

Product Description

- ◆ Zero-crossing or Random-on Switching
- ◆ TRIAC or SCR Output
- ◆ AC or DC Input Control
- ◆ Load current: 25A-60A@48-660VAC
- ◆ Dielectric Strength: 4000Vrms
- ◆ Internal MOV/TVS Protection Circuit(Optional)
- ◆ LED Indicator
- ◆ RoHS Compliant



Note:(1) Suffix T series products (TVS protection products) without TUV certification.

Ordering Information

KSI	240	D	25	R	-L	M	(XXX)
KSI Series	Load Voltage 240: 240VAC 480: 480VAC 600: 600VAC	D: DC Control A: AC Control	Load Current 25: 25Amp 40: 40Amp 60: 60Amp	Switching Mode Blank: Zero Crossing R: Random-on	LED Indicator	M: MOV T: TVS (Optional)	Blank: Standard 016: Quick Connection Other: Customized Code

Note:

- The feature number (016) series is the structure of fast connection terminal, the current optional range is 25A~40A, among which the products of KSI(240,380)xxx25xxx(016) series are TRIAC output, the products of KSI(480,600)xxx25xxx(016) series and KSI(480,600)xxx40xxx(016) series are SCR output.
- Conventional KSI series are bolt structure, and the current range is 25A~60A, among which KSI(240,380)xxx25xxx series products are TRIAC output, KSI(480,600)xxx25xxx series products and KSIxxx40xxx series products and KSIxxx60xxx series products are SCR output.

KSI Series

Information	25A	40A	60A
D:4-32VDC	KSI240D25-L	KSI240D40-L	KSI240D60-L
	KSI240D25R-L	KSI240D40R-L	KSI240D60R-L
	KSI480D25-L	KSI480D40-L	KSI480D60-L
	KSI480D25R-L	KSI480D40R-L	KSI480D60R-L
	KSI600D25-L	KSI600D40-L	KSI600D60-L
	KSI600D25R-L	KSI600D40R-L	KSI600D60R-L
	KSI240D25-LT	KSI240D40-LT	KSI240D60-LT
	KSI240D25R-LT	KSI240D40R-LT	KSI240D60R-LT
	KSI480D25-LT	KSI480D40-LT	KSI480D60-LT
	KSI480D25R-LT	KSI480D40R-LT	KSI480D60R-LT
	KSI600D25-LT	KSI600D40-LT	KSI600D60-LT
	KSI600D25R-LT	KSI600D40R-LT	KSI600D60R-LT
	KSI240D25-LM	KSI240D40-LM	KSI240D60-LM
	KSI240D25R-LM	KSI240D40R-LM	KSI240D60R-LM
	KSI480D25-LM	KSI480D40-LM	KSI480D60-LM
	KSI480D25R-LM	KSI480D40R-LM	KSI480D60R-LM
	KSI600D25-LM	KSI600D40-LM	KSI600D60-LM
	KSI600D25R-LM	KSI600D40R-LM	KSI600D60R-LM

General Specifications

Information	25A	40A	60A
A:90-280VAC	KSI240A25-L	KSI240A40-L	KSI240A60-L
	KSI240A25R-L	KSI240A40R-L	KSI240A60R-L
	KSI480A25-L	KSI480A40-L	KSI480A60-L
	KSI480A25R-L	KSI480A40R-L	KSI480A60R-L
	KSI600A25-L	KSI600A40-L	KSI600A60-L
	KSI600A25R-L	KSI600A40R-L	KSI600A60R-L
	KSI240A25-LT	KSI240A40-LT	KSI240A60-LT
	KSI240A25R-LT	KSI240A40R-LT	KSI240A60R-LT
	KSI480A25-LT	KSI480A40-LT	KSI480A60-LT
	KSI480A25R-LT	KSI480A40R-LT	KSI480A60R-LT
	KSI600A25-LT	KSI600A40-LT	KSI600A60-LT
	KSI600A25R-LT	KSI600A40R-LT	KSI600A60R-LT
	KSI240A25-LM	KSI240A40-LM	KSI240A60-LM
	KSI240A25R-LM	KSI240A40R-LM	KSI240A60R-LM
	KSI480A25-LM	KSI480A40-LM	KSI480A60-LM
	KSI480A25R-LM	KSI480A40R-LM	KSI480A60R-LM
	KSI600A25-LM	KSI600A40-LM	KSI600A60-LM
	KSI600A25R-LM	KSI600A40R-LM	KSI600A60R-LM

