

Universal Lamp Alarm Relay

SCR430T & SCR630T

Beacon & Obstruction



- Monitors Incandescent Lamps for Failure
- Senses Failed Flashing Beacon or Obstruction Lamps
- Switch Selectable Number, Voltage, & Wattage of Lamps
- 10 A Isolated SPDT Alarm Output Contacts
- 1 A Solid State Line Voltage Alarm Output
- Toroidal Current Sensing

Approvals: (SCR430T only)

Description

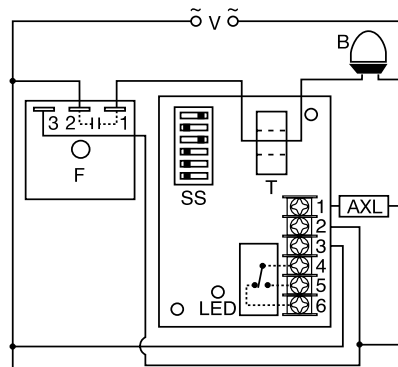
The SCR series is a Universal Lamp Alarm Relay designed to sense the failure of flashing or steady incandescent beacon lamps or steady side lights. The toroidal current sensor provides isolation and allows monitoring of more than one line at a time. The SCR Series energizes when one or more lamps fail. It will monitor the operation of one to four side lights and up to four beacon lamps.

Operation

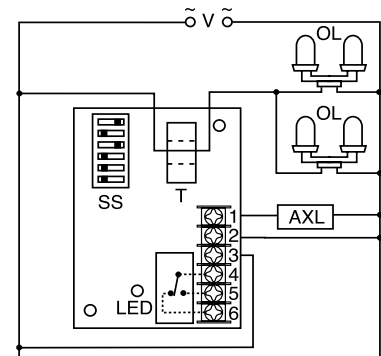
When a lamp fails, the SCR Series senses a decrease in current flow. After a fixed time delay, the LED glows and the two alarm outputs energize. The outputs and the LED are reset when the failed lamps are replaced and the current returns to the nominal setting, or when the input voltage is removed. The SCR will sense an open flasher, it will not sense a continuously on flasher (see FB Series).

Connection

Beacon Connection Diagram



Obstruction Lamp Connection Diagram



Relay contacts are isolated. Dashed lines are internal connections.

V = Voltage B = Beacon Lamps SS = Selector Switch T = Toroid
F = Flasher AXL = Auxiliary Load/Alarm OL = Obstruction Lamps

Ordering Table

Input	Part Number	Lamp Types
120 V AC	SCR430T	Incandescent
230 V AC	SCR630T	Incandescent

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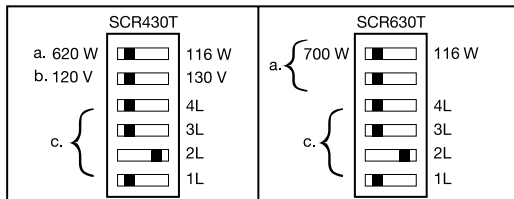
Beacon & Obstruction

Tower &
obstruction
lighting

Technical Data

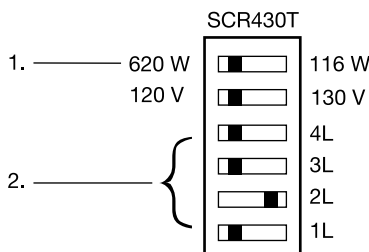
Lamp Monitoring Capacity (in lamps)		100 W	116 W	620 W	700 W	This chart is based on typical current draw of lamps at the rated voltage and the units trip point over the voltage tolerance.
SCR430T 120VAC Lamps		4	4	4	n/a	
SCR630T 230VAC Lamps		n/a	4	n/a	4	
Time Delay Trip Delay		Factory fixed \approx 6 s				
Input Input Voltage/Tolerance/Frequency		SCR430T -- 120 V AC +/-10% 50 ... 60 Hz SCR630T -- 230 V AC +/-10% 50 ... 60 Hz				
Output Line Voltage Output (Solid State Rated)		To operate a spare lamp or alarm \leq 125 W at 120 V AC \leq 250 W at 240 V AC				
Isolated Alarm Output (SPDT)		10 A at 240 V AC or 30 V DC resistive; 1/4 hp at 125 V AC; 1/2 hp at 250 V AC				
Mechanical Mounting Termination Package		Two #6 (M3.5 x 0.6) screws Screws with captive clamps for up to 14 AWG (2.45 mm ²) wire 3.5 x 2.5 x 1.75 in. (88.9 x 63.5 x 44.5 mm)				
Protection Circuitry		Encapsulated				
Environmental Operating Temperature Weight		-40°C ... +65°C \approx 6.8 oz (193 g)				

Selection Range:



- Lamp Wattage - Select the lamp wattage of the lamps in use.
- Lamp Voltage - Select the lamp voltage shown on the lamp. (SCR430T)
- Lamps ON - Select the number of lamps on during normal operation. Only one lamp switch, at a time, may be transferred to the right.

Programming Example:

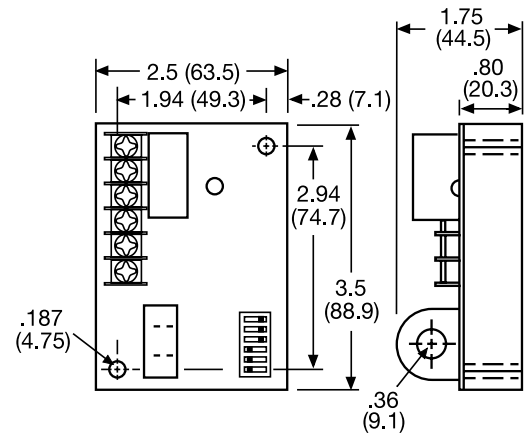


Example Shown: SCR430T-620 watts at 120 V AC lamps, two lamps are ON during normal operation.

STEP

- Select lamp wattage: 116 or 620 watts
- Select the number of lamps ON (1 thru 4) during normal operation. Only one lamp switch may be ON (RIGHT) at any time.

Mechanical View



Inches (Millimeters)