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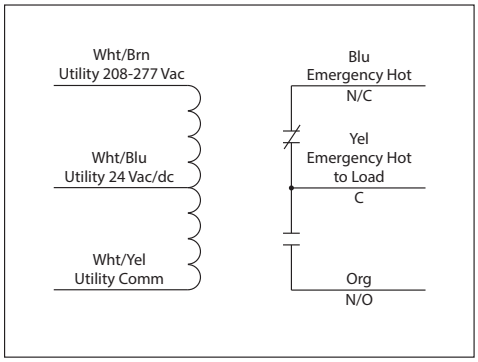
UL924 / 20 AMP BYPASS / SHUNT RELAY

ESR2402B

UL924 Emergency Lighting Bypass/Shunt Relay, 20 Amp SPDT, 24 Vac/dc/208-277 Vac Coil, NEMA 1 Housing



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

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

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

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 = Normal power present
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, UL924, C-UL, CE, RoHS
Housing Rating: UL Accepted for Use in Plenum, NEMA 1
Gold Flash: No
Override (Test Switch): No

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 Wall Switch. Emergency Light should illuminate.

FIELD INSPECTION

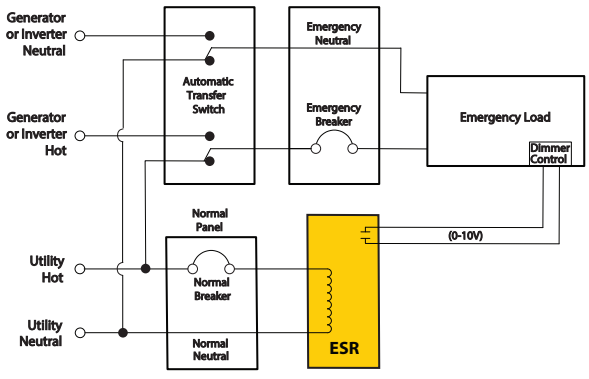
1. Ensure Normal Power and Transfer Power are energized.
2. Turn OFF Wall Switch. Light will turn OFF.
3. Red LED will be illuminated.
4. Turn OFF Normal Power. Red LED will turn OFF. Emergency Light will illuminate.

BYPASS/SHUNT RELAYS & DIMMING OVERRIDE APPLICATION

Our Bypass/Shunt Relays are UL924 Listed and suitable for shunting around wall switches and/or lighting control panel circuits, in order to turn on emergency lighting when normal utility power is lost. In certain applications where a designated emergency light is desired for dimmed normal lighting, our UL924 relays will open the dimming control and override the switch position or 0-10 Vdc controller output to provide full illumination when normal utility power is lost.

DIMMING OVERRIDE LOW VOLTAGE APPLICATION

When Normal Power is present, the ESR coil is activated and the N/O contacts are closed, allowing for the 0-10 Vdc to control the dimming of the load. When Normal Power is lost, the N/O contacts open, breaking the 0-10 Vdc dimming control, bringing the light load to full brightness.



BYPASS/SHUNT APPLICATION

When Normal Power is present, the ESR Bypass/Shunt relay coil is activated (contacts N/O), 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.