Functional Devices, Inc.

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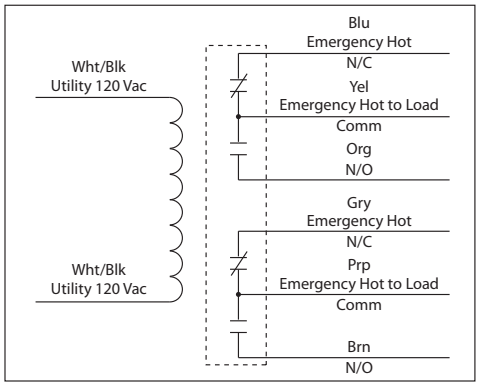
ESR01P

Enclosed Relay 20 Amp DPDT with 120 Vac Coil



UL924 / 20 AMP EMERGENCY BYPASS / SHUNT RELAY

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CE

Made in USA

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 = Activated
Dimensions: 4.00″ x 4.00″ x 1.80″ with .50″ NPT Nipple
Wires: 16″, 600V Rated
Approvals: UL Listed, UL924, C-UL, CE
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 @ 120 Vac

Coil Voltage Input:
120 Vac ; 50-60 Hz
Drop Out = 35 Vac
Pull In = 85 Vac

Notes:
• Not rated for use as a UL1008 Transfer Device.

Initial Wiring Verification

1. Turn OFF Normal Power, Transfer Power, and Wall Switch.
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.

Shunt Relay Application

Our Emergency 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.