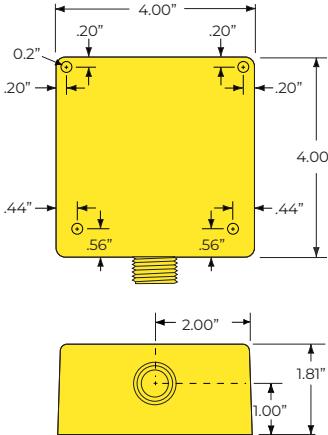
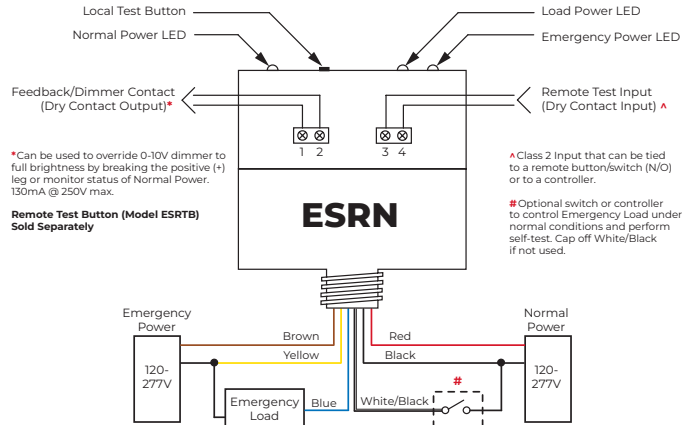


**UL924 / 20 AMP AUTOMATIC LOAD CONTROL RELAY**

**ESRN**

UL924 Emergency Lighting Automatic Load Control Relay, 20 Amp SPST, Universal 120-277 Vac, 0-10 Vdc Dimmer Override, Dry Contact Fire Alarm Interface



**SPECIFICATIONS**

**# Relays & Contact Type:** One (1) SPST Continuous Duty Coil  
**Expected Relay Life:** 10 million cycles minimum mechanical  
**Operating Temperature:** -30 to 140° F  
**Operate Time:** 18ms  
**LED:** Green = Normal Power  
Red = Emergency Power  
Yellow = Load Power  
**Dimensions:** 4.00"H x 4.00"W x 1.81"D with 0.50" NPT hub  
**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):** Yes  
**Humidity Range:** 5-95%(noncondensing)

**Coil Current:**  
Normal Power = 24 mA max  
Emergency Power = 118 mA max

**Coil Voltage Input:**  
Emergency Input: 120-277 Vac (50/60 Hz)  
Normal Input: 120-277 Vac (50/60 Hz)

**Contact Ratings:**  
20 Amp Magnetic Ballast @ 277 Vac  
16 Amp Electronic Ballast @ 277 Vac  
10 Amp Tungsten @ 120 Vac

**TESTING**

**Initial Test for Correct Wiring**  
Apply Emergency Power to the Emergency Power Input and Normal Power to the Normal Power Input. (If using the Wall Switch Input, apply Normal Power to the switch also, but keep the switch OFF/OPEN.)

- The Red LED (Emergency Power available) should be ON.
- The Green LED (Normal Power available) should be ON.
- The Yellow LED (Load Status) should be OFF.
- The Load should be OFF.
- The Feedback/Dimmer Contact should be CLOSED.

**Local Test Button**

- Turn switched circuit OFF. Emergency light should be OFF.
- Press and hold "Local Test Button".
- Emergency light should turn ON.
- Release "Local Test Button" and emergency light should turn OFF.

**Remote Test Button (Model ESRTB - sold separately)**

- Turn switched circuit OFF. Emergency light should be OFF.
- Press and hold "Remote Test Button".
- Emergency light should turn ON.
- Release "Remote Test Button" and emergency light should turn OFF.

**Wall Switch or Controller Contact**

- Turn ON switch if not already on.
- Emergency light should turn ON.
- Turn wall switch OFF.
- Emergency light will remain on for two seconds before turning OFF.

**TROUBLESHOOTING**

CONDITION	ACTION
Red LED is OFF	• Check Emergency Power Input wiring (BROWN and YELLOW wires) and voltage.
Green LED is OFF	• Check Normal Power Input wiring (BLACK and RED wires) and voltage.
Yellow LED is ON but Load is OFF	• Check Load wiring (BLUE wire and Load's neutral). • Verify Load's operation voltage is the same as the Emergency Power Input Voltage. • Check bulbs and ballast. • Replace Unit.
Load is ON but Yellow LED is OFF	• Replace Unit.
Yellow LED and Load do not turn on when being tested	• Check bulbs and ballast. • Check wiring connections if using a remote test option. • Press local test button on the unit. • Replace Unit.
Yellow LED and Load will not turn OFF	• Verify status of Normal Power Input. • Open Wall Switch Input. • Verify no test inputs are stuck closed. (i.e. Remote Test Input is not closed)

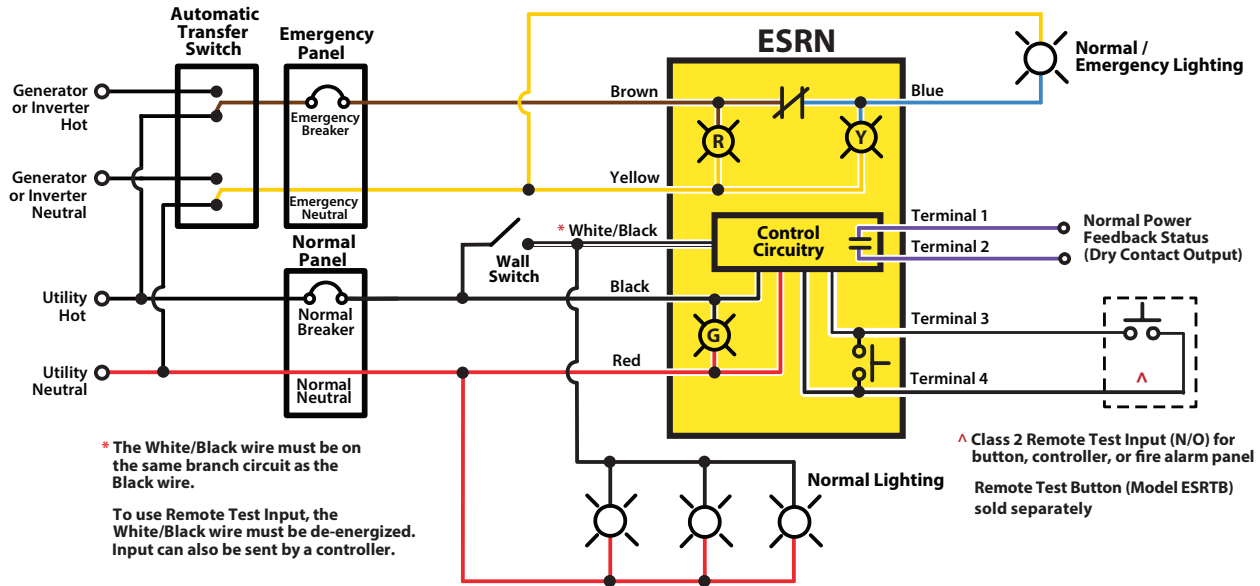
**BYPASS/SHUNT RELAYS & DIMMING OVERRIDE APPLICATION**

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.

**UL924 / 20 AMP AUTOMATIC LOAD CONTROL RELAY**

**ESRN TYPICAL APPLICATIONS**

**USING EMERGENCY LIGHTING AS NORMAL LIGHTING**



**OVERRIDING A 0-10VDC DIMMER**

