

Product Description

- ◆ 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
- ◆ LED Indicator
- ◆ RoHS Compliant



Ordering Information

<b>KSIA</b>	<b>480</b>	<b>D</b>	<b>25</b>	<b>P</b>	<b>-L</b>	<b>(XXX)</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	LED Indicator

		25A	40A	60A	80A	100A
Negative Trigger	240	KSIA240D25-L	KSIA240D40-L	KSIA240D60-L	KSIA240D80-L	KSIA240D100-L
	480	KSIA480D25-L	KSIA480D40-L	KSIA480D60-L	KSIA480D80-L	KSIA480D100-L
	600	KSIA600D25-L	KSIA600D40-L	KSIA600D60-L	KSIA600D80-L	KSIA600D100-L
Positive Trigger	240	KSIA240D25P-L	KSIA240D40P-L	KSIA240D60P-L	KSIA240D80P-L	KSIA240D100P-L
	480	KSIA480D25P-L	KSIA480D40P-L	KSIA480D60P-L	KSIA480D80P-L	KSIA480D100P-L
	600	KSIA600D25P-L	KSIA600D40P-L	KSIA600D60P-L	KSIA600D80P-L	KSIA600D100P-L

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	

General Specifications

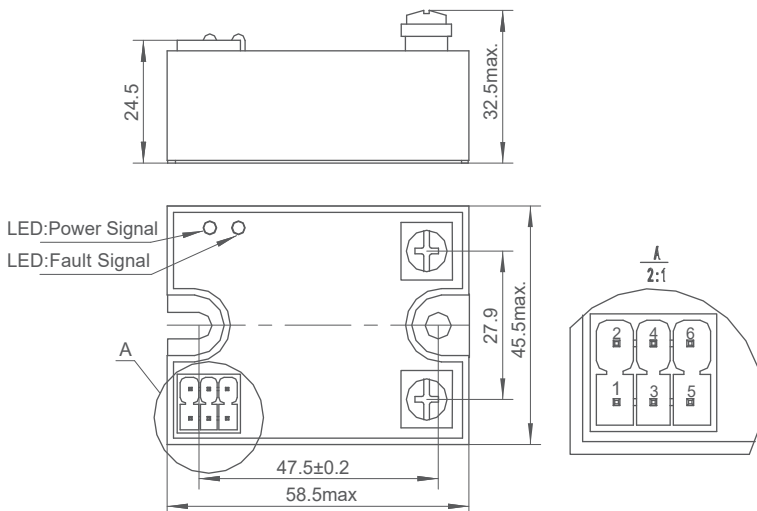
Output Specifications (Ta=25°C)		
Load Voltage Range	240VAC	150-280VAC
	480VAC	150-530VAC
	600VAC	150-660VAC
Maximum Surge Current (@10ms)	25A	250A
	40A	400A
	60A	600A
	80A	800A
	100A	1000A
Maximum Turn-on Time	10ms	
Maximum Turn-Off Time	10ms	
Maximum I <sup>2</sup> t for Fusing (@10ms)	25A	312A <sup>2</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
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

