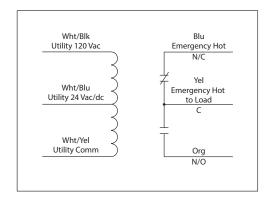




### A-E20-11-11-DJ00

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



#### **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:**

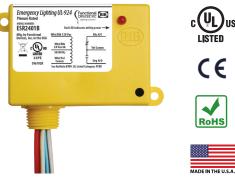
24 Vac/dc; 120 Vac; 50-60 Hz Drop Out = 2.1 Vac / 3.8 Vdc Pull In = 18 Vac / 22 Vdc

#### **Contact Ratings:**

1 HP @ 120 Vac

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

#### UL924 / 20 AMP 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 = Normal power present

Dimensions: 2.30" x 3.20" x 1.80" with .50" NPT Nipple

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**

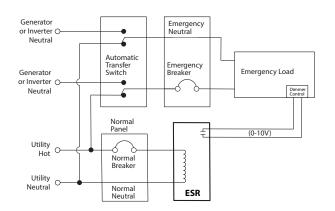
- 1. Ensure Normal Power and Transfer Power are energized.
- 2. Turn OFF Wall Switch. Light will turn OFF.
- 3. Red LED will be illuminated.
- Turn OFF Normal Power. Red LED will turn OFF. Emergency Light will illuminate.

# **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.

