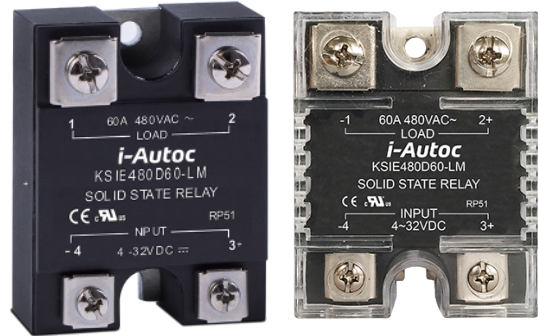


**Product Description**

- ◆ Zero Crossing Switching
- ◆ Load Current: 25A,40A,60A,80A
- ◆ Load VoltageRange: 380VAC,480VAC
- ◆ Control Voltage Range: 4-32VDC or 176-264VAC
- ◆ Internal TVS Protection Circuit (Optional)
- ◆ SCR Output or TRIAC Output<sup>(1)</sup>
- ◆ LED Light
- ◆ Dielectric Strength: 4000VACrms
- ◆ Protective cover KPC-0A (Optional)



Note: (1) KSIExxx25xxx series are TRIAC output, KSIExxx (40, 60, 80) xxx series are SCR output.



**Ordering Information**

<b>KSIE</b>	<b>480</b>	<b>D</b>	<b>40</b>	<b>-L</b>	<b>M</b>	<b>(XXX)</b>	<b>+KPC-0A</b>
KSIE Series	Load Voltage 380:380VAC 480:480VAC	Control Voltage D: DC Control A: AC Control	Load Current 25:25Amp 40:40Amp 60:60Amp 80:80Amp	LED Light	T: TVS <sup>(2)</sup> (Optional)	Customized Code	(Optional)

Note: (2) Only KSIE480DXXX-LT series products have TVS protection.

**General Specifications**

Input Specifications (Ta=25°C)		
Control Voltage Range	DC Control	4-32VDC
	AC Control	176-264VAC
Must Turn-on Voltage	DC Control	4VDC
	AC Control	176VAC
Must Turn-off Voltage	DC Control	1VDC
	AC Control	10VAC
Maximum Input Current	DC Control	25mA(@32VDC)
	AC Control	25mA(@264VAC/50Hz)

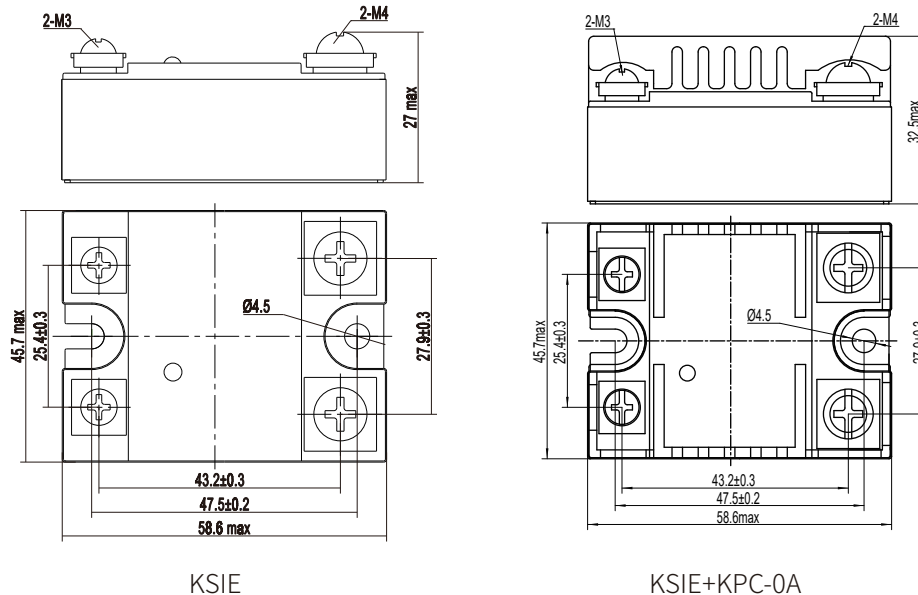
Output Specifications (Ta=25°C)		
Load Voltage Range (47Hz~63Hz)	380V	48-440VAC
	480V	48-530VAC
Load Current Range (47Hz~63Hz)	25A	0.1~25A
	40A	0.1~40A
	60A	0.1~60A
	80A	0.1~80A
Maximum Turn-on Time		1/2cycle+1ms
Maximum Turn-off Time		1/2cycle+1ms

