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# SCR490D Beacon & Obstruction Lamp Alarm Relay

FL-81011 (with device box) • 68-SCR490D (w/o device box)



The SCR490D Series is used to provide remote monitoring of steady burning incandescent marker and obstruction lighting. Four onboard switches allow operator programming for lighting systems with two through nine lamps on a single AC circuit. The SCR490D uses a toroidal sensor and electronic circuitry to sense the failure of one or more lamps.

### Features:

- Senses failed obstruction lamps
- 2 - 9 steadily burning lamps can be monitored
- Toroidal current sensing
- Isolated, 10A, SPDT alarm output contacts
- 1A, solid-state line voltage alarm output
- 6 second trip delay prevents nuisance alarms

Approvals:

### Operation

When a lamp fails, the SCR490D senses a decrease in current flow. Then, after a fixed time delay, it transfers to its alarm mode. In alarm mode, the LED indicator, the output relay (SPDT isolated contacts), and a non-isolated solid-state output are energized. Replacement of the failed lamps resets the alarm outputs and the LED indicator. To prevent false alarm signals, power must be applied to the SCR490D at the same time that lamps are energized.

### Available Models:

SCR490D

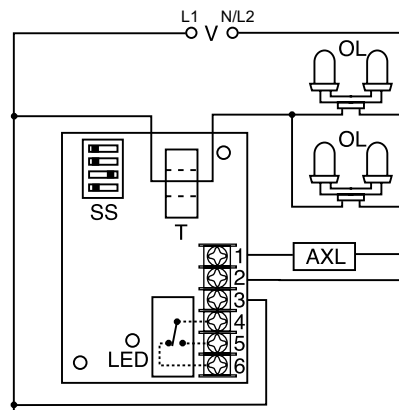
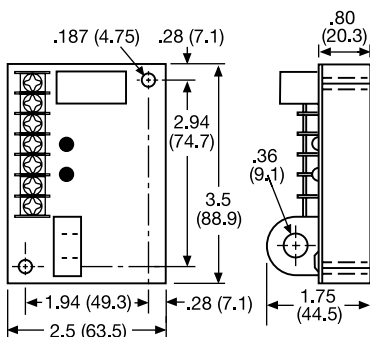
### Order Table:

| Input  | Part Number |
|--------|-------------|
| 120VAC | SCR490D     |

### Specifications:

|   |  |                                 |  |
|---|--|---------------------------------|--|
| Operation                               |  | Mounting                        | Surface mount with two #6 (M3.5 x 0.6) screws                            |
| Number of Lamps                         | 2 - 9 (selectable)   | Dimensions                      | 3.5 x 2.5 x 1.75 in. (88.9 x 63.5 x 44.5 mm)                             |
| Lamp Wattage                            | 116W, incandescent lamps   | Termination                     | Screws with captive clamps for up to 14 AWG (2.45 mm <sup>2</sup> ) wire |
| Rated Lamp Voltage                      | 120 or 130VAC (selectable)   | Circuitry                       | Encapsulated   |
| Monitored Voltage                       | 120VAC ±3%   | Operating / Storage Temperature | -40° to 65°C / -40° to 85°C  |
| Trip Delay                              | ≅ 6s fixed   | Humidity                        | 95% relative, non-condensing   |
| Voltage                                 | 120VAC   | Weight                          | ≅ 6.8 oz (193 g)   |
| AC Line Frequency                       | 50/60Hz  |                                 |  |
| Tolerance                               | 120VAC - 20% - 10%   |                                 |  |
| Line Voltage Output (Solid State Rated) | ≤ 125W to operate a spare lamp or alarm                              |                                 |  |
| Isolated Alarm Output                   | 10A @ 120VAC or 30VDC resistive;<br>1/4 hp @ 125VAC; 1/2 hp @ 250VAC |                                 |  |

### SCR490D Connection Diagrams



V = Voltage  
 OL = Obstruction Lamps  
 T = Toroid  
 SS = Selector Switch  
 AXL = Auxiliary Load/ Alarm  
 Relay contacts are isolated.