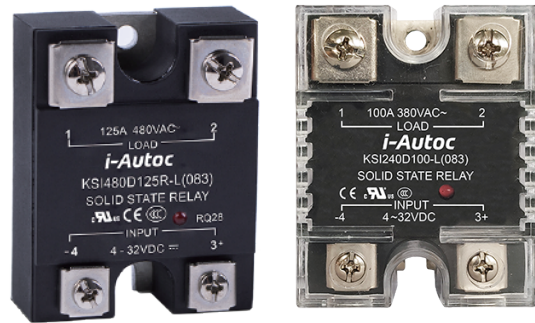


Product Description

- ◆ Zero-crossing or Random-on Switching
- ◆ Load current: 80A-125A
- ◆ SCR Output
- ◆ AC or DC Input Control
- ◆ Dielectric Strength: 4000Vrms
- ◆ Internal MOV/TVS Protection Circuit(Optional)
- ◆ LED Indicator
- ◆ Protective cover KPC-0A(Optional)



Note: (1) There is no TUV certification for KSIXXX(100, 125) XXX series products and products with suffix T (that is, products protected by TVS).

Ordering Information

<b>KSI</b>	<b>240</b>	<b>D</b>	<b>125</b>	<b>R</b>	<b>-L</b>	<b>M</b>	<b>(083)</b>	<b>+KPC-0A</b>
KSI Series	Load Voltage 240: 240VAC 480: 480VAC 600: 600VAC	D: DC Control A: AC Control	Load Current 80: 80Amp 100: 100Amp 125A: 125Amp	Switching Mode Blank: Zero Crossing R: Random-on	LED Indicator	M: MOV T: TVS (Optional)	Customized Code	(Optional)

Information	80A	100A	125A
D:4-32VDC	KSI240D80-L (083)	KSI240D100-L (083)	KSI240D125-L (083)
	KSI240D80R-L (083)	KSI240D100R-L (083)	KSI240D125R-L (083)
	KSI480D80-L (083)	KSI480D100-L (083)	KSI480D125-L (083)
	KSI480D80R-L (083)	KSI480D100R-L (083)	KSI480D125R-L (083)
	KSI600D80-L (083)	KSI600D100-L (083)	KSI600D125-L (083)
	KSI600D80R-L (083)	KSI600D100R-L (083)	KSI600D125R-L (083)
	KSI240D80-LT (083)	KSI240D100-LT (083)	KSI240D125-LT (083)
	KSI240D80R-LT (083)	KSI240D100R-LT (083)	KSI240D125R-LT (083)
	KSI480D80-LT (083)	KSI480D100-LT (083)	KSI480D125-LT (083)
	KSI480D80R-LT (083)	KSI480D100R-LT (083)	KSI480D125R-LT (083)
	KSI600D80-LT (083)	KSI600D100-LT (083)	KSI600D125-LT (083)
	KSI600D80R-LT (083)	KSI600D100R-LT (083)	KSI600D125R-LT (083)
	KSI240D80-LM (083)	KSI240D100-LM (083)	KSI240D125-LM (083)
	KSI240D80R-LM (083)	KSI240D100R-LM (083)	KSI240D125R-LM (083)
	KSI480D80-LM (083)	KSI480D100-LM (083)	KSI480D125-LM (083)
	KSI480D80R-LM (083)	KSI480D100R-LM (083)	KSI480D125R-LM (083)
A:90-280VAC	KSI240A80-L (083)	KSI240A100-L (083)	KSI240A125-L (083)
	KSI240A80R-L (083)	KSI240A100R-L (083)	KSI240A125R-L (083)
	KSI480A80-L (083)	KSI480A100-L (083)	KSI480A125-L (083)
	KSI480A80R-L (083)	KSI480A100R-L (083)	KSI480A125R-L (083)
	KSI600A80-L (083)	KSI600A100-L (083)	KSI600A125-L (083)
	KSI600A80R-L (083)	KSI600A100R-L (083)	KSI600A125R-L (083)
	KSI240A80-LT (083)	KSI240A100-LT (083)	KSI240A125-LT (083)
	KSI240A80R-LT (083)	KSI240A100R-LT (083)	KSI240A125R-LT (083)
	KSI480A80-LT (083)	KSI480A100-LT (083)	KSI480A125-LT (083)
	KSI480A80R-LT (083)	KSI480A100R-LT (083)	KSI480A125R-LT (083)
	KSI600A80-LT (083)	KSI600A100-LT (083)	KSI600A125-LT (083)
	KSI600A80R-LT (083)	KSI600A100R-LT (083)	KSI600A125R-LT (083)

