPTION D

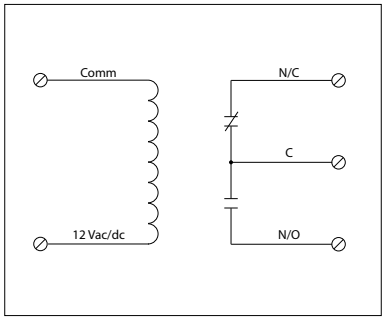


1. Slide current sensor onto corresponding mounting tab.
2. Snap into place.
3. Depress tab to remove current sensor.

10 AMP PILOT CONTROL TRACK MOUNT RELAYS

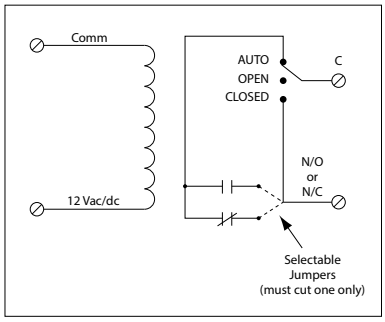
RIBM12C

Pilot Relay, 15 Amp SPDT, 12 Vac/dc Coil, 4.00" Track Mount



RIBM12S

Pilot Relay, 15 Amp SPST + Override, 12 Vac/dc Coil, 4.00" Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIBM12C)
One (1) SPST Continuous Duty Coil (RIBM12S)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.25"H x 4.00"W x 0.75"D1/1.25"D2 (RIBM12C)
1.25"H x 4.00"W x 1.00"D1/1.50"D2 (RIBM12S)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: No (RIBM12C) ; Yes (RIBM12S)

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

Coil Current:
53 mA @ 10 Vac
62 mA @ 12 Vac
29 mA @ 11 Vdc
36 mA @ 12 Vdc

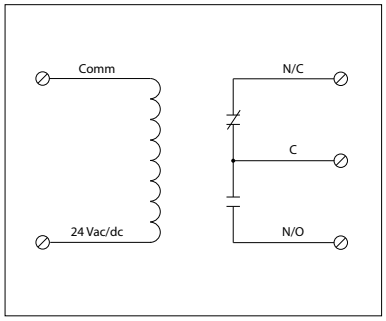
Coil Voltage Input:
12 Vac/dc ; 50-60 Hz
Drop Out = 2 Vac / 2.5 Vdc
Pull In = 9 Vac / 11 Vdc

Notes:
Must cut appropriate jumper to select
Normally Open or Normally Closed (RIBM12S)

10 AMP PILOT CONTROL TRACK MOUNT RELAYS

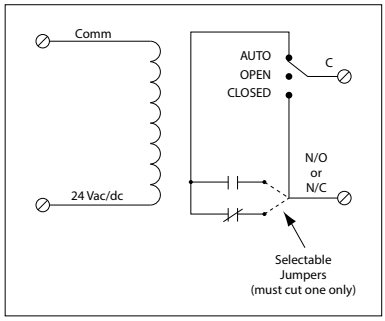
RIBM24C

Pilot Relay, 15 Amp SPDT, 24 Vac/dc Coil, 4.00" Track Mount



RIBM24S

Pilot Relay, 15 Amp SPST + Override, 24 Vac/dc Coil, 4.00" Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIBM24C)
One (1) SPST Continuous Duty Coil (RIBM24S)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.25"H x 4.00"W x 0.75"D1/1.25"D2 (RIBM24C)
1.25"H x 4.00"W x 1.25"D1/1.75"D2 (RIBM24S)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: No (RIBM24C) ; Yes (RIBM24S)

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

Coil Current:
26 mA @ 20 Vac
31 mA @ 24 Vac
48 mA @ 35 Vac
14 mA @ 20 Vdc
18 mA @ 24 Vdc
28 mA @ 35 Vdc

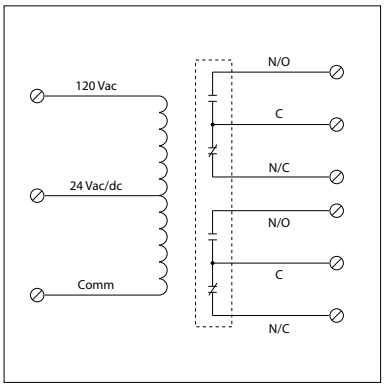
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

Notes:
Must cut appropriate jumper to select
Normally Open or Normally Closed (RIBM24S)

10 AMP PILOT CONTROL TRACK MOUNT RELAYS

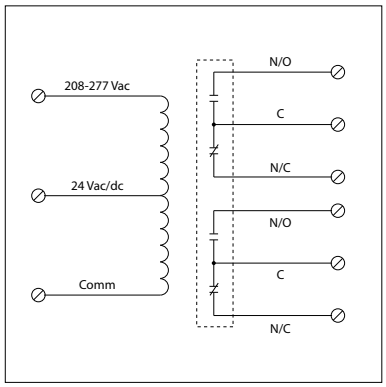
RIBM2401D

Pilot Relay, 10 Amp DPDT, 24 Vac/dc/
120 Vac Coil, 4.00″ Track Mount



RIBM2402D

Pilot Relay, 10 Amp DPDT, 24 Vac/dc/
208-277 Vac Coil, 4.00″ Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 1.70″H x 4.00″W x 0.75″D1/1.25″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000″
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120/240 Vac (N/O)
1/3 HP @ 120/240 Vac (N/C)
B300 Pilot Duty
120 Vac 30A Make 3A Break (360 VA)
240 Vac 15 A Make 1.5A Break (360 VA)
208 Vac 17.3A Make 1.73A Break (360 VA)
277 Vac 13A Make 1.3A Break (360 VA)
24 Vac 30A Make 5A Break (120VA) 5A Max

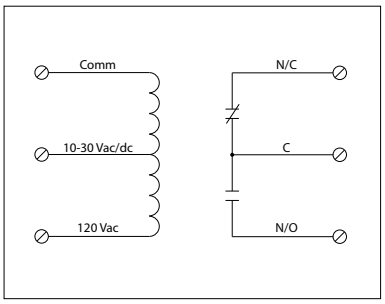
Coil Current:
24 mA @ 18 Vac 20 mA @ 20 Vdc
32 mA @ 24 Vac 24 mA @ 24 Vdc
40 mA @ 30 Vac 36 mA @ 30 Vdc
31 mA @ 120 Vac (RIBM2401D)
36 mA @ 208-277 Vac (RIBM2402D)

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIBM2401D)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBM2402D)
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

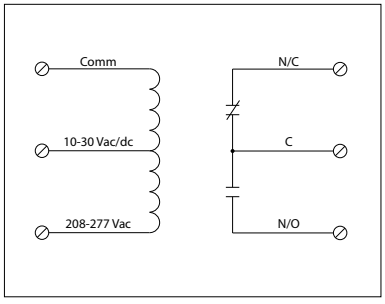
RIBMU1C

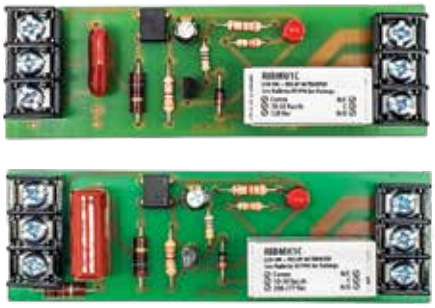
Pilot Relay, 15 Amp SPDT, 10-30 Vac/dc/
120 Vac Coil, 4.00″ Track Mount



RIBMH1C

Pilot Relay, 15 Amp SPDT, 10-30 Vac/dc/
208-277 Vac Coil, 4.00″ 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: 20ms
Relay Status: LED On = Activated
Dimensions: 1.25″H x 4.00″W x 0.88″D1/1.38″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000″
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: Yes
Override Switch: No

Contact Ratings:
15 Amp Inductive @ 150 Vac
15 Amp Resistive @ 150 Vac, 28 Vdc
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

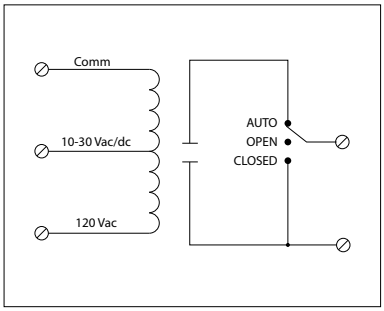
Coil Current:
33 mA @ 10 Vac 13 mA @ 10 Vdc
35 mA @ 12 Vac 15 mA @ 12 Vdc
46 mA @ 24 Vac 18 mA @ 24 Vdc
55 mA @ 30 Vac 20 mA @ 30 Vdc
28 mA @ 120 Vac (RIBMU1C)
39 mA @ 208-277 Vac (RIBMH1C)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMU1C)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMH1C)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

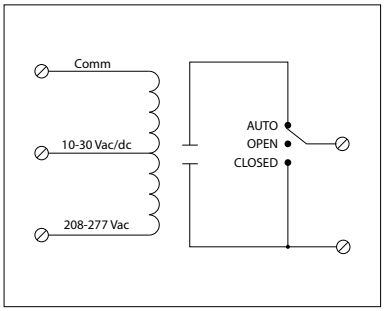
RIBMU1S

Pilot Relay, 15 Amp SPST-N/O + Override,
10-30 Vac/dc/120 Vac Coil, 4.00"Track Mount



RIBMH1S

Pilot Relay, 15 Amp SPST-N/O + Override,
10-30 Vac/dc/208-277 Vac Coil, 4.00"Track Mount



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: 20ms
Relay Status: LED On = Activated
Dimensions: 1.28"H x 4.00"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: Yes
Override Switch: Yes

Contact Ratings:
15 Amp Resistive @ 150 Vac
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Notes:
• Order Normally Closed by adding "-NC" to end of model number

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

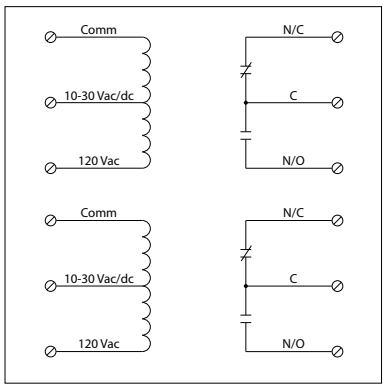
28 mA @ 120 Vac (RIBMU1S)
39 mA @ 208-277 Vac (RIBMH1S)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMU1S)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMH1S)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

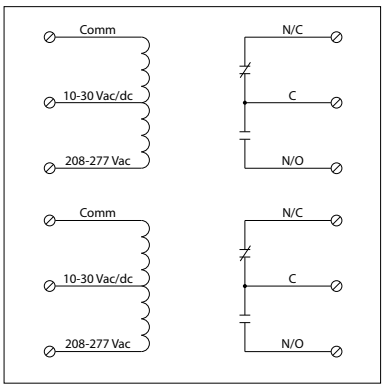
RIBMU2C

Pilot Relays 15 Amp 2 SPDT, 10-30 Vac/dc/
120 Vac Coil, 4.00"Track Mount



RIBMH2C

Pilot Relays 15 Amp 2 SPDT, 10-30 Vac/dc/
208-277 Vac Coil, 4.00"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: Two (2) 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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.45"H x 4.00"W x 0.88"D1/1.38"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: Yes
Override Switch: No

Contact Ratings:
15 Amp Inductive @ 150 Vac
15 Amp Resistive @ 150 Vac, 28 Vdc
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

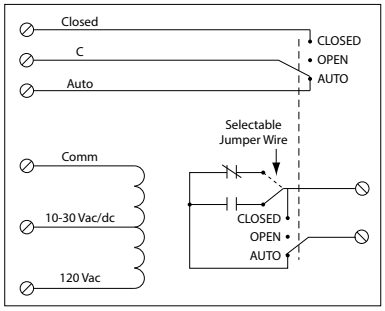
28 mA @ 120 Vac (RIBMU2C)
39 mA @ 208-277 Vac (RIBMH2C)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMU2C)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMH2C)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

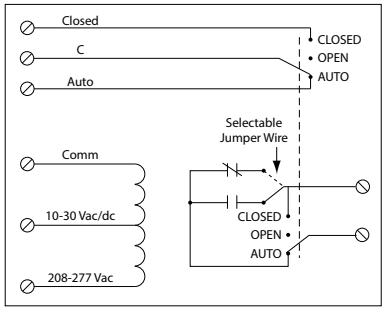
RIBMU1SM-250

Pilot Relay, 15 Amp SPST + Override + Monitor, 10-30 Vac/dc/120 Vac Coil, 4.00″ Track Mount



RIBMH1SM-250

Pilot Relay, 15 Amp SPST + Override + Monitor, 10-30 Vac/dc/208-277 Vac Coil, 4.00″ Track Mount



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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.00″H x 4.00″W x 1.38″D1/1.88″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000″
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: Yes
Override Switch: Yes + Monitor

Contact Ratings:
15 Amp Resistive @ 125 Vac
10 Amp Resistive @ 250 Vac
345 VA Pilot Duty @ 120/240 Vac (N/O)
211 VA Pilot Duty @ 120/240 Vac (N/C)
1/3 HP for N/O @ 120-240 Vac
1/6 HP for N/C @ 120-240 Vac

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMU1SM-250)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMH1SM-250)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

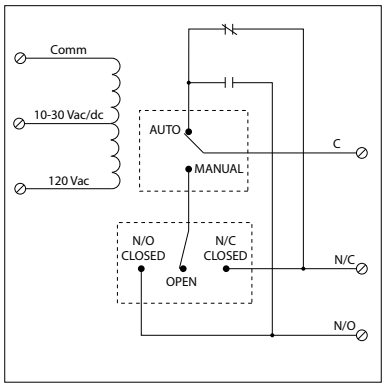
28 mA @ 120 Vac (RIBMU1SM-250)
39 mA @ 208-277 Vac (RIBMH1SM-250)

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire
- Second pole of override switch can be connected to digital-in of controller to report position of override switch
- Rating of second pole is 50 Vac/dc, 0.25 Amp max

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

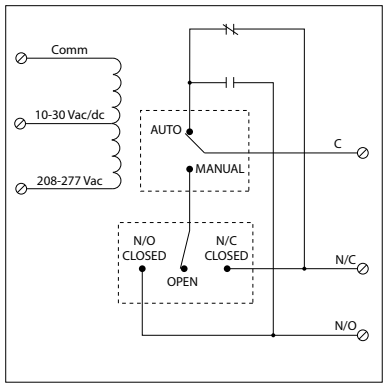
RIBMU1SC

Pilot Relay, 15 Amp SPDT + Override, 10-30 Vac/dc/120 Vac Coil, 4.00″ Track Mount



RIBMH1SC

Pilot Relay, 15 Amp SPDT + Override, 10-30 Vac/dc/208-277 Vac Coil, 4.00″ 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: 20ms
Relay Status: LED On = Activated
Dimensions: 1.50″H x 4.00″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000″
MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: Yes
Override Switch: Yes (2)

Contact Ratings:
15 Amp Resistive @ 150 Vac
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

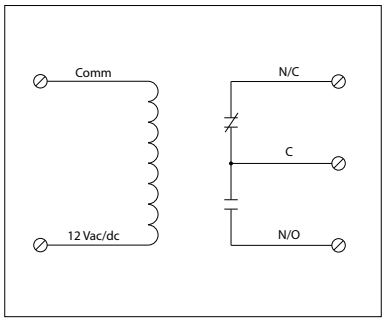
28 mA @ 120 Vac (RIBMU1SC)
39 mA @ 208-277 Vac (RIBMH1SC)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMU1SC)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMH1SC)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

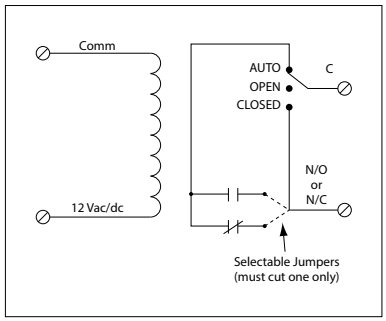
RIBMN12C

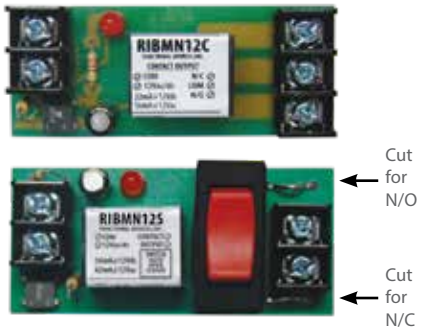
Pilot Relay, 15 Amp SPDT, 12 Vac/dc Coil, 2.75"Track Mount



RIBMN12S

Pilot Relay, 15 Amp SPST + Override, 12 Vac/dc Coil, 2.75"Track Mount





SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIBMN12C)
One (1) SPST Continuous Duty Coil (RIBMN12S)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.10"H x 2.75"W x 0.75"D1/1.25"D2 (RIBMN12C)
1.25"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMN12S)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750"
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: No (RIBMN12C) ; Yes (RIBMN12S)

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

Coil Current:
53 mA @ 10 Vac
62 mA @ 12 Vac
29 mA @ 11 Vdc
35 mA @ 12 Vdc

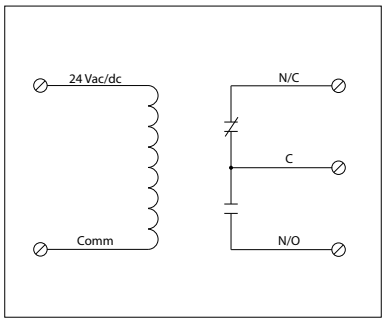
Coil Voltage Input:
12 Vac/dc ; 50-60 Hz
Drop Out = 2 Vac / 2.5 Vdc
Pull In = 9 Vac / 11 Vdc

Notes: (RIBMN12S)
- Must cut appropriate jumper to select Normally Open or Normally Closed

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

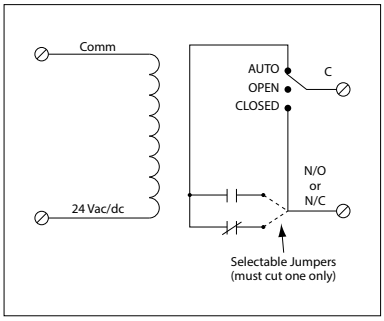
RIBMN24C

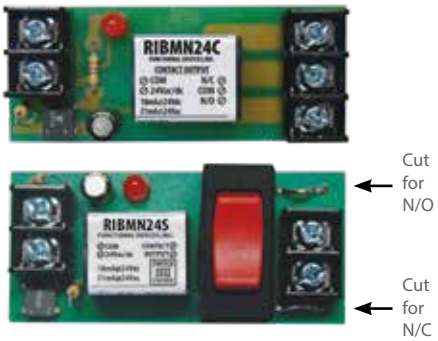
Pilot Relay, 15 Amp SPDT, 24 Vac/dc Coil, 2.75"Track Mount



RIBMN24S

Pilot Relay, 15 Amp SPST + Override, 24 Vac/dc Coil, 2.75"Track Mount





SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIBMN24C)
One (1) SPST Continuous Duty Coil (RIBMN24S)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.10"H x 2.75"W x 0.75"D1/1.25"D2 (RIBMN2CS)
1.25"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMN24S)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750"
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: No (RIBMN24C) ; Yes (RIBMN24S)

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

Coil Current:
26 mA @ 20 Vac
31 mA @ 24 Vac
48 mA @ 35 Vac
14 mA @ 20 Vdc
18 mA @ 24 Vdc
28 mA @ 35 Vdc

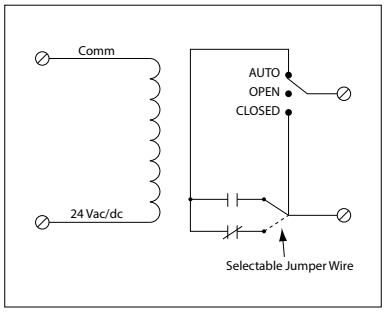
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

Notes: (RIBMN24S)
- Must cut appropriate jumper to select Normally Open or Normally Closed

15 AMP PILOT CONTROL TRACK MOUNT RELAY

RIBMN24S-J

Pilot Relay, 15 Amp SPST + Override,
24 Vac/dc Coil, Jumper Selectable Output,
2.75″ Track Mount



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: 6ms
Relay Status: LED On = Activated
Dimensions: 1.25″H x 2.75″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750″
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: Yes

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

Coil Current:
26 mA @ 20 Vac
31 mA @ 24 Vac
48 mA @ 35 Vac
14 mA @ 20 Vdc
18 mA @ 24 Vdc
28 mA @ 35 Vdc

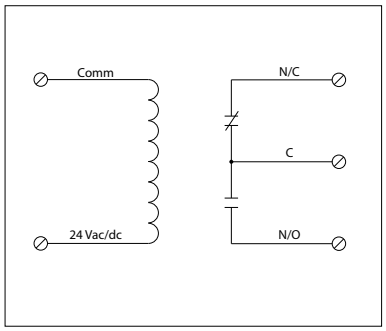
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

Notes:
Normally Open or Normally Closed
selected by yellow jumper wire.

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

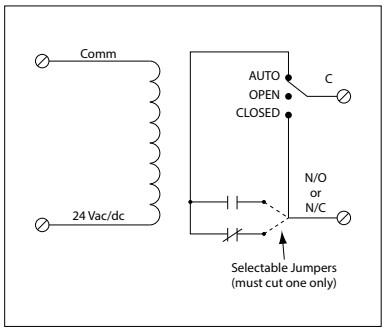
RIBMN24C-4T

Four Pilot Relays, 15 Amp SPDT, 24 Vac/dc Coil,
2.75″ x 6.00″ Track Mount



RIBMN24S-4T

Four Pilot Relays, 15 Amp SPST + Override,
24 Vac/dc Coil, 2.75″ x 6.00″ Track Mount



SPECIFICATIONS

 # Relays & Contact Type: Four (4) SPDT Continuous Duty Coils (RIBMN24C-4T)
Four (4) SPST Continuous Duty Coils (RIBMN24S-4T)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.25″H x 2.75″W x 1.25″D1/1.75″D2 (RIBMN24C-4T)
1.25″H x 2.75″W x 1.25″D1/1.75″D2 (RIBMN24S-4T)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750″ x 6.000″ ; MT212-6 Mounting Track Included
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: No (RIBMN24C-4T) ; Yes (RIBMN24S-4T)

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
C300 Pilot Duty

Coil Current:
26 mA @ 20 Vac
31 mA @ 24 Vac
48 mA @ 35 Vac
14 mA @ 20 Vdc
18 mA @ 24 Vdc
28 mA @ 35 Vdc

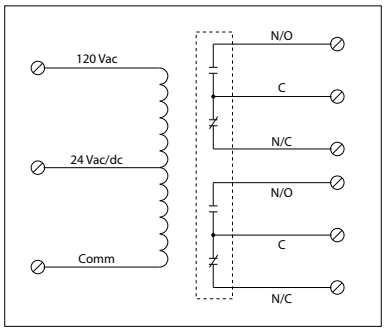
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

Notes:
Must cut appropriate jumper to select
Normally Open or Normally Closed (RIBMN24S-4T)

10 AMP PILOT CONTROL TRACK MOUNT RELAYS

RIBMN2401D

Pilot Relay, 10 Amp DPDT, 24 Vac/dc/
120 Vac Coil, 2.75"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.75"W x 0.75"D1/1.25"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750″
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp Resistive @ 30 Vdc
10 Amp General Use @ 277 Vac
1/2 HP @ 120/240 Vac (N/O)
1/3 HP @ 120/240 Vac (N/C)
B300 Pilot Duty
120 Vac 30A Make 3A Break (360 VA)
240 Vac 15 A Make 1.5A Break (360 VA)
208 Vac 17.3A Make 1.73A Break (360 VA)
277 Vac 13A Make 1.3A Break (360 VA)
24 Vac 30A Make 5A Break (120VA) 5A Max

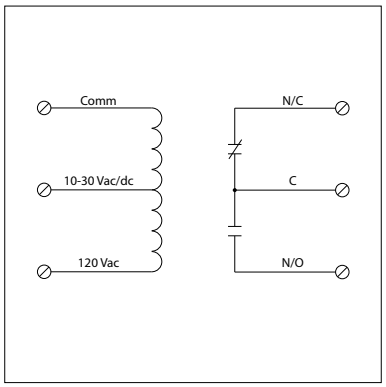
Coil Current:
36 mA @ 30Vdc
24 mA @ 18 Vac
32 mA @ 24 Vac
40 mA @ 30 Vac
31 mA @ 120 Vac

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 20 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

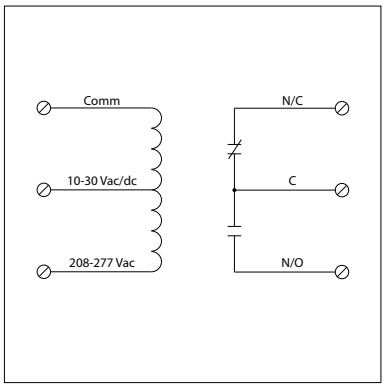
RIBMNU1C

Pilot Relay, 15 Amp SPDT, 10-30 Vac/dc/
120 Vac Coil, 2.75"Track Mount



RIBMNH1C

Pilot Relay, 15 Amp SPDT, 10-30 Vac/dc/
208-277 Vac Coil, 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: 20ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.75"W x 0.88"D1/1.38"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750″
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: Yes
Override Switch: No

Contact Ratings:
15 Amp Resistive @ 150 Vac, 28Vdc
15 Amp Inductive @ 150 Vac
10 Amp Resistive @ 120-277 Vac, 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

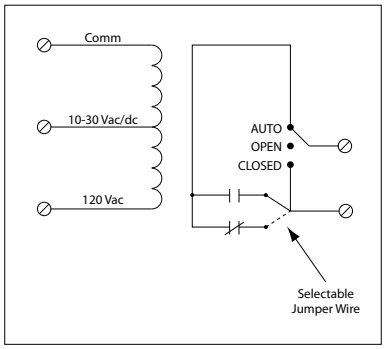
Coil Current:
33 mA @ 10 Vac
35 mA @ 12 Vac
46 mA @ 24 Vac
55 mA @ 30 Vac
28 mA @ 120 Vac (RIBMNU1C)
39 mA @ 208-277 Vac (RIBMNH1C)
13 mA @ 10 Vdc
15 mA @ 12 Vdc
18 mA @ 24 Vdc
20 mA @ 30 Vdc

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMNU1C)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMNH1C)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

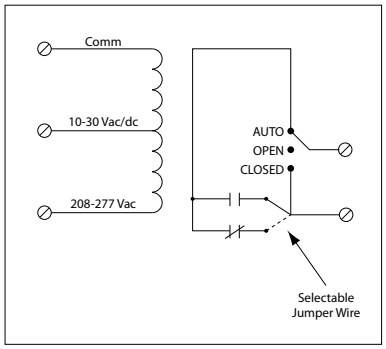
RIBMNU1S

Pilot Relay, 15 Amp SPST + Override,
10-30 Vac/dc/120 Vac Coil, 2.75″Track Mount



RIBMNH1S

Pilot Relay, 15 Amp SPST + Override,
10-30 Vac/dc/208-277 Vac Coil, 2.75″Track Mount



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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.53″H x 2.75″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750″
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL864, California State Fire Marshal
Gold Flash: Yes
Override Switch: Yes

Contact Ratings:
15 Amp Resistive @ 150 Vac
10 Amp Resistive @ 277 Vac
480 VA Pilot Duty @ 277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Notes:
Normally Open or Normally Closed selected by yellow jumper wire

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

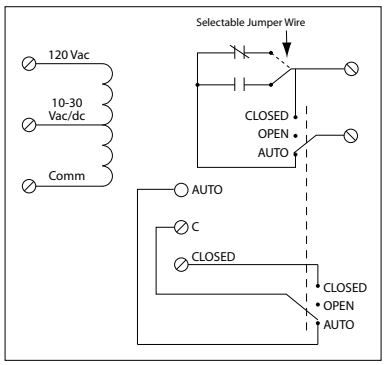
28 mA @ 120 Vac (RIBMNU1S)
39 mA @ 208-277 Vac (RIBMNH1S)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMNU1S)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMNH1S)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

15 AMP PILOT CONTROL TRACK MOUNT RELAYS

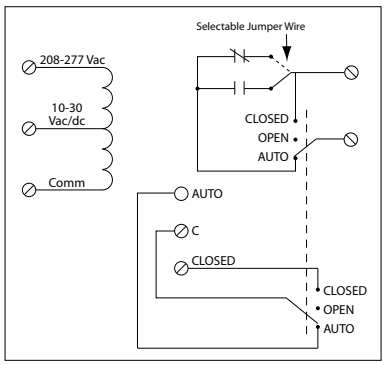
RIBMNU1SM-250

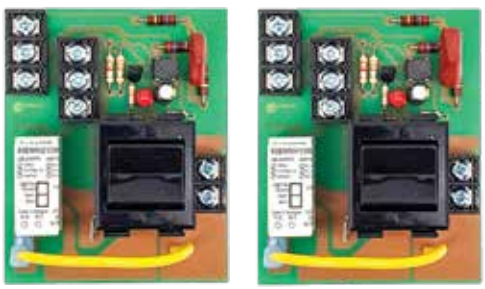
Pilot Relay, 15 Amp SPST + Override +
Monitor, 10-30 Vac/dc/120 Vac Coil,
2.75″Track Mount



RIBMNH1SM-250

Pilot Relay, 15 Amp SPST + Override +
Monitor, 10-30 Vac/dc/208-277 Vac Coil,
2.75″Track Mount





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: 20ms
Relay Status: LED On = Activated
Dimensions: 3.38″H x 2.75″W x 1.38″D1/1.88″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750″
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: Yes
Override Switch: Yes (with Monitor)

Contact Ratings:
15 Amp Resistive @ 125 Vac
10 Amp Resistive @ 250 Vac
345 VA Pilot Duty @ 120/240 Vac (N/O)
211 VA Pilot Duty @ 120/240 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire
- Second pole of override switch can be connected to digital-in of controller to report position of override switch
- Rating of second pole is 50 Vac/dc, 0.25 Amp max

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

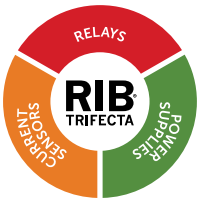
28 mA @ 120 Vac (RIBMNU1SM-250)
39 mA @ 208-277 Vac (RIBMNH1SM-250)

Coil Voltage Input:
10-30 Vac/dc ; 120 Vac ; 50-60 Hz (RIBMNU1SM-250)
10-30 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBMNH1SM-250)
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

POWER RELAYS: 20–30 AMPS

Convenient Prepackaging is a Great Time Saver

- LED indicator
- Multiple contact ratings
- Override / HOA switch options available
- High/low voltage separation available
- 20-30 Amp models
- Pre-wired
- Enclosed or track mount
- Time delay models



ENCLOSED POWER RELAYS

		COIL VOLTAGE			CONTACT RATINGS						
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	HIGH/LOW SEPARATION	OVERRIDE SWITCH	HOUSING STYLE *	SPEC PAGE
RIB2401B	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac			B	47
RIB2402B	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac			B	47
RIB2401SB	•	24	120	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		1	B	47
RIB2402SB	•	24	208-277	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		1	B	47
RIB2421B	•	24	120/208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac			B	48
RIB2421SB	•	24	120/208-277	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		1	B	48
RIB2401SBC	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		2 +	B	48
RIB2402SBC	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		2 +	B	48
RIB2401B2G	•	24	120	1 DPDT	5 A @ 480 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac			B	49
RIB2402B2G	•	24	208-277	1 DPDT	5 A @ 480 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac			B	49
RIB01P	•		120	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	49
RIB02P	•		208-277	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	49
RIB347P	•		347	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	50
RIB04P	•		480	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	50
RIB013P	•		120	1 3PST	20 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac	•		C	50
RIB023P	•		208-277	1 3PST	20 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac	•		C	50
RIB043P	•		480	1 3PST	20 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac	•		C	51
RIB243P	•	24		1 3PST	20 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac	•		C	51
RIB24Z	•	24		1 SPST N/O, 1 SPST N/C	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac			B	51
RIB12P	•	12		1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac			B	52
RIB12P30	•	12		1 DPDT	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac			B	52
RIB24P	•	24		1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac			B	52
RIB24P30	•	24		1 DPDT	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac			B	52
RIB01P30	•		120	1 DPST	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	53
RIB01P30-S	•		120	1 DPST	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•	1 #	C	53
RIB02P30	•		208-277	1 DPST	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	53

(UL) = UL Listed - see data sheet for specific Listing

* = See Housing Guide on page 201

+ = SPDT with override requires 2 switches

= Coil side relay override (requires unit to be powered)

POWER RELAYS: 20–30 AMPS

T STYLE POWER RELAYS

MODEL #	UL	COIL VOLTAGE AC/DC	COIL VOLTAGE AC	RELAY CONTACTS	CONTACT RATINGS RESISTIVE	CONTACT RATINGS MOTOR	CONTACT RATINGS PILOT DUTY	HIGH/LOW SEPARATION	OVERRIDE SWITCH	HOUSING STYLE *	SPEC PAGE
RIBT24B	•	24		1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	54
RIBT24SB	•	24		1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	1	C	54
RIBT2401B	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	54
RIBT2402B	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	54
RIBT2401SB	•	24	120	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	1	C	55
RIBT2402SB	•	24	208-277	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	1	C	55
RIBT2401SBC	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	2 +	C	55
RIBT2402SBC	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	2 +	C	55
RIBTD2401B ~	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	56
RIBT242B	•	24		2 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	57
RIBT243B	•	24		2 SPST, 1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	57
RIBT24P	•	24		1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	57
RIBT24Z	•	24		1 SPST N/O, 1 SPST N/C	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac	•		C	58
RIBT243P	•	24		3PST	20 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac	•		C	58

TRACK MOUNT POWER RELAYS

MODEL #	UL	COIL VOLTAGE AC/DC	COIL VOLTAGE AC	RELAY CONTACTS	CONTACT RATINGS RESISTIVE	CONTACT RATINGS MOTOR	CONTACT RATINGS PILOT DUTY	OVERRIDE SWITCH	TRACK MOUNT ^	SPEC PAGE
RIBM2401B	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		MT4 Series	59
RIBM2402B	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		MT4 Series	59
RIBM2401SB	•	24	120	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1	MT4 Series	59
RIBM2402SB	•	24	208-277	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1	MT4 Series	59
RIBM2401SBC	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	2 +	MT4 Series	60
RIBM2402SBC	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	2 +	MT4 Series	60
RIBM24ZN	𝓁	24		1 DPDT	30 A @ 300 Vac	3 HP @ 480-600 Vac	NEMA B600		MT4 Series	60
RIBM24ZL	•	24		1 DPST	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac		MT4 Series	61
RIBMN24ZL	•	24		1 DPST	30 A @ 300 Vac	3 HP @ 480-600 Vac	Heavy Pilot Duty @ 600 Vac		MT212 Series	61
RIBM243PN	𝓁	24		1 3PDT	30 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac		MT4 Series	61
RIBM013PN	𝓁		120	1 3PDT	30 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac		MT4 Series	62
RIBM023PN	𝓁		208-277	1 3PDT	30 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac		MT4 Series	62
RIBM043PN	𝓁		480	1 3PDT	30 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac		MT4 Series	63
RIBM043PN-HD	𝓁		480	1 3PDT	30 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	Heavy Pilot Duty @ 600 Vac		MT4 Series	63

Ⓤ = UL Listed - see data sheet for specific Listing

𝓁 = UL Component Recognized - see data sheet for specific Listing

~ = Time Delay

\+ = SPDT with override requires 2 switches

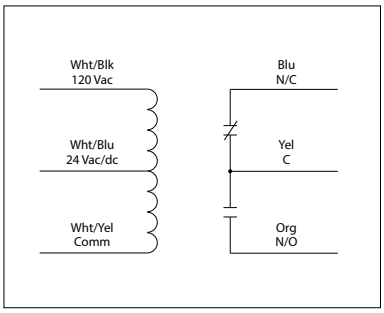
* = See Housing Guide on page 201

^ = Track mount sold separately

20 AMP POWER CONTROL RELAYS

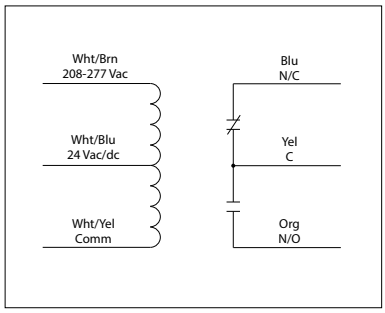
RIB2401B

Power Relay, 20 Amp SPDT,
24 Vac/dc/120 Vac Coil, NEMA 1 Housing



RIB2402B

Power Relay, 20 Amp SPDT,
24 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



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
Relay Status: LED On = Activated
Dimensions: 2.390˝H x 3.310˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

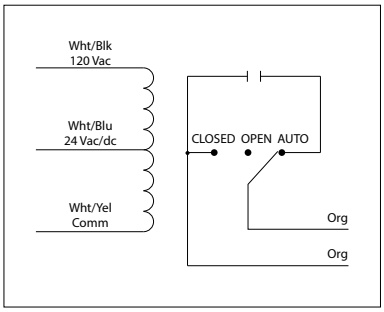
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIB2401B)
69mA @ 208-277 Vac (RIB2402B)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIB2401B)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIB2402B)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

20 AMP POWER CONTROL RELAYS

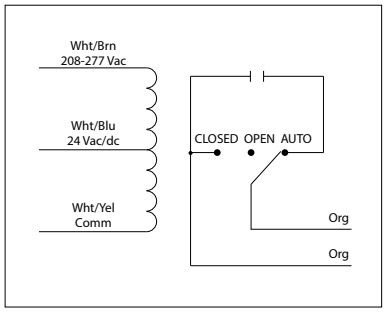
RIB2401SB

Power Relay, 20 Amp SPST-N/O + Override,
24 Vac/dc/120 Vac Coil, NEMA 1 Housing



RIB2402SB

Power Relay, 20 Amp SPST-N/O + Override,
24 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



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
Relay Status: LED On = Activated
Dimensions: 2.390˝H x 3.310˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIB2401SB)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIB2402SB)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

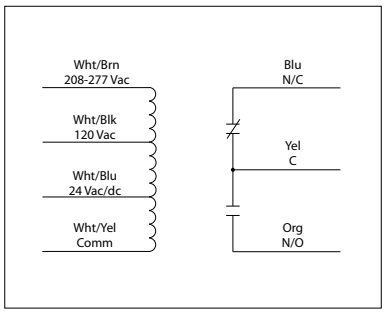
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIB2401SB)
69 mA @ 208-277 Vac (RIB2402SB)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Notes:
- Order Normally Closed by adding "-NC" to end of model number

20 AMP POWER CONTROL RELAYS

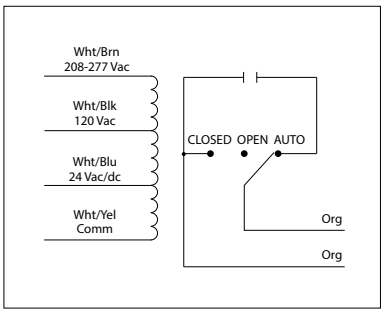
RIB2421B

Power Relay, 20 Amp SPDT,
24 Vac/dc/120 Vac/208-277 Vac Coil,
NEMA 1 Housing



RIB2421SB

Power Relay, 20 Amp SPST-N/O + Override,
24 Vac/dc/208-277 Vac/120 Vac Coil,
NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIB2421B)
One (1) SPST Continuous Duty Coil (RIB2421SB)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 18ms
Relay Status: LED On = Activated
Dimensions: 2.390˝H x 3.310˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes (RIB2421SB)
No (RIB2421B)

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O) (RIB2421SB)
Not rated for Electronic Ballast (RIB2421SB)
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Coil Current:
83 mA @ 24 Vac
47 mA @ 120 Vac
69 mA @ 208-277 Vac
47 mA @ 30 Vdc

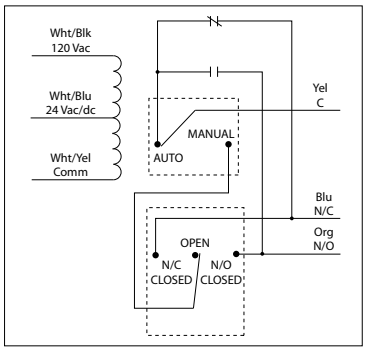
Coil Voltage Input:
24 Vac/dc ; 208-277 Vac ;
120 Vac ; 50-60 Hz
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

Notes:
- Order RIB2421SB Normally Closed by adding "-NC" to end of model number

20 AMP POWER CONTROL RELAYS

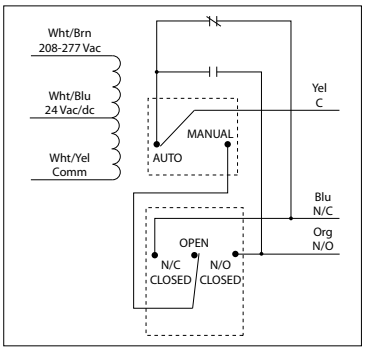
RIB2401SBC

Power Relay, 20 Amp SPDT + Override,
24 Vac/dc/120 Vac Coil, NEMA 1 Housing



RIB2402SBC

Power Relay, 20 Amp SPDT + Override,
24 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



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
Relay Status: LED On = Activated
Dimensions: 2.390˝H x 3.310˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes (2)

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

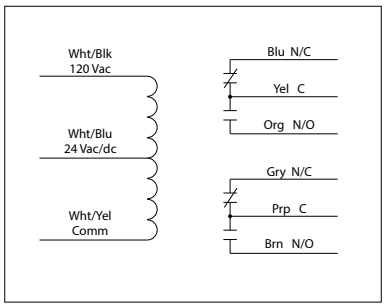
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIB2401SBC)
69 mA @ 208-277 Vac (RIB2402SBC)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIB2401SBC)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIB2402SBC)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

20 AMP POWER CONTROL RELAYS

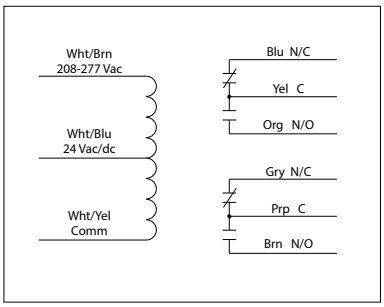
RIB2401B2G

Power Relay, 20 Amp DPDT,
24 Vac/dc/120 Vac Coil, NEMA 1 Housing



RIB2402B2G

Power Relay, 20 Amp DPDT,
24 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: DPDT 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
Relay Status: LED On = Activated
Dimensions: 2.390˝H x 3.310˝W x 1.810˝D with .75˝ NPT Nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 A @ 277 Vac General Purpose
20 A @ 28 Vdc
1 HP @ 120 Vac
2 HP @ 277 Vac
2 HP @ 240 Vac (N/O)
1 HP @ 208 Vac (N/O)
20 A Ballast @ 277 Vac
15 A Tungsten @ 120 Vac (N/O)
5 A @ 480 Vac Resistive
16 A @ 277 Vac Electronic Ballast (N/O)
1,110 VA Pilot Duty @ 277 Vac
1,158 VA Pilot Duty @ 240 Vac (N/O)
770 VA Pilot Duty @ 208 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
2 A Tungsten @ 120 Vac (N/C)

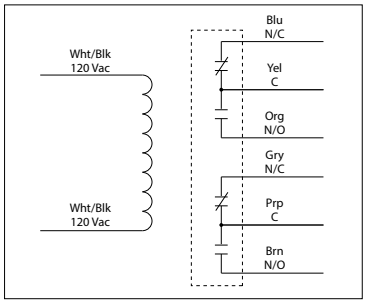
Coil Current:
145 mA max @ 24 Vac
65 mA max @ 30 Vdc
107 mA max @ 120 Vac (RIB2401B2G)
140 mA max @ 208-277 Vac (RIB2402B2G)

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIB2401B2G)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIB2402B2G)
Drop Out = 13.5 Vac / 15.5 Vdc
Pull In = 18 Vac / 22 Vdc

20 AMP POWER CONTROL RELAYS

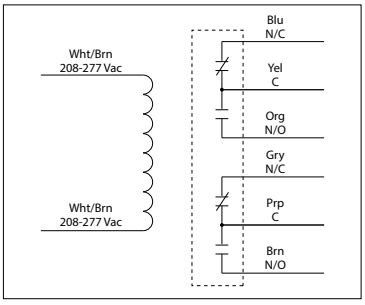
RIB01P

Power Relay, 20 Amp DPDT, 120 Vac Coil,
NEMA 1 Housing



RIB02P

Power Relay, 20 Amp DPDT, 208-277 Vac Coil,
NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

Coil Current:
105 mA @ 120 Vac (RIB01P)
105 mA @ 208-277 Vac (RIB02P)

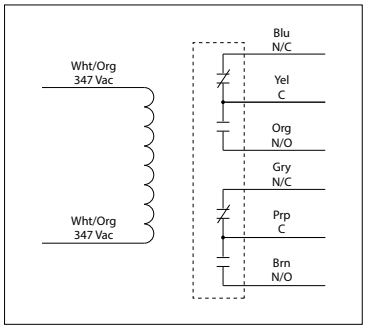
Coil Voltage Input:
RIB01P
120 Vac ; 50-60 Hz
Drop Out = 35 Vac
Pull In = 85 Vac

RIB02P
208-277 Vac ; 50-60 Hz
Drop Out = 60 Vac
Pull In = 160 Vac

20 AMP POWER CONTROL RELAYS

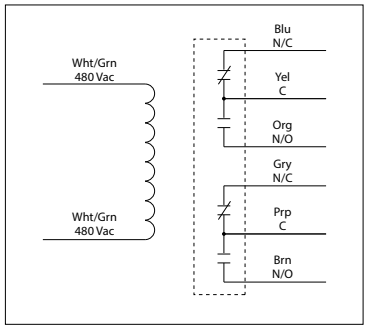
RIB347P

Power Relay, 20 Amp DPDT, 347 Vac Coil, NEMA 1 Housing



RIB04P

Power Relay, 20 Amp DPDT, 480 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS (Both Models)
UL864, California State Fire Marshal (RIB04P)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
15 Amp Resistive @ 600 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

Coil Current:
105 mA @ 347 Vac (RIB347P)
105 mA @ 480 Vac (RIB04P)

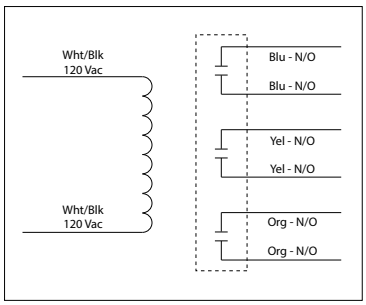
Coil Voltage Input:
RIB347P
347 Vac ; 50-60 Hz
Drop Out = 70 Vac
Pull In = 295 Vac

RIB04P
480 Vac ; 50-60 Hz
Drop Out = 140 Vac
Pull In = 340 Vac

20 AMP POWER CONTROL RELAYS

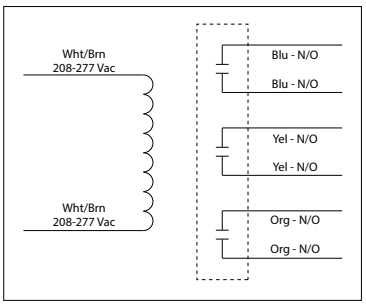
RIB013P

Power Relay, 20 Amp, 3PST-N/O, 120 Vac Coil, NEMA 1 Housing



RIB023P

Power Relay, 20 Amp, 3PST-N/O, 208-277 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PST 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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac, 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac, 1 Phase
1,158 VA Pilot Duty @ 240 Vac, 1 Phase
1,110 VA Pilot Duty @ 277 Vac, 1 Phase
1,640 VA Pilot Duty @ 480 Vac, 1 Phase
1,466 VA Pilot Duty @ 240 Vac, 3 Phase
2,112 VA Pilot Duty @ 480 Vac, 3 Phase
Heavy Pilot Duty @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase

Coil Current:
154 mA @ 120 Vac (RIB013P)
187 mA @ 208-277 Vac (RIB023P)

Coil Voltage Input:
RIB013P
120 Vac ; 50-60 Hz
Drop Out = 35 Vac
Pull In = 85 Vac

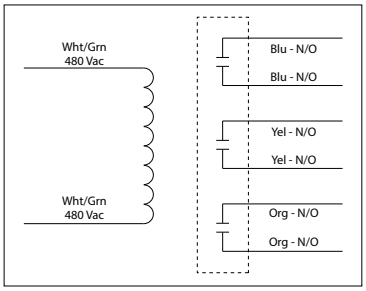
RIB023P
208-277 Vac ; 50-60 Hz
Drop Out = 60 Vac
Pull In = 160 Vac

Notes:
• Order Normally Closed by adding "-NC" to end of model number

20 AMP POWER CONTROL RELAYS

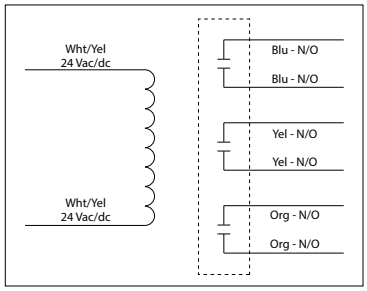
RIB043P

Power Relay, 20 Amp 3PST-N/O, 480 Vac Coil, NEMA 1 Housing



RIB243P

Power Relay, 20 Amp 3PST-N/O, 24 Vac/dc Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PST 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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS (Both Models)
UL864, California State Fire Marshal (RIB043P)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac, 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac, 1 Phase
1,158 VA Pilot Duty @ 240 Vac, 1 Phase
1,110 VA Pilot Duty @ 277 Vac, 1 Phase
1,640 VA Pilot Duty @ 480 Vac, 1 Phase
1,466 VA Pilot Duty @ 240 Vac, 3 Phase
2,112 VA Pilot Duty @ 480 Vac, 3 Phase
Heavy Pilot Duty @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase

Coil Current:
132 mA @ 480 Vac (RIB043P)
210 mA @ 24 Vac (RIB243P)
154 mA @ 30 Vdc (RIB243P)

Coil Voltage Input:
RIB043P
480 Vac ; 50-60 Hz
Drop Out = 140 Vac
Pull In = 340 Vac

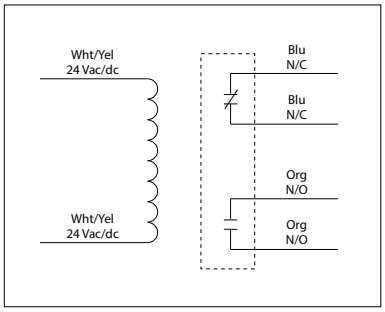
RIB243P
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 22 Vdc

Notes:
• Order Normally Closed by adding "-NC" to end of model number

30 AMP POWER CONTROL RELAY

RIB24Z

Power Relay, 30 Amp SPST-N/O + SPST-N/C, 24 Vac/dc Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) SPST-N/O + SPST-N/C 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
Relay Status: LED On = Activated
Dimensions: 2.390˝ x 3.310˝ x 1.810˝ with .50˝ NPT Nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

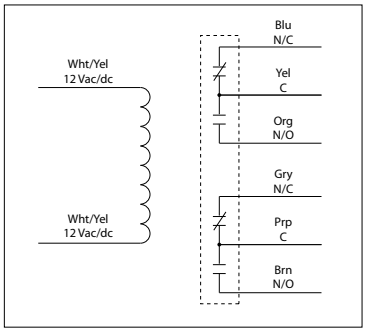
Coil Current:
110 mA @ 20 Vac
138 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
77 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

20 AMP POWER CONTROL RELAYS

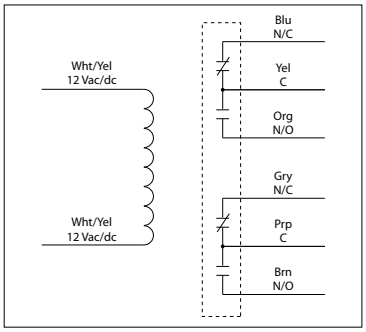
RIB12P

Power Relay, 20 Amp DPDT, 12 Vac/dc Coil, NEMA 1 Housing



RIB12P30

Power Relay, 30 Amp DPDT, 12 Vac/dc Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 2.390˝H x 3.310˝W x 1.810˝D with .50˝ NPT Nipple (RIB12P)
2.390˝H x 3.310˝W x 1.810˝D with .75˝ NPT Nipple (RIB12P30)
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL60947, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings: (RIB12P)
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

Contact Ratings: (RIB12P30)
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,110 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

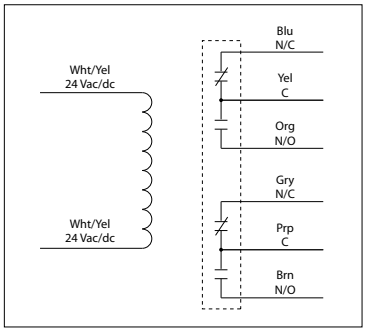
Coil Current:
115 mA @ 10 Vac
180 mA @ 12 Vac
79 mA @ 11 Vdc
90 mA @ 12 Vdc
115 mA @ 15 Vdc

Coil Voltage Input:
12 Vac/dc ; 50-60 Hz
Drop Out = 4.5 Vac / 4.8 Vdc
Pull In = 9.7 Vac / 11 Vdc

20 / 30 AMP POWER CONTROL RELAYS

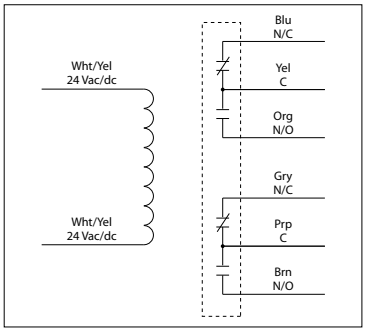
RIB24P

Power Relay, 20 Amp DPDT, 24 Vac/dc Coil, NEMA 1 Housing



RIB24P30

Power Relay, 30 Amp DPDT, 24 Vac/dc Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 2.390˝ x 3.310˝ x 1.810˝ with .50˝ NPT Nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, UL60947, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings: (RIB24P)
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

Contact Ratings: (RIB24P30)
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,110 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

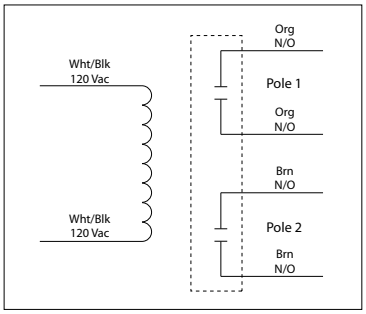
Coil Current:
110 mA @ 20 Vac
138 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
77 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

30 AMP POWER CONTROL RELAYS

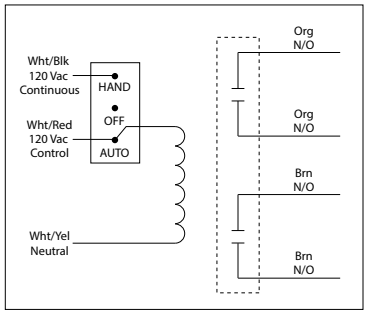
RIB01P30

Power Relay, 30 Amp DPST-N/O, 120 Vac Coil, NEMA 1 Housing



RIB01P30-S

Power Relay, 30 Amp DPST-N/O + Coil Side Override, 120 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPST 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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No (RIB01P30)
Coil Side (RIB01P30-S)

Contact Ratings:
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,110 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

Coil Current:
105 mA @ 120 Vac

Coil Voltage Input:
120 Vac ; 50-60 Hz
Drop Out = 35 Vac
Pull In = 85 Vac

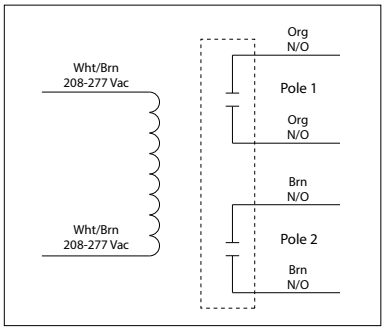
Control Input:
Wht/Blk = 120 Vac Continuous
Wht/Red = 120 Vac Control
Wht/Yel = Neutral

Notes:
- Order Both Poles Normally Closed by adding "-NC" to end of model number
- Order Pole 1 Normally Open and Pole 2 Normally Closed by adding "-NONC" to end of model number

30 AMP POWER CONTROL RELAY

RIB02P30

Power Relay, 30 Amp DPST-N/O, 208-277 Vac Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPST 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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,110 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

Coil Current:
105 mA @ 208-277 Vac

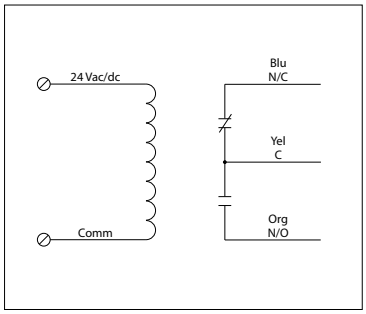
Coil Voltage Input:
208-277 Vac ; 50-60 Hz
Drop Out = 60 Vac
Pull In = 160 Vac

Notes:
- Order Both Poles Normally Closed by adding "-NC" to end of model number
- Order Pole 1 Normally Open and Pole 2 Normally Closed by adding "-NONC" to end of model number

20 AMP POWER CONTROL RELAYS

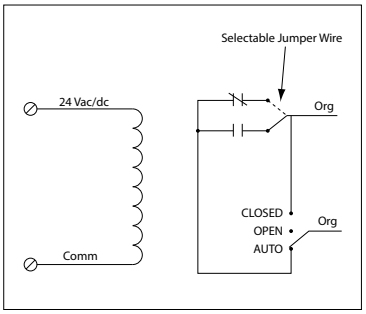
RIBT24B

Power Relay, 20 Amp SPDT, 24 Vac/dc Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



RIBT24SB

Power Relay, 20 Amp SPST + Override, 24 Vac/dc Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIBT24B)
One (1) SPST Continuous Duty Coil (RIBT24SB)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 18ms
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No (RIBT24B)
Yes (RIBT24SB)

Contact Ratings: (RIBT24B)
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Coil Current:
45 mA @ 18 Vac
75 mA @ 24 Vac
30 mA @ 22 Vdc
32 mA @ 24 Vdc
42 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

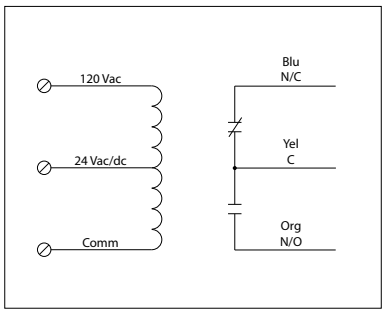
Contact Ratings: (RIBT24SB)
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire (RIBT24SB)

20 AMP POWER CONTROL RELAYS

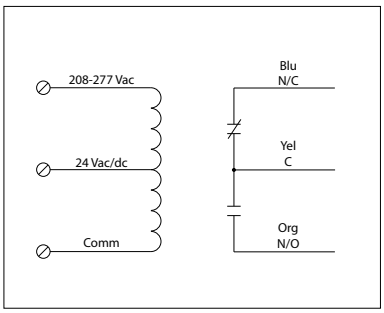
RIBT2401B

Power Relay, 20 Amp SPDT, 24 Vac/dc/120 Vac Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



RIBT2402B

Power Relay, 20 Amp SPDT, 24 Vac/dc/208-277 Vac Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

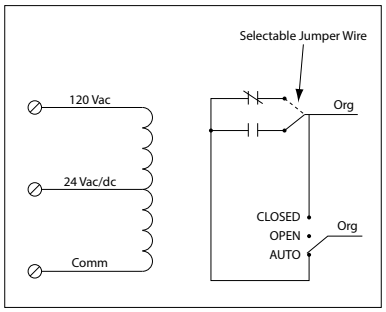
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIBT2401B)
69 mA @ 208-277 Vac (RIBT2402B)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIBT2401B)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBT2402B)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

20 AMP POWER CONTROL RELAYS

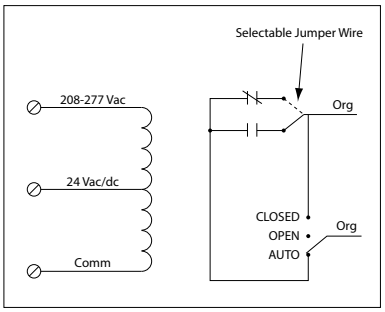
RIBT2401SB

Power Relay, 20 Amp SPST + Override,
24 Vac/dc/120 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



RIBT2402SB

Power Relay, 20 Amp SPST + Override,
24 Vac/dc/208-277 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS (RIBT2401SB)
UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS (RIBT2402SB)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
1,110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIBT2401SB)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBT2402SB)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

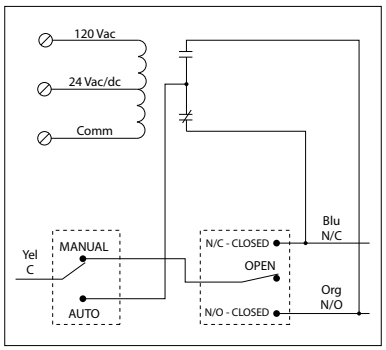
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIBT2401SB)
69 mA @ 208-277 Vac (RIBT2402SB)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire

20 AMP POWER CONTROL RELAYS

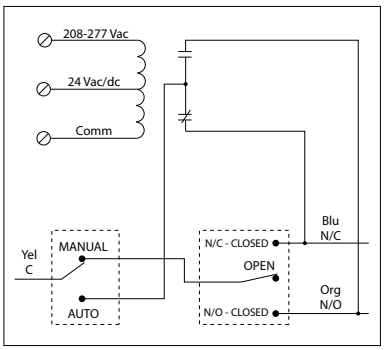
RIBT2401SBC

Power Relay, 20 Amp SPDT + Override,
24 Vac/dc/120 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



RIBT2402SBC

Power Relay, 20 Amp SPDT + Override,
24 Vac/dc/208-277 Vac Coil, Hi/Lo Voltage
Separation, NEMA 1 Housing



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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes (2)

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
1,110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

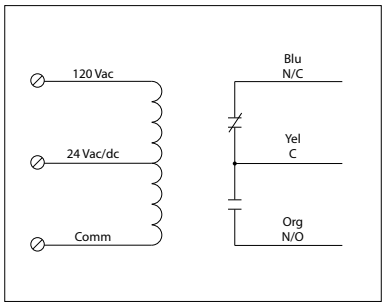
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIBT2401SBC)
69 mA @ 208-277 Vac (RIBT2402SBC)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIBT2401SBC)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBT2402SBC)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

20 AMP TIME DELAY RELAY

RIBTD2401B

Time Delay Power Relay, 20 Amp SPDT, 24 Vac/dc/120 Vac Coil, NEMA 1 Housing



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: 6ms after time delay
Relay Status: RED LED On = Activated
Time Delay Status: PINK LED FLASHING = Timing
Timing Mode: Delay On Make (N/O)
Timing Range: 6 seconds - 20 minutes
Timing Adjustment: 4 position DIP switch for range selection and single turn potentiometer for timing adjustment within range
Timing Tolerance: Switches 1& 2 = ±10%
Switches 3 & 4 = ±5%
Timing Repeatability: ±1%
Temperature Timing Variance: ±1%
Voltage Timing Variance: ±1%
Recycle Time: 750ms Maximum
Dimensions: 4.000˝H x 4.000˝W x 1.810˝D with .50˝ NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

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)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Input Current:
133 mA @ 24 Vac
45 mA @ 24 Vdc
51 mA @ 120 Vac

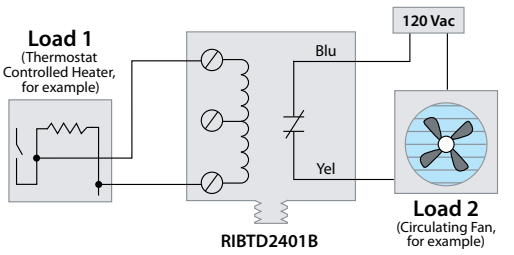
Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

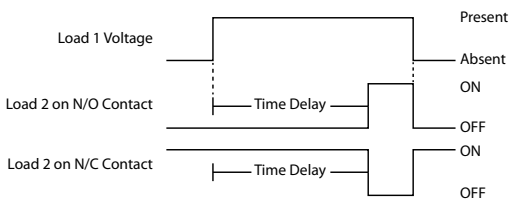
TIMING TABLE

Switch Ranges	Close Dip Switch	Potentiometer Setting A ⟷ B	B ⟷ C	C ⟷ D	D ⟷ E
6s-20s	1	6s	9s	13s	16s	20s
22s-1min15s	2	22s	36s	50s	1min4s	1min15s
1min30s-5min	3	1min30s	2min10s	3min20s	4min16s	5min
6min-20min	4	6min	9min	13min20s	17min20s	20min

Time Delay Application Example #1

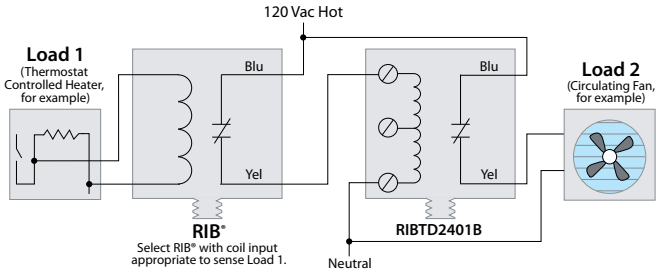
Load 2 stays ON selected amount of time after Load 1 turns ON (N/C)
Load 2 stays OFF selected amount of time after Load 1 turns ON (N/O)

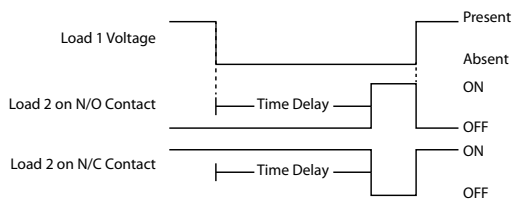




Time Delay Application Example #2 (Requires an Inverting Relay)

Load 2 stays ON selected amount of time after Load 1 turns OFF (N/C)
Load 2 stays OFF selected amount of time after Load 1 turns OFF (N/O)

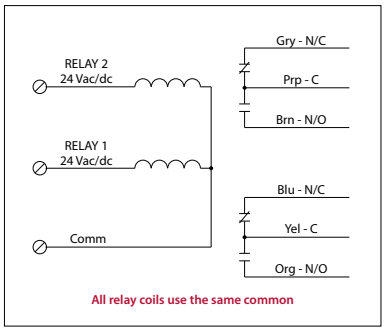




20 AMP POWER CONTROL RELAYS

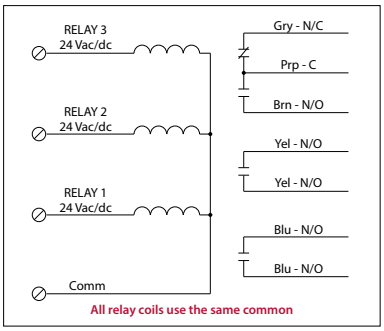
RIBT242B

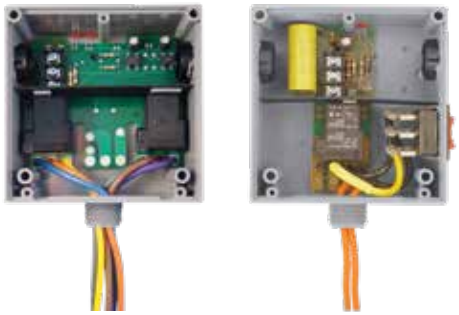
Power Relays, 20 Amp 2 SPDT, 24 Vac/dc Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



RIBT243B

Power Relays, 20 Amp 2 SPST-N/O + 1 SPDT, 24 Vac/dc Vac Coil, Hi/Lo Voltage Separation, NEMA 1 Housing





SPECIFICATIONS

 # Relays & Contact Type: Two (2) SPDT Continuous Duty Coil (RIBT242B)
Two (2) SPST + One (1) SPDT Continuous Duty Coil (RIBT243B)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 18ms
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.800˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, C-UL, CE, RoHS (Both Models)
UL916 (RIBT243B)
UL864 , California State Fire Marshal (RIBT242B)
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

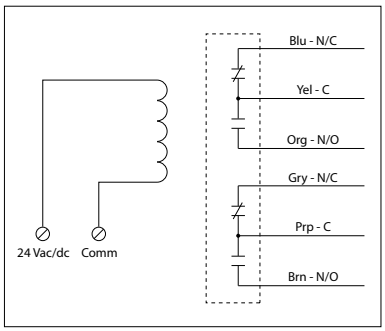
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Notes:
• RIBT243B not rated for UL864

20 AMP POWER CONTROL RELAY

RIBT24P

Power Relay, 20 Amp DPDT, 24 Vac/dc Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.800˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

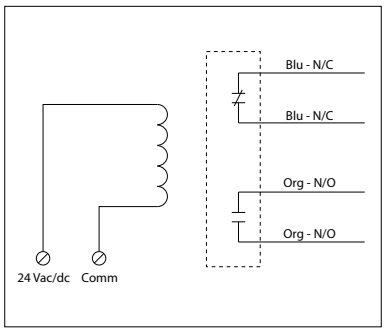
Coil Current:
110 mA @ 20 Vac
138 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
77 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

30 AMP POWER CONTROL RELAY

RIBT24Z

Power Relay, 30 Amp SPST-N/O + SPST-N/C, 24 Vac/dc Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) SPST-N/O + One (1) SPST-N/C 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
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.800˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

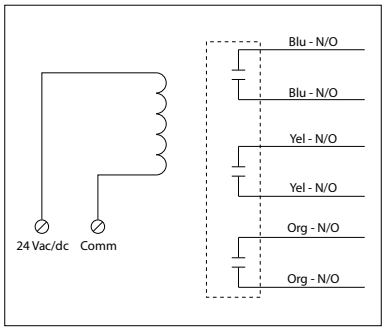
Coil Current:
110 mA @ 20 Vac
138 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
77 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

20 AMP POWER CONTROL RELAY

RIBT243P

Power Relay, 20 Amp 3PST-N/O, 24 Vac/dc Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PST 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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.000˝H x 4.000˝W x 1.800˝D with .50˝ NPT Nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac, 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac, 1 Phase
1,158 VA Pilot Duty @ 240 Vac, 1 Phase
1,110 VA Pilot Duty @ 277 Vac, 1 Phase
1,640 VA Pilot Duty @ 480 Vac, 1 Phase
1,466 VA Pilot Duty @ 240 Vac, 3 Phase
2,112 VA Pilot Duty @ 480 Vac, 3 Phase
Heavy Pilot Duty @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase

Coil Current:
210 mA @ 24 Vac
154 mA @ 30 Vdc

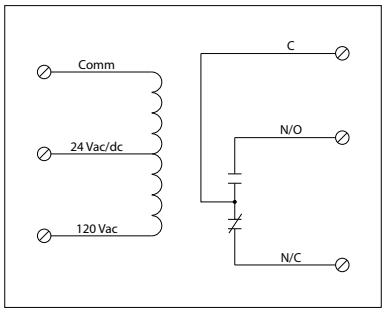
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 22 Vdc

Notes:
• Order Normally Closed by adding "-NC" to end of model number

20 AMP TRACK MOUNT CONTROL RELAYS

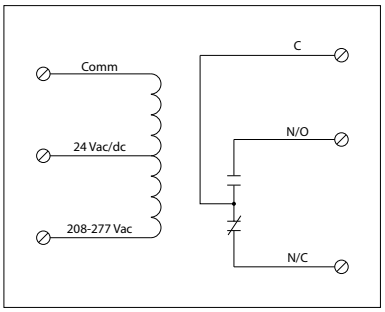
RIBM2401B

Power Relay, 20 Amp SPDT,
24 Vac/dc/120 Vac Coil, 4.00″ Track Mount



RIBM2402B

Power Relay, 20 Amp SPDT,
24 Vac/dc/208-277 Vac Coil, 4.00″ 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
Relay Status: LED On = Activated
Dimensions: 1.250″H x 4.000″W x 0.880″D1/1.380″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000″
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No

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

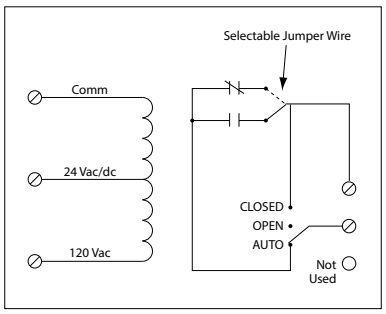
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIBM2401B)
69 mA @ 208-277 Vac (RIBM2402B)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIBM2401B)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBM2402B)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