**General Specifications**

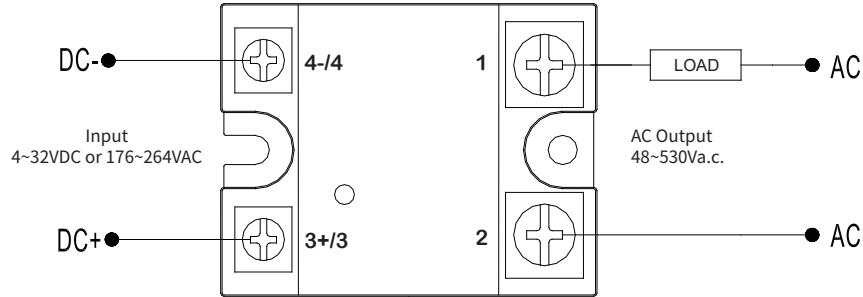
Output Specifications (Ta=25°C)		
Maximum 1 Cycle Surge Current (@10ms)	25A	250A
	40A	400A
	60A	500A
	80A	800A
Maximum I <sup>2</sup> t for Fusing (@10ms)	25A	312A2s
	40A	800A2s
	60A	1250A2s
	80A	3200A2s
Transient Overvoltage	KSIE380XXX-L Series	800Vpk
	KSIE480XXX-L Series	1200Vpk
Internal TVS Protection (Typical)	KSIE480XXX-LT Series	960V
Maximum Off-State Leakage Current@Rated Load Voltage		10mA
Maximum On-State Voltage Drop@Rated Current		1.7Vrms
Minimum Off-State dv/dt @Maximum Rated Voltage	25A	200V/μs
	40A、60A、80A	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)		100g

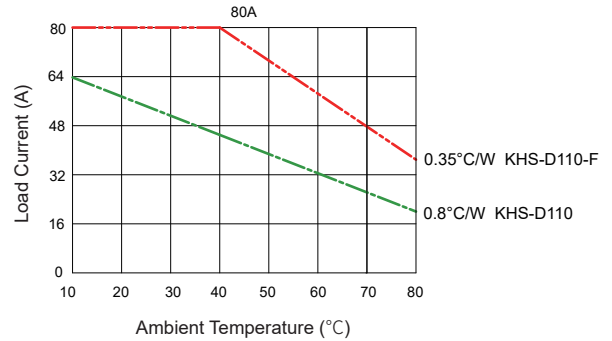
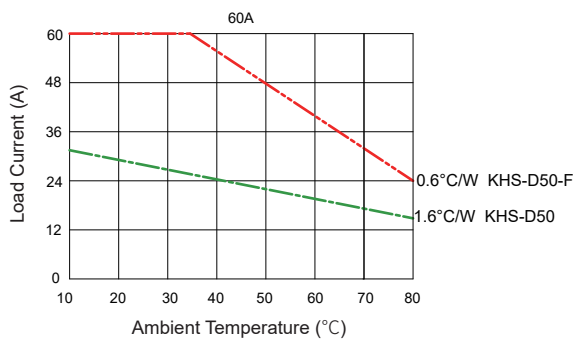
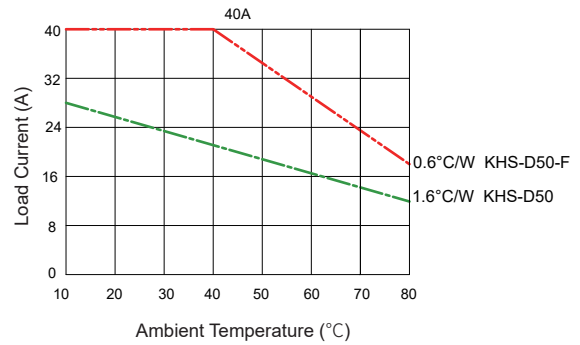
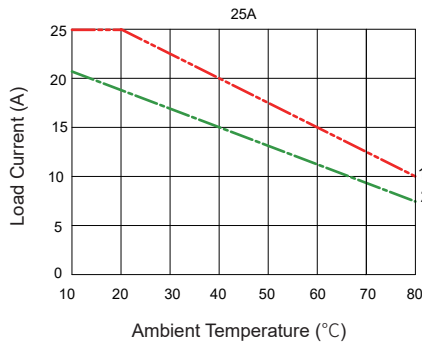
**Installation dimensions**



