

General Specifications

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



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

KSI	240	D	25	R	-L	M	(083)
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

	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)

Product Description

	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)

General Specification

Input Specifications (Ta=25°C)		
Control Voltage Range	DC Control	4-32VDC
	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)

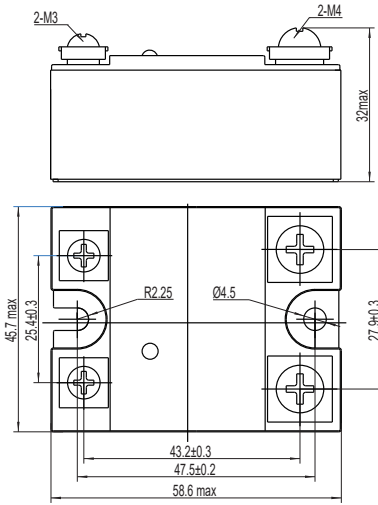
Output Specifications (Ta=25°C)		
Load Voltage Range(47~63Hz)	240VAC	48-280VAC
	480VAC	48-530VAC
	600VAC	48-660VAC
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	1/2cycle+1ms
	AC Control	40ms
Maximum Turn-off Time	DC Control	1/2cycle+1ms
	AC Control	40ms
Maximum Surge Current (@10ms)	80A	1000A
	100A	1250A
	125A	1500A
Maximum I ² t for Fusing (@10ms)	80A	5000A ² s
	100A	7812A ² s
	125A	11250A ² s
Transient Overvoltage	KSI240D/AXXX-L(083) Series	600Vpk
	KSI480D/AXXX-L(083) Series	1200Vpk
	KSI600D/AXXX-L(083) Series	1600Vpk
Maximum Operating Voltage Allowed By Varistors	KSI240D/AXXX-LM(083) Series	300VAC
	KSI480D/AXXX-LM(083) Series	550VAC
	KSI600D/AXXX-LM(083) Series	680VAC
TVS Protection Voltage(Typical)	KSI240D/AXXX-LT(083) Series	480V
	KSI480D/AXXX-LT(083) Series	960V
	KSI600D/AXXX-LT(083) Series	1100V
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	

General Specifications (Ta=25°C)		
Dielectric Strength (50Hz/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)	180g	

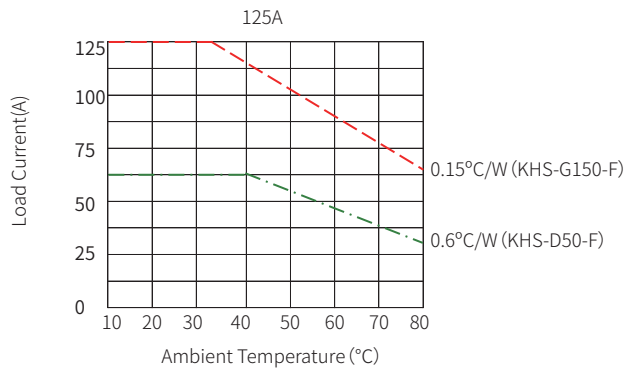
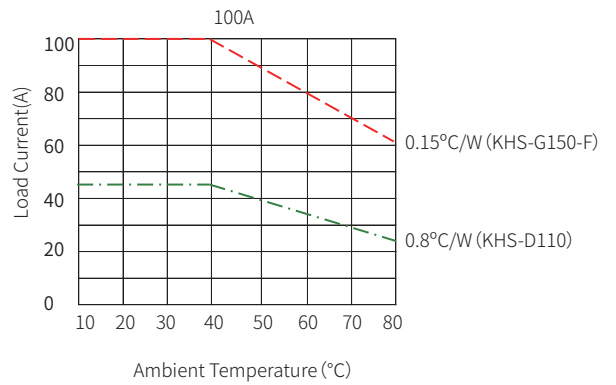
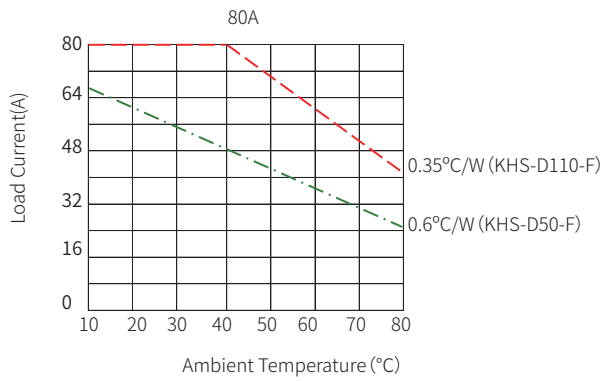
Applications