20 AMP TRACK MOUNT CONTROL RELAYS

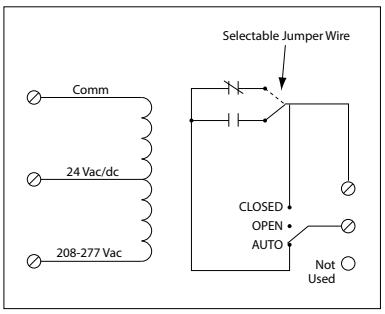
RIBM2401SB

Power Relay, 20 Amp SPST + Override,
24 Vac/dc/120 Vac Coil, 4.00″ Track Mount



RIBM2402SB

Power Relay, 20 Amp SPST + Override,
24 Vac/dc/208-277 Vac Coil, 4.00″ Track Mount



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
Relay Status: LED On = Activated
Dimensions: 1.60″H x 4.00″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000″
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 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

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire

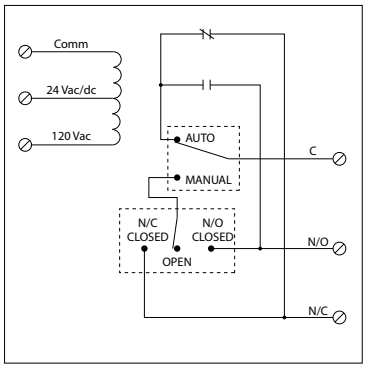
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIBM2401B)
69 mA @ 208-277 Vac (RIBM2402B)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIBM2401B)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBM2402B)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

20 AMP TRACK MOUNT CONTROL RELAYS

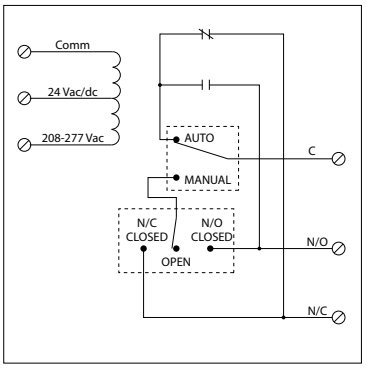
RIBM2401SBC

Power Relay, 20 Amp SPDT + Override,
24 Vac/dc/120 Vac Coil, 4.00"Track Mount



RIBM2402SBC

Power Relay, 20 Amp SPDT + Override,
24 Vac/dc/208-277 Vac Coil, 4.00"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
Relay Status: LED On = Activated
Dimensions: 2.40"H x 4.00"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: Yes (2)

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 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

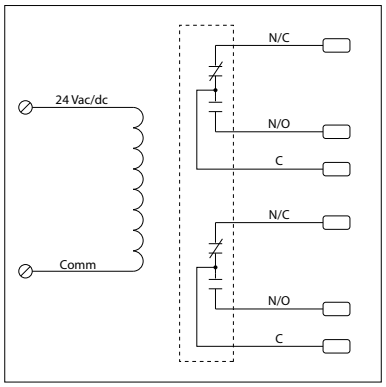
Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIBM2401SBC)
69 mA @ 208-277 Vac (RIBM2402SBC)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 120 Vac ; 50-60 Hz (RIBM2401SBC)
24 Vac/dc ; 208-277 Vac ; 50-60 Hz (RIBM2402SBC)
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

30 AMP TRACK MOUNT CONTROL RELAY

RIBM24ZN

Power Relay, 30 Amp DPDT, 24 Vac/dc Coil, 4.00"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 2.38"H x 4.00"W x 1.50"D1/2.00"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Component Recognized, UL916
C-UL, CE, RoHS
Gold Flash: Yes
Override Switch: No

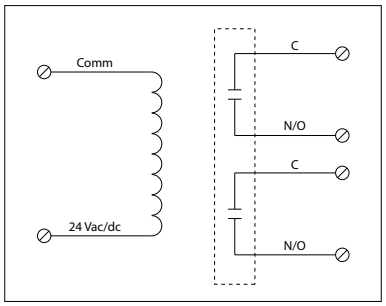
Contact Ratings:
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
3 HP @ 480-600 Vac
2 HP @ 240/277 Vac
1 HP @ 120 Vac
NEMA B600 Pilot Duty

Coil Current:
110 mA @ 20 Vac
125 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
70 mA @ 30 Vdc

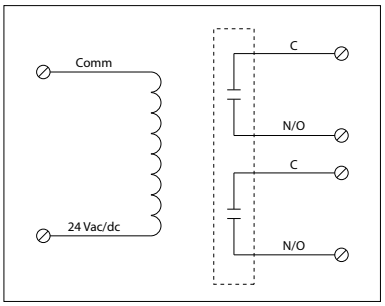
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

30 AMP TRACK MOUNT CONTROL RELAYS

RIBM24ZL
Power Relay, 30 Amp DPST-N/O,
24 Vac/dc Coil, 4.00"Track Mount



RIBMN24ZL
Power Relay, 30 Amp DPST-N/O,
24 Vac/dc Coil, 2.75"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPST 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
Relay Status: LED On = Activated
Dimensions: 2.50"H x 4.00"W x 2.25"D1/2.75"D2 (RIBM24ZL)
2.50"H x 2.75"W x 2.25"D1/2.75"D2 (RIBMN24ZL)
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000˝ (RIBM24ZL) or 2.750" (RIBMN24ZL)
Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: Yes
Override Switch: No

Contact Ratings:
30 Amp Resistive @ 300 Vac
25 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
3 HP @ 480-600 Vac
2 HP @ 240/277 Vac
1 HP @ 120 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,109 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac
Heavy Pilot Duty @ 600 Vac

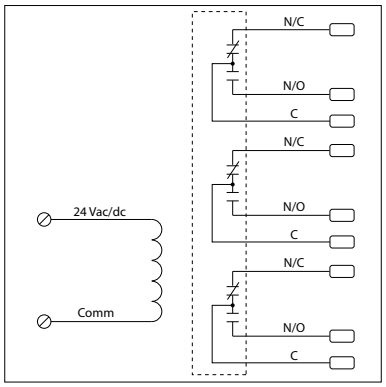
Coil Current:
110 mA @ 20 Vac
138 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
77 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

Notes:
Order Normally Closed by adding "-NC" to end of model number

30 AMP TRACK MOUNT CONTROL RELAY

RIBM243PN
Power Relay, 30 Amp 3PDT, 24 Vac/dc Coil, 4.00" Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PDT 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: 20ms
Relay Status: LED On = Activated
Housing Detail: See **Housing H** in housing guide for dimensions
Dimensions: 2.38"H x 4.00"W x 1.50"D1/2.00"D2
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Component Recognized, UL916
C-UL, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
30 Amp General Use @ 300 Vac
30 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase
Heavy Pilot Duty @ 600 Vac
770 VA @ 120 Vac, 1 Phase
1,158 VA @ 240 Vac, 1 Phase
1,110 VA @ 277 Vac, 1 Phase
1,640 VA @ 480 Vac, 1 Phase
1,466 VA @ 240 Vac, 3 Phase
2,122 VA @ 480 Vac, 3 Phase

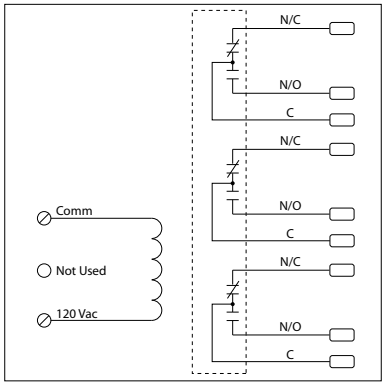
Coil Current:
190 mA @ 24 Vac
140 mA @ 30 Vdc

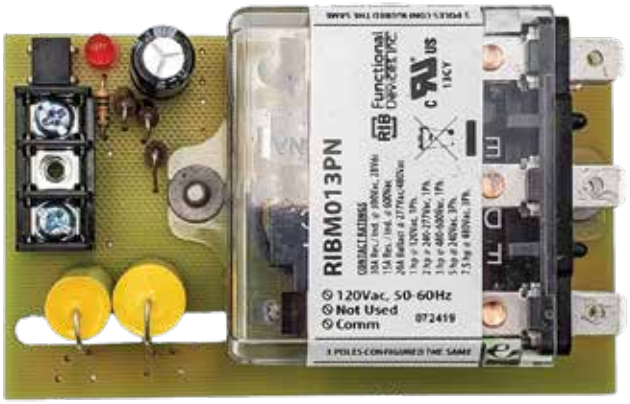
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 22 Vdc

30 AMP TRACK MOUNT CONTROL RELAY

RIBM013PN

Power Relay, 30 Amp 3PDT, 120 Vac Coil, 4.00"Track Mount





SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PDT 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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.38"H x 4.00"W x 1.38"D1/1.88"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Component Recognized, UL916, UL864
C-UL, California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
30 Amp General Use @ 300 Vac
30 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase
Heavy Pilot Duty @ 600 Vac
770 VA @ 120 Vac, 1 Phase
1,158 VA @ 240 Vac, 1 Phase
1,110 VA @ 277 Vac, 1 Phase
1,640 VA @ 480 Vac, 1 Phase
1,466 VA @ 240 Vac, 3 Phase
2,122 VA @ 480 Vac, 3 Phase

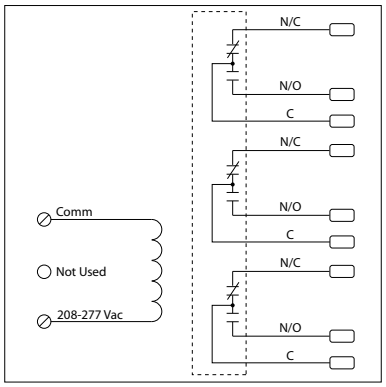
Coil Current:
140 mA @ 120 Vac

Coil Voltage Input:
120 Vac ; 50-60 Hz
Drop Out = 35 Vac
Pull In = 85 Vac

30 AMP TRACK MOUNT CONTROL RELAY

RIBM023PN

Power Relay, 30 Amp 3PDT, 208-277 Vac Coil, 4.00"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PDT 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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.38"H x 4.00"W x 1.38"D1/1.88"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Component Recognized, UL916, UL864
C-UL, California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
30 Amp General Use @ 300 Vac
30 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase
Heavy Pilot Duty @ 600 Vac
770 VA @ 120 Vac, 1 Phase
1,158 VA @ 240 Vac, 1 Phase
1,110 VA @ 277 Vac, 1 Phase
1,640 VA @ 480 Vac, 1 Phase
1,466 VA @ 240 Vac, 3 Phase
2,122 VA @ 480 Vac, 3 Phase

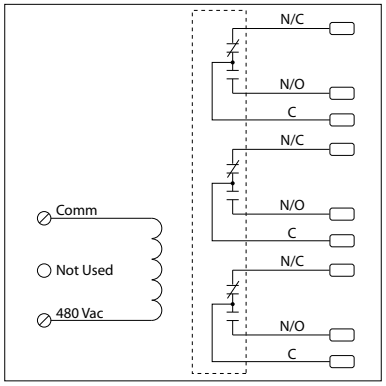
Coil Current:
170 mA @ 208-277 Vac

Coil Voltage Input:
208-277 Vac ; 50-60 Hz
Drop Out = 60 Vac
Pull In = 160 Vac

30 AMP TRACK MOUNT CONTROL RELAY

RIBM043PN

Power Relay, 30 Amp 3PDT, 480 Vac Coil, 4.00"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PDT 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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.38"H x 4.00"W x 1.38"D1/1.88"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Component Recognized, UL916, UL864
C-UL, California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
30 Amp General Use @ 300 Vac
30 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase
Heavy Pilot Duty @ 600 Vac
770 VA @ 120 Vac, 1 Phase
1,158 VA @ 240 Vac, 1 Phase
1,110 VA @ 277 Vac, 1 Phase
1,640 VA @ 480 Vac, 1 Phase
1,466 VA @ 240 Vac, 3 Phase
2,122 VA @ 480 Vac, 3 Phase

Coil Current:
140 mA @ 120 Vac

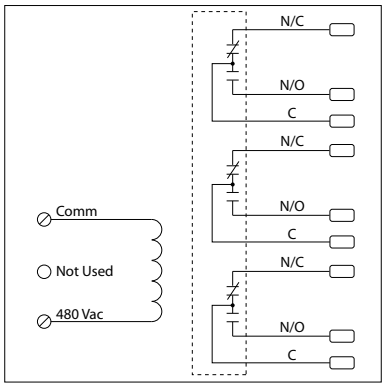
Coil Voltage Input:
480 Vac ; 50-60 Hz
Drop Out = 140 Vac
Pull In = 340 Vac

Notes:
See model RIBM043PN-HD for use in more transient prone environments

30 AMP TRACK MOUNT CONTROL RELAY

RIBM043PN-HD

Heavy Duty Relay, 30 Amp 3PDT, 480 Vac Coil, For Use in More Transient Prone Environments, 4.00" x 3.25"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PDT 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: 20ms
Relay Status: LED On = Activated
Dimensions: 3.25"H x 4.00"W x 1.50"D1/2.00"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 4.000˝
MT4 Mounting Track Sold Separately
Origin: Made of US and non-US parts
Approvals: UL Component Recognized, UL916, UL864
C-UL, California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
30 Amp General Use @ 300 Vac
30 Amp Resistive @ 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase
Heavy Pilot Duty @ 600 Vac
770 VA @ 120 Vac, 1 Phase
1,158 VA @ 240 Vac, 1 Phase
1,110 VA @ 277 Vac, 1 Phase
1,640 VA @ 480 Vac, 1 Phase
1,466 VA @ 240 Vac, 3 Phase
2,122 VA @ 480 Vac, 3 Phase

Coil Current:
140 mA @ 480 Vac

Coil Voltage Input:
480 Vac/dc ; 50-60 Hz
Drop Out = 140 Vac
Pull In = 340 Vac

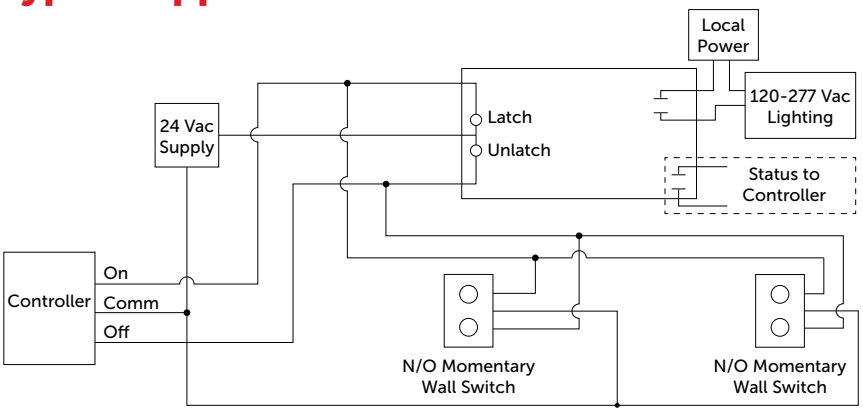
LATCHING RELAYS

These relays are switched by pulse commands from an appropriate power source or a controller. The relay contacts are mechanically latched in position, so that the load remains in its last state (on or off) during a loss of power. A pulse of opposing polarity latches the relay in the alternate state.

Product Features

- Prepackaged for quick and easy installation
- Electromechanical relay
- Mechanically latching
- Status LED and auxiliary ouput models available
- Electronic ballast rating
- 20 Amp rating

Typical Application



ENCLOSED LATCHING RELAYS

		COIL VOLTAGE		CONTACT RATINGS						
MODEL #	UL	AC/DC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	OVERRIDE SWITCH	AUXILIARY OUTPUT	HOUSING STYLE *	SPEC PAGE
RIBL12B	•	12	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac			A	65
RIBL12BM	•	12	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac		•	B	65
RIBL12SB	•	12	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac	•		A	65
RIBL12SBM	•	12	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac	•	•	B	65
RIBL24B	•	24	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac			A	66
RIBL24BM	•	24	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac		•	B	66
RIBL24SB	•	24	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac	•		A	66
RIBL24SBM	•	24	1 SPST	20 A @ 120-277 Vac	3 HP @ 240 Vac	720 VA @ 120-277 Vac	•	•	B	66

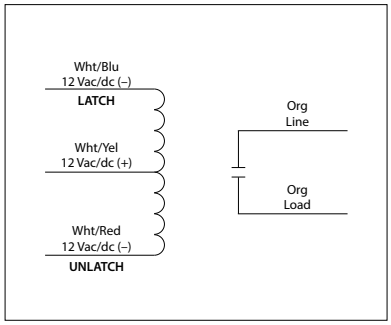
UL = UL Listed - see data sheet for specific Listing

* = See Housing Guide on page 201

LATCHING RELAY

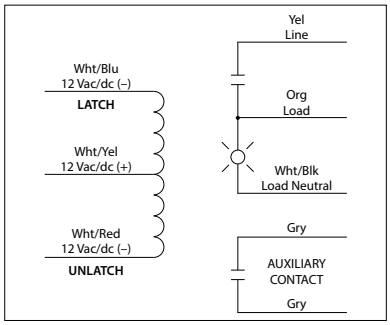
RIBL12B

Mechanically Latching Relay, 20 Amp SPST, 12 Vac/dc Coil, NEMA 1 Housing



RIBL12BM

Mechanically Latching Relay, 20 Amp SPST, 12 Vac/dc Coil, Status LED, Auxiliary Output, NEMA 1 Housing



RIBL12B-RD
• Red housing

RIBL12B-N4
• NEMA 4X housing

SPECIFICATIONS

 # Relays & Contact Type: One (1) SPST Latching Relay, Dual Coil
Expected Relay Life: 1 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 50ms
Maximum Pulse Length: 30 seconds
Relay Status / Auxiliary: (RIBL12BM)
Contact Closed: LED On = Voltage Detected on Load Wire (RIBL12BM)
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple (RIBL12B)
2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple (RIBL12BM)
Housing Detail: See **Housing A** (RIBL12B) or **Housing B** (RIBL12BM) in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL60947, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No

Contact Ratings:
20 Amp Resistive @ 120-277 Vac
20 Amp Ballast @ 120-277 Vac
16 Amp Electronic Ballast @ 120-277 Vac
5540 Watt Tungsten @ 277 Vac
720 VA Pilot Duty @ 120-277 Vac
2 HP @ 277 Vac
3 HP @ 240 Vac
1.5 HP @ 120 Vac

Coil Current:
182 mA @ 10 Vac
250 mA @ 12 Vac
165 mA @ 10 Vdc
198 mA @ 12 Vdc
250 mA @ 15 Vdc

Latch / Unlatch:
Min. 10 Vdc / 11 Vac

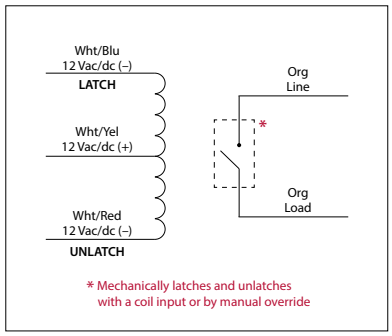
Auxiliary Contact:
3 Amp @ 30 Vac/dc max. (RIBL12BM)

Notes:
- Application of voltage on latch coil (Wht/Blu & Wht/Yel) will close the contact.
- Application of voltage on unlatch coil (Wht/Red & Wht/Yel) will open the contact.
- Voltage should not be applied to the coil for more than 30 seconds.
- Auxiliary contact and status LED activate when 120-277 Vac is applied between Load (Org) wire and Load Neutral (Wht/Blk) wire. (RIBL12BM)

LATCHING RELAY

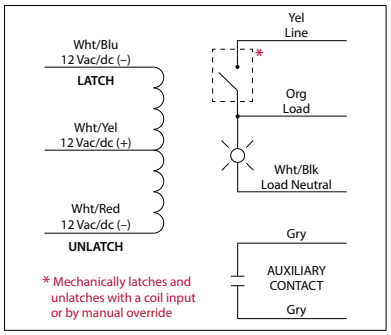
RIBL12SB

Mechanically Latching Relay, 20 Amp SPST + True Override, 12 Vac/dc Coil, NEMA 1 Housing



RIBL12SBM

Mechanically Latching Relay, 20 Amp SPST + True Override, 12 Vac/dc Coil, Status LED, Auxiliary Output, NEMA 1 Housing



RIBL12SB-RD
• Red housing

SPECIFICATIONS

 # Relays & Contact Type: One (1) SPST Latching Relay, Dual Coil
Expected Relay Life: 1 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 50ms
Maximum Pulse Length: 30 seconds
Relay Status / Auxiliary: (RIBL12SBM)
Contact Closed: LED On = Voltage Detected on Load Wire (RIBL12SBM)
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple (RIBL12SB)
2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple (RIBL12SBM)
Housing Detail: See **Housing A** (RIBL12SB) or **Housing B** (RIBL12SBM) in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL60947, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 120-277 Vac
20 Amp Ballast @ 120-277 Vac
16 Amp Electronic Ballast @ 120-277 Vac
5540 Watt Tungsten @ 277 Vac
720 VA Pilot Duty @ 120-277 Vac
2 HP @ 277 Vac
3 HP @ 240 Vac
1.5 HP @ 120 Vac

Coil Current:
182 mA @ 10 Vac
250 mA @ 12 Vac
165 mA @ 10 Vdc
198 mA @ 12 Vdc
250 mA @ 15 Vdc

Latch / Unlatch:
Min. 10 Vdc / 11 Vac

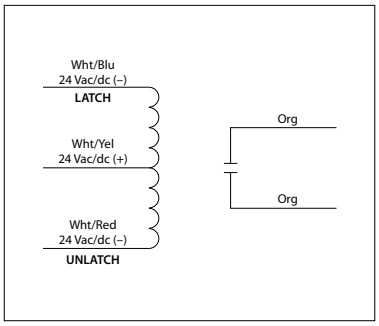
Auxiliary Contact:
3 Amp @ 30 Vac/dc max. (RIBL12SBM)

Notes:
- Application of voltage on latch coil (Wht/Blu & Wht/Yel) will close the contact.
- Application of voltage on unlatch coil (Wht/Red & Wht/Yel) will open the contact.
- Voltage should not be applied to the coil for more than 30 seconds.
- Auxiliary contact and status LED activate when 120-277 Vac is applied between Load (Org) wire and Load Neutral (Wht/Blk) wire. (RIBL12SBM)

LATCHING RELAYS

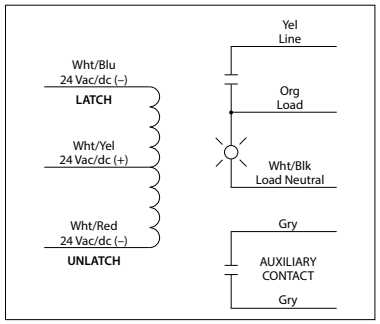
RIBL24B

Mechanically Latching Relay, 20 Amp SPST, 24 Vac/dc Coil, NEMA 1 Housing



RIBL24BM

Mechanically Latching Relay, 20 Amp SPST, 24 Vac/dc Coil, Status LED, Auxiliary Output, NEMA 1 Housing



RIBL24B-RD
• Red housing

RIBL24B-N4
• NEMA 4X housing (Not available on switched models)

SPECIFICATIONS

 # Relays & Contact Type: One (1) SPST Latching Relay, Dual Coil
Expected Relay Life: 1 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 50ms
Maximum Pulse Length: 30 seconds
Relay Status / Auxiliary: (RIBL24BM)
Contact Closed: LED On = Voltage Detected on Load Wire (RIBL24BM)
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple (RIBL24B)
2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple (RIBL24BM)
Housing Detail: See **Housing A** (RIBL24B) or **Housing B** (RIBL24BM) in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL60947, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No

Contact Ratings:
20 Amp Resistive @ 120-277 Vac
20 Amp Ballast @ 120-277 Vac
16 Amp Electronic Ballast @ 120-277 Vac
5540 Watt Tungsten @ 277 Vac
720 VA Pilot Duty @ 120-277 Vac
2 HP @ 277 Vac
3 HP @ 240 Vac
1.5 HP @ 120 Vac

Coil Current:
175 mA @ 20 Vac
210 mA @ 24 Vac
92 mA @ 20 Vdc
110 mA @ 24 Vdc
138 mA @ 30 Vdc

Latch / Unlatch:
Min. 20 Vdc / 22 Vac

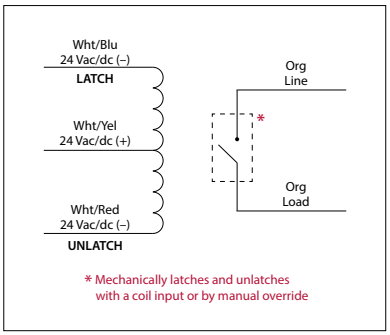
Auxiliary Contact:
3 Amp @ 30 Vac/dc max. (RIBL24BM)

Notes:
- Application of voltage on latch coil (Wht/Blu & Wht/Yel) will close the contact.
- Application of voltage on unlatch coil (Wht/Red & Wht/Yel) will open the contact.
- Voltage should not be applied to the coil for more than 30 seconds.
- Auxiliary contact and status LED activate when 120-277 Vac is applied between Load (Org) wire and Load Neutral (Wht/Blk) wire. (RIBL24BM)

LATCHING RELAYS

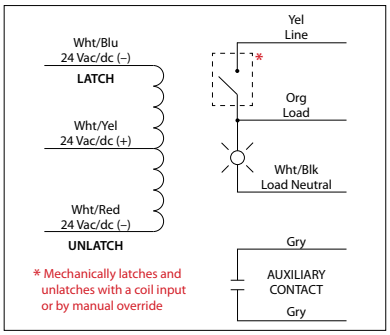
RIBL24SB

Mechanically Latching Relay, 20 Amp SPST + True Override, 24 Vac/dc Coil, NEMA 1 Housing



RIBL24SBM

Mechanically Latching Relay, 20 Amp SPST + True Override, 24 Vac/dc Coil, Status LED, Auxiliary Output, NEMA 1 Housing



RIBL24SB-RD
• Red housing

SPECIFICATIONS

 # Relays & Contact Type: One (1) SPST Latching Relay, Dual Coil
Expected Relay Life: 1 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 50ms
Maximum Pulse Length: 30 seconds
Relay Status / Auxiliary: (RIBL24SBM)
Contact Closed: LED On = Voltage Detected on Load Wire (RIBL24SBM)
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple (RIBL24SB)
2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple (RIBL24SBM)
Housing Detail: See **Housing A** (RIBL24SB) or **Housing B** (RIBL24SBM) in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL60947, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 120-277 Vac
20 Amp Ballast @ 120-277 Vac
16 Amp Electronic Ballast @ 120-277 Vac
5540 Watt Tungsten @ 277 Vac
720 VA Pilot Duty @ 120-277 Vac
2 HP @ 277 Vac
3 HP @ 240 Vac
1.5 HP @ 120 Vac

Coil Current:
175 mA @ 20 Vac
210 mA @ 24 Vac
92 mA @ 20 Vdc
110 mA @ 24 Vdc
138 mA @ 30 Vdc

Latch / Unlatch:
Min. 20 Vdc / 22 Vac

Auxiliary Contact:
3 Amp @ 30 Vac/dc max (RIBL24SBM).

Notes:
- Application of voltage on latch coil (Wht/Blu & Wht/Yel) will close the contact.
- Application of voltage on unlatch coil (Wht/Red & Wht/Yel) will open the contact.
- Voltage should not be applied to the coil for more than 30 seconds.
- Auxiliary contact and status LED activate when 120-277 Vac is applied between Load (Org) wire and Load Neutral (Wht/Blk) wire. (RIBL24SBM)

LOW-INPUT / OPTOISOLATED RELAYS

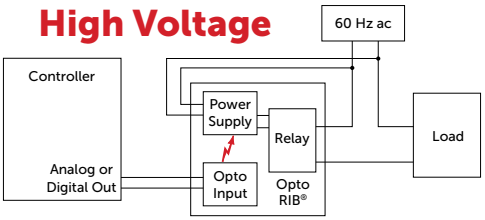
RIBTE24B RIBME2401B RIBTE02P-S

Optoisolated relays help isolate noisy loads from the controller. Good for controlling power relays from analog outputs.

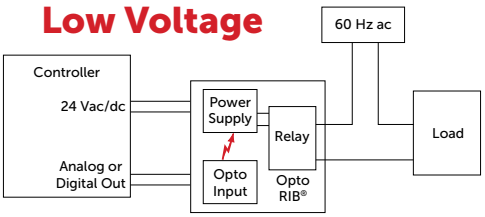
Product Features

- Prepackaged for quick and easy installation
- Extremely low current draw on the input
- Control input can connect to AO for relay control
- Protect controller from feedback or voltage transients

High Voltage



Low Voltage



ENCLOSED LOW-INPUT / OPTOISOLATED RELAYS

MODEL #	UL	CONTROL INPUT	POWER INPUT	RELAY CONTACTS	CONTACT RATINGS: RESISTIVE	CONTACT RATINGS: MOTOR	CONTACT RATINGS: PILOT DUTY	HIGH/LOW SEPARATION	OVERRIDE SWITCH	HOUSING STYLE *	SPEC PAGE
RIBTELC	•	5-25 Vac/dc	10-30 Vac/dc	1 SPDT	10 A @ 120-277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•		C	68
RIBTELS	•	5-25 Vac/dc	10-30 Vac/dc	1 SPST	10 A @ 120-277 Vac	1/3 HP @ 120-240 Vac (N/O)	480 VA @ 240-277 Vac	•	1	C	68
RIBTE24B	•	5-25 Vac/dc	24 Vac/dc	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	68
RIBTE01B	•	5-25 Vac/dc	120 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	69
RIBTE02B	•	5-25 Vac/dc	208-277 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	69
RIBTE24SB	•	5-25 Vac/dc	24 Vac/dc	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	1	C	70
RIBTE01SB	•	5-25 Vac/dc	120 Vac	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	1	C	70
RIBTE02SB	•	5-25 Vac/dc	208-277 Vac	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	1	C	71
RIBTE24P	•	5-25 Vac/dc	24 Vac/dc	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	1,640 VA @ 480 Vac	•		C	71
RIBTE01P	•	5-25 Vac/dc	120 Vac	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	1,640 VA @ 480 Vac	•		C	72
RIBTE02P	•	5-25 Vac/dc	208-277 Vac	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	1,640 VA @ 480 Vac	•		C	72
RIBTE01P-S	•	5-25 Vac/dc	120 Vac	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	1,640 VA @ 480 Vac	•	1 #	C	73
RIBTE02P-S	•	5-25 Vac/dc	208-277 Vac	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	1,640 VA @ 480 Vac	•	1 #	C	73

TRACK MOUNT LOW-INPUT / OPTOISOLATED RELAYS

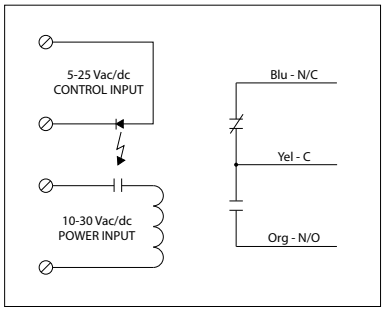
MODEL #	UL	CONTROL INPUT	POWER INPUT	RELAY CONTACTS	CONTACT RATINGS: RESISTIVE	CONTACT RATINGS: MOTOR	CONTACT RATINGS: PILOT DUTY	OVERRIDE SWITCH	TRACK MOUNT ^	SPEC PAGE
RIBME2401B	•	5-25 Vac/dc	24 Vac/dc/120 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		MT4 Series	73
RIBME2402B	•	5-25 Vac/dc	24 Vac/dc/208-277 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		MT4 Series	73

UL = UL Listed - see data sheet for specific Listing * = See Housing Guide on page 201 ^ = Track mount sold separately # = Coil side relay override (requires unit to be powered)

LOW COIL INPUT RELAYS

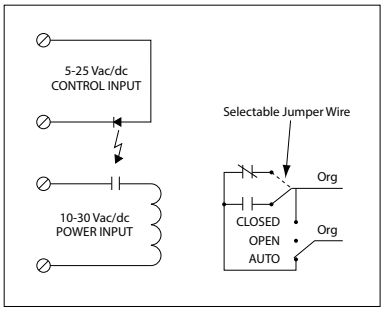
RIBTELC

Low Input/Optoisolated Relay, 10 Amp SPDT, 10-30 Vac/dc Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



RIBTELS

Low Input/Optoisolated Relay, 10 Amp SPST + Override, 10-30 Vac/dc Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 10-30 Vac/dc, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # 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: 20ms
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes (RIBTELC), No (RIBTELS)
Override Switch: No (RIBTELC), Yes (RIBTELS)

Contact Ratings:
10 Amp Resistive @ 120-277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240-277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
1/3 HP @ 120-240 Vac (N/O)
1/6 HP @ 120-240 Vac (N/C)
1/4 HP @ 277 Vac (N/O)
1/8 HP @ 277 Vac (N/C)

Power Input Ratings:
33 mA @ 10 Vac
35 mA @ 12 Vac
46 mA @ 24 Vac
55 mA @ 30 Vac
13 mA @ 10 Vdc
15 mA @ 12 Vdc
18 mA @ 24 Vdc
20 mA @ 30 Vdc

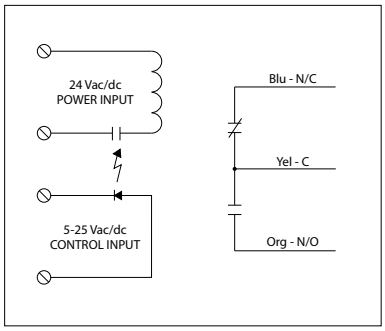
Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

Notes:
• Normally Open or Normally Closed selected by yellow jumper wire (RIBTELS)

LOW COIL INPUT RELAY

RIBTE24B

Low Input/Optoisolated Relay, 20 Amp SPDT, 24 Vac/dc Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 24 Vac/dc, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

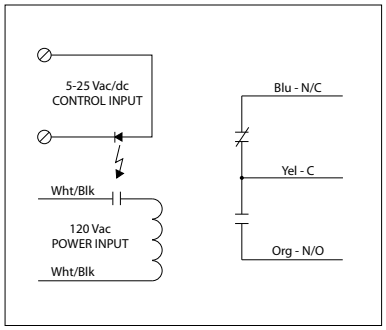
Power Input Ratings:
50 mA @ 18 Vac
83 mA @ 24 Vac
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

LOW COIL INPUT RELAY

RIBTE01B

Low Input/Optoisolated Relay, 20 Amp SPDT, 120 Vac Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 120 Vac, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

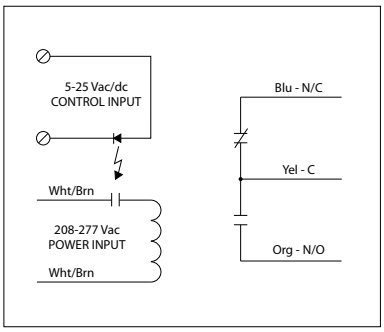
Power Input Ratings:
47 mA @ 120 Vac

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

LOW COIL INPUT RELAY

RIBTE02B

Low Input/Optoisolated Relay, 20 Amp SPDT, 208-277 Vac Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 208-277 Vac, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

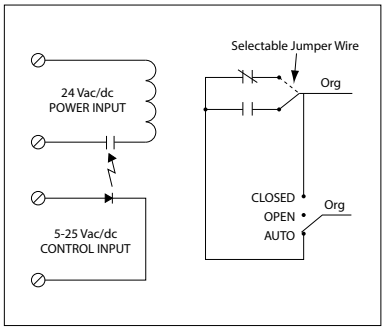
Power Input Ratings:
69 mA @ 208-277 Vac

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

LOW COIL INPUT RELAY

RIBTE24SB

Low Input/Optoisolated Relay, 20 Amp SPST + Override,
24 Vac/dc Power Input, 5-25 Vac/dc Control Input, Hi/Lo
Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 24 Vac/dc, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

Power Input Ratings:
50 mA @ 18 Vac
83 mA @ 24 Vac
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

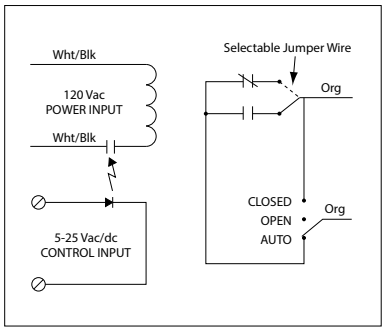
Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire

LOW COIL INPUT RELAY

RIBTE01SB

Low Input/Optoisolated Relay, 20 Amp SPST + Override,
120 Vac/dc Power Input, 5-25 Vac/dc Control Input, Hi/Lo
Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 120 Vac, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

Power Input Ratings:
47 mA @ 120 Vac

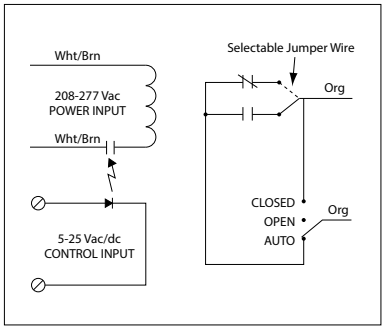
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire

LOW COIL INPUT RELAY

RIBTE02SB

Low Input/Optoisolated Relay, 20 Amp SPST + Override, 208-277 Vac Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 208-277 Vac, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

Power Input Ratings:
69 mA @ 208-277 Vac

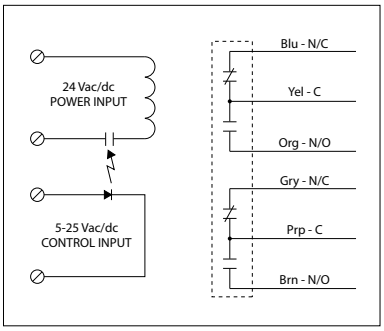
Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire

LOW COIL INPUT RELAY

RIBTE24P

Low Input/Optoisolated Relay, 20 Amp DPDT, 24 Vac/dc Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 24 Vac/dc, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 4.00˝ x 4.00˝ x 1.80˝ with .50˝ NPT Nipple
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1158 VA Pilot Duty @ 240 Vac
1110 VA Pilot Duty @ 277 Vac
1640 VA Pilot Duty @ 480 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

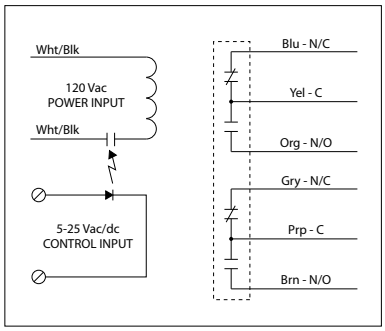
Power Input Ratings:
110 mA @ 20 Vac
138 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
77 mA @ 30 Vdc

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

LOW COIL INPUT RELAY

RIBTE01P

Low Input/Optoisolated Relay, 20 Amp DPDT, 120 Vac/dc Power Input,
5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 120 Vac, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1158 VA Pilot Duty @ 240 Vac
1110 VA Pilot Duty @ 277 Vac
1640 VA Pilot Duty @ 480 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

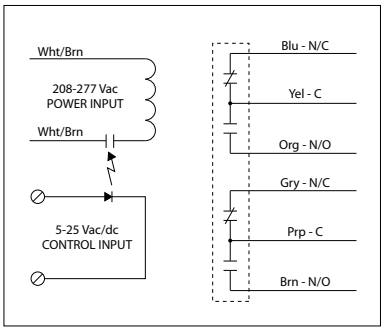
Power Input Ratings:
105 mA @ 120 Vac

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

LOW COIL INPUT RELAY

RIBTE02P

Low Input/Optoisolated Relay, 20 Amp DPDT, 208-277 Vac Power Input,
5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 208-277 Vac, 50-60 Hz
Control Input: 5-25 Vac/dc, 50-60 Hz
 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1158 VA Pilot Duty @ 240 Vac
1110 VA Pilot Duty @ 277 Vac
1640 VA Pilot Duty @ 480 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

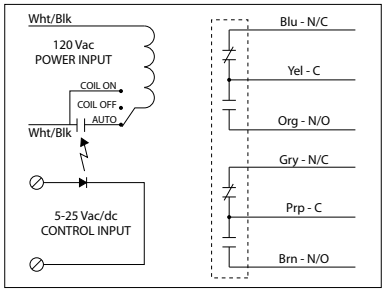
Power Input Ratings:
105 mA @ 208-277 Vac

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

LOW COIL INPUT RELAYS

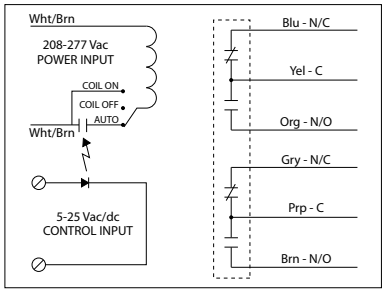
RIBTE01P-S

Low Input/Optoisolated Relay, 20 Amp DPDT + Override, 120 Vac Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



RIBTE02P-S

Low Input/Optoisolated Relay, 20 Amp DPDT + Override, 208-277 Vac Power Input, 5-25 Vac/dc Control Input, Hi/Lo Voltage Separation, NEMA 1 Housing



SPECIFICATIONS

Power Input: 120 Vac, 50-60 Hz (RIBTE01P-S)
208-277 Vac, 50-60 Hz (RIBTE02P-S)
Control Input: 5-25 Vac/dc, 50-60 Hz
 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL,CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes*

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc
15 Amp Resistive @ 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1158 VA Pilot Duty @ 240 Vac
1110 VA Pilot Duty @ 277 Vac
1640 VA Pilot Duty @ 480 Vac
3 HP @ 480-600 Vac
2 HP @ 240-277 Vac
1 HP @ 120 Vac

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

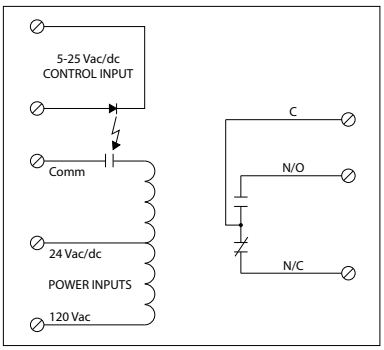
Notes:
- Override capability is made possible by supplying constant voltage on the Power Input. No Control Input Voltage is necessary to override the relay. *

Power Input Ratings:
105 mA @ 120 Vac (RIBTE01P-S)
105 mA @ 208-277 Vac (RIBTE02P-S)

LOW COIL INPUT TRACK OUNT RELAYS

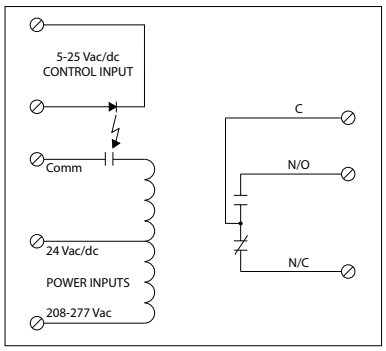
RIBME2401B

Low Input/Optoisolated Relay, 20 Amp SPDT, 24 Vac/dc/120 Vac Power Input, 5-25 Vac/dc Control Input, 4.00" Track Mount



RIBME2402B

Low Input/Optoisolated Relay, 20 Amp SPDT, 24 Vac/dc/208-277 Vac Power Input, 5-25 Vac/dc Control Input, 4.00" Track Mount



SPECIFICATIONS

Power Input: 24 Vac/dc/120 Vac, 50-60 Hz (RIBME2401B)
24 Vac/dc/208-277 Vac, 50-60 Hz (RIBME2402B)
Control Input: 5-25 Vac/dc, 50-60 Hz
 # 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
Relay Status: LED On = Activated
Dimensions: 1.75"H x 4.00"W x 0.88"D1/1.38"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

Power Input Ratings:
50 mA @ 18 Vac
83 mA @ 24 Vac
47 mA @ 120 Vac (RIBME2401B)
69 mA @ 208-277 Vac (RIBME2402B)
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Control Input Ratings:
.4 mA @ 5 Vdc
.9 mA @ 10 Vdc
1 mA @ 12 Vdc
2 mA @ 24 Vdc
3 mA @ 24 Vac
(Non Polarized)

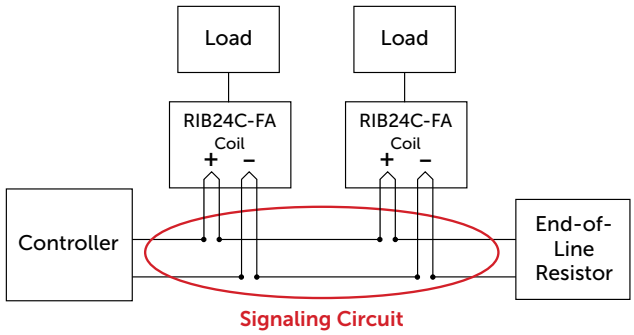
POLARIZED / ALARM RELAYS

These relays are polarized to work in a supervised system and may be turned on and off by reversing polarity. These prepackaged relays make installation quick and easy and can be used in fire alarm systems, smoke control systems, etc.

Product Features

- Coil input is polarity sensitive
- For use with fire alarm systems
- System supervision for controllers that utilize end-of-line resistors
- Four wire circuit ensures indication of broken wiring connection with RIB®
- Prepackaged for quick and easy installation

Typical Application



ENCLOSED POLARIZED / ALARM RELAYS

MODEL #	UL	COIL VOLTAGE	RELAY CONTACTS	CONTACT RATINGS: RESISTIVE	CONTACT RATINGS: MOTOR	CONTACT RATINGS: PILOT DUTY	HIGH/LOW SEPARATION	OVERRIDE SWITCH	HOUSING STYLE *	SPEC PAGE
RIB12C-FA	•	12 Vac/dc	1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac			A	75
RIB24C-FA	•	24 Vac/dc	1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac			A	75
RIB12S-FA	•	12 Vac/dc	1 SPST	10 A @ 277 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac		1	A	75
RIB24S-FA	•	24 Vac/dc	1 SPST	10 A @ 277 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac		1	A	75
RIBT24B-FA	•	24 Vac/dc	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	76
RIB24P-FA	•	24 Vac/dc	1 DPDT	20 A @ 300 Vac	3 HP @ 480-600 Vac	1,640 VA @ 480 Vac			B	76

TRACK MOUNT POLARIZED / ALARM RELAYS

MODEL #	UL	COIL VOLTAGE	RELAY CONTACTS	CONTACT RATINGS: RESISTIVE	CONTACT RATINGS: MOTOR	CONTACT RATINGS: PILOT DUTY	OVERRIDE SWITCH	TRACK MOUNT ^	SPEC PAGE
RIBMN12C-FA	•	12 Vac/dc	1 SPDT	15 A @ 125 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac		MT212 Series	77
RIBMN24C-FA	•	24 Vac/dc	1 SPDT	15 A @ 125 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac		MT212 Series	77
RIBMN12S-FA	•	12 Vac/dc	1 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac	1	MT212 Series	77
RIBMN24S-FA	•	24 Vac/dc	1 SPST	15 A @ 125 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac	1	MT212 Series	77

UL = UL Listed - see data sheet for specific Listing

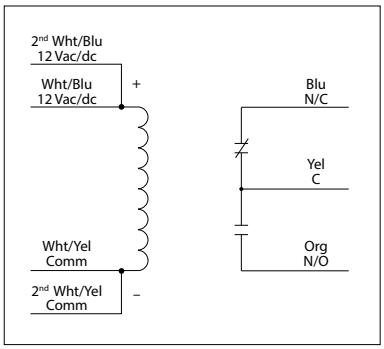
* = See Housing Guide on page 201

^ = Track mount sold separately

FIRE ALARM RELAYS

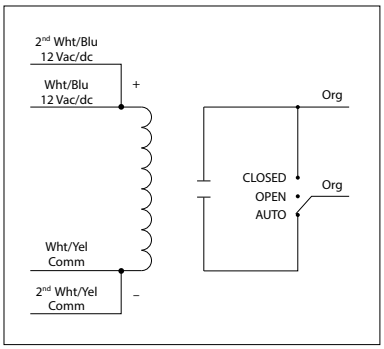
RIB12C-FA

Polarized Relay, 10 Amp SPDT, 12 Vac/dc Coil, NEMA 1 Housing



RIB12S-FA

Polarized Relay 10 Amp SPST-N/O + Override, 12 Vac/dc Coil, NEMA 1 Housing



RIB12C-FA-RD
RIB12S-FA-RD
• Red housing

RIB12C-FA-N4
• NEMA 4X housing, UL508 only

SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIB12C-FA)
One (1) SPST Continuous Duty Coil (RIB12S-FA)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No (RIB12C-FA)
Yes (RIB12S-FA)

Contact Ratings:
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

Coil Current:
53 mA @ 10 Vac
62 mA @ 12 Vac
29 mA @ 11 Vdc
36 mA @ 12 Vdc

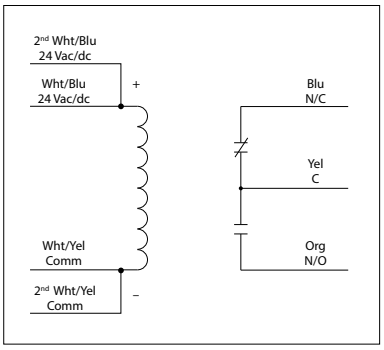
Coil Voltage Input:
12 Vac/dc ; 50-60 Hz
Drop Out = 2 Vac / 2.5 Vdc
Pull In = 9 Vac / 11 Vdc

Notes:
• Order Normally Closed by adding "NC" to end of model number (RIB12S-FA)

FIRE ALARM RELAYS

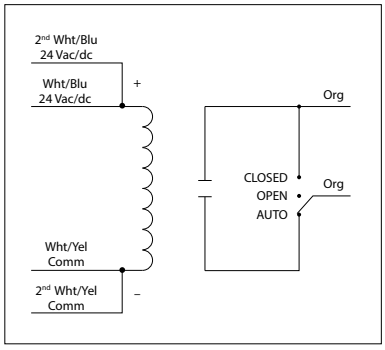
RIB24C-FA

Polarized Relay, 10 Amp SPDT, 24 Vac/dc Coil, NEMA 1 Housing



RIB24S-FA

Polarized Relay 10 Amp SPST-N/O + Override, 24 Vac/dc Coil, NEMA 1 Housing



RIB24C-FA-RD
RIB24S-FA-RD
• Red housing

RIB24C-FA-N4
• NEMA 4X housing, UL508 only

SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIB24C-FA)
One (1) SPST Continuous Duty Coil (RIB24S-FA)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No (RIB24C-FA)
Yes (RIB24S-FA)

Contact Ratings:
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

Coil Current:
26 mA @ 20 Vac
31 mA @ 24 Vac
48 mA @ 35 Vac
14 mA @ 20 Vdc
18 mA @ 24 Vdc
28 mA @ 35 Vdc

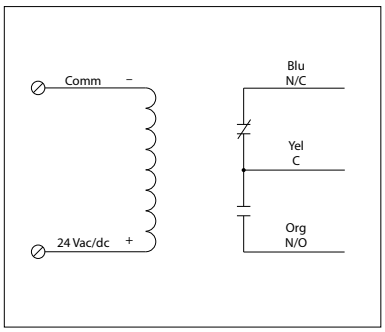
Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

Notes:
• Order Normally Closed by adding "NC" to end of model number (RIB12S-FA)

FIRE ALARM RELAY

RIBT24B-FA

Polarized Relay, 20 Amp SPDT, 24 Vac/dc Coil, Hi/Lo Voltage Separation, NEMA 1 Housing



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
Relay Status: LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
5 Amp Resistive @ 480 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

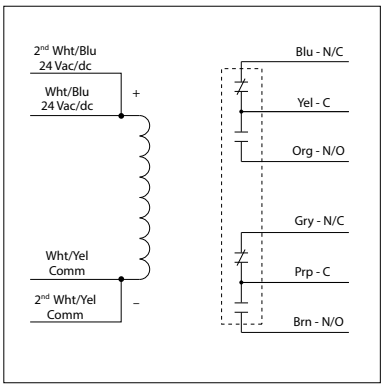
Coil Current:
47 mA @ 18 Vac
83 mA @ 24 Vac
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

FIRE ALARM RELAY

RIB24P-FA

Polarized Relay, 20 Amp DPDT, 24 Vac/dc Coil, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.75" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 300 Vac
20 Amp Resistive @ 28 Vdc, 15 Vdc
15 Amp Resistive @ 600 Vac
1 HP @ 120 Vac
2 HP @ 240-277 Vac
3 HP @ 480 Vac - 600 Vac
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
770 VA Pilot Duty @ 120 Vac
1,158 VA Pilot Duty @ 240 Vac
1,110 VA Pilot Duty @ 277 Vac
1,640 VA Pilot Duty @ 480 Vac

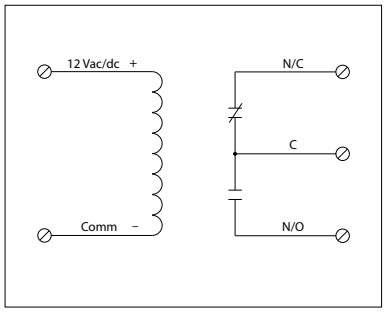
Coil Current:
110 mA @ 20 Vac
138 mA @ 24 Vac
55 mA @ 20 Vdc
55 mA @ 24 Vdc
77 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 20 Vdc

FIRE ALARM TRACK MOUNT RELAYS

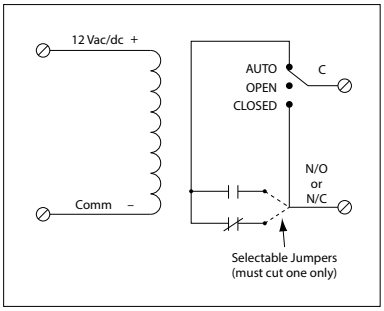
RIBMN12C-FA

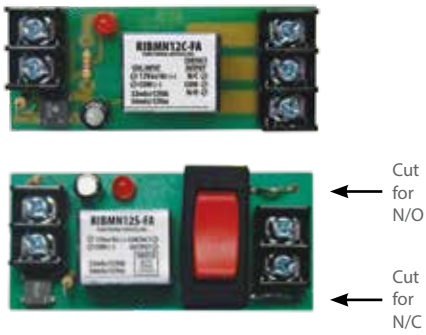
Polarized Relay, 15 Amp SPDT, 12 Vac/dc Coil, 2.75" Track Mount



RIBMN12S-FA

Polarized Relay, 15 Amp SPST + Override, 12 Vac/dc Coil, 2.75" Track Mount





SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIBMN12C-FA)
One (1) SPST Continuous Duty Coil (RIBMN12S-FA)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.10"H x 2.75"W x 0.75" D1/1.25"D2 (RIBMN12C-FA)
1.25"H x 2.75"W x 1.25" D1/1.25"D2 (RIBMN12S-FA)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin Made of US and non-US parts
Track Mount: 2.750˝
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No (RIBMN12C-FA)
Yes (RIBMN12S-FA)

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

Coil Current:
53 mA @ 10 Vac
62 mA @ 12 Vac
29 mA @ 11 Vdc
35 mA @ 12 Vdc

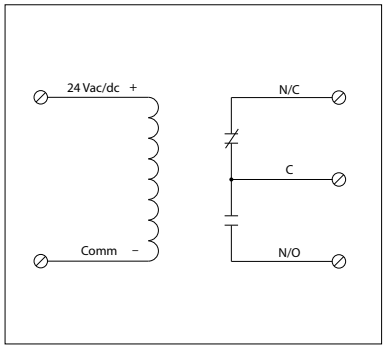
Coil Voltage Input:
12 Vac/dc ; 50-60 Hz
Drop Out = 2 Vac / 2.5 Vdc
Pull In = 9 Vac / 11 Vdc

Notes:
• Must cut appropriate jumper to select Normally Open or Normally Closed (RIBMN12S-FA)

FIRE ALARM TRACK MOUNT RELAYS

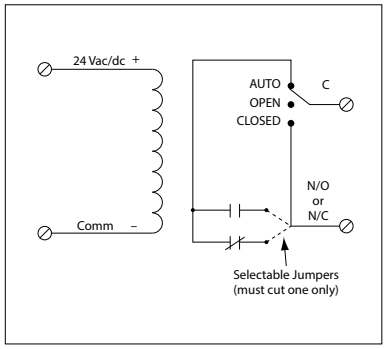
RIBMN24C-FA

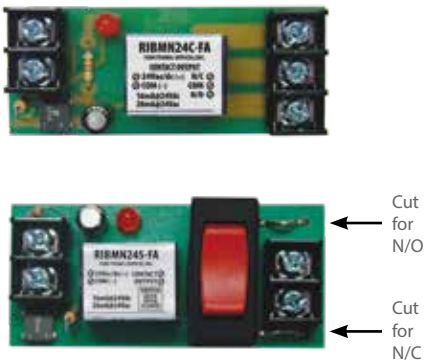
Polarized Relay, 15 Amp SPDT, 24 Vac/dc Coil, 2.75" Track Mount



RIBMN24S-FA

Polarized Relay, 15 Amp SPST + Override, 24 Vac/dc Coil, 2.75" Track Mount





SPECIFICATIONS

 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil (RIBMN24C-FA)
One (1) SPST Continuous Duty Coil (RIBMN24S-FA)
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 6ms
Relay Status: LED On = Activated
Dimensions: 1.10"H x 2.75"W x 0.75"D1/1.25"D2 (RIBMN24C-FA)
1.25"H x 2.75"W x 1.25"D1/1.25"D2 (RIBMN24S-FA)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin Made of US and non-US parts
Track Mount: 2.750˝
MT212 Mounting Track Sold Separately
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: No
Override Switch: No (RIBMN24C-FA)
Yes (RIBMN24S-FA)

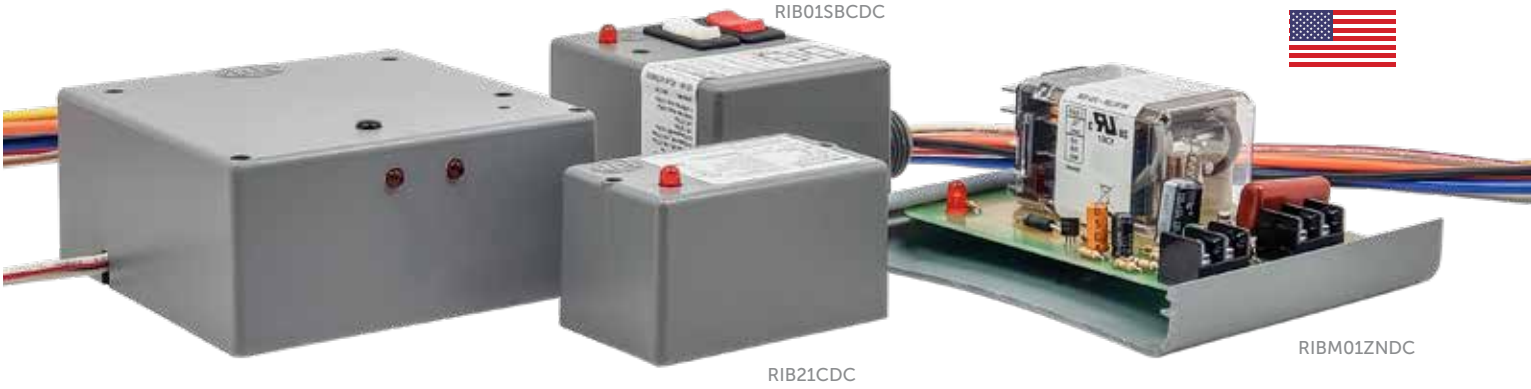
Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

Coil Current:
26 mA @ 20 Vac
31 mA @ 24 Vac
48 mA @ 35 Vac
14 mA @ 20 Vdc
18 mA @ 24 Vdc
28 mA @ 35 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 2 Vac / 2.5 Vdc
Pull In = 9 Vac / 11 Vdc

Notes:
• Must cut appropriate jumper to select Normally Open or Normally Closed (RIBMN24S-FA)

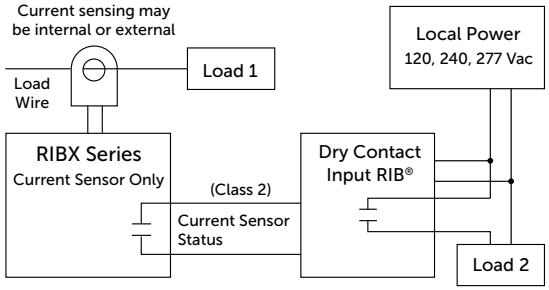
DRY CONTACT INPUT RELAYS



Product Features

- Prepackaged for quick and easy installation
- Provides low-voltage (Class 2) power needed to activate the relay (self-powered) by closing the dry contact input
- Activated by a wide range of dry contacts such as thermostats, switches, other relays, solid-state switches, etc.
- Power to energize the relay can be brought to the relay on a separate pair of wires along with the control output of the controller, or can be a local power source near the relay
- Relay contacts are isolated from the input power and the dry contact input, so they can be wired to switch any other power-load or low-voltage load (see specifications for contact ratings)

Typical Application



Self-powered current switches of the RIBX Series and relays of the Dry Contact Input RIB® Series may be applied to interlock Load 2 to Load 1.

ENCLOSED DRY CONTACT INPUT RELAYS

MODEL #	UL	POWER INPUT	RELAY CONTACTS	CONTACT RATINGS: RESISTIVE	CONTACT RATINGS: MOTOR	CONTACT RATINGS: PILOT DUTY	HIGH/LOW SEPARATION	OVERRIDE SWITCH	HOUSING STYLE *	SPEC PAGE
RIB21CDC	•	120-277 Vac	1 SPDT	10 A @ 277 Vac	1 HP @ 250 Vac	770 VA @ 250 Vac			A	79
RIB01BDC	•	120 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac			B	79
RIB02BDC	•	208-277 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac			B	79
RIB01SBDC	•	120 Vac	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		1	B	80
RIB02SBDC	•	208-277 Vac	1 SPST	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		1	B	80
RIB01SBCDC	•	120 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		2	B	80
RIB02SBCDC	•	208-277 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac		2	B	80
RIBD01BDC ~	•	120 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	81
RIBD02BDC ~	•	208-277 Vac	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		C	81

TRACK MOUNT DRY CONTACT INPUT RELAYS

MODEL #	UL	POWER INPUT	RELAY CONTACTS	CONTACT RATINGS: RESISTIVE	CONTACT RATINGS: MOTOR	CONTACT RATINGS: PILOT DUTY	OVERRIDE SWITCH	TRACK MOUNT ^	SPEC PAGE
RIBM01ZNDC	•	120 Vac	1 DPDT	30 A @ 300 Vac	3 HP @ 480-600 Vac	B600		MT4 Series	83
RIBM02ZNDC	•	208-277 Vac	1 DPDT	30 A @ 300 Vac	3 HP @ 480-600 Vac	B600		MT4 Series	83
RIBM013PNDC	•	120 Vac	1 3PDT	30 A @ 300 Vac	7.5 HP @ 480 Vac, 3 Phase	2122 VA @ 480 Vac, 3 Phase		MT4 Series	83

UL = UL Listed - see data sheet for specific Listing

UL = UL Component Recognized - see data sheet for specific Listing

* = See Housing Guide on page 201

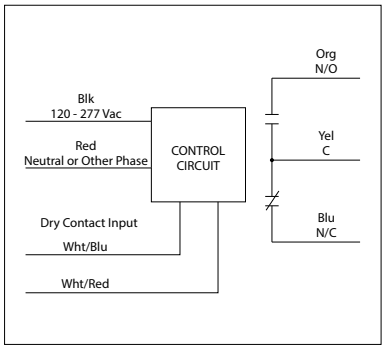
^ = Track mount sold separately

~ = Time Delay

DRY CONTACT INPUT RELAYS

RIB21CDC

Dry Contact Relay, 10 Amp SPDT, Class 2 Dry Contact Input, 120-277 Vac Power Input, NEMA 1 Housing



RIB21CDC-RD
- Red housing

RIB21CDC-N4
- NEMA 4X housing, UL508 only

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: 1.8 Seconds
Relay Status: LED On = Activated
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

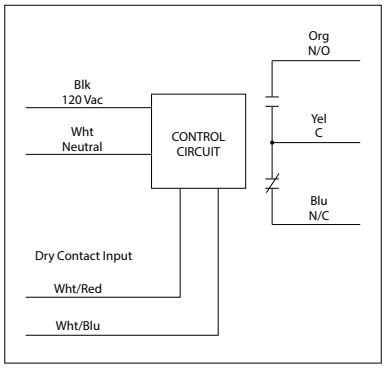
Power Input:
50 mA @ 240 Vac Max.

Notes:
- Dry Contact Input Operation: Close White/Red wire to White/Blue wire to activate relay. If more than one dry contact RIB® shares a single dry contact input, White/Blue must be common.

DRY CONTACT INPUT RELAYS

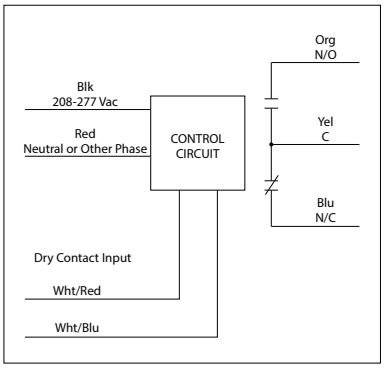
RIB01BDC

Dry Contact Relay, 20 Amp SPDT, Class 2 Dry Contact Input, 120 Vac Power Input, NEMA 1 Housing



RIB02BDC

Dry Contact Relay, 20 Amp SPDT, Class 2 Dry Contact Input, 208-277 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 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 1.8 Seconds
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Contact Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

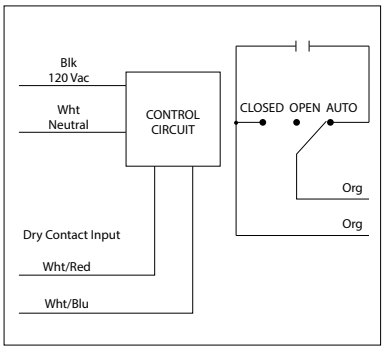
Power Input:
42 mA @ 120 Vac (RIB01BDC)
62 mA @ 208-277 Vac (RIB02BDC)

Notes:
- Dry Contact Input Operation: Close White/Red wire to White/Blue wire to activate relay. If more than one dry contact RIB® shares a single dry contact input, White/Blue must be common.

DRY CONTACT INPUT RELAYS

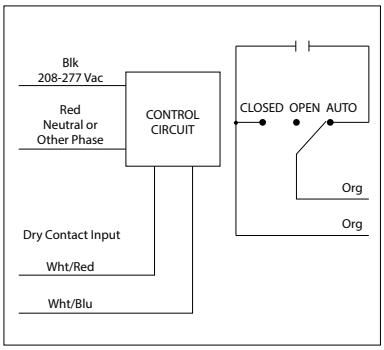
RIB01SBDC

Dry Contact Relay, 20 Amp SPST-N/O + Override, Class 2 Dry Contact Input, 120 Vac Power Input, NEMA 1 Housing



RIB02SBDC

Dry Contact Relay, 20 Amp SPST-N/O + Override, Class 2 Dry Contact Input, 208-277 Vac Power Input, NEMA 1 Housing



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: 1.8 Seconds
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes

Contact Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277 Vac (N/C)
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac (N/O)
240 Watt Tungsten @ 120 Vac (N/C)
2 HP @ 277 Vac
1 HP @ 120 Vac

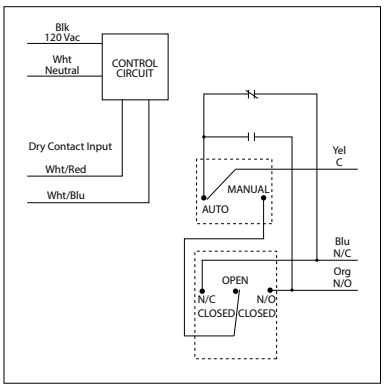
Power Input:
42 mA @ 120 Vac (RIB01SBDC)
62 mA @ 208-277 Vac (RIB02SBDC)

Notes:
- Dry Contact Input Operation:
  Close White/Red wire to White/Blue wire to activate relay. If more than one dry contact RIB® shares a single dry contact input, White/Blue must be common.
- Order Normally Closed by adding "-NC" to end of model number

DRY CONTACT INPUT RELAYS

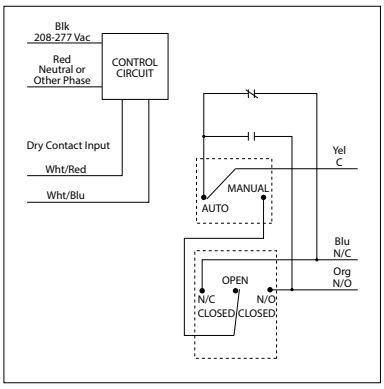
RIB01SBCDC

Dry Contact Relay, 20 Amp SPDT + Override, Class 2 Dry Contact Input, 120 Vac Power Input, NEMA 1 Housing



RIB02SBCDC

Dry Contact Relay, 20 Amp SPDT + Override, Class 2 Dry Contact Input, 208-277 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 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 1.8 Seconds
Relay Status: LED On = Activated
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: Yes (2)

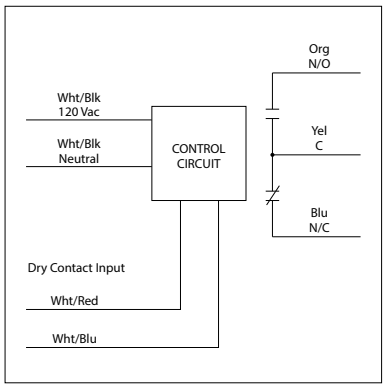
Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac
Not rated for Electronic Ballast
10 Amp Tungsten @ 120 Vac
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Power Input:
42 mA @ 120 Vac (RIB01SBCDC)
62 mA @ 208-277 Vac (RIB02SBCDC)

Notes:
- Dry Contact Input Operation:
  Close White/Red wire to White/Blue wire to activate relay. If more than one dry contact RIB® shares a single dry contact input, White/Blue must be common.

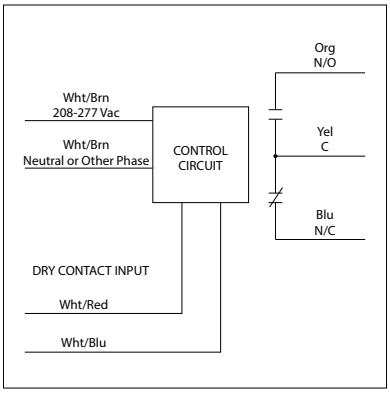
RIBD01BDC

Time Delay Dry Contact Relay, 20 Amp SPDT, Class 2 Dry Contact Input, 120 Vac Power Input, NEMA 1 Housing



RIBD02BDC

Time Delay Dry Contact Relay, 20 Amp SPDT, Class 2 Dry Contact Input, 208-277 Vac Power Input, NEMA 1 Housing



SPECIFICATIONS

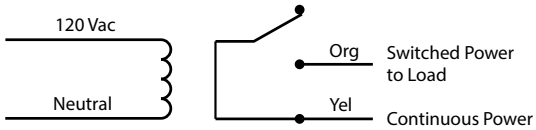
 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 18ms after time delay
Relay Status: Red LED On = Activated
Time Delay Status: Pink LED FLASHING = Timing
Timing Mode: Selectable: Delay On Make, Delay On Break, or Delay On Make and Break
Timing Range: 1-30 Seconds or 1-30 Minutes
Timing Adjustment: 3 pin header w/jumper for sec/min and single turn potentiometer for timing adjustment within range
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

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)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

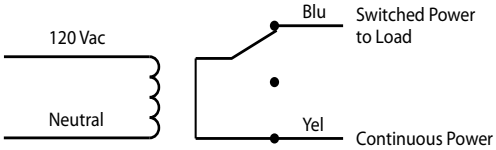
Power Input:
66 mA @ 120 Vac (RIBD01BDC)
62 mA @ 208-277 Vac (RIBD02BDC)

Notes:
- Dry Contact Input Operation:
  Mode A&C: Close White/Red wire to White/Blue wire to start timing. Relay will activate after timing sequence has ended.
- Mode B&C: Open White/Red and White/Blue wires to start timing. Relay will deenergize after timing sequence has ended.
- If more than one dry contact RIB® shares a single dry contact input, White/Blue must be common.
- Changing min/sec or mode while unit is running will reset the unit (de-energize the relay and turn off the timer). Once the dry-contact input is opened the unit will function as normal again
- If the unit is powered up with the dry-contact input closed, the unit will begin timing (MODE A and MODE C) or energize the relay (MODE B).

