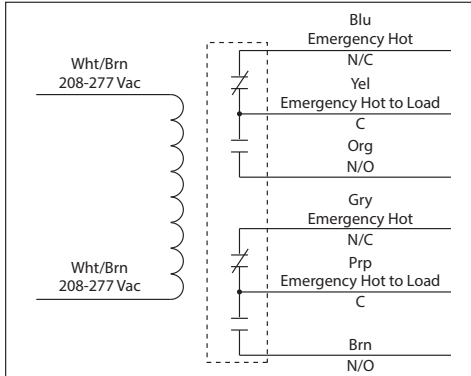


UL924 / 20 AMP BYPASS / SHUNT RELAY

**ESR02P**

UL924 Emergency Lighting Bypass/Shunt Relay, 20 Amp DPDT, 208-277 Vac Coil, NEMA 1 Housing



Not rated for use as a UL1008 Transfer Device



**SPECIFICATIONS**

- # Relays & Contact Type:** One (1) DPDT Continuous Duty Coil
- Expected Relay Life:** 10 million cycles minimum mechanical
- Operating Temperature:** -30 to 140° F
- Operate Time:** 18ms
- Relay Status:** LED On =Normal power present
- 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, UL924, C-UL, CE, RoHS
- Housing Rating:** UL Accepted for Use in Plenum, NEMA 1
- Gold Flash:** Yes
- Override (Test 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
  - 1158 VA Pilot Duty @ 240 Vac
  - 1109 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

- 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:**
  - Not rated for use as a UL1008 Transfer Device.

**INITIAL WIRING VERIFICATION**

1. Turn OFF Normal Power and Transfer Power.
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 Emergency Zone Controller. Emergency Light should illuminate.

**FIELD INSPECTION**

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

**SHUNT RELAY APPLICATION**

Our 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.