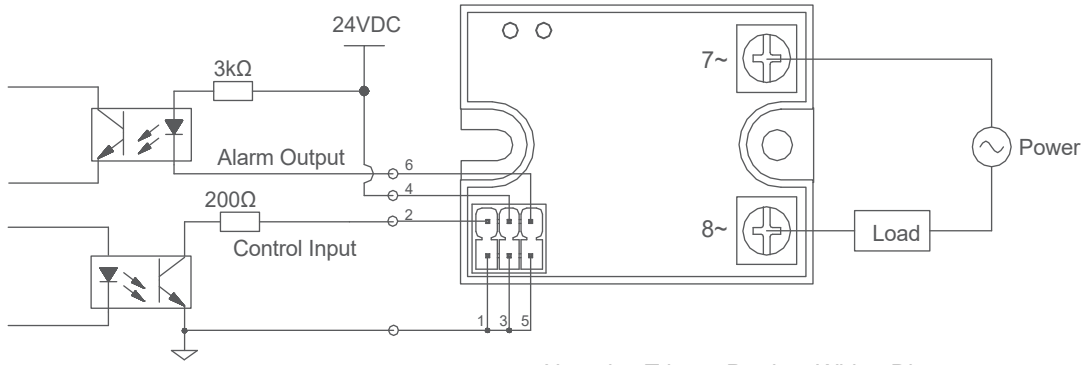
Applications

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

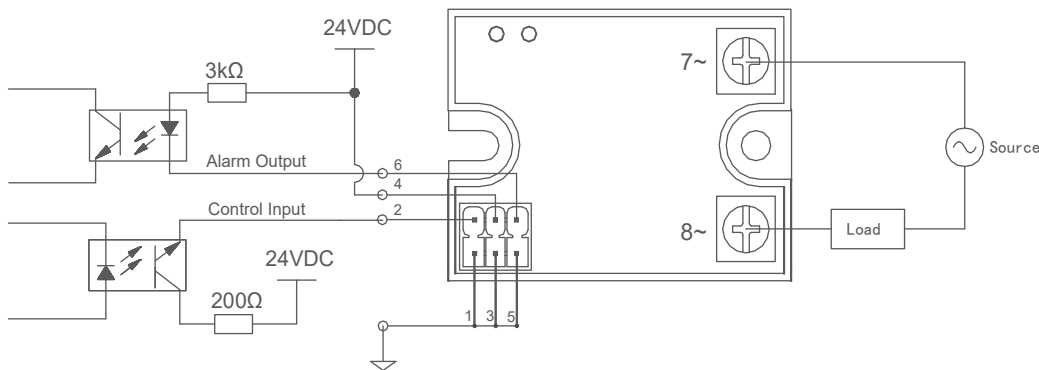
Outline Dimensions



Wiring Diagram

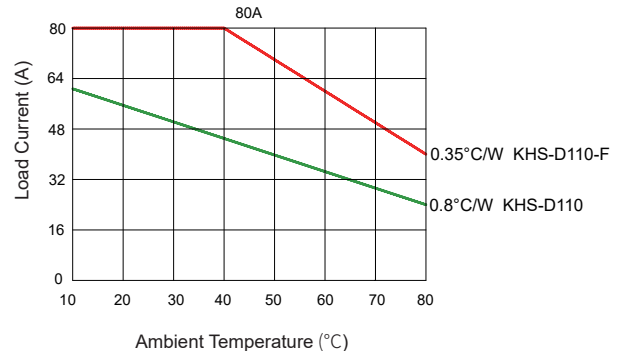
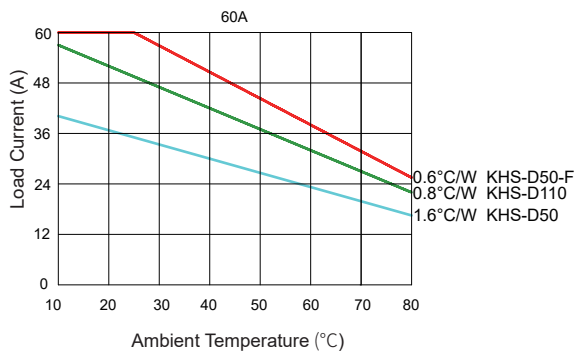
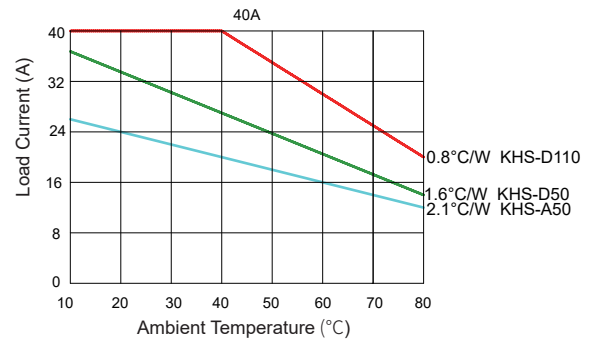
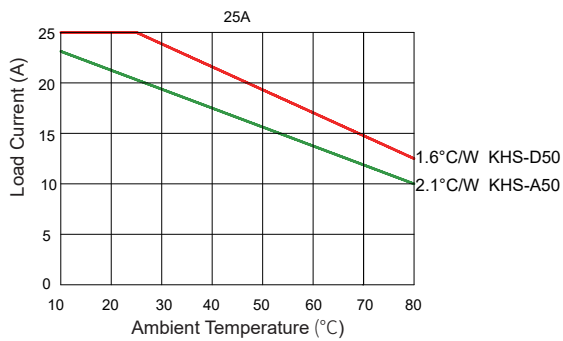


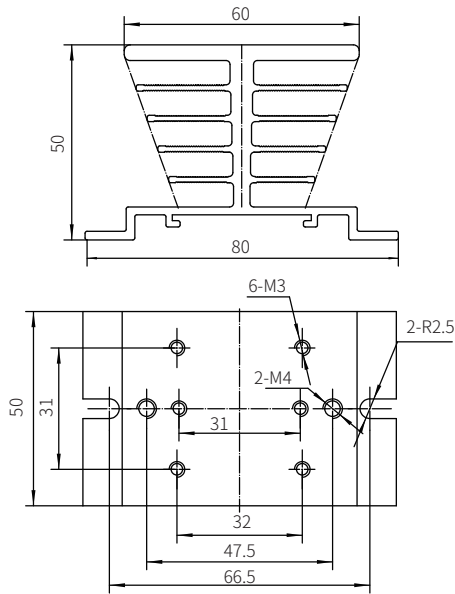
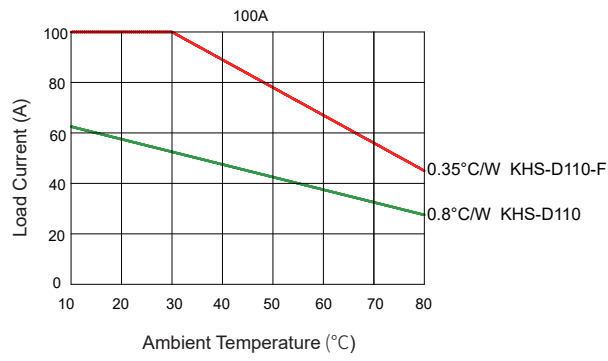
Negative Trigger Product Wiring Diagram