**Ordering Information**

描述	80A	100A	125A
A:90-280VAC	KSI600A80R-LT (083)	KSI600A100R-LT (083)	KSI600A125R-LT (083)
	KSI240A80-LM (083)	KSI240A100-LM (083)	KSI240A125-LM (083)
	KSI240A80R-LM (083)	KSI240A100R-LM (083)	KSI240A125R-LM (083)
	KSI480A80-LM (083)	KSI480A100-LM (083)	KSI480A125-LM (083)
	KSI480A80R-LM (083)	KSI480A100R-LM (083)	KSI480A125R-LM (083)
	KSI600A80-LM (083)	KSI600A100-LM (083)	KSI600A125-LM (083)
	KSI600A80R-LM (083)	KSI600A100R-LM (083)	KSI600A125R-LM (083)

**Technical parameters**

Input Specifications (Ta=25°C)		
Control Voltage Range	DC Control	4-32VDC <sup>(2)</sup>
	AC Control	90-280VAC
Must Turn-On Voltage	DC Control	4VDC
	AC Control	90VAC
Must Turn-off Voltage	DC Control	1VDC
	AC Control	10VAC
Maximum Input Current	DC Control	25mA(@32VDC)
	AC Control	25mA(@280VAC/50Hz)

Note: (2) KSI240Dxxx Series Control Voltage Range: 3-32VDC or 4-32VDC

Output Specifications (Ta=25°C)		
Load Voltage Range(47~63Hz)	240VAC	48-280VAC
	480VAC	48-530VAC
	600VAC	48-660VAC
Load Current Range	80A	0.1-80A
	100A	0.1-100A
	125A	0.1-125A
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	1/2cycle+1ms
	AC Control	40ms
Maximum Turn-off Time	DC Control	1/2cycle+1ms
	AC Control	40ms
Maximum Surge Current (@10ms)	80A	1000A
	100A	1250A
	125A	1500A
Maximum I <sup>2</sup> t for Fusing (@10ms)	80A	5000A <sup>2</sup> s
	100A	7812A <sup>2</sup> s
	125A	11250A <sup>2</sup> s
Transient Overvoltage	KSI240D/AXXX-L Series	600Vpk
	KSI480D/AXXX-L Series	1200Vpk
	KSI600D/AXXX-L Series	1600Vpk
Maximum Operating Voltage Allowed By Varistors	KSI240D/AXXX-LM Series	300VAC
	KSI480D/AXXX-LM Series	550VAC
	KSI600D/AXXX-LM Series	680VAC
MOV Varistor Voltage Range	KSI240D/AXXX-LT Series	480V
	KSI480D/AXXX-LT Series	960V
	KSI600D/AXXX-LT Series	1100V
TVS Breakdown Voltage Range	KSI240D/AXXX-LT Series	423-517V
	KSI480D/AXXX-LT Series	819-1001V
	KSI600D/AXXX-LT Series	990-1210V
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	500V/μs	

Technical parameters

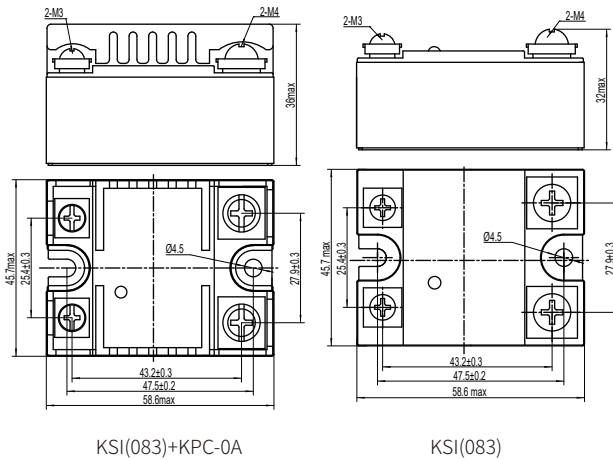
General Specifications (Ta=25°C)

Dielectric Strength (50Hz/60Hz)	Input/Output	4000Vrms
Minimum Insulation Resistance (@500VDC)	Input, output/Base	2500Vrms
Ambient Temperature Range		1000MΩ
Storage Temperature Range		-30°C ~ +80°C
Weight (Typical)		-30°C ~ +100°C
		180g

