

Product Description

- ◆ Zero-crossing or Random-on Switching
- ◆ Load current: 25A-60A@48-660VAC
- ◆ TRIAC or SCR Output
- ◆ AC or DC Input Control
- ◆ Dielectric Strength: 4000Vrms
- ◆ LED Indicator
- ◆ Internal MOV/TVS Protection(Optional)
- ◆ Protective cover KPC-0A (Optional)



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

Ordering Information

KSI	240	D	25	R	-L	M	(XXX)	+KPC-0A
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	Optional

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

Ordering Information

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)

Technical parameters

Input Specifications (Ta=25°C)

Control Voltage Range	DC Control	4-32VDC ⁽²⁾
	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	25A	0.1-25A
	40A	0.1-40A
	60A	0.1-60A
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)	25A	250A
	40A	500A
	60A	700A
Maximum I²t for Fusing (@10ms)	25A	312A²s
	40A	1250A²s
	60A	2450A²s
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
MOV Varistor Voltage Range	KSI240D/AXXX-LTXXX Series	423~517V
	KSI480D/AXXX-LTXXX Series	819~1001V
	KSI600D/AXXX-LTXXX Series	990~1210V
TVS Breakdown Voltage Range	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

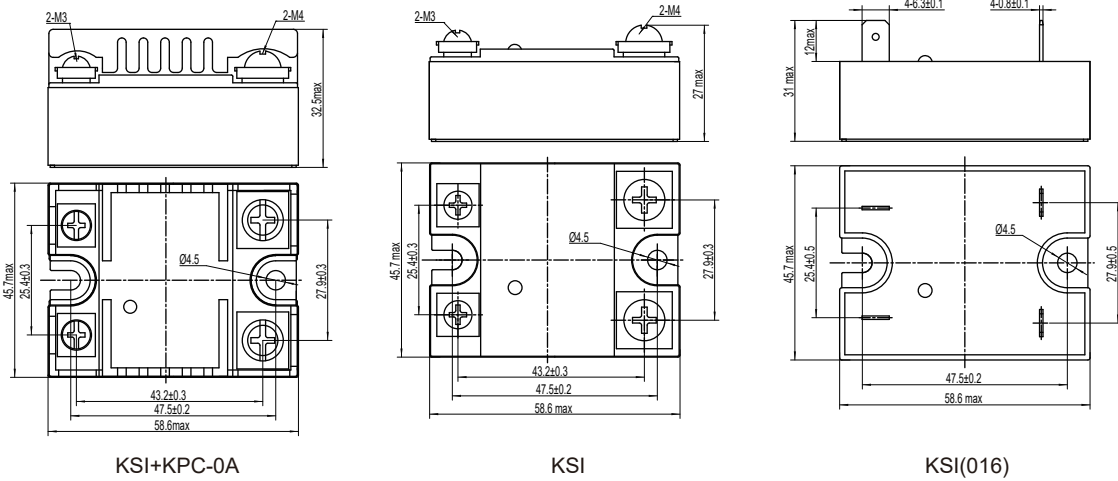
General Specifications (Ta=25°C)

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

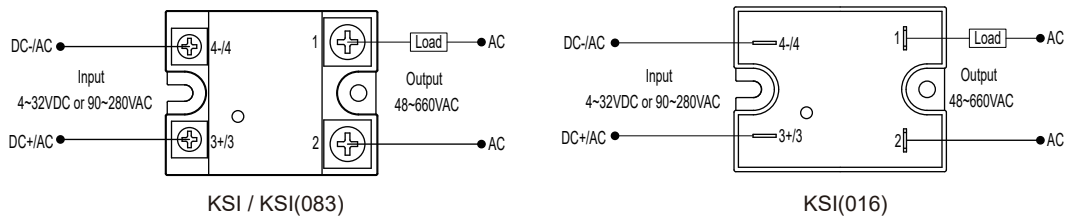
Application

Suitable for temperature chamber, oiler, air conditioning, lighting, fountain controller and other occasions.

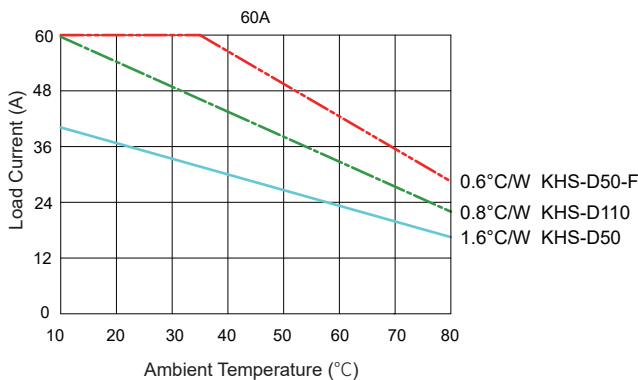
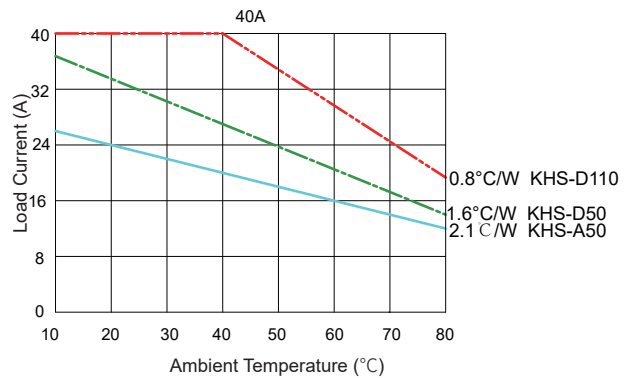
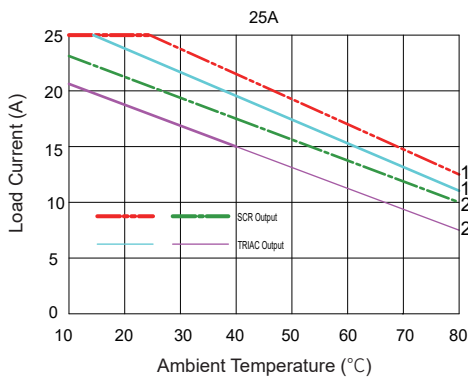
Installation



