

**Product Description**

- ◆ Zero Cross or Random-on Switching
- ◆ Rated Current: 25A
- ◆ Rated Voltage: 240VAC, 600VAC
- ◆ Input Range: 3-32VDC or 4-32VDC
- ◆ SCR output
- ◆ Internal RC Protection Circuit
- ◆ IP20 touch-safe housing
- ◆ Integrated Heatsink
- ◆ EN50022 35mm DIN Rail mount



**Ordering Information**

<b>KSK</b>	<b>240</b>	<b>D</b>	<b>25</b>	<b>R</b>	<b>-</b>	<b>M</b>	<b>(XXX)</b>	<b>-</b>	<b>K</b>
KSK Series	Load Voltage 240: 240VAC 600: 600VAC	Control Voltage D: DC control	Rated Current 25: 25Amp	Switching Mode None: Zero Crossing R: Random-on		Over Voltage Protection None: Without MOV or TVS M: With MOV T: With TVS	Customer Code		Heatsink K: KHS-K90 heatsink L: KHS-L90 heatsink

Note: The code for heatsink will not display on the product marking.

List of Models								
Rated Load Voltage	Blocking Voltage <sup>(1)</sup>	Control Voltage	Zero-on			RANDOM-ON		
			-	with MOV	with TVS	-	with MOV	with TVS
240:240VAC	800VPK	D: 3~32VDC	KSK240D25	KSK240D25-M	KSK240D25-T	KSK240D25R	KSK240D25R-M	KSK240D25R-T
600:600VAC	1200VPK	D: 4~32VDC	KSK600D25	-	KSK600D25-T	KSK600D25R	-	KSK600D25R-T

**Technical Specifications**

Input Specifications (Ta=25°C)		
Control Voltage Range	KSK240D...series	3~32VDC
	KSK600D...series	4~32VDC
Maximum Input Current <sup>(2)</sup>		20mA(@32VDC)
Must Turn-on Voltage	KSK240D...series	3VDC
	KSK600D...series	4VDC
Must Turn-off Voltage		1VDC
Maximum Reverse Voltage		-32VDC