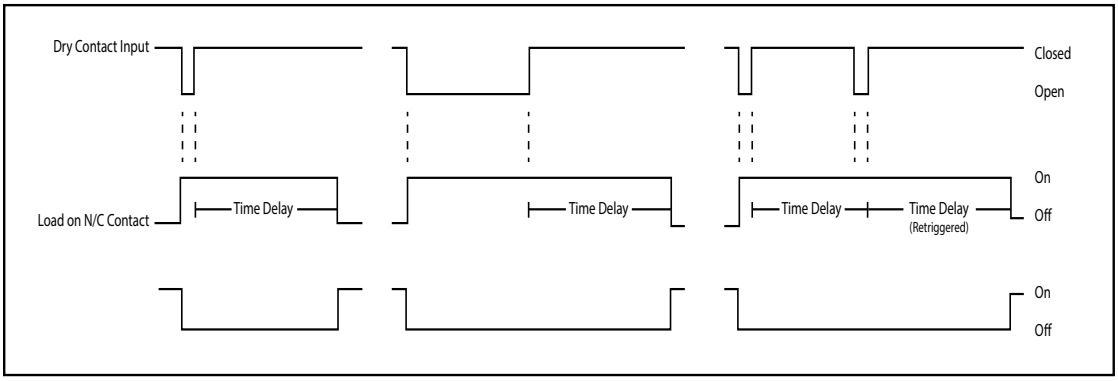
Wiring for Load on N/O Contact



Wiring for Load on N/C Contact



MODE A: DELAY ON MAKE



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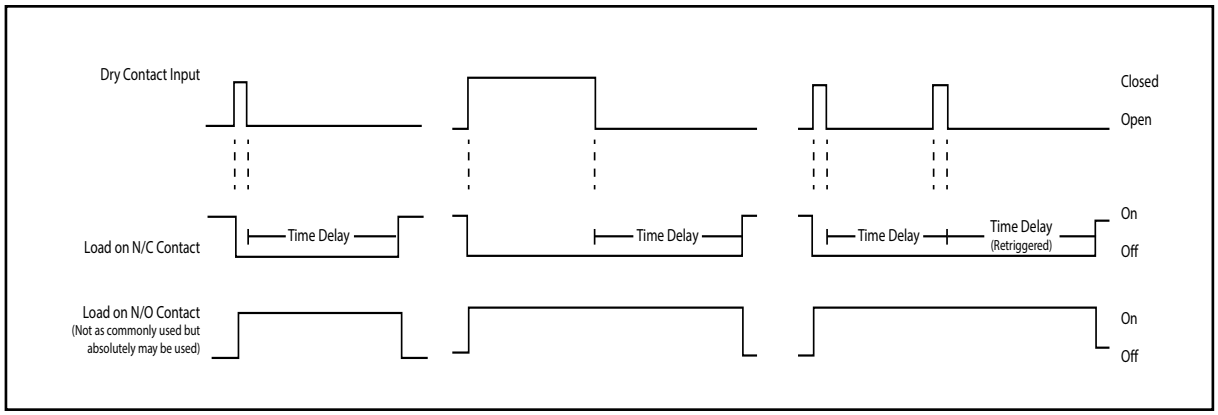
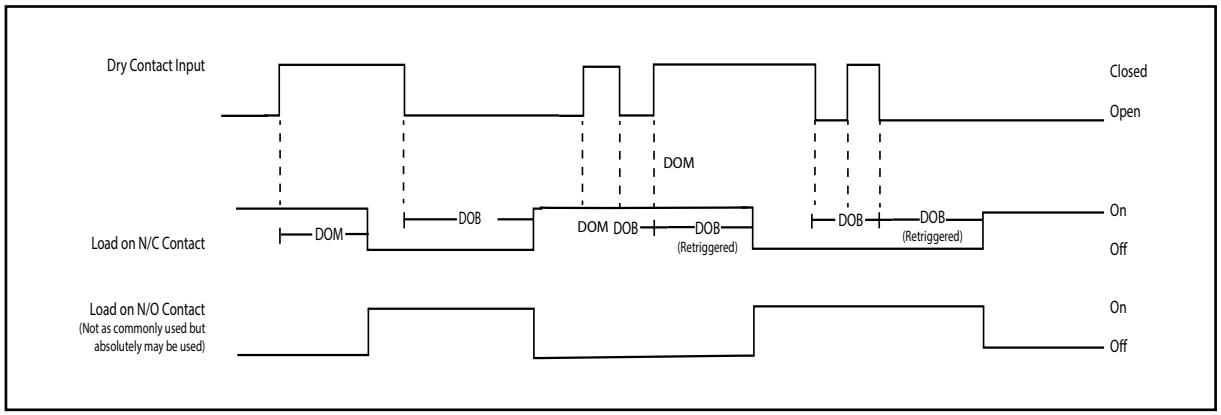
DRY CONTACT INPUT TIME DELAY RELAYS - CONTINUED

MODE B: DELAY ON BREAK



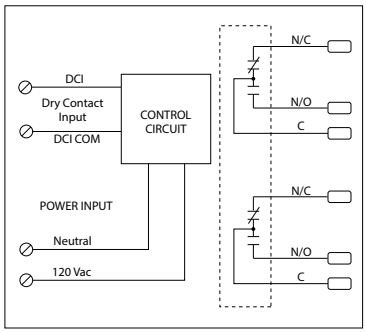
MODE C: DELAY ON MAKE AND DELAY ON BREAK



DRY CONTACT INPUT TRACK MOUNT RELAYS

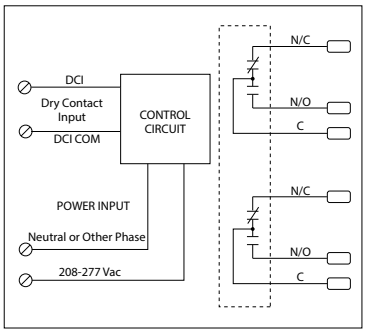
RIBM01ZNDC

Dry Contact Relay, 30 Amp DPDT, Class 2 Dry Contact Input, 120 Vac Power Input, 4.00" Track Mount



RIBM02ZNDC

Dry Contact Relay, 30 Amp DPDT, Class 2 Dry Contact Input, 208-277 Vac Power Input, 4.00" Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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
Relay Status: Red LED On = Activated
Power Status: Green LED On = Activated
Dimensions: 2.88"H x 4.00"W x 1.50"D1/2.00"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000"
MT4 Mounting Track Sold Separately
Approvals: UL Component Recognized, UL916
C-UL, CE, RoHS
Gold Flash: Yes
Override Switch: No

Contact Ratings:

30 Amp Resistive @ 300 Vac	770 VA @ 120 Vac
25 Amp Resistive @ 28 Vdc	1158 VA @ 240 Vac
15 Amp Resistive @ 600 Vac	1109 VA @ 277 Vac
3 HP @ 480-600 Vac	1640 VA @ 480 Vac
2 HP @ 240/277 Vac	NEMA B600 Pilot Duty
1 HP @ 120 Vac	
20 Amp Ballast @ 277-480 Vac	
Not rated for Electronic Ballast	

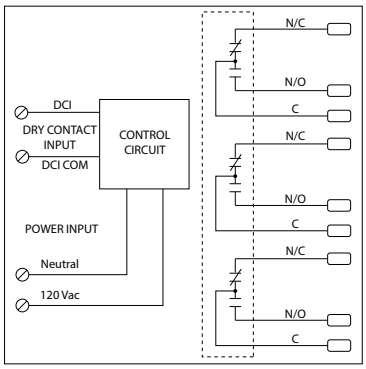
Power Input:
95 mA @ 120 Vac (RIBM01ZNDC)
95 mA @ 208-277 Vac (RIBM01ZNDC)

Notes:
- Dry Contact Input Operation:
  Close dry contact to activate relay.
- If more than one dry contact input RIB shares a single dry contact input, DCI COM must be common.

DRY CONTACT INPUT TRACK MOUNT RELAY

RIBM013PNDC

Dry Contact Relay, 30 Amp 3PDT, Class 2 Dry Contact Input, 120 Vac Power Input, 4.00"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PDT 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: 20ms
Relay Status: Red LED On = Activated
Power Status: Green LED On = Activated
Dimensions: 2.88"H x 4.00"W x 1.50"D1/2.00"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000"
MT4 Mounting Track Sold Separately
Approvals: UL Component Recognized, UL916
C-UL, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:

30 Amp Resistive @ 300 Vac	Heavy Pilot Duty
30 Amp Resistive @ 28 Vdc	770 VA @ 120 Vac, 1 Phase
15 Amp Resistive @ 600 Vac	1158 VA @ 240 Vac, 1 Phase
7.5 HP @ 480 Vac, 3 Phase	1109 VA @ 277 Vac, 1 Phase
5 HP @ 240 Vac, 3 Phase	1640 VA @ 480 Vac, 1 Phase
3 HP @ 480-600 Vac, 1 Phase	1466 VA @ 240 Vac, 3 Phase
2 HP @ 240/277 Vac, 1 Phase	2122 VA @ 480 Vac, 3 Phase
1 HP @ 120 Vac, 1Phase	
20 Amp Ballast @ 277-480 Vac	
Not rated for Electronic Ballast	

Power Input:
95 mA @ 120 Vac

Notes:
- Dry Contact Input Operation:
  Close dry contact to activate relay.
- If more than one dry contact input RIB shares a single dry contact input, DCI COM must be common.

CURRENT SENSORS

RIB® CURRENT SENSORS, TRANSDUCERS, AND RELAY AND SENSOR COMBOS ARE PREPACKAGED TO MAKE INSTALLATION EASY

- Prepackaged: Sensor, LED indicators, and wires or terminals
- Some models available with 10 Amp or 20 Amp relay
- Sense up to 150 Amps
- Split and solid core models
- Fixed or adjustable thresholds
- Hi/Low voltage separation
- Transducers with voltage output or 4-20mA regulation available
- Enclosed or track mount
- HOA switches available
- UL Listed

LOW THRESHOLD CURRENT SWITCH FOR ECM APPLICATIONS

ECM SENSOR
VIEW VIDEO

RELAYS
RIB TRIFECTA
POWER SUPPLIES
CURRENT SENSORS

0.25 Amp Adjustable Threshold | Sense Loads up to 150 Amps | 10% Hysteresis
Split Core | UL Listed | Terminals | LEDs for Line & Load Indication

CURRENT SENSORS

SOLID AND SPLIT CORE AC SENSORS

MODEL #	UL	SENSING RANGE	TYPE	THRESHOLD	SENSOR CONTACT TYPE	SWITCHING VOLTAGE RANGE	MAX. SWITCHING CURRENT	SENSOR CONTACT TERMINATION	SENSOR OUTPUT *	SPEC PAGE
RIBXKF	•	.25-150 A	Solid	Fixed, .25 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16˝ 18 AWG Wire Leads		87
RIBXKTF	•	.25-150 A	Solid	Fixed, .25 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		87
RIBXKA	•	.50-150 A	Solid	Adjustable	Solid State Switch SPST	30 Vac/dc	.8 Amps Max	Wht/Yel 16˝ 18 AWG Wire Leads		87
RIBXKTA	•	.50-150 A	Solid	Adjustable	Solid State Switch SPST	30 Vac/dc	.8 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		87
RIBXKNUTA	•	.20-150 A	Solid	Adjustable	Solid State Switch SPST	30 Vac/dc	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		87
RIBXGHF	•	.50-150 A	Split	Fixed, .50 Amp	Solid State Switch SPST	120 Vac only	1 Amp Max	Wht/Blk 16˝ 18 AWG Wire Leads		87
RIBXGHTF	•	.50-150 A	Split	Fixed, .50 Amp	Solid State Switch SPST	120 Vac only	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		87
RIBXGHA	•	.75-150 A	Split	Adjustable	Solid State Switch SPST	120 Vac only	1 Amp Max	Wht/Blk 16˝ 18 AWG Wire Leads		87
RIBXGHTA	•	.75-150 A	Split	Adjustable	Solid State Switch SPST	120 Vac only	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		87
RIBXGF	•	.35-150 A	Split	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16˝ 18 AWG Wire Leads		88
RIBXGFL	•	.75-150 A	Split	Fixed, .75 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16˝ 18 AWG Wire Leads		88
RIBXGTF	•	.35-150 A	Split	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		88
RIBXGTFL	•	.75-150 A	Split	Fixed, .75 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		88
RIBXGA	•	.75-150 A	Split	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16˝ 18 AWG Wire Leads		88
RIBXGTA	•	.75-150 A	Split	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		88
RIBXGTA-ECM	•	.25-150 A	Split	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		88
RIBXGA-SCAL	•	3-150 A	Split	Self-Calibrating	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16˝ 18 AWG Wire Leads		88
RIBXGTA-SCAL	•	3-150 A	Split	Self-Calibrating	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		88
RIBXGTA-NC	•	.75-150 A	Split	Adjustable	Solid State Switch SPST	30 Vac/dc	.1 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		89
RIBXGTF-NC	•	.35-150 A	Split	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	.1 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		89
RIBXG21F	•	.50-150 A	Split	Fixed, .50 Amp	Solid State Switch SPST	120-277 Vac	1 Amp Max	Wht/Blk 16˝ 18 AWG Wire Leads		89
RIBXG21TF	•	.50-150 A	Split	Fixed, .50 Amp	Solid State Switch SPST	120-277 Vac	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		89
RIBXG21A	•	.75-150 A	Split	Adjustable	Solid State Switch SPST	120-277 Vac	1 Amp Max	Wht/Blk 16˝ 18 AWG Wire Leads		89
RIBXG21TA	•	.75-150 A	Split	Adjustable	Solid State Switch SPST	120-277 Vac	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		89
RIBXGNTF	•	.35-150 A	Split	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		90
RIBXGNTA	•	.75-150 A	Split	Fixed, .75 Amp	Solid State Switch SPST	30 Vac/dc	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		90
RIBXGNTF-125	•	.125-150 A	Split	Fixed, .125 Amp	Solid State Switch SPST	30 Vac/dc	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		90
RIBXKTV5-10	•	0-10 A	Solid	Analog				Terminal Strip, Accepts #14-22 AWG Wire	0-5 Vdc	90
RIBXKTV5-20	•	0-20 A	Solid	Analog				Terminal Strip, Accepts #14-22 AWG Wire	0-5 Vdc	90
RIBXKTV5-50	•	0-50 A	Solid	Analog				Terminal Strip, Accepts #14-22 AWG Wire	0-5 Vdc	90
RIBXKTV5-100	•	0-100 A	Solid	Analog				Terminal Strip, Accepts #14-22 AWG Wire	0-5 Vdc	90
RIBXK420-20	•	0-20 A	Solid	Analog				Red & Blk 16˝ 18 AWG Wire Leads	4-20 mA	91
RIBXK420-50	•	0-50 A	Solid	Analog				Red & Blk 16˝ 18 AWG Wire Leads	4-20 mA	91
RIBXK420-100	•	0-100 A	Solid	Analog				Red & Blk 16˝ 18 AWG Wire Leads	4-20 mA	91
RIBXGTV5-10	•	0-10 A	Split	Analog				Terminal Strip, Accepts #14-22 AWG Wire	4-20 mA	91
RIBXGTV5	•	0-20 A, 0-50 A, 0-100 A	Split	Analog				Terminal Strip, Accepts #14-22 AWG Wire	0-5 Vdc	92
RIBXGTV10	•	0-20 A, 0-50 A, 0-100 A	Split	Analog				Terminal Strip, Accepts #14-22 AWG Wire	0-10 Vdc	92
RIBXG420-20	•	0-20 A	Split	Analog				Red & Blk 16˝ 18 AWG Wire Leads	4-20 mA	93
RIBXG420-50	•	0-50 A	Split	Analog				Red & Blk 16˝ 18 AWG Wire Leads	4-20 mA	93
RIBXG420-100	•	0-100 A	Split	Analog				Red & Blk 16˝ 18 AWG Wire Leads	4-20 mA	93
RIBXGT420-RMS	•	0-20 A, 0-50 A, 0-100 A	Split	Analog				Terminal Strip, Accepts #14-22 AWG Wire	4-20 mA	94

T STYLE AC SENSORS

MODEL #	UL	SENSING RANGE	TYPE	THRESHOLD	SENSOR CONTACT TYPE	SWITCHING VOLTAGE RANGE	MAX. SWITCHING CURRENT	SENSOR CONTACT TERMINATION	SENSOR OUTPUT	SPEC PAGE
RIBXF	•	.50-30 A	Internal	Fixed, .50 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		95
RIBXA	•	.50-30 A	Internal	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		95
RIBXV	•	0-30 A	Internal	Analog				Terminal Strip, Accepts #14-22 AWG Wire	0-5 Vdc / 0-10 Vdc	95
RIBXRF	•	1.25-150 A	Solid	Fixed, 1.25 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		95
RIBXRA	•	1.25-150 A	Solid	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		95
RIBXJF	•	3-150 A	Split	Fixed, 3 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		96
RIBXJA	•	3-150 A	Split	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		96

UL = UL Listed - see data sheet for specific Listing * = 4-20 mA is Loop Powered

Refer to Housing Guide on page 201 or product data sheet for housing information.

CURRENT SENSOR & RELAY COMBINATIONS

ENCLOSED AC SENSORS WITH RELAYS

MODEL #	UL	COIL VOLTAGE	RELAY CONTACTS	OVERRIDE SWITCH	RESISTIVE	SENSING RANGE	TYPE ~	THRESHOLD	SENSOR CONTACT TYPE	SWITCHING VOLTAGE RANGE	MAX. SWITCHING CURRENT	SENSOR OUTPUT	SPEC PAGE
RIBHX24BF	•	24 Vac	1 SPST-N/O		20 A @ 277 Vac	.25-20 A	Internal	Fixed, .25 Amp	Solid State Switch Contact	30 Vac/dc	.1 Amps Max		97
RIBHX24BA	•	24 Vac	1 SPST-N/O		20 A @ 277 Vac	.25-20 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.1 Amps Max		97
RIBXLCF	•	10-30 Vac/dc	1 SPDT		10 A @ 277 Vac	.50-10 A	Internal	Fixed, .50 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		98
RIBXLCA	•	10-30 Vac/dc	1 SPDT		10 A @ 277 Vac	.50-10 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		98
RIBXLCV	•	10-30 Vac/dc	1 SPDT		10 A @ 277 Vac	0-10 A	Internal	Analog				0-5 Vdc / 0-10 Vdc	98
RIBXLCRF	•	10-30 Vac/dc	1 SPDT		10 A @ 277 Vac	1.25-150 A	External	Fixed, 1.25 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		98
RIBXLCRA	•	10-30 Vac/dc	1 SPDT		10 A @ 277 Vac	1.25-150 A	External	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		98
RIBXLCJF	•	10-30 Vac/dc	1 SPDT		10 A @ 277 Vac	3-150 A	External	Fixed, 3 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		98
RIBXLCJA	•	10-30 Vac/dc	1 SPDT		10 A @ 277 Vac	3-150 A	External	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		98
RIBXLCEA	•	10-30 Vac/dc	1 SPDT		5 A @ 277 Vac	.125 - 5 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		98
RIBXLCEV	•	10-30 Vac/dc	1 SPDT		5 A @ 277 Vac	0 - 5 A	Internal	Analog				0-5 Vdc / 0-10 Vdc	98
RIBXLSF	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	.50-10 A	Internal	Fixed, .50 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		99
RIBXLSA	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	.50-10 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		99
RIBXLSV	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	0 - 10 A	Internal	Analog				0-5 Vdc / 0-10 Vdc	99
RIBXLSRF	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	1.25-150 A	External	Fixed, 1.25 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		99
RIBXLSRA	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	1.25-150 A	External	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		99
RIBXLSJF	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	3-150 A	External	Fixed, 3 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		99
RIBXLSJA	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	3-150 A	External	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		99
RIBXLSEA	•	10-30 Vac/dc	1 SPST	1	5 A @ 277 Vac	.125 - 5 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		99
RIBXLSEV	•	10-30 Vac/dc	1 SPST	1	5 A @ 277 Vac	0 - 5 A	Internal	Analog				0-5 Vdc / 0-10 Vdc	99
RIBX24BF	•	24 Vac/dc	1 SPDT		20 A @ 277 Vac	.50-20 A	Internal	Fixed, .50 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		100
RIBX24BA	•	24 Vac/dc	1 SPDT		20 A @ 277 Vac	.50-20 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		100
RIBX24BV	•	24 Vac/dc	1 SPDT		20 A @ 277 Vac	0-20 A	Internal	Analog				0-5 Vdc / 0-10 Vdc	100
RIBX24SBF	•	24 Vac/dc	1 SPST	1	20 A @ 277 Vac	.50-20 A	Internal	Fixed, .50 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		100
RIBX24SBA	•	24 Vac/dc	1 SPST	1	20 A @ 277 Vac	.50-20 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		100
RIBX24SBV	•	24 Vac/dc	1 SPST	1	20 A @ 277 Vac	0-20 A	Internal	Analog				0-5 Vdc / 0-10 Vdc	100
RIBX243PV	•	24 Vac/dc	1 3PST		20 A @ 300 Vac	0-20 A	Internal	Analog				0-10 Vdc	103
RIBX243PF	•	24 Vac/dc	1 3PST		20 A @ 300 Vac	.50-20 A	Internal	Fixed, .50 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		103
RIBX243PA	•	24 Vac/dc	1 3PST		20 A @ 300 Vac	.50-20 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		104

DIN MOUNT AC SENSORS WITH RELAYS

MODEL #	UL	COIL VOLTAGE	RELAY CONTACTS	OVERRIDE SWITCH	RESISTIVE	SENSING RANGE	TYPE ~	THRESHOLD	SENSOR CONTACT TYPE	SWITCHING VOLTAGE RANGE	MAX. SWITCHING CURRENT	NO SOCKET	TRACK MOUNT ^	SPEC PAGE
RIBRXLCF-NS	•	10-30 Vac/dc	1 SPST		10 A @ 277 Vac	.25-10 A	Internal	Fixed, .25 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max	•	DIN Rail	101
RIBRXLSA-NS	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	.25-10 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max	•	DIN Rail	101
RIBRXLCF	•	10-30 Vac/dc	1 SPST		10 A @ 277 Vac	.25-10 A	Internal	Fixed, .25 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		DIN Rail	102
RIBRXLSA	•	10-30 Vac/dc	1 SPST	1	10 A @ 277 Vac	.25-10 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		DIN Rail	102

TRACK MOUNT AC SENSORS WITH RELAYS

MODEL #	UL	COIL VOLTAGE	RELAY CONTACTS	OVERRIDE SWITCH	RESISTIVE	SENSING RANGE	TYPE ~	THRESHOLD	SENSOR CONTACT TYPE	SWITCHING VOLTAGE RANGE	MAX. SWITCHING CURRENT	SENSOR OUTPUT	TRACK MOUNT ^	SPEC PAGE
RIBMX24BF	•	24 Vac/dc	1 SPDT		20 A @ 277 Vac	.50-20 A	Internal	Fixed, .50 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		MT4 Series	105
RIBMX24BA	•	24 Vac/dc	1 SPDT		20 A @ 277 Vac	.50-20 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		MT4 Series	105
RIBMX24SBF	•	24 Vac/dc	1 SPST	1	20 A @ 277 Vac	.50-20 A	Internal	Fixed, .50 Amp	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		MT4 Series	105
RIBMX24SBA	•	24 Vac/dc	1 SPST	1	20 A @ 277 Vac	.50-20 A	Internal	Adjustable	Solid State Switch Contact	30 Vac/dc	.4 Amps Max		MT4 Series	105
RIBMX24SBV	•	24 Vac/dc	1 SPST	1	20 A @ 277 Vac	0-20 A	Internal	Analog				0-5 Vdc / 0-10 Vdc	MT4 Series	105

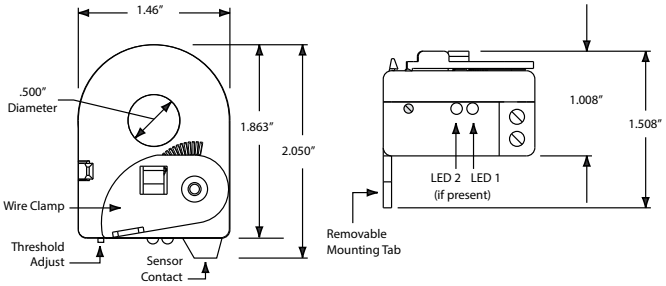
UL = UL Listed - see data sheet for specific Listing

~ = Internal current sensor monitors current through common contact of relay

^ = Track mount sold separately

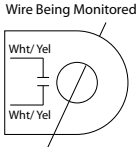
RIBXK Series

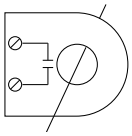
Current Switches, Solid Core, Fixed or Adjustable, Up to 150 Amps Sensing Range, Terminal Strip or Wire Lead Output




RIBXKA


RIBXKTF





SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Max Sense Voltage: 600 Vac
Approvals: UL Listed, C-UL, CE, RoH, UL916, S (All models)
UL864, California State Fire Marshal (RIBXKTF, RIBXKTA)
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Contact Output: Current below threshold: Open ; Current above threshold: Closed
Origin: Made of US and non-US parts

Sensor Contact:
- Solid State Contact
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), voltage drop
  < .3 Vac/dc @ .1 Amp
  < 1.6 Vac/dc @ .4 Amp

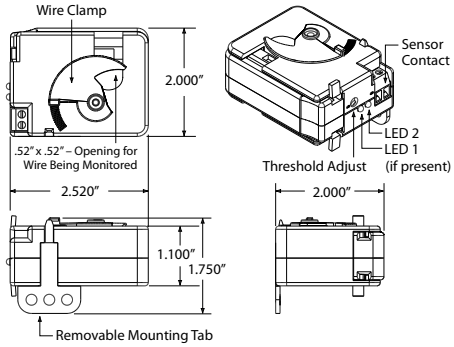
RIBXK SERIES SELECTION GUIDE

Model#	Sensing Range	Type	Threshold	Sensor Contact Type	Switching Voltage Range	Maximum Switching Current	Sensor Contact Termination	LED 1	LED 2
RIBXKF	.25-150 Amp	Solid Core	Fixed, .25 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16″ 18 AWG Wire Leads		
RIBXKTF	.25-150 Amp	Solid Core	Fixed, .25 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		
RIBXKA	.50-150 Amp	Solid Core	Adjustable	Solid State Switch SPST	30 Vac/dc	.8 Amps Max	Wht/Yel 16″ 18 AWG Wire Leads	Over Trip Point	Under Trip Point
RIBXKTA	.50-150 Amp	Solid Core	Adjustable	Solid State Switch SPST	30 Vac/dc	.8 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	Under Trip Point
RIBXKNUTA	.2-150 Amp	Solid Core	Adjustable	Solid State Switch SPST	30 Vac/dc	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	Under Trip Point

AC CURRENT SWITCHES

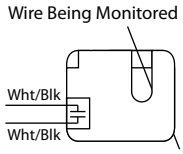
RIBXGH Series

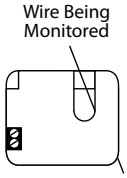
Current Switches, Split Core, Fixed or Adjustable, Up to 150 Amps Sensing Range, 120 Vac Switching Voltage, Terminal Strip or Wire Lead Output




RIBXGHF


RIBXGHTF





SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
***Temperature Derating:** 1 Amp up to 50° C, 0.5 Amp up to 60° C
Max Sense Voltage: 600 Vac
Sensor Contact Status: Current below threshold: Open
Current above threshold: Closed

Origin: Made of US and non-US parts
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Mounting/ Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.

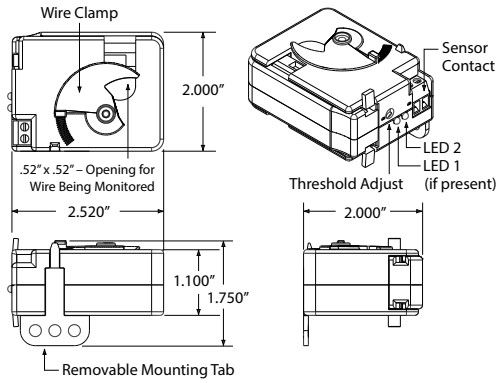
Notes:
- Use Sensor Contact to switch 120 Vac loads only.
- For testing purposes, Sensor Contact will measure approximately 250 Ω when closed and > 10 MΩ when open.
- The Sensor Contact is a Solid State Contact.

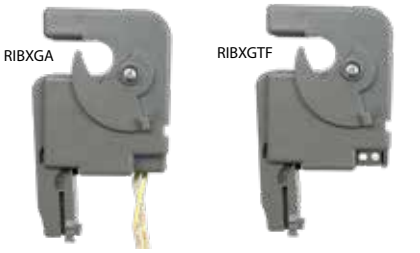
RIBXGH SERIES SELECTION GUIDE

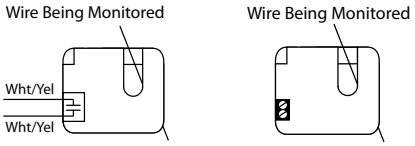
Model#	Sensing Range	Type	Threshold	Sensor Contact Type	Switching Voltage Range	Maximum Switching Current	Sensor Contact Termination	LED 1	LED 2
RIBXGHF	.50-150 Amp	Split Core	Fixed, .50 Amp	Solid State Switch SPST	120 Vac Only*	1 Amp Max	Wht/Blk 16″ 18 AWG Wire Leads		
RIBXGHTF	.50-150 Amp	Split Core	Fixed, .50 Amp	Solid State Switch SPST	120 Vac Only*	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire		
RIBXGHA	.75-150 Amp	Split Core	Adjustable	Solid State Switch SPST	120 Vac Only*	1 Amp Max	Wht/Blk 16″ 18 AWG Wire Leads	Over Trip Point	Under Trip Point
RIBXGHTA	.75-150 Amp	Split Core	Adjustable	Solid State Switch SPST	120 Vac Only*	1 Amp Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	Under Trip Point

RIBXG Series

Current Switches, Split Core, Fixed, Adjustable, or Self-Calibrated, Up to 150 Amps Sensing Range, Terminal Strip or Wire Lead Output





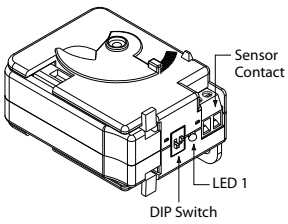


SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Max Sense Voltage: 600 Vac
Approvals: UL Listed, C-UL, CE, RoHS, UL916, (All models)
UL864, California State Fire Marshal (RIBXGTF, RIBXGTA, RIBXGTA-SCAL, RIBXGA-ECM)
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Contact Status: Current below threshold: Open
Current above threshold: Closed
Origin: Made of US and non-US parts

Sensor Contact:
- Solid State Contact
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), voltage drop
  < .3 Vac/dc @ .1 Amp
  < 1.6 Vac/dc @ .4 Amp

SELF-CALIBRATING AC SWITCHES (Models with -SCAL Suffix)



-SCAL LED TABLE	
LED Off	No Current
Two Winks	Current Below Range
Three Winks	Current In Range
Four Winks	Current Above Range
Continuous Winks	Calibration in Progress

The SCAL unit begins the 30 second self-calibration process the first time current is applied in the operating range. The threshold is then set. Subsequent calibrations may be performed by moving SW1 to the position opposite of its current position with or without current applied (hands can be safely away from live voltage). Once current begins flowing, or if it already is, the calibration process will begin. At the end of the 30 seconds, amperage will be read and set as the threshold. SW2 in the ON position provides a 15% (+/-3%) differential. In the OFF position, it provides a 25% (+/-3%) differential. SW2 can be selected at anytime and does not affect the threshold setting. Current in-range closes the sensor contact. Current above or below range opens the sensor contact.

Example: With a current of 10 amps set as the threshold and a 15% differential, sensor contact will be closed between 8.5 amps and 11.5 amps and open outside of this range. A small amount of hysteresis is provided to prevent dithering near the differential limits.

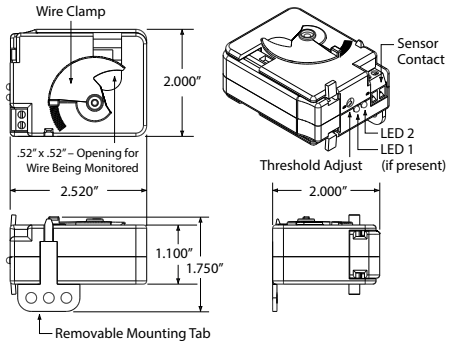
RIBXG SERIES SELECTION GUIDE

Model#	Sensing Range	Type	Threshold	Sensor Contact Type	Switching Voltage Range	Maximum Switching Current	Sensor Contact Termination	LED 1	LED 2
RIBXGF	.35-150 Amp	Split Core	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16″ 18 AWG Wire Leads		
RIBXGFL*	.75-150 Amp	Split Core	Fixed, .75 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16″ 18 AWG Wire Leads	Over Trip Point	
RIBXGTF	.35-150 Amp	Split Core	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		
RIBXGTFL*	.75-150 Amp	Split Core	Fixed, .75 Amp	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	
RIBXGA	.75-150 Amp	Split Core	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16″ 18 AWG Wire Leads	Over Trip Point	Under Trip Point
RIBXGTA	.75-150 Amp	Split Core	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	Under Trip Point
RIBXGA-SCAL	3-150 Amp	Split Core	Self-Cal.	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Wht/Yel 16″ 18 AWG Wire Leads	See -SCAL Table	
RIBXGTA-SCAL	3-150 Amp	Split Core	Self-Cal.	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire	See -SCAL Table	
RIBXGTA-ECM	.25-150 Amp	Split Core	Adjustable	Solid State Switch SPST	30 Vac/dc	.4 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	Load Current Detcted

* = Not approved by California State Fire Marshal

RIBXG-NC Series

Current Switches, Split Core, Fixed or Adjustable, Up to 150 Amps Sensing Range, Normally Closed Terminal Strip or Wire Lead Output



SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Max Sense Voltage: 600 Vac
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Contact Status: Current below threshold: Closed
Current above threshold: Open
Origin: Made of US and non-US parts

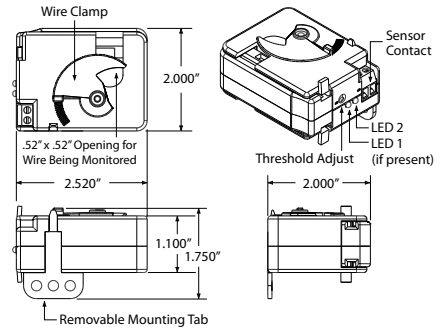
Sensor Contact:
- Solid State Contact
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), resistance 11.2 ohm

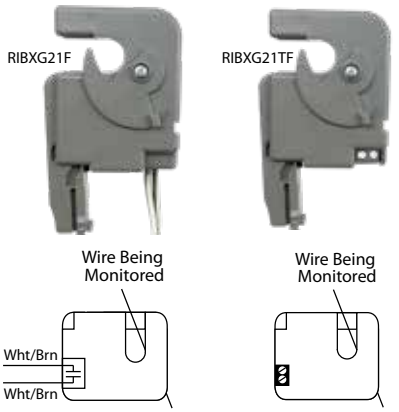
RIBXG-NC SERIES SELECTION GUIDE

Model#	Sensing Range	Type	Threshold	Sensor Contact Type	Switching Voltage Range	Maximum Switching Current	Sensor Contact Termination	LED 1	LED 2
RIBXGTF-NC	.35-150 Amp	Split Core	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	.1 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		
RIBXGTA-NC	.75-150 Amp	Split Core	Adjustable	Solid State Switch SPST	30 Vac/dc	.1 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	Under Trip Point

RIBXG21 Series

Current Switches, Split Core, Fixed or Adjustable, Up to 150 Amps Sensing Range, 120-277 Vac Switching Voltage, Terminal Strip or Wire Lead Output





SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
* **Temperature Derating:** 1 Amp up to 50˚ C, 0.5 Amp up to 60˚ C
Max Sense Voltage: 600 Vac
Sensor Contact Status: Monitored current below threshold: Open
Monitored current above threshold: Closed
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Mounting/Installation: Unit can be secured using the supplied Mounting Tab, the adjustable Wire Clamp, or both.
Origin: Made of US and non-US parts

Notes:
- Use Sensor Contact to switch 120-277 Vac loads only.
- For testing purposes, Sensor Contact will measure approximately 250 Ω when closed and > 10 MΩ when open.
- The Sensor Contact is a Solid State Contact.

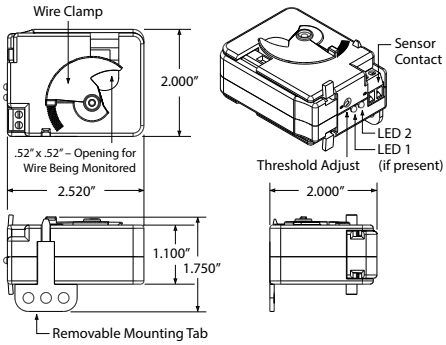
RIBXG21 SERIES SELECTION GUIDE

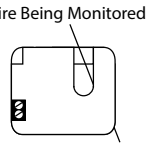
Model#	Sensing Range	Type	Threshold	Sensor Contact Type	Switching Voltage Range	Maximum Switching Current	Sensor Contact Termination	LED 1	LED 2
RIBXG21F	.50-150 Amps AC	Split Core	Fixed, .50 Amp AC	Solid State Switch SPST	120-277 Vac	1 Amp AC *	Wht/Blk 16˝ 18 AWG Wire Leads		
RIBXG21TF	.50-150 Amps AC	Split Core	Fixed, .50 Amp AC	Solid State Switch SPST	120-277 Vac	1 Amp AC *	Terminal Strip, Accepts #14-22 AWG Wire		
RIBXG21A	.75-150 Amps AC	Split Core	Adjustable	Solid State Switch SPST	120-277 Vac	1 Amp AC *	Wht/Blk 16˝ 18 AWG Wire Leads	Over Threshold	Under Threshold
RIBXG21TA	.75-150 Amps AC	Split Core	Adjustable	Solid State Switch SPST	120-277 Vac	1 Amp AC *	Terminal Strip, Accepts #14-22 AWG Wire	Over Threshold	Under Threshold

AC CURRENT SWITCHES

RIBXGN Series

Current Switches, Split Core, Fixed or Adjustable, Up to 150 Amps Sensing Range, 1 Amps Switching Current, Terminal Strip Output





SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Max Sense Voltage: 600 Vac
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Contact Status: Current below threshold: Open
Current above threshold: Closed
Origin: Made of US and non-US parts

Sensor Contact:
- Solid State Contact
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), resistance 0.26 ohm

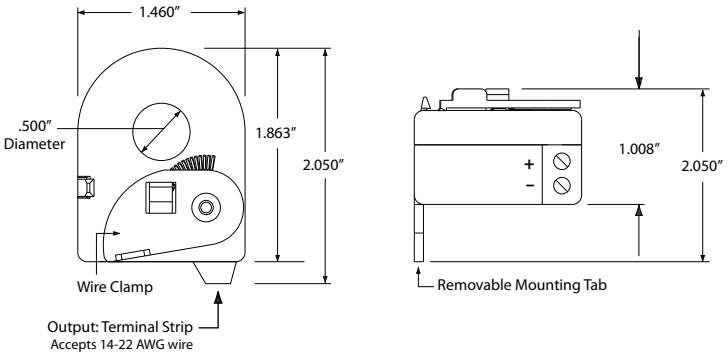
RIBXGN SERIES SELECTION GUIDE

Model#	Sensing Range	Type	Threshold	Sensor Contact Type	Switching Voltage Range	Maximum Switching Current	Sensor Contact Termination	LED 1	LED 2
RIBXGNTF	.35-150 Amp	Split Core	Fixed, .35 Amp	Solid State Switch SPST	30 Vac/dc	1 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		
RIBXGNTA	.75-150 Amp	Split Core	Adjustable	Solid State Switch SPST	30 Vac/dc	1 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire	Over Trip Point	Under Trip Point
RIBXGNTF-125	.125-150 Amp	Split Core	Fixed, .125 Amp	Solid State Switch SPST	30 Vac/dc	1 Amps Max	Terminal Strip, Accepts #14-22 AWG Wire		

AC TRANSDUCERS

RIBXKTV Series

Current Transducers, Solid Core, Up to 100 Amps Sensing Range, 0-5 Vdc Terminal Strip Sensor Output



SPECIFICATIONS

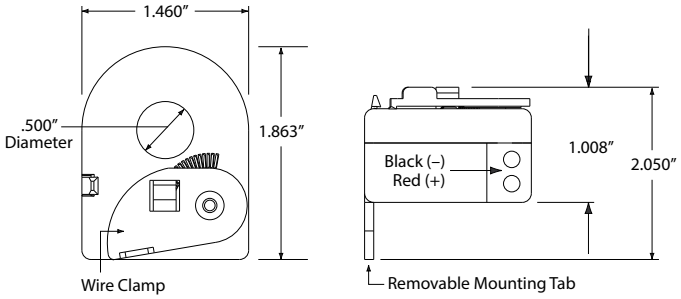
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Accuracy: 96.8% Full Scale
Loading: RIBXKTV5-10, 1% Error @ 180 kΩ
RIBXKTV5-20, 1% Error @ 90 kΩ
RIBXKTV5-50, 1% Error @ 40 kΩ
RIBXKTV5-100, 1% Error @ 15 kΩ
Max Sense Voltage: 600 Vac
Approvals: UL Listed, UL916, UL864, California State Fire Marshal, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Type: Solid core with voltage output
Origin: Made of US and non-US parts

RIBXKTV SERIES SELECTION GUIDE

Model#	Sensing Range	Sensor Output
RIBXKTV5-10	0-10 Amp	0-5 Vdc (Terminal Strip, Accepts #14-22 AWG Wire)
RIBXKTV5-20	0-20 Amp	0-5 Vdc (Terminal Strip, Accepts #14-22 AWG Wire)
RIBXKTV5-50	0-50 Amp	0-5 Vdc (Terminal Strip, Accepts #14-22 AWG Wire)
RIBXKTV5-100	0-100 Amp	0-5 Vdc (Terminal Strip, Accepts #14-22 AWG Wire)

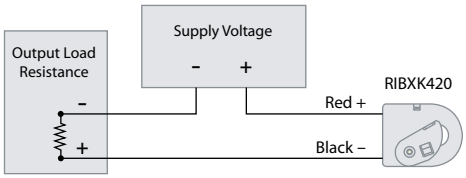
RIBXK420 Series

Current Transducers, Solid Core, Up to 100 Amps Sensing Range, 4-20 mA Wire Lead Sensor Output



SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Wires: Red (positive) & Black (negative), 16˝, 18 AWG, 600V Rated
Sensor Type: Internal, with 4-20 mA Transmitter Output
Sensor Range: 0-20 Amps, 0-50 Amps, or 0-100 Amps (See Selection Guide Below)
Accuracy: 96.4% FS
Linearity: 99% FS (25%-100% Span)
Max Output Current: 30 mA
Max Sense Voltage: 600 Vac
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Origin: Made of US and non-US parts



RIBXK420 SERIES SELECTION GUIDE

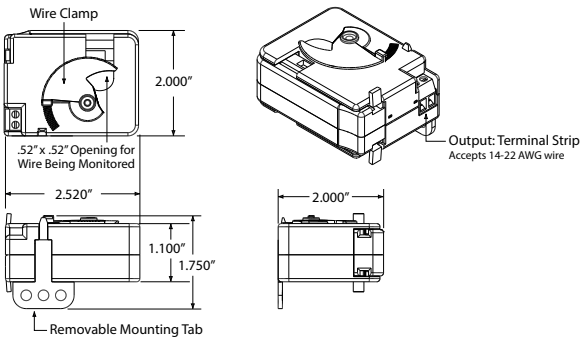
Model#	Sensing Range	Sensor Output
RIBXK420-20	0-20 Amps	Loop Powered 4-20 mA Transmitter (Pre-Wired)
RIBXK420-50	0-50 Amps	Loop Powered 4-20 mA Transmitter (Pre-Wired)
RIBXK420-100	0-100 Amps	Loop Powered 4-20 mA Transmitter (Pre-Wired)

OUTPUT LOAD RESISTANCE	SUPPLY VOLTAGE	
Maximum	Minimum	Maximum
700 ohms	26 Vdc	35 Vdc
600 ohms	24 Vdc	35 Vdc
500 ohms	21 Vdc	35 Vdc
400 ohms	19 Vdc	30 Vdc
300 ohms	17 Vdc	30 Vdc
250 ohms	16 Vdc	28 Vdc
200 ohms	14 Vdc	28 Vdc
100 ohms	12 Vdc	28 Vdc
50 ohms	11 Vdc	28 Vdc

AC TRANSDUCERS

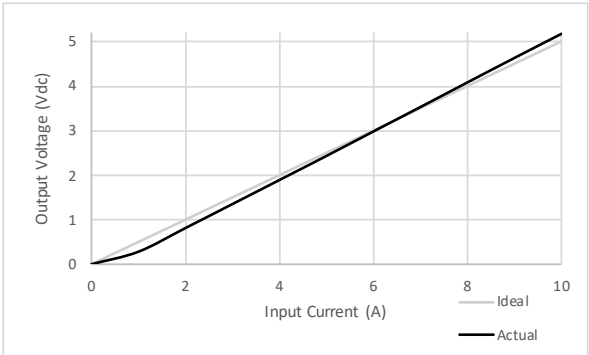
RIBXGTV5-10

Current Transducer, Split Core, 0-10 Amp, 0-5 Vdc Terminal Output



SPECIFICATIONS

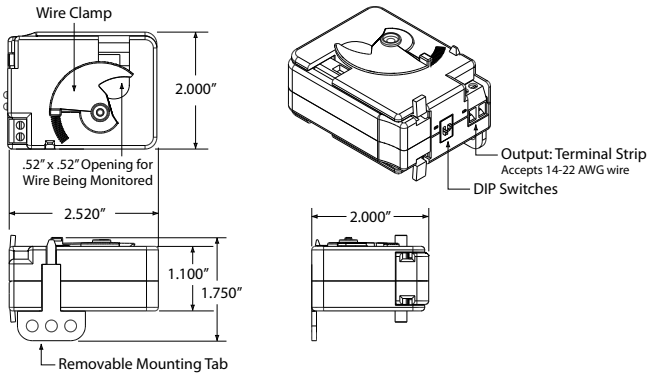
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Accuracy: 98.3% Full Scale
Loading: 5% Error @ 58 kΩ
Max Sense Voltage: 600 Vac
Approvals: UL Listed, UL916, UL864, California State Fire Marshal, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Type: Split core with voltage output
Origin: Made of US and non-US parts



AC TRANSDUCER

RIBXGTV5

Current Transducer, Split Core, Multi-Range (0-20 Amp, 50 Amp, 100 Amp), 0-5 Vdc Terminal Output



DIP SWITCH		
1	2	Sensing Range
OFF	OFF	0-20 Amp
OFF	ON	0-50 Amp
ON	OFF	0-100 Amp

SPECIFICATIONS

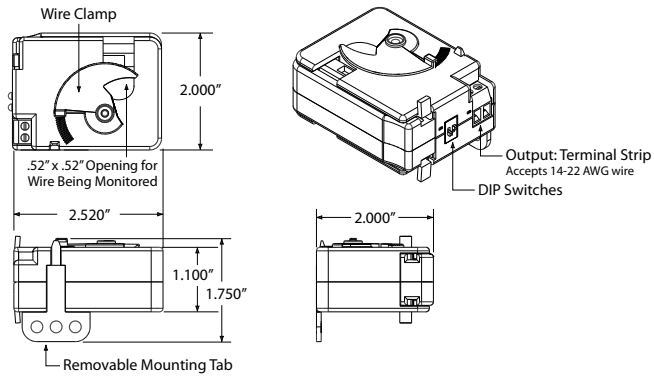
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Accuracy: 98.3% Full Scale
Loading: RIBXGTV5, (0-20 Amp), 5% Error @ 33 kΩ
RIBXGTV5, (0-50 Amp), 5% Error @ 15 kΩ
RIBXGTV5, (0-100 Amp), 5% Error @ 6.8 kΩ
Max Sense Voltage: 600 Vac
Origin: Made of US and non-US parts

Approvals: UL Listed, UL916, UL864, California State Fire Marshal, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Type: Split core with voltage output

AC TRANSDUCER

RIBXGTV10

Current Transducer, Split Core, Multi-Range (0-20 Amp, 50 Amp, 100 Amp), 0-10 Vdc Terminal Output



DIP SWITCH		
1	2	Sensing Range
OFF	OFF	0-20 Amp
OFF	ON	0-50 Amp
ON	OFF	0-100 Amp

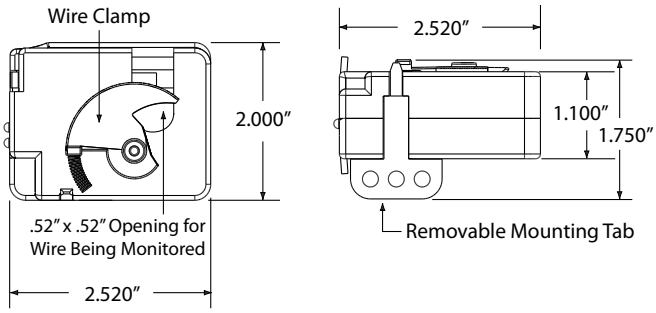
SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Accuracy: 98.8% Full Scale
Loading: RIBXGTV10, (0-20 Amp), 5% Error @ 60.4 kΩ
RIBXGTV10, (0-50 Amp), 5% Error @ 25.24 kΩ
RIBXGTV10, (0-100 Amp), 5% Error @ 13.65 kΩ
Max Sense Voltage: 600 Vac
Approvals: UL Listed, UL916, UL864, California State Fire Marshal, C-UL, CE, RoHS

Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Sensor Type: Split core with voltage output
Origin: Made of US and non-US parts

RIBXG420 Series

Current Transducers, Split Core, Up to 100 Amps Sensing Range, 4-20 mA Wire Lead Sensor Output

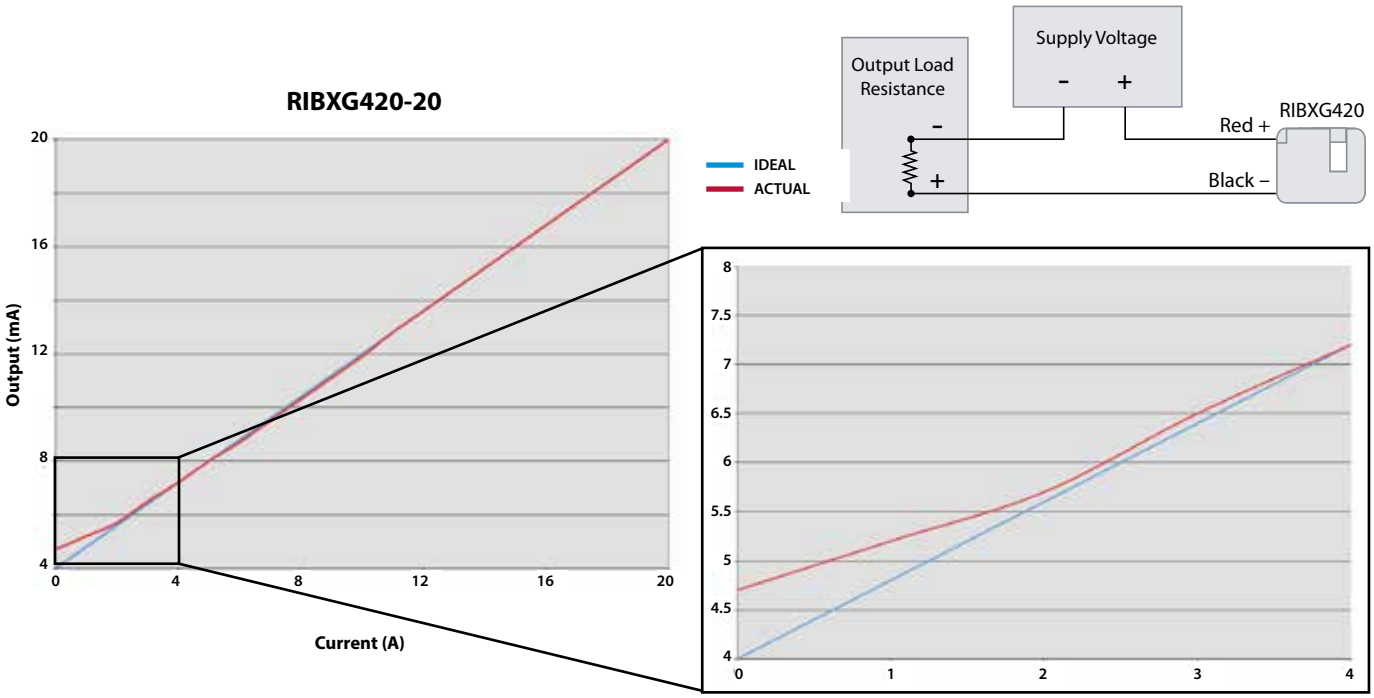


SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Wires: Red (positive) & Black (negative), 16″, 18 AWG, 600V Rated
Sensor Type: Internal, with 4-20 mA Transmitter Output
Sensor Range: 0-20 Amps, 0-50 Amps, or 0-100 Amps (See Selection Guide Below)
Accuracy: Refer to chart below.
Linearity: 99% FS (20%-100% Span)
Max Output Current: 30 mA
Max Sense Voltage: 600 Vac
Approvals: UL Listed, UL508, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.
Origin: Made of US and non-US parts

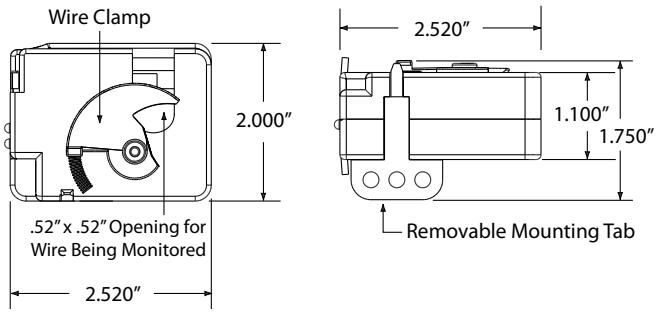
OUTPUT LOAD RESISTANCE	SUPPLY VOLTAGE	
Maximum	Minimum	Maximum
800 ohms	24 Vdc	35 Vdc
500 ohms	18 Vdc	35 Vdc
350 ohms	15 Vdc	35 Vdc
250 ohms	13 Vdc	35 Vdc
200 ohms	12 Vdc	35 Vdc
100 ohms	10 Vdc	35 Vdc
50 ohms	9 Vdc	35 Vdc

RIBXG420 SERIES SELECTION GUIDE			ACCURACY		
Model#	Sensing Range	Sensor Output	Span 20% – 100%	Span 10% – 100%	Span 0% – 100%
RIBXG420-20	0-20 Amps	Loop Powered 4-20 mA Transmitter (Pre-Wired)	99%	99%	95%
RIBXG420-50	0-50 Amps	Loop Powered 4-20 mA Transmitter (Pre-Wired)	99%	97.5%	92%
RIBXG420-100	0-100 Amps	Loop Powered 4-20 mA Transmitter (Pre-Wired)	99%	97%	91%



RIBXGT420-RMS

VFD Compatible True RMS Current Transducer, Split Core, Multi-Range (0-10, 20, and 50A), 4-20 mA Terminal Output



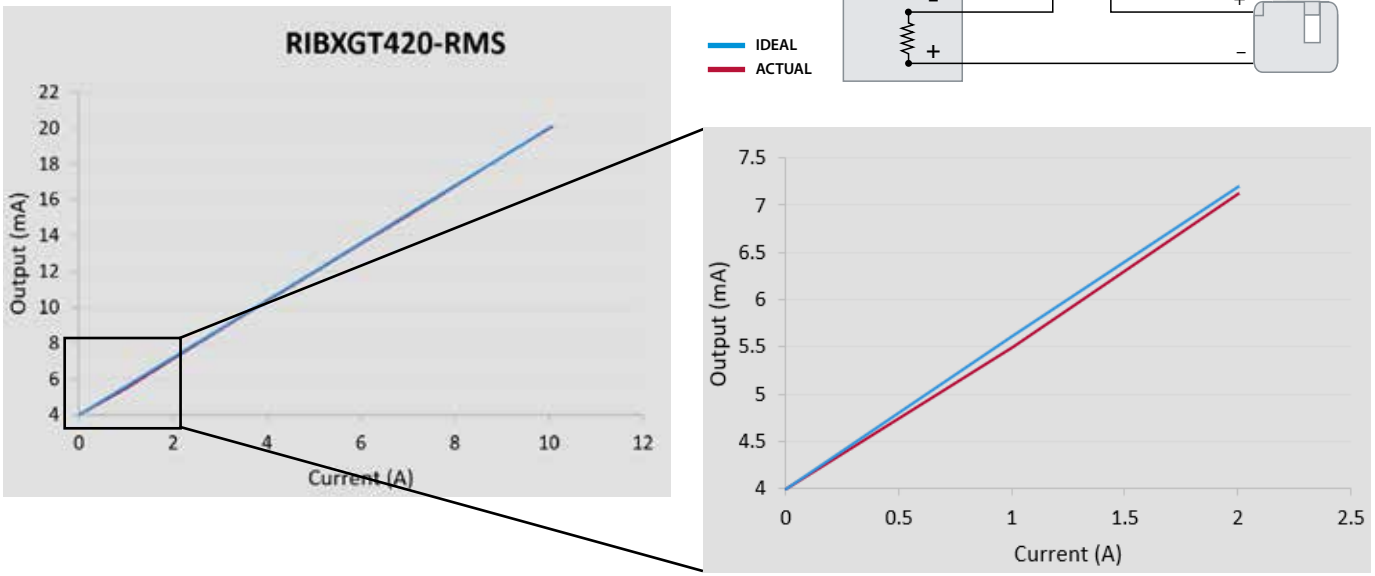
SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Sensor Type: Internal, with 4-20 mA Transmitter Output
Sensor Range: 0-10 Amps, 0-20 Amps, or 0-50 Amps (See Selection Guide Below)
Accuracy: ± 2% FS (5% - 100% Span)
Max Sense Voltage: 600 Vac
Frequency: 10-400 Hz
Approvals: UL Listed, UL508, C-UL, CE, RoHS
Mounting/Installation: Removable mounting tab provided. The wire clamp locks against the wire being monitored, securing the unit in place.

OUTPUT LOAD RESISTANCE	SUPPLY VOLTAGE	
Maximum	Minimum	Maximum
800 ohms	24 Vdc	35 Vdc
500 ohms	18 Vdc	35 Vdc
350 ohms	15 Vdc	35 Vdc
250 ohms	13 Vdc	35 Vdc
200 ohms	12 Vdc	35 Vdc
100 ohms	10 Vdc	35 Vdc
50 ohms	9 Vdc	35 Vdc

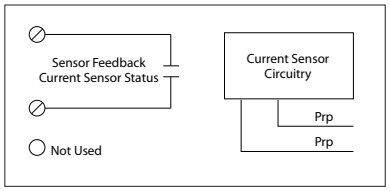
True RMS: True RMS current transducers can measure the current of waveforms that are not purely sinusoidal. This enables them to be used in applications involving VFDs, phase angle dimmers, switching power supplies and more.

DIP Switch 1	DIP Switch 2	Sensing Range
OFF	OFF	0-10A
OFF	ON	0-20A
ON	OFF	0-50A

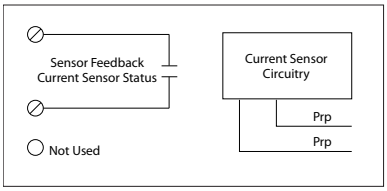


AC CURRENT SWITCHES

RIBXF
Current Switch, Fixed, 0.50-30 Amp, NEMA 1 Housing



RIBXA
Current Switch, Adjustable, 0.50-30 Amp, NEMA 1 Housing



SPECIFICATIONS

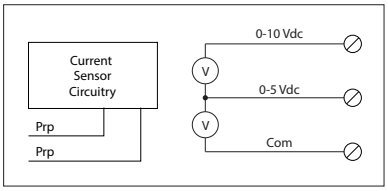
Operating Temperature: -30 to 140˚ F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Sensor Type: Internal, with contact status

Sensor Threshold: Fixed, .5 Amps (RIBXF); Adjustable, .50-30 Amps (RIBXA)
Sensor Range: .50-30 Amps
Max Sense Voltage: 600 Vac
Sensor Contact Status: Current below threshold: Open / LED OFF
Current above threshold: Closed / LED ON

Sensor Contact:
- Solid State Contact
- 30 Vac/dc, .4 Amp Max.
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

AC TRANSDUCER

RIBXV
Current Transducer, 0-30 Amp, Analog, 0-5 Vdc/0-10 Vdc Output, NEMA 1 Housing



SPECIFICATIONS

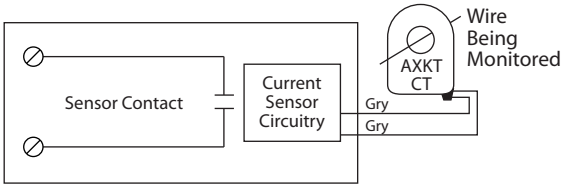
Operating Temperature: -30 to 140˚ F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1

Sensor Type: Internal, with voltage output
Sensor Range: 0-30 Amps
Max Sense Voltage: 600 Vac

Sensor Output:
- Voltage output is proportional to current sensor range.
- Min. Input Impedance = 30K ohms
- Accuracy +/– 3% full scale
- Vripple < 10m Vac

AC CURRENT SWITCHES

RIBXRF
Current Switch, Solid Remote, Fixed, 1.25-150 Amp



RIBXRA
Current Switch, Solid Remote, Adjustable, 1.25-150 Amp

SPECIFICATIONS

Operating Temperature: -30 to 140˚ F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Sensor Type: External, with contact status
Sensor Threshold: Fixed, 1.25 Amps (RIBXRF)
Adjustable, 1.25-150 Amps (RIBXRA)

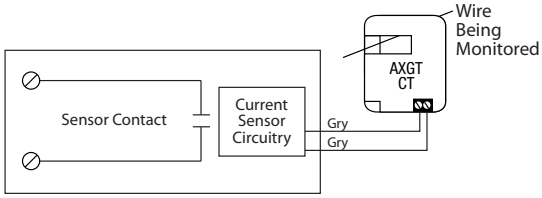
Sensor Range: 1.25-150 Amps
Max Sense Voltage: 600 Vac
Sensor Contact Status: Current below threshold: Open / LED OFF
Current above threshold: Closed / LED ON

Sensor Contact:
- Solid State Contact
- 30 Vac/dc, .4 Amp Max.
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

AC CURRENT SWITCH

RIBXJF

Current Switch, Split Ring Remote, Fixed, 3-150 Amp



SPECIFICATIONS

Operating Temperature: -30 to 140˚ F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Remote Dimensions: (Outside) 2.52˝ x 2.00˝, (Inside) .52˝ x .52˝
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Sensor Type: External, with contact status

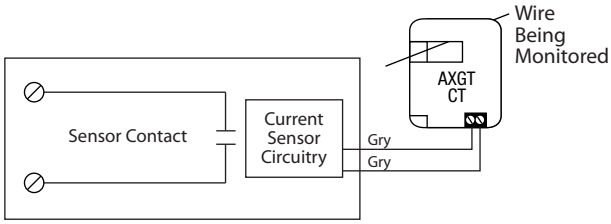
Sensor Threshold: Fixed, 3 Amps
Sensor Range: 3-150 Amps
Max Sense Voltage: 600 Vac
Sensor Contact Status: Current below threshold: Open / LED OFF
Current above threshold: Closed / LED ON

Sensor Contact:
- Solid State Contact
- 30 Vac/dc, .4 Amp Max.
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

AC CURRENT SWITCH

RIBXJA

Current Switch, Split Ring Remote, Adjustable, 3-150 Amp



SPECIFICATIONS

Operating Temperature: -30 to 140˚ F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL Accepted for Use in Plenum, NEMA 1
Housing Rating: External, with contact status
Sensor Type: Adjustable, 3-150 Amps
Sensor Threshold: 3-150 Amps

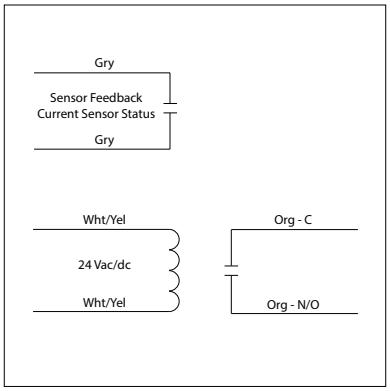
Sensor Range: 600 Vac
Max Sense Voltage: Current below threshold: Open / LED OFF
Sensor Contact Status: Current above threshold: Closed / LED ON

Sensor Contact:
- Solid State Contact
- 30 Vac/dc, .4 Amp Max.
- When sensor contact is off (open), leakage <30 uA @ 30Vac/dc
- When sensor contact is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

RELAY & AC CURRENT SWITCH COMBO

RIBHX24BF

Current Switch and Relay Combination, 20 Amp SPST-N/O,
Fixed, 24 Vac/dc Coil, NEMA 1 Housing



RIBHX24BF-RD
- Red housing

RIBHX24BF-N4
- NEMA 4X housing, UL508 only

SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 20ms
Relay Status: Red LED On = Activated
Current Sensor Status Pink LED On = Current Over Trip Point (0.25 Amp)
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No

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)
1,110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Sensor Contact:
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

Coil Current:
128 mA @ 24 Vac
71 mA @ 30 Vdc

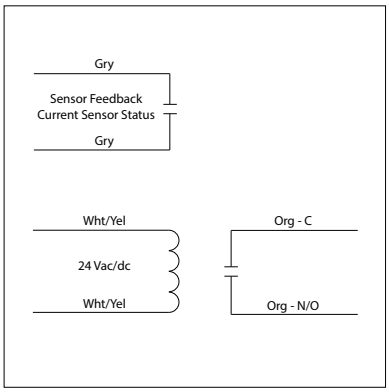
Sensor Type: Internal, with contact status
Sensor Threshold: Fixed, .25 Amp
Sensor Range: .25-20 Amps
Sensor Feedback Output: Solid State Contact 30 Vac/dc, 100 mA

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac
Pull In = 18 Vac

RELAY & AC CURRENT SWITCH COMBO

RIBHX24BA

Current Switch and Relay Combination, 20 Amp SPST-N/O,
Adjustable, 24 Vac/dc Coil, NEMA 1 Housing



RIBHX24BA-RD
- Red housing

SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 20ms
Relay Status: Red or Green LED On = Activated
Current Sensor Status Green LED On = Current Over Trip Point Adjustable
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No

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)
1,110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Sensor Contact:
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp

Coil Current:
128 mA @ 24 Vac
71 mA @ 30 Vdc

Sensor Type: Internal, with contact status
Sensor Threshold: Adjustable
Sensor Range: .25-20 Amps
Sensor Feedback Output: Solid State Contact 30 Vac/dc, 100 mA

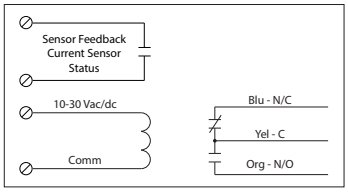
Coil Voltage Input:
24 Vac ; 50-60 Hz
Drop Out = 3 Vac
Pull In = 18 Vac

RELAY & AC CURRENT SWITCH COMBOS

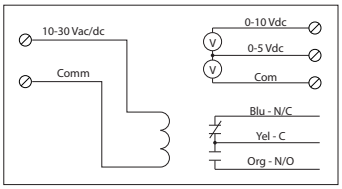
RIBXLC Series

Current Switches or Transducers with Relay, 5 or 10 Amp SPDT, 10-30 Vac/dc Coil, Fixed, Adjustable, or Analog, Up to 150 Amps Sensing Range, Terminal Strip or Wire Lead Output

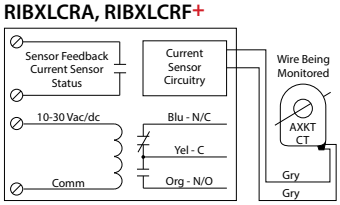
RIBXLCA, RIBXLCF, RIBXLCEA+



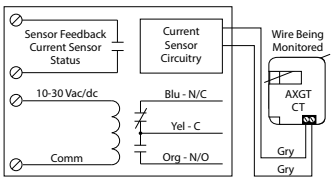
RIBXLCV, RIBXLCEV^



RIBXLCRA, RIBXLCRF+



RIBXLCJA, RIBXLCJF+



RIBXLCA

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: 20ms
Relay Status: Red LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
UL Accepted for Use in Plenum, NEMA 1
Housing Rating: Yes
Gold Flash: No
Override Switch:

Coil Current:
33 mA @ 10 Vac
35 mA @ 12 Vac
46 mA @ 24 Vac
55 mA @ 30 Vac
13 mA @ 10 Vdc
15 mA @ 12 Vdc
18 mA @ 24 Vdc
20 mA @ 30 Vdc

Coil Voltage Input:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

+ Sensor Contact:
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

^ Sensor Feedback Output:
- Voltage output is proportional to current sensor range.
- Min. Input Impedance = 30K ohms
- Accuracy +/– 3% full scale
- Vripple < 10m Vac

Notes:
- Models AXKT and AXGT CT remotes do not have contact closure circuitry and only work in conjunction with RIBXLCR and RIBXLCJ models, respectively.

RIBXLC SERIES SELECTION GUIDE

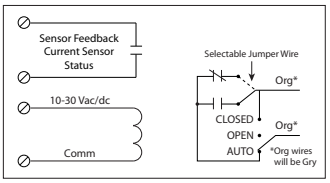
Model#	Sensing Range	Type *	Threshold	Sensor Output	Remote Style	Resistive	Contact Ratings
RIBXLCF ECMs	.50-10 Amps	Internal w/ contact status	Fixed, .50 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp		10 Amp	10 Amp Resistive @ 120-277 Vac 10 Amp Resistive @ 28 Vdc 480 VA Pilot Duty @ 240-277 Vac 480 VA Ballast @ 277 Vac *Not rated for Electronic Ballast* 600 Watt Tungsten @ 120 Vac (N/O) 240 Watt Tungsten @ 120 Vac (N/C) 1/3 HP @ 120-240 Vac (N/O) 1/6 HP @ 120-240 Vac (N/C) 1/4 HP @ 277 Vac (N/O) 1/8 HP @ 277 Vac (N/C)
RIBXLCA ECMs	.50-10 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp		10 Amp	
RIBXLCV	0-10 Amps	Internal w/ voltage output	Analog	0-5 Vdc 0-10 Vdc		10 Amp	
RIBXLCRF ECMs	.25-150 Amps	External w/ contact status	Fixed, 1.25 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXKT: (Solid Core Remote CT)	10 Amp	
RIBXLCRA ECMs	.25-150 Amps	External w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXKT: (Solid Core Remote CT)	10 Amp	
RIBXLCJF ECMs	3-150 Amps	External w/ contact status	Fixed, 3 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXGT: (Split Core Remote CT)	10 Amp	
RIBXLCJA ECMs	3-150 Amps	External w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXGT: (Split Core Remote CT)	10 Amp	
RIBXLCEA	.125-5 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp		5 Amp	5 Amp Resistive @ 277 Vac 345 VA Pilot Duty @ 120/240 Vac (N/O) 268 VA Pilot Duty @ 277 Vac (N/O) 211 VA Pilot Duty @ 120/240 Vac (N/C) 175 VA Pilot Duty @ 277 Vac (N/C) 1/3 HP @ 120-240 Vac (N/O) 1/6 HP @ 120-240 Vac (N/C) 1/4 HP @ 277 Vac (N/O) 1/8 HP @ 277 Vac (N/C)
RIBXLCEV	0-5 Amps	Internal w/ voltage output	Analog	0-5 Vdc 0-10 Vdc		5 Amp	

* = Internal current sensor monitors current through common contact of relay.

