

- ◆ Zero-crossing Switching
- ◆ SCR Inverse Parallel Output
- ◆ SCR Short Circuit, Open Circuit and Error Self-Inspection Functions
- ◆ Load Current: 25A-100A
- ◆ Dielectric Strength: 4000Vrms
- ◆ Internal RC/MOV Protection Circuit
- ◆ LED Indicator
- ◆ RoHS Compliant



### Ordering Information

<b>KSIA</b>	<b>480</b>	<b>D</b>	<b>25</b>	<b>P</b>	<b>-L</b>
KSIA Series	Load Voltage 240: 240VAC 480: 480VAC 600: 600VAC	Control Mode D: DC Control	Load Current 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp 100: 100Amp	Trigger Mode Blank: Negative Trigger P: Positive Trigger	LED Indicator

### General Specifications

Input Specifications (Ta=25°C)			
Control Voltage Range	18VDC ~ 32VDC		
Control Voltage Range (@VCC=24VDC)	Negative Trigger	0~12VDC	
	Positive Trigger	18~32VDC	
Must Turn-On Voltage (@VCC=24VDC)	Negative Trigger	12VDC (max.)	
	Positive Trigger	18VDC (min.)	
Must Turn-Off Voltage (@VCC=24VDC)	Negative Trigger	18VDC (min.)	
	Positive Trigger	12VDC (max.)	
Maximum Power Current (@VCC=24VDC)	40mA		
Maximum Input Current	4mA		
Output Specifications (Ta=25°C)			
Load Voltage Range	240VAC	150-280VAC	
	480VAC	150-530VAC	
	600VAC	300-660VAC	
Maximum Surge Current (@10ms)	25A	250A	
	40A	400A	
	60A	600A	
	80A	800A	
	100A	1000A	
Maximum Turn-On Time	10ms		
Maximum Turn-Off Time	10ms		
Maximum I <sup>2</sup> t for Fusing (@10ms)	25A	312A <sup>2</sup> s	
	40A	800A <sup>2</sup> s	
	60A	1800A <sup>2</sup> s	
	80A	3200A <sup>2</sup> s	
	100A	5000A <sup>2</sup> s	

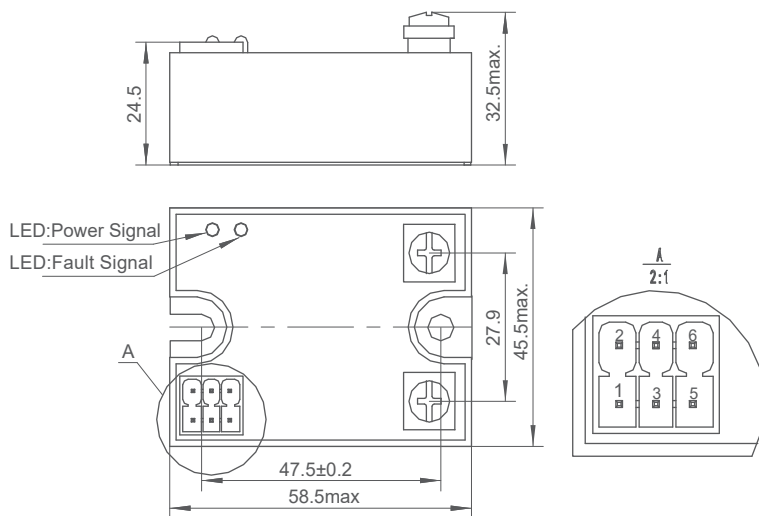
### General Specifications

Output Specifications (Ta=25°C)		
Transient Overvoltage	240VAC	600Vpk
	480VAC	1200Vpk
	600VAC	1600Vpk
Maximum Off-State Leakage Current@Rated Load Voltage	5mA	
Maximum On-State Voltage Drop@Rated Current	1.6Vrms	
Minimum Off-State dv/dt@Maximum Rated Voltage	500V/μs	
General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input, output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)	1000MΩ	
Ambient Temperature Range	-30°C ~ +80°C	
Storage Temperature Range	-30°C ~ +100°C	
Weight (Typical)	25A, 40A, 60A	100g
	80A, 100A	140g

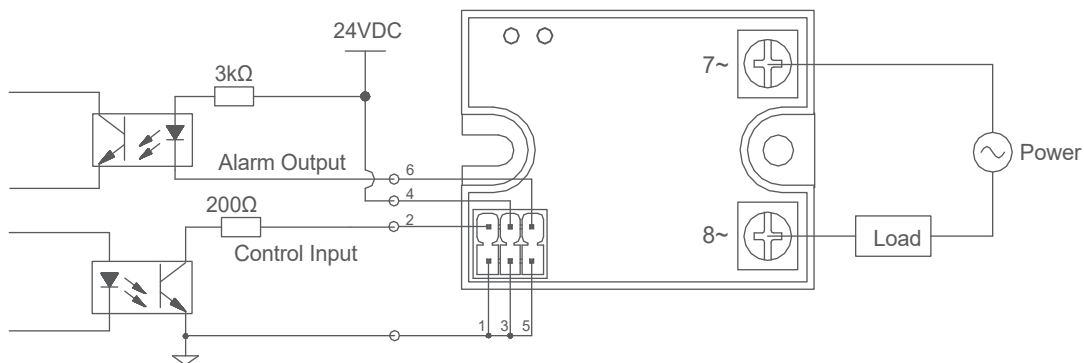
### Applications

Temperature Chamber, Plastics Machinery, Food Processing Machinery, Incubator, Oiling machines, HVAC, Lighting, Fountain Controller and etc.