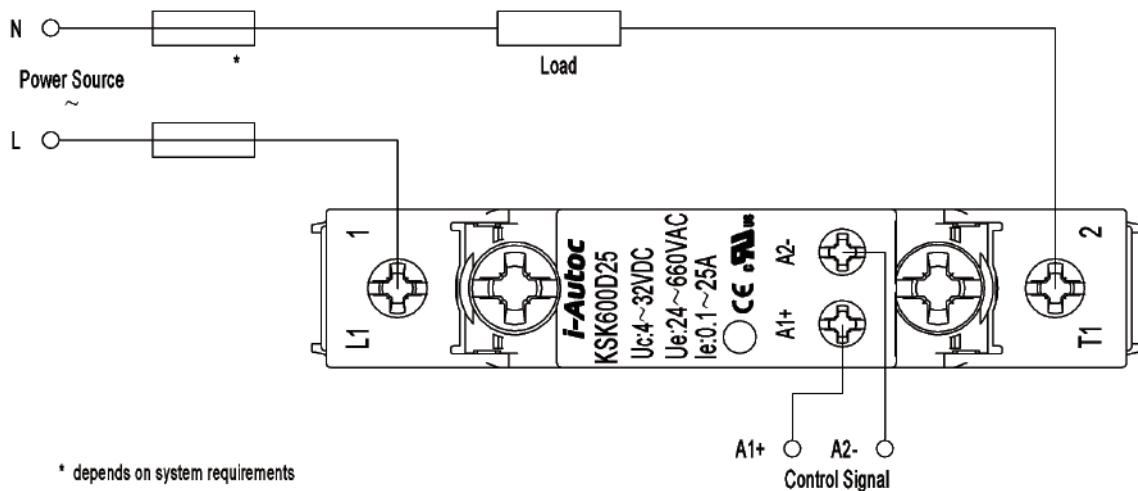
**Technical Specifications**

Output Specifications(Ta=25°C)		
Load Voltage Range (45~65Hz)	KSK240D... series	24~280VAC
	KSK600D... series	24~660VAC
Blocking Voltage <sup>(1)</sup>	KSK240D... series	800Vpk
	KSK600D... series	1200Vpk
Varistor Voltage of MOV	KSK240D...M... series	470V
Breakdown Voltage of Internal TVS	KSK240D...T... series	480V
	KSK600D...T... series	1100V
Max. Operational Current AC-51@25°C <sup>(3)</sup>	with KHS-K90 heatsink	30A
	with KHS-L90 heatsink	35A
Max. Operational Current AC-51@40°C <sup>(3)</sup>	with KHS-K90 heatsink	25A
	with KHS-L90 heatsink	30A
Min. Load Current		100mA
Surge Current (@10ms)		800Apk
Max. I <sup>2</sup> t For Fusing (@10ms)		3200A <sup>2</sup> s
Max. Turn-on Time	KSK...D25R...series	1ms
	KSK...D25...series	1/2cycle+1ms
Max. Turn-off Time		1/2cycle+1ms
Max. Off-State Leakage Current (@ Rated Voltage)		3mA
Max. On-state Voltage Drop (@ Rated Current)		1.5Vrms
Min. Off-state dv/dt		1000V/μs

General Specifications(Ta=25°C)		
Dielectric Strength(50/60Hz)	Input/Output	4000Vrms
	Input,Output/Heatsink	4000Vrms
Insulation Resistance(@500V)		1000MΩ
Ambient Operating Temperature Range		-30°C ~ +80°C
Ambient Storage Temperature Range		-30°C ~ +100°C
Weight(Typical)	with KHS-K90 heatsink	190g
	with KHS-L90 heatsink	260g

- (1) For products with built-in MOV or TVS, please refer to MOV and TVS protection voltage;
- (2) The input current value is related to the input voltage and ambient temperature. Please refer to "input current v.s. input voltage curve" for details;
- (3) The maximum load current is related to ambient temperature and product installation spacing. For details, please refer to "Temperature curve".

