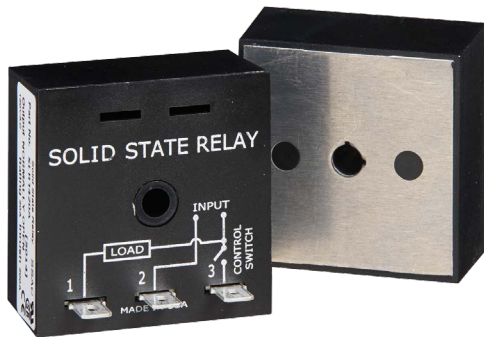


## SLR SERIES

### Solid-State Relay - Non-Isolated



### Description

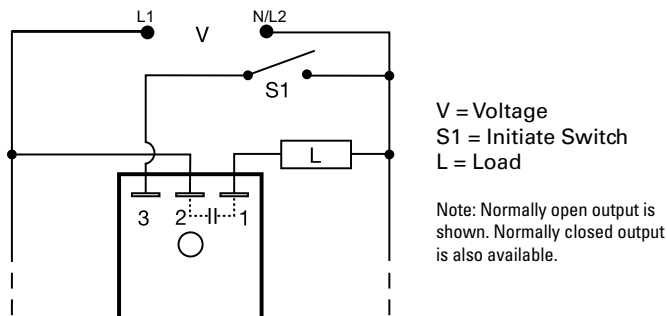
The SLR Series has no isolation between the control switch input and the solid-state output. Select the SLR for applications where the control switch is the same voltage source as the load. Provides the noiseless, reliability and long life of a solid-state relay, without the cost of isolation circuitry. The SLR Series offers random switching and is normally used for inductive loads. When fully insulated female terminals are used on the connection wires, the system meets the requirements for touch-proof connections.

### Operation

The solid-state output is located between terminals 1 and 2 and can be ordered as either normally open or normally closed, when voltage is applied and S1 is open. When S1 is closed, the solid-state output between terminals 1 and 2 closes (or opens). If S1 is opened, the solid-state output will open (or close).

**Reset:** Opening S1 resets the output to its original state. Reset is also accomplished by removing input voltage.

### Wiring Diagram



### Features & Benefits

| FEATURES   | BENEFITS   |
|--|--|
| <b>Compact design measures 2 in. (50.8mm) square</b> | Perfect for OEM applications where space is limited  |
| <b>Totally solid state and encapsulated</b>          | No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity |
| <b>Up to 20A steady, 200A inrush output rating</b>   | Provides direct control of heavy inductive, resistive, or incandescent loads                                     |
| <b>Metalized mounting surface</b>                    | Facilitates heat transfer in high current applications   |

### Accessories



**P1015-13** (AWG 10/12), **P1015-64** (AWG 14/16), **P1015-14** (AWG 18/22) **Female Quick Connect**  
These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



**P1015-18 Quick Connect to Screw Adapter**  
Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.

### Ordering Information

| MODEL    | SWITCHING | INPUT VOLTAGE | OUTPUT RATING | OUTPUT FORM   |
|----------|-----------|---------------|---------------|---------------|
| SLR1420A | Random    | 120VAC        | 20A           | Normally open |
| SLR1610A | Random    | 230VAC        | 10A           | Normally open |

If you don't find the part you need, call us for a custom product 800-843-8848

# SLR SERIES

## Specifications

### Output (Contact)

|                  |                          |                |                        |
|------------------|--------------------------|----------------|------------------------|
| <b>Type</b>      | Non-isolated solid state |                |                        |
| <b>Form</b>      | SPST, NO or NC           |                |                        |
| <b>Voltage</b>   | 24, 120, or 230VAC       |                |                        |
| <b>Tolerance</b> | ±20%                     |                |                        |
| <b>Ratings</b>   | <b>Steady State</b>      | <b>Inrush*</b> | <b>Output Device</b>   |
|                  | 1A                       | 10A            | SCR & Bridge Rectifier |
|                  | 6 A                      | 60A            | Triac                  |
|                  | 10A                      | 100A           | Triac                  |
|                  | 20A                      | 200A           | Triac                  |

|  |  |
|--|--|
| <b>Minimum Load Current</b>            | ≅ 50mA   |
| <b>Voltage Drop (at Rated Current)</b> | ≅ 2.0V - 6, 10, & 20A units; ≅ 2.5V - 1A units |
| <b>Leakage Current (Open State)</b>    | ≤ 5mA  |
| <b>Initiate Switch Voltage</b>         | Same as the output voltage                     |
| <b>Power Consumption</b>               | ≤ 0.5W   |

### Protection

|                              |   |
|------------------------------|---|
| <b>Circuitry</b>             | Encapsulated                              |
| <b>Dielectric Breakdown</b>  | ≥ 2000V RMS terminals to mounting surface |
| <b>Insulation Resistance</b> | ≥ 100MΩ                                   |

### Mechanical

|                    |   |
|--------------------|---|
| <b>Mounting*</b>   | Surface mount with one #10 (M5 x 0.8) screw                                   |
| <b>Dimensions</b>  | <b>H</b> 50.8 mm (2.0"); <b>W</b> 50.8 mm (2.0");<br><b>D</b> 38.4 mm (1.51") |
| <b>Termination</b> | 0.25 in. (6.35 mm) male quick connect terminals                               |

### Environmental

|                                      |  |
|--------------------------------------|--|
| <b>Operating/Storage Temperature</b> | -20° to 60°C / -40° to 85°C                                      |
| <b>Humidity</b>                      | 95% relative, non-condensing                                     |
| <b>Weight</b>                        | 1A units: ≅ 2.4 oz (68 g);<br>6, 10, 20A units: ≅ 3.9 oz (111 g) |

\*Must be bolted to a metal surface using the included heat sink compound. The maximum mounting surface temperature is 90°C. Inrush: Non-repetitive for 16ms.

## Function Diagram