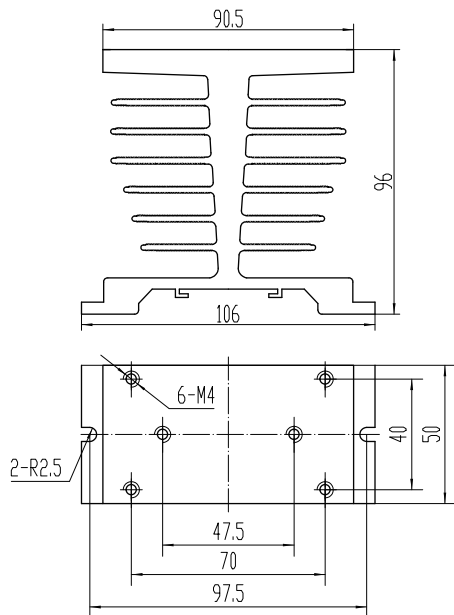
Positive Trigger Product Wiring Diagram

Thermal Derating Curve

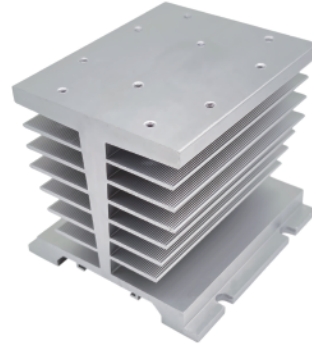
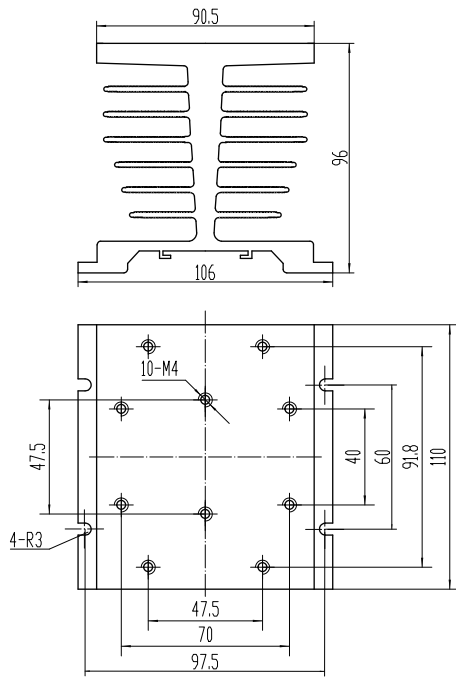




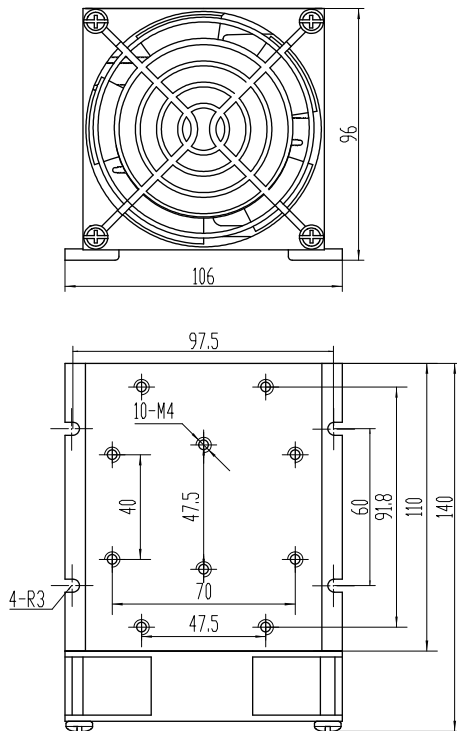
KHS-A50



KHS-D50



KHS-D110



KHS-D110-F

### 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 18-20/2.0-2.2in-lb/Nm.
2. When connection wiring to SSR, please ensure screws are torqued down properly (input 13-15/1.5-1.7in-lb/Nm, output 18-20/2.0-2.2 in-lb/Nm).
3. SSR's carrying load capacity is related to the operation ambient temperature and heat dissipation condition, please refer to the Thermal Derating Curve for derating.

### ! Warnings

1. The product's side panels may be hot, allow the product to cool before touching.
2. Disconnect all power before installing or working with this equipment.
3. Verify all connections and replace all covers before turning on power.