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).

• **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.

• **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 1/2” 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
ESRU1C
Enclosed Relay 10 Amp SPDT with 10-30 Vac/dc/120 Vac Coil

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: 20 ms
- Relay Status: LED On = Activated
- Dimensions: 1.70˝ x 2.80˝ x 1.50˝ 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: Yes
- Override (Test Switch): No
- 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)
- 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
  - 18 mA @ 24 Vdc
  - 20 mA @ 277 Vac
- 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

Initial Wiring Verification

1. Turn OFF Normal Power, Transfer Power, and Wall Switch.
2. Wire relay according to wiring diagram.
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

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.

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.