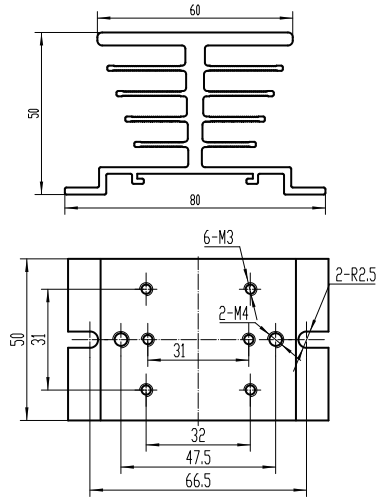
Wiring



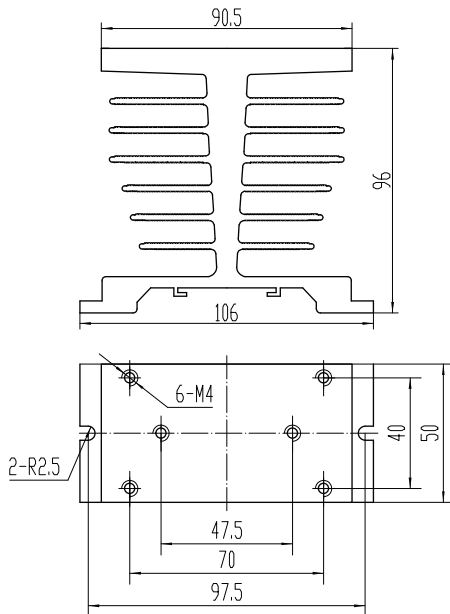
Thermal Derating Curve



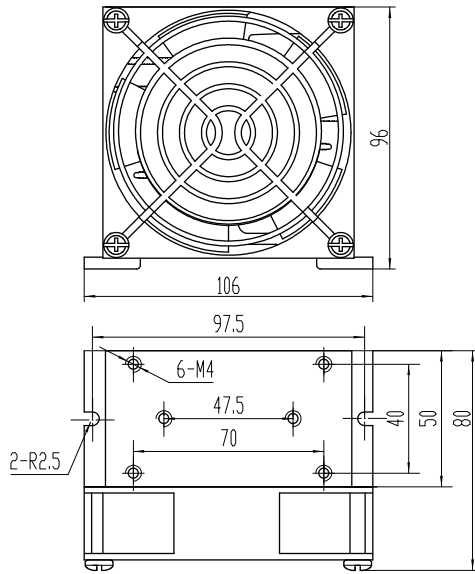
The above temperature curve is configured with radiator models as follows:



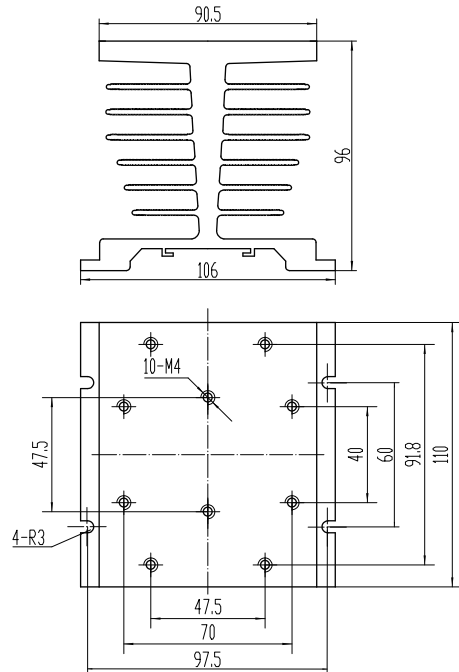
KHS-A50



KHS-D50



KHS-D50-F



KHS-D110

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 (0.58~0.98) N·m, output (0.98~1.37) N·m.
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.

Certification Standards

Certification	Test Standard
UL	UL508
	C22.2 No. 14-13
CCC	GB/T14048.5-2017
CQC	GB/T14048.5-2017
TUV	EN 62314:2006