KSI (016) Series

Information	25A	40A
D:4-32VDC	KSI240D25-L (016)	KSI240D40-L (016)
	KSI240D25R-L (016)	KSI240D40R-L (016)
	KSI480D25-L (016)	KSI480D40-L (016)
	KSI480D25R-L (016)	KSI480D40R-L (016)
	KSI600D25-L (016)	KSI600D40-L (016)
	KSI600D25R-L (016)	KSI600D40R-L (016)
	KSI240D25-LT (016)	KSI240D40-LT (016)
	KSI240D25R-LT (016)	KSI240D40R-LT (016)
	KSI480D25-LT (016)	KSI480D40-LT (016)
	KSI480D25R-LT (016)	KSI480D40R-LT (016)
	KSI600D25-LT (016)	KSI600D40-LT (016)
	KSI600D25R-LT (016)	KSI600D40R-LT (016)
	KSI240D25-LM (016)	KSI240D40-LM (016)
	KSI240D25R-LM (016)	KSI240D40R-LM (016)
	KSI480D25-LM (016)	KSI480D40-LM (016)
	KSI480D25R-LM (016)	KSI480D40R-LM (016)
	KSI600D25-LM (016)	KSI600D40-LM (016)
	KSI600D25R-LM (016)	KSI600D40R-LM (016)
A:90-280VAC	KSI240A25-L (016)	KSI240A40-L (016)
	KSI240A25R-L (016)	KSI240A40R-L (016)
	KSI480A25-L (016)	KSI480A40-L (016)
	KSI480A25R-L (016)	KSI480A40R-L (016)
	KSI600A25-L (016)	KSI600A40-L (016)
	KSI600A25R-L (016)	KSI600A40R-L (016)
	KSI240A25-LT (016)	KSI240A40-LT (016)
	KSI240A25R-LT (016)	KSI240A40R-LT (016)
	KSI480A25-LT (016)	KSI480A40-LT (016)
	KSI480A25R-LT (016)	KSI480A40R-LT (016)
	KSI600A25-LT (016)	KSI600A40-LT (016)
	KSI600A25R-LT (016)	KSI600A40R-LT (016)
	KSI240A25-LM (016)	KSI240A40-LM (016)
	KSI240A25R-LM (016)	KSI240A40R-LM (016)
	KSI480A25-LM (016)	KSI480A40-LM (016)
	KSI480A25R-LM (016)	KSI480A40R-LM (016)
	KSI600A25-LM (016)	KSI600A40-LM (016)
	KSI600A25R-LM (016)	KSI600A40R-LM (016)

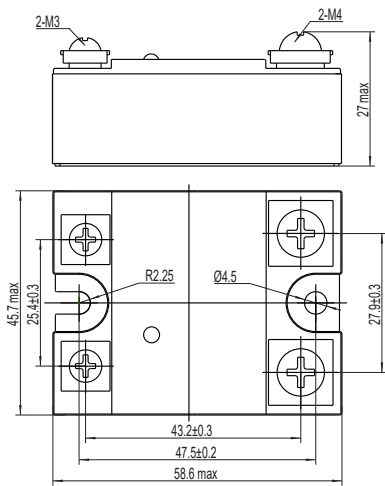
Outline Dimensions/Wiring Diagram

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)

