

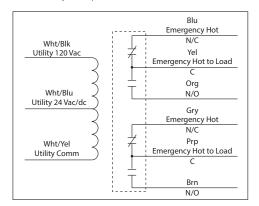
Functional Devices, Inc. | 101 Commerce Drive, Sharpsville, IN 46068

Email: sales@functionaldevices.com | Website: www.functionaldevices.com

Toll Free: (800) 888-5538 | Office: (765) 883-5538 | Fax: (765) 883-7505

ESR2401D

Enclosed Relay 10 Amp DPDT with 24 Vac/dc/120 Vac





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: 8ms

Relay Status: LED On = Normal power present **Dimensions:** 1.70" x 2.80" x 1.50" 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

Contact Ratings:

10 Amp Resistive @ 30 Vdc 10 Amp General Use @ 277 Vac 1/2 HP @ 120/240 Vac (N/O) 1/3 HP @ 120/240 Vac (N/C) B300 Pilot Duty

120 Vac 30A Make 3A Break (360 VA) 240 Vac 15 A Make 1.5A Break (360 VA) 208 Vac 17.3A Make 1.73A Break (360 VA) 277 Vac 13A Make 1.3A Break (360 VA) 24 Vac 30A Make 5A Break (120 VA) 5A Max

Coil Current:

24 mA @ 18 Vac 20 mA @ 20 Vdc 32 mA @ 24 Vac 24 mA @ 24 Vdc 36 mA @ 30 Vdc 31 mA @ 120 Vac

Coil Voltage Input:

24 Vac/dc; 120 Vac; 50-60 Hz Drop Out = 3 Vac / 3.8 Vdc Pull In = 18 Vac / 20 Vdc

Notes:

• Not rated for use as a UL1008 Transfer Device.

Initial Wiring Verification

- 1. Turn OFF Normal Power and Transfer Power.
- 2. Wire relay according to wiring diagram.
- ${\it 3. \,\, Energize \, Transfer \, Power. \,\, Emergency \,\, Lights \,\, should \,\, illuminate.}$
- Energize Normal Power. Emergency Lights will turn OFF.
 Red LED will turn ON.
- 5. Turn ON Wall Switches. Emergency Lights should illuminate.

Field Inspection

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

Shunt Relay Application

Our 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.