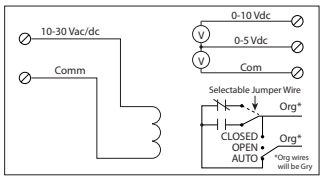
RIBXLS Series

Current Switches or Transducers with Relay, 5 or 10 Amp SPST + Override, 10-30 Vac/dc Coil, Fixed, Adjustable, or Analog, Up to 150 Amps Sensing Range, Terminal Strip or Wire Lead Output

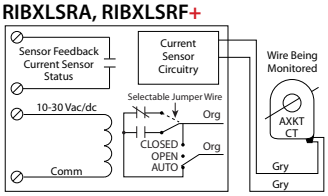
RIBXLSA, RIBXLSF, (RIBXLSEA*)+



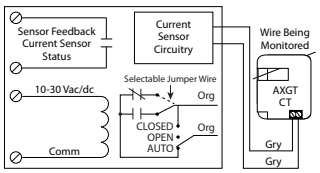
RIBXLSV, (RIBXLSEV*)^



RIBXLSRA, RIBXLSRF+



RIBXLSJA, RIBXLSJF+



RIBXLSA

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: 20ms
Relay Status: Red LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: Yes
Override Switch: Yes

Coil Current:
33 mA @ 10 Vac
35 mA @ 12 Vac
46 mA @ 24 Vac
55 mA @ 30 Vac
13 mA @ 10 Vdc
15 mA @ 12 Vdc
18 mA @ 24 Vdc
20 mA @ 30 Vdc

Coil Voltage Input:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

+ Sensor Contact:
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

^ Sensor Feedback Output:
- Voltage output is proportional to current sensor range.
- Min. Input Impedance = 30K ohms
- Accuracy +/– 3% full scale
- Vripple < 10m Vac

Notes:
- Normally Open or Normally Closed selected by yellow jumper wire
- Models AXKT and AXGT CT remotes do not have contact closure circuitry and only work in conjunction with RIBXLSR and RIBXLSJ models, respectively.

RIBXLS SERIES SELECTION GUIDE

Model#	Sensing Range	Type *	Threshold	Sensor Output	Remote Style	Resistive	Contact Ratings
RIBXLSF ECMs	.50-10 Amps	Internal w/ contact status	Fixed, .50 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp		10 Amp	10 Amp Resistive @ 277 Vac 480 VA Pilot Duty @ 277 Vac 480 VA Ballast @ 277 Vac *Not rated for Electronic Ballast* 600 Watt Tungsten @ 120 Vac (N/O) 240 Watt Tungsten @ 120 Vac (N/C) 1/3 HP @ 120-240 Vac (N/O) 1/6 HP @ 120-240 Vac (N/C) 1/4 HP @ 277 Vac (N/O) 1/8 HP @ 277 Vac (N/C)
RIBXLSA ECMs	.50-10 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp		10 Amp	
RIBXLSV	0-10 Amps	Internal w/ voltage output	Analog	0-5 Vdc 0-10 Vdc		10 Amp	
RIBXLSRF ECMs	1.25-150 Amps	External w/ contact status	Fixed, 1.25 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXKT: (Solid Core Remote)	10 Amp	
RIBXLSRA ECMs	1.25-150 Amps	External w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXKT: (Solid Core Remote)	10 Amp	
RIBXLSJF ECMs	3-150 Amps	External w/ contact status	Fixed, 3 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXGT: (Split Core Remote)	10 Amp	
RIBXLSJA ECMs	3-150 Amps	External w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	Model AXGT: (Split Core Remote)	10 Amp	
RIBXLSEA	.125-5 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp		5 Amp	5 Amp Resistive @ 277 Vac 345 VA Pilot Duty @ 120/240 Vac (N/O) 268 VA Pilot Duty @ 277 Vac (N/O) 211 VA Pilot Duty @ 120/240 Vac (N/C) 175 VA Pilot Duty @ 277 Vac (N/C) 1/3 HP @ 120-240 Vac (N/O) 1/6 HP @ 120-240 Vac (N/C) 1/4 HP @ 277 Vac (N/O) 1/8 HP @ 277 Vac (N/C)
RIBXLSEV	0-5 Amps	Internal w/ voltage output	Analog	0-5 Vdc 0-10 Vdc		5 Amp	

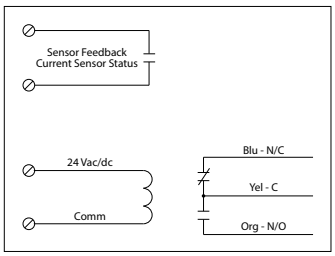
* = Internal current sensor monitors current through common contact of relay.

RELAY & AC CURRENT SWITCH COMBOS

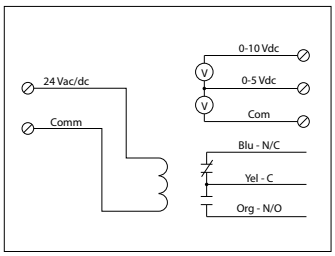
RIBX24 Series

Current Switches or Transducers with Relay, 20 Amp SPDT or SPST + Override, 24 Vac/dc Coil, Fixed, Adjustable, or Analog, Up to 150 Amps Sensing Range, Terminal Strip or Wire Lead Output

RIBX24BA, RIBX24BF+

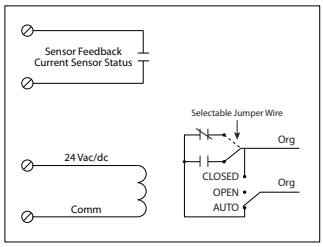


RIBX24BV^

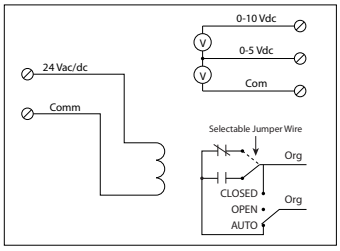


RIBX24SBA

RIBX24SBA, RIBX24SBF+



RIBX24SBV^



SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 20ms
Relay Status: Red LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16", 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No

Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

Sensor Contact: +
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

Sensor Feedback Output: ^
- Voltage output is proportional to current sensor range.
- Min. Input Impedance = 30K ohms
- Accuracy +/– 1% full scale
- Vripple < 10m Vac

RIBX24 SERIES SELECTION GUIDE

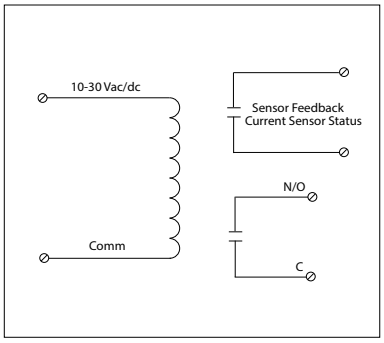
Model#	Sensing Range	Type *	Threshold	Sensor Output	Resistive	Override Switch	Contact Ratings	Notes
RIBX24BF ECMs	.50-20 Amps	Internal w/ contact status	Fixed, .50 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	No	20 Amp Resistive @ 277 Vac 20 Amp Ballast @ 277 Vac 16 Amp Electronic Ballast @ 277 Vac (N/O) 10 Amp Tungsten @ 120 Vac (N/O) 1,110 VA Pilot Duty @ 277 Vac 770 VA Pilot Duty @ 120 Vac 240 Watt Tungsten @ 120 Vac (N/C) 2 HP @ 277 Vac 1 HP @ 120 Vac	
RIBX24BA ECMs	.50-20 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	No		
RIBX24BV	0-20 Amps	Internal w/ voltage output	Analog	0-5 Vdc 0-10 Vdc	20 Amp	No		
RIBX24SBF ECMs	.50-20 Amps	Internal w/ contact status	Fixed, .50 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	Yes	20 Amp Resistive @ 277 Vac 20 Amp Ballast @ 277 Vac (N/O) 10 Amp Ballast @ 277 Vac (N/C) *Not rated for Electronic Ballast* 10 Amp Tungsten @ 120 Vac (N/O) 1,110 VA Pilot Duty @ 277 Vac 770 VA Pilot Duty @ 120 Vac 240 Watt Tungsten @ 120 Vac (N/C) 2 HP @ 277 Vac 1 HP @ 120 Vac	• Normally Open or Normally Closed selected by yellow jumper wire
RIBX24SBA ECMs	.50-20 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	Yes		
RIBX24SBV	0-20 Amps	Internal w/ voltage output	Analog	0-5 Vdc 0-10 Vdc	20 Amp	Yes		

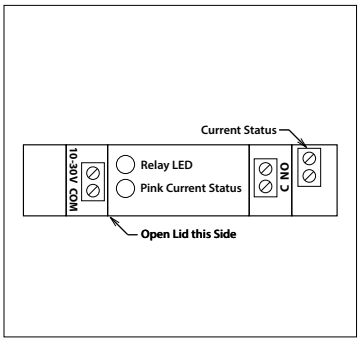
* = Internal current sensor monitors current through common contact of relay.

DIN MOUNT NO SOCKET RELAY & AC CURRENT SWITCH COMBO

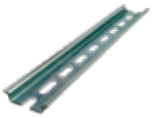
RIBRXLCF-NS

Current Switch and Relay Combination, 10 Amp SPST-N/O, 10-30 Vac/dc Coil, Fixed, 0.25-10 Amp, No Socket Non-Pluggable Relay





ADIN35ES
Pair of End Stops
for 35mm DIN Rail



ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

Models
ADIN35 and ADIN35ES
sold separately. See data sheet on website for more product information.

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76"H x 3.88"W x 0.78"D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Sensing Range: .25 - 10A
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac
1/3 HP @ 120-240 Vac
1/4 HP @ 277 Vac

Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

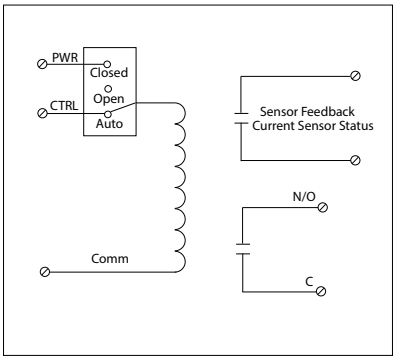
Sensor Contact:
Solid State Contact
30Vac/dc, 0.1A Max.

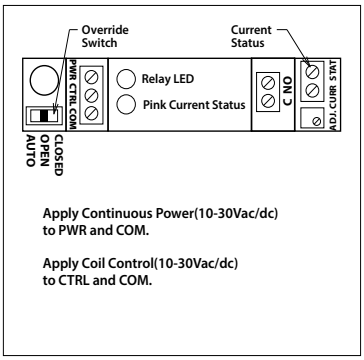
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp

DIN MOUNT NO SOCKET RELAY & AC CURRENT SWITCH COMBO

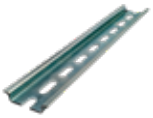
RIBRXLSA-NS

Current Switch and Relay Combination, 10 Amp SPST-N/O + Coil Side Override, 10-30 Vac/dc Coil, Fixed, 0.25-10 Amp, No Socket Non-Pluggable Relay





ADIN35ES
Pair of End Stops
for 35mm DIN Rail



ADIN35
DIN Rail Perforated
35mm x 7.5mm x 1m

Models
ADIN35 and ADIN35ES
sold separately. See data sheet on website for more product information.

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76"H x 3.88"W x 0.78"D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Sensing Range: .25 - 10A
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac
1/3 HP @ 120-240 Vac
1/4 HP @ 277 Vac

Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

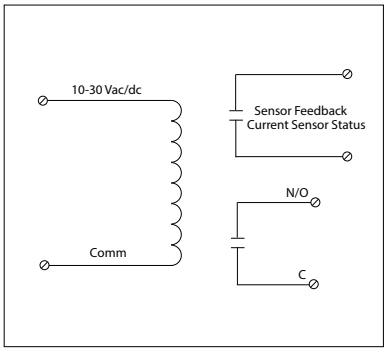
Sensor Contact:
Solid State Contact
30Vac/dc, 0.1A Max.

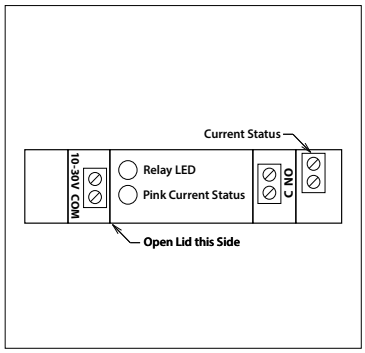
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp

DIN MOUNT RELAY & AC CURRENT SWITCH COMBO

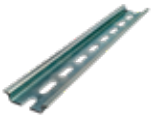
RIBRXLCF

Current Switch and Relay Combination, 10 Amp SPST-N/O, 10-30 Vac/dc Coil, Fixed, 0.25-10 Amp





ADIN35ES
Pair of End Stops for 35mm DIN Rail



ADIN35
DIN Rail Perforated 35mm x 7.5mm x 1m

Models
ADIN35 and ADIN35ES sold separately. See data sheet on website for more product information.

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76"H x 3.88"W x 0.78"D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Sensing Range: .25 - 10A
Replacement Relay: ARL1C
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac
1/3 HP @ 120-240 Vac
1/4 HP @ 277 Vac

Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

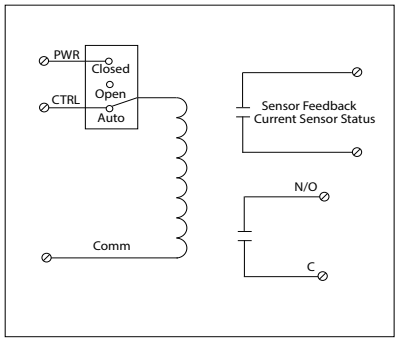
Sensor Contact:
Solid State Contact
30Vac/dc, 0.1A Max.

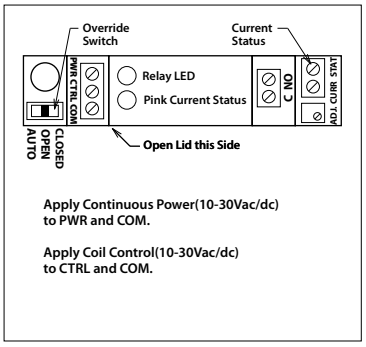
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp

DIN MOUNT RELAY & AC CURRENT SWITCH COMBO

RIBRXLSA

Current Switch and Relay Combination, 10 Amp SPST-N/O + Coil Side Override, 10-30 Vac/dc Coil, Adjustable, 0.25-10 Amp

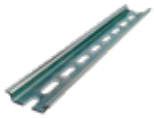




Apply Continuous Power(10-30Vac/dc) to PWR and COM.

Apply Coil Control(10-30Vac/dc) to CTRL and COM.

ADIN35ES
Pair of End Stops for 35mm DIN Rail



ADIN35
DIN Rail Perforated 35mm x 7.5mm x 1m

Models
ADIN35 and ADIN35ES sold separately. See data sheet on website for more product information.

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: 20ms
Relay Status: LED On = Activated
Dimensions: 2.76"H x 3.88"W x 0.78"D
Housing Detail: See **Housing K** in housing guide for dimensions
Origin: Made of US and non-US parts
Terminal Strip: 14-22 AWG wire
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: Yes
Sensing Range: .25 - 10A
Replacement Relay: ARL1C
Accessories: ADIN35, ADIN35ES

Contact Ratings:
10 Amp Resistive @ 277 Vac
10 Amp Resistive @ 28 Vdc
480 VA Pilot Duty @ 240/277 Vac
480 VA Ballast @ 277 Vac
Not rated for Electronic Ballast
600 Watt Tungsten @ 120 Vac
1/3 HP @ 120-240 Vac
1/4 HP @ 277 Vac

Power and Control Voltage:
10-30 Vac/dc ; 50-60 Hz
Drop Out = 2.1 Vac / 2.8 Vdc
Pull In = 9 Vac / 10 Vdc

Coil Current:

33 mA @ 10 Vac	13 mA @ 10 Vdc
35 mA @ 12 Vac	15 mA @ 12 Vdc
46 mA @ 24 Vac	18 mA @ 24 Vdc
55 mA @ 30 Vac	20 mA @ 30 Vdc

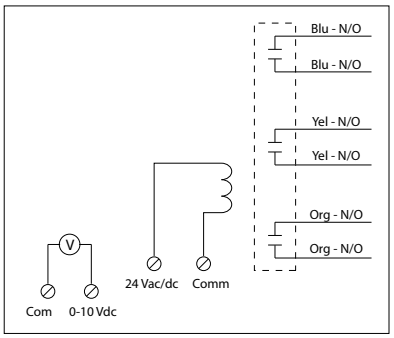
Sensor Contact:
Solid State Contact
30Vac/dc, 0.1A Max.

- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp

RELAY & AC CURRENT SWITCH COMBO

RIBX243PV

Transducer and Relay Combination, 20 Amp 3PST-N/O, 24 Vac/dc Coil, Analog, 0-20 Amp, 0-10 Vdc Output, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PST 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: 20ms
Relay Status: Red LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Coil Current:
210 mA @ 24 Vac
154 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 22 Vdc

Contact Ratings:
20 Amp Resistive @ 300 Vac, 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac, 1 Phase
1158 VA Pilot Duty @ 240 Vac, 1 Phase
1110 VA Pilot Duty @ 277 Vac, 1 Phase
1640 VA Pilot Duty @ 480 Vac, 1 Phase
1466 VA Pilot Duty @ 240 Vac, 3 Phase
2112 VA Pilot Duty @ 480 Vac, 3 Phase
Heavy Pilot Duty @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase

Sensor Type: Internal, with voltage output. Current sensing on orange wires
Sensor Range: 0-20 Amps

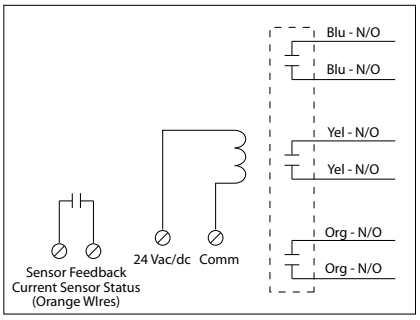
Sensor Feedback Output:
- Voltage output is proportional to current sensor range.
- Min. Input Impedance = 30K ohms
- Accuracy +/– 1% full scale
- Vripple < 10m Vac

Notes:
- Order Normally Closed by adding "-NC" to end of model number
- Can be ordered with 0-5 Vdc voltage output - Consult factory.

RELAY & AC CURRENT SWITCH COMBO

RIBX243PF

Current Switch and Relay Combination, 20 Amp 3PST-N/O, 24Vac/dc Coil, Internal Fixed, 0.5-20 Amp, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PST 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: 20ms
Relay Status: Red LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Coil Current:
210 mA @ 24 Vac
154 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 22 Vdc

Contact Ratings:
20 Amp Resistive @ 300 Vac, 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac, 1 Phase
1158 VA Pilot Duty @ 240 Vac, 1 Phase
1110 VA Pilot Duty @ 277 Vac, 1 Phase
1640 VA Pilot Duty @ 480 Vac, 1 Phase
1466 VA Pilot Duty @ 240 Vac, 3 Phase
2112 VA Pilot Duty @ 480 Vac, 3 Phase
Heavy Pilot Duty @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase

Sensor Type: Internal, with contact status
Current sensing on orange wires
Sensor Threshold: Fixed, .5 Amps
Sensor Range: .50-20 Amps

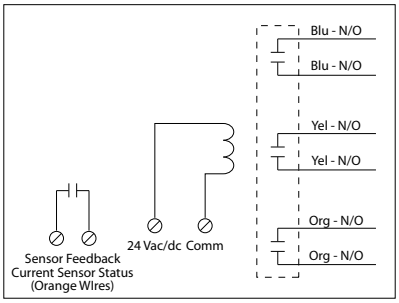
Sensor Contact:
- Solid State Contact
- 30 Vac/dc, .4 Amp Max.
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop
  < .3 Vac/dc @ .1 Amp
  < 1.6 Vac/dc @ .4 Amp

Notes:
- Order Normally Closed by adding "-NC" to end of model number

RELAY & AC CURRENT SWITCH COMBO

RIBX243PA

Current Switch and Relay Combination, 20 Amp 3PST-N/O,
24Vac/dc Coil, Internal Adjustable, 0.5-20 Amp, NEMA 1 Housing



SPECIFICATIONS

 # Relays & Contact Type: One (1) 3PST 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: 20ms
Relay Status: Red LED On = Activated
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wire Length: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No

Coil Current:
210 mA @ 24 Vac
154 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 20 Vac / 22 Vdc

Contact Ratings:
20 Amp Resistive @ 300 Vac, 28 Vdc
20 Amp Ballast @ 277-480 Vac
Not rated for Electronic Ballast
15 Amp Resistive @ 600 Vac
770 VA Pilot Duty @ 120 Vac, 1 Phase
1158 VA Pilot Duty @ 240 Vac, 1 Phase
1110 VA Pilot Duty @ 277 Vac, 1 Phase
1640 VA Pilot Duty @ 480 Vac, 1 Phase
1466 VA Pilot Duty @ 240 Vac, 3 Phase
2112 VA Pilot Duty @ 480 Vac, 3 Phase
Heavy Pilot Duty @ 600 Vac
7.5 HP @ 480 Vac, 3 Phase
5 HP @ 240 Vac, 3 Phase
3 HP @ 480-600 Vac, 1 Phase
2 HP @ 240-277 Vac, 1 Phase
1 HP @ 120 Vac, 1 Phase

Sensor Type: Internal, with contact status
Current sensing on orange wires
Sensor Threshold: Adjustable, .50-20 Amps
Sensor Range: .50-20 Amps

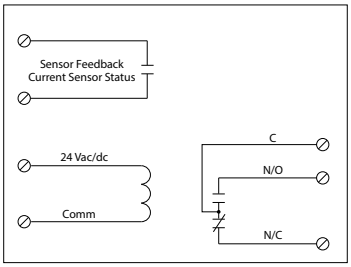
Sensor Contact:
- Solid State Contact
- 30 Vac/dc, .4 Amp Max.
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop
  < .3 Vac/dc @ .1 Amp
  < 1.6 Vac/dc @ .4 Amp

Notes:
- Order Normally Closed by adding "-NC" to end of model number

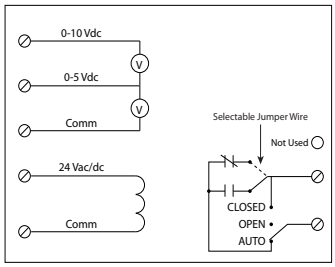
RIBMX24 Series

Current Switches or Transducers with Relay, 20 Amp SPDT or SPST + Override, 24 Vac/dc Coil, Fixed, Adjustable, or Analog, Up to 150 Amps Sensing Range, Terminal Strip, 4.00"Track Mount

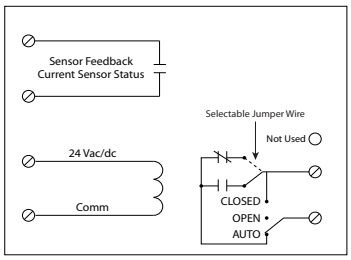
RIBMX24BA, RIBMX24BF+



RIBMX24SBV^



RIBMX24SBA, RIBMX24SBF+



SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 18ms
Relay Status: Red LED On = Activated
Dimensions: 2.95"H x 4.00"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000", MT4 Mounting Track Sold Separately
Approvals: UL Listed, UL916, UL864, C-UL
California State Fire Marshal, CE, RoHS
Gold Flash: No

Coil Current:
50 mA @ 18 Vac
83 mA @ 24 Vac
33 mA @ 22 Vdc
35 mA @ 24 Vdc
47 mA @ 30 Vdc

Coil Voltage Input:
24 Vac/dc ; 50-60 Hz
Drop Out = 3 Vac / 3.8 Vdc
Pull In = 18 Vac / 22 Vdc

Sensor Contact: +
- When current sensor status is off (open), leakage <30 uA @ 30Vac/dc
- When current sensor status is on (closed), voltage drop < .3 Vac/dc @ .1 Amp < 1.6 Vac/dc @ .4 Amp

Sensor Feedback Output: ^
- Voltage output is proportional to current sensor range.
- Min. Input Impedance = 30K ohms
- Accuracy +/– 1% full scale
- Vripple < 10m Vac

RIBMX24 SERIES SELECTION GUIDE

Model#	Sensing Range	Type*	Threshold	Sensor Output	Resistive	Override Switch	Contact Type	Contact Ratings	Notes
RIBMX24BF ECMs	.50-20 Amps	Internal w/ contact status	Fixed, .50 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	No	SPDT	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) 1,110 VA Pilot Duty @ 277 Vac 770 VA Pilot Duty @ 120 Vac 240 Watt Tungsten @ 120 Vac (N/C) 2 HP @ 277 Vac 1 HP @ 120 Vac	
RIBMX24BA ECMs	.50-20 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	No	SPDT		
RIBMX24SBF ECMs	.50-20 Amps	Internal w/ contact status	Fixed, .50 Amp	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	Yes	SPST	20 Amp Resistive @ 277 Vac 20 Amp Ballast @ 277 Vac (N/O) 10 Amp Ballast @ 277 Vac (N/C) *Not rated for Electronic Ballast* 10 Amp Tungsten @ 120 Vac (N/O) 1,110 VA Pilot Duty @ 277 Vac 770 VA Pilot Duty @ 120 Vac 240 Watt Tungsten @ 120 Vac (N/C) 2 HP @ 277 Vac 1 HP @ 120 Vac	• Normally Open or Normally Closed selected by yellow jumper wire
RIBMX24SBA ECMs	.50-20 Amps	Internal w/ contact status	Adjustable	Solid State Contact 30 Vac/dc, 0.4 Amp	20 Amp	Yes	SPST		
RIBMX24SBV	0-20 Amps	Internal w/ voltage output	Analog	0-5 Vdc 0-10 Vdc	20 Amp	Yes	SPST		

* = Internal current sensor monitors current through common contact of Relay

AC & DC POWER SUPPLIES

AC & DC POWER SUPPLIES

- 40 - 500 VA AC models
- Single & dual transformers
- Prepackaged power supply kits
- Class 2 models
- On/off control
- Overcurrent protection
- LED power indicator
- High/low voltage separation
- 120 Vac convenience outlets

500, 300 & 200 VA Power Supplies are Perfect for VAV & Zone and Network Controller Applications

- 5 or 3 isolated 100 VA or 5 isolated 40 VA outputs
- On/Off circuit breaker switch for each output
- UL Listed Class 2
- Enclosed or sub-panel mount
- Low voltage compartment models available
- 120 Vac convenience outlet available

Mounting Your Controller and Peripheral Devices is Easy and Convenient in our Prepackaged Power Supply Solutions

Metal Enclosure, Power Supply, and Sub-Panel with Several Options to Fit Your Needs

If you plan to install a controller and other peripheral devices, an important consideration is where the items will be placed within an enclosure and how they will be powered. We have a line of products that can address both of those needs: the MHP Series. These products include a metal enclosure, power supply and a sub-panel with several prepackaged options to meet your specific needs.

AC POWER SUPPLIES

AC POWER SUPPLIES: 40-100 VA

MODEL #	UL	TRANSFORMER(S)	INPUT POWER	HEIGHT	WIDTH	DEPTH	120 VAC OUTLETS	AUX OUTPUT WIRE	MAIN BREAKER ON INPUT POWER *	SECONDARY CONFIGURATION	EXTENSION CORD	HOUSING STYLE / TRACK MOUNT	SPEC PAGE
PSB40AB10	•	40 VA	120 Vac	5.200″	5.250″	3.750″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Panel Mount	109
PSB100AB10	•	100 VA	120 Vac	5.200″	5.250″	3.750″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Panel Mount	109
PSC40AB10	•	40 VA	120 Vac	6.250″	5.620″	3.900″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Enclosed	109
PSC100AB10	•	100 VA	120 Vac	6.250″	5.620″	3.900″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Enclosed	109
PSMN40A	•	40 VA	120 Vac	3.250″	2.750″	2.000″				Terminal Strip		MT212-4 included	110
PSMN40AS	•	40 VA	120 Vac	3.250″	2.750″	2.000″				Terminal Strip		MT212-4 included	110
PSH40A	•	40 VA	120 Vac	4.500″	5.438″	4.500″	•			Ext. Terminal Strip		Enclosed	110
PSH40AW	•	40 VA	120 Vac	4.500″	5.438″	4.500″	•			Internal Wires		Enclosed	110
PSH40AB10	•	40 VA	120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Enclosed	110
PSH40AB10-EXT2	•	40 VA	120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Ext. Terminal Strip	•	Enclosed	111
PSH40AWB10	•	40 VA	120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Internal Wires		Enclosed	110
PSH75A	•	75 VA	480/277/240/208/120 Vac	4.500″	5.438″	4.500″	•			Ext. Terminal Strip		Enclosed	111
PSH75AW	•	75 VA	480/277/240/208/120 Vac	4.500″	5.438″	4.500″	•			Internal Wires		Enclosed	111
PSH75AB10	•	75 VA	480/277/240/208/120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Enclosed	111
PSH75AWB10	•	75 VA	480/277/240/208/120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Internal Wires		Enclosed	111
PSH100A	•	100 VA	120 Vac	4.500″	5.438″	4.500″	•			Ext. Terminal Strip		Enclosed	112
PSH100AW	•	100 VA	120 Vac	4.500″	5.438″	4.500″	•			Internal Wires		Enclosed	112
PSH100AB10	•	100 VA	120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Enclosed	112
PSH100AB10-EXT2	•	100 VA	120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Ext. Terminal Strip	•	Enclosed	111
PSH100AWB10	•	100 VA	120 Vac	4.500″	5.438″	4.500″	•	•	10 A Switch/Breaker	Internal Wires		Enclosed	112
PSH75A75A	•	75 VA, 75 VA	480/277/240/208/120 Vac	4.500″	8.625″	4.500″	•			Ext. Terminal Strip		Enclosed	112
PSH75A75AW	•	75 VA, 75 VA	480/277/240/208/120 Vac	4.500″	8.625″	4.500″	•			Internal Wires		Enclosed	112
PSH75A75AB10	•	75 VA, 75 VA	480/277/240/208/120 Vac	4.500″	8.625″	4.500″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Enclosed	112
PSH75A75AWB10	•	75 VA, 75 VA	480/277/240/208/120 Vac	4.500″	8.625″	4.500″	•	•	10 A Switch/Breaker	Internal Wires		Enclosed	112
PSH100A100A	•	100 VA, 100 VA	120 Vac	4.500″	8.625″	4.500″	•			Ext. Terminal Strip		Enclosed	113
PSH100A100AW	•	100 VA, 100 VA	120 Vac	4.500″	8.625″	4.500″	•			Internal Wires		Enclosed	113
PSH100A100AB10	•	100 VA, 100 VA	120 Vac	4.500″	8.625″	4.500″	•	•	10 A Switch/Breaker	Ext. Terminal Strip		Enclosed	113
PSH100A100AWB10	•	100 VA, 100 VA	120 Vac	4.500″	8.625″	4.500″	•	•	10 A Switch/Breaker	Internal Wires		Enclosed	113

AC POWER SUPPLIES: 200-500 VA

MODEL #	UL	TRANSFORMER	INPUT POWER	HEIGHT	WIDTH	DEPTH	120 VAC OUTLET #	BREAKER PER OUTPUT	SECONDARY CONFIGURATION	HOUSING STYLE / SUB-PANEL	SPEC PAGE
PSH500A	•	500 VA (five 100 VA Outputs)	480/277/240/120 Vac	12.125″	12.125″	6.000″		5 x 4 Amp	Terminals	Enclosed	113
PSH300A	•	300 VA (three 100 VA Outputs)	480/277/240/120 Vac	12.125″	12.125″	6.000″		3 x 4 Amp	Terminals	Enclosed	114
PSH200A	•	200 VA (five 40 VA Outputs)	480/347/277/240/120 Vac	12.125″	12.125″	6.000″		5 x 2 Amp	Terminals	Enclosed	114
PSMN500A	•	500 VA (five 100 VA Outputs)	480/277/240/120 Vac	11.330″	11.400″	5.000″		5 x 4 Amp	Terminals	Sub-panel Mount	113
PSMN300A	•	300 VA (three 100 VA Outputs)	480/277/240/120 Vac	11.330″	11.400″	5.000″		3 x 4 Amp	Terminals	Sub-panel Mount	114
PSMN200A	•	200 VA (five 40 VA Outputs)	480/347/277/240/120 Vac	11.330″	11.400″	5.000″		5 x 2 Amp	Terminals	Sub-panel Mount	114
PSH500A-LVC	•	500 VA (five 100 VA Outputs)	480/277/240/120 Vac	12.125″	12.125″	6.000″		5 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment	115
PSH300A-LVC	•	300 VA (three 100 VA Outputs)	480/277/240/120 Vac	12.125″	12.125″	6.000″		3 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment	115
PSH200A-LVC	•	200 VA (five 40 VA Outputs)	480/347/277/240/120 Vac	12.125″	12.125″	6.000″		5 x 2 Amp	Terminals	Enclosed with Low Voltage Compartment	116
PSH500AB10-LVC	•	500 VA (five 100 VA Outputs)	120 Vac	12.125″	12.125″	6.000″	•	5 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment	117
PSH300AB10-LVC	•	300 VA (three 100 VA Outputs)	120 Vac	12.125″	12.125″	6.000″	•	3 x 4 Amp	Terminals	Enclosed with Low Voltage Compartment	118
PSH200AB10-LVC	•	200 VA (five 40 VA Outputs)	120 Vac	12.125″	12.125″	6.000″	•	5 x 2 Amp	Terminals	Enclosed with Low Voltage Compartment	118

UL = Class 2 UL Listed - see data sheet for specific Listing

* = Kills power to entire unit: Outlets, Aux. Output, & Transformer; Total Combined Output 9A

= Convenience outlet has 4 Amp Breaker

AC & DC POWER SUPPLIES

AC POWER SUPPLY PREPACKAGED KITS

MODEL #	TRANS-FORMER(S)	INPUT POWER	HEIGHT	WIDTH	DEPTH	120 VAC OUTLETS	AUX OUTPUT WIRE	ON/OFF SWITCH	MAIN BREAKER ON INPUT POWER *	SECONDARY CONFIGURATION	METAL HOUSING	SUB-PANEL / TRACK MOUNT	SPEC PAGE
CTRL-PS	40 VA	120 Vac	14.500″	7.700″	3.900″			•			MH1000	MT212-4 included	120
MHP3903100AB10	100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3803S (Polymetal)	120
MHP3903100A100AB10	100 VA, 100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3803S (Polymetal)	121
MHP3904100AB10	100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3804S (Perforated)	120
MHP3904100A100AB10	100 VA, 100 VA	120 Vac	12.500″	24.500″	6.500″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH3900	SP3804S (Perforated)	121
MHP4604100AB10	100 VA	120 Vac	16.150″	20.000″	6.720″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH4600	SP4604 (Perforated)	121
MHP4604100A100AB10	100 VA, 100 VA	120 Vac	16.150″	20.000″	6.720″	•	•	•	10 A Switch/Breaker	Ext. Terminal Strip	MH4600	SP4604 (Perforated)	122

DC POWER SUPPLIES

MODEL #	UL	VOLTAGE INPUT	VOLTAGE OUTPUT	OUTPUT CURRENT	ON/OFF SWITCH	HEIGHT	WIDTH	DEPTH	HOUSING STYLE / TRACK MOUNT	SPEC PAGE
PSP24DA	•	24 Vac	Adjustable 1.5-28 Vdc ; Non-Isolated	300 mA		2.390″	3.310″	1.810″	Enclosed	122
PSH24DWB10		120 Vac	Fixed 24 Vdc ; Isolated	2.5 Amp	•	4.500″	5.438″	4.500″	Enclosed	123
PSH100A24DWB10		120 Vac	Fixed 24 Vdc ; Isolated 100 VA, 24 Vac	2.5 Amp	•	4.500″	8.625″	4.500″	Enclosed	123
PSMN24DA	•	24 Vac	Adjustable 1.5-28 Vdc ; Non-Isolated	300 mA		1.750″	2.750″	1.750″	MT212-2 included	124
PSMN24DAS	•	24 Vac	Adjustable 1.5-28 Vdc ; Non-Isolated	300 mA	•	1.750″	2.750″	1.750″	MT212-2 included	124
PSM20A12DAS	•	24 Vac	Adjustable 1.5-14 Vdc ; Isolated	300 mA	•	2.750″	4.000″	2.250″	MT212-4 included	124
PSM24A24DAS	•	24 Vac	Adjustable 1.5-28 Vdc ; Isolated	300 mA	•	2.750″	4.000″	2.250″	MT212-4 included	125
PSM19A24DAS	•	120 Vac	Adjustable 1.5-28 Vdc ; Isolated	300 mA	•	2.750″	4.000″	2.250″	MT212-4 included	125
PSMN40A24DS	•	120 Vac	Fixed 24 Vdc ; Isolated	1 Amp	•	5.000″	2.750″	2.500″	MT212-6 included	125
PSH100AB10-DC	•	120 Vac	Fixed 24 Vdc ; Isolated	2.5 Amp	•	4.500″	5.438″	4.500″	Enclosed	126
PSH100A100AB10-DC	•	120 Vac	Fixed 24 Vdc ; Isolated ; 100 VA, 24 Vac	2.5 Amp	•	4.500″	8.625″	4.500″	Enclosed	126

DIN MOUNT DC POWER SUPPLIES

MODEL #	UL	VOLTAGE INPUT	VOLTAGE OUTPUT	OUTPUT CURRENT	ON/OFF SWITCH	HEIGHT	WIDTH	DEPTH	HOUSING STYLE / TRACK MOUNT
PULS-ML15-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	600 mA		2.950″	0.890″	3.580″	DIN Mount
PULS-PIC120-241D	•	100-120 Vac; 200-240 Vac	Adjustable 24-28 Vdc ; Isolated	5 Amp		4.880″	1.540″	4.880″	DIN Mount
PULS-PIC240-241D	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	10 Amp		4.880″	1.930″	4.880″	DIN Mount
PULS-PIM36-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	1.5 Amp		3.540″	0.860″	3.580″	DIN Mount
PULS-PIM60-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	2.5 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM60-245	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	2.5 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM90-241	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	3.8 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM90-245	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	3.8 Amp		3.540″	1.420″	3.580″	DIN Mount
PULS-PIM90-245-L1	•	100-240 Vac	Adjustable 24-28 Vdc ; Isolated	3.8 Amp		3.540″	1.420″	3.580″	DIN Mount

For full product information on "PULS-" models, see our website for data sheets pages.

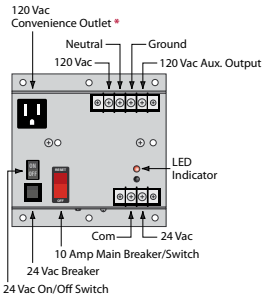
UL = Class 2 UL Listed - see data sheet for specific Listing

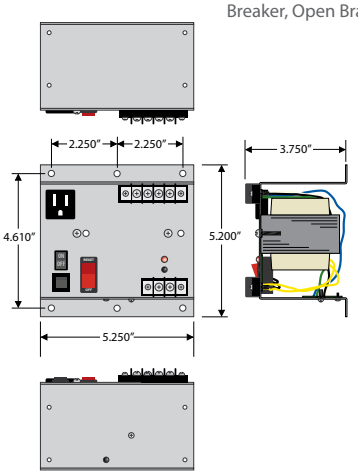
* = Kills power to entire unit: Outlets, Aux. Output, & Transformer; Total Combined Output 9A

AC POWER SUPPLIES: 120 VAC TO 24 VAC

PSB40AB10

Single 40 VA Power Supply, 120 Vac to 24 Vac, 10 Amp Main Breaker, Open Bracket Panel Mount





* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.

PSB100AB10

Single 100 VA Power Supply, 120 Vac to 24 Vac, 10 Amp Main Breaker, Open Bracket Panel Mount

REMOVABLE TERMINAL COVER PROVIDED

SPECIFICATIONS

Transformer: One 40 VA Split-Bobbin (PSB40AB10)
One 100 VA Split-Bobbin (PSB100AB10)
Primary: 120 Vac
Secondary: 24 Vac, w/ LED Indicator
Frequency: 50/60 Hz
Over Current Protection: Inherently Limited + Circuit Breaker (PSB40AB10)
Circuit Breaker (PSB100AB10)
24 Vac ON/OFF: On / Off Switch
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit:
Outlets, Aux. Output, & Transformer)*
Total Combined Output 9A

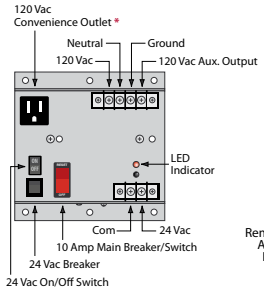
Mounting: Panel mount
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3),
UL916, UL508, C-UL, CE, RoHS
Dimensions: 5.200″ H x 5.250″ W x 3.750″ D
Origin: Made of US and non-US parts

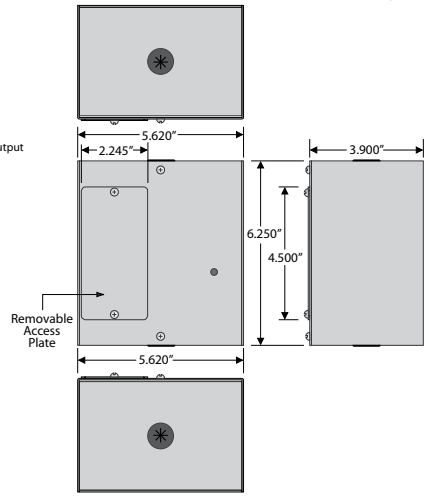
POWER SUPPLIES

AC POWER SUPPLIES: 120 VAC TO 24 VAC

PSC40AB10

Single 40 VA Power Supply, 120 Vac to 24 Vac, 10 Amp Main Breaker, Metal Enclosure





* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.

PSC100AB10

Single 100 VA Power Supply, 120 Vac to 24 Vac, 10 Amp Main Breaker, Metal Enclosure


Shown Without Cover


Shown With Cover

SPECIFICATIONS

Transformer: One 40 VA Split-Bobbin,
Inherently Limited (PSC100AB10)
One 100 VA Split-Bobbin, Circuit
Breaker (PSC100AB10)
Primary: 120 Vac
Secondary: 24 Vac, w/ LED Indicator
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker

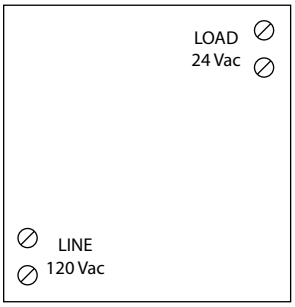
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit: Outlets,
Aux. Output, & Transformer)*
Total Combined Output 9A
Mounting: Mounting plate included (as shown)
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3), UL916,
C-UL, CE, RoHS
Dimensions: 6.250″ H x 5.620″ W x 3.900″ D
Origin: Made of US and non-US parts

Notes:
- To order without enclosure, see PSB40AB10
- To order without enclosure, see PSB100AB10.

AC POWER SUPPLIES: 120 VAC TO 24 VAC

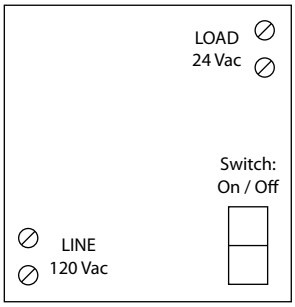
PSMN40A

40 VA Power Supply, 120 Vac to 24 Vac, 2.75″Track Mount



PSMN40AS

40 VA Power Supply, 120 Vac to 24 Vac, Switch, 2.75″Track Mount



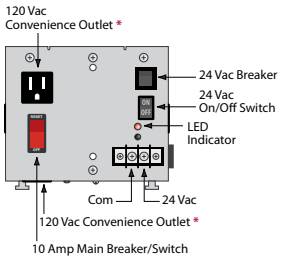
SPECIFICATIONS

Transformers: One 40 VA
Primary: 120 Vac
Secondary: 24 Vac, isolated
Frequency: 50/60 Hz
Overload Protection: Inherently limited
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: LED On = Secondary Voltage Present
Dimensions: 3.25″H x 2.75″W x 2.00″D1/2.50″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: MT212-4 Mounting Track Supplied
ON/OFF Switch: 2 Position (PSMN40AS)
Max. Ambient Temperature: 40° C
Approvals: UL916, UL508, C-UL, CE, RoHS
Origin: Made of US and non-US parts

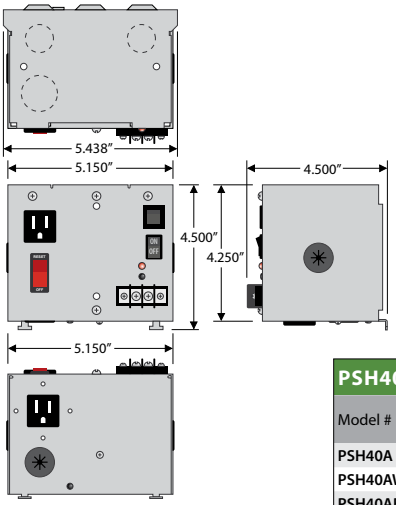
AC POWER SUPPLIES

PSH40A Series

Single 40 VA Power Supply, 120 Vac to 24 Vac, UL Class 2, Metal Enclosure



* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.



PSH40A SERIES SELECTION GUIDE

Model #	120 Vac Outlets	Aux Output Wire	Main Breaker on Input Power	Secondary Configuration
PSH40A	•			External Terminal Strip
PSH40AW	•			Internal Wires
PSH40AB10*	•	•	10 Amp Switch / Breaker	External Terminal Strip
PSH40AWB10*	•	•	10 Amp Switch / Breaker	Internal Wires

SPECIFICATIONS

Transformer: One 40 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit: Outlets, Aux. Output, & Transformer)*
Total Combined Output 9A
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3), UL916, UL508, C-UL, CE, RoHS,
^ Special Seismic Certification of Equipment and Components: OSP-0201-10
Dimensions: 4.500″H x 5.438″W x 4.500″D
Origin: Made of US and non-US parts

Input Wires: "B10" Models Only
Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

All Other Models
Primary Wires
BLK: 120 Vac
WHT: Common

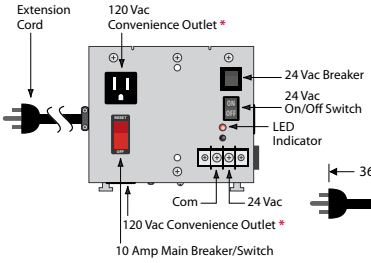
Output Wires: "B10" Models Only
Auxiliary Output
BLU: 120 Vac

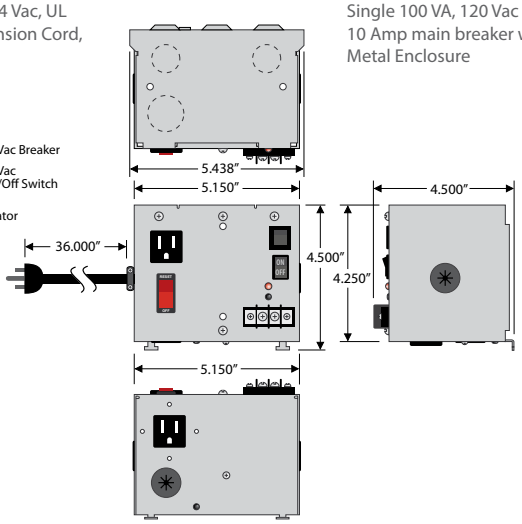
"W" Models Only
Transformer Output
WHT/YEL: 24 Vac
WHT/BLU: Common

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

PSH40AB10-EXT2

Single 40 VA Power Supply, 120 Vac to 24 Vac, UL Class 2, 10 Amp Main Breaker with Extension Cord, Metal Enclosure





* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.

PSH100AB10-EXT2

Single 100 VA, 120 Vac to 24 Vac, UL Class 2, 10 Amp main breaker with input extension cord, Metal Enclosure

PLUGS DIRECTLY INTO WIRED OUTLET BOX FOR USE ABOVE FALSE CEILINGS OR IN CONTROL PANELS

SPECIFICATIONS

Transformer: One 40 VA (PSH40A10-EXT2)
One 100 VA (PSH100A10-EXT2)
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit: Outlets, Aux. Output, & Transformer)*
Total Combined Output 9A
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Dimensions: 4.500″H x 5.438″W x 4.500″D
Origin: Made of US and non-US parts

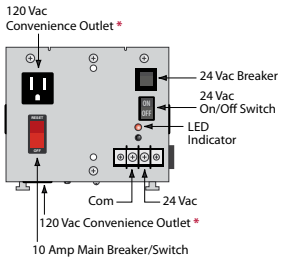
Input Wires: Powercord
BLK: 120 Vac
WHT: Neutral
GRN: Ground

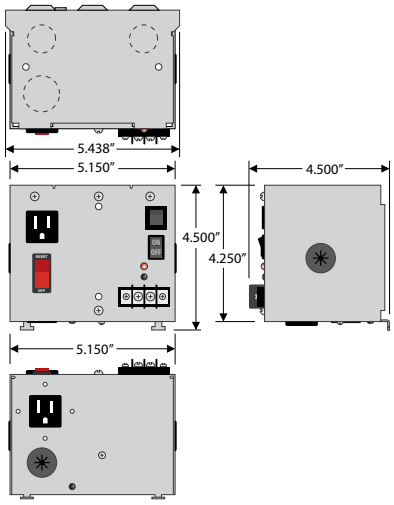
Output Wire: Auxiliary Load Output
BLU: 120 Vac
9 Amp, max.

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.

PSH75A Series

Single 75 VA Power Supply Multi-tap 480/277/240/208/120 to 24 Vac, UL Class 2, Metal Enclosure





* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.

PSH75A SERIES SELECTION GUIDE

Model #	120 Vac Outlets	Aux Output Wire	Main Breaker on Input Power	Secondary Configuration
PSH75A	•			External Terminal Strip
PSH75AW	•			Internal Wires
PSH75AB10*	•	•	10 Amp Switch / Breaker	External Terminal Strip
PSH75AWB10*	•	•	10 Amp Switch / Breaker	Internal Wires

SPECIFICATIONS

Transformer: One 75 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit: Outlets, Aux. Output, & Transformer)*
Total Combined Output 9A
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS, Special
^ Seismic Certification of Equipment and Components: OSP-0201-10
Dimensions: 4.500″H x 5.438″W x 4.500″D
Origin: Made of US and non-US parts

Input Wires: "B10" Models Only
Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground
Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Output Wires: "B10" Models Only
Auxiliary Output
BLU: 120 Vac

All Other Models
Primary Wires**
GRY: 480 Vac
BRN: 277 Vac
ORG: 240 Vac
RED: 208 Vac
WHT: 120 Vac
BLK: Common

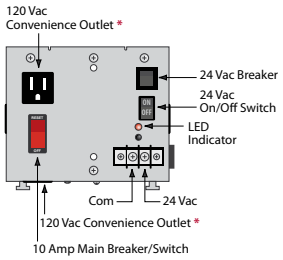
"W" Models Only
Transformer Output
WHT/YEL: 24 Vac
WHT/BLU: Common

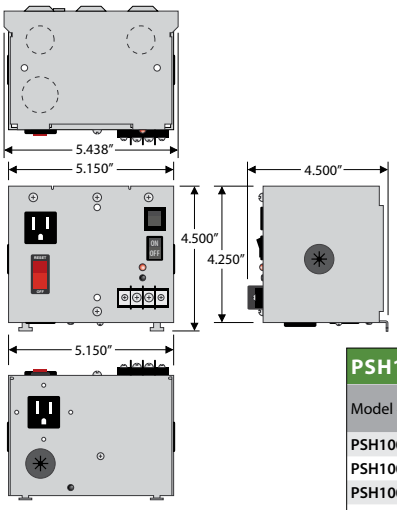
Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

AC POWER SUPPLIES

PSH100A Series

Single 100 VA, 120 Vac to 24 Vac, UL Class 2, Metal Enclosure





* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.

PSH100A SERIES SELECTION GUIDE

Model #	120 Vac Outlets	Aux Output Wire	Main Breaker on Input Power	Secondary Configuration
PSH100A	•			External Terminal Strip
PSH100AW	•			Internal Wires
PSH100AB10*	•	•	10 Amp Switch / Breaker	External Terminal Strip
PSH100AWB10*	•	•	10 Amp Switch / Breaker	Internal Wires

SPECIFICATIONS

Transformer: One 100 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, & Transformer)* Total Combined Output 9A
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3), UL916, UL508, C-UL, CE, RoHS, Special ^ Seismic Certification of Equipment and Components: OSP-0201-10
Dimensions: 4.500″ H x 5.438″ W x 4.500″ D
Origin: Made of US and non-US parts

Input Wires: "B10″ Models Only
Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

All Other Models
Primary Wires
BLK: 120 Vac
WHT: Common

Output Wires: "B10″ Models Only
Auxiliary Output
BLU: 120 Vac

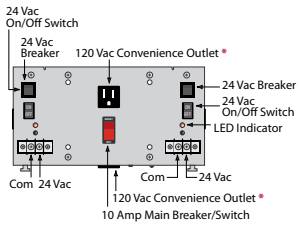
"W″ Models Only
Transformer Output
WHT/YEL: 24 Vac
WHT/BLU: Common

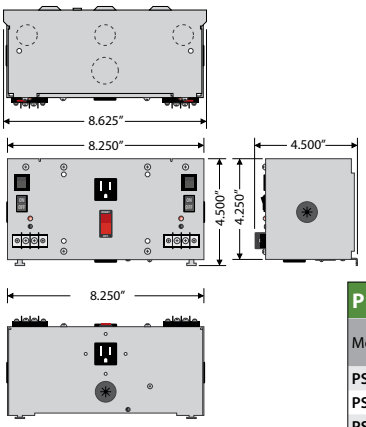
Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

AC POWER SUPPLIES

PSH75A75A Series

Dual 75 VA, Multi-tap 480/277/240/208/120 to 24 Vac, UL Class 2, Metal Enclosure





* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.

PSH75A75A SERIES SELECTION GUIDE

Model #	120 Vac Outlets	Aux Output Wire	Main Breaker on Input Power	Secondary Configuration
PSH75A75A	•			External Terminal Strip
PSH75A75AW	•			Internal Wires
PSH75A75AB10*	•	•	10 Amp Switch / Breaker	External Terminal Strip
PSH75A75AWB10*	•	•	10 Amp Switch / Breaker	Internal Wires

SPECIFICATIONS

Transformer: Two 75 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, & Transformer)* Total Combined Output 9A
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS, Special ^ Seismic Certification of Equipment and Components: OSP-0201-10
Dimensions: 4.500″ H x 8.625″ W x 4.500″ D
Origin: Made of US and non-US parts

Input Wires: "B10″ Models Only
Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

All Other Models
Primary Wires**
GRY: 480 Vac
BRN: 277 Vac
ORG: 240 Vac
RED: 208 Vac
WHT: 120 Vac
BLK: Common

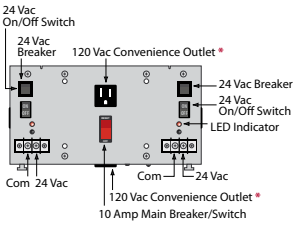
Output Wires: "B10″ Models Only
Auxiliary Output
BLU: 120 Vac

"W″ Models Only
Transformer Output
WHT/YEL: 24 Vac
WHT/BLU: Common

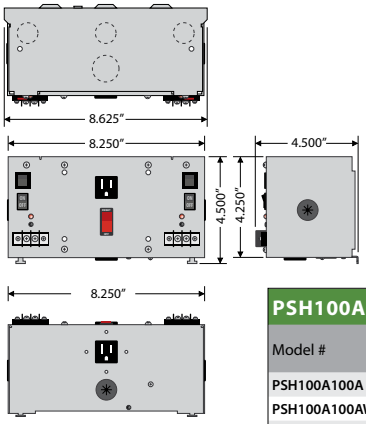
Notes:
- All dual models: Model number denotes location of transformer within enclosure. PSH75A75A (Left side | Right side)
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling
- All primary voltages other than 120 Vac will result in the disabling of convenience outlets.**

PSH100A100A Series

Dual 100 VA, 120 Vac to 24 Vac, UL Class 2, Metal Enclosure



* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.



PSH100A100A SERIES SELECTION GUIDE

Model #	120 Vac Outlets	Aux Output Wire	Main Breaker on Input Power	Secondary Configuration
PSH100A100A	•			External Terminal Strip
PSH100A100AW	•			Internal Wires
PSH100A100AB10*	•	•	10 Amp Switch / Breaker	External Terminal Strip
PSH100A100AWB10*	•	•	10 Amp Switch / Breaker	Internal Wires

SPECIFICATIONS

Transformer: Two 100 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, & Transformer)*
Total Combined Output 9A
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3), UL916, UL508, C-UL, CE, RoHS,
Special ^ Seismic Certification of Equipment and Components: OSP-0201-10
Dimensions: 4.500˝ H x 8.625˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: "B10˝ Models Only
Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

All Other Models
Primary Wires
BLK: 120 Vac
WHT: Common

Output Wires: "B10˝ Models Only
Auxiliary Output
BLU: 120 Vac

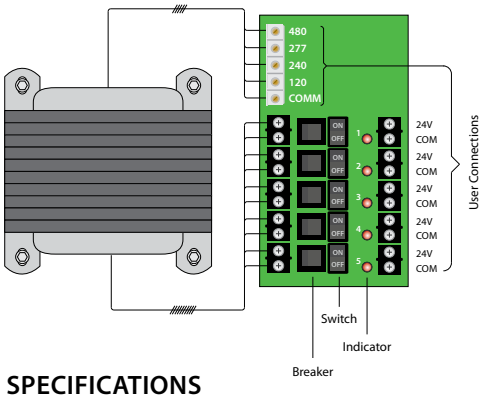
"W˝ Models Only
Transformer Output
WHT/YEL: 24 Vac
WHT/BLU: Common

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

AC POWER SUPPLIES

PSH500A

500 VA Power Supply, Five 100 VA Class 2 Outputs, 480/277/240/120 Vac to 24 Vac, Metal Enclosure



PSMN500A

500 VA Power Supply, Five 100 VA Class 2 Outputs, 480/277/240/120 Vac to 24 Vac, Polymetal Sub-panel Pre-Mounted

PSMN500A

PSH500A
Shown WithCover

PSH500A
Shown Without Cover

SPECIFICATIONS

Transformer: One (1) 500 VA
Over Current Protection: Circuit Breaker
Primary: 480/277/240/120 Vac
Frequency: 50/60 Hz
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D (PSH500A)
11.330˝ H x 11.400˝ W x 5.000˝ D (PSMN500A)
Origin: Made of US and non-US parts
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS, Special ^ Seismic Certification of Equipment and Components: OSP-0201-10
Housing: NEMA1 Metal Enclosure (PSH500A)
Sub-Panel: Plenum Rated Polymetal (PSMN500A)

Notes:
- To order UL508, add "-IC" to end of model number.
- Primary voltage terminal cover available.
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

5 Secondaries:
24 Vac, with LED Indicators
4 Amp breaker for each output

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
480/277/240/120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
5 Ungrounded, Isolated, 100 VA, Class 2, 24 Vac Outputs. Terminals accept 12-26 AWG wire.

Ambient Temperature Derating:
4A up to 40˚ C ; 3A up to 50˚ C ; 2A up to 55˚ C (When All 5 Outputs Operated Simultaneously)

- With 240 Vac primary input voltage
- When all 5 outputs operated simultaneously, at room temperature

Standby Wattage:
48.515 W @ 120 Vac
48.699 W @ 240 Vac
49.564 W @ 277 Vac
48.255 W @ 480 Vac

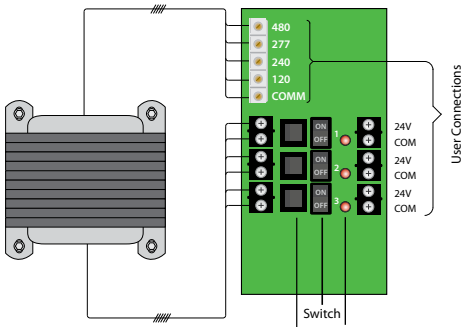
Full Load Primary Current:
4.66 A @ 120 Vac
2.41 A @ 240 Vac
2.06 A @ 277 Vac
1.17 A @ 480 Vac

Secondary Output Voltage vs. Load:
24.0 V @ 1 Amp
23.0 V @ 2 Amp
21.8 V @ 3 Amp
21.1 V @ 4 Amp

AC POWER SUPPLIES

PSH300A

300 VA Power Supply, Three 100 VA Class 2 Outputs, 480/277/240/120 Vac to 24 Vac, Metal Enclosure



PSMN300A

300 VA Power Supply, Three 100 VA Class 2 Outputs, 480/277/240/120 Vac to 24 Vac, Polymetal Subpanel Pre-Mounted

PSMN300A

PSH300A
Shown Without Cover

PSH300A
Shown Without Cover

SPECIFICATIONS

Transformer: One (1) 300 VA
Over Current Protection: Circuit Breaker
Primary: 480/277/240/120 Vac
Frequency: 50/60 Hz
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D (PSH300A)
11.330˝ H x 11.400˝ W x 5.000˝ D (PSMN300A)
Origin: Made of US and non-US parts
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS, Special ^ Seismic Certification of Equipment and Components: OSP-0201-10
Housing: NEMA1 Metal Enclosure (PSH300A)
Sub-Panel: Plenum Rated Polymetal (PSMN300A)

Notes:
- To order UL508, add "-IC" to end of model number.
- Primary voltage terminal cover available.
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

3 Secondaries:
24 Vac, with LED Indicators
4 Amp breaker for each output

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
480/277/240/120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
3 Ungrounded, Isolated, 100 VA, Class 2, 24 Vac Outputs. Terminals accept 12-26 AWG wire.

Ambient Temperature Derating:
4A up to 40˚ C ; 3A up to 50˚ C ; 2A up to 55˚ C
(When All 3 Outputs Operated Simultaneously)
- With 120 Vac primary input voltage
- When all 3 outputs operated simultaneously, at room temperature

Standby Wattage:
16.61 W @ 120 Vac
17.70 W @ 240 Vac
16.26 W @ 277 Vac
19.20 W @ 480 Vac

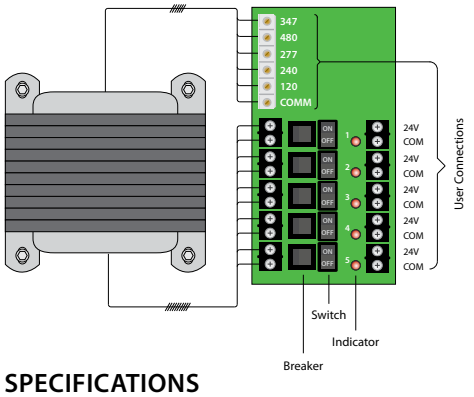
Full Load Primary Current:
2.66 A @ 120 Vac
1.36 A @ 240 Vac
1.18 A @ 277 Vac
0.68 A @ 480 Vac

Secondary Output Voltage vs. Load:
24.5 V @ 1 Amp
23.5 V @ 2 Amp
22.8 V @ 3 Amp
22.3 V @ 4 Amp

AC POWER SUPPLIES

PSH200A

200 VA Power Supply, Five 40 VA Class 2 Outputs, 480/347/277/240/120 Vac to 24 Vac, Metal Enclosure



PSMN200A

200 VA Power Supply, Five 40 VA Class 2 Outputs, 480/347/277/240/120 Vac to 24 Vac, Polymetal Subpanel Pre-Mounted

PSMN300A

347 VAC INPUT VOLTAGE PROVIDES DIRECT CONVERSION FROM MANY CANADIAN SYSTEMS TO CLASS 2 OUTPUTS

PERFECT FOR ISOLATING UP TO FIVE ZONE CONTROLLERS

PSH200A
Shown Without Cover

PSH200A
Shown Without Cover

SPECIFICATIONS

Transformer: One (1) 200 VA
Over Current Protection: Circuit Breaker
Primary: 480/347/277/240/120 Vac
Frequency: 50/60 Hz
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D (PSH200A)
11.330˝ H x 11.400˝ W x 5.000˝ D (PSMN200A)
Origin: Made of US and non-US parts
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Housing: NEMA1 Metal Enclosure (PSH200A)
Sub-Panel: Plenum Rated Polymetal (PSMN200A)

Notes:
- Primary voltage terminal cover available.

5 Secondaries:
24 Vac, with LED Indicators

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
480/347/277/240/120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
5 Ungrounded, Isolated, 40 VA, Class 2, 24 Vac Outputs. Terminals accept 12-26 AWG wire.

Ambient Temperature Derating:
1.6A up to 40˚ C ; 1.2A up to 60˚ C
(When All 5 Outputs Operated Simultaneously)
- With 120 Vac primary input voltage
- When all 5 outputs operated simultaneously, at room temperature

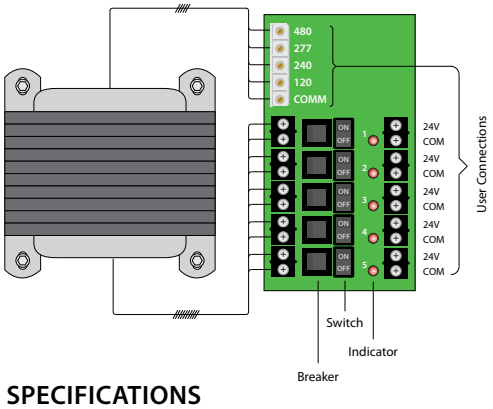
Standby Wattage:
18.93 W @ 120 Vac
22.08 W @ 240 Vac
22.33 W @ 277 Vac
23.11 W @ 347 Vac
25.24 W @ 480 Vac

Full Load Primary Current:
2.57 A @ 120 Vac
1.44 A @ 240 Vac
1.17 A @ 277 Vac
0.95 A @ 347 Vac
0.73 A @ 480 Vac

Secondary Output Voltage vs. Load:
24.9 V @ 0.5 Amp
24.0 V @ 1.0 Amp
23.9 V @ 1.4 Amp
23.7 V @ 1.6 Amp

PSH500A-LVC

500 VA Power Supply, Five 100 VA Class 2 Outputs, 480/277/240/120 Vac to 24 Vac, Hi/Lo Voltage Separate Wiring Compartments, Metal Enclosure



HI VOLTAGE SEPARATION LO

PSH500A-LVC
Shown Without High Voltage Cover & Low Voltage Access Plate

PSH500A-LVC
Shown With Full Cover & Access Plate

PSH500A-LVC
Shown Without Low Voltage Access Plate

c UL us LISTED Class 2

SPECIFICATIONS

Transformer: One (1) 500 VA
Over Current Protection: Circuit Breaker
Primary: 480/277/240/120 Vac
Frequency: 50/60 Hz
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D
Origin: Made of US and non-US parts
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
^ Seismic Certification of Equipment and Components: OSP-0201-10
Housing: NEMA1 Metal Enclosure with high/low separation

Notes:
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

5 Secondaries:
24 Vac, with LED Indicators
4 Amp breaker for each output

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
480/277/240/120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
5 Ungrounded, Isolated, 100 VA Class 2, 24 Vac Outputs. Removable Terminals accept16-22 AWG wire.

Ambient Temperature Derating:
4A up to 40˚ C ; 3A up to 50˚ C ; 2A up to 55˚ C
(When All 5 Outputs Operated Simultaneously)
- With 240 Vac primary input voltage
- When all 5 outputs operated simultaneously, at room temperature

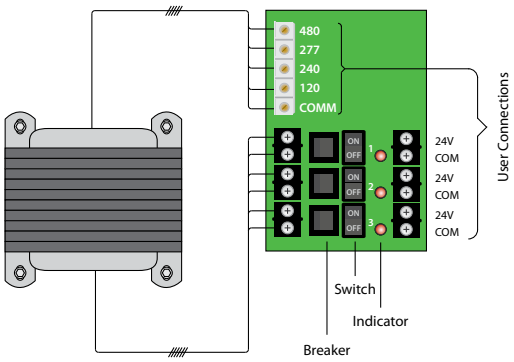
Standby Wattage:
48.515 W @ 120 Vac
48.699 W @ 240 Vac
49.564 W @ 277 Vac
48.255 W @ 480 Vac

Full Load Primary Current:
4.66 A @ 120 Vac
2.41 A @ 240 Vac
2.06 A @ 277 Vac
1.17 A @ 480 Vac

Secondary Output Voltage vs. Load:
24.0 V @ 1 Amp
23.0 V @ 2 Amp
21.8 V @ 3 Amp
21.1 V @ 4 Amp

PSH300A-LVC

300 VA Power Supply, Three 100 VA Class 2 Outputs, 480/277/240/120 Vac to 24 Vac, Hi/Lo Voltage Separate Wiring Compartments, Metal Enclosure



HI VOLTAGE SEPARATION LO

PSH300A-LVC
Shown Without High Voltage Cover & Low Voltage Access Plate

PSH300A-LVC
Shown With Full Cover & Access Plate

PSH300A-LVC
Shown Without Low Voltage Access Plate

c UL us LISTED Class 2

SPECIFICATIONS

Transformer: One (1) 300 VA
Over Current Protection: Circuit Breaker
Primary: 480/277/240/120 Vac
Frequency: 50/60 Hz
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D
Origin Made of US and non-US parts
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
^ Seismic Certification of Equipment and Components: OSP-0201-10
Housing: NEMA1 Metal Enclosure

Notes:
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

3 Secondaries:
24 Vac, with LED Indicators
4 Amp breaker for each output

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
480/277/240/120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
3 Ungrounded, Isolated, 100 VA, Class 2, 24 Vac Outputs. Terminals accept 12-26 AWG wire.

Ambient Temperature Derating:
4A up to 40˚ C ; 3A up to 50˚ C ; 2A up to 55˚ C
(When All 3 Outputs Operated Simultaneously)

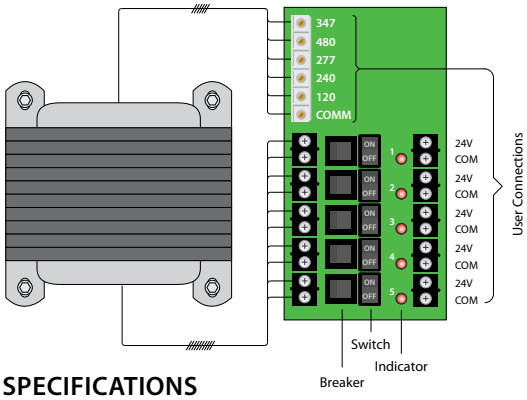
Standby Wattage:
16.61 W @ 120 Vac
17.70 W @ 240 Vac
16.26 W @ 277 Vac
19.20 W @ 480 Vac

Full Load Primary Current:
2.66 A @ 120 Vac
1.36 A @ 240 Vac
1.18 A @ 277 Vac
0.68 A @ 480 Vac

Secondary Output Voltage vs. Load:
24.5 V @ 1 Amp
23.5 V @ 2 Amp
22.8 V @ 3 Amp
22.3 V @ 4 Amp
- With 120 Vac primary input voltage
- When all 3 outputs operated simultaneously, at room temperature

PSH200A-LVC

200 VA Power Supply, Five 40 VA Class 2 Outputs, 480/347/277/240/120 Vac to 24 Vac, Hi/Lo Voltage Separate Wiring Compartments, Metal Enclosure



HI VOLTAGE SEPARATION LO™

PSH200A-LVC
Shown Without High Voltage Cover & Low Voltage Access Plate

PSH200A-LVC
Shown With Full Cover & Access Plate

PSH200A-LVC
Shown Without Low Voltage Access Plate

c UL us LISTED Class 2

SPECIFICATIONS

Transformer: One (1) 200 VA
Over Current Protection: Circuit Breaker
Primary: 480/347/277/240/120 Vac
Frequency: 50/60 Hz
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D
Origin: Made of US and non-US parts
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Housing: NEMA1 Metal Enclosure

5 Secondaries:
24 Vac, with LED Indicators

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
480/347/277/240/120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
5 Ungrounded, Isolated, 40 VA, Class 2, 24 Vac Outputs. Terminals accept 12-26 AWG wire.

