

UL924 Emergency Bypass / Shunt Relays

• Description

Our Emergency Bypass / Shunt Relays are UL924 listed and suitable for shunting around wall switches in order to turn on emergency lighting in the event of loss of normal utility power.

Models can also be ordered with various configurations of LED indicators used for initial wiring verification as well as field inspection. Certain models can be ordered equipped with a wireless receiver which responds to signals transmitted by the ESRT remote test transmitter and are used for field inspection in accordance with Article 700.3 of the 2011 NEC (National Electric Code). Still others can be used when the emergency light is needed as part of the normal lighting scheme and controlled by a single switch (models with ESRBE prefix).

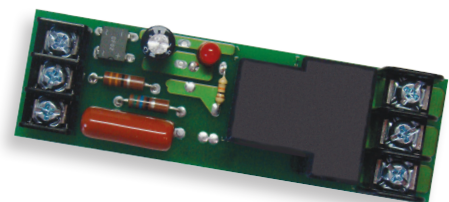
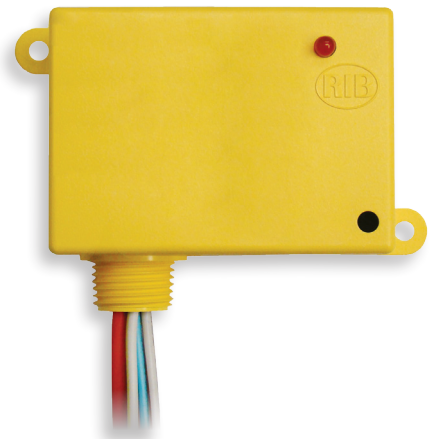
• Operation

When normal power is present, the ESR relay coil is activated and the emergency panel is fed from normal power. The lighting load can be switched on/off using an individual wall switch.

When normal power drops out, the ESR coil is deactivated and N/C contact falls closed. The automatic transfer switch changes over to backup (generator) power, and the lighting load is illuminated regardless of the position of the wall switch or controller scheme.

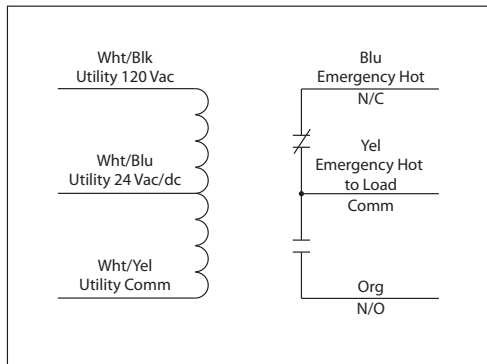
• Features

- Multi-coil voltage input
- 10, 15, 20 Amp contact ratings
- Override capabilities for wiring verification and field inspection
- NEMA 1 enclosure
- Pre wired and prepackaged for convenience
- LED indicator of utility and emergency power
- Mounts easily through ½" knockout or remotely on flat surfaces
- Bright yellow color for easy identification
- Panel style for use inside control panels
- UL 924 & California State Fire Marshall
- DPDT configurations
- 5 year warranty
- Made in USA

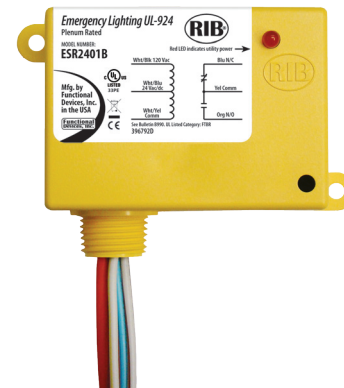


ESR2401B

Enclosed Relay 20 Amp SPDT with 24 Vac/dc/120 Vac Coil



UL924 / 20 Amp Emergency Bypass / Shunt Relay



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: 18mS
Relay Status: LED On = Activated
Dimensions: 2.30" x 3.20" x 1.80" with .50" NPT Nipple
Wires: 16", 600V Rated
Approvals: UL Listed, UL924, C-UL, CE
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override (Test Switch): No

Contact Ratings:
 20 Amp Resistive @ 277 Vac
 20 Amp Ballast @ 120/277 Vac (N/O)
 10 Amp Ballast @ 120/277 Vac (N/C)
Not rated for Electronic Ballast
 10 Amp Tungsten @ 120 Vac (N/O)
 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
 33 mA @ 22 Vdc
 35 mA @ 24 Vdc
 47 mA @ 30 Vdc

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

Initial Wiring Verification

1. Turn OFF Normal Power, Transfer Power, and Wall Switch.
2. Wire relay according to wiring diagram.
3. Energize Transfer Power. Emergency Light should illuminate.
4. Energize Normal Power. Emergency Light will turn OFF.
5. Turn ON Wall Switch. Emergency Light should illuminate.

Field Inspection

1. Ensure Normal Power and Transfer Power are energized.
2. Turn OFF Wall Switch. Light will turn OFF.
3. Red LED will be illuminated.
4. Turn OFF Normal Power. Red LED will turn OFF. Emergency Light will illuminate.

Shunt Relay Application

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