

EMR-20-CR-D UL 924/20 Amp Automatic Load Control Relay

PROJECT	
LOCATION	

Description

Coil Current:

Normal Power = 24 mA max

Emergency Power = 118 mA max

Coil Voltage Input:

Emergency Input: 120-277 Vac
(50/60 Hz)

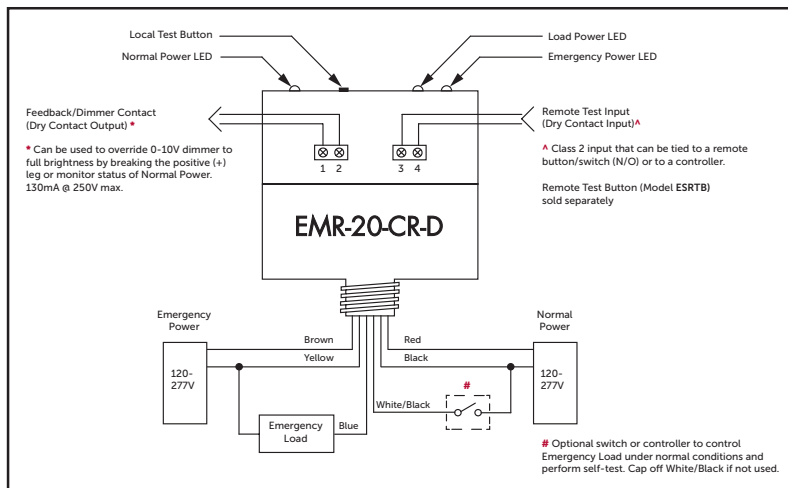
Normal Input: 120-277 Vac
(50/60 Hz)

Contact Ratings:

20 Amp Magnetic Ballast @ 277 Vac

16 Amp Electronic Ballast @ 277 Vac

10 Amp Tungsten @ 120 Vac



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: 4.0" x 4.57" 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): Yes

Humidity Range: 5-95%(noncondensing)

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.

Bypass/Shunt Relay Application

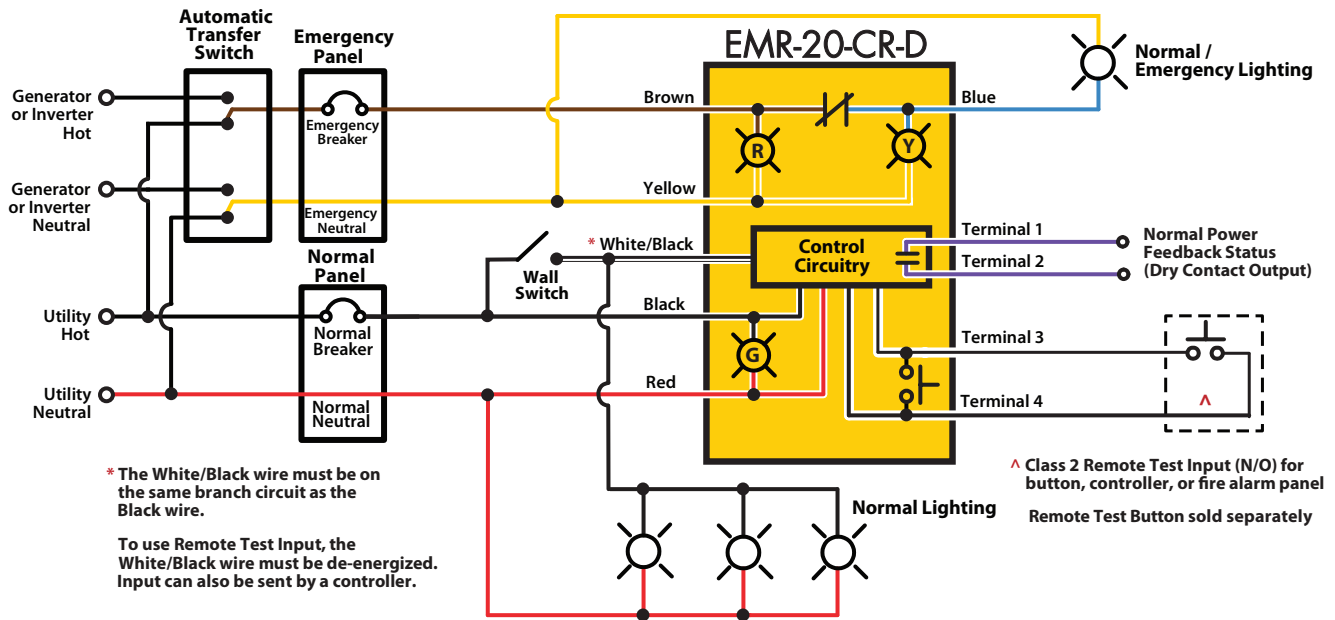
Our Bypass/Shunt Relays are UL924 Listed and suitable for shunting around wall switches and/or lighting control panel circuits, in order to turn on emergency lighting when normal utility power is lost.

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 operating 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 that no test inputs are stuck closed. (i.e. Remote Test Input is not closed).

Applications

Using Emergency Lighting as Normal Lighting



Overriding a 0-10VDC Dimmer