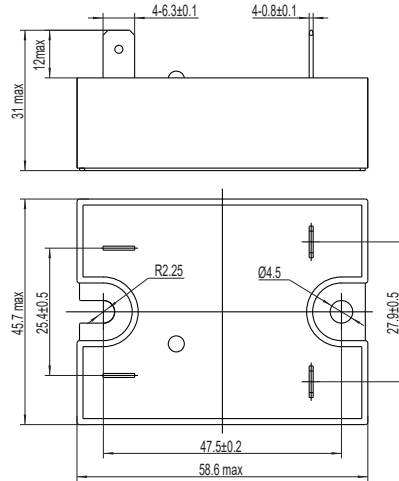
Output Specifications (Ta=25°C)		
Load Voltage Range(47~63Hz)	240VAC	48-280VAC
	480VAC	48-530VAC
	600VAC	48-660VAC
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	1/2cycle+1ms
	AC Control	40ms
Maximum Turn-off Time	DC Control	1/2cycle+1ms
	AC Control	40ms
Maximum Surge Current (@10ms) (@10ms)	25A	250A
	40A	500A
	60A	700A
Maximum I ² t for Fusing (@10ms)	25A	312A ² s
	40A	1250A ² s
	60A	2450A ² s
Transient Overvoltage	KSI240D/AXXX-LXXX Series	600Vpk
	KSI480D/AXXX-LXXX Series	1200Vpk
	KSI600D/AXXX-LXXX Series	1600Vpk
Maximum Operating Voltage Allowed By Varistors	KSI240D/AXXX-LMXXX Series	300VAC
	KSI480D/AXXX-LMXXX Series	550VAC
	KSI600D/AXXX-LMXXX Series	680VAC
TVS Protection Voltage(Typical)	KSI240D/AXXX-LTXXX Series	480V
	KSI480D/AXXX-LTXXX Series	960V
	KSI600D/AXXX-LTXXX 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	TRIAC Output	200V/μs
	SCR Output	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)	Standard Version	96g
	Suffix with (016)	100g

Thermal Derating Curve

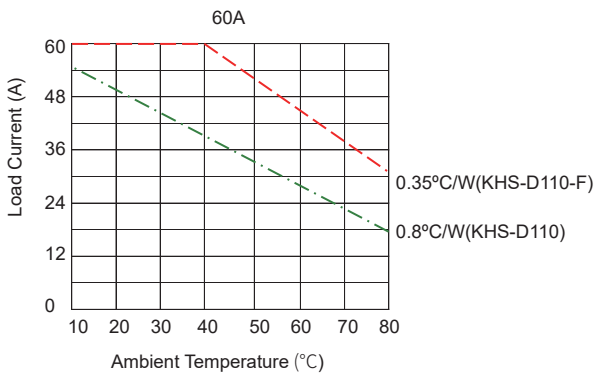
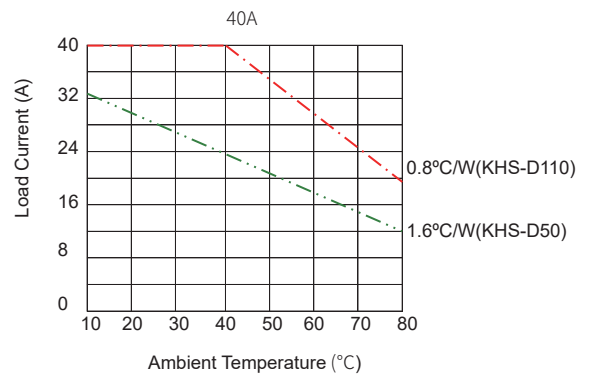
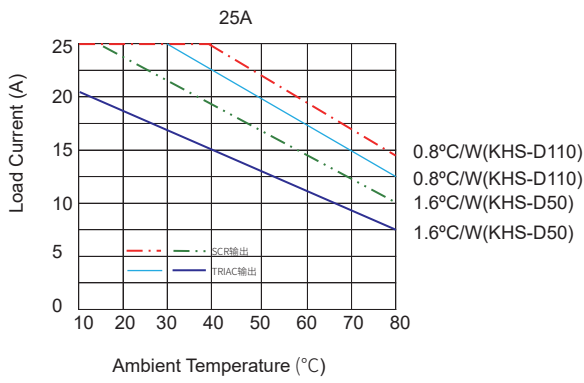