Ambient Temperature Derating:
1.6A up to 40˚ C ; 1.2A up to 60˚ C
(When All 5 Outputs Operated Simultaneously)

Standby Wattage:
18.93 W @ 120 Vac
22.08 W @ 240 Vac
22.33 W @ 277 Vac
23.11 W @ 347 Vac
25.24 W @ 480 Vac

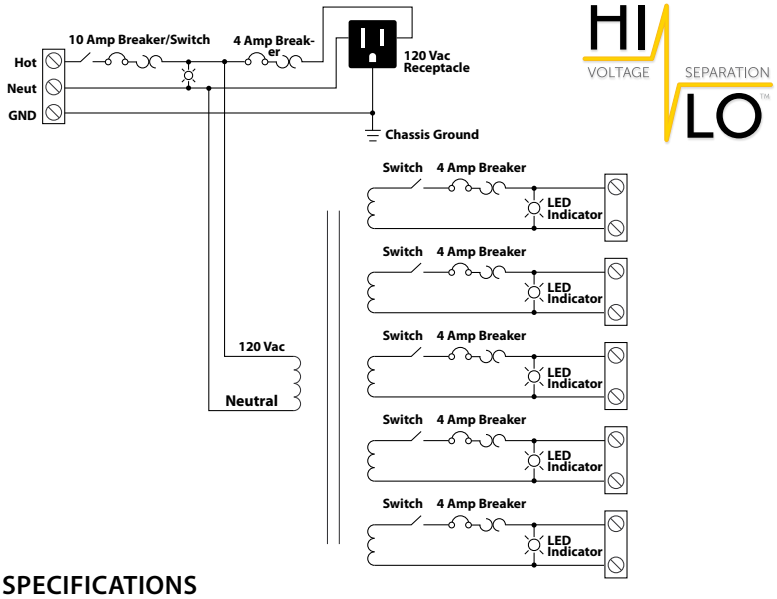
Full Load Primary Current:
2.57 A @ 120 Vac
1.44 A @ 240 Vac
1.17 A @ 277 Vac
0.95 A @ 347 Vac
0.73 A @ 480 Vac

Secondary Output Voltage vs. Load:
24.9 V @ 0.5 Amp
24.0 V @ 1.0 Amp
23.9 V @ 1.4 Amp
23.7 V @ 1.6 Amp

- With 120 Vac primary input voltage
- When all 5 outputs operated simultaneously, at room temperature

PSH500AB10-LVC

500 VA Power Supply, Five 100 VA Class 2 Outputs, 120 Vac to 24 Vac, Hi/Lo Voltage Separate Wiring Compartments, Exterior 120 Vac Receptacle and Circuit Breakers Switches, Metal Enclosure



HI VOLTAGE SEPARATION LO™

PSH500AB10-LVC
Shown With High Voltage Cover & Low Voltage Access Plate

C UL US LISTED Class 2

POWER SUPPLIES

SPECIFICATIONS

Transformer: One (1) 500 VA
Over Current Protection: Circuit Breaker
Primary: 120 Vac
Frequency: 50/60 Hz
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: 1 Outlet & Transformer)
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
^ Seismic Certification of Equipment and Components: OSP-0201-10
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D
Origin: Made of US and non-US parts
Housing: NEMA1 Metal Enclosure with high/low separation

5 Secondaries:
24 Vac, with LED Indicators
4 Amp breaker for each output

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
5 Ungrounded, Isolated, 100 VA Class 2, 24 Vac Outputs. Removable Terminals accept16-22 AWG wire.

Ambient Temperature Derating:
4A up to 40˚ C ; 3A up to 50˚ C ; 2A up to 55˚ C (When All 5 Outputs Operated Simultaneously)

Standby Wattage:
48.515 W @ 120 Vac

Full Load Primary Current:
4.66 A @ 120 Vac

Secondary Output Voltage vs. Load:
24.0 V @ 1 Amp
23.0 V @ 2 Amp
21.8 V @ 3 Amp
21.1 V @ 4 Amp

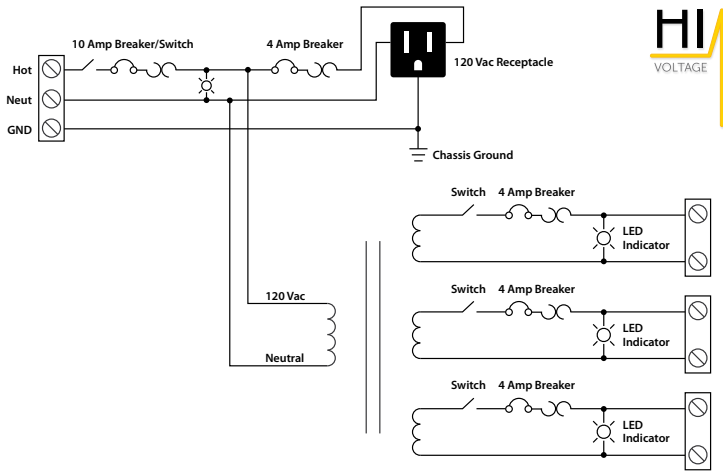
- When all 5 outputs operated simultaneously, at room temperature

Notes:

- 4A (Breaker protected) Convenience Receptacle Provided
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

PSH300AB10-LVC

300 VA Power Supply, Three 100 VA Class 2 Outputs, 120 Vac to 24 Vac, Hi/Lo Voltage Separate Wiring Compartments, Exterior 120 Vac Receptacle and Circuit Breakers Switches, Metal Enclosure



PSH300AB10-LVC
Shown With High Voltage Cover & Low Voltage Access Plate

SPECIFICATIONS

Transformer: One (1) 300 VA
Over Current Protection: Circuit Breaker
Primary: 120 Vac
Frequency: 50/60 Hz
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: 1 Outlet & Transformer)
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
^ Seismic Certification of Equipment and Components: OSP-0201-10
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D
Origin: Made of US and non-US parts
Housing: NEMA1 Metal Enclosure with high/low separation

3 Secondaries:
24 Vac, with LED Indicators
4 Amp breaker for each output

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
3 Ungrounded, Isolated, 100 VA Class 2, 24 Vac Outputs. Removable Terminals accept16-22 AWG wire.

Ambient Temperature Derating:
4A up to 40˚ C ; 3A up to 50˚ C ; 2A up to 55˚ C (When All 5 Outputs Operated Simultaneously)

Standby Wattage:
16.61 W @ 120 Vac

Full Load Primary Current:
2.66 A @ 120 Vac

Secondary Output Voltage vs. Load:
24.5 V @ 1 Amp
23.5 V @ 2 Amp
22.8 V @ 3 Amp
22.3 V @ 4 Amp

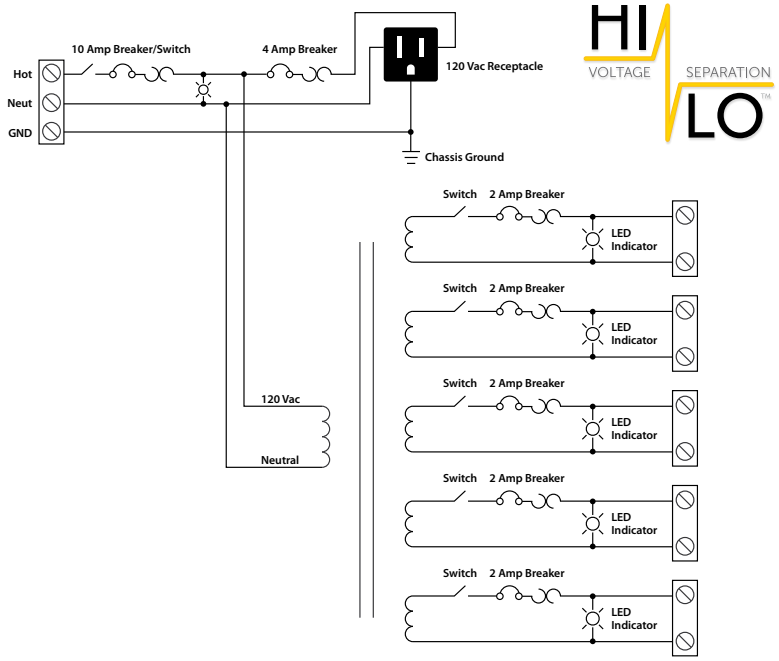
- When all 5 outputs operated simultaneously, at room temperature

Notes:

- 4A (Breaker protected) Convenience Receptacle Provided
- Design is in accordance with ASCE 7-05 Chapter 13: ^ https://hcai.ca.gov/wp-content/uploads/2020/10/OSP-0201.pdf
- Consult factory for OSP labeling

PSH200AB10-LVC

200 VA Power Supply, Five 40 VA Class 2 Outputs, 120 Vac to 24 Vac, Hi/Lo Voltage Separate Wiring Compartments, Exterior 120 Vac Receptacle and Circuit Breakers Switches, Metal Enclosure



PSH200AB10-LVC
Shown With High Voltage Cover & Low Voltage Access Plate

SPECIFICATIONS

Transformer: One (1) 200 VA
Over Current Protection: Circuit Breaker
Primary: 120 Vac
Frequency: 50/60 Hz
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: 1 Outlet & Transformer)
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Dimensions: 12.125˝ H x 12.125˝ W x 6.000˝ D
Origin: Made of US and non-US parts
Housing: NEMA1 Metal Enclosure with high/low separation

Notes:

- 4A (Breaker protected) Convenience Receptacle Provided

5 Secondaries:
24 Vac, with LED Indicators
2 Amp breaker for each output

24 Vac ON/OFF:
On / Off Switch & Breaker

Input:
120 Vac Finger-Safe Terminals, 8-18 AWG

Output:
5 Ungrounded, Isolated, 40 VA Class 2, 24 Vac Outputs. Removable Terminals accept16-22 AWG wire.

Ambient Temperature Derating:
1.6A up to 40˚ C ; 1.2A up to 60˚ C
(When All 5 Outputs Operated Simultaneously)

Standby Wattage:
18.93 W @ 120 Vac

Full Load Primary Current:
2.57 A @ 120 Vac

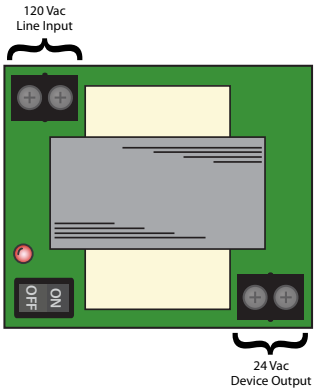
Secondary Output Voltage vs. Load:
24.9 V @ 0.5 Amp
24.0 V @ 1.0 Amp
23.9 V @ 1.4 Amp
23.7 V @ 1.6 Amp

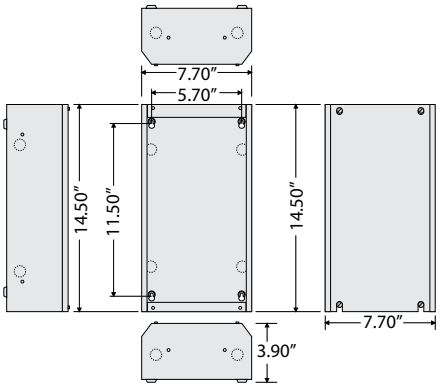
- When all 5 outputs operated simultaneously, at room temperature

AC POWER SUPPLY

CTRL-PS

40 VA Power Supply, 120 to 24 Vac, DIN rail and 14.5"x 7.7"x 3.9" Enclosure





Shown With Cover

SPECIFICATIONS

Transformer: One 40 VA
Primary: 120 Vac
Secondary: 24 Vac, isolated
Frequency: 50/60 Hz
Overload Protection: Inherently Limited
Status: LED On = Activated
ON/OFF Switch: 2 Position
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS (PSMN40AS) UL916, C-UL, CE, RoHS (MH1000 Series)
Dimensions: 14.50˝ D x 7.70˝ W x 3.90˝ D
Origin: Made of US and non-US parts
Housing: NEMA 1 Metal Enclosure with screw cover

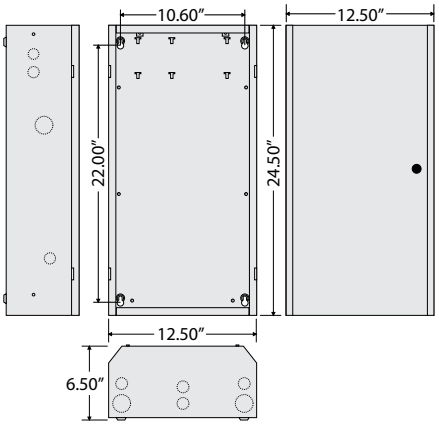
Notes:
- Track mounted power supply may be ordered separately as model PSMN40AS.
- 40 VA power supply mounted in MT212-4 track, high/low voltage barrier and 8.75˝ of 35 mm top hat DIN rail for mounting of desired controller in one metal enclosure.
- Controller must be 9.50˝ x 6.75˝ x 3.50˝ or smaller with DIN rail mounting capability, or 9.50˝ x 6.75˝ x 3.125˝ without DIN rail mounting capability.
- Controller not included.

GREAT FOR ZONE & NETWORK CONTROLLERS

AC POWER SUPPLIES

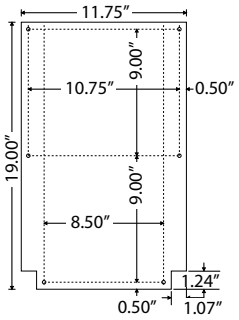
MHP3903100AB10

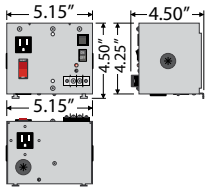
Single 100 VA Power Supply, Polymetal Subpanel Mounted, 12.5" x 24.5" x 6.5" Metal Enclosure



MHP3904100AB10

Single 100 VA Power Supply, Perforated Steel Subpanel Mounted, 12.5" x 24.5" x 6.5" Metal Enclosure





SELECTION GUIDE

Model #	Sub-Panel
MHP3903100AB10	Polymetal
MHP3904100AB10	Perforated Steel

POWER SUPPLY (PS100AB10)

Transformer: One 100 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, & Transformer) Total Combined Output 9A
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Dimensions: 4.500˝ H x 8.625˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Output Wires: Auxiliary Output
BLU: 120 Vac

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13

METAL HOUSING

Construction: 14 Gauge Steel
Cover Type: Reversible Hook Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE Approved, RoHS
Dimensions: 12.50" (W) x 24.50" (H) x 6.50" (D)

POLYMETAL SUB-PANEL (SP3803S)

Mounting Area: 220.60˝ square
Approvals: Plenum Rated
Dimensions: 19.00" x 11.75"

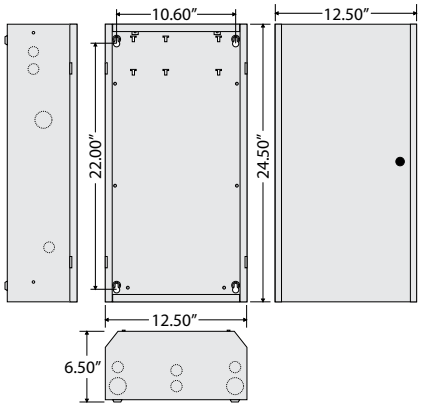
PERFORATED STEEL SUB-PANEL (SP3804S)

Mounting Area: 220.60˝ square
Approvals: Plenum Rated
Dimensions: 19.00" x 11.75"

AC POWER SUPPLIES

MHP3903100A100AB10

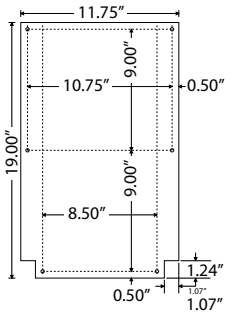
Dual 100 VA Power Supplies, Polymetal Subpanel Mounted, 12.5" x 24.5" x 6.5" Metal Enclosure

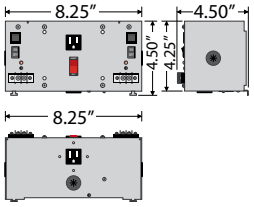


(PS100A100AB10)

MHP3904100A100AB10

Dual 100 VA Power Supplies, Perforated Steel Subpanel Mounted, 12.5" x 24.5" x 6.5" Metal Enclosure





SELECTION GUIDE

Model #	Sub-Panel
MHP3903100A100AB10	Polymetal
MHP3904100A100AB10	Perforated Steel

Transformer: Two 100 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, & Transformer) Total Combined Output 9A
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Dimensions: 4.500˝ H x 8.625˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground
Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Output Wires: Auxiliary Output
BLU: 120 Vac

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13

METAL HOUSING

Construction: 14 Gauge Steel
Cover Type: Reversible Hook Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE Approved, RoHS
Dimensions: 12.50" (W) x 24.50" (H) x 6.50" (D)

POLYMETAL SUB-PANEL (SP3803S)

Mounting Area: 220.60˝ square
Approvals: Plenum Rated
Dimensions: 19.00" x 11.75"

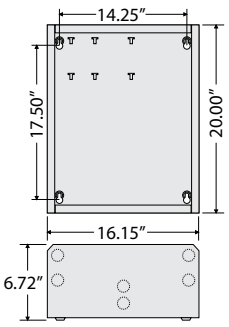
PERFORATED STEEL SUB-PANEL (SP3804S)

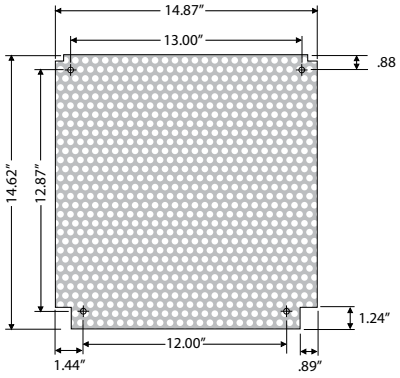
Mounting Area: 220.60˝ square
Approvals: Plenum Rated
Dimensions: 19.00" x 11.75"

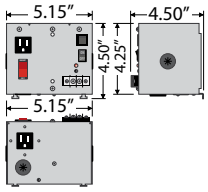
AC POWER SUPPLY

MHP4604100AB10

Single 100 VA Power Supply, Perforated Steel Sub-panel Mounted, 16.15" x 20.0" x 6.72" Metal Enclosure







POWER SUPPLY (PS100AB10)

Transformer: One 100 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, & Transformer) Total Combined Output 9A
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Dimensions: 4.500˝ H x 5.150˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground
Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Output Wires: Auxiliary Output
BLU: 120 Vac

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13

METAL HOUSING (MH4600)

Construction: 14 Gauge Steel
Cover Type: Reversible Hook Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE Approved, RoHS
Dimensions: 16.15" (W) x 20.00" (H) x 6.72" (D)

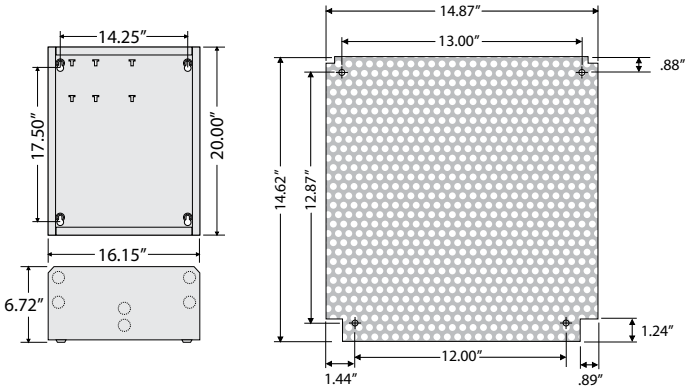
PERFORATED STEEL SUB-PANEL (SP4604)

Mounting Area: 214.85˝ square
Approvals: Plenum Rated
Dimensions: 14.62" x 14.87"

AC POWER SUPPLY

MHP4604100A100AB10

Dual 100 VA Power Supplies, Perforated Steel Subpanel Mounted, 16.15″ x 20.0″ x 6.72″ Metal Enclosure



POWER SUPPLY (PS100A100AB10)

Transformer: Two 100 VA Split-Bobbin
Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit: Outlets, Aux. Output, & Transformer)
Total Combined Output 9A
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Dimensions: 4.500″ H x 8.625″ W x 4.500″ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Output Wires: Auxiliary Output
BLU: 120 Vac

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.
- Design is in accordance with ASCE 7-05 Chapter 13

METAL HOUSING (MH4600)

Construction: 14 Gauge Steel
Cover Type: Reversible Hook Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE Approved, RoHS
Dimensions: 16.15″ (W) x 20.00″ (H) x 6.72″ (D)

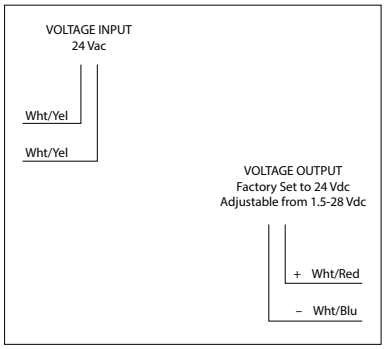
PERFORATED STEEL SUB-PANEL (SP4604)

Mounting Area: 214.85″ square
Approvals: Plenum Rated
Dimensions: 14.62″ x 14.87″

DC POWER SUPPLY: 24 VAC TO 1.5 - 28 VDC

PSP24DA

DC Power Supply, Non-Isolated Linear, 24 Vac to 1.5-28 Vdc, Adjustable Output, NEMA 1 Housing



SPECIFICATIONS

Voltage Input: 24 Vac, full-wave rectified
Voltage Output: 1.5 - 28 Vdc non-isolated
Frequency: 50/60 Hz
Overload Protection: Electrical and Thermal, Auto-Reset
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: LED On = Activated
Dimensions: 2.39″H x 3.31″W x 1.81″D with 0.50″ NPT nipple
Housing Detail: See **Housing B** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16″, 600V Rated
ON/OFF Switch: None
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1

Output Current Ratings:
116 mA @ 10 Vdc
125 mA @ 12 Vdc
300 mA @ 24 Vdc

Input Current Rating:
550 mA Maximum

Percent Ripple:
0.0016%, 24 Vdc @ 300 mA

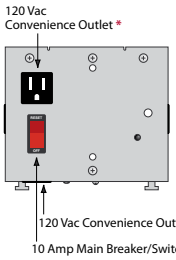
Regulation:
Load: 0.04% No Load to Full Load
Line: 0.0125 V/V

Notes:
- Requires a separate ungrounded transformer when used in conjunction with 1/2 wave rectified power supplies, grounded 24 Vac transformers, or when 24 Vac and 24 Vdc are connected in common.

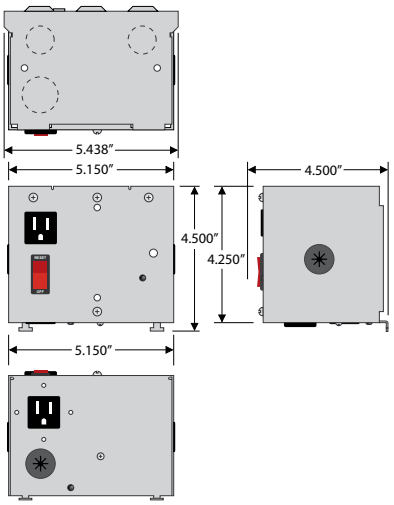
DC POWER SUPPLY: 120 VAC TO 24 VDC

PSH24DWB10

DC Power Supply, Single Switching, 120-24 Vdc at 2.5 Amp, Metal Enclosure



* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.



SPECIFICATIONS

Input Voltage: 120 Vac
Frequency: 50/60 Hz
DC Output: 24 Vdc @ 2.5 Amp
Over Current Protection: Circuit Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit)*
Total Combined Output 9A
Operating Temperature: 32 to 122˚F
Dimensions: 4.500˝ H x 5.438˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Notes:
• This device is not certified for use as a Class 2 power source.

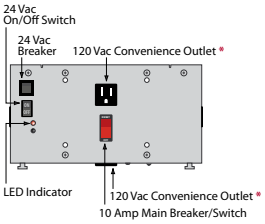
Output Wires: DC Supply Output
WHT/RED: 24 Vdc
WHT/BLU: 24 Vdc COM

Auxiliary Output
BLU: 120 Vac

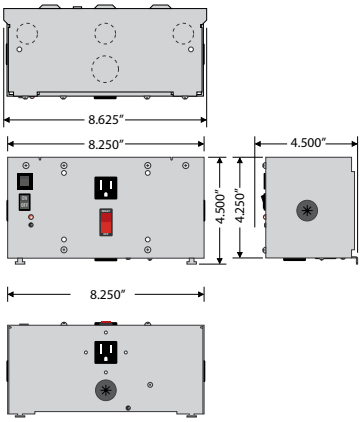
DC POWER SUPPLY: 120 VAC TO 24 VAC AND 24 VDC

PSH100A24DWB10

DC Power Supply, 100 VA, 120 to 24 Vac and Switching 120 to 24 Vdc at 2.5 Amp, Metal Enclosure



* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.



SPECIFICATIONS

Transformer: One 100 VA Split-Bobbin
Voltage Input: 120 Vac
Frequency: 50/60 Hz
Over Current Protection: Circuit Breaker
24 Vac ON/OFF: Switch / Breaker (4 Amp)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
(Kills power to entire unit: Outlets,
Aux. Output, & Transformer, and 24 Vdc)*
Total Combined Output 9A
Dimensions: 4.500˝ H x 8.625˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Notes:
• This device is not certified for use as a Class 2 power source.

Output Wires: DC Supply Output
WHT/RED: 24 Vdc
WHT/BLU: 24 Vdc COM

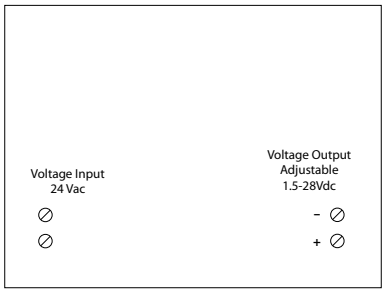
Auxiliary Output
BLU: 120 Vac

Transformer Output
WHT/YEL: 24 Vac
WHT/BLU: 24 Vac COM

DC POWER SUPPLIES: 24 VAC TO 1.5 - 28 VDC

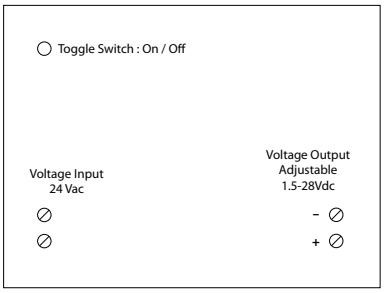
PSMN24DA

DC Power Supply, Non-Isolated Linear, 24 Vac to 1.5-28 Vdc, 300mA Adjustable Output, 2.75"Track Mount



PSMN24DAS

DC Power Supply, Non-Isolated Linear, 24 Vac to 1.5-28 Vdc, 300mA Adjustable Output, Switch, 2.75"Track Mount



SPECIFICATIONS

Voltage Input: 24 Vac, full-wave rectified
Voltage Output: 1.5 - 28 Vdc non-isolated
Frequency: 50/60 Hz
Overload Protection: Electrical and Thermal, Auto-Reset
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: LED On = Activated
Dimensions: 1.75"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750˝
MT212-2 Mounting Track Supplied
ON/OFF Switch: None (PSMN24DA)
2 Position Toggle (PSMN24DAS)
Approvals: Class 2 (UL Approved UL5085-3), UL916, C-UL, CE, RoHS

Output Current Ratings:
116 mA @ 10 Vdc
125 mA @ 12 Vdc
300 mA @ 24 Vdc

Input Current Rating:
550 mA Maximum

Percent Ripple:
0.0016%, 24 Vdc @ 300 mA

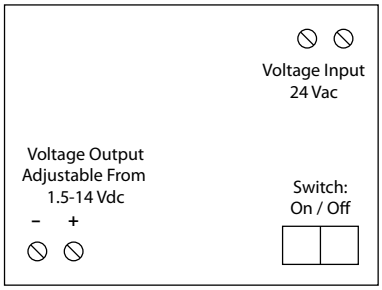
Regulation:
Load: 0.04% No Load to Full Load
Line: 0.0125 V/V

Notes:
- Requires a separate ungrounded transformer when used in conjunction with 1/2 wave rectified power supplies, grounded 24 Vac transformers, or when 24 Vac and 24 Vdc are connected in common.

DC POWER SUPPLY: 24 VAC TO 1.5 - 14 VDC

PSM20A12DAS

DC Power Supply, Isolated Linear, 24 Vac to 1.5Vdc-14Vdc, 300mA Adjustable Output, Track Mount



SPECIFICATIONS

Voltage Input: 24 Vac
Voltage Output: 1.5 - 14 Vdc Isolated
Frequency: 50/60 Hz
Overload Protection: Electrical and Thermal, Auto-Reset
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: LED On = Activated
Dimensions: 2.75"H x 4.00"W x 1.75"D1/2.25"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000˝ and 2.750˝
MT212-4 Mounting Track Supplied
ON/OFF Switch: 2 Position
Approvals: Class 2, UL916, C-UL, CE, RoHS,

Output Current Ratings:
300 mA @ 12 Vdc

Input Current Rating:
950 mA Maximum

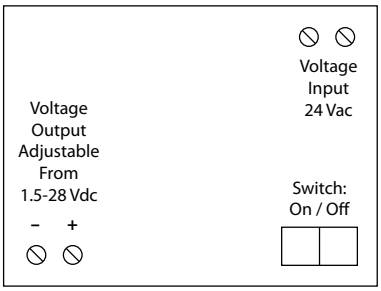
Percent Ripple:
0.0016%, 12 Vdc @ 300 mA

Regulation:
Load: 0.04% No Load to Full Load
Line: 0.0080 mV/V

DC POWER SUPPLIES: 24 VAC TO 1.5 - 28 VDC

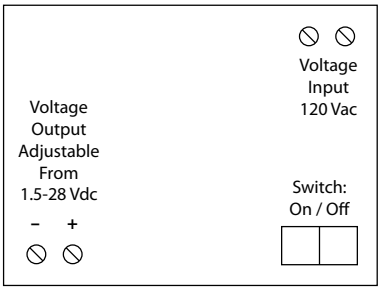
PSM24A24DAS

DC Power Supply, Isolated Linear, 24 Vac to 1.5-28 Vdc, 300mA Adjustable Output, Track Mount



PSM19A24DAS

DC Power Supply, Isolated Linear, 120 Vac to 1.5-28 Vdc, 300mA Adjustable Output, Track Mount



SPECIFICATIONS

Voltage Input: 24 Vac (PSM24A24DAS)
120 Vac (PSM19A24DAS)
Voltage Output: 1.5 - 28 Vdc Isolated
Frequency: 50/60 Hz
Overload Protection: Electrical and Thermal, Auto-Reset
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: LED On = Activated
Dimensions: 2.75"H x 4.00"W x 1.75"D1/2.25"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000" and 2.750"
MT212-4 Mounting Track Supplied
ON/OFF Switch: 2 Position
Max. Ambient Temperature: 40° C (PSM19A24DAS)
Approvals: Class 2, UL916, C-UL, CE, RoHS,

Output Current Ratings:
116 mA @ 10 Vdc
125 mA @ 12 Vdc
300 mA @ 24 Vdc

Input Current Rating:
950 mA Maximum (PSM24A24DAS)
150 mA Maximum (PSM19A24DAS)

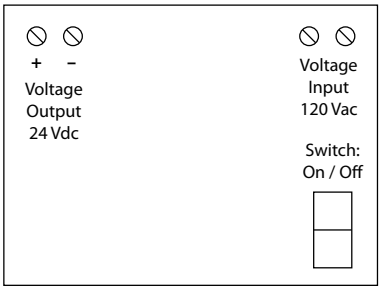
Percent Ripple:
0.0016%, 24 Vdc @ 300 mA

Regulation:
Load: 0.04% No Load to Full Load
Line: 0.0080 mV/V (PSM24A24DAS)
Line: 0.6250 mV/V (PSM19A24DAS)

DC POWER SUPPLY: 120 VAC TO 24 VDC

PSMN40A24DS

DC Power Supply, Isolated Linear, 120 Vac to 24 Vdc, 1 Amp Output, 2.75" Track Mount



SPECIFICATIONS

Voltage Input: 120 Vac
Voltage Output: 24 Vdc Isolated
Frequency: 50/60 Hz
Overload Protection: Electrical and Thermal, Auto-Reset
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: LED On = Activated
Dimensions: 5.00"H x 2.75"W x 2.00"D1/2.50"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750"
MT212-6 Mounting Track Supplied
ON/OFF Switch: 2 Position
Max. Ambient Temperature: 40° C
Approvals: Class 2, UL916, C-UL, CE, RoHS,

Output Current Ratings:
1 A @ 24 Vdc

Input Current Rating:
400 mA Maximum

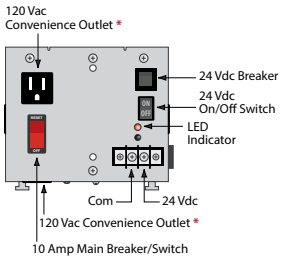
Percent Ripple:
0.0016%, 24 Vdc @ 1 A

Regulation:
Load: 0.50% No Load to Full Load
Line: 25.0000 mV/V

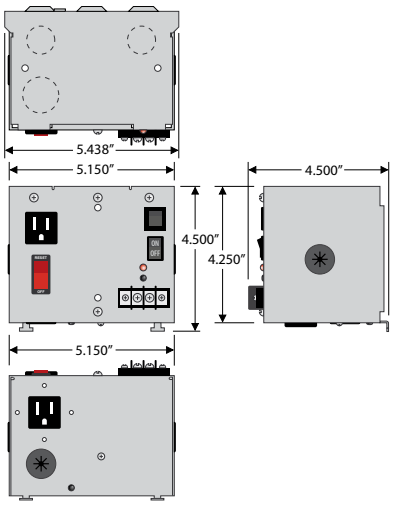
DC POWER SUPPLY

PSH100AB10-DC

Enclosed Single Switching DC Power Supplies, 120 to 24 Vdc @ 2.5 Amp, Class 2



* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.



SPECIFICATIONS

Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vdc ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, & Transformer)* Total Combined Output 9A
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3), UL508, C-UL, CE, RoHS, FCC
Dimensions: 4.500˝ H x 5.438˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

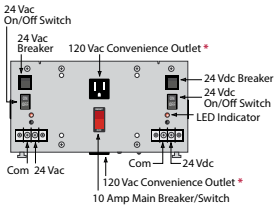
Output Wires: Auxiliary Output
BLU: 120 Vac

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.

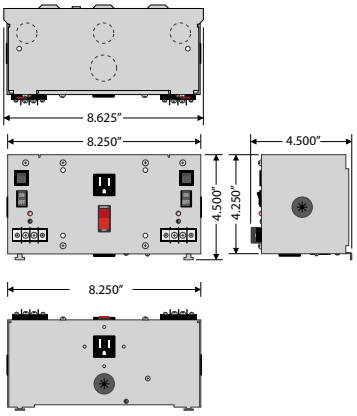
AC & DC POWER SUPPLY: 120 VAC TO 24 VAC & 24 VDC

PSH100A100AB10-DC

Enclosed Dual Power Supplies, 100 VA, 120 to 24 Vac and 120 to 24 Vdc @ 2.5 Amp, Class 2



* Move internal jumper to "HOT" position if you wish outlets to always be hot otherwise outlets will be switched by main breaker.



SPECIFICATIONS

Over Current Protection: Circuit Breaker
Frequency: 50/60 Hz
24 Vac ON/OFF: On / Off Switch & Breaker
24 Vdc ON/OFF: On / Off Switch & Breaker
Main Breaker ON/OFF: Switch / Breaker (10 Amp) (Kills power to entire unit: Outlets, Aux. Output, 24 Vac, & 24 Vdc)* Total Combined Output 9A
Max. Ambient Temperature: 40° C
Approvals: Class 2 (UL Approved UL5085-3), UL508, C-UL, CE, RoHS, FCC
Dimensions: 4.500˝ H x 8.625˝ W x 4.500˝ D
Origin: Made of US and non-US parts

Input Wires: Input Power Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Outlet Wires
BLK: 120 Vac
WHT: Neutral
GRN: Ground

Output Wires: Auxiliary Output
BLU: 120 Vac

Notes:
- Output derating may exceed 20% due to elevated ambient temperature or heat buildup in device over time.

TR40VA002US TR100VA009US TR50VA001US

US MANUFACTURED TRANSFORMERS

- 40 VA through 96 VA
- Single and dual hub
- Foot or hub mountable
- Circuit breaker models
- Class 2 UL Listed
- 24 Vac secondary
- Single and multi-tap primaries

Transformers may be foot mount, hub mount, or both. Transformers with the hub mount option will have either a single threaded hub or dual threaded hubs. Several transformers are provided with a circuit breaker and many are Class 2. Pigtail wires are standard on most models and are typically 8.00˝ in length. [1]

All transformers utilize split-bobbin construction, making them inherently isolated. Custom transformers are also available (contact factory).

Frequency: 50/60 Hz
Hub Style: .5˝ NPT Hub
Wire Length: 8˝ Typical with .5˝ Strip [1]
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
MTBF: 100,000 Hours @ 77° F
Construction: Split-Bobbin
Approvals: CE approved, RoHS. See charts for UL approvals.

1 = TR40VA022 = 8˝ Primary, 30˝ Secondary, with .5˝ Strip
TR50VA019 = 28˝ Typical with .5˝ Strip
TR100VA001-28 = 28˝ Typical with .5˝ Strip
TR100VA002-20 = 8˝ Primary, 20˝ Secondary, with .5˝ Strip
TR150VA001-28 = 28˝ Typical with .5˝ Strip

Instructions inside product box include wire colors/voltages.

Additional information on voltage and wire colors is available on individual data sheets on website.

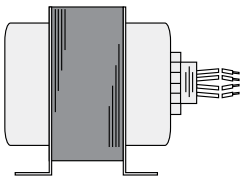
US MANUFACTURED TRANSFORMERS: 40-96 VA

MODEL #	MADE IN USA	UL	VA RATING	STYLE	OVER CURRENT PROTECTION	CLASS 2	PRIMARY VOLTAGE (VAC)	SEC. VOLTAGE (VAC)	FOOT MOUNT	HUBS	L	W	H	A	B	C
TR40VA001US	•	•	40VA	1	Inherent	•	120	24	•	1 Threaded	2.380˝	2.200˝	2.930˝	1.720˝	1.750˝	.980˝
TR40VA002US	•	•	40VA	4	Inherent	•	120	24	•	2 Threaded	2.380˝	2.200˝	2.920˝	1.720˝	1.750˝	.980˝
TR50VA001US	•	•	50VA	1	Fuse	•	120	24	•	1 Threaded	2.750˝	2.200˝	2.910˝	2.060˝	1.750˝	1.330˝
TR50VA005US	•	•	50VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.270˝	2.525˝	3.250˝	2.210˝	2.000˝	1.130˝
TR50VA022US	•	•	50VA	5	Circuit Brkr.	•	480/277/240/208/120	24	•	2 Threaded	3.260˝	2.525˝	3.290˝	2.190˝	2.000˝	1.120˝
TR100VA001US	•	•	96VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.780˝	2.500˝	3.290˝	2.740˝	2.000˝	1.630˝
TR100VA002US	•	•	96VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	3.750˝	2.500˝	3.290˝	2.690˝	2.000˝	1.600˝
TR100VA009US	•	•	96VA	5	Circuit Brkr.	•	480/277/240/208/120	24	•	2 Threaded	3.780˝	2.500˝	3.270˝	2.720˝	2.000˝	1.630˝

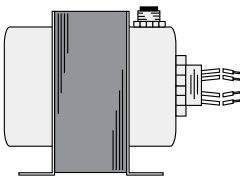
UL = Class 2 UL Listed - see data sheet for specific Listing

For full product information, see data sheets on website.

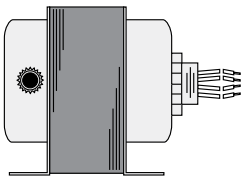
TRANSFORMERS



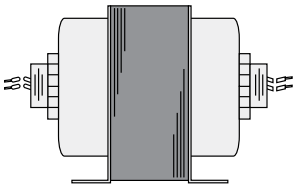
STYLE 1
Single Hub
& Foot Mount



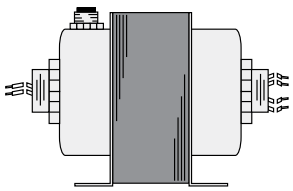
STYLE 2
Single Hub
& Foot Mount
with Circuit Breaker



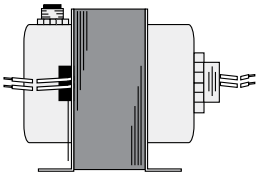
STYLE 3
Single Hub
& Foot Mount
with Circuit Breaker



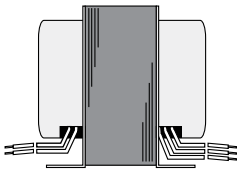
STYLE 4
Dual Hub
& Foot Mount



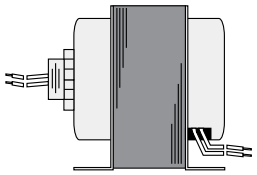
STYLE 5
Dual Hub
& Foot Mount
with Circuit Breaker



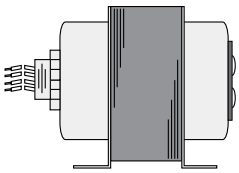
STYLE 6
Single Hub
& Side Opening
with Circuit Breaker



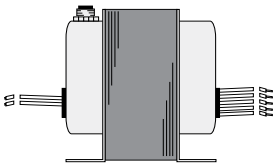
STYLE 7
Two Bottom Openings
& Foot Mount



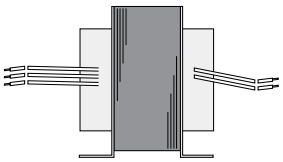
STYLE 8
Single Hub,
Side Opening
& Foot Mount



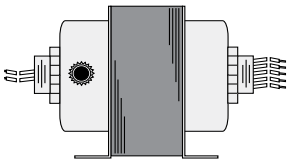
STYLE 9
Single Hub
& Dual Terminal Secondary



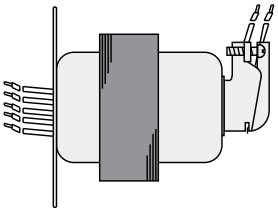
STYLE 10
Two End-Bell Openings,
& Foot Mount
with Circuit Breaker



STYLE 11
Two Side Openings
& Foot Mount

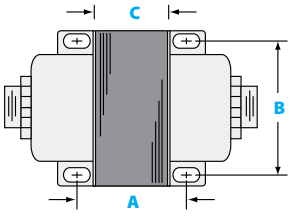


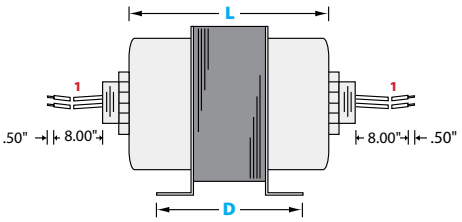
STYLE 12
Dual Hub
& Foot Mount
with Circuit Breaker

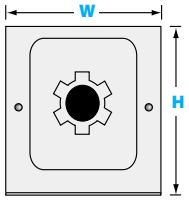


STYLE 13
90º Conduit Connector
& Mounting Plate Opening

Dimensions: See charts.







TRANSFORMERS: 20-50 VA

MODEL #	UL	VA RATING	STYLE	OVER CURRENT PROTECTION	CLASS 2	PRIMARY VOLTAGE (VAC)	SEC. VOLTAGE (VAC)	FOOT MOUNT	HUBS	L	W	H	A	B	C	D
TR20VA001	•	20VA	1	Inherent	•	120	24	•	1 Threaded	2.226″	1.877″	2.595″	1.625″	1.619″	1.013″	2.125″
TR20VA002	•	20VA	4	Inherent	•	208	24	•	2 Threaded	2.296″	1.902″	2.616″	1.604″	1.665″	1.020″	2.114″
TR20VA003	•	20VA	1	Inherent		24	24	•	1 Threaded	2.272″	1.900″	2.628″	1.635″	1.686″	1.023″	2.153″
TR20VA004	•	20VA	4	Inherent	•	277/240/208/120	24	•	2 Threaded	2.310″	1.890″	2.625″	1.540″	1.625″	1.000″	2.100″
TR20VA007	•	20VA	1	Inherent	•	277	24	•	1 Threaded	2.302″	1.895″	2.607″	1.608″	1.685″	1.019″	2.107″
TR40VA001	•	40VA	1	Inherent	•	120	24	•	1 Threaded	2.607″	2.169″	2.906″	2.020″	1.786″	1.204″	2.545″
TR40VA002	•	40VA	4	Inherent	•	120	24	•	2 Threaded	2.634″	2.177″	2.886″	2.007″	1.775″	1.206″	2.564″
TR40VA003	•	40VA	1	Inherent	•	24	24	•	1 Threaded	2.653″	2.171″	2.882″	2.033″	1.779″	1.185″	2.580″
TR40VA004	•	40VA	4	Inherent	•	277/240/208/120	24	•	2 Threaded	2.631″	2.177″	2.882″	1.998″	1.774″	1.189″	2.553″
TR40VA013	•	40VA	2	Circuit Brkr.		480/277/240/208	120	•	1 Threaded	3.267″	2.505″	3.000″	1.699″	1.986″	1.114″	3.325″
TR40VA015	•	40VA	1	Internal Thermal	•	240/208/120	24	•	1 Threaded	2.628″	2.175″	2.907″	2.040″	1.780″	1.188″	2.590″
TR40VA022 #	•	40VA	4	Inherent	•	120	24	•	2 Threaded	2.660″	2.172″	2.891″	1.980″	1.786″	1.201″	2.526″
TR40VA040 ^	•	40VA	9	Internal Thermal	•	240/208/120	24	•	1 Threaded	2.728″	2.171″	2.890″	1.995″	1.792″	1.215″	2.550″
TR50VA001	•	50VA	1	Fuse	•	120	24	•	1 Threaded	2.677″	2.178″	2.879″	2.109″	1.793″	1.253″	2.664″
TR50VA002	•	50VA	4	Fuse	•	120	24	•	2 Threaded	2.696″	2.181″	2.908″	2.053″	1.788″	1.278″	2.614″
TR50VA003	•	50VA	4	Fuse	•	240/208	24	•	2 Threaded	2.695″	2.181″	2.899″	2.082″	1.778″	1.294″	2.646″
TR50VA004	•	50VA	5	Circuit Brkr.	•	480/277/240/120	24	•	2 Threaded	3.475″	2.513″	3.014″	1.858″	1.970″	1.291″	2.490″
TR50VA005	•	50VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.489″	2.515″	3.008″	1.870″	1.971″	1.294″	2.463″
TR50VA006	•	50VA	1	Fuse	•	277	24	•	1 Threaded	2.763″	2.182″	2.898″	2.135″	1.790″	1.322″	2.698″
TR50VA007	•	50VA	4	Fuse	•	277	24	•	2 Threaded	2.715″	2.173″	2.886″	2.661″	1.784″	1.276″	2.790″
TR50VA008	•	50VA	5	Circuit Brkr.		480/277/240/208	120	•	2 Threaded	3.440″	2.510″	3.012″	1.932″	1.945″	1.346″	2.523″
TR50VA009	•	50VA	5	Circuit Brkr.	•	240/208/120	24	•	2 Threaded	3.412″	2.504″	3.014″	1.864″	2.000″	1.313″	2.485″
TR50VA014	•	50VA	2	Circuit Brkr.	•	277	24	•	1 Threaded	3.479″	2.509″	3.009″	1.873″	1.965″	1.285″	2.480″
TR50VA015	•	50VA	2	Circuit Brkr.	•	480/277/240/208/120	24	•	1 Threaded	3.405″	2.517″	3.013″	1.875″	1.985″	1.316″	2.484″
TR50VA016	•	50VA	2	Circuit Brkr.	•	240/208/120	24	•	1 Threaded	3.345″	2.510″	3.028″	1.842″	1.978″	1.325″	2.454″
TR50VA017	•	50VA	2	Circuit Brkr.	•	480/277/208	24	•	1 Threaded	3.470″	2.520″	3.031″	1.880″	1.872″	1.292″	2.460″
TR50VA018	•	50VA	13			480/277/240/208	120		1, 90° Conduit Connector, 1 Mounting Plate Opening	Refer to data sheet on website.						
TR50VA019 #	ᵁᴸ	50VA	11	Inherent	•	277/120	24	•	2 Side Openings	2.470″	2.170″	2.896″	1.850″	1.740″	1.130″	2.512″
TR50VA027	•	50VA	2	Circuit Brkr.	•	240	24	•	1 Threaded	3.450″	2.500″	3.060″	2.030″	1.911″	1.260″	2.450″

FOR 75 - 375 VA TRANSFORMERS, SEE NEXT PAGE.

For full product information, see data sheets on website.

UL = UL Listed - see data sheet for specific Listing ᵁᴸ = UL Component Recognized - see data sheet for specific Listing # = Refer to website for more wire length information ^ = Dual Terminal Secondary

TRANSFORMERS

TRANSFORMERS: 75-375 VA

MODEL #	UL	VA RATING	STYLE	OVER CURRENT PROTECTION	CLASS 2	PRIMARY VOLTAGE (VAC)	SEC. VOLTAGE (VAC)	FOOT MOUNT	HUBS	L	W	H	A	B	C	D
TR75VA001	•	75VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	3.743″	2.506″	3.016″	2.256″	1.974″	1.711″	2.873″
TR75VA002	•	75VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	3.890″	2.508″	3.013″	2.290″	1.952″	1.701″	2.882″
TR75VA003	•	75VA	2	Circuit Brkr.	•	277	24	•	1 Threaded	3.875″	2.507″	3.037″	2.269″	1.978″	1.684″	2.860″
TR75VA004	•	75VA	6	Circuit Brkr.	•	480/240/208/120	24	•	1 Threaded 1 Side Opening	3.802″	2.515″	3.050″	2.244″	1.990″	1.665″	2.850″
TR75VA005	•	75VA	2	Circuit Brkr.	•	480/240/208/120	24	•	1 Threaded	3.880″	2.515″	3.030″	2.270″	1.975″	1.700″	2.854″
TR75VA007	•	75VA	5	Circuit Brkr.	•	480/240/208/120	24	•	2 Threaded	3.883″	2.504″	3.034″	2.287″	1.981″	1.708″	2.813″
TR100VA001	•	96VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	4.085″	2.515″	3.030″	2.486″	1.975″	1.900″	3.082″
TR100VA001-28 #	•	96VA	2	Circuit Brkr.	•	120	24	•	1 Threaded	4.085″	2.515″	3.030″	2.486″	1.975″	1.900″	3.082″
TR100VA002	•	96VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	4.077″	2.504″	3.023″	2.470″	1.975″	1.888″	3.095″
TR100VA002-20 #	•	96VA	5	Circuit Brkr.	•	120	24	•	2 Threaded	3.973″	2.518″	3.033″	2.486″	1.865″	1.924″	3.060″
TR100VA004	•	96VA	5	Circuit Brkr.	•	480/277/240/120	24	•	2 Threaded	4.173″	2.523″	3.041″	2.647″	1.976″	2.086″	3.268″
TR100VA005	•	96VA	2	Circuit Brkr.	•	480/277/240/120	24	•	1 Threaded	4.258″	2.510″	3.030″	2.670″	1.968″	2.065″	3.260″
TR100VA008	•	96VA	5	Circuit Brkr.		480/277/240/208	120	•	2 Threaded	4.220″	2.525″	3.022″	2.690″	1.970″	2.082″	3.272″
TR100VA009	•	96VA	5	Circuit Brkr.	•	480/277/240/208/120	24	•	2 Threaded	4.270″	2.500″	3.060″	2.750″	1.975″	2.000″	2.252″
TR100VA015	•	96VA	2	Circuit Brkr.	•	480/277/240/208/120	24	•	1 Threaded	4.270″	2.500″	3.060″	2.699″	2.030″	2.065″	3.270″
TR100VA026	•	96VA	5	Circuit Brkr.	•	347/120	24	•	2 Threaded	4.040″	2.500″	3.050″	2.500″	2.030″	1.830″	3.070″
TR100VA027	•	96VA	2	Circuit Brkr.	•	240	24	•	1 Threaded	4.050″	2.500″	3.070″	2.510″	2.030″	1.880″	3.063″
TR150VA001	•	150VA	3	Circuit Brkr.		120	24	•	1 Threaded	3.650″	3.800″	3.183″	2.560″	3.150″	1.438″	3.514″
TR150VA001-28 #	•	150VA	3	Circuit Brkr.		120	24	•	1 Threaded	3.650″	3.800″	3.183″	2.560″	3.150″	1.438″	3.514″
TR150VA002	•	150VA	12	Circuit Brkr.		120	24	•	2 Threaded	3.620″	3.785″	3.160″	2.568″	3.147″	1.456″	3.511″
TR150VA008	•	150VA	12	Circuit Brkr.		480/277/240/208	120	•	2 Threaded	4.283″	3.786″	3.161″	3.211″	3.148 ″	2.116″	4.177″
TR175VA001	•	175VA	7			240/208	24	•	2 Bottom Openings	3.801″	3.790″	3.163″	3.264″	3.141″	2.151″	4.197″
TR175VA002	•	175VA	4			120	24	•	2 Threaded	3.800″	3.790″	3.189″	3.220″	3.150″	2.100″	4.180″
TR175VA003	•	175VA	1	Thermal Fuse on Primary		120	24	•	1 Threaded	4.030″	3.786″	3.161″	3.189″	3.155″	2.127″	4.153″
TR240VA001	•	240VA	8			120	24	•	1 Threaded 1 Bottom Opening	3.957″	3.750″	4.530″	3.350″	3.180″	1.932″	4.025″
TR300VA002	ᵘL	300VA	10	Circuit Brkr.		480/240/208/120	24	•	2 End-Bell Openings	5.499″	3.750″	4.500″	3.859″	3.187″	2.526″	4.526″
TR375VA001	•	375VA	7			120	24	•	2 Bottom Openings	4.592″	3.747″	4.504″	3.933″	3.181″	2.516″	4.630″

FOR 20 - 50 VA TRANSFORMERS, SEE PREVIOUS PAGE.

For full product information, see data sheets on website.

UL = UL Listed - see data sheet for specific Listing ᵘL = UL Component Recognized - see data sheet for specific Listing # = Refer to website for more wire length information ^ = Dual Terminal Secondary

SPECIALTY PERIPHERAL CONTROLS

If we do not already build a device with specifications or packaging configurations you require, we will be happy to quote and design one for you. Functional Devices, Inc. is actively involved in the development, manufacturing, and production of special peripheral devices. They are either variations of existing Functional Devices products or entirely unique devices. We will help provide you with a product to fit your specific needs. Please contact us so we may review your project and special requirements.

Air Handling Unit Fan Safety Shutdown

VIEW VIDEO

FAN SAFETY ALARM CIRCUITS / GENERAL PURPOSE LOGIC BOARDS

MODEL #	UL	POWER INPUT	ALARM CIRCUITS	BACnet COMPATIBLE	HOUSING STYLE *	TRACK MOUNT INCLUDED	SPEC PAGE
RIBMNLB	•	24 Vac/dc	4		H	MT212-6	132
RIBLB	•	24 Vac/dc	4		D		133
RIBMNWLB-7-BC	•	24 Vac/dc	7	•	H	MT212-6	134
RIBMNLB-6	•	24 Vac/dc	6		H	MT212-6	135
RIBMNLB-4	•	24 Vac/dc	4		H	MT212-4	135
RIBMNLB-2	•	24 Vac/dc	2		H	MT212-4	135
RIBMNLB-1	•	24 Vac/dc	1		H	MT212-4	136
RIBLB-6	•	24 Vac/dc	6		D		137
RIBLB-4	•	24 Vac/dc	4		D		137
RIBLB-2	•	24 Vac/dc	2		D		137
RIBMNLB-6NO	•	24 Vac/dc	6		H	MT212-6	138
RIBMNLB-4NO	•	24 Vac/dc	4		H	MT212-4	138
RIBMNLB-2NO	•	24 Vac/dc	2		H	MT212-4	138

I/O EXPANDERS

MODEL #	UL	POWER INPUT	RELAY CONTACTS	TRACK MOUNT INCLUDED	SPEC PAGE
RIBMN24Q2C	•	24 Vac/dc	2 SPDT	MT212-4	139
RIBMN24Q3C	•	24 Vac/dc	3 SPDT	MT212-4	139
RIBMN24Q4C	•	24 Vac/dc	4 SPDT	MT212-6	140
RIBMN24Q4C-PX	•	24 Vac/dc	4 SPDT	MT212-6	140

MANUAL ANALOG OVERRIDE SWITCH

MODEL #	POWER INPUT	SWITCH	TRACK MOUNT ^	SPEC PAGE
RIBMNA1D0	24 Vac/dc	Manual / Auto	MT212 Series	141

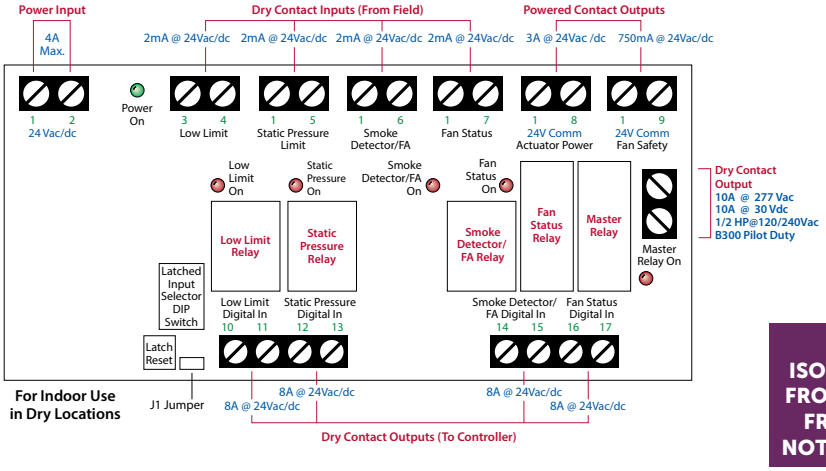
UL = UL Listed - see data sheet for specific Listing

* = See Housing Guide on page 201

^ = Track mount sold separately

RIBMNLB

AHU Fan Safety Alarm Circuit, 24 Vac/dc Power Input, 2.75" Track Mount



CODE VER. 1.0

CAN BE USED TO ISOLATE FIELD DEVICES FROM EACH OTHER AND FROM CONTROLLER, NOT ONLY FAN CIRCUITS

SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 250ms
Power Input: 4 Amp Max @ 24 Vac/dc ; 50-60 Hz
Alarm Status: LED On = Activated
Dimensions: 6.00"H x 2.75"W x 0.75"D1/1.25"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided
Approvals: UL Listed, UL864, C-UL, CE, RoHS, CSFM
Gold Flash: No
Override Switch: No

Notes:
- RIBMNLB has four Alarm Inputs and one Master Alarm.

A master relay will open if any one of the normally-closed (N/C) inputs open. LED status of all outputs and the master relay is provided. The RIBMNLB is provided with mounting track for mounting in user-provided electrical enclosures. The RIBLB is enclosed in a NEMA 1, 4˝ x 7˝ enclosure with a clear lid to allow viewing of the status LEDs. The master relay has two general-purpose outputs: one 24 V output terminal and one dry contact output rated up to 10 Amp @ 277 Vac. Fan status contact controls actuator power. The most common application is an Air Handling Unit (AHU) fan-safety-shutdown where the master relay is used to shutdown the fan. Contact closure outputs are provided so that a DDC controller can determine the cause of a shutdown.

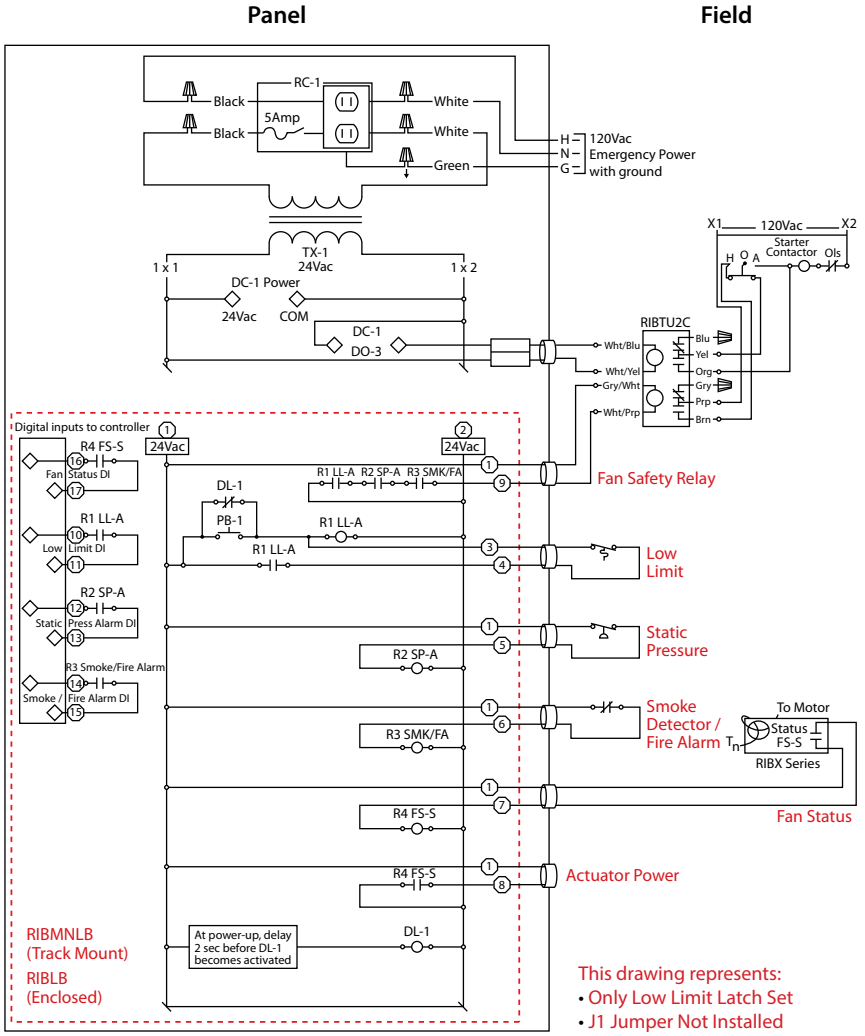
Model RIBMNLB combines all the relay logic to facilitate fan status, fan safety control, and damper actuator control. It is intended for use in a circuit that will control fan start/stop and fan safety shut-down circuit monitors three critical inputs:

- Low-limit freeze protection (to stop fan and remove power from damper actuator)
- Static pressure (to monitor for hi/low pressure condition)
- Smoke detector / fire alarm

Master relay opens to shut down AHU when any Normally Closed input opens.

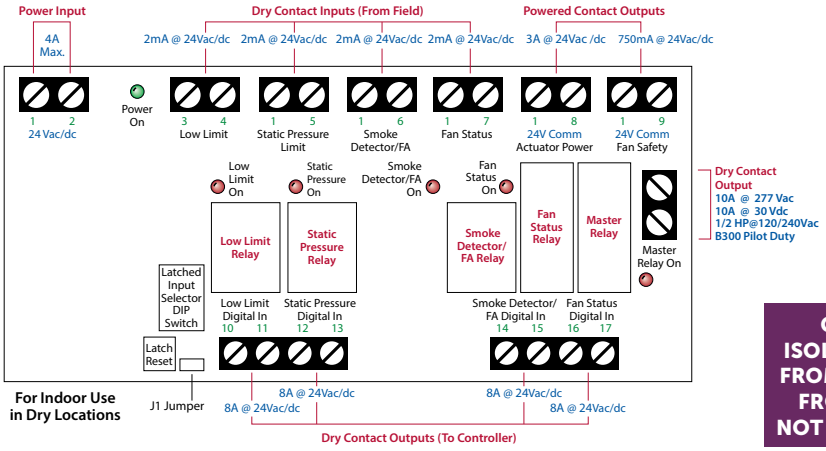
Integral DIP switch allows any input to be latched. Input can be reset with push button or by cycling unit power.

Installing J1 jumper allows Fan Status input to control Master Relay, like the other 3 inputs.



RIBLB

AHU Fan Safety Alarm Circuit, 24 Vac/dc Power Input, NEMA 1 Housing



CODE VER. 1.0

CAN BE USED TO ISOLATE FIELD DEVICES FROM EACH OTHER AND FROM CONTROLLER, NOT ONLY FAN CIRCUITS

SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 250ms
Power Input: 4 Amp Max @ 24 Vac/dc ; 50-60 Hz
Alarm Status: 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: UL Listed, UL864, C-UL, CE, RoHS, CSFM
Housing Rating: UL Listed, NEMA 1, C-UL, CE
Gold Flash: No
Override Switch: No

Notes:

- RIBMNLB and RIBLB have four Alarm Inputs and one Master Alarm.

A master relay will open if any one of the normally-closed (N/C) inputs open. LED status of all outputs and the master relay is provided. The RIBMNLB is provided with mounting track for mounting in user-provided electrical enclosures. The RIBLB is enclosed in a NEMA 1, 4˝ x 7˝ enclosure with a clear lid to allow viewing of the status LEDs. The master relay has two general-purpose outputs: one 24 V output terminal and one dry contact output rated up to 10 Amp @ 277 Vac. Fan status contact controls actuator power. The most common application is an Air Handling Unit (AHU) fan-safety-shutdown where the master relay is used to shutdown the fan. Contact closure outputs are provided so that a DDC controller can determine the cause of a shutdown.

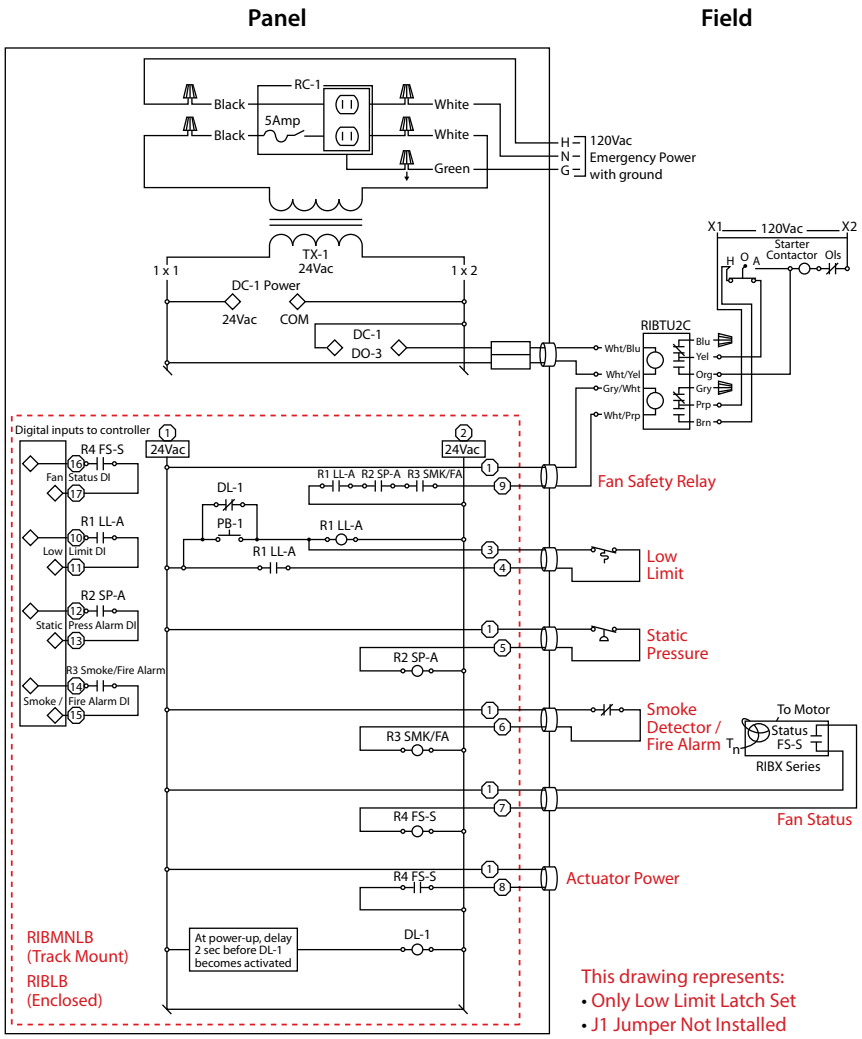
Model RIBMNLB combines all the relay logic to facilitate fan status, fan safety control, and damper actuator control. It is intended for use in a circuit that will control fan start/stop and fan safety shut-down circuit monitors three critical inputs:

- Low-limit freeze protection (to stop fan and remove power from damper actuator)
- Static pressure (to monitor for hi/low pressure condition)
- Smoke detector / fire alarm

Master relay opens to shut down AHU when any Normally Closed input opens.

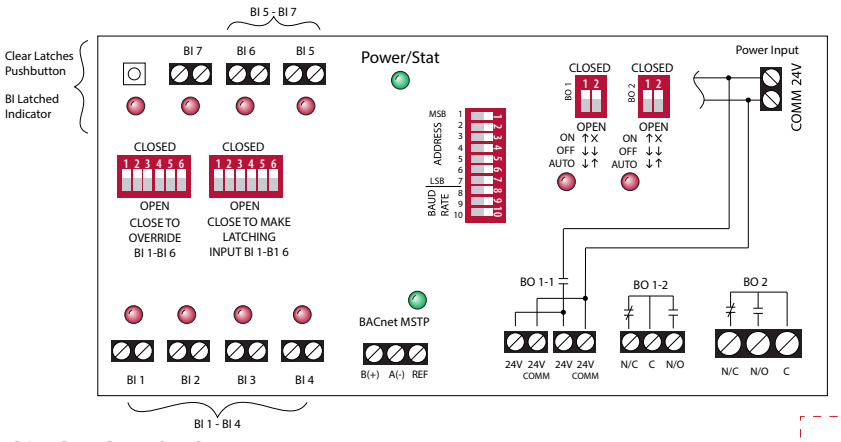
Integral DIP switch allows any input to be latched. Input can be reset with push button or by cycling unit power.

Installing J1 jumper allows Fan Status input to control Master Relay, like the other 3 inputs.



RIBMNWLB-7-BC

AHU Fan Safety Alarm and General Purpose Logic Circuit, BACnet MS/TP Network, 24 Vac/dc Power Input, Two Binary Outputs + Override, Seven Binary Inputs, 2.75" Track Mount



RIBMNWLB-7-BC

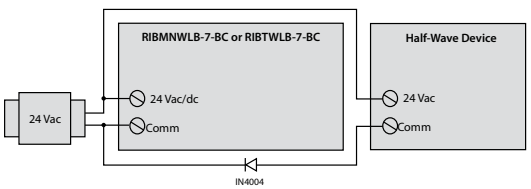
SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 8ms
Power Input: 24 Vac/dc: 50-60 Hz
Max current input determined by adding load current user applies to BO 1-1 (3A Max) plus 75 mA @ 24 Vac or 30 mA @ 24 Vdc depending on power source supplied by user to power RIB device, 24 Vac or 24 Vdc
Dimensions: 6.62"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Approvals: UL864, UL916, C-UL, CE, RoHs, CSFM
Relay Rating, BO 1-1: 3 Amp Max @ 24 Vac or 24 Vdc (depending on power source supplied by user to power RIB device)
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
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
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200 (DIP Switch Selectable)

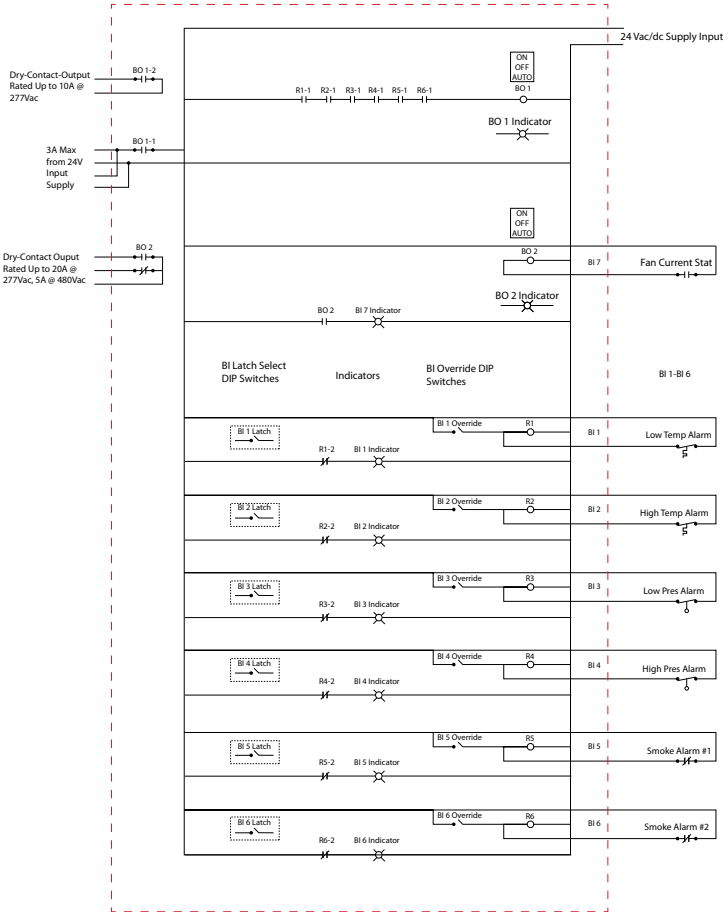
Notes:

- 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. ^^

- The RIBMNWLB-7-BC is set in Fan-Safety-Circuit mode by default from the factory. Fan-Safety-Circuit mode sets up BI 1 – BI 6 in an AND function, so that when all 6 binary inputs are closed, BO 1 will close. Opening any of the 6 binary inputs will open BO 1.
- BO 2 is bound to BI 7 such that when BI 7 is closed, BO 2 relay will activate. Binding and Priority level can be set by properties in BO 2.
- The RIBMNWLB-7-BC can also be enabled as an I/O board with 2 binary output relays and 7 general-purpose binary inputs.