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

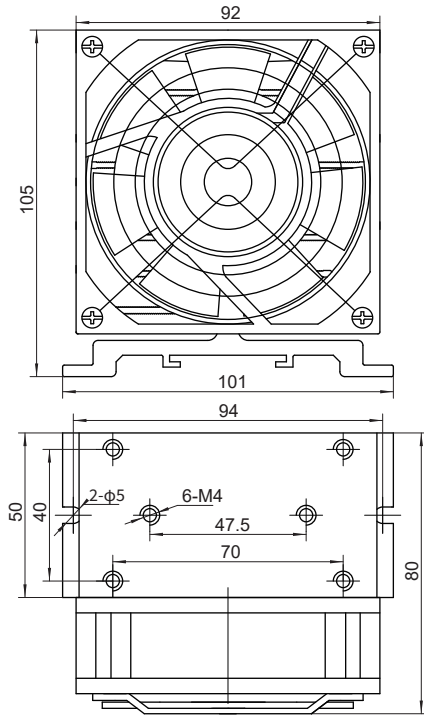
General Specifications



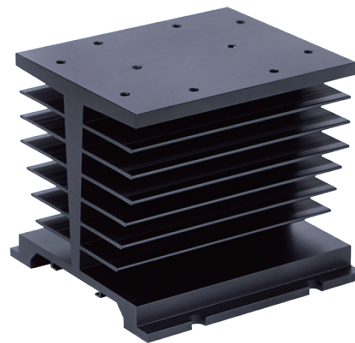
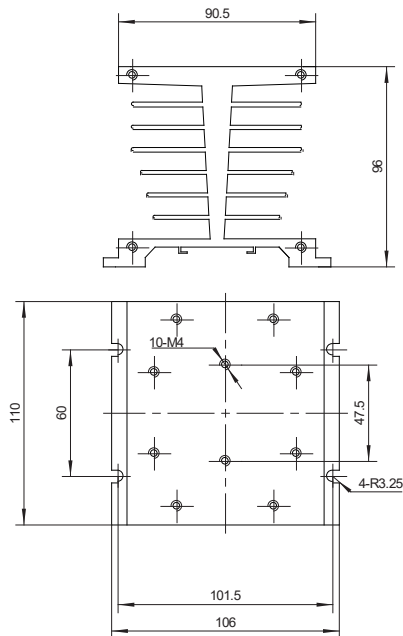
Thermal Derating Curve



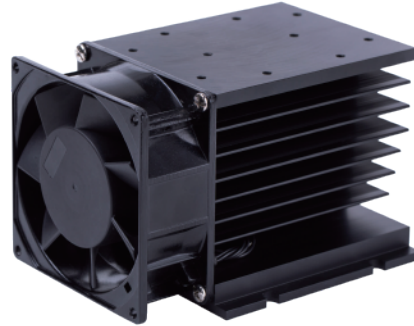
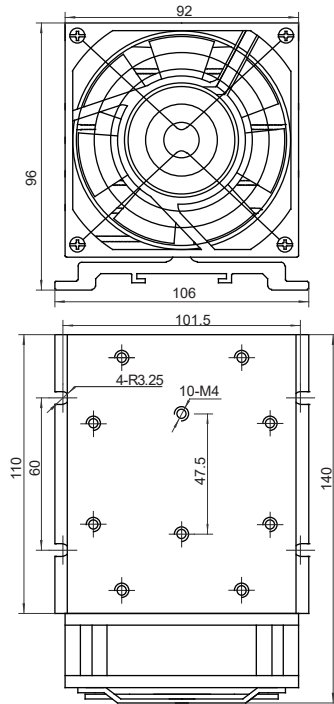
The above temperature curve is configured with radiator models as follows:



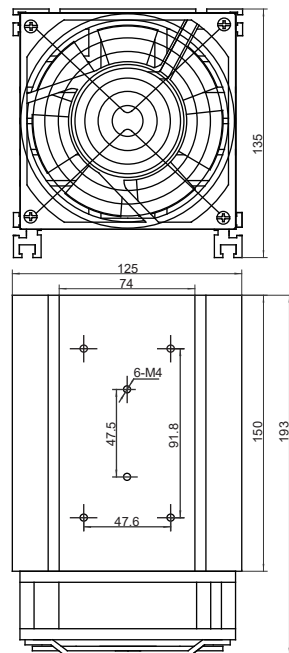
KHS-D50-F



KHS-D110



KHS-D110-F



KHS-G150-F

General Notes

1. The heat generated by the relay shall be distributed through the bottom plate, and it shall be ensured that the bottom plate of the relay is in close contact with the radiator and firmly installed, and the contact surface shall be added with heat conducting pads or coated with heat conducting silicone grease.
2. The terminal of relay should ensure the wiring is firm. Loose wiring will lead to abnormal heating of the product and damage the product. The recommended mounting torque of M3 terminal is (0.58 ~ 0.98) N·m, and that of M4 terminal is (0.98 ~ 1.37) N·m.
3. When the working environment temperature of the product is high, please refer to the temperature curve for derating.