### Outline Dimensions

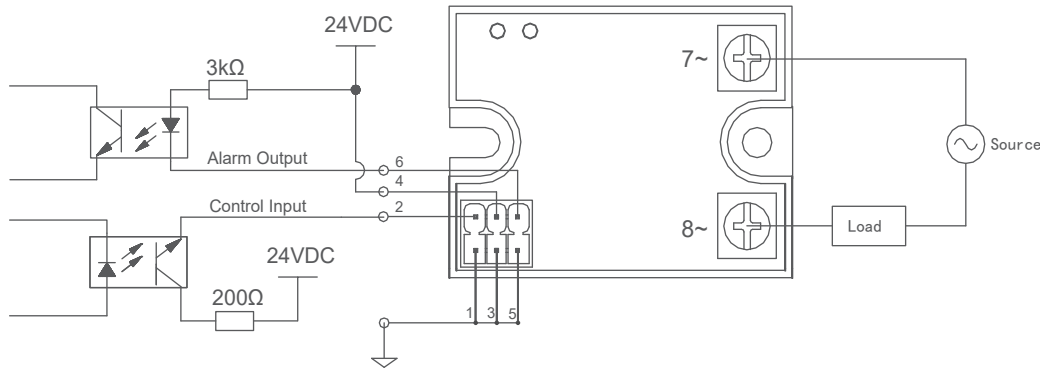


### Wiring Diagram

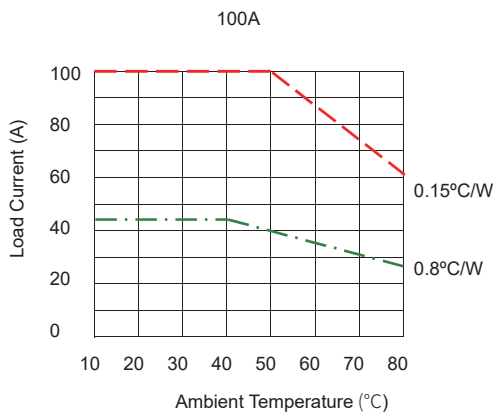
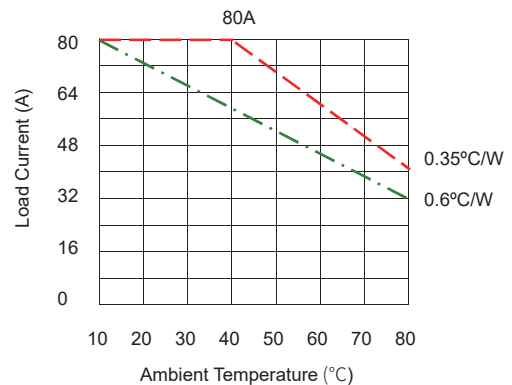
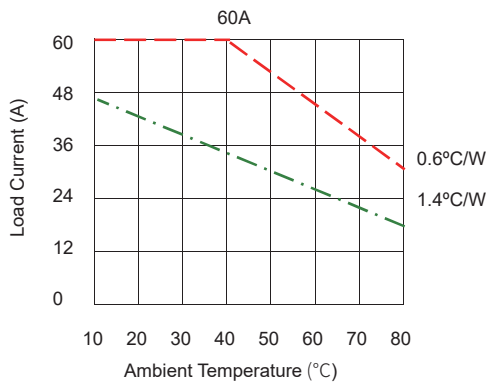
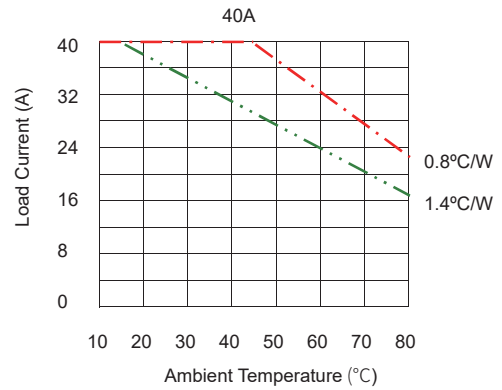
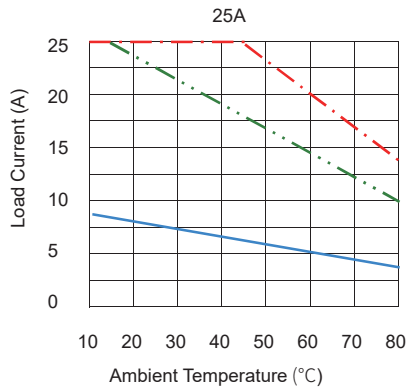


Negative Trigger Product Wiring Diagram

### Wiring Diagram



### Thermal Derating Curve



### General Notes

1. Relay must be mounted to proper sized heat sink based on thermal curves. Thermal grease or a thermal pad must be used between relay and heat sink and be torqued down to 18-20/2.0-2.2 in-lb/N·m.
2. When connection wiring to SSR please ensure screws are torqued down properly (input 13-15/1.5-1.7in/lb/N·m, output 18-20/2.0-2.2 in-lb/N·m).
3. When ambient temperature is above 25°C see thermal derating curve.

### Agency Approvals (Certification)