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



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	MS/TP Address - 121
Device ID - 277004	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.)

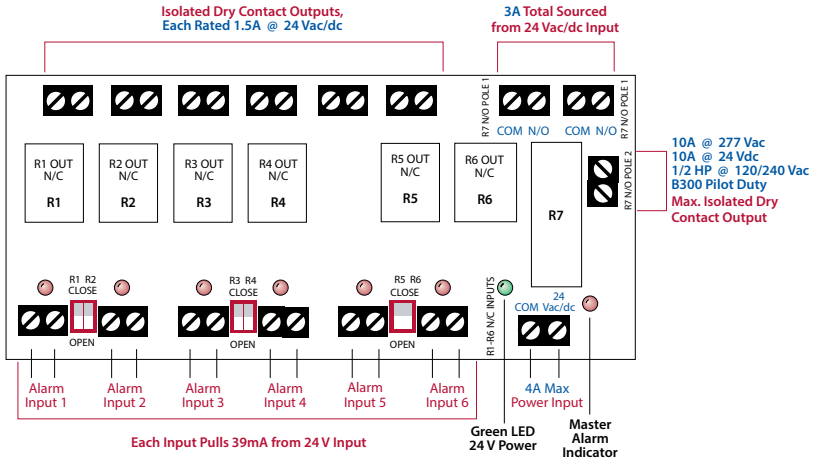
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

All other combinations = 9600 baud

* 0 = Open ; 1 = Closed

RIBMNLB-6/-4/-2

AHU Fan Safety Alarm and General Purpose Logic Circuit, 24 Vac/dc Power Input, 6/4/2 Alarm Inputs all with N/C Outputs, 2.75" Track Mount



SPECIFICATIONS

Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 8ms
Power Input: 4 Amp max. @ 24 Vac/dc ; 50-60 Hz
Alarm Status: LED On = Activated
Dimensions: 6.20"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMNLB-6)
4.60"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMNLB-4)
3.00"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMNLB-2)
Hosuing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided (RIBMNLB-6)
MT212-4 Mounting Track Provided (RIBMNLB-4, RIBMNLB-2)
Approvals: UL Listed, UL916, UL864, C-UL, CE, RoHS, CSFM
Gold Flash: No
Override Switch: No

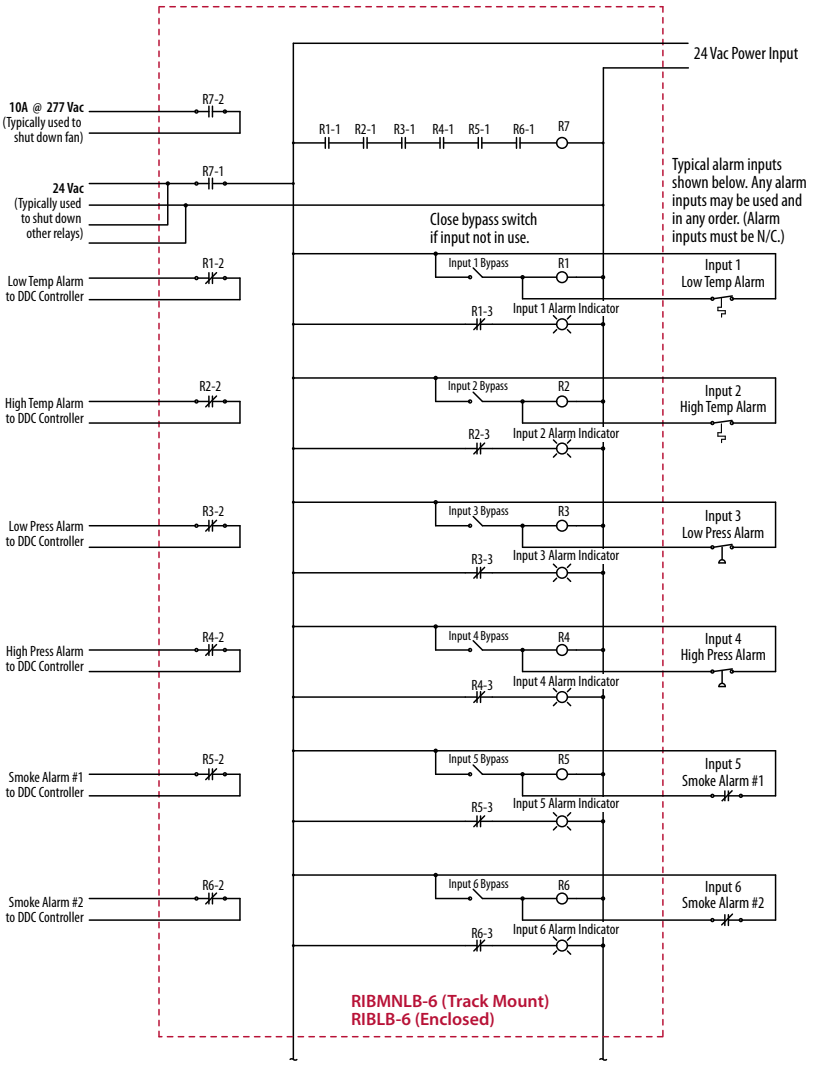
Notes:
- Track mount models shown above.
- RIBMNLB-6 has six Alarm Inputs and one Master Alarm.
- RIBMNLB-4 has four Alarm Inputs and one Master Alarm.
- RIBMNLB-2 has two Alarm Inputs and one Master Alarm.
- This is a half wave device. When connecting 24Vac to both this device and a full wave device, damage to devices can occur.

Models RIBMNLB-6, RIBMNLB-4, and RIBMNLB-2 are simply devices that combine a common relay-logic function into a small, easy-to-install, and less expensive form.

A master relay will open if any one of the normally-closed (N/C) inputs open. There are six, four, or two inputs depending on the model chosen. LED status of all inputs, the master relay, and power input is provided. Bypass of un-used inputs is also provided. The RIBMNLB series is provided with mounting track for mounting in user-provided electrical enclosures. The RIBLB series is enclosed in a NEMA-1, 4˝ x 7˝ enclosure with a clear lid to allow viewing of the status LEDs. The master relay has three general-purpose outputs: two 24 V output terminals and one dry-contact output rated up to 10 Amp @ 277 Vac (terminals on RIBMNLB series, wires on RIBLB series.) The most common application is an Air Handling Unit (AHU) fan-safety-shutdown where the master relay is used to shutdown the fan. Contact closure outputs are provided so that a DDC controller can determine the cause of a shutdown.

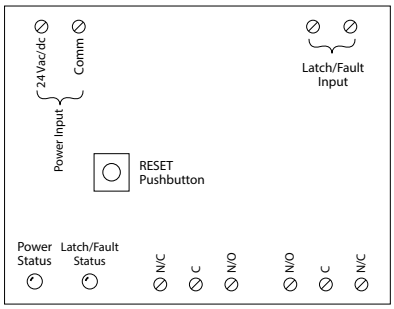
SELECTION GUIDE

Model#	Inputs	
RIBMNLB-6	6	MT212 Mounting Track
RIBMNLB-4	4	MT212 Mounting Track
RIBMNLB-2	2	MT212 Mounting Track



RIBMNLB-1

General Purpose Latching Logic Circuit, One Latching/Fault Input, One Relay Output, 24 Vac/dc Power Input, 2.75"Track Mount



- MANUAL RESET
- ONE ALARM OUTPUT
- ONE RELAY OUTPUT

SPECIFICATIONS

 # Relays & Contact Type: One (1) DPDT 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: 8ms
Green LED: Power Status (ON: Power present)
Red LED: Fault Status (ON: Latched/Fault State)
Dimensions: 3.00"H x 2.75"W x 0.75"D1/1.25"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-4 Mounting Track Provided
Approvals: CE, UL Listed, UL864, C-UL, RoHS, CSFM
Gold Flash: No
Relay Override Switch: No
Fault Reset Switch: Yes

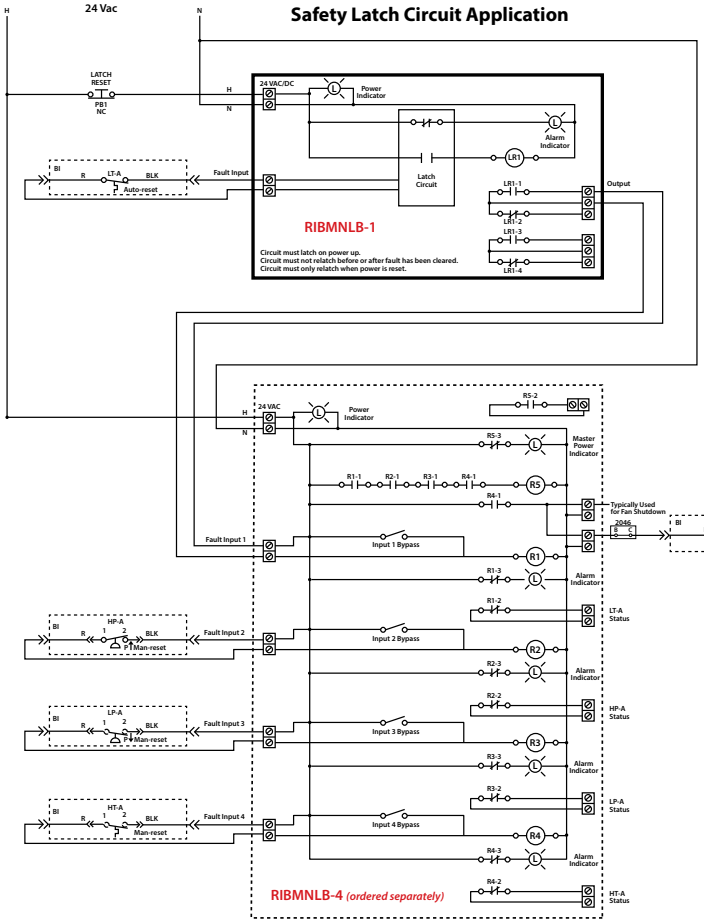
Contact Ratings:
10 Amp Resistive @ 30Vdc
10 Amp General Use @ 277Vac
1/2 HP @ 120/240Vac (N/O)
1/3 HP @ 120/240Vac (N/C)

Power Input Ratings:
53 mA @ 24Vac
25 mA @ 24Vdc
50/60 Hz

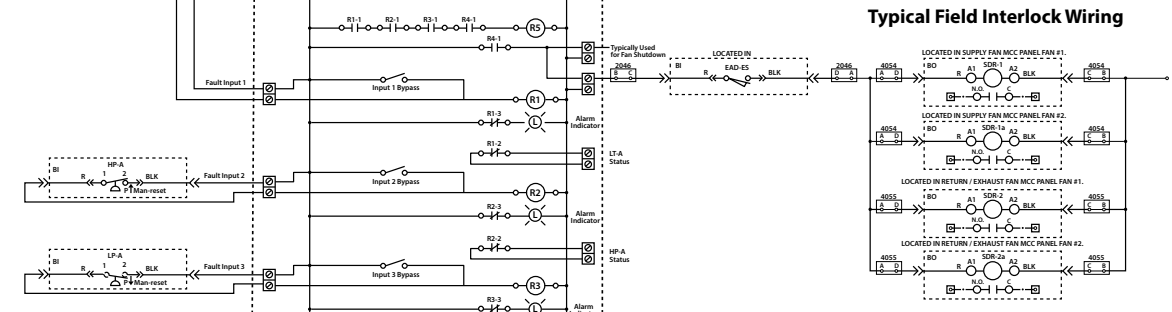
Alarm Fault Application:
When the Latch/Fault Input is Closed (Normal state), the Relay is activated, and Red LED is Off. When Latch/Fault Input Opens (Alarm state), the Relay deactivates, and Red LED turns On. Until the Latch/Fault Input is Closed AND either power is cycled or the RESET button is pressed, relay will remain in the Alarm state.

Notes:
- Fault conditions must last for at least 500 ms in order for the unit to go into Alarm state.
- Reset signal, whether via pushbutton or power cycling, must last for at least 30 ms in order to reset the device to go from Alarm state to Normal state.

Safety Latch Circuit Application

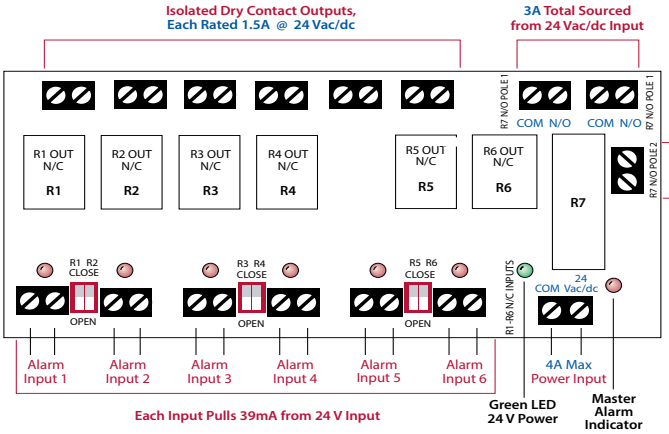


Typical Field Interlock Wiring



RIBLB-6/-4/-2

AHU Fan Safety Alarm and General Purpose Logic Circuit, 24 Vac/dc Power Input, 6/4/2 Alarm Inputs all with N/C Outputs, NEMA 1 Housing



SPECIFICATIONS

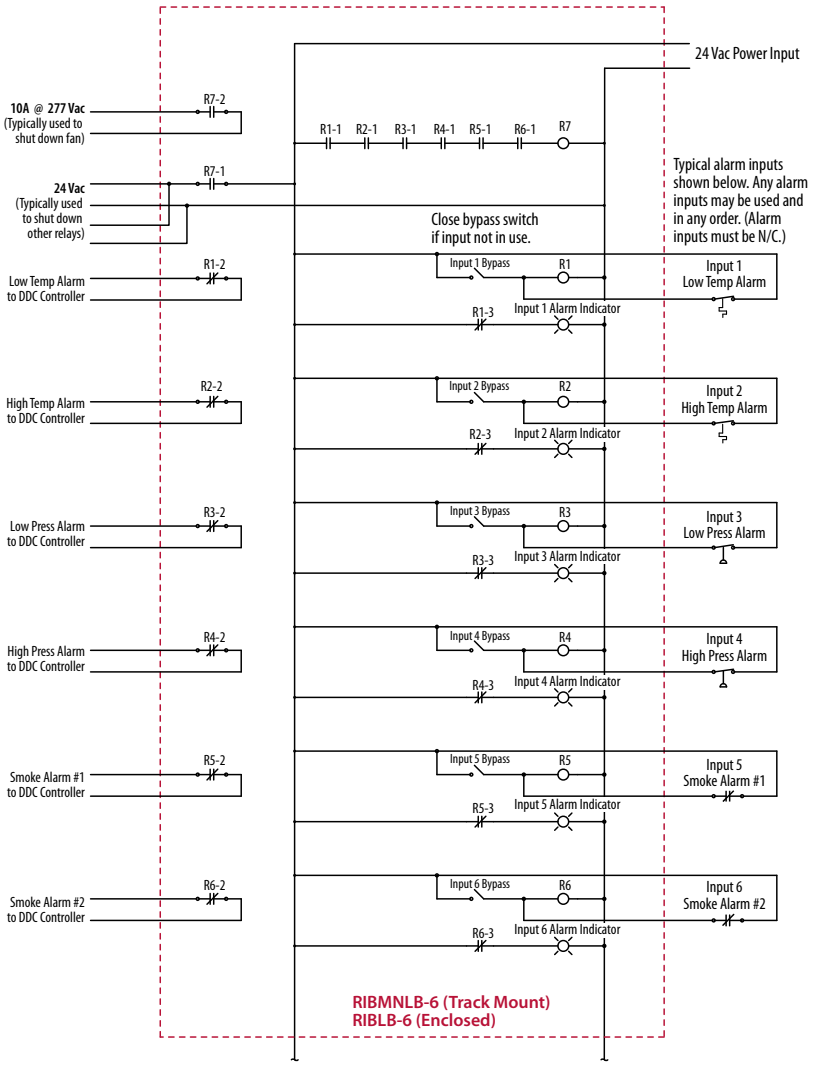
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 8ms
Power Input: 4 Amp max. @ 24 Vac/dc ; 50-60 Hz
Alarm Status: LED On = Activated
Dimensions: 4.28˝H x 7.00˝W x 2.00˝D with .75˝ NPT Nipple
Housing Detail: See **Housing D** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided (RIBMNLB-6) MT212-4 Mounting Track Provided (RIBMNLB-4, RIBMNLB-2)
Approvals: UL Listed, UL916, UL864, C-UL, CE, RoHS, CSFM
Housing Rating: UL Listed, NEMA 1, C-UL, CE Approved, UL Accepted for Use in Plenum
Gold Flash: No
Override Switch: No

Notes:

- Track mount models shown above.
- RIBLB-6 have six Alarm Inputs and one Master Alarm.
- RIBLB-4 have four Alarm Inputs and one Master Alarm.
- RIBLB-2 have two Alarm Inputs and one Master Alarm.
- This is a half wave device. When connecting 24Vac to both this device and a full wave device, damage to devices can occur.

Models RIBLB-6, RIBLB-4, and RIBLB-2 are simply devices that combine a common relay-logic function into a small, easy-to-install, and less expensive form.

A master relay will open if any one of the normally-closed (N/C) inputs open. There are six, four, or two inputs depending on the model chosen. LED status of all inputs, the master relay, and power input is provided. Bypass of un-used inputs is also provided. The RIBMNLB series is provided with mounting track for mounting in user-provided electrical enclosures. The RIBLB series is enclosed in a NEMA-1, 4˝ x 7˝ enclosure with a clear lid to allow viewing of the status LEDs. The master relay has three general-purpose outputs: two 24 V output terminals and one dry-contact output rated up to 10 Amp @ 277 Vac (terminals on RIBMNLB series, wires on RIBLB series.) The most common application is an Air Handling Unit (AHU) fan-safety-shutdown where the master relay is used to shutdown the fan. Contact closure outputs are provided so that a DDC controller can determine the cause of a shutdown.

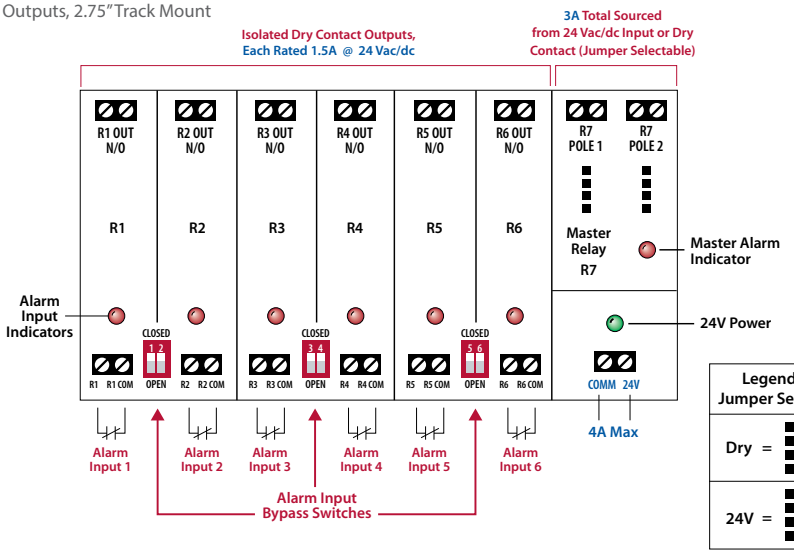


SELECTION GUIDE

Model#	Inputs	
RIBLB-6	6	PE6020 Enclosure
RIBLB-4	4	PE6020 Enclosure
RIBLB-2	2	PE6020 Enclosure

RIBMNLB-6NO/-4NO/-2NO

AHU Fan Safety Alarm and General Purpose Logic Circuit, 24 Vac/dc Power Input, 6/4/2 Alarm Inputs all with N/O Outputs, 2.75"Track Mount



SPECIFICATIONS

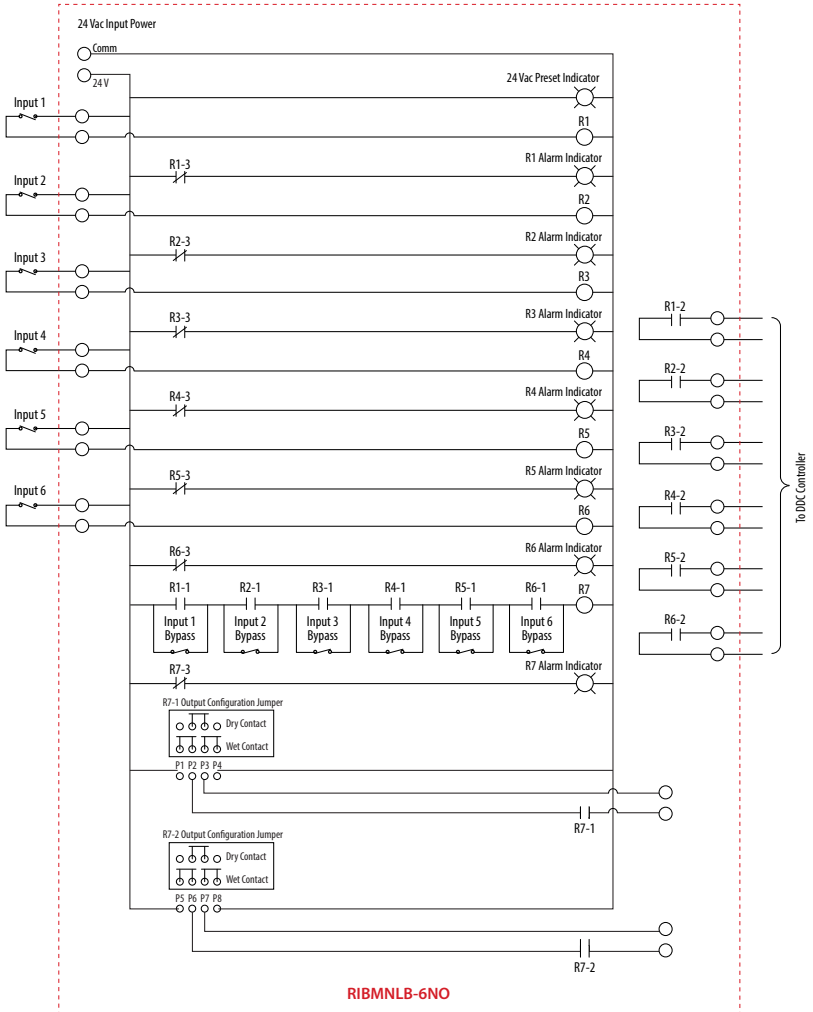
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 8ms
Power Input: 4 Amp max. @ 24 Vac/dc ; 50-60 Hz
Alarm Status: LED On = Activated
Dimensions: 6.20"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMNLB-6NO)
4.60"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMNLB-4NO)
3.00"H x 2.75"W x 1.25"D1/1.75"D2 (RIBMNLB-2NO)
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided (RIBMNLB-6NO)
MT212-4 Mounting Track Provided (RIBMNLB-4NO, RIBMNLB-2NO)
Approvals: UL Listed, UL916, UL864, C-UL, CE, RoHS, CSFM
Gold Flash: No
Override Switch: No

Models RIBMNLB-6NO, RIBMNLB-4NO, and RIBMNLB-2NO are simply devices that combine a common relay-logic function into a small, easy-to-install, and less expensive form.

A master relay will open if any one of the normally-closed (N/C) inputs open. There are six, four, or two inputs depending on the model chosen. LED status of all inputs, the master relay, and power input is provided. Bypass of un-used inputs is also provided. The RIBMNLB series is provided with mounting track for mounting in user-provided electrical enclosures.

The master relay has two general-purpose outputs: both can be jumper selected at 24 V (sourced from input) or dry contact. The most common application is an Air Handling Unit (AHU) fan-safety-shutdown where the master relay is used to shutdown the fan. Contact closure outputs are provided so that a DDC controller can determine the cause of a shutdown.

Notes:
- RIBMNLB-6NO has six Alarm Inputs and one Master Alarm.
- RIBMNLB-4NO has four Alarm Inputs and one Master Alarm.
- RIBMNLB-2NO has two Alarm Inputs and one Master Alarm.
- This is a half wave device. When connecting 24 Vac to both this device and a full-wave device, damage to device can occur.



RIBMNLB-6NO

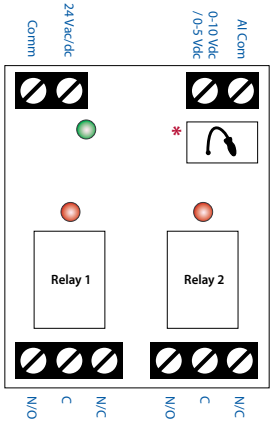
SELECTION GUIDE

Model#	Inputs	
RIBMNLB-6NO	6	MT212 Mounting Track
RIBMNLB-4NO	4	MT212 Mounting Track
RIBMNLB-2NO	2	MT212 Mounting Track

I/O EXPANDER

RIBMN24Q2C

I/O Expander, 2 Outputs, 24 Vac/dc Power Input, 0-10 Vdc / 0-5 Vdc Control Input, 2.75"Track Mount



0-10 VDC CONTROL VOLTAGE	0-5 VDC * CONTROL VOLTAGE	RELAY 1 STATUS	RELAY 2 STATUS
0-2.117Vdc	0-1.058Vdc	OFF	OFF
2.745-4.627Vdc	1.373-2.313Vdc	ON	OFF
5.255-7.137Vdc	2.628-3.568Vdc	OFF	ON
7.765-10.000Vdc	3.883-5.000Vdc	ON	ON

GREAT FOR STAGING LOADS SUCH AS CHILLERS, PUMPS, ACTUATORS, OR MULTI-STAGE HEATING

SPECIFICATIONS

 # Relays & Contact Type: Two (2) SPDT Continuous Duty Coil
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: Green LED On = Power On
Relay Status: Red LED On = Relay Activated
Dimensions: 3.10"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-4 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

Power Input:
24 Vac/dc ; 50-60 Hz
100mA max.

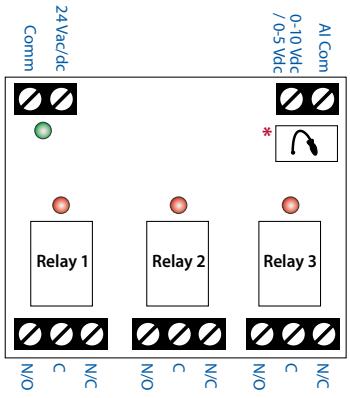
Notes:
- Must clip resistor in white box for 0-5Vdc.*
- Custom Programming Available for Large Orders.

SPECIALTY PERIPHERAL CONTROLS

I/O EXPANDER

RIBMN24Q3C

I/O Expander, 3 Outputs, 24 Vac/dc Power Input, 0-10 Vdc / 0-5 Vdc Control Input, 2.75"Track Mount



0-10 VDC CONTROL VOLTAGE	0-5 VDC * CONTROL VOLTAGE	RELAY 1 STATUS	RELAY 2 STATUS	RELAY 3 STATUS
0-0.988Vdc	0-0.494Vdc	OFF	OFF	OFF
1.366-2.242Vdc	0.683-1.121Vdc	ON	OFF	OFF
2.620-3.496Vdc	1.310-1.748Vdc	OFF	ON	OFF
3.876-4.752Vdc	1.938-2.376Vdc	ON	ON	OFF
5.130-6.006Vdc	2.565-3.003Vdc	OFF	OFF	ON
6.386-7.262Vdc	3.193-3.631Vdc	ON	OFF	ON
7.640-8.516Vdc	3.820-4.258Vdc	OFF	ON	ON
8.896-10.000Vdc	4.448-5.000Vdc	ON	ON	ON

GREAT FOR STAGING LOADS SUCH AS CHILLERS, PUMPS, ACTUATORS, OR MULTI-STAGE HEATING

SPECIFICATIONS

 # Relays & Contact Type: Three (3) SPDT Continuous Duty Coil
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: Green LED On = Power On
Relay Status: Red LED On = Relay Activated
Dimensions: 4.00"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-4 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: No
Override Switch: No

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

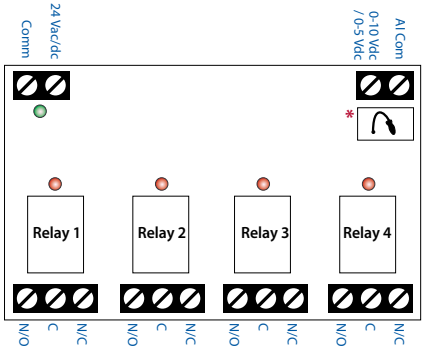
Power Input:
24 Vac/dc ; 50-60 Hz
150mA max.

Notes:
- Must clip resistor in white box for 0-5Vdc.*
- Custom Programming Available for Large Orders.

I/O EXPANDER

RIBMN24Q4C

I/O Expander, Four Outputs, 24 Vac/dc Power, 0-10 Vdc / 0-5 Vdc Control Input, 2.75"Track Mount



0-10 VDC CONTROL VOLTAGE	0-5 VDC * CONTROL VOLTAGE	RELAY 1 STATUS	RELAY 2 STATUS	RELAY 3 STATUS	RELAY 4 STATUS
0-0.372Vdc	0-0.186Vdc	OFF	OFF	OFF	OFF
0.726-1.000Vdc	0.363-0.500Vdc	ON	OFF	OFF	OFF
1.354-1.626Vdc	0.677-0.813Vdc	OFF	ON	OFF	OFF
1.982-2.254Vdc	0.991-1.127Vdc	ON	ON	OFF	OFF
2.608-2.882Vdc	1.304-1.441Vdc	OFF	OFF	ON	OFF
3.236-3.508Vdc	1.618-1.754Vdc	ON	OFF	ON	OFF
3.864-4.136Vdc	1.932-2.068Vdc	OFF	ON	ON	OFF
4.492-4.764Vdc	2.246-2.382Vdc	ON	ON	ON	OFF
5.118-5.392Vdc	2.559-2.696Vdc	OFF	OFF	OFF	ON
5.746-6.018Vdc	2.873-3.009Vdc	ON	OFF	OFF	ON
6.374-6.646Vdc	3.187-3.323Vdc	OFF	ON	OFF	ON
7.000-7.274Vdc	3.500-3.637Vdc	ON	ON	OFF	ON
7.628-7.902Vdc	3.814-3.951Vdc	OFF	OFF	ON	ON
8.256-8.528Vdc	4.128-4.264Vdc	ON	OFF	ON	ON
8.884-9.156Vdc	4.442-4.578Vdc	OFF	ON	ON	ON
9.510-10.000Vdc	4.755-5.000Vdc	ON	ON	ON	ON

GREAT FOR STAGING LOADS SUCH AS CHILLERS, PUMPS, ACTUATORS, OR MULTI-STAGE HEATING

SPECIFICATIONS

 # Relays & Contact Type: Four (4) SPDT Continuous Duty Coil
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: Green LED On = Power On
Relay Status: Red LED On = Relay Activated
Dimensions: 4.95"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: MT212-6 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: No
Override Switch: No
Origin: Made of US and non-US parts

Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

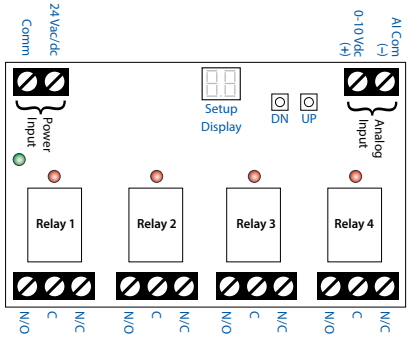
Power Input:
24 Vac/dc ; 50-60 Hz
200mA max.

Notes:
- Must clip resistor in white box for 0-5Vdc.*
- Custom Programming Available for Large Orders.

I/O EXPANDER

RIBMN24Q4C-PX

Field Adjustable Staging Threshold Relay Module, 4 Outputs, 24 Vac/dc Power Input, 0-10 Vdc Control Input, 2.75" Track Mount



- **CONTROL FOUR RELAY OUTPUTS WITH ONE (0-10 VDC) ANALOG SIGNAL FROM CONTROLLER OR THERMOSTAT**
- **CAPABILITY TO SET DESIRED ON AND OFF VOLTAGES FOR EACH RELAY**
- **NO POTS TO ADJUST**
- **NO NEED FOR VOLT METER FOR SETUP**
- **ON BOARD "FIELD SELECTABLE" DIGITAL DISPLAY**

SPECIFICATIONS

 # Relays & Contact Type: Four (4) SPDT Continuous Duty Coil
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Power Status: Green LED On = Power On
Relay Status: Red LED On = Relay Activated
Heartbeat Status: Right-most decimal point
Dimensions: 4.95"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Gold Flash: No
Override Switch: No

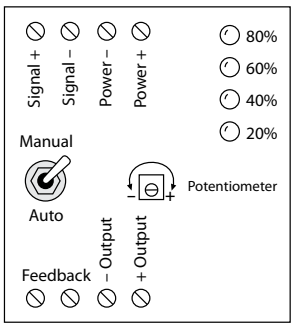
Contact Ratings:
15 Amp General Use @ 125 Vac
10 Amp General Use @ 277 Vac
10 Amp Resistive @ 30 Vdc (N/O)
7 Amp Resistive @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1 HP @ 250 Vac
1/4 HP @ 277 Vac
470 VA Pilot Duty @ 125 Vac
770 VA Pilot Duty @ 250 Vac

Power Input:
24 Vac/dc ; 50-60 Hz
200mA max.

Notes:
- For AC applications, an isolation transformer, to be used solely for the power input, is recommended.
- Relay will activate when control signal voltage reaches or exceeds individual relay ON point. Relay will deactivate when control voltage reaches or drops below individual OFF point.
- Factory relay ON / OFF voltages: • Relay 1: 3V / 2.8V • Relay 2: 5V / 4.8V • Relay 3: 7V / 6.8V • Relay 4: 9V / 8.8 V
- Minimum ON point: 0.5V • Maximum ON point: 9.9V
- Minimum OFF point: 0.3V
- Relay number will flash 3 times when voltage exceeds setpoint.
- Pressing UP or DN button in normal run mode will display the voltage present on Analog Input.
- ON/OFF points can be changed at any time, by the user, by entering "Program Mode"
- User defined ON/OFF points will be maintained upon power loss.

RIBMNA1D0

Manual Analog Override Switch + Monitor, 24 Vac/dc Power Input, 2.75"Track Mount



Legend for Selecting Output for Jumpers

- Top 2 pins covered by jumper
- Bottom 2 pins covered by jumper
- Only 1 pin covered by jumper

5 Vdc
10 Vdc
15 Vdc
20 mA

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 2.45"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750",
MT212 Mounting Track Sold Separately
Input Voltage: 24 Vac/dc
Input Current: 90mA Max.
Range/Impedance Override: 0-5 Vdc, 200 Ω Min.
0-10 Vdc, 400 Ω Min.
0-15 Vdc, 1 kΩ Min.
0-20mA dc, 500 Ω Max.
Feedback Contact: 2A Max. @ 24 Vac/dc

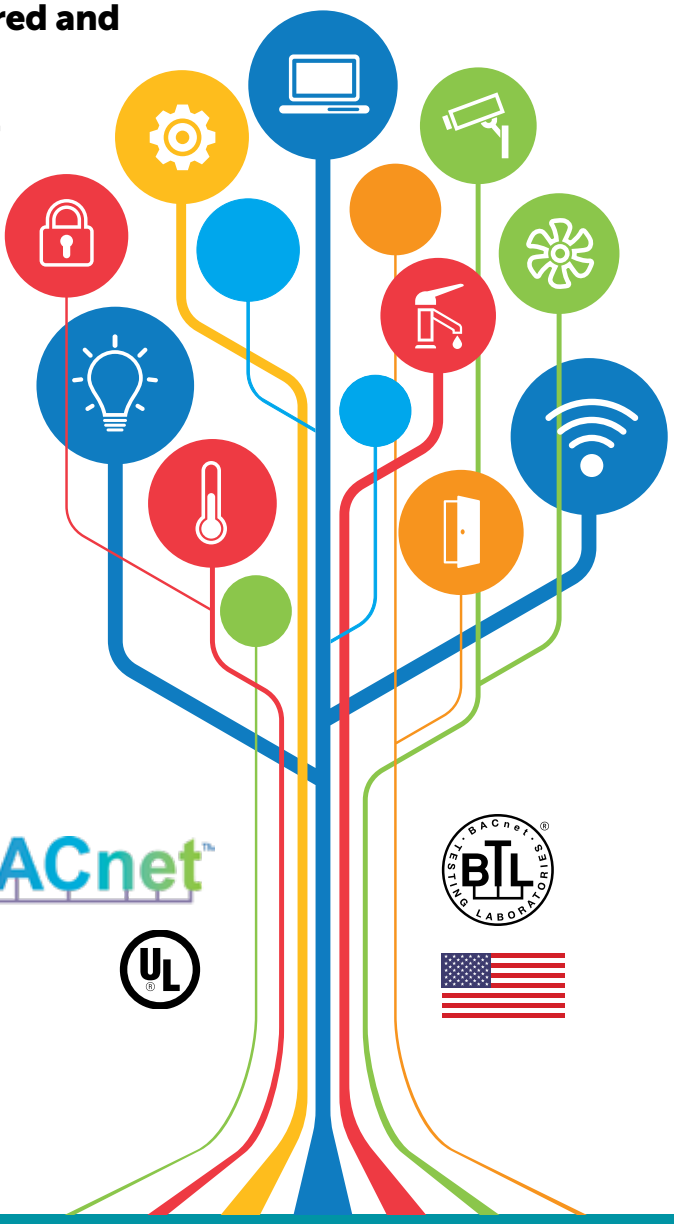
Notes:

- Set the jumpers according to your input signal (Analog signal from the controller.) Example: When controlling a damper with 0-10 Vdc, the jumpers need to be in position for the 0-10 Vdc override range. If the LED range does not match your analog scale, ensure the jumpers are set for the proper range.
- Feedback contact closed when switch is in Manual position, open when switch is in Auto position.

- **PROVIDES MANUAL OVERRIDE IF CONTROLLER DOES NOT SUPPORT OVERRIDE CAPABILITY**
- **ALLOWS YOU TO MANUALLY MAKE ADJUSTMENTS TO YOUR END DEVICE REMOTELY INSTEAD OF AT YOUR CONTROL PANEL**
- **SENDS OVERRIDE STATUS BACK TO CONTROLLER VIA FEEDBACK**
- **MULTI-RANGE ANALOG OUTPUT**

INTELLIGENT FIELD DEVICES

Our Intelligent Field Devices can be hard wired and used instead of more expensive multi-output controllers when a few more control points are needed, and large controllers are too much for the job. They can also be used when control points are widely spread throughout the job site. These devices have been prepackaged to save the installer the time, trouble, and expense of buying separate components and assembling them on the job.



Product Features

- BACnet® and Modbus protocols
- Analog input
- Analog output
- Binary output
- Binary input
- Thermistor inputs available
- On-board current sensors available
- Track mount and enclosed versions
- NEMA 4X available
- UL Listed

BACNET® DEVICES

		POWER INPUT			CONTACT RATINGS											
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	DRY CONTACT BINARY INPUT	ANALOG INPUT	ANALOG OUTPUT	ACCUMULATOR INPUT	INTERNAL CURRENT SENSOR	PRECON® THERMISTOR INPUT	OVERRIDE SWITCH	TRACK MOUNT / HOUSING STYLE *	SPEC PAGE
RIBTW2401B-BC	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1						#	C	144
RIBTW2402B-BC	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1						#	C	145
RIBMNWX2401B-BC	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1				•		#	MT212-6	146
RIBTWX2401B-BC	•	24	120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1				•		#	D	147
RIBMNWX2402B-BC	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1				•		#	MT212-6	148
RIBTWX2402B-BC	•	24	208-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1				•		#	D	149
RIBMNW24B-BCAI	•	24		1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	2	1				10kΩ Type 2 or 3	#	MT212-6	150
RIBTW24B-BCAI	•	24		1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	2	1				10kΩ Type 2 or 3	#	D	151
RIBTW24B-BCAO	•	24		1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	1	1	1			10kΩ Type 2 or 3	#	D	152
RIBMNWD12-BCDI		24						12							MT212-6	153
RIBMNWD12-BC		24						12			2				MT212-6	154
RIBMW24B-44-BC	•	24		4 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	4						#	MT4-6	155

OTHER BACNET® DEVICES:

Fan Safety Alarm Circuit / General Purpose Logic Board (pg. 137) and UPS Kit (pg. 174)

MODBUS DEVICES

		POWER INPUT			CONTACT RATINGS								
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	DRY CONTACT BINARY INPUT	ANALOG INPUT	PRECON® THERMISTOR INPUT	OVERRIDE SWITCH	TRACK MOUNT / HOUSING STYLE *	SPEC PAGE
RIBMNW24B-MBAI	•	24		1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	2	1	10kΩ Type 2	#	MT212-6	156
RIBTW24B-MBAI	•	24		1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	2	1	10kΩ Type 2	#	D	157

UL = UL Listed - see data sheet for specific Listing

= UL Component Recognized - see data sheet for specific Listing

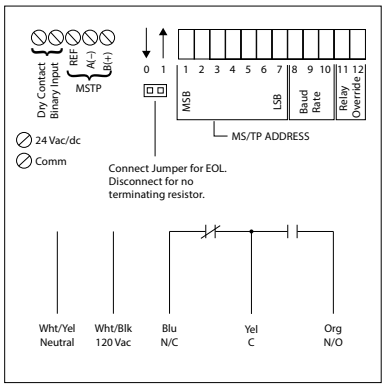
= Coil Side Relay Override (requires unit to be powered)

* = See Housing Guide on page 201

^ = Track mount included

RIBTW2401B-BC

BACnet MS/TP Network Relay Device, One Binary Output + Override, One Binary 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 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 18ms
Green LED: Network Communication
Red LED: Relay Status
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: CE, UL Listed, UL916, C-UL, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
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 M S/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)

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
96 mA @ 120 Vac

Power Input:
24 Vac/dc ; 120 Vac ; 50/60 Hz

Notes:
- 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).
- Device Instance changed via Object Identifier Property of Device Object
- PIC Statement available on website.

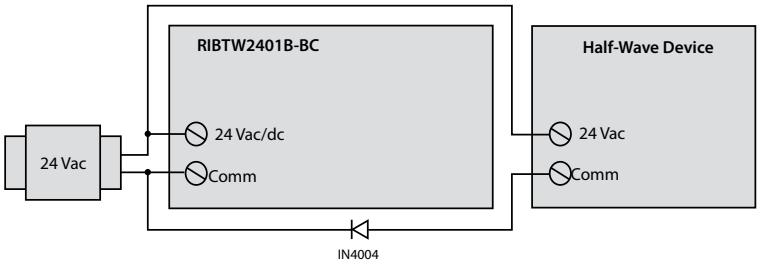
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

All other combinations=9600 baud

DIP SWITCHES*		RELAY STATE**
11	12	
1	0	Auto
X	1	Override on
0	0	Override off

* 0 = Open ; 1 = Closed
** Device must be powered for override

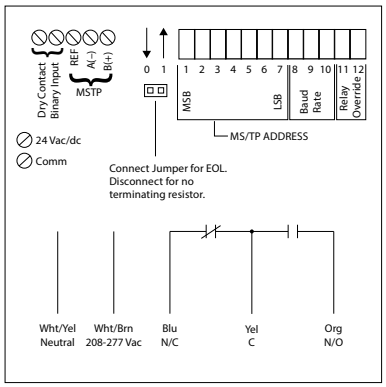
- Dry contact binary input is a general purpose input that is not tied to the relay internally. Can be used with any dry contact switching device, such as a current sensor, to report back to the network.



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

RIBTW2402B-BC

BACnet MS/TP Network Relay Device, One Binary Output + Override, One Binary Input, 24Vac/dc/208-277Vac 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 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Operate Time: 18ms
Green LED: Network Communication
Red LED: Relay Status
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: CE, UL Listed, UL916, C-UL, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
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
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 Ratings:
81 mA @ 24 Vdc
111 mA @ 24 Vac
121 mA @ 208-277 Vac

Power Input:
24 Vac/dc ; 208-277 Vac ; 50/60 Hz

Notes:
- 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).
- Device Instance changed via Object Identifier Property of Device Object
- PIC Statement available on website.

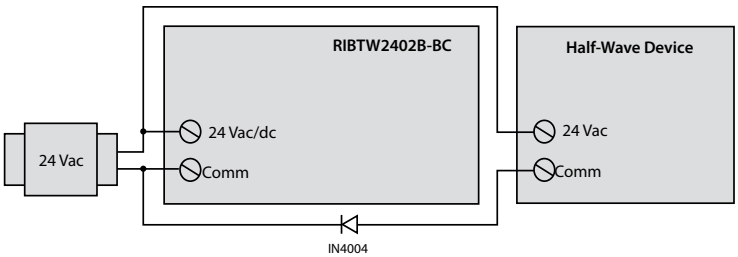
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

All other combinations=9600 baud

DIP SWITCHES*		RELAY STATE**
11	12	
1	0	Auto
X	1	Override on
0	0	Override off

* 0 = Open ; 1 = Closed
** Device must be powered for override

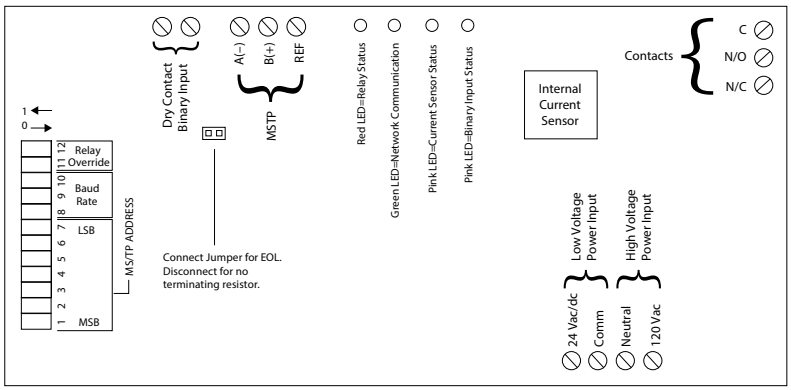
- Dry contact binary input is a general purpose input that is not tied to the relay internally. Can be used with any dry contact switching device, such as a current sensor, to report back to the network.



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

RIBMNWX2401B-BC

BACnet MS/TP Network Relay Device, One Binary Output + Override, Two Binary Inputs (One Current Sensor Relay Load Sensing & One Dry Contact Binary Input), 24Vac/dc/120 Vac 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: 6.00"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** 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
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
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200 (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
1	0	0	76800
1	0	1	115200

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
** 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.

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

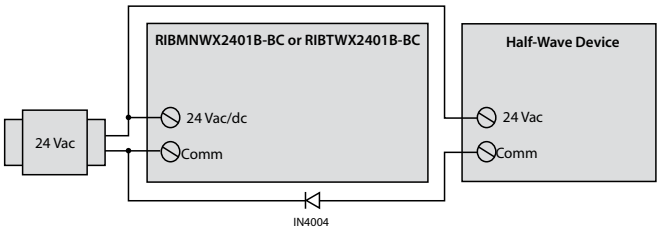
Power Input:
24 Vac/dc ; 120 Vac ; 50/60 Hz

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.
- 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. ^^

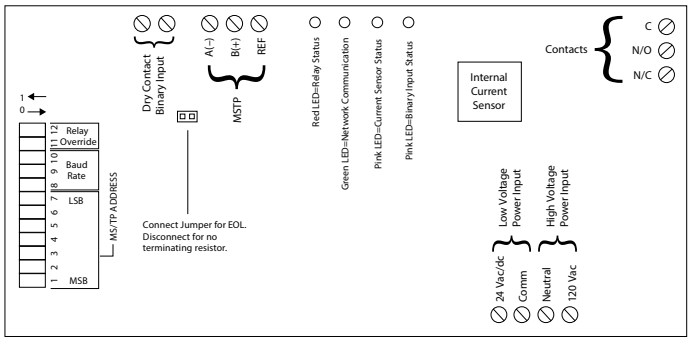
BACnet® Details:
- MS/TP Address & Baud Rate must be set prior to power up via DIP switches.
- Device ID will default to 277XXX where XXX is the MS/TP Address.
  Examples:
  MS/TP Address - 004
  Device ID - 277004
  MS/TP Address - 121
  Device ID - 277121
- Device ID can be changed via network command. 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.



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

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 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: 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
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200 (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
1	0	0	76800
1	0	1	115200

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
** 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.

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

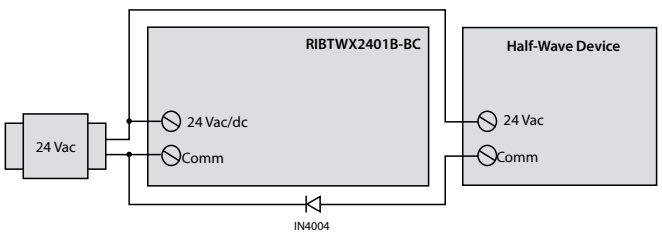
Current Sensor Range:
0.25 - 20 Amps
Threshold fixed at .25 Amps.

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

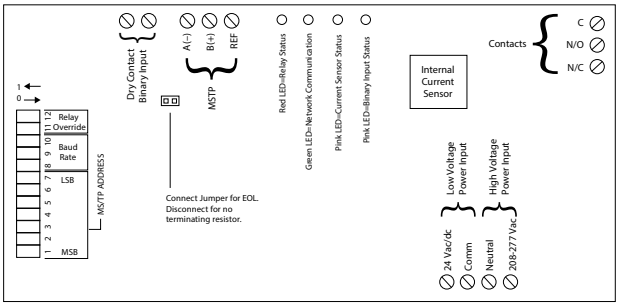
- Device ID can be changed via network command. Once changed, it will no longer default to 277XXX. (MS/TP Address & Device ID must be unique.)
- This model utilizes: BO 1 (Relay output), BI 1 (Dry contact binary input), BI 2 (Internal current sensor input)
- Device Instance changed via Object Identifier Property of Device Object
- PIC Statement available on website.



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

RIBMNWX2402B-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 or 208-277 Vac 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: 6.00″H x 2.75″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS, BTL Certified
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
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 ; 208-277 Vac ; 50/60 Hz

Power Input Ratings:
105 mA @ 24 Vac
78 mA @ 24 Vdc
120 mA @ 208-277 Vac

Current Sensor Range:
0.25 - 20 Amps
Threshold fixed at .25 Amps.

Notes:
- Device can be powered by either 24 Vac/dc or 208-277 Vac, but not both.
- 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.

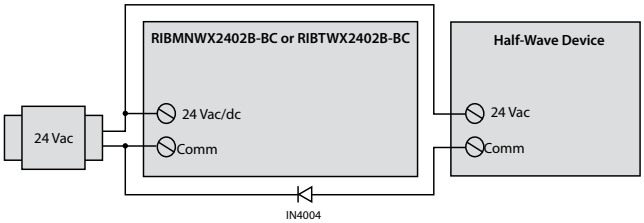
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

All other combinations=9600 baud

DIP SWITCHES*		RELAY STATE**
11	12	
1	0	Auto
X	1	Override on
0	0	Override off

* 0 = Open ; 1 = Closed
** Device must be powered for override

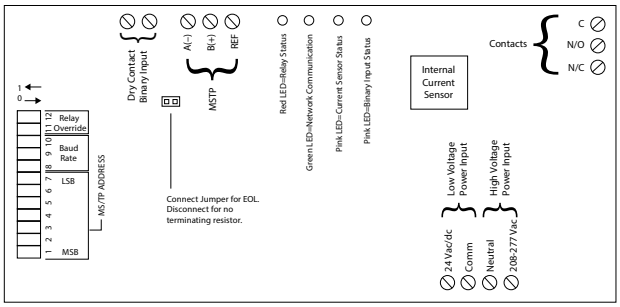
- Dry contact binary input is a general purpose input that is not tied to the relay internally. Can be used with any dry contact switching device, such as a current sensor, to report back to the network.



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

RIBTWX2402B-BC

BACnet MS/TP Network Relay Device, One Binary Output + Override, Two Binary Inputs (One Current Sensor Relay Load Sensing & One Dry Contact Binary Input), 24Vac/dc/208-277Vac 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 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: 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: UL Listed, UL916, C-UL, CE, 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
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 ; 208-277 Vac ; 50/60 Hz

Power Input Ratings:
105 mA @ 24 Vac
78 mA @ 24 Vdc
120 mA @ 208-277 Vac

Current Sensor Range:
0.25 - 20 Amps
Threshold fixed at .25 Amps.

Notes:
- Device can be powered by either 24 Vac/dc or 208-277 Vac, but not both.
- Order NEMA 4 housing by adding "-N4" to end of model number. (RIBTWX2402B-BC-N4)
- Order with grey lid by adding "-GY" to end of model number. (RIBTWX2402B-BC-GY)
- Order NEMA 4 housing with grey lid by adding "-N4-GY" to end of model number. (RIBTWX2402B-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.

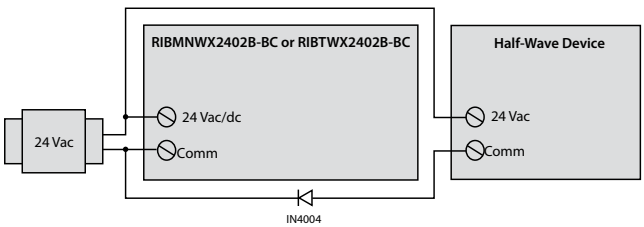
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

All other combinations=9600 baud

DIP SWITCHES*		RELAY STATE**
11	12	
1	0	Auto
X	1	Override on
0	0	Override off

* 0 = Open ; 1 = Closed
** Device must be powered for override

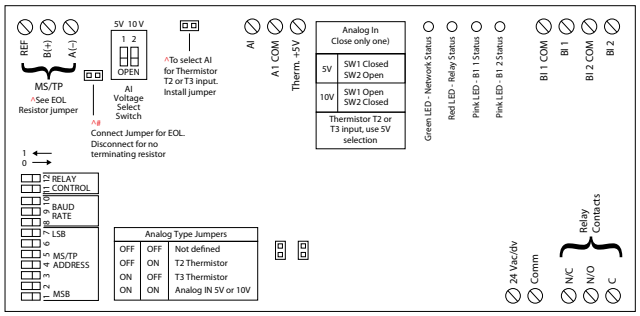
• Dry contact binary input is a general purpose input that is not tied to the relay internally. Can be used with any dry contact switching device, such as a current sensor, to report back to the network.



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

RIBMNW24B-BCAI

BACnet MS/TP Network Relay Device with Binary Output Set Point, One Binary Output + Override, Two Binary Inputs, One Analog Input, 24 Vac/dc Power Input, 2.75"Track Mount



Code Version 1.5

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
BI1 Status: Pink LED On = Activated
BI2 Status: Pink LED On = Activated
Dimensions: 5.68"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS, BTL Certified
Gold Flash: No
Relay Override Switch: DIP Switch Control (See Bulletin B1243)

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 - See Bulletin B1243)

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

- PIC Statement available on website.

Notes:
- For all versions, raw analog default settings are 0 and 1023 (real), respectively. Units default to 95 (no units). For Set Point Function settings, See Bulletin B1243
- 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 Bulletin B1243 for diagram)

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

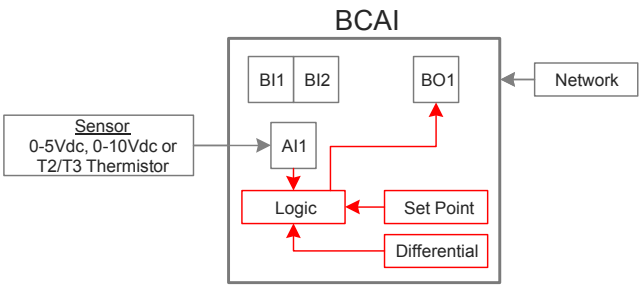
- Device ID can be changed via network command. Once changed, it will no longer default to 277XXX. (MS/TP Address & Device ID must be unique.)
- This model utilizes: BO 1 (Relay output), BI 1 (Dry contact binary input), BI 2 (Dry contact binary input), AI 1 (Analog input), AV1 (Set Point), AV2 (Differential), BV1 (Function Enable), BV2 (Function Mode), BV3 (Function Status)
- Device Instance changed via Object Identifier Property of Device Object

Thermistor Specifications:
- Thermistor Type 2 (T2) Precon 10 K @ 77°F (25°C) PN ST-R24, Model 24, (or equivalent.) Thermistor Type 3 (T3) Precon 10 K @ 77°F (25°C) Model 3, (or equivalent.) Thermistor not included.

- For both T2 and T3, MIN_PRES_VAL must be set to -36 (real value) and MAX_PRES_VAL must be set to 66.3 (real value) for Celcius. For Fahrenheit, MIN_PRES_VAL must be set to -32.8 (real value) and MAX_PRES_VAL must be set to 151.34 (real value).
- -35 to 10°C range in 1° steps / -31 to 50°F range in 1.8° steps
  10 to 32°C range in 0.1° steps / 50 to 90°F range in 0.18° steps
  32 to 100°C range in 1° steps / 90 to 212°F range in 1.8° steps

Set Point Function

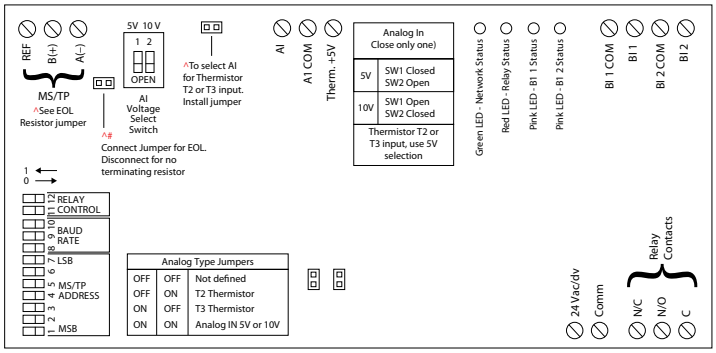
for App. Version 1.5 or higher



Set Point Function must be enabled via the Network for logic to execute. Once configured, the function will continue to operate even if communication is lost (see Bulletin B1243 for setup).

RIBTW24B-BCAI

BACnet MS/TP Network Relay Device with Binary Output Set Point, One Binary Output + Override, Two Binary Inputs, One Analog Input, 24 Vac/dc Power Input, NEMA 1 Housing



Code Version 1.5

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
BI1 Status: Pink LED On = Activated
BI2 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
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 (See Bulletin B1243)

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 - See Bulletin B1243)

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

- PIC Statement available on website.

Notes:
- Order NEMA 4 housing by adding "-N4" to end of model number. (RIBTW24B-BCAI-N4)
- Order with grey lid by adding "-GY" to end of model number. (RIBTW24B-BCAI-GY)
- Order NEMA 4 housing with grey lid by adding "-N4-GY" to end of model number. (RIBTW24B-BCAI-N4-GY)
- For all versions, raw analog default settings are 0 and 1023 (real), respectively. Units default to 95 (no units). For Set Point Function settings, See Bulletin B1243
- 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 Bulletin B1243 for diagram)

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:

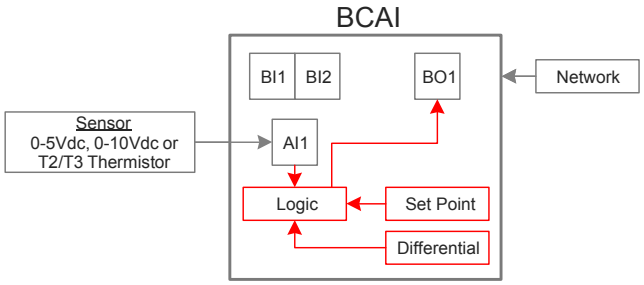
MS/TP Address - 004 Device ID - 277004	MS/TP Address - 121 Device ID - 277121

- 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 (Dry contact binary input), AI 1 (Analog input), AV1 (Set Point), AV2 (Differential), BV1 (Function Enable), BV2 (Function Mode), BV3 (Function Status)
- Device Instance changed via Object Identifier Property of Device Object

Thermistor Specifications:
- Thermistor Type 2 (T2) Precon 10 K @ 77°F (25°C) PN ST-R24, Model 24, (or equivalent.) Thermistor Type 3 (T3) Precon 10 K @ 77°F (25°C) Model 3, (or equivalent.) Thermistor not included.
  - For both T2 and T3, MIN_PRES_VAL must be set to -36 (real value) and MAX_PRES_VAL must be set to 66.3 (real value) for Celcius. For Fahrenheit, MIN_PRES_VAL must be set to -32.8 (real value) and MAX_PRES_VAL must be set to 151.34 (real value).
  - -35 to 10°C range in 1° steps / -31 to 50°F range in 1.8° steps
    10 to 32°C range in 0.1° steps / 50 to 90°F range in 0.18° steps
    32 to 100°C range in 1° steps / 90 to 212°F range in 1.8° steps

Set Point Function

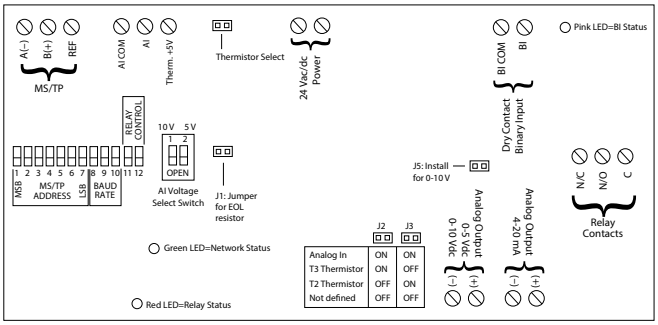
for App. Version 1.5 or higher



Set Point Function must be enabled via the Network for logic to execute. Once configured, the function will continue to operate even if communication is lost (see Bulletin B1243 for setup).

RIBTW24B-BCAO

BACnet MS/TP Network Relay Device, One Binary Output + Override, One Binary Input, One Analog Output, One Analog Input, 24Vac/dc Power Input, NEMA 1 Housing



Shown With Cover

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 = Relay 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
Approvals: UL Listed, UL916, C-UL, RoHS, BTL Certified
Housing Rating: UL Listed, NEMA 1, C-UL, CE Approved, UL Accepted for Use in Plenum,
Gold Flash: No
Relay Override: 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
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200 (DIP Switch Selectable)

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Magnetic 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:
176 mA @ 24 Vac
150 mA @ 24 Vdc

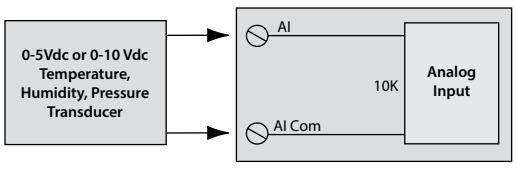
Notes:
- Use a separate 24 Vac transformer, or an isolated 24 Vdc power supply to power-up this product.
- Complete Installation Instructions: Bulletin B1756 available on website.
- When connecting 24 Vac to both the RIB(s) and a half-wave device, damage to device can occur. Option 1: Use separate transformers for each device. Option 2: Add diode between devices, see Option 2 note below. ^^

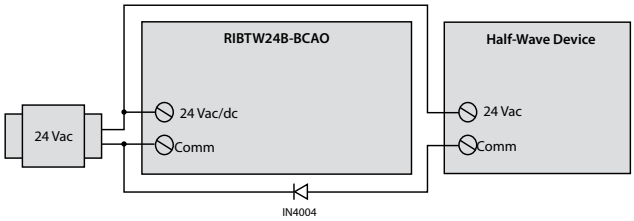
Thermistor Specifications:
- Thermistor Type 2 (T2) Precon 10 K @ 77°F (25°C) PN ST-R24, Model 24, (or equivalent.) Thermistor Type 3 (T3) Precon 10 K @ 77°F (25°C) Model 3, (or equivalent.) Thermistor not included.
- -35 to 10°C range in 1° steps / -31 to 50°F range in 1.8° steps
  10 to 32°C range in 0.1° steps / 50 to 90°F range in 0.18° steps
  32 to 100°C range in 1° steps / 90 to 212°F range in 1.8° steps

BACnet® Details:
- This model utilizes: BO 1 (Relay output), BI 1 (Dry contact binary input), AI 1 (Analog input), AO 1 (Analog output)
- PIC Statement available on website.
- Addressing Specifications: Bulletin B2028 available on website.

	ANALOG OUTPUT ACCURACY AS A FUNCTION OF OUTPUT SPAN (USING STANDARD CONDITIONS *)		
	Span 20% - 100%	Span 10% - 100%	Span 0% - 100%
Analog Output Voltage (0-5 Vdc; 0-10 Vdc)	+/- 2% error	+/- 5% error	+/- 11% error
Analog Output Current (4-20 mA)	+/- 2% error	+/- 3% error	+/- 12% error

*** Standard Conditions:**
Power Supply Input: 22 Vac/dc to 28 Vac/dc ; **Loop Resistance (Analog Output 4-20 mA Loop):** 530 Ohms max.
Load Resistance [Analog Output Voltage (0-5 Vdc, 0-10 Vdc)]: 10 K Ohms min. ; **Ambient Temperature:** -30 to 140° F

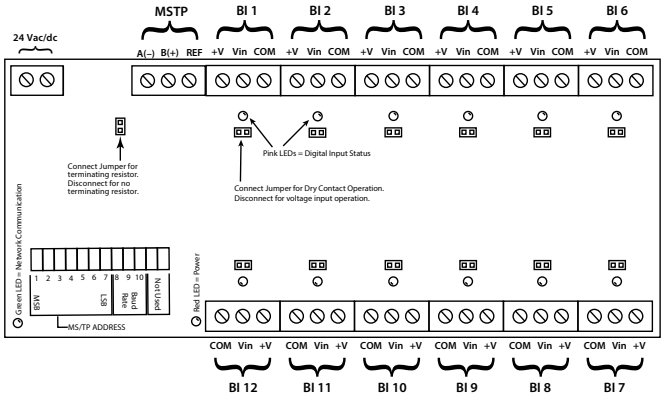




^^ Option 2: Add diode on 24 Vac power (Comm) interconnection between devices. Band on diode faces towards RIB(s).

RIBMNWD12-BCDI

BACnet MS/TP Network Input Device, Twelve Binary Inputs (Voltage or Dry Contacts), 2.75" Track Mount



SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Green LED: Network Communication
Red LED: ON = Power Present
Dimensions: 6.00"H x 2.75"W x 1.25"D1/1.75"D2
Origin: See **Housing H** in housing guide for dimensions
Track Mount: Made of US and non-US parts
Approvals: MT212-6 Mounting Track Provided
CE, RoHS, BTL Certified
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
Band Rate: 9600, 19200, 38400, 57600, 76800, 115200 (DIP Switch Selectable)

Power Input Ratings:
41 mA @ 24 Vdc
53 mA @ 24 Vac

Binary Input Ratings:
Dry Contact: 3 mA @ 30 Vdc max.
Voltage Input: 12 mA @ 25 Vac/dc max.

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	MS/TP Address - 121
Device ID - 277004	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.)
- Device Instance changed via Object Identifier Property of Device Object
- Full wave rectified
- PIC Statement available on website.

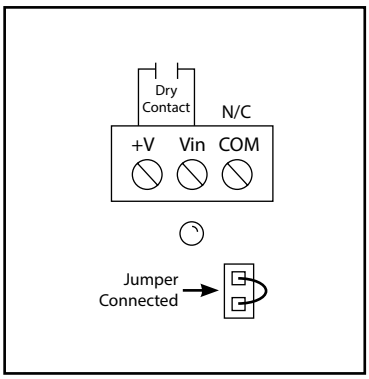
- Objects included in device are:

BI 1 (Binary input)	BI 7 (Binary input)
BI 2 (Binary input)	BI 8 (Binary input)
BI 3 (Binary input)	BI 9 (Binary input)
BI 4 (Binary input)	BI 10 (Binary input)
BI 5 (Binary input)	BI 11 (Binary input)
BI 6 (Binary input)	BI 12 (Binary input)

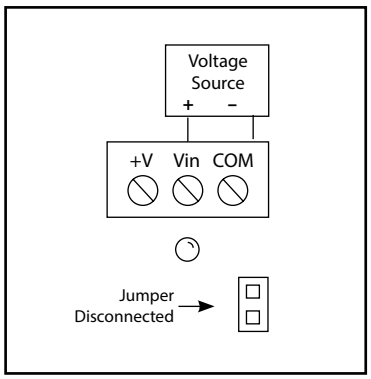
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

* 0 = Open ; 1 = Closed
All other combinations=9600 baud

Example of Dry Contact Input Operation

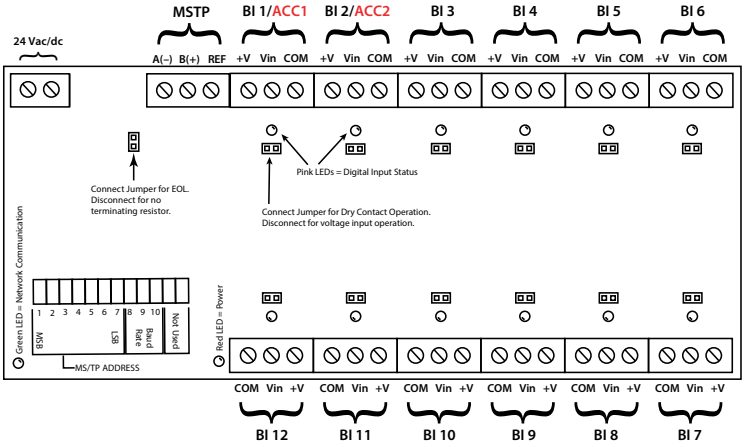


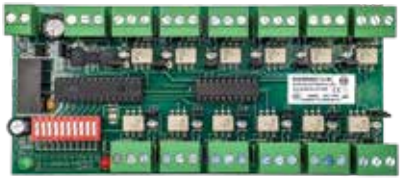
Example of Voltage Input Operation



RIBMNWD12-BC

BACnet MS/TP Network Input Device, Twelve Binary Inputs
(Voltage or Dry Contacts), Accumulators, 2.75" Track Mount





TWO (ACCUMULATOR) INPUTS CAN BE USED FOR POWER MONITORING OR OTHER PULSE COUNTING APPLICATION.

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Green LED: Network Communication
Red LED: ON = Power Present
Dimensions 6.00"H x 2.75"W x 1.25"D1/1.75"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-6 Mounting Track Provided
Approvals: CE, RoHS, BTL Certified

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)

Power Input Ratings:
41 mA @ 24 Vdc
53 mA @ 24 Vac

Max. Accumulator Frequency:
50 Hz

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	MS/TP Address - 121
Device ID - 277004	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.)
- Device Instance changed via Object Identifier Property of Device Object

- PIC Statement available on website.

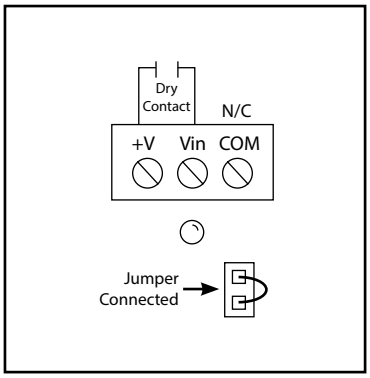
Binary Input Ratings:
Dry Contact: 3 mA @ 30 Vdc max.
Voltage Input: 12 mA @ 25 Vac/dc max.

