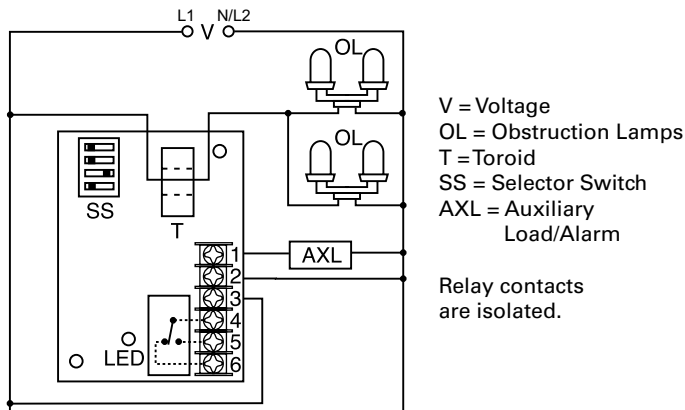


SCR490D

Obstruction Lamp Alarm Relay



Wiring Diagram



Description

The SCR490D 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.

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.

Features & Benefits

FEATURES	BENEFITS
Toroidal current sensing	Reliable low cost monitoring of incandescent marker and obstruction lighting through built-in CT which also provides isolation from the lighting circuit
Monitors 2 - 9 lamps	Senses failed obstruction lamps on a single AC circuit
Isolated, 10A, SPDT alarm output plus one 1A, solid-state line voltage alarm output	Provide alarm indication and can also be used for remote monitoring of the lighting system
Fixed trip delay (6s)	Prevents nuisance alarms

Specifications

Operation

Number of Lamps	2 - 9 (selectable)
Lamp Wattage	116W, incandescent lamps
Rated Lamp Voltage	120 or 130VAC (selectable)
Monitored Voltage	120VAC $\pm 3\%$
Trip Delay	$\approx 6s$ fixed
Voltage	120VAC
AC Line Frequency	50/60Hz
Tolerance	- 20% - 10%
120VAC Line Voltage Output (Solid State Rated)	$\leq 125W$ to operate a spare lamp or alarm
Isolated Alarm Output	10A @ 120VAC or 30VDC resistive; 1/4 hp @ 125VAC; 1/2 hp @ 250VAC
Mounting	Surface mount with two #6 (M3.5 x 0.6) screws
Dimensions	H 88.9 mm (3.5"); W 63.5 mm (2.5"); D 44.5 mm (1.75")
Termination	Screws with captive clamps for up to 14 AWG (2.45 mm ²) wire
Circuitry	Encapsulated
Operating/Storage Temperature	-55° to 65°C / -55° to 85°C
Humidity	95% relative, non-condensing
Weight	≈ 6.8 oz (193 g)