Standard Version

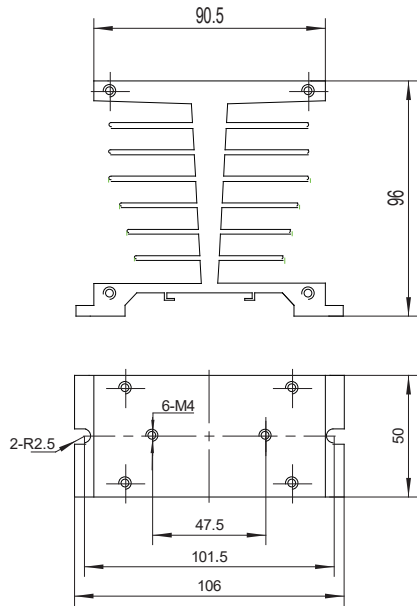


KSI (016) Outline Dimensions

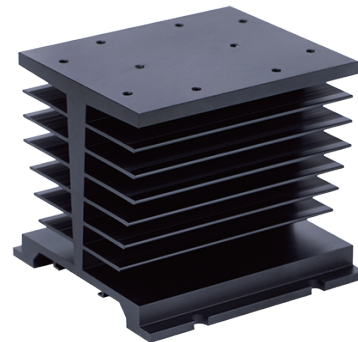
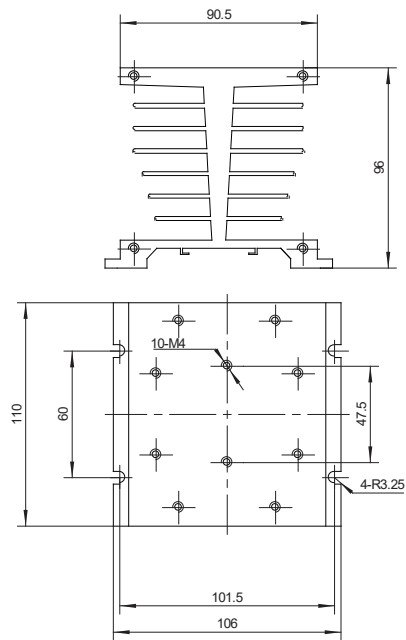
Thermal Derating Curve



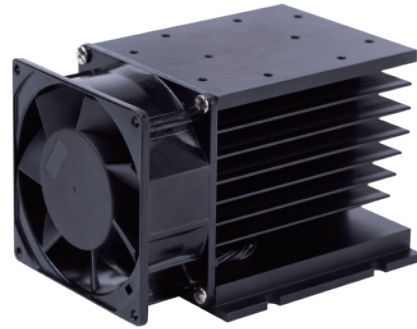
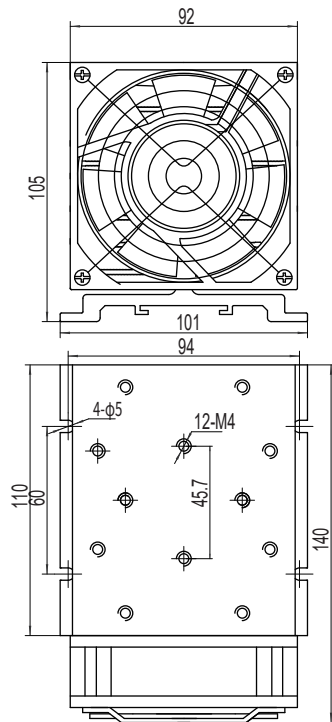
The above temperature curve is configured with radiator models as follows:



KHS-1D



KHS-3A



KHS-3AFF

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, M4 terminal. The recommended mounting torque 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.