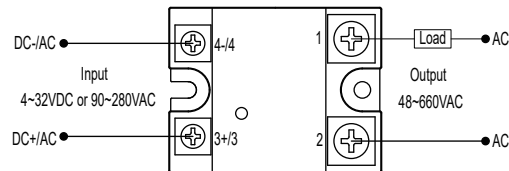
Applications

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

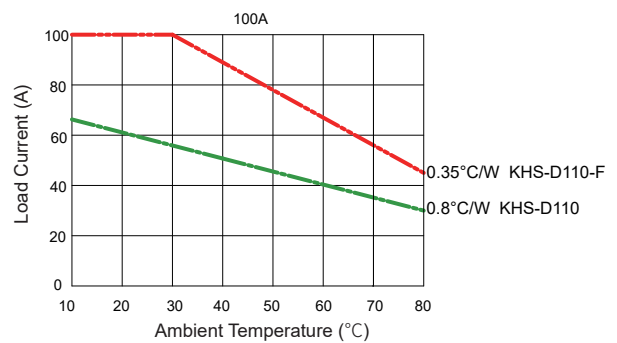
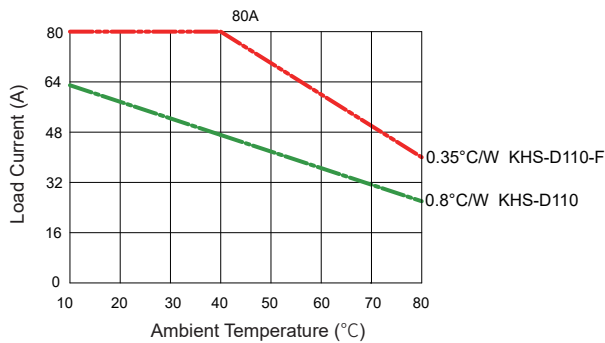
Outline Dimensions



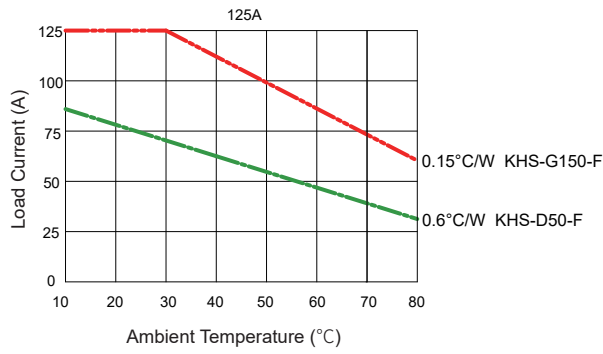
Wiring Diagram



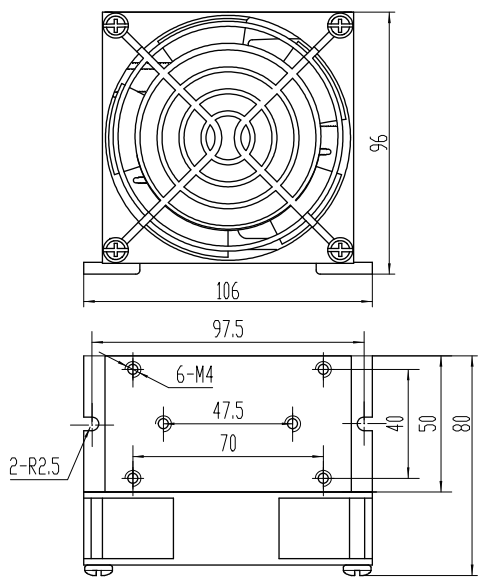
Thermal Derating Curve



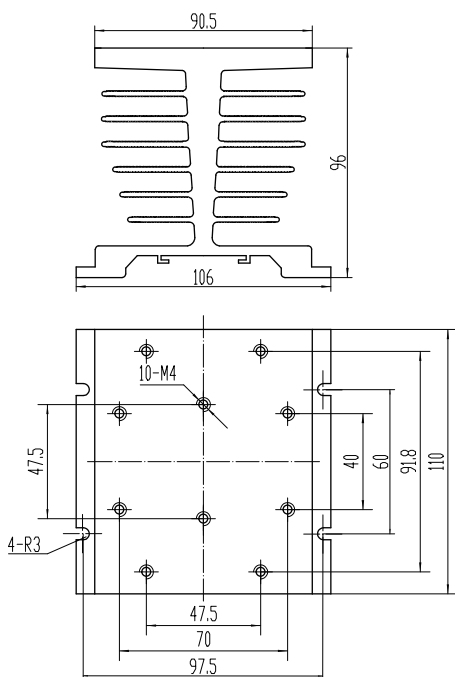
Thermal Derating Curve



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

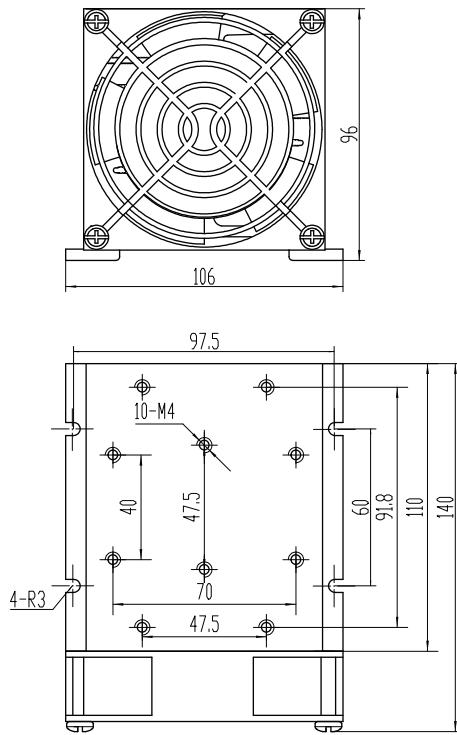


KHS-D50-F



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 Thermal Derating Curve for derating.