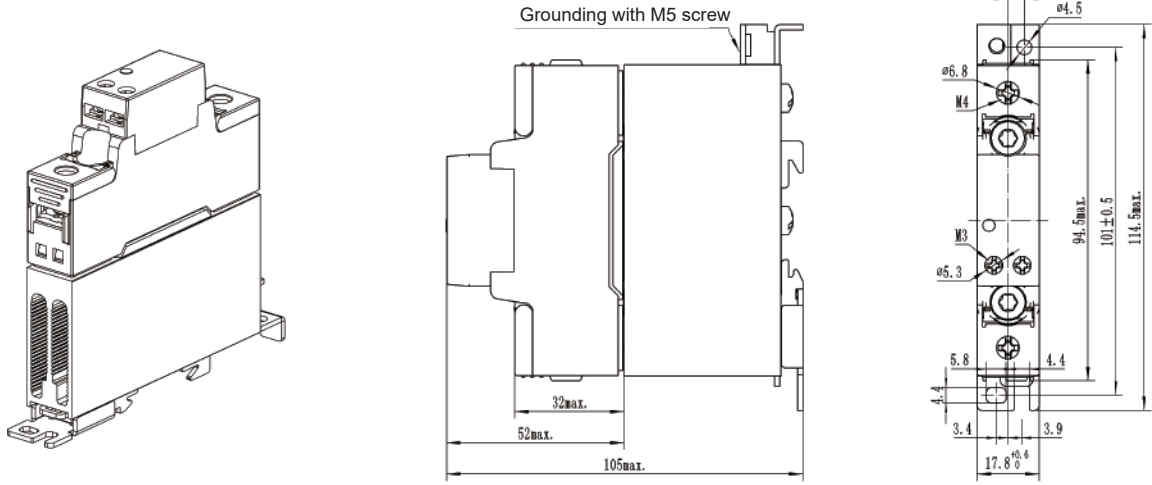
**Wiring Diagram**



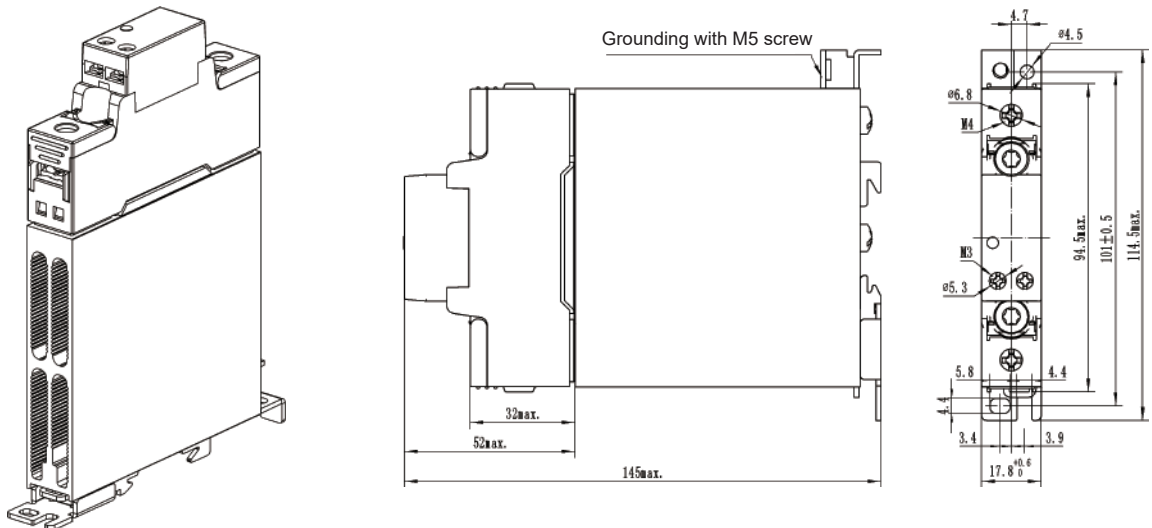
Installation

Unit:mm,Tolerances:±0.3mm

KSK...25...-K series

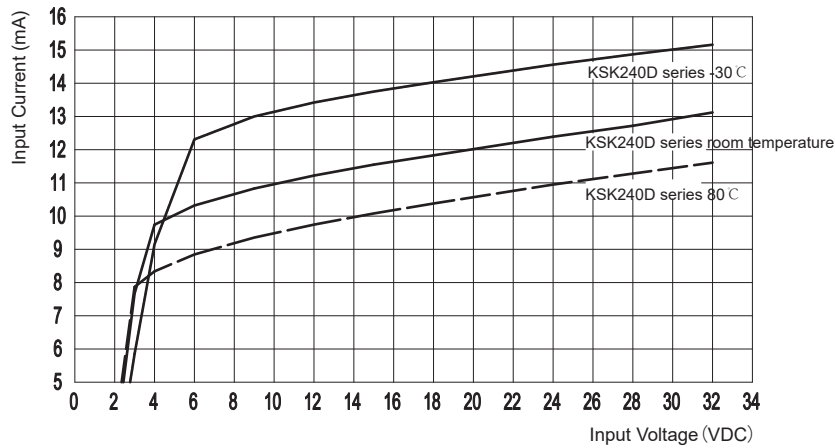


KSK...25...-L series



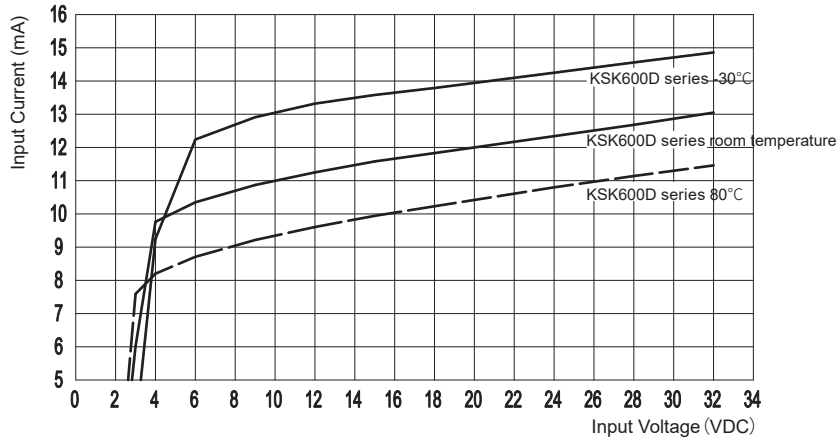
Input current vs. input voltage

KSK240D... series



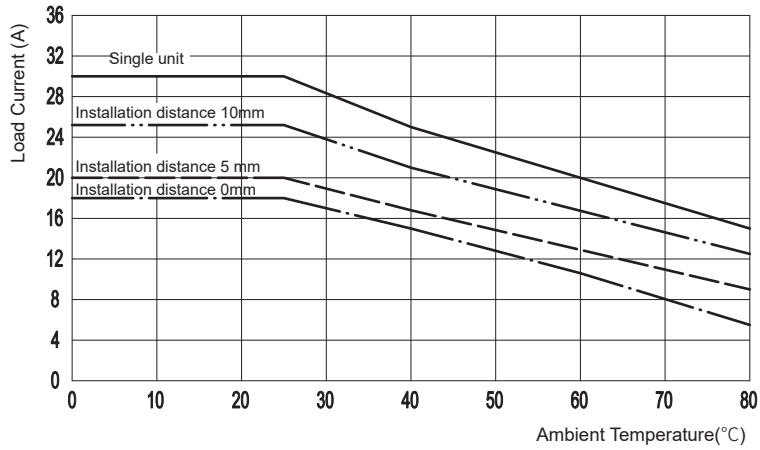
**Derating vs. spacing curves**

KSK600D... series

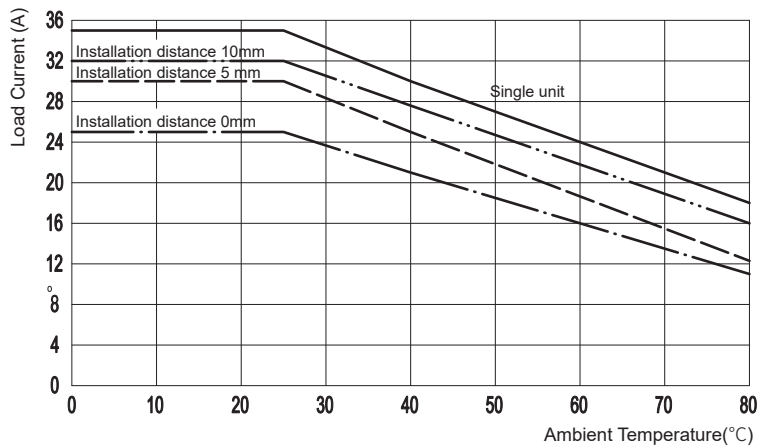


**Thermal Curve**

KSK...25...-K series



KSK...25...-L series



### Important Notice

1. SSR's carrying load capacity is related to the operation ambient temperature and heat dissipation condition, when there are many pieces SSR installed closely, please refer to the Thermal Derating Curve for derating.
2. When connection wiring to SSR, please ensure screws are torqued down properly. Recommended torque for input screw is (13-15)/(1.5-1.7) in-lb/Nm, output screw is (18-20)/(2.0-2.2) in-lb/Nm).

### ! 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.