**Wiring Diagram**

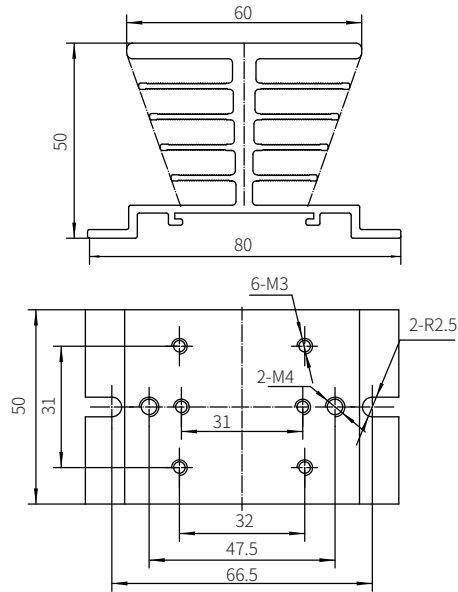


**Thermal Derating Curve**

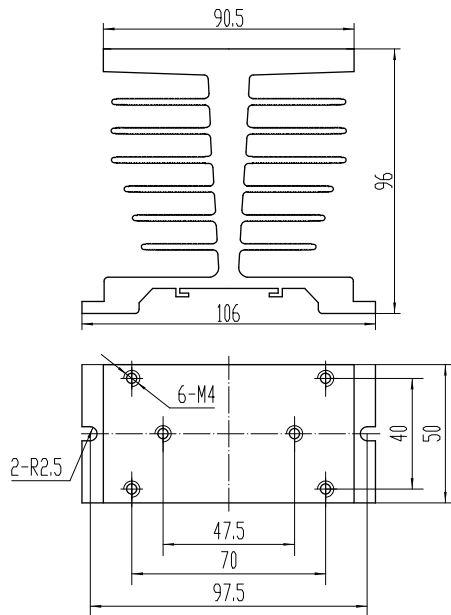


Note: The curve above shows the heatsink capability under the worst case (100% continuous operation) for a solid state relay. If your application involves intermittent operation, please contact us with your actual operating conditions (load current, on/off time, ambient temperature, etc.), and we will recommend the most suitable solution for you.

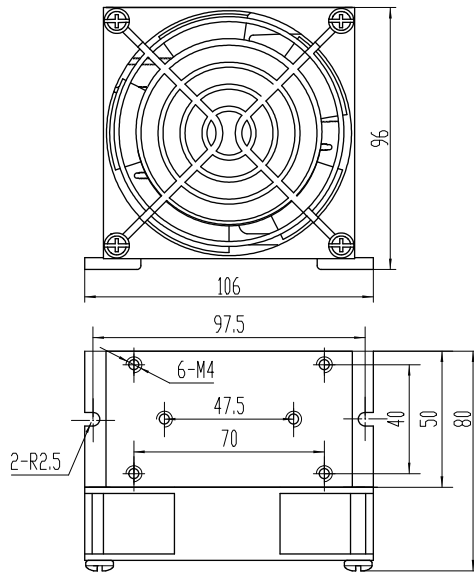
The above temperature curve is configured with radiator models as follows:



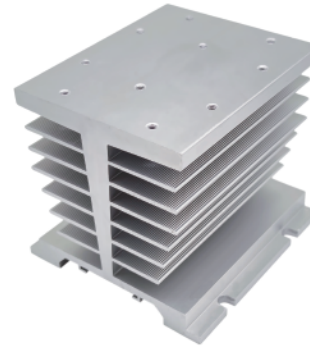
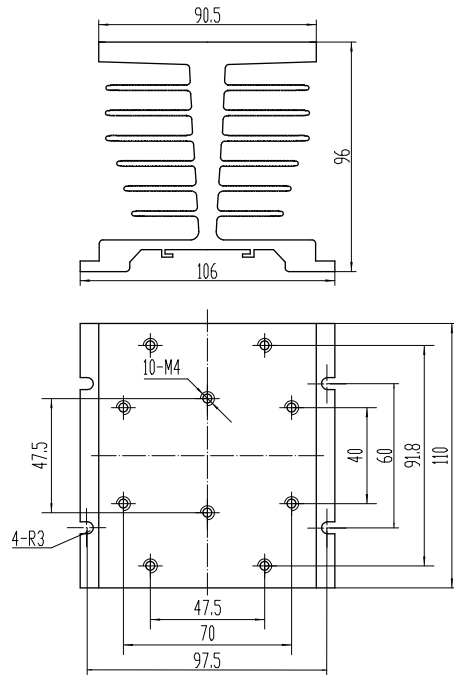
KHS-A50



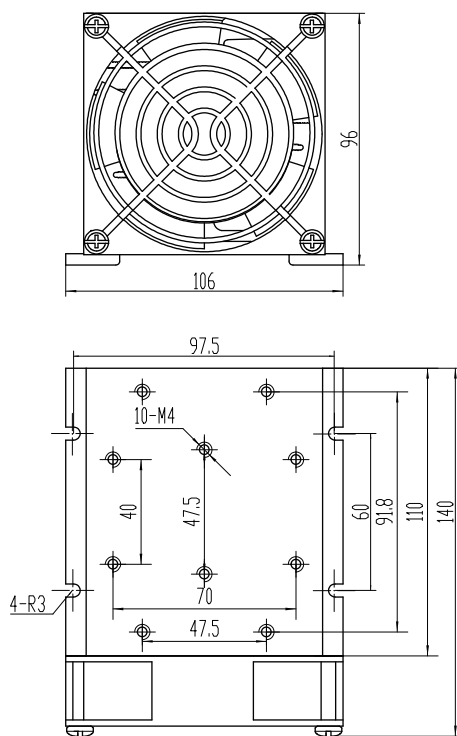
KHS-D50



KHS-D50-F



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 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.