- Objects included in device are:
  - BI 1 (Binary input) } Use Same
  - ACC 1 (Accumulator) } Physical Input
  - BI 2 (Binary input) } Use Same
  - ACC 2 (Accumulator) } Physical Input
  - BI 3 (Binary input)
  - BI 4 (Binary input)
  - BI 5 (Binary input)
  - BI 6 (Binary input)
  - BI 7 (Binary input)
  - BI 8 (Binary input)
  - BI 9 (Binary input)
  - BI 10 (Binary input)
  - BI 11 (Binary input)
  - BI 12 (Binary input)

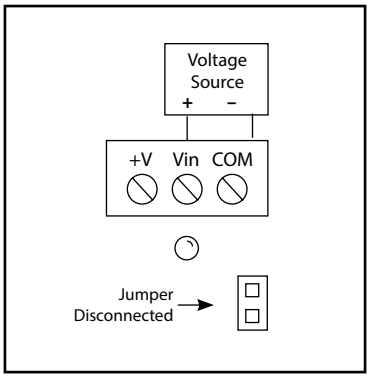
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600
1	0	0	76800
1	0	1	115200

* 0 = Open ; 1 = Closed
All other combinations=9600 baud

Example of Dry Contact Input Operation

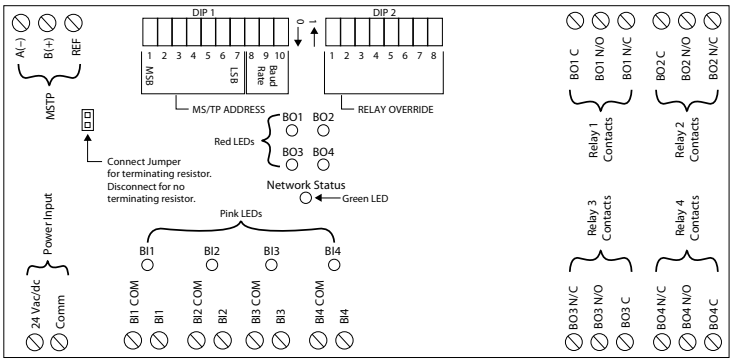


Example of Voltage Input Operation



RIBMW24B-44-BC

BACnet MS/TP Network Relay Device, Four Binary Outputs + Override, Four Binary Inputs, 24 Vac/dc Power Input, 4.00"Track Mount



SPECIFICATIONS

 # Relays & Contact Type: Four (4) 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
Binary Input Status: Pink LED On = Activated
Dimensions: 6.00"H x 4.00"W x 0.88"D1/1.38"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin:: Made of US and non-US parts
Track Mount: MT4-6 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS, BTL Certified
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
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200 (Dip Switch Selectable)

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 120/277 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:
24 Vac : 400 mA
24 Vdc : 190 mA

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: BO1, BO2, BO3, BO4, (Relay outputs), BI1, BI2, BI3, BI4 (Dry contact inputs)
- Device Instance changed via Object Identifier Property of Device Object
- Each unit is 1/8 unit load

- PIC Statement available on website.

DIP 1

DIP Switches				Baud Rate
1-7	8	9	10	
See Bulletin B1082 for full MS/TP Addressing	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

- Dry contact digital 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.

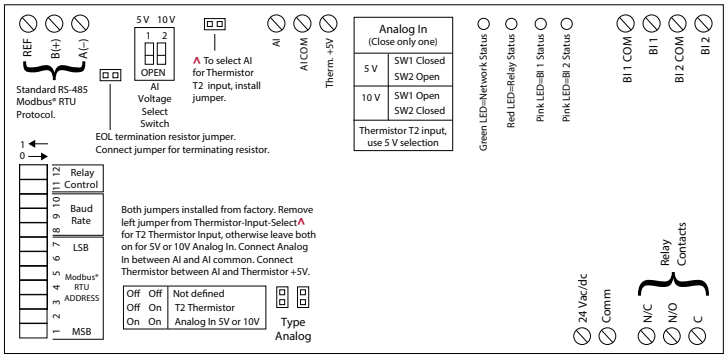
DIP 2

Relay	Relay State**	DIP Switches* 1	2	3	4	5	6	7	8
BO1	Auto	1	X	X	X	0	X	X	X
	ON	X	X	X	X	1	X	X	X
	OFF	0	X	X	X	0	X	X	X
BO2	Auto	X	1	X	X	X	0	X	X
	ON	X	X	X	X	X	1	X	X
	OFF	X	0	X	X	X	0	X	X
BO3	Auto	X	X	1	X	X	X	0	X
	ON	X	X	X	X	X	X	1	X
	OFF	X	X	0	X	X	X	0	X
BO4	Auto	X	X	X	1	X	X	X	0
	ON	X	X	X	X	X	X	X	1
	OFF	X	X	X	0	X	X	X	0

* 0 = Open ; 1 = Closed ** Device must be powered for override

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

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 120 Ω 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)

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 AI 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.^^
- Address and Baud Rate Settings on Bulletin B1676 available on website.

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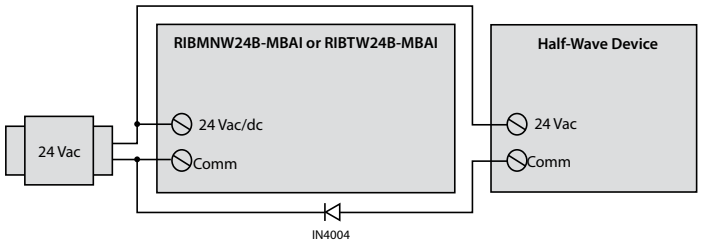
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600

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
** Device must be powered for override

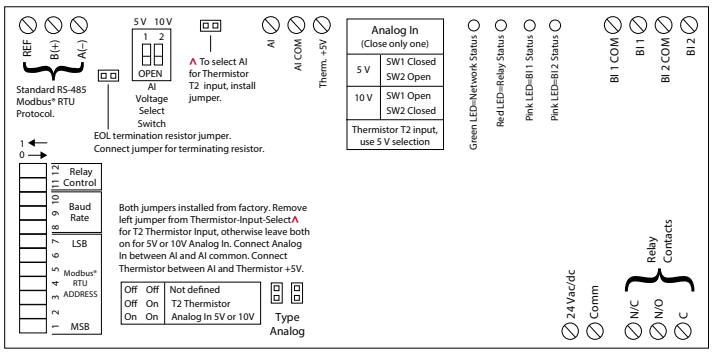
- Dry contact binary input is a general purpose input that is not tied to the relay internally. Can be used with any dry contact switching device, such as a current sensor, to feed back to the network.



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

RIBTW24B-MBAI

MODbus RTU Network Relay Device, One Binary Output + Override, Two Binary Inputs, One Analog Input, 24 Vac/dc 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 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: 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
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, EIA/TIA-485 (standard RS485)
Terminations: Functional Devices product installed at both ends of the standard RS485 Modbus® RTU network – Use 120 Ω 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)

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.
- Order NEMA 4 housing by adding "-N4" to end of model number. (RIBTW24B-MBAI-N4)
- Order with grey lid by adding "-GY" to end of model number. (RIBTW24B-MBAI-GY)
- Order NEMA 4 housing with grey lid by adding "-N4-GY" to end of model number. (RIBTW24B-MBAI-N4-GY)
- 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 AI 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.^^
- Address and Baud Rate Settings on Bulletin B1676 available on website.

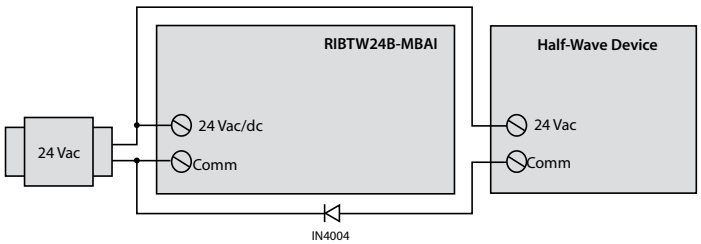
DIP SWITCHES*			BAUD RATE
8	9	10	
0	0	0	9600
0	0	1	19200
0	1	0	38400
0	1	1	57600

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
** 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 feed back to the network.



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

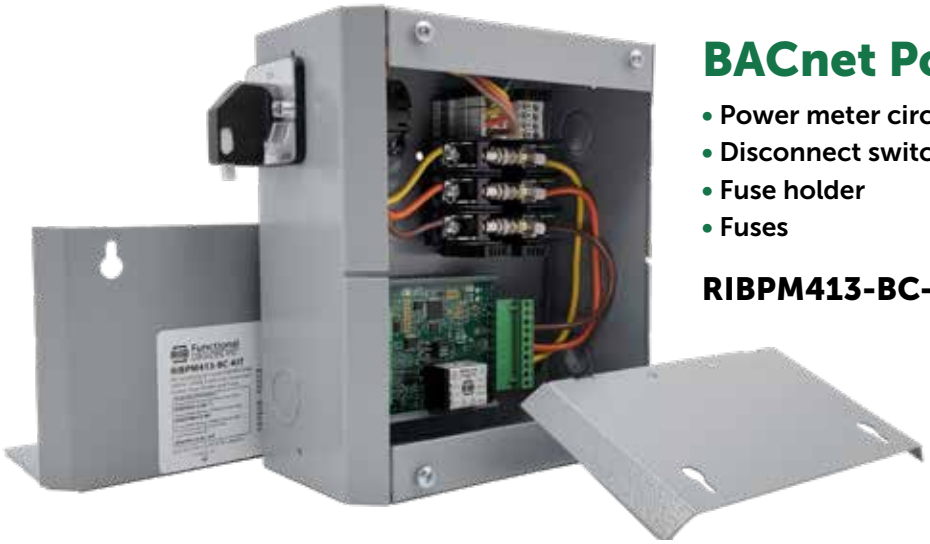
NOTES

POWER METER KIT

Introducing our new BACnet® Compatible Power Meter Kit. This Power Meter Kit includes the BACnet® Compatible Power Meter circuit board, which will collect and send all the data points to the BAS controller. Also included in this Kit is the fuse holder, fuses, and disconnect switch. Everything is prepackaged and prewired in an 18-gauge steel enclosure. This Power Meter Kit is compatible with single or three-phase electrical systems. This Kit is a great solution for revenue-grade power metering applications.

- Revenue Grade Power Meter
- Power Meter input power: 120-277 Vac
- Made in the U.S.A
- Includes 16 Amp rated Disconnect Switch *
- Includes Fuse holder with three 2 Amp rated fuses ^

Dimensions: 8.3" H x 7.7" W (9.2" W with switch) x 3.9" D

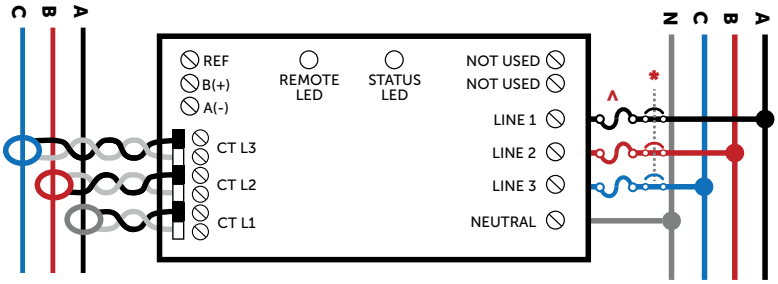


BACnet Power Meter Kit

- Power meter circuit board
- Disconnect switch
- Fuse holder
- Fuses

RIBPM413-BC-KIT

POWER MONITORING



Current Transformers

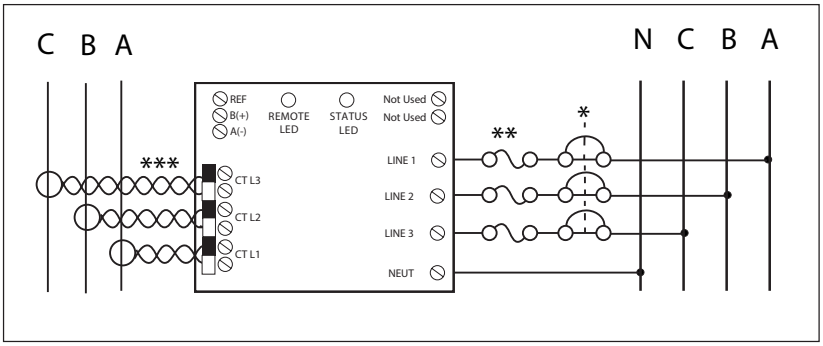
See page 163 for available models

FOR MORE PRODUCT INFORMATION, SEE PAGE 160.

POWER METER KIT - BACNET® COMPATIBLE

RIBPM413-BC-KIT

PPower Meter Kit, 120-277 Vac, 3-Phase, Disconnect Switch, Fuses and Fuse Holder



SPECIFICATIONS

Power Meter - RIBPM413-BC:

***Power Input Rating:** 120-277 Vac, Powered from Line 1 to Neutral, < 2 VA
Headers: Pluggable screw terminals, accept 12 to 28 AWG wire
Dimensions: 2.75" H x 4.5"W x 0.85" D with headers installed
Origin: Made of US and non-US parts
Frequency: 50/60 Hz
Operating Temperature: -20 to 70°C, -4 to 158°F
Humidity: 5 to 95% (noncondensing)
Altitude: Up to 2,000 m
Remote LED: Green = Rx
Amber = Tx
Status LED: See Bulletin B2646
Terminal Torque: 4.43 in-lbs
Approvals: CE, UL Listed, UL 61010-1 and UL 61010-2-30, C-UL, RoHS, FCC Part 15 Class B
Network Media: 18-22 AWG, 2-Core, shielded twisted pair
Network Termination: For End of Line (EOL) device, use 120 Ω Resistor. See Bulletin B2646 for details
Polarity: Network is polarity sensitive
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200; Set via BACnet®

Fuse Holder:

Type: Class CC
Rated Current: 30 Amps
Rated Voltage: 600 Vac
Interrupt Rating: 200kA
Max Ambient Temp: 125°C, 257°F
Wire Gauge: 10-14 AWG
Terminal Torque: 20 in-lbs
Approvals: UL Listed, CSA Certified, RoHS, CE

Disconnect Switch*:

Rated Current: 16 Amps
Rated Voltage: 600 Vac
Interrupt Rating: 10kA
Ambient Temperature: -25 to 50°C, -13 to 122°F
Wire Gauge: 10-14 AWG
Mechanical Life: 1 million cycles
Terminal Torque: 7 in-lbs
Approvals: UL508, IEC 60947-3, EN 60947-3 and CSA 22.2, CE, RoHS

Enclosure:

Construction: 18 Gauge Steel
Cover Type: Screw Down Cover
Dimensions: 8.3" H x 7.7"W **(9.2"W with switch)** x 3.9" D
Rating: NEMA 1
Approvals: UL Listed, CE, RoHS

Fuses**:

Type: Class CC, Fast-acting
Rated Current: 2 Amps
Rated Voltage: 600 Vac
Interrupt Rating: 200kA
Approvals: CSA Certified, CE, RoHS

Metered Circuit:

Voltage Range: 120 - 277 Vac L-N (CAT III); 1P 2/3W, 3P 4W
Voltage Overload: 1.1 x Voltage Range
Voltage Burden: < 0.1 VA @ 277 Vac
Frequency Range: 45 - 65 Hz
Current Transformer: 333 mV Output (sold separately)
Current Overload: 1.2 x CT Output
Power Overload: 1.2 x Voltage Range x CT Output

Measurement Accuracy:

Voltage: 0.5%, < 0.2% typical from 80-120%
Current: 0.5%, < 0.2% typical from 10-120%
Power: 0.5%, < 0.2% typical from 10-120%
Power Factor: 0.5% between 0.5 and 1.0

BACnet® Details:

- Device ID Default: 277050
- MAC Address Default: 50
- Baud Rate Default: 38400
- CT-Ratings (AV-8005) must be updated with the current rating of the CTs used with the device.
- See Bulletin B2646 for further details
- PIC Statement available on website. https://www.functionaldevices.com/downloads/pics/BACnet-PM413_PICS.pdf

Notes:

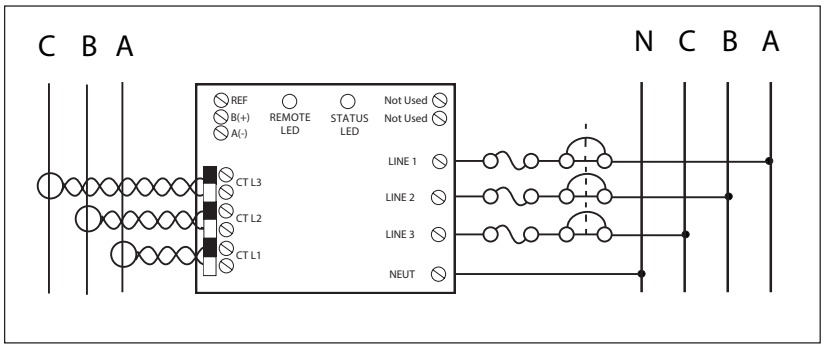
- See Bulletin B2818 for installation instructions
- Bi-directional for NET metering
- For compatible Current Transformers, see our CT Series***

*** Neutral connection required for Input Power**

POWER MONITORING

RIBPM413-BC

Power Meter, 120-277 Vac, 3-Phase, 2.75"Track Mount



SPECIFICATIONS

***Power Input Rating:** Powered from Line 1 to Neutral, 120-277 Vac, < 2 VA
Headers: Pluggable screw terminal, accepts up to 12 AWG stranded copper wire
Frequency: 50/60 Hz
Operating Temperature: -4 to 158 °F
Storage Temperature: -40 to 185 °F
Humidity: 5 to 95% (noncondensing)
Altitude: Up to 2,000 m
Remote LED: Green = Rx
Amber = Tx
Status LED: See Bulletin B2646
Dimensions: 2.75" H x 4.5"W x 0.85" D with headers installed
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-4 mounting track provided
Approvals: CE, UL Listed, UL 61010-1 and UL 61010-2-30, C-UL, RoHS, FCC Part 15 Class B
Network Media: 18-22 AWG, 2-Core, shielded twisted pair
Network Termination: For End of Line (EOL) device, use 120 Ω Resistor. See Bulletin B2646 for details
Polarity: Network is polarity sensitive
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200; set via BACnet®

Metered Circuit:

Voltage Range: 120-277 Vac L-N (CAT III); 1P 2/3W, 3P 4W
Voltage Overload: 1.1 x Voltage Range
Voltage Burden: < 0.1 VA @ 277 Vac
Frequency Range: 45 - 65 Hz
Current Transformer: 333 mV Output
Current Overload: 1.2 x CT Output
Power Overload: 1.2 x Voltage Range x CT Output

Measurement Accuracy:

Voltage: 0.5%, < 0.2% typical from 80-120%
Current: 0.5%, < 0.2% typical from 10-120%
Power: 0.5%, < 0.2 % typical from 10-120%
Power Factor: 0.5% between 0.5 and 1.0

BACnet® Details:

- Device ID Default: 277050
- MAC Address Default: 50
- Baud Rate Default: 38400
- CT-Ratings (AV-8005) must be updated with the current rating of the CTs used with the device.
- See Bulletin B2646 for further details
- PIC Statement available on website. https://www.functionaldevices.com/downloads/pics/BACnet-PM413_PICS.pdf

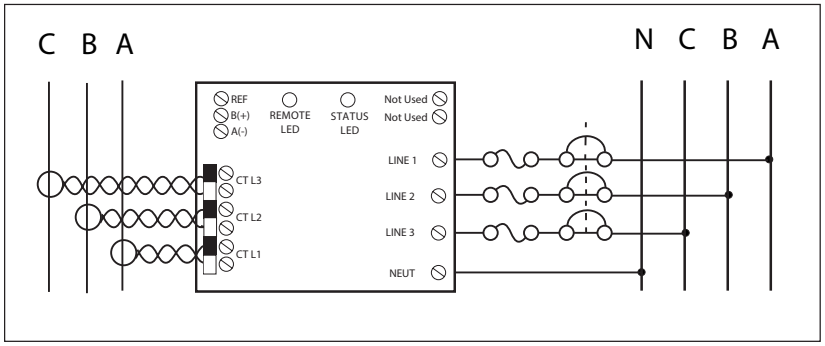
Notes:

- See Bulletin B2646 for installation instructions
- Bi-directional for NET metering

*** Neutral connection required for Input Power**

RIBTPM413-BC

Power Meter, 120-277 Vac, 3-Phase, NEMA 1 Housing



SPECIFICATIONS

***Power Input Rating:** Powered from Line 1 to Neutral, 120-277 Vac, < 2 VA
Headers: Pluggable screw terminal, accepts up to 12 AWG stranded copper wire
Frequency: 50/60 Hz
Operating Temperature: -4 to 158 °F
Storage Temperature: -40 to 185 °F
Humidity: 5 to 95% (noncondensing)
Altitude: Up to 2,000 m
Remote LED: Green = Rx
Amber = Tx
Status LED: See Bulletin B2646
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, UL 61010-1 and UL 61010-2-30, C-UL, RoHS, FCC Part 15 Class B (circuit board)
Housing Ratings: UL Listed, NEMA 1, C-UL, CE Approved, UL Accepted for Use in Plenum, Also available NEMA 4 / 4X
Network Media: 18-22 AWG, 2-Core, shielded twisted pair
For End of Line (EOL) device, use
Network Termination: 120 Ω Resistor. See Bulletin B2646 for details
Polarity: Network is polarity sensitive
Baud Rate: 9600, 19200, 38400, 57600, 76800, 115200; set via BACnet®

Metered Circuit:

Voltage Range: 120-277 Vac L-N (CAT III); 1P 2/3W, 3P 4W
Voltage Overload: 1.1 x Voltage Range
Voltage Burden: < 0.1 VA @ 277 Vac
Frequency Range: 45 - 65 Hz
Current Transformer: 333 mV Output
Current Overload: 1.2 x CT Output
Power Overload: 1.2 x Voltage Range x CT Output

Measurement Accuracy:

Voltage: 0.5%, < 0.2% typical from 80-120%
Current: 0.5%, < 0.2% typical from 10-120%
Power: 0.5%, < 0.2 % typical from 10-120%
Power Factor: 0.5% between 0.5 and 1.0

BACnet® Details:

- Device ID Default: 277050
- MAC Address Default: 50
- Baud Rate Default: 38400
- CT-Ratings (AV-8005) must be updated with the current rating of the CTs used with the device.
- See Bulletin B2646 for further details
- PIC Statement available on website. https://www.functionaldevices.com/downloads/pics/BACnet-PM413_PICS.pdf

Notes:

- See Bulletin B2646 for installation instructions
- Bi-directional for NET metering
- Order NEMA 4 housing by adding "-N4" to end of model number. (RIBTPM413-BC-N4)
- Order with grey lid by adding "-GY" to end of model number. (RIBTPM413-BC-GY)
- Order NEMA 4 housing with grey lid by adding "-N4-GY" to end of model number. (RIBTPM413-BC-N4-GY)

*** Neutral connection required for Input Power**

RIB® CURRENT TRANSFORMERS


CT-05A0-333


CT-100A2-333


CT-400A4-333


ROPE16-040A-07MV


ROPE24-060A-07MV


ROPE36-080A-07MV


ROPE48-100A-07MV


CT-100A1-333


CT-100A4-333


CT-200A4-333


CT-025A1-333


CT-050A1-333


CTS-100A55-333


MOD1-07-33MV

FDI MODEL	PRIMARY INPUT (A)	SECONDARY OUTPUT (V)	RATIO	ACCURACY	CORE TYPE	WINDOW SIZE
CT-05A0-333	5	0.333	5A/0.333V	0.3	Split	.47" x .45"
CT-025A1-333	25	0.333	25A/0.333V	0.8	Split	.72" x .62"
CT-050A1-333	50	0.333	50A/0.333V	0.5	Split	.72" x .62"
CT-100A1-333	100	0.333	100A/0.333V	0.5	Split	.72" x .62"
CT-100A2-333	100	0.333	100A/0.333V	0.75	Split	1.0" x 1.4"
CT-100A4-333	100	0.333	100A/0.333V	0.5	Split	1.3" x 1.7"
CT-200A4-333	200	0.333	200A/0.333V	0.5	Split	1.3" x 1.7"
CT-400A4-333	400	0.333	400A/0.333V	0.5	Split	1.3" x 1.7"
CT-600A4-333	600	0.333	600A/0.333V	0.5	Split	1.3" x 1.7"
CTS-05A20-333	5	0.333	5A/0.333V	0.2	Solid	.2" diameter
CTS-30A20-333	30	0.333	30A/0.333V	0.2	Solid	.2" diameter
CTS-60A35-333	60	0.333	60A/0.333V	0.2	Solid	.35 diameter
CTS-100A55-333	100	0.333	100A/0.333V	0.2	Solid	.55 diameter
ROPE16-040A-07MV	4,000	0.07	4,000/70mV	0.75	Rope	5.0" diameter
ROPE24-060A-07MV	6,000	0.07	6,000/70mV	0.75	Rope	7.6" diameter
ROPE36-080A-07MV	8,000	0.07	8,000/70mV	0.75	Rope	11.5" diameter
ROPE48-100A-07MV	10,000	0.07	10,000/70mV	0.75	Rope	15.3" diameter

"MOD" & "ROPE" Series

The MOD series of devices are optional modules that connect to the output of the Rogowski Coil CTs (ROPE units) and convert the output to the 0.333 V analog scale for use in other Power Monitoring systems. The MOD series has options for one, two, or three-phase power feeds. The MOD series devices are DIN rail-mountable, are ETL approved, and require 12 Vdc for input voltage.

FDI MODEL	INPUT	SECONDARY OUTPUT (V)	ACCURACY	USED WITH
MOD1-07-33MV	0.07	0.333	0.50	Any "ROPE" CT
MOD2-07-33MV	0.07	0.333	0.50	Any "ROPE" CT
MOD3-07-33MV	0.07	0.333	0.50	Any "ROPE" CT
ROPE16-040A-07MV	4,000	0.07	0.75	Any "MOD" CT
ROPE24-060A-07MV	6,000	0.07	0.75	Any "MOD" CT
ROPE36-080A-07MV	8,000	0.07	0.75	Any "MOD" CT
ROPE48-100A-07MV	10,000	0.07	0.75	Any "MOD" CT

POWER CONTROL

Enclosed Power Control Centers

- Two 120 Vac grounded convenience outlets
- 4 or 10 Amp switch / circuit breaker
- Outlets can be continuously powered or controlled by the switch / circuit breaker.
- True override switch on load side of relay
- Auxiliary outputs are provided for convenient control panel installations.

Track Mount Circuit Breaker Switches

- Track mount circuit breaker switches provide a convenient addition to control panels.
- Circuits can be low voltage (24 Vac) or line voltage (120 Vac).

Prepackaged Switches

- Standard configurations to provide simple switching schemes.
- Labels can be ordered with custom content to fit your project.

UPS Power Supplies

- Perfect for applications in hospitals, laboratories and research & surgery centers
- Keep your critical controller powered on during a loss of normal utility power with the ability to hardwire line voltage to the provided UPS, in addition to hardwiring the UPS to the final load.
- Kits include: 600 or 850 VA commercial UPS, NEMA 1 metal enclosure, and interface board
- BACnet® compatible model is BTL Certified and includes six objects: Line or UPS power, UPS percent load, VA load, UPS battery capacity, USB connection, and remaining battery time.
- Cords tuck inside enclosure for clean & neat use of a UPS.
- 120 Vac convenience outlet(s) provided
- 10 Amp circuit breaker / switch can be used to test functionality of UPS.
- Switch controls line voltage

ENCLOSED POWER CONTROL CENTERS

MODEL #	UL	120 VAC OUTLETS	SWITCH	CIRCUIT BREAKER	HEIGHT	WIDTH	DEPTH	WIRES	TERMINALS	SPEC PAGE
PSPT2RB4	•	2	On / Off	4 Amp	4.000″	4.000″	1.800″		•	166
PSPW2RB4	•	2	On / Off	4 Amp	4.000″	4.000″	1.800″	•		166
PSPT2RB10	•	2	On / Off	10 Amp	4.000″	4.000″	1.800″		•	166
PSPW2RB10	•	2	On / Off	10 Amp	4.000″	4.000″	1.800″	•		166

TRACK MOUNT CIRCUIT BREAKER SWITCHES.

MODEL #	UL	POWER INPUT	SWITCH	LED	CIRCUIT BREAKER	HEIGHT	WIDTH	DEPTH 1	DEPTH 2	TRACK MOUNT	SPEC PAGE
PSMN01SB4	•	120 Vac	On / Off	•	4 Amp	1.350″	2.750″	2.000″	2.500″	MT212-2 included	166
PSMN01SB10	•	120 Vac	On / Off	•	10 Amp	1.350″	2.750″	2.000″	2.500″	MT212-2 included	166
PSMN24SB4	•	24 Vac	On / Off	•	4 Amp	1.350″	2.750″	2.000″	2.500″	MT212-2 included	166
PSMN24SB10	•	24 Vac	On / Off	•	10 Amp	1.350″	2.750″	2.000″	2.500″	MT212-2 included	166

PREPACKAGED SWITCHES

MODEL #	UL	RELAY CONTACTS	SWITCH	SWITCH RATING	HEIGHT	WIDTH	DEPTH 1	DEPTH 2	ENCLOSED	TRACK MOUNT	SPEC PAGE
PSMS1	•	1 SPST	Maintained 3 Position	5 Amp @ 30 Vac/dc	1.280″	4.000″	1.250″	1.750″		MT4 Series sold separately	167
SIB02S	•	1 SPDT	Maintained 3 Position	20 Amp @ 277 Vac	1.700″	2.800″	1.500″		•		167
SIB04S	•	1 SPDT	Maintained 2 Position (On / On)	20 Amp @ 277 Vac	1.700″	2.800″	1.500″		•		167
SIB05S	•	1 SPST	Maintained 2 Position (On / Off)	20 Amp @ 277 Vac	1.700″	2.800″	1.500″		•		168
SIBLS	•	1 SPDT	Maintained 3 Position	5 Amp @ 30 Vac/dc	1.700″	2.800″	1.500″		•		168

UPS POWER SUPPLIES.

MODEL #	UL	STATUS	UPS	CIRCUIT BREAKER	120 VAC OUTLET(S)	BACnet COMPATIBLE	KIT	ENCLOSED	TRACK MOUNT	HEIGHT	WIDTH	DEPTH 1	DEPTH 2	SPEC PAGE
PSH600-UPS (Kit)#			600 VA	•	•		N/A	•		12.000″	14.000″	6.000″		169
PSH2RB10	•			•	•		PSH600-UPS	•		12.000″	14.000″	6.000″		169
PSM2RB10	•			•	•		PSH600-UPS		MT4-4N included	3.250″	4.100″	1.250″	1.750″	170
PSMN2RB10	•			•	•				MT212-6N included	4.750″	2.750″	1.250″	1.750″	170
PSH600-UPS-STAT (Kit)#		•	600 VA	•	•		N/A	•		12.000″	16.000″	6.000″		171
PSH2C2RB10	•	•		•	•		PSH600-UPS-STAT	•		12.000″	16.000″	6.000″		172
PSMN2C2RB10	•	•		•	•		PSH600-UPS-STAT		MT212-6N included	6.660″	2.750″	1.250″	1.750″	172
PSH850-UPS-STAT (Kit)*		•	850 VA	•	•		N/A	•		14.000″	16.000″	6.000″		173
PSH2C2RB10-L	•	•		•	•		PSH850-UPS-STAT	•		14.000″	16.000″	6.000″		173
PSH600-UPS-BC (Kit)#		•	600 VA	•	•	•	N/A	•		12.000″	16.000″	6.000″		174

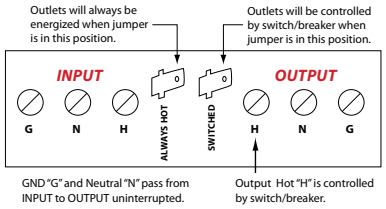
For full product information on "UPS" models, see our website.

UL = UL Listed - see data sheet for specific Listing # = For replacement UPS order UPS600 * = For replacement UPS order UPS850

SWITCH / CIRCUIT BREAKER COMBOS

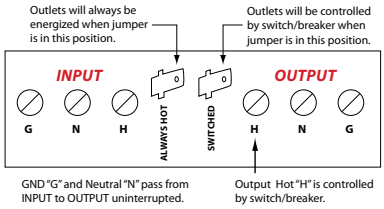
PSPT2RB4

Power Control Center, 4 Amp Switch / Circuit Breaker, 120 Vac, 2 Outlets, Terminals, NEMA 1 Housing



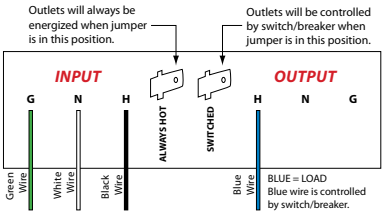
PSPT2RB10

Power Control Center, 10 Amp Switch / Circuit Breaker, 120 Vac, 2 Outlets, Terminals, NEMA 1 Housing



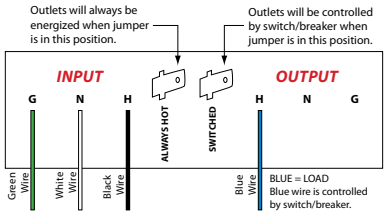
PSPW2RB4

Power Control Center, 4 Amp Switch / Circuit Breaker, 120 Vac, 2 Outlets, Wires, NEMA 1 Housing



PSPW2RB10

Power Control Center, 10 Amp Switch / Circuit Breaker, 120 Vac, 2 Outlets, Wires, NEMA 1 Housing



AT4 SERIES SELECTION GUIDE

Model #	Circuit Breaker	Terminals	Wires
PSPT2RB4	4 Amps	•	
PSPT2RB10	10 Amps	•	
PSPW2RB4	4 Amps		•
PSPW2RB10	10 Amps		•

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Circuit Breaker: 4 Amp Max. or 10 Amp Max.
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated (PSPW2RB4 & PSPW2RB10)
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Terminals: Ground "G˝ and Neutral "N˝ pass from INPUT to OUTPUT uninterrupted. OUTPUT Hot blue wire is controlled by the switch/breaker.

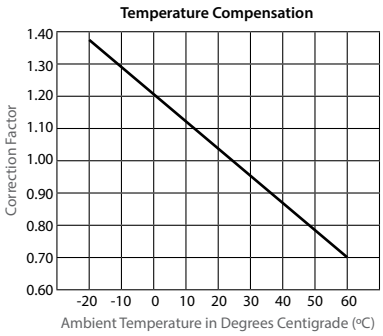
Notes:

- Indicator light will illuminate when switch/breaker is ON (RESET position) indicating power has been transferred from INPUT to OUTPUT by the switch/breaker. If it is desired for the indicator light to be illuminated continuously to indicate the presence of input (Line) power, INPUT and OUTPUT may be reversed -- connect input power from line to OUTPUT and connect output load to INPUT (operation of the jumpers above also reverses).

TRACK MOUNT CIRCUIT BREAKER SWITCHES

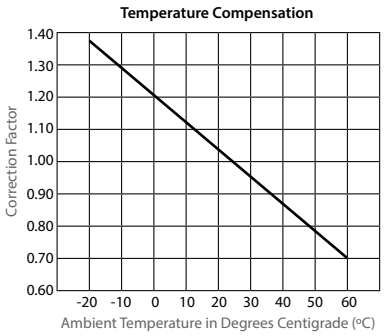
PSMN01S SERIES

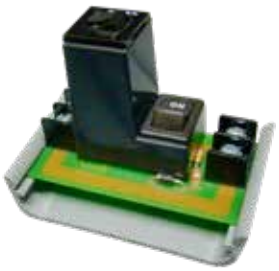
Switch, 2 Position Maintained, On/Off, 4 Amp or 10 Amp Circuit Breaker, 120 Vac, 2.75" Track Mount



PSMN24S SERIES

Switch, 2 Position Maintained, On/Off, 4 Amp or 10 Amp Circuit Breaker, 24 Vac, 2.75" Track Mount





PSMN01S SERIES

Model #	Circuit Breaker
PSMN01SB4	4 Amps
PSMN01SB10	10 Amps

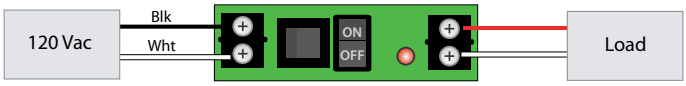
PSMN24S SERIES

Model #	Circuit Breaker
PSMN24SB4	4 Amps
PSMN24SB10	10 Amps

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Circuit Breaker: 4 Amp or 10 Amp
Dimensions: 1.35"H x 2.75"W x 2.00"D1/2.50"D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: MT212-2 Mounting Track Provided
Approvals: UL Listed, UL916, C-UL, CE, RoHS

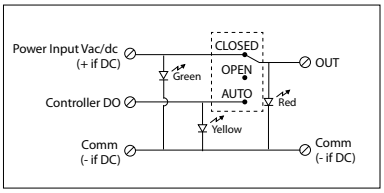
OVER CURRENT / SHORT CIRCUIT PROTECTION AND SWITCHING



PREPACKAGED SWITCH

PSMS1

Switch, 3 Position Maintained, 5 Amp, 30 Vac/dc, 4.00″ Track Mount



SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 1.28″H x 4.00″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 4.000″ MT4 Mounting Track Sold Separately

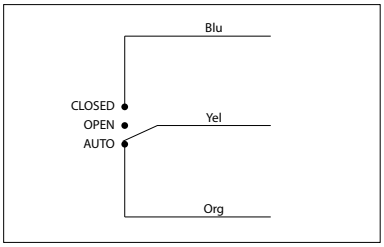
Switch Status: Green LED On = Power Input present
Yellow LED On = Controller DO ON
Red LED On = Output Signal ON
Approvals: UL Listed, UL916, C-UL, CE, RoHS

Switch Ratings:
5 Amp @ 30 Vac/dc

PREPACKAGED SWITCH

SIB02S

Switch, 20 Amp, 3 Position Maintained, Center Off, 3 Wires, NEMA 1 Housing



SIB02S-RD
• Red housing

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 1.70″H x 2.80″W x 1.50″D with 0.50″ NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16″, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1

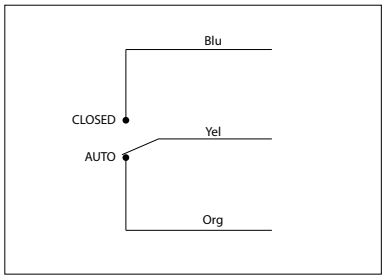
Switch Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
10 Amp Tungsten @ 120 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Notes:
• Switch position label can be custom printed according to your needs, simply consult factory

PREPACKAGED SWITCH

SIB04S

Switch, 20 Amp, 2 Position Maintained, On/On, 3 Wires, NEMA 1 Housing



SIB04S-RD
• Red housing

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 1.70″H x 2.80″W x 1.50″D with 0.50″ NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16″, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1

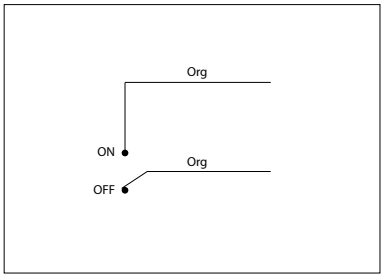
Switch Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
10 Amp Tungsten @ 120 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Notes:
• Switch position label can be custom printed according to your needs, simply consult factory

PREPACKAGED SWITCH

SIB05S

Switch, 20 Amp, 2 Position Maintained, On/Off, 2 Wires, NEMA 1 Housing



SIB05S-RD
• Red housing

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1

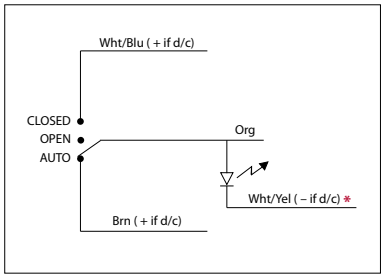
Switch Ratings:
20 Amp Resistive @ 277 Vac
1110 VA Pilot Duty @ 277 Vac
770 VA Pilot Duty @ 120 Vac
20 Amp Ballast @ 277 Vac
10 Amp Tungsten @ 120 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Notes:
• Switch position label can be custom printed according to your needs, simply consult factory

PREPACKAGED SWITCH

SIBLS

Switch, 5 Amp, 30 Vac/dc, 3 Position Maintained, On/Off/On, LED Indicator, NEMA 1 Housing



SIBLS-RD
• Red housing

SPECIFICATIONS

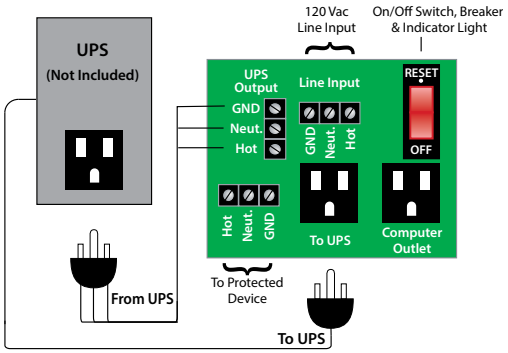
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Dimensions: 1.70"H x 2.80"W x 1.50"D with 0.50" NPT nipple
Housing Detail: See **Housing A** in housing guide for dimensions
Origin: Made of US and non-US parts
Wires: 16˝, 600V Rated
Approvals: CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Switch Rating: 5 Amp @ 30Vac/dc

Notes:
• Switch position label can be custom printed according to your needs, simply consult factory
• Connection to Wht/Yel may be omitted if LED is not needed *

UNINTERUPTABLE POWER SUPPLY KIT

PSH600-UPS

600VA UPS Backup Power Control Center, 12" x 14" x 6" Metal Enclosure



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Without
Cover

SPECIFICATIONS

UPS

UPS: 600VA
Backup Time: 2.5 Min. @ Full 600 VA Load
10 Min. @ 1/2 Load
Power Consumption Up to 3 Amp @120 Vac
Max Load: 330 Watt
Frequency: 50/60 Hz
Temperature Rating of UPS: 32 to 104° F
UPS Transfer Time: 6ms
Approvals: UL Listed, UL1778

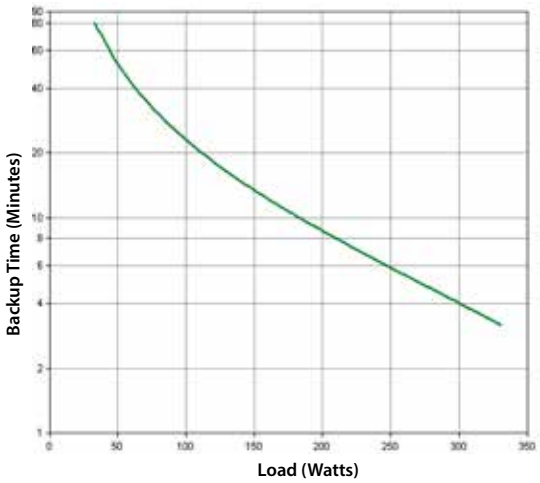
PSH2RB10

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Dimensions: 12.000˝ H x 14.000˝ W x 6.000˝ D
Metal Housing with Screw Cover
Origin: Made of US and non-US parts

Notes:

- To order without UPS, so that any other commercial UPS with appropriate ratings and within housing space limitations may be used, see model PSH2RB10.
- To order interface board for replacement or for separate use, order model PSMN2RB10.
- Average battery life: 3-5 years depending on the number of discharge cycles and environmental temperature
- UPS may change based on quality and availability

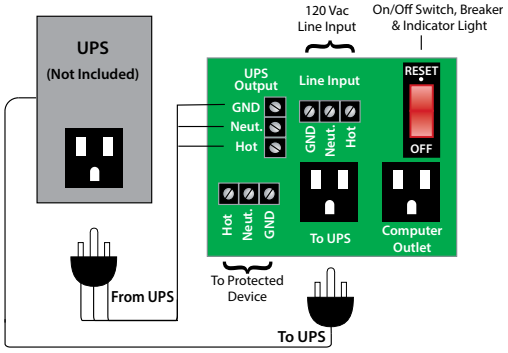
ESTIMATED BACKUP TIME VS. LOAD



UNINTERUPTABLE POWER SUPPLY KIT

PSH2RB10

UPS Power Control Center, 2.75" Track Mount in 12" x 14" x 6" Metal Enclosure



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SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Dimensions: 12.000˝ H x 14.000˝ W x 6.000˝ D
Metal Housing with Screw Cover
Origin: Made of US and non-US parts

Notes:

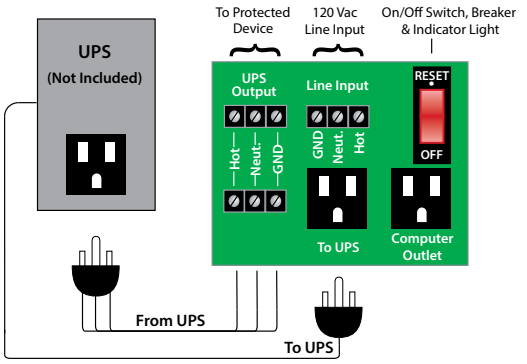
- Track mounted interface board may be ordered separately as model PSMN2RB10, to be used with any commercial UPS with appropriate ratings for the circuit breaker.
- Circuit breaker for short protection.
- 14/3 Line Cord included (3´).
- Use with UPS devices rated 1000 VA or less.
  - Max. size: 12.000˝ x 7.250˝ x 5.500˝
  - 120 Vac max., 600 W max., 8.3 Amp max.
- UPS is not included.

POWER CONTROL

UPS INTERFACE MODULE

PSM2RB10

UPS Power Control Center, 10 Amp Switch / Circuit Breaker, 120 Vac, 2 Outlets, Terminals, 4.00″Track Mount



BUY SEPARATELY AND PLACE IN AN ENCLOSURE OF YOUR CHOICE

SPECIFICATIONS

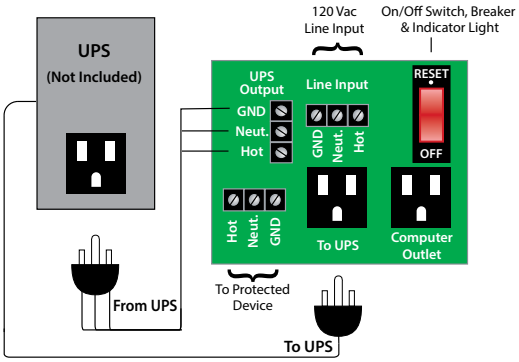
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Dimensions: 3.25″H x 4.10″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 3.250″ x 4.000″
MT4-4N Mounting Track Included
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
- Circuit breaker for short protection.
- 14/3 Line Cord included (3′).
- Use with UPS devices rated 1000 VA or less.
- UPS is not included.

UPS INTERFACE MODULE

PSMN2RB10

UPS Power Control Center, 10 Amp Switch / Circuit Breaker, 120 Vac, 2 Outlets, Terminals, 2.75″Track Mount



BUY SEPARATELY AND PLACE IN AN ENCLOSURE OF YOUR CHOICE

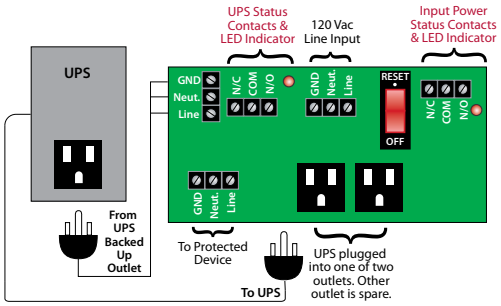
SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Dimensions: 4.75″H x 2.75″W x 1.25″D1/1.75″D2
Housng Detail: See **Housing H** in housing guide for dimensions
Origin: Made of US and non-US parts
Track Mount: 2.750″ x 6.000″
MT212-6N Mounting Track Included
Approvals: UL Listed, UL916, C-UL, CE, RoHS

Notes:
- Circuit breaker for short protection.
- 14/3 Line Cord included (3′).
- Use with UPS devices rated 1000 VA or less.
- UPS is not included.

PSH600-UPS-STAT

600VA UPS Backup Power Control Center, Status Contacts, 12" x 14" x 6" Metal Enclosure



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SPECIFICATIONS

UPS

UPS: 550 or 600VA
Backup Time: 2.5 Min. @ Full 600 VA Load
10 Min. @ 1/2 Load
Power Consumption Up to 3 Amp @120 Vac
Max Load: 330 Watt
Frequency: 50/60 Hz
Temperature Rating of UPS: 32 to 104° F
UPS Transfer Time: 6ms
Approvals: UL Listed, UL1778

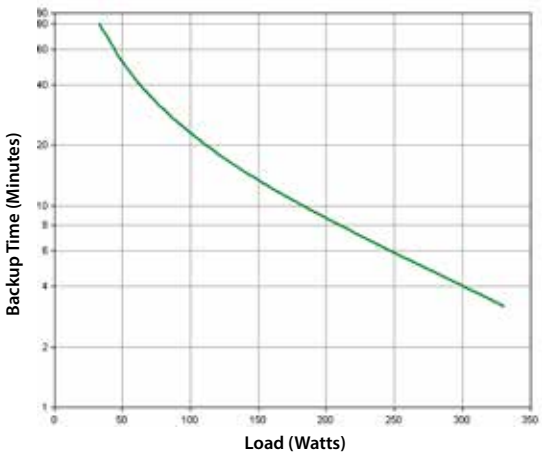
PSH2C2RB10

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Dimensions: 12.000˝ H x 14.000˝W x 6.000˝D Metal Housing with Screw Cover
Origin: Made of US and non-US parts

Line Input Status Contacts and UPS Output Status Contacts Rated:
10 Amp @ 277 Vac General Use
10 Amp @ 30 Vdc (N/O)
7 Amp @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1/4 HP @ 277 Vac
1000 VA @ 120 Vac Magnetic Ballast (N/C)
C300 Pilot Duty
16.8 VA @ 24 Vac Pilot Duty

Notes:
- To order without UPS, so that any other commercial UPS with appropriate ratings and within housing space limitations may be used, see model PSH2C2RB10.
- To order interface board for replacement or for separate use, order model PSMN2C2RB10.
- Average battery life: 3-5 years depending on the number of discharge cycles and environmental temperature
- UPS may change based on quality and availability

ESTIMATED BACKUP TIME VS. LOAD



UPS Status Contacts and LED Indicator

The UPS status contacts and LED indicate power from the UPS. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay will be energized as long as the UPS can sustain it (until the UPS battery is depleted), and the LED is on.

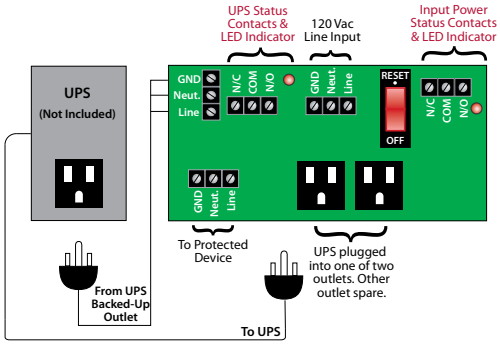
Input Power Status Contacts and LED Indicator

The input power status contacts and LED indicate the presence of normal power. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay is de-energized, and the LED is off.

ENCLOSED UPS INTERFACE MODULE

PSH2C2RB10

UPS Power Control Center Interface Board, Status Contacts, 2.75″ Track Mount in 12″ x 16″ x 6″ Metal Enclosure



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Shown Without Cover

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Approvals: UL Listed, UL916, C-UL, CE, RoHS, NEMA 1
Dimensions: 4.75″H x 2.75″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Metal Housing with Screw Cover
Origin: Made of US and non-US parts

Line Input Status Contacts and UPS Output Status Contacts Rated:
10 Amp @ 277 Vac General Use
10 Amp @ 30 Vdc N/O
7 Amp @ 30 Vdc N/C
1/2 HP @ 125 Vac
1/4 HP @ 277 Vac
100 VA @ 120 Vac Ballast N/C
C300 Pilot Duty
16.8 VA @ 24 Vac Pilot Duty

Notes:
- Track mounted interface board may be ordered separately as model PSMN2C2RB10, to be used with any commercial UPS with appropriate ratings for the circuit breaker.
- Circuit breaker for short-circuit protection.
- 14/3 Line Cord included (3´).
- Use with UPS devices rated 1000 VA or less.
  - Max. size: 12.000˝ x 7.250˝ x 5.500˝
  - 120 Vac max., 600 W max., 8.3 Amp max.
- UPS is not included.

UPS Status Contacts and LED Indicator

The UPS status contacts and LED indicate power from the UPS. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay will be energized as long as the UPS can sustain it (until the UPS battery is depleted), and the LED is on.

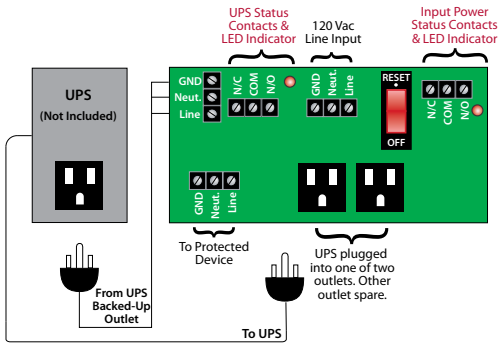
Input Power Status Contacts and LED Indicator

The input power status contacts and LED indicate the presence of normal power. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay is de-energized, and the LED is off.

UPS INTERFACE MODULE

PSMN2C2RB10

UPS Power Control Center, 10 Amp Switch / Circuit Breaker, 120 Vac, 2 Outlets, Terminals, Status Contacts, 2.75″ Track Mount



BUY SEPARATELY AND PLACE IN AN ENCLOSURE OF YOUR CHOICE

SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Dimensions: 6.66″H x 2.75″W x 1.25″D1/1.75″D2
Housing Detail: See **Housing H** in housing guide for dimensions
Track Mount: 2.750˝ x 6.000˝
MT212-6N Mounting Track Included
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Line Input Status Contacts and UPS Output Status Contacts Rated:
10 Amp @ 277 Vac General Use
10 Amp @ 30 Vdc N/O
7 Amp @ 30 Vdc N/C
1/2 HP @ 125 Vac
1/4 HP @ 277 Vac
100 VA @ 120 Vac Ballast N/C
C300 Pilot Duty
16.8 VA @ 24 Vac Pilot Duty

Notes:
- Circuit breaker for short-circuit protection.
- 14/3 Line Cord included (3´).
- Use with UPS devices rated 1000 VA or less.
- UPS is not included.

UPS Status Contacts and LED Indicator

The UPS status contacts and LED indicate power from the UPS. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay will be energized as long as the UPS can sustain it (until the UPS battery is depleted), and the LED is on.

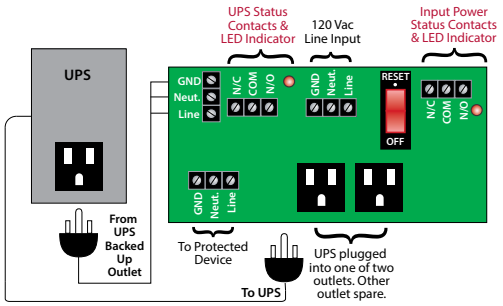
Input Power Status Contacts and LED Indicator

The input power status contacts and LED indicate the presence of normal power. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay is de-energized, and the LED is off.

UNINTERUPTABLE POWER SUPPLY KIT

PSH850-UPS-STAT

850VA UPS Backup Power Control Center, Status Contacts, 14″ x 16″ x 6″ Metal Enclosure



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SINUSOIDAL OUTPUT OR PURE SINE WAVE OUTPUT

SPECIFICATIONS

UPS

UPS: 850VA
Backup Time: 2 Min. @ Full 850 VA Load
8 Min. @ 1/2 Load
Input: 120 Vac, 12 Amp
Sine Wave Output: 120 Vac, 7.1 Amp
Max Load: 510 Watt
Frequency: 50/60 Hz
Temperature Rating of UPS: 32 to 95° F
UPS Transfer Time: 4ms
Approvals: UL Listed, UL1778
Model: Cyber Power Model 850PFCLCD

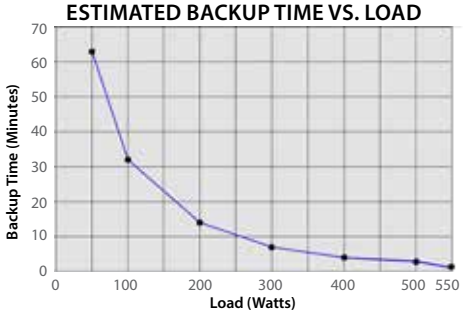
PSH2C2RB10-L

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Dimensions: 14.000″H x 16.000″W x 6.000″D Metal Housing with Screw Cover
Origin: Made of US and non-US parts

Line Input Status Contacts and UPS Output Status Contacts Rated:
10 Amp @ 277 Vac General Use
10 Amp @ 30 Vdc (N/O)
7 Amp @ 30 Vdc (N/C)
1/2 HP @ 125 Vac
1/4 HP @ 277 Vac
1000 VA @ 120 Vac Magnetic Ballast (N/C)
C300 Pilot Duty
16.8 VA @ 24 Vac Pilot Duty

Notes:
- To order without UPS, so that any other commercial UPS with appropriate ratings and within housing space limitations may be used, see model PSH2C2RB10-L.
- To order interface board for replacement or for separate use, order model PSMN2C2RB10.
- Typical battery life: 3-6 years, depending on number of discharge/recharge cycles

ESTIMATED BACKUP TIME VS. LOAD



UPS Status Contacts and LED Indicator

The UPS status contacts and LED indicate power from the UPS. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay will be energized as long as the UPS can sustain it (until the UPS battery is depleted), and the LED is on.

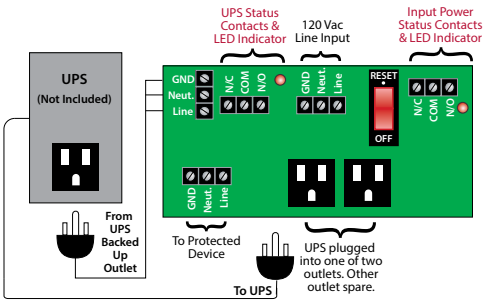
Input Power Status Contacts and LED Indicator

The input power status contacts and LED indicate the presence of normal power. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay is de-energized, and the LED is off.

ENCLOSED UPS INTERFACE MODULE

PSH2C2RB10-L

UPS Power Control Center Interface Board, Status Contacts, 2.75″ Track Mount in 14″ x 16″ x 6″ Metal Enclosure



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SPECIFICATIONS

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Dimensions: 14.000″H x 16.000″W x 6.000″D Metal Housing with Screw Cover
Origin: Made of US and non-US parts

Line Input Status Contacts and UPS Output Status Contacts Rated:
10 Amp @ 277 Vac General Use
10 Amp @ 30 Vdc N/O
7 Amp @ 30 Vdc N/C
1/2 HP @ 125 Vac
1/4 HP @ 277 Vac
1000 VA @ 120 Vac Magnetic Ballast N/C
C300 Pilot Duty
16.8 VA @ 24 Vac Pilot Duty

Notes:
- Track mounted interface board may be ordered separately as model PSMN2C2RB10, to be used with any commercial UPS with appropriate ratings for the circuit breaker.
- Circuit breaker for short-circuit protection.
- 14/3 Line Cord included (3′).
- Use with UPS devices rated 1000 VA or less.
  - Max. size: 14.000″ x 10.000″ x 5.500″
  - 120 Vac, 600 W max., 8.3 Amp max.
- UPS is not included.
- To order a kit with a UPS, see PSH850-UPS-STAT.

UPS Status Contacts and LED Indicator

The UPS status contacts and LED indicate power from the UPS. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay will be energized as long as the UPS can sustain it (until the UPS battery is depleted), and the LED is on.

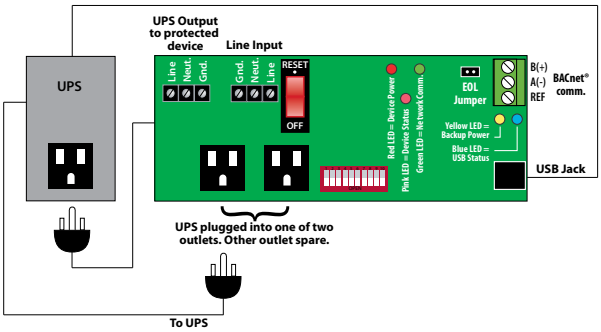
Input Power Status Contacts and LED Indicator

The input power status contacts and LED indicate the presence of normal power. When normal power is present, the relay is energized, and the LED is on. When normal power is lost, the relay is de-energized, and the LED is off.

POWER CONTROL

PSH600-UPS-BC

600 VA UPS Backup Power Control Center, BACnet MS/TP Network, 12" x 14" x 6" Metal Enclosure



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SPECIFICATIONS

BOARD AND ENCLOSURE:

Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Indicators: Device Power: Red LED
Device Status: Pink LED
Network Communication: Green LED
Backup Power: Yellow LED
USB Status: Blue LED

Main Breaker ON/OFF: Switch / Breaker (10 Amp)
Dimensions: 12" H x 14" W x 6" D
Origin: Made of US and non-US parts
Track Mount: 2.750" x 8.000"
MT212-8N Mounting Track Included
Approvals: UL Listed, UL916, C-UL, CE, RoHS
Line Input: 120Vac, 10A(max)
Convenience Receptacles: 120Vac, 10A(max combined)

UPS:

UPS: 600VA
Backup Time: 2.5 Min. @ Full 600 VA Load
10.2 Min. @ 1/2 Load
Input: 120 Vac, 12 Amp
Output: 120 Vac, 4.6 Amp
Max Load: 330 Watt
Frequency: 50/60 Hz
Temperature Rating of UPS: 32 to 104° F
UPS Transfer Time: 6ms
Approvals: UL Listed, UL1778

Notes:
- Average battery life: 3-5 years depending on the number of discharge cycles and environmental temperature
- This model is not designed to notify user of battery failure.
- This model is designed to work exclusively with Functional Devices Model UPS600

Power Input Rating:
25mA @ 120Vac
Network Media:
Twisted Pair 22-24 AWG, shielded recommended (MS/TP)
USB A/B (device to UPS, included)
Terminations:
Functional Devices product installed at both ends of the MS/TP network - Use 120 Ohm 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, 192000, 38400, 76800, 115200 (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
1	0	0	76800
1	0	1	115200

All other combinations=9600 baud

Notes:
- Circuit breaker for short-circuit protection.
- 14/3 Line Cord included (3').

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:

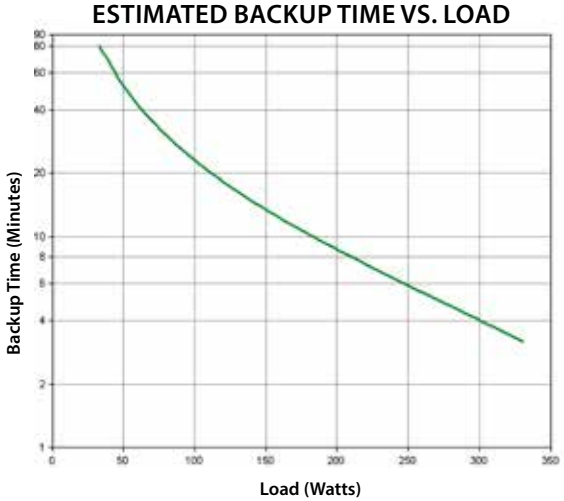
MS/TP Address - 004 Device ID - 277004

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.)
- Devices Instance changed via Object Identifier Property of Device Object.
- Status of UPS connection, Battery run time, line power ,UPS load (VA and %), and battery capacity can be read from BACnet network.

INFORMATION PROVIDED OVER BACNET® NETWORK CAN BE USED TO SCHEDULE "PREDICTIVE MAINTENANCE" SUCH AS UPS BATTERY REPLACEMENT, ETC.

ESTIMATED BACKUP TIME VS. LOAD



enocean®

HVAC & LIGHTING ENERGY MANAGEMENT

902 MHz • Maintenance-free
Flexibility of applications • Time saving
Cost savings in installation, renovation, and energy usage

Many hotels keep their rooms at a comfortable temperature for the duration of their guests' stays – whether the guests are in or out of their room. With guest comfort as a priority, hotels and motels typically use almost 40 percent of their electricity on heating and cooling rooms, even though studies show that most sold rooms are unoccupied for 12 or more hours a day. Used correctly, the right controls could offer significant energy savings without compromising the comfort of guests.

Information from: EnOcean® Alliance & ENERGY STAR Building Upgrade Manual

ENOCEAN® ENABLED WIRELESS DEVICES

enocean alliance Member

RIBW01B-EN3

RIBW01C-EN3

WDWS2-EN3

WWS2-EN3

WKC-EN3

WVSCM-EN3

WVSWM-EN3

EnOcean® Enabled Wireless RIB® Relay Receivers & Transceivers work in conjunction with many 902 MHz EnOcean® enabled transmitters.

Wireless wall switches, occupancy sensors, thermostats, key card switches, and patio & door switches are all devices which can activate the RIB® Wireless Control Relays by using EnOcean's "energy harvesting" technology. Energy harvesting refers to the process by which energy is captured and stored, then used to transmit a wireless signal, which in turn is received by the RIB® Wireless Relay.

WIRELESS CONTROL RELAYS

		COIL VOLTAGE			CONTACT RATINGS								
MODEL #	UL	AC/DC	AC	RELAY CONTACTS	RESISTIVE	MOTOR	PILOT DUTY	REPEAT FUNCTION	DRY CONTACT INPUT	DIMMER FUNCTION	HOUSING STYLE *	FREQUENCY	SPEC PAGE
RIBW01B-EN3	•		120	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	•		B	902 MHz	177
RIBW208B-EN3	•		208	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	•		B	902 MHz	177
RIBW240B-EN3	•		240	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	•		B	902 MHz	177
RIBW277B-EN3	•		277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	•		B	902 MHz	177
RIBW24B-EN3	•	24		1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•	•		B	902 MHz	177
RIBW21BAO-EN3	•		120-277	1 SPDT	20 A @ 277 Vac	2 HP @ 277 Vac	1,110 VA @ 277 Vac	•		•	B	902 MHz	178
RIBW01C-EN3	•		120	1 SPST	5 A Ballast @ 120/277 Vac; 5 A Elec. Ballast @ 120 Vac			•			Ballast size	902 MHz	178
RIBW02C-EN3	•		208-277	1 SPST	5 A Ballast @ 120/277 Vac; 5 A Elec. Ballast @ 120 Vac			•			Ballast size	902 MHz	178

WIRELESS PHASE ANGLE DIMMER

		POWER INPUT							
MODEL #	UL	AC/DC	AC	REPEAT FUNCTION	DRY CONTACT INPUT	DIMMER FUNCTION	HOUSING STYLE *	FREQUENCY	SPEC PAGE
RIBW01F600-EN3	•		120 Vac	•		•	C	902 MHz	179

WIRELESS DEVICES

WIRELESS TRANSMITTERS

MODEL #	DESCRIPTION	POWER INPUT	ENOCEAN® ENERGY HARVESTING	FREQUENCY	COLOR	SPEC PAGE
WWS2-EN3	Wall switch with barrier & cover plate	Self-Powered	•	902 MHz	White	180
WDWS2-EN3	Door and window switch	Light-Powered	•	902 MHz	White	180
WKC-EN3	Keycard switch	Self-Powered	•	902 MHz	White	180
WVSCM-EN3	Occupancy / vacancy sensor, ceiling mount	Light-Powered	•	902 MHz	White	181
WVSWM-EN3	Occupancy / vacancy sensor, wall mount	Light-Powered	•	902 MHz	White	181
WVSUS-EN3	Occupancy / vacancy sensor, ceiling mount	Light-Powered	•	902 MHz	White	182

WIRELESS ACCESSORIES

MODEL #	DESCRIPTION	SPEC PAGE
AWSTFM	Flush Surface Mount Backplate Kit for WWS2-EN3	182
WSTP-W	Wall Switch Plate Replacement	182

UL = UL Listed - see data sheet for specific Listing

* = See Housing Guide on page 201

WIRELESS CONTROL RELAYS WITH TWO-WAY COMMUNICATION

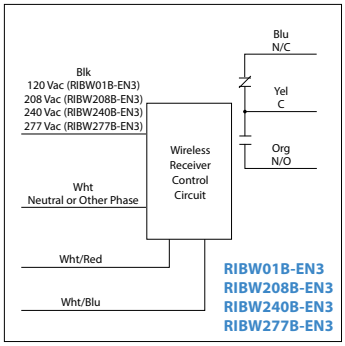
RIBW01B-EN3
EnOcean 902 MHz Wireless Relay, Transceiver / Repeater, 20 Amp SPDT, 120 Vac Power Input, Dry Contact Input, NEMA 1 Housing

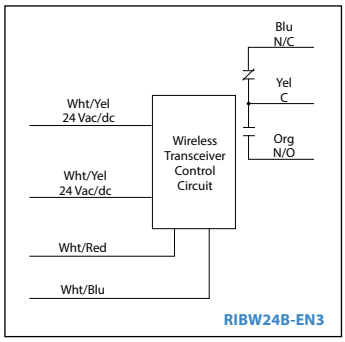
RIBW208B-EN3
EnOcean 902 MHz Wireless Relay, Transceiver / Repeater, 20 Amp SPDT, 208 Vac Power Input, Dry Contact Input, NEMA 1 Housing

RIBW240B-EN3
EnOcean 902 MHz Wireless Relay, Transceiver / Repeater, 20 Amp SPDT, 240 Vac Power Input, Dry Contact Input, NEMA 1 Housing

RIBW277B-EN3
EnOcean 902 MHz Wireless Relay, Transceiver / Repeater, 20 Amp SPDT, 277 Vac Power Input, Dry Contact Input, NEMA 1 Housing

RIBW24B-EN3
EnOcean 902 MHz Wireless Relay, Transceiver / Repeater, 20 Amp SPDT, 24 Vac/dc Power Input, Dry Contact Input, NEMA 1 Housing





RELAY HAS BUILT-IN REPEATER FUNCTION. RELAY RECEIVES SIGNAL FROM WIRELESS SWITCH TRANSMITTER AND REBROADCASTS THE SIGNAL TO THE NEXT RELAY RECEIVER.

SPECIFICATIONS

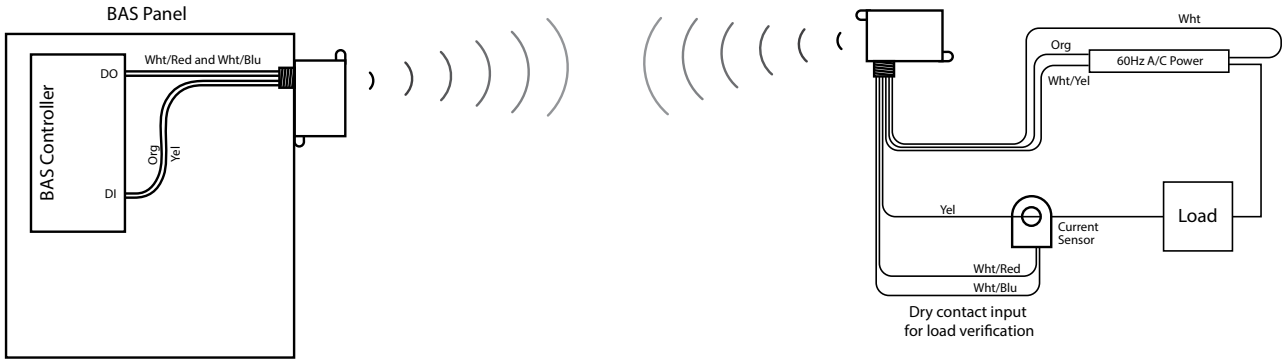
 # Relays & Contact Type: One (1) SPDT Continuous Duty Coil
Expected Relay Life: 10 million cycles minimum mechanical
Operating Temperature: -30 to 140° F
Humidity Range: 5 to 95% (noncondensing)
Red LED: Relay Status / Learn Mode Status (Flashing)
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.50" NPT nipple
Housing Details: See **Housing B** in housing guide for demensions
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, RoHS
Agency Compliance: FCCID: SZV-TCM320U
IC: 5713A-TCM320U
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No
Frequency: 902 MHz
Receiver Sensitivity: -93 dBm typical
Conducted Power: 5 mW typical
Built-in Switch Modes: Alarm, Repeater, Delay, Rocker, Momentary, and Toggle
Origin: Made of US and non-US parts

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)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Power Input Ratings:
73 mA @ 120 Vac ; 60 Hz (RIBW01B-EN3)
80 mA @ 208 Vac ; 60 Hz (RIBW208B-EN3)
80 mA @ 240 Vac ; 60 Hz (RIBW240B-EN3)
80 mA @ 277 Vac ; 60 Hz (RIBW277B-EN3)
69 mA @ 24 Vdc (RIBW24B-EN3)
139 mA @ 24 Vac (RIBW24B-EN3)

Notes:
- Compatible with Enocean® 902 MHz Switches/Transmitters.
- Typical range: 50-150 ft.
  - Open area transmission could be farther. Consult factory for more information.
- Repeater function only rebroadcasts original EnOcean® transmission. Up to two repeaters can be used.
- Version 1.5 firmware or later implements Functional Devices, Inc.'s EnOcean® Manufacturer ID of 0x055.
- For setup instructions, see website for -EN3 Series Application Manual: www.functionaldevices.com/wp-content/uploads/2021/12/B1867_393231.pdf

APPLICATION FOR WIRELESS CONTROL & FEEDBACK IN A BUILDING AUTOMATION SYSTEM

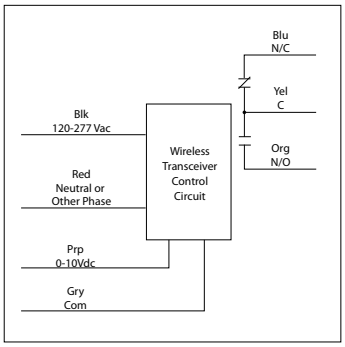


WIRELESS DEVICES

WIRELESS CONTROL RELAY

RIBW21BAO-EN3

EnOcean 902 MHz Wireless Relay, Transceiver / Repeater, 20 Amp SPDT, 120-277 Vac Power Input, 0-10 Vdc Analog Output, NEMA 1 Housing



RELAY HAS BUILT-IN REPEATER FUNCTION. RELAY RECEIVES SIGNAL FROM WIRELESS SWITCH TRANSMITTER AND REBROADCASTS THE SIGNAL TO THE NEXT RELAY RECEIVER.

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)
Red LED: Relay Status / Learn Mode Status (Flashing)
Dimensions: 2.39"H x 3.31"W x 1.81"D with 0.75" NPT nipple
Housing Detail: See **Housing B** in housing guide for demensions
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, RoHs
Agency Compliance: FCCID: SZV-TCM320U
IC: 5713A-TCM320U
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override Switch: No
Frequency: 902 MHz
Receiver Sensitivity: -93 dBm typical
Conducted Power: 5 mW typical
Built-in Switch Modes: Alarm, Repeater, Delay, Dimming, Rocker, Momentary, and Toggle
Origin: Made of US and non-US parts

Contact Ratings:
20 Amp Resistive @ 277 Vac
20 Amp Ballast @ 277 Vac (N/O)
10 Amp Ballast @ 277Vac (N/C)
16 Amp Electronic Ballast @ 277 Vac (N/O)
10 Amp Tungsten @ 120 Vac (N/O)
770 VA Pilot Duty @ 120 Vac
1,110 VA Pilot Duty @ 277 Vac
2 HP @ 277 Vac
1 HP @ 120 Vac

Power Input Ratings:
39 mA max @ 120-277Vac

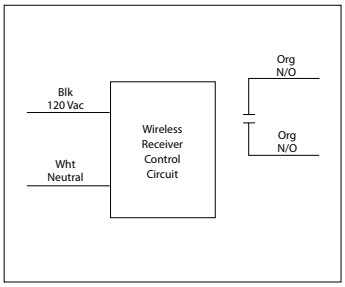
Analog Output Ratings:
0-10Vdc, 10mA Sourcing/ 50mA Sinking

Notes:
- Compatible with Enocean® 902 MHz Switches/Transmitters.
- Typical range: 50-150 ft.
  - Open area transmission could be farther. Consult factory for more information.
- Repeater function only rebroadcasts original EnOcean® transmission. Up to two repeaters can be used.
- For setup instructions, see website.

WIRELESS CONTROL RELAYS WITH TWO-WAY COMMUNICATION

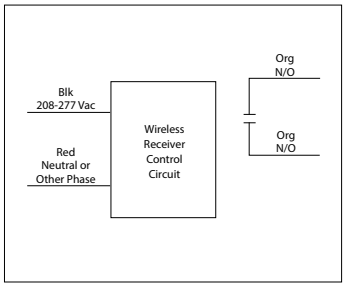
RIBW01C-EN3

EnOcean 902 MHz Wireless Relay, Receiver/ Repeater, 5 Amp SPST-N/O, 120 Vac Power Input, NEMA 1 Housing



RIBW02C-EN3

EnOcean 902 MHz Wireless Relay, Receiver/ Repeater, 5 Amp SPST-N/O, 208-277 Vac Power Input, NEMA 1 Housing



SMALLER SIZE DESIGN TO FIT INSIDE BALLAST HOUSING OF FLUORESCENT LIGHT FIXTURE.

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)
Red LED: Relay Status / Learn Mode Status (Flashing)
Dimensions: 1.68"H x 4.58"W x 1.18"D
Housing Detail: See **Housing E** in housing guide for demensions
Wires: 16˝, 600V Rated
Approvals: UL Listed, UL916, C-UL, RoHS
Agency Compliance: FCCID: SZV-TCM320U ; IC: 5713A-TCM320U
Gold Flash: No
Override Switch: No
Frequency: 902 MHz
Receiver Sensitivity: -93 dBm typical
Conducted Power: 5 mW typical
Built-in Switch Modes: Alarm, Repeater, Delay, Rocker, Momentary, and Toggle
Origin: Made of US and non-US parts

Contact Ratings:
5 Amp Ballast @ 120/277 Vac
5 Amp Tungsten @ 120 Vac
5 Amp Electronic Ballast @ 120 Vac

Power Input Ratings:
75 mA @ 120 Vac ; 60 Hz (RIBW01C-EN3)
100 mA @ 208-277 Vac ; 60 Hz (RIBW02C-EN3)

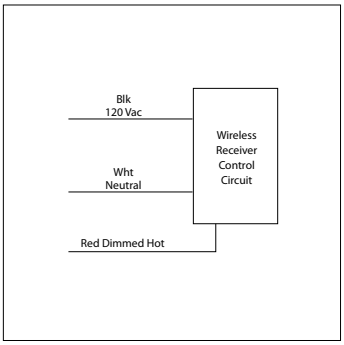
Notes:
- Compatible with Enocean® 902 MHz Switches/Transmitters.
- Typical range: 50-150 ft.
  - Open area transmission could be farther. Consult factory for more information.
- Repeater function only rebroadcasts original EnOcean® transmission. Up to two repeaters can be used.
- Version 1.5 firmware or later implements Functional Devices, Inc.'s EnOcean® Manufacturer ID of 0x055.
- For setup instructions, see website for -EN3 Series:
  www.functionaldevices.com/wp-content/uploads/2021/12/B1867_393231.pdf

WIRELESS CONTROL PHASE ANGLE DIMMER

RIBW01F600-EN3

EnOcean 902 MHz Wireless Phase Angle Dimmer, Receiver / Repeater, 120 Vac Power Input, 600W Rated, Dimming Mode Selectable, NEMA 1 Housing

DIMMER HAS BUILT-IN REPEATER FUNCTION. DIMMER RECEIVES SIGNAL FROM WIRELESS TRANSMITTER AND REBROADCASTS THE SIGNAL TO THE NEXT RELAY RECEIVER.



RoHS

c UL us LISTED

enocean alliance Member

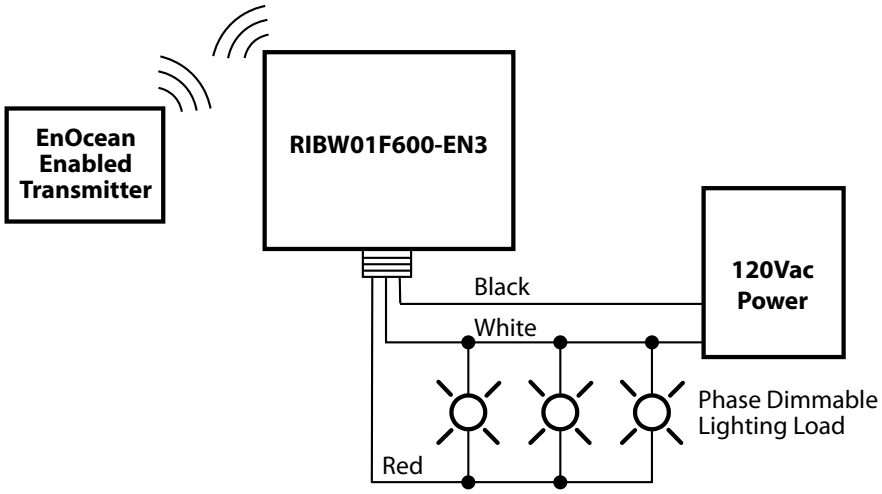
SPECIFICATIONS

Operating Temperature: -30 to 122 F
Humidity Range: 5 to 95% (noncondensing)
Red LED: Learn Mode Status (Flashing) / Dim Mode Status
Dimensions: 4.00"H x 4.00"W x 1.81"D with 0.50" NPT nipple
Housing Detail: See **Housing C** in housing guide for demensions
Wires: 16", 600V rated
Approvals: UL Listed, UL916, C-UL, RoHS
Agency Compliance: FCCID: SZV-TCM320U
IC: 5713A-TCM320U
Housing Rating: UL Accepted, NEMA 1
Frequency: 902 MHz
Max Lighting Load: 600W Incndescent/Halogen
Recommended 300W for other dimmable lighting loads
Selectable Dimming Mode: Yes
Selectable Low Dim Threshold: Yes
Origin: Made of US and non-US parts

Power Input Ratings:
100mA @ 120 Vac; 60Hz

Notes:
- Compatible with Enocean® 902 MHz Switches/Transmitters.
- Typical range: 50-150 ft.
  - Open area transmission could be farther. Consult factory for more information.
- Repeater function only rebroadcasts original EnOcean® transmission. Up to two repeaters can be used.
- Version 1.5 firmware or later implements Functional Devices, Inc.'s EnOcean® Manufacturer ID of 0x055.
- Not for use with Magnetic Low Voltage (MLV) loads.

TYPICAL APPLICATION

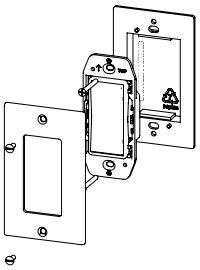


WIRELESS ROCKER SWITCH TRANSMITTER & COVER PLATE

WWS2-EN3

EnOcean 902 MHz Wireless Wall Transmitter
Switch with Barrier and Cover Plate, White

Includes Cover Plate.



RoHS

enocean alliance Member

SPECIFICATIONS

Operating Modes: On/Off, Toggle, Scene control
Power Supply: Powered by finger press (Electrodynamic Energy Harvester)
Frequency: 902 MHz
Antenna: Integrated antenna, 6.4 cm
Transmission Power: Max. 10mW EIRP
Energy Bowtravel/Operating Force: 50,000 actuations tested to EN60669 / VDE 0632
Operating Temperature: -25 to 65° C
Relative Humidity 5 to 92% (noncondensing)
Dimensions: 2.75˝H x 4.50˝W x 0.8˝D
Approvals: RoHS
Agency Compliance:
- Switch: FCC ID: SZV-PTM210U; IC: 5713A-PTM210U
- Barrier Plate: Certified to UL514D; CSA C22.2 #42-1-13

Notes:
- Control one load or one group of loads with a single rocker style Wireless Switch Transmitter.
- Typical range: 50-150 ft.
  - Open area transmission could be farther. Consult factory for more information.
- Mounting
  - Includes barrier plate and mounts to electrical wall boxes (screws included).
  - Alternate surface mount accessory AWSTFM to install on any surface using double sided tape or Velcro™ (sold separately).
- For use with EN3 Series Relays.
- EEP F6-02-02

WIRELESS SOLAR DOOR / WINDOW TRANSMITTER

WDWS2-EN3

EnOcean 902 MHz Wireless Solar Door / Window Transmitter Switch

RoHS

enocean alliance Member

SPECIFICATIONS

Minimum Illumination: 400 lux hours per day
e.g. 100 lux for 4 hours or 200 lux for 2 hours
Start-up Time: Less than 2.5 min @ 400 lux
Operating Life in Darkness (after full charge): Min 10 days signs-of-life only
Operating Life in Darkness (with backup battery): Min 5 years
Maximum Sensor Gap: 0.16" (4mm)
Dimensions : 3.00" L x 0.87" W x 0.59" D (76mm x 22mm x 15mm)
Dimensions (with mounting plate): 3.15" L x 0.94" W x 0.73" D (80mm x 24mm x 19mm)
Drill Distance: 2.05" (52mm)
Environment: Indoor use only
-4 to 140 F (-20 to 60 C)
5 to 93% relative humidity (noncondensing)
Approvals: RoHS
Agency Compliance: FCC ID: SZV-STM 320U
IC: 5713A-STM 320U

Notes:
- Typical range: 100 ft.
  - Open area transmission could be farther. Consult factory for more information.
- Only for use with –EN3 Series relays.
- EEP D5-00-01

WIRELESS KEYCARD TRANSMITTER SWITCH

WKC-EN3

EnOcean 902 MHz Wireless Key Card Transmitter Switch

RoHS

enocean alliance Member

SPECIFICATIONS

Power Supply: Mechanical energy harvesting
(power is generated by inserting the card into the key card switch)
Inputs/Outputs: Slot for standard hotel key card: (2.125" W x 3.375" H x 0.034" D)
Radio Frequency (RF) transmitter
RF Communications: EnOcean 902 MHz
Transmission Range: 80ft.
EnOcean Equipment Profile (EEP): F6-04-01
RF Transmission: On key card insertion or removal
Installation: Surface mounted on wall (using included mounting screws)
Dimensions: 4.72" H x 3.8" W x .43" D (at edge)
Environment: Indoor use only
32° to 131° F (0° to 55° C)
5% to 95% relative humidity (non-condensing)
Agency Compliance: FCC: SZV-PTM330U
IC: 5713A-PTM330U
Approvals: RoHS

www.functionaldevices.com/wp-content/uploads/2022/04/B1970_393238.pdf

WIRELESS OCCUPANCY / VACANCY SENSOR

WVSCM-EN3

EnOcean 902 MHz Wireless Vacancy / Occupancy Sensor, Ceiling Mount

SPECIFICATIONS

RF Transmission Range: 80 ft.
Motion Sensing Range: 34 ft. diameter (refer to coverage diagrams)

Startup Charge Times
First Motion Transmission / Linking: 5 minutes at 200 lux
Motion LED Blink Light / Walk Test Modes: 1.5 hours at 2000 lux

Sustaining Charge Time: 3 hours per 24 hours at 200 lux
Time to Full Charge: 25 hours at 200 lux
Operating Life in Total Darkness: 80 hours (after full charge)
Minimum Operating Light: 50 lux (for auto-off only)
Motion Transmission Interval: 2 minutes
Unoccupied Transmission: 10 and 30 minutes since last motion
Dimensions: 6.3" L x 2.35" W x 1.47" D (160 mm x 60 mm x 37 mm)
Mounting Height: 7-10 feet recommended
Environment: Indoor use only
14° to 104° F (-10° to 40° C)
20 to 95% relative humidity (noncondensing)
Approvals: RoHS, R&TTE
Agency Compliance: FCC: SZV-STM300U
IC: 5713A-STM300U

Notes:
- Only for use with –EN3 Series relays.
- EEP A5-07-01

https://www.functionaldevices.com/wp-content/uploads/2022/04/B2104_393249.pdf

WIRELESS OCCUPANCY / VACANCY SENSOR

WVSWM-EN3

EnOcean 902 MHz Wireless Vacancy / Occupancy Sensor, Wall Mount

SPECIFICATIONS

RF Transmission Range: 80 ft.
Motion Sensing Range: Up to 100 ft. (refer to coverage diagrams)

Startup Charge Times
First Motion Transmission / Linking: 5 minutes at 200 lux
Motion LED Blink Light / Walk Test Modes: 1.5 hours at 2000 lux

Sustaining Charge Time: 3 hours per 24 hours at 200 lux
Time to Full Charge: 25 hours at 200 lux
Operating Life in Total Darkness: 80 hours (after full charge)
Minimum Operating Light: 50 lux (for auto-off only)
Motion Transmission Interval: 2 minutes
Unoccupied Transmission: 10 and 30 minutes since last motion
Dimensions: 5.83" L x 2.52" W x 1.8" D (148 mm x 64 mm x 45.7 mm)
Mounting Height: 6-8 feet recommended
Environment: Indoor use only
14° to 104° F (-10° to 40° C)
20 to 95% relative humidity (noncondensing)
Approvals: RoHS, R&TTE
Agency Compliance: FCC ID: SZV-STM300U
IC: 5713A-STM300U

Notes:
- Only for use with –EN3 Series relays.
- EEP A5-07-01

WIRELESS OCCUPANCY / VACANCY SENSOR

WVSUS-EN3

EnOcean® Enabled Wireless Occupancy / Vacancy Sensor, Ceiling Mount, 902 MHz

SPECIFICATIONS

Solar Supply: Integrated Solar Cells
Operational Light Level: 65 lux (6 fc)
Start Up Period < 2 minutes @ 65 lux
Battery Supply: CR1632 coin cell battery
Battery Life Expectancy: Shelf life as defined by the battery manufacturer or 5 years, whichever occurs first
Radio Frequency: 902 MHz
Antenna: Integrated whip
Transmission Range: 24 m (80 ft.) - commercial office spaces(typical), up 100 m (330ft.) line of sight
Telegram Transmission: Vacancy - on heartbeat
Occupancy - Immediately upon motion detection or heartbeat
Telegram Heartbeat: 100 seconds min. - 1000 seconds max.
Inputs: Teach button, Test button
Detection Area: A lens - 450 ft² at 8 ft. - 800 ft² at 10 ft
B lens - 1,800 ft² at 8 ft. - 3000 ft² at 10 ft
Operating Temperature: -10°C to 45°C(14°F to 113°F)
Storage Temperature: -25°C to 65°C(-13°F to 149°F)
Relative Humidity: 5% to 92% RH(non-condensing)
Dimensions: 98.0 mm. x 25.5 mm. (3.86" x 1.00")
Mounting: Integrated magnets, wire bracket, screws(not supplied), double sided tape (not supplied)
Agency Compliance: FCC: 15.231
IC: RSS-210
Origin: Made of US and non- US parts

Notes:
- Only for use with –EN3 Series relays.
- EEP A5-07-01

SINGLE SURFACE MOUNT BACKPLATE KIT

AWSTFM

Flush Surface Mount Backplate Kit for WWS2-EN3, White

SPECIFICATIONS

Includes: (2) Switch-mounting screws

For Use With: WWS2-EN3, FDLTS2

Approvals: CE Approved, RoHS
Origin: Made of US and non-US parts
Installation Instructions: Mount switch to any surface by using double sided tape or Velcro™ (not included.)

ROCKER SWITCH COVER PLATE

WSTP-W

Wall Switch Plate Replacement, White

SPECIFICATIONS

Approvals: CE, RoHS
For use with: WWS-EN3, WWS2-EN3
Origin: Made of US and non-US parts


MH5503L


MH3803L


MH4404L


MH3300


MH1210

ENCLOSURES

Metal & Plastic Enclosures

- NEMA 1 or NEMA 4/4X rated
- Various sizes available
- Multiple knockouts on many models
- Vertically and horizontally stackable
- Available with perforated steel or polymetal sub-panels or track mount
- Several cover and door configurations
- Grey finish
- Blue housings available (consult factory)
- Made in the USA
- UL Listed

ENCLOSURES

MODEL #	UL	ENCLOSURE	HOUSING MATERIAL	SUB-PANEL	TRACK MOUNT	NEMA RATING	COVER / DOOR	HEIGHT	WIDTH	DEPTH	GAUGE	SPEC PAGE
PE6000	•	PE6000	Plastic			NEMA 1	Screw Down Cover	4.28″	7.00″	2.00″		185
PE6010	•	PE6000	Plastic		MT4-4	NEMA 1	Screw Down Cover	4.28″	7.00″	2.00″		185
PE6020	•	PE6000	Plastic		MT212-6	NEMA 1	Screw Down Cover	4.28″	7.00″	2.00″		185
PE6000-N4	•	PE6000-N4	Plastic			NEMA 4/4X	Screw Down Cover	4.28″	7.00″	2.00″		185
PE6010-N4	•	PE6000-N4	Plastic		MT4-4	NEMA 4/4X	Screw Down Cover	4.28″	7.00″	2.00″		185
PE6020-N4	•	PE6000-N4	Plastic		MT212-6	NEMA 4/4X	Screw Down Cover	4.28″	7.00″	2.00″		185
MH1000	•	MH1000	Metal			NEMA 1	Screw Down Cover	14.50″	7.70″	3.90″	18	185
MH1010	•	MH1000	Metal		MT4-12	NEMA 1	Screw Down Cover	14.50″	7.70″	3.90″	18	185
MH1020	•	MH1000	Metal		MT212-12	NEMA 1	Screw Down Cover	14.50″	7.70″	3.90″	18	185
MH1200	•	MH1200	Metal			NEMA 1	Screw Down Cover	8.30″	7.70″	3.90″	18	185
MH1210	•	MH1200	Metal		MT4-8	NEMA 1	Screw Down Cover	8.30″	7.70″	3.90″	18	185
MH1220	•	MH1200	Metal		MT212-8	NEMA 1	Screw Down Cover	8.30″	7.70″	3.90″	18	185
MH2204-N4	•		Metal	14 Gauge Steel		NEMA 4/4X	Hinge Key Latch Door	9.84″	7.87″	3.98″	16	186
MH3100-M1	•		Metal		6 Threaded Studs	NEMA 1	Screw Down Cover	12.00″	12.00″	6.00″	16	186
MH3204-N4	•		Metal	14 Gauge Steel		NEMA 4/4X	Hinge Key Latch Door	15.75″	11.81″	5.91″	16	186
MH3300	•	MH3300	Metal			NEMA 1	Vertical Lift Screw Down Cover	12.50″	12.50″	7.00″	18	187
MH3300K	•	MH3300K	Metal			NEMA 1	Vertical Lift Key Latch	12.50″	12.50″	7.00″	18	187
MH3303	•	MH3300	Metal	SP3303 #		NEMA 1	Vertical Lift Screw Down Cover	12.50″	12.50″	7.00″	18	187
MH3304	•	MH3300	Metal	SP3304 ^		NEMA 1	Vertical Lift Screw Down Cover	12.50″	12.50″	7.00″	18	187
MH3303K	•	MH3300K	Metal	SP3303 #		NEMA 1	Vertical Lift Key Latch	12.50″	12.50″	7.00″	18	187
MH3304K	•	MH3300K	Metal	SP3304 ^		NEMA 1	Vertical Lift Key Latch	12.50″	12.50″	7.00″	18	187
MH3500	•	MH3500	Metal			NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	10.25″	3.90″	18	187
MH3510	•	MH3500	Metal		MT4-24	NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	10.25″	3.90″	18	187
MH3520	•	MH3500	Metal		MT212-24	NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	10.25″	3.90″	18	187
MH3800	•	MH3800	Metal			NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	12.50″	6.50″	18	187
MH3810	•	MH3800	Metal		MT4-18	NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	12.50″	6.50″	18	187
MH3820	•	MH3800	Metal		MT212-18	NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	12.50″	6.50″	18	187
MH3803S	•	MH3800	Metal	SP3803S #		NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	12.50″	6.50″	18	187
MH3803L	•	MH3800	Metal	SP3803L #		NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	12.50″	6.50″	18	187
MH3804S	•	MH3800	Metal	SP3804S ^		NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	12.50″	6.50″	18	187
MH3804L	•	MH3800	Metal	SP3804L ^		NEMA 1	Reversible Hook Hinge Key Latch Door	24.50″	12.50″	6.50″	18	187
MH4400	•	MH4400	Metal			NEMA 1	Full Hinge Key Latch Door	18.00″	18.00″	7.00″	16	188
MH4403L	•	MH4400	Metal	SP4403L #		NEMA 1	Full Hinge Key Latch Door	18.00″	18.00″	7.00″	16	188
MH4404L	•	MH4400	Metal	SP4404L ^		NEMA 1	Full Hinge Key Latch Door	18.00″	18.00″	7.00″	16	188
MH4604S	•	MH4600	Metal	Perforated Steel		NEMA 1	Hinge Key Latch Door	20.00″	16.15″	6.72″	14	188
MH5500	•	MH5500	Metal			NEMA 1	Full Hinge Key Latch Door	25.00″	25.00″	9.50″	14	188
MH5503L	•	MH5500	Metal	SP5503L #		NEMA 1	Full Hinge Key Latch Door	25.00″	25.00″	9.50″	14	188
MH5504L	•	MH5500	Metal	SP5504L ^		NEMA 1	Full Hinge Key Latch Door	25.00″	25.00″	9.50″	14	188
MH5800	•	MH5800	Metal			NEMA 1	Full Hinge Key Latch Door	36.00″	25.00″	9.50″	14	189
MH5803L	•	MH5800	Metal	SP5803L #		NEMA 1	Full Hinge Key Latch Door	36.00″	25.00″	9.50″	14	189
MH5804L	•	MH5800	Metal	SP5804L ^		NEMA 1	Full Hinge Key Latch Door	36.00″	25.00″	9.50″	14	189

MH3300 SERIES

Polymetal
11.33″ H x 11.40″ W

^ Perforated Steel
11.33″ H x 11.40″ W

MH3800 SERIES

Polymetal
Model S: 19.00″ H x 11.75″ W
Model L: 23.00″ H x 11.75″ W

^ Perforated Steel
Model S: 19.00″ H x 11.75″ W
Model L: 23.00″ H x 11.75″ W

MH4400 SERIES

Polymetal
16.875″ H x 15.75″ W

^ Perforated Steel
16.875″ H x 15.75″ W

MH5500 SERIES

Polymetal
23.00″ H x 22.50″ W

^ Perforated Steel
23.00″ H x 22.50″ W

MH5800 SERIES

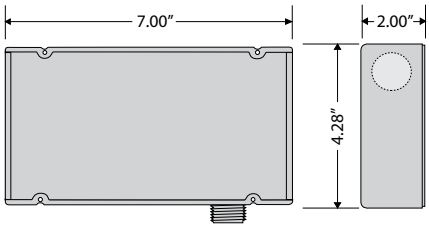
Polymetal
34.125″ H x 22.50″ W

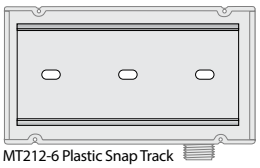
^ Perforated Steel
34.125″ H x 22.50″ W

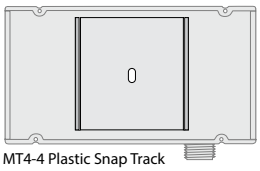
UL = UL Listed - see data sheet for specific Listing

PE6000 Series

Plastic Housing Series, NEMA 1, 0.75" NPT Nipple, 4.28" H x 7.00" W x 2.00" D




MT212-6 Plastic Snap Track


MT4-4 Plastic Snap Track

PE6000 SERIES ASSEMBLIES			
Model #	Enclosure	Plastic Snap Track	NEMA Type
PE6000	PE6000		NEMA 1
PE6010	PE6000	MT4-4 (4.00"W)	NEMA 1
PE6020	PE6000	MT212-6 (2.75"W)	NEMA 1
PE6000-N4	PE6000-N4		NEMA 4/4X
PE6010-N4	PE6000-N4	MT4-4 (4.00"W)	NEMA 4/4X
PE6020-N4	PE6000-N4	MT212-6 (2.75"W)	NEMA 4/4X

SPECIFICATIONS

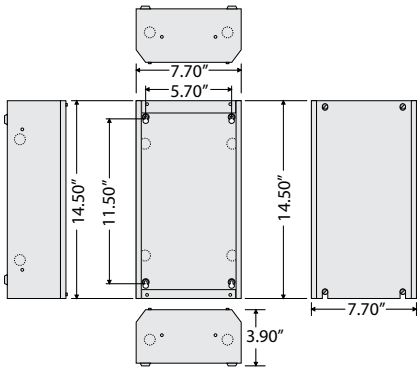
Cover Type: Screw Down Cover
Approvals: UL Listed, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1, Also available NEMA 4 / 4X

Housing Detail: See **Housing D** in housing guide for dimensions
Origin: Made of US and non-US parts

Notes:
• Comes with transparent lid. To order with gray opaque lid, add "-GY" to end of model number.

MH1000 Series

Metal Housing Series, NEMA 1, 14.5" H x 7.7" W x 3.9" D



MH1000 SERIES ASSEMBLIES		
Model #	Enclosure	Plastic Snap Track
MH1000	MH1000	
MH1010	MH1000	MT4-12 (4.00"W)
MH1020	MH1000	MT212-12 (2.75"W)

SPECIFICATIONS

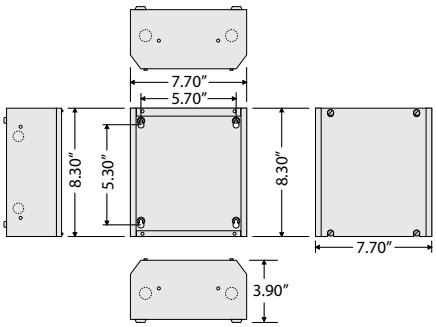
Construction: 18 Gauge Steel
Cover Type: Screw Down Cover

Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
• Consult factory for custom colors for large orders.

MH1200 Series

Metal Housing, NEMA 1, 8.3" H x 7.7" W x 3.9" D



MH1200 SERIES ASSEMBLIES		
Model #	Enclosure	Plastic Snap Track
MH1200	MH1200	
MH1210	MH1200	MT4-8 (4.00"W)
MH1220	MH1200	MT212-8 (2.75"W)

SPECIFICATIONS

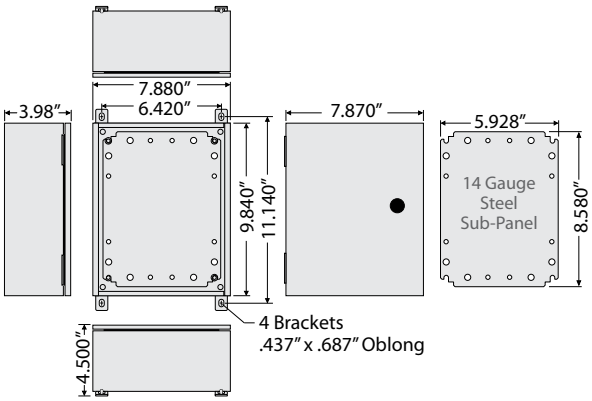
Construction: 18 Gauge Steel
Cover Type: Screw Down Cover
Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
• Consult factory for custom colors for large orders.

ENCLOSURES

MH2204-N4

Metal Housing, NEMA 4/4X, 9.84″ H x 7.87″ W x 3.98″ D



SPECIFICATIONS

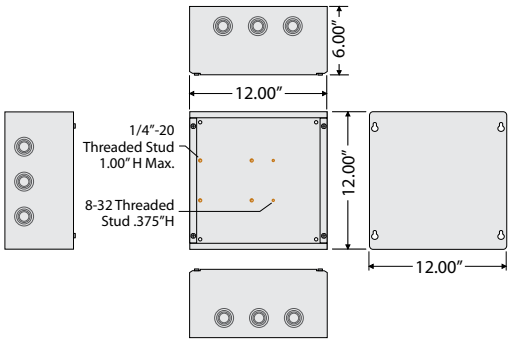
Construction: 16 Gauge Steel
Cover Type: Hinge Key Latch Door

Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

ENCLOSURES

MH3100-M1

Metal Housing, NEMA 1, 12.00″ H x 12.00″ W x 6.00″ D, Mounting Option 1



MH3100-M1 ASSEMBLY

Model #	Enclosure	Plastic Snap Track
MH3100-M1 *	MH3100	6 Threaded Studs

MH3100-M1 + PSMN500A = **PSH500A**
MH3100-M1 + PSMN300A = **PSH300A**

SPECIFICATIONS

Construction: 16 Gauge Steel.
Cover Type: Screw Down Cover

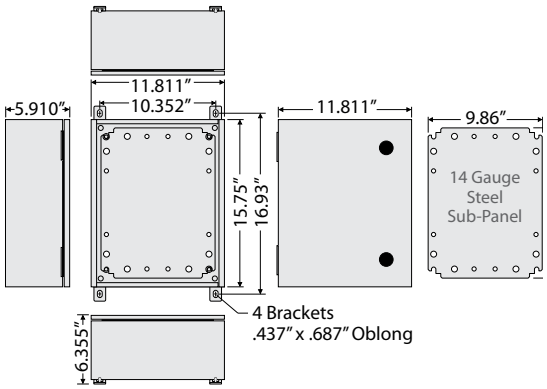
Approvals: UL Listed, C-UL, CE, RoHS
Origin Made of US and non-US parts

Notes:
• To convert panel-mounted power supply to enclosed, simply remove the sub-panel and mount to enclosure with provided screw pack. *

ENCLOSURES

MH3204-N4

Metal Housing, NEMA 4/4X,15.75″ H x 11.81″ W x 5.91″ D



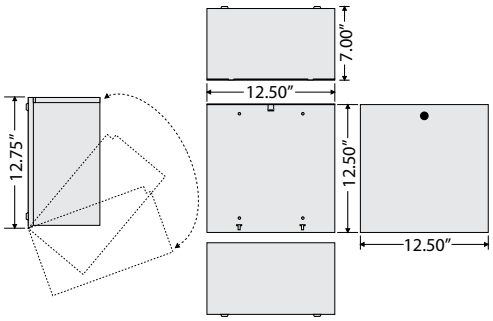
SPECIFICATIONS

Construction: 16 Gauge Steel
Cover Type: Hinge Key Latch Door

Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

MH3300 Series

Metal Housing, NEMA 1, 12.5 H x 12.5 W x 7.0 D



MH3300 SERIES ASSEMBLIES

Model #	Enclosure	Cover Type	Sub-Panel
MH3300	MH3300	Vertical Lift Screw Down	
MH3300K	MH3300K	Vertical Lift Key Latch	
MH3303	MH3300	Vertical Lift Screw Down	SP3303 [1]
MH3304	MH3300	Vertical Lift Screw Down	SP3304 [2]
MH3303K	MH3300K	Vertical Lift Key Latch	SP3303 [1]
MH3304K	MH3300K	Vertical Lift Key Latch	SP3304 [2]

1 = Polymetal
11.33″ H x 11.40″ W

2 = Perforated Steel
11.33″ H x 11.40″ W

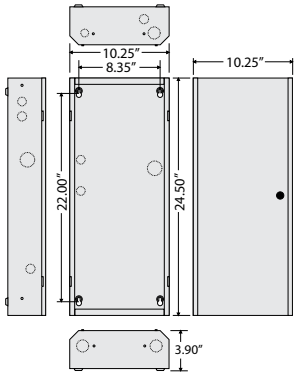
SPECIFICATIONS

Construction: 18 Gauge Steel
Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
• Consult factory for custom colors for large orders.

MH3500 Series

Metal Housing, NEMA 1, 24.5″ H x 10.25″ W x 3.9″ D



MH3500 SERIES ASSEMBLIES

Model #	Enclosure	Plastic Snap Track
MH3500	MH3500	
MH3510	MH3500	MT4-24 (4.00″W)
MH3520	MH3500	MT212-24 (2.75″W)

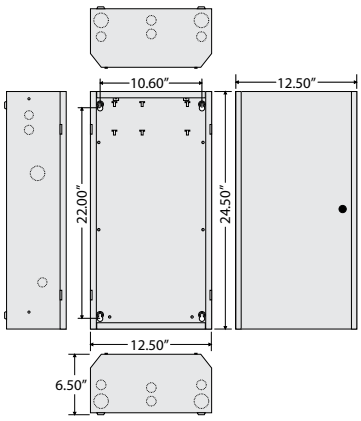
SPECIFICATIONS

Construction: 18 Gauge Steel
Cover Type: Reversible Hook Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
• Consult factory for custom colors for large orders.
• Order with coin latch by adding "-L4" to end of model number.

MH3800 Series

Metal Housing, NEMA 1, 24.5″ H x 12.5″ W x 6.5″ D



MH3800 SERIES ASSEMBLIES

Model #	Enclosure	Plastic Snap Track / Sub-Panel	Color option
MH3800	MH3800		
MH3800-BL	MH3800		Blue
MH3803L-BL	MH3800	SP3803L [1]	Blue
MH3803S-BL	MH3800	SP3803S [2]	Blue
MH3810	MH3800	MT4-18 (4.00″W)	
MH3820	MH3800	MT212-18 (2.75″W)	
MH3803S	MH3800	SP3803S [1]	
MH3803L	MH3800	SP3803L [1]	
MH3804S	MH3800	SP3804S [2]	
MH3804L	MH3800	SP3804L [2]	

1 = Polymetal
Model S: 19.00″ H x 11.75″ W
Model L: 23.00″ H x 11.75″ W

2 = Perforated Steel
Model S: 19.00″ H x 11.75″ W
Model L: 23.00″ H x 11.75″ W

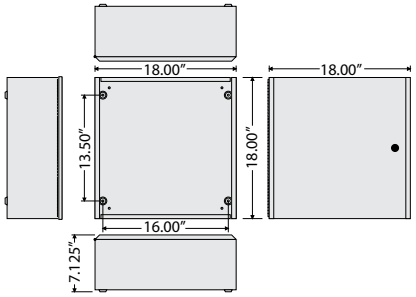
SPECIFICATIONS

Construction: 18 Gauge Steel
Cover Type: Reversible Hook Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
• Consult factory for custom colors for large orders.
• Order with coin latch by adding "-L4" to end of model number.

MH4400 Series

Metal Housing, NEMA 1, 18.0″ H x 18.0″ W x 7.0″ D



MH4400 SERIES ASSEMBLIES		
Model #	Enclosure	Sub-Panel
MH4400	MH4400	
MH4403L	MH4400	SP4403L [1]
MH4404L	MH4400	SP4404L [2]

1 = Polymetal 16.875″ H x 15.75″ W

2 = Perforated Steel 16.875″ H x 15.75″ W

SPECIFICATIONS

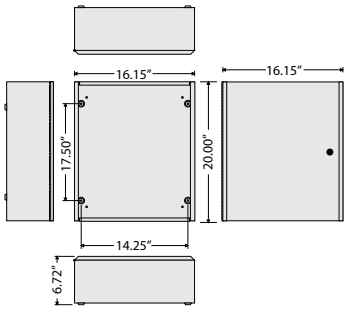
Construction: 16 Gauge Steel
Cover Type: Full Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
- Consult factory for custom colors for large orders.
- Order with coin latch by adding "-L4" to end of model number.

ENCLOSURES

MH4604S

Metal Housing, NEMA 1, 20.0″ H x 16.15″ W x 6.72″ D with SP4604S Sub-Panel



SPECIFICATIONS

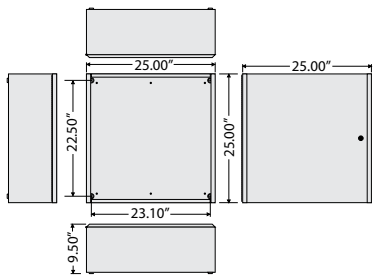
Construction: 14 Gauge Steel
Cover Type: Key Latch Door
Approvals: UL Listed, C-UL, CE Approved, RoHS
Subpanel: Perforated Steel (14.87″ x 14.62″)
Origin: Made of US and non-US parts

Notes:
- Consult factory for custom colors for large orders.

ENCLOSURES

MH5500 Series

Metal Housing, NEMA 1, 25.0″ H x 25.0″ W x 9.5″ D



MH5500 SERIES ASSEMBLIES		
Model #	Enclosure	Sub-Panel
MH5500	MH5500	
MH5503L	MH5500	SP5503L [1]
MH5504L	MH5500	SP5504L [2]

1 = Polymetal 23.00″ H x 22.50″ W

2 = Perforated Steel 23.00″ H x 22.50″ W

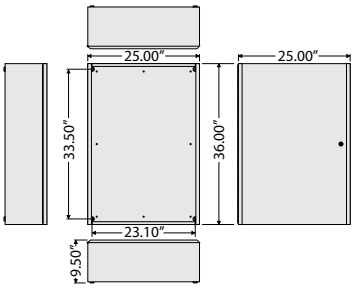
SPECIFICATIONS

Construction: 14 Gauge Steel
Cover Type: Full Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
- Consult factory for custom colors for large orders.
- Order with coin latch by adding "-L4" to end of model number.

MH5800 Series

Metal Housing, NEMA 1, 36.0″ H x 25.0″ W x 9.5″ D



MH5800 SERIES ASSEMBLIES

Model #	Enclosure	Sub-Panel
MH5800	MH5800	
MH5803L	MH5800	SP5803L [1]
MH5804L	MH5800	SP5804L [2]

1 = Polymetal
34.125″ H x 22.50″ W

2 = Perforated Steel
34.125″ H x 22.50″ W

SPECIFICATIONS

Construction: 14 Gauge Steel
Cover Type: Full Hinge Key Latch Door
Approvals: UL Listed, C-UL, CE, RoHS
Origin: Made of US and non-US parts

Notes:
- Consult factory for custom colors for large orders.
- Order with coin latch by adding "-L4" to end of model number.

ACCESSORIES

Sub-Panels

Two types of sub-panel material are available: polymetal and perforated steel. Both the polymetal and perforated steel sub-panels are Plenum Rated and designed to mount in "MH" metal housing models. The mounting holes are pre-drilled and ready to install. Sub-panels can be ordered pre-installed in your choice of "MH" enclosure. See general specifications of pre-assembled enclosure models on page 77.

Replacement Parts

Replacement parts are available for several products including remote sensors, socket relays, and more.

Mounting Supplies

Mounting options include plastic track for snap-mounting circuit boards. One style of track can be mounted to the back surface of any cabinet and is available in 4.00" or 2.75" widths. Another style of track, AdapTrack®, snaps onto any of the three most popular DIN rails. In turn, it can accomodate a 4.00" wide circuit board. Perforated DIN rail and end stops are also available.

ACCESSORIES

SUB-PANELS

MODEL #	USE WITH ENCLOSURE	MATERIAL	HEIGHT	WIDTH	THICKNESS	MOUNTING AREA	SPEC PAGE
SP3303	MH3300 or MH3300K	Polymetal	11.330″	11.400″	.130″	129.16 square inches	192
SP3304	MH3300 or MH3300K	Perforated Steel	11.330″	11.400″	.250″	129.16 square inches	192
SP3803S	MH3800	Polymetal	19.000″	11.750″	.130″	223.25 square inches	192
SP3803L	MH3800	Polymetal	23.000″	11.750″	.130″	270.25 square inches	193
SP3804S	MH3800	Perforated Steel	19.000″	11.750″	.250″	223.25 square inches	193
SP3804L	MH3800	Perforated Steel	23.000″	11.750″	.250″	270.25 square inches	193
SP4403L	MH4400	Polymetal	16.875″	15.750″	.130″	265.78 square inches	194
SP4404L	MH4400	Perforated Steel	16.875″	15.750″	.250″	265.78 square inches	194
SP5503L	MH5500	Polymetal	23.000″	22.500″	.130″	517.50 square inches	194
SP5504L	MH5500	Perforated Steel	23.000″	22.500″	.250″	517.50 square inches	195
SP5803L	MH5800	Polymetal	34.125″	22.500″	.130″	767.81 square inches	195
SP5804L	MH5800	Perforated Steel	34.125″	22.500″	.250″	767.81 square inches	196

MOUNTING SUPPLIES

MODEL #		WIDTH	LENGTH	TRACK TYPE	DISTANCE BETWEEN HOLE CENTERS	SPEC PAGE
MT212-2	•	2.75″	2.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT212-4	•	2.75″	4.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT212-6	•	2.75″	6.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT212-8	•	2.75″	8.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT212-12	•	2.75″	12.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT212-18	•	2.75″	18.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT212-24	•	2.75″	24.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT212-48	•	2.75″	48.00″	Screw mounted snap-in track	2.00″ Center to Center	196
MT4-2	•	4.00″	2.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-4	•	4.00″	4.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-6	•	4.00″	6.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-8	•	4.00″	8.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-10	•	4.00″	10.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-12	•	4.00″	12.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-18	•	4.00″	18.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-24	•	4.00″	24.00″	Screw mounted snap-in track	2.00″ Center to Center	197
MT4-48	•	4.00″	48.00″	Screw mounted snap-in track	2.00″ Center to Center	197
AT4-2	•	4.00″	2.00″	AdapTrack® for DIN rail	3 Most Common for AT4 Series #	197
AT4-6	•	4.00″	6.00″	AdapTrack® for DIN rail	3 Most Common for AT4 Series #	197
AT4-12	•	4.00″	12.00″	AdapTrack® for DIN rail	3 Most Common for AT4 Series #	197
AT4-24	•	4.00″	24.00″	AdapTrack® for DIN rail	3 Most Common for AT4 Series #	197
AT4-48	•	4.00″	48.00″	AdapTrack® for DIN rail	3 Most Common for AT4 Series #	197
ADIN35		35 mm	7.5 mm	Perforated DIN rail	25 mm Center to Center	197

REPLACEMENT & MISCELLANEOUS PARTS

MODEL #	DESCRIPTION	FOR USE WITH MODEL(S)	SPEC PAGE
ADIN35ES	Pair of End Stops for 35mm DIN Rail	ADIN35	198
APS53-TC	Primary voltage terminal cover	Functional Devices 300 VA and 500 VA power supplies	198
APSB-TC	One terminal cover and two clips	PSB100AB10, PSB40AB10	198
AR24D	Replacement relays (3-pack)	RIBR24D, RIBR24SD	198
ARL1C	Replacement relays (3-pack)	RIBRL1C, RIBRL1S, RIBRXLCA, RIBRXLCF, RIBRXLSA	199
AXG	Split ring remote current sensor assembly (Wire Output)	RIBXJA, RIBXJF, RIBXLCJA, RIBXLCJF, RIBXLSJA, RIBXLSJF	199
AXGT	Split ring remote current sensor assembly (Terminal Output)	RIBXJA, RIBXJF, RIBXLCJA, RIBXLCJF, RIBXLSJA, RIBXLSJF	199
AXK	Remote mini current sensor assembly (Wire Output)	RIBXLCRA, RIBXLCRF, RIBXLSRA, RIBXLSRF, RIBXRA, RIBXRF	199
AXKT	Remote mini current sensor assembly (Terminal Output)	RIBXLCRA, RIBXLCRF, RIBXLSRA, RIBXLSRF, RIBXRA, RIBXRF	200
DS80625	No. 8 x 5/8″ Self-Tapping Drill Screws	Functional Devices polymetal sub-panels	200
KEYSET	One set of 2 keys	Functional Devices key latch metal enclosures	200
MKL-1	Locking key latch assembly	Functional Devices metal enclosures except MH3300K	200
MKL-2	Locking key-hook latch assembly	Functional Devices MH3300K metal enclosures	200
MKL-3	Metal locking key latch assembly	Functional Devices metal enclosures except MH3300K	200
MKL-4	Coin locking key latch assembly	Functional Devices metal enclosures except MH3300K	200
TS-AN	Pluggable terminal strips	RIBAN12C, RIBAN24C	200
TS-BC	Replacement pluggable terminal strips	RIBTW2401B-BC, RIBTW2402B-BC	

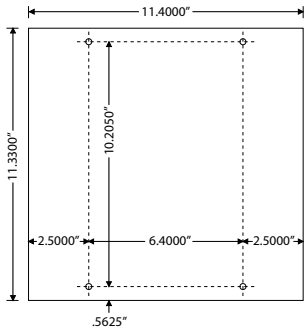
= UL Component Recognized - see data sheet for specific Listing

= 32 mm x 15 mm asymmetrical DIN rail EN50035; 35 mm x 7.5 mm symmetrical DIN rail EN50022; 22.4 mm x 6.9 mm symmetrical NEMA A Series rail

SUB-PANEL

SP3303

Polymetal Sub-Panel, 11.33″ H x 11.40″ W x 0.13″ Thick, For use with MH3300 or MH3300K



SPECIFICATIONS

Mounting Area: 129.16″ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

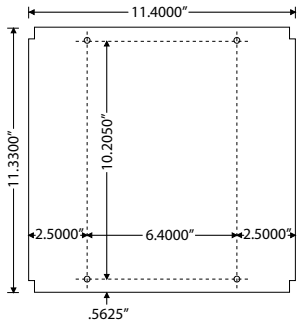
Enclosure Assemblies: ***MH3303***
MH3300 Enclosure with SP3303 Sub-Panel pre-mounted

MH3303K
MH3300K Enclosure with SP3303 Sub-Panel pre-mounted

SUB-PANEL

SP3304

Perforated Steel Sub-Panel, 11.33″ H x 11.40″ W x 0.25″ Thick, For use with MH3300 or MH3300K



SPECIFICATIONS

Mounting Area: 129.16″ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

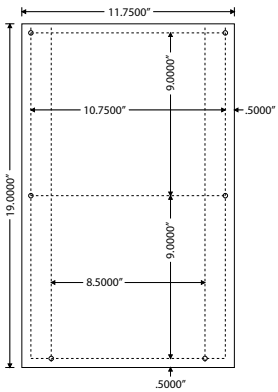
Enclosure Assemblies: ***MH3304***
MH3300 Enclosure with SP3304 Sub-Panel pre-mounted

MH3304K
MH3300K Enclosure with SP3304 Sub-Panel pre-mounted

SUB-PANEL

SP3803S

Polymetal Sub-Panel, 19.00″ H x 11.75″ W x 0.13″ Thick, For use with MH3800



SPECIFICATIONS

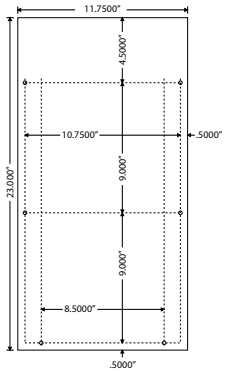
Mounting Area: 223.25″ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: ***MH3803S***
MH3800 Enclosure with SP3803S Sub-Panel pre-mounted

SUB-PANEL

SP3803L

Polymetal Sub-Panel, 23.00" H x 11.75" W x 0.13" Thick, For use with MH3800



SPECIFICATIONS

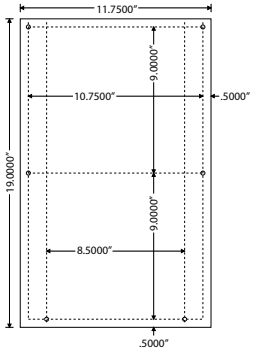
Mounting Area: 270.25˝ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH3803L*
MH3800 Enclosure with SP3803L
Sub-Panel pre-mounted

SUB-PANEL

SP3804S

Perforated Steel Sub-Panel, 19.00" H x 11.75" W x 0.25" Thick, For use with MH3800



SPECIFICATIONS

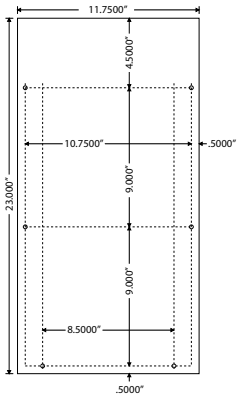
Mounting Area: 223.25˝ square
Approvals: Plenum Rated
Origins: Made of US and non-US parts

Enclosure Assemblies: *MH3804S*
MH3800 Enclosure with SP3804S
Sub-Panel pre-mounted

SUB-PANEL

SP3804L

Perforated Steel Sub-Panel, 23.00" H x 11.75" W x 0.25" Thick, For use with MH3800



SPECIFICATIONS

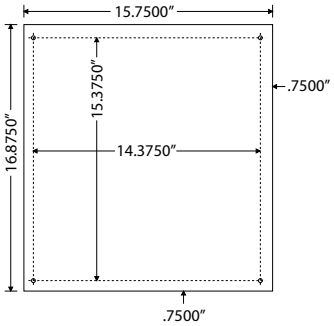
Mounting Area: 270.25˝ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH3804L*
MH3800 Enclosure with SP3304L
Sub-Panel pre-mounted

SUB-PANEL

SP4403L

Polymetal Sub-Panel, 16.875″ H x 15.750″ W x 0.130″ Thick, For use with MH4400



SPECIFICATIONS

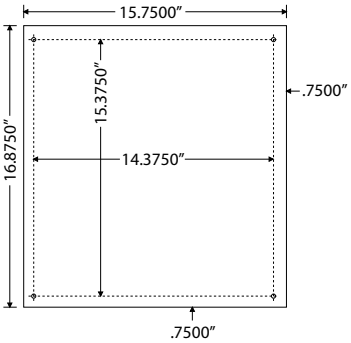
Mounting Area: 265.78″ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH4403L*
MH4400 Enclosure with SP4403L
Sub-Panel pre-mounted

SUB-PANEL

SP4404L

Perforated Steel Sub-Panel, 16.875″ H x 15.750″ W x 0.25″ Thick, For use with MH4400



SPECIFICATIONS

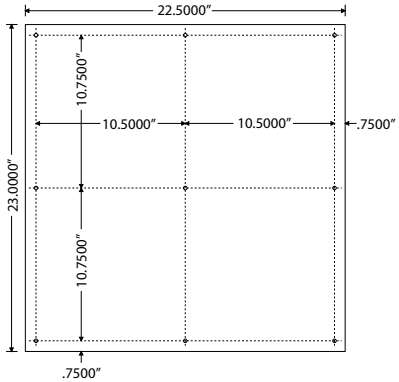
Mounting Area: 265.78″ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH4404L*
MH4400 Enclosure with SP4404L
Sub-Panel pre-mounted

SUB-PANEL

SP5503L

Polymetal Sub-Panel, 23.00″ H x 22.50″ W x 0.13″ Thick, For use with MH5500



SPECIFICATIONS

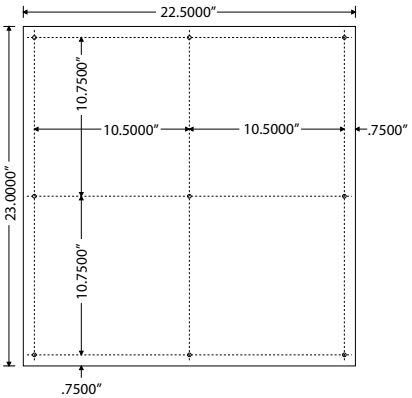
Mounting Area: 517.50″ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH5503L*
MH5500 Enclosure with SP5503L
Sub-Panel pre-mounted

SUB-PANEL

SP5504L

Perforated Steel Sub-Panel, 23.00" H x 22.50" W x 0.25" Thick, For use with MH5500



SPECIFICATIONS

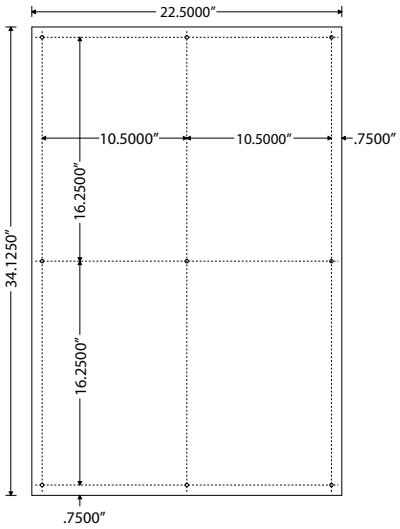
Mounting Area: 517.50˝ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH5504L*
MH5500 Enclosure with SP5504L
Sub-Panel pre-mounted

SUB-PANEL

SP5803L

Polymetal Sub-Panel, 34.00" H x 22.50" W x 0.13" Thick, For use with MH5800



SPECIFICATIONS

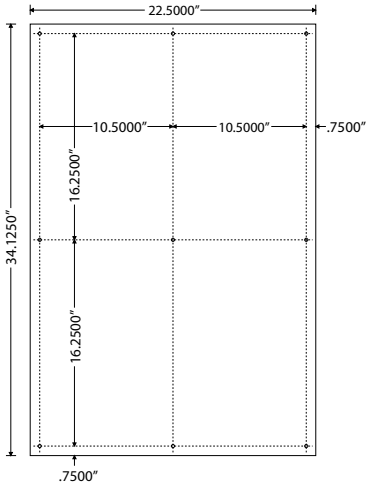
Mounting Area: 767.81˝ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH5803L*
MH5800 Enclosure with SP5803L
Sub-Panel pre-mounted

SUB-PANEL

SP5804L

Perforated Steel Sub-Panel, 34.00" H x 22.50" W x 0.25" Thick, For use with MH5800



SPECIFICATIONS

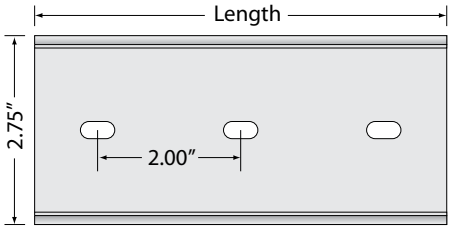
Mounting Area: 767.81˝ square
Approvals: Plenum Rated
Origin: Made of US and non-US parts

Enclosure Assemblies: *MH5804L*
MH5800 Enclosure with SP5804L Sub-Panel pre-mounted

MOUNTING TRACK

MT212 Series

2.75˝ Wide Mounting Track for Relays, Current Sensors, and Power Supplies



SPECIFICATIONS

Flame Rated: 94-5V
Approvals: UL Component Recognized, USA & Canada
CE, RoHS
Mounting: MT212 Series track can be screw-mounted to any flat surface to provide mounting for 2.75˝ wide track-mountable relays, current sensors, or power supplies.
Origin: Made of US and non-US parts

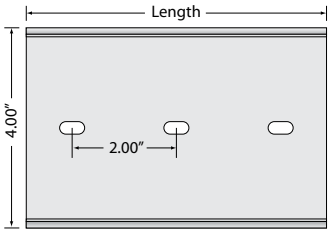
MT212 SERIES SELECTION GUIDE

Model #	Width	Length	Distance Between Hole Centers
MT212-2	2.75˝	2.00˝	2.00˝ Center to Center
MT212-4	2.75˝	4.00˝	2.00˝ Center to Center
MT212-6	2.75˝	6.00˝	2.00˝ Center to Center
MT212-8	2.75˝	8.00˝	2.00˝ Center to Center
MT212-12	2.75˝	12.00˝	2.00˝ Center to Center
MT212-18	2.75˝	18.00˝	2.00˝ Center to Center
MT212-24	2.75˝	24.00˝	2.00˝ Center to Center
MT212-48	2.75˝	48.00˝	2.00˝ Center to Center

MOUNTING TRACK

MT4 Series

4.00˝ Wide Mounting Track for Relays, Current Sensors, and Power Supplies



SPECIFICATIONS

Flame Rated: 94-5V
Approvals: UL Component Recognized, USA & Canada
CE, RoHS
Mounting: MT4 Series track can be screw-mounted to any flat surface to provide mounting for 4.00˝ wide track-mountable relays, current sensors, or power supplies.
Origin: Made of US and non-US parts

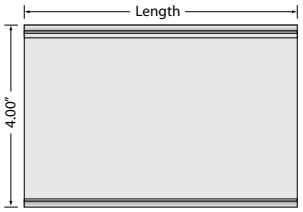
MT4 SERIES SELECTION GUIDE

Model #	Width	Length	Distance Between Hole Centers
MT4-2	4.00˝	2.00˝	2.00˝ Center to Center
MT4-4	4.00˝	4.00˝	2.00˝ Center to Center
MT4-6	4.00˝	6.00˝	2.00˝ Center to Center
MT4-8	4.00˝	8.00˝	2.00˝ Center to Center
MT4-10	4.00˝	10.00˝	2.00˝ Center to Center
MT4-12	4.00˝	12.00˝	2.00˝ Center to Center
MT4-18	4.00˝	18.00˝	2.00˝ Center to Center
MT4-24	4.00˝	24.00˝	2.00˝ Center to Center
MT4-48	4.00˝	48.00˝	2.00˝ Center to Center

MOUNTING TRACK

AT4 Series

4.00˝ Wide AdapTrack® for Relays, Current Sensors, and Power Supplies



SPECIFICATIONS

Flame Rated: 94-5V
DIN Rail Sizes: 32 mm x 15 mm asymmetrical DIN rail EN50035
35 mm x 7.5 mm symmetrical DIN rail EN50022
22.4 mm x 6.9 mm symmetrical NEMA A Series rail
Approvals: UL Component Recognized, USA & Canada
CE, RoHS
Mounting: AT4 Series AdapTrack® snaps onto the three most common DIN rail sizes to provide mounting for 4.00˝ wide track-mountable relays, current sensors, or power supplies.
Origin: Made of US and non-US parts

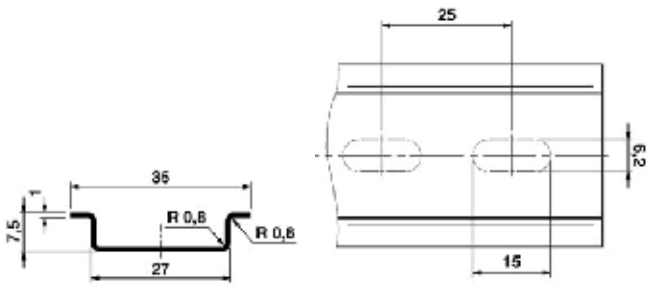
AT4 SERIES SELECTION GUIDE

Model #	Width	Length	DIN Rail Sizes
AT4-2	4.00˝	2.00˝	3 Most Common (see general specs to the left)
AT4-6	4.00˝	6.00˝	3 Most Common (see general specs to the left)
AT4-12	4.00˝	12.00˝	3 Most Common (see general specs to the left)
AT4-24	4.00˝	24.00˝	3 Most Common (see general specs to the left)
AT4-48	4.00˝	48.00˝	3 Most Common (see general specs to the left)

MOUNTING TRACK

ADIN35

DIN Rail Perforated 35mm x 7.5mm x 1m



Pair of end stops sold separately.

SPECIFICATIONS

Approvals: CE Approved, RoHS, EN60715:2001
Materials: Steel galvanized and passivated with a thick layer

ACCESSORIES

MOUNTING TRACK

ADIN35ES
End Stops for 35mm DIN Rail

SPECIFICATIONS

Approvals: CE Approved, RoHS, EN60715:2001
Materials: Polyamide 6.6
Dimensions: 32mm x 28mm x 8mm

REPLACEMENT

APS53-TC
Terminal Cover for PSH500A and PSH300A

SPECIFICATIONS

Includes: (2) Self-Tapping Drill Screws for Installation

For Use With: PSMN300A, PSMN300A-IC, PSMN500A, PSMN500A-IC, PSH300A, PSH300A-IC, PSH500A, PSH500A-IC
Origin: Made of US and non-US parts

REPLACEMENT

APSB-TC
1 Terminal Cover and 2 Clips for PSB 4up-Terminal

SPECIFICATIONS

***Only For Only for Use With:** PSB100AB10, PSB40AB10
Installation Instructions: Remove end screws. Position one clip on each outside screw. Insert screws through hole in clip. Snap cover onto clips.
Origin: Made of US and non-US parts

REPLACEMENT

AR24D
Pluggable Relays (3-pack), Replacement for RIBR24 Series

SPECIFICATIONS

Dimensions: 1.125" x 0.5" x 0.75": (One relay)
4.25" x 0.625" x 0.875" (Package of 3)
***Only For Only for Use With:** RIBR24D, RIBR24SD
Purpose: Replacement relay
Approvals: CE Approved, RoHS
Origin: Made of US and non-US parts

REPLACEMENT

ARL1C
Pluggable Relays (3-pack), Replacement for RIBRL & RIBRX Series

SPECIFICATIONS

Dimensions: 1.125" x 0.5" x 1: (One relay)
4.25" x 0.625" x 1.125" (Package of 3)
***Only For Only for Use With:** RIBRL1C, RIBRL1S, RIBRXLCF, RIBRXLCA, RIBRXLSA
Purpose: Replacement relay
Approvals: CE Approved, RoHS
Origin: Made of US and non-US parts

REPLACEMENT

AXG

Split Core Remote with Wires, Replacement for Any Damaged or Lost Sensor, for Use with Models Listed on Data Sheet

SPECIFICATIONS

Dimensions: (Inside) .52″ x .52″
(Outside) 2.52″ x 2.00″ x 1.75″
***Only For Only for Use With:** RIBXJA, RIBXJF, RIBXLCJA, RIBXLCJF, RIBXLSJA, RIBXLSJF
Can replace any damaged or lost sensor.
Purpose: For use with the models listed above.
Origin: Made of US and non-US parts

REPLACEMENT

AXGT

Split Core Remote with Terminals, Replacement for Any Damaged or Lost Sensor, for Use with Models Listed on Data Sheet

SPECIFICATIONS

Dimensions: (Inside) .52″ x .52″
(Outside) 2.52″ x 2.00″ x 1.75″
***Only For Only for Use With:** RIBXJA, RIBXJF, RIBXLCJA, RIBXLCJF, RIBXLSJA, RIBXLSJF
Can replace any damaged or lost sensor.
Purpose: For use with the models listed above.
Origin: Made of US and non-US parts

REPLACEMENT

AXK

Solid Core Remote with Wires, Replacement for Any Damaged or Lost Sensor, for Use with Models Listed on Data Sheet

SPECIFICATIONS

Dimensions: (Inside Diameter) .50″
(Outside) 1.86″ x 1.46″ x 1.50″
***Only For Only for Use With:** RIBXLCRA, RIBXLCRF, RIBXLSRA, RIBXLSRF, RIBXRA, RIBXRF
Can replace any damaged or lost sensor.
Purpose: For use with the models listed above.
Origin: Made of US and non-US parts

REPLACEMENT

AXKT

Solid Core Remote with Terminals, Replacement for Any Damaged or Lost Sensor, for Use with Models Listed on Data Sheet

SPECIFICATIONS

Dimensions: (Inside Diameter) .50″
(Outside) 2.05″ x 1.46″ x 1.50″
***Only For Only for Use With:** RIBXLCRA, RIBXLCRF, RIBXLSRA, RIBXLSRF, RIBXRA, RIBXRF
Can replace any damaged or lost sensor.
Purpose: For use with the models listed above.
Origin: Made of US and non-US parts

SCREW SET

DS80625
Number 8 Self-Tapping Drill Screws

SPECIFICATIONS

Size: No. 8 x 5/8″
For Use With: All polymetal sub-panels
Advantages: Self-tapping, eliminates mushrooming
Weight: 0.004
Origin: Made of US and non-US parts

KEY SET

KEYSET
Set of Two Metal Enclosure Replacement Keys

SPECIFICATIONS

Quantity: Two keys and one ring per set
For Use With: Any of the key-lock enclosures
Advantages: Works with any Functional Devices, Inc. key-lock enclosures
Origin: Made of US and non-US parts

LOCK ASSEMBLY

MKL-1
Locking Key Latch Assembly for Use with All Metal Enclosures Except MH3300K

SPECIFICATIONS

Origin: Made of US and non-US parts

LOCK ASSEMBLY

MKL-2
Locking Key-Hook Latch Assembly for Use with MH3300K

SPECIFICATIONS

Origin: Made of US and non-US parts

LOCK ASSEMBLY

MKL-3
Metal Locking Key Latch Assembly for Use with All Metal Enclosures Except MH3300K

SPECIFICATIONS

Origin: Made of US and non-US parts

LOCK ASSEMBLY

MKL-4
Coin Locking Key Latch Assembly for Use with All Metal Enclosures Except MH3300K

SPECIFICATIONS

Origin: Made of US and non-US parts

REPLACEMENT

TS-AN
Replacement Pluggable Terminal Strips for RIBAN Series

SPECIFICATIONS

***Only For Use With:** RIBAN12C, RIBAN24C
Installation Instructions: Plug the terminal strips into the headers found on the RIBAN Series product.
Origin: Made of US and non-US parts

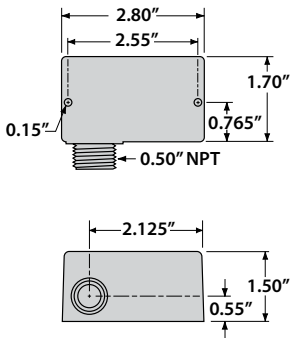
REPLACEMENT

TS-BC
Replacement Pluggable Terminal Strips for RIBTW240*B-BC Series; one 2-up and one 5-up

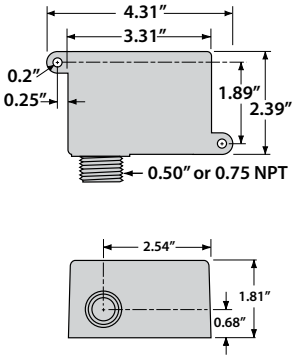
SPECIFICATIONS

***Only For Use With:** RIBTW2401B-BC, RIBTW2402B-BC
Approvals: CE, RoHS
Installation Instructions: Plug the terminal strips into the headers found on the RIBTW240*B-BC models.

HOUSING GUIDE



HOUSING A



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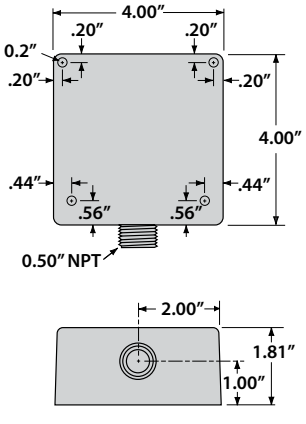

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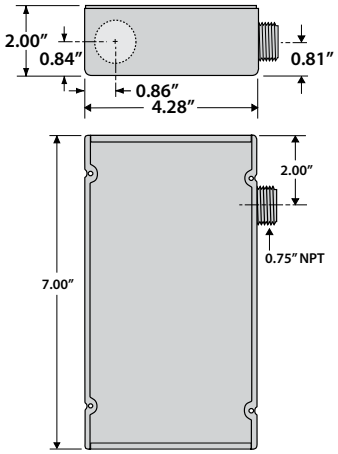
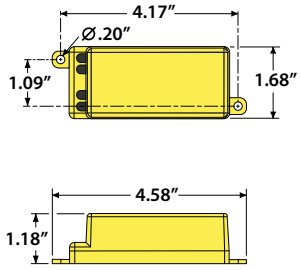


red (“-rd”) and NEMA 4 (“-N4”) HOUSINGS Available. See our website for details.

HOUSING D



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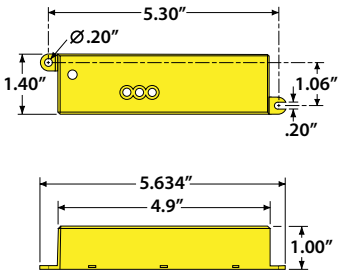

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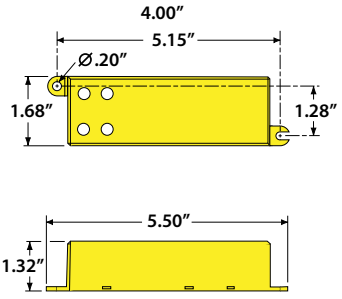

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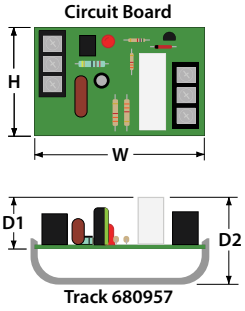

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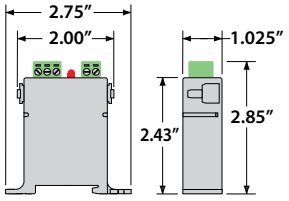

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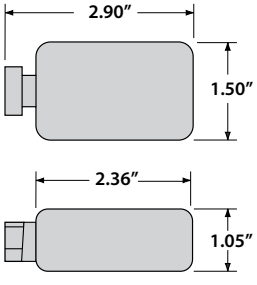
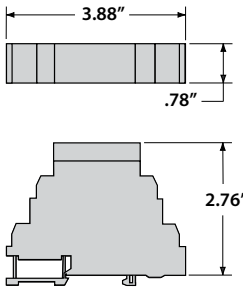


with Retaining Clip for 1/2″ Knockout

HOUSING J



HOUSING K

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