

## **KSK Series AC Output**

#### Product Description

- Zero Cross or Random-on Switching
- Rated Current: 25A, 50A, 75A
- Rated Voltage: 240VAC, 600VAC
- Control Voltage Range: 3~32VDC, 4-32VDC

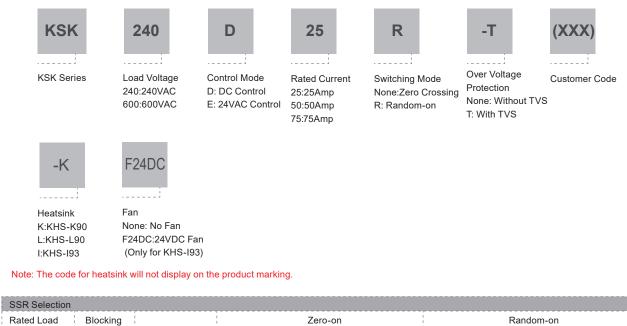
18~30VAC/15~30VDC

- SCR output
- Internal RC Protection Circuit
- IP20 Touch-safe Housing
- Integrated with Heatsink
- Available with Thermal Protector option
- EN50022 35mm DIN Rail Mount





### Ordering Information



Rated Load Voltage	Blocking Voltage	Control Voltage	Zero-on		Random-on	
			-	with TVS	-	with TVS
240:240VAC	800VPK	D: 3~32VDC	KSK240D#	KSK240D#-T	KSK240D#R	KSK240D#R-T
		E: 24VAC	KSK240E#	KSK240E#-T	KSK240E#R	KSK240E#R-T
600:600VAC	1200VPK	D: 4~32VDC	KSK600D#	KSK600D#-T	KSK600D#R	KSK600D#R-T
		E: 24VAC	KSK600E#	KSK600E#-T	KSK600E#R	KSK600E#R-T
		S, the blocking voltaged load current, whic	ge refers to SCR chip ar h is 25, 50 or 75.	nd optocoupler.		

## **Technical Specifications**

Input Specifications(Ta=25°C)					
	KSK240D series	3~32VDC			
Control Voltage Range	KSK600D series	4~32VDC			
	KSKE series	18~30VAC/15~30VDC			
Maximum Input Current	KSKD series	20mA(@32VDC)			
Maximum input Gurrent	KSKE series	20mA(@30VDC/30VAC)			

*Rev.4.0,07-01-2024* Specifications are subject to change without notice. For any questions, please contact our technical support. Please visit us at www.i-autoc.com Copyright © 2024 Xiamen Kudom Electronics Technology Co.,Ltd.





# Technical Specifications

Input Specifications(Ta=25°C)		
	KSK240D series	3VDC
Must Turn-on Voltage	KSK600D series	4VDC
	KSKE series	18VAC/15VDC
M	KSKD series	1VDC
Must Turn-off Voltage	KSKE series	5VAC/VDC
Maximum Reverse Voltage	KSKD series	-32VDC

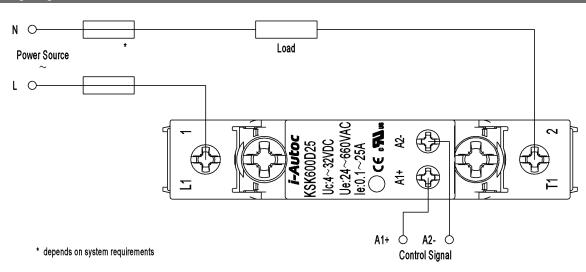
Output Specifications(Ta=25°C)			
	KSK240 series		24~280VAC
Load Voltage Range (45~65Hz)	KSK600 series		24~660VAC
	KSK240 series		800Vpk
Blocking Voltage	KSK600 series		1200Vpk
	KSK25series		25A
Rated Load Current	KSK50series		50A
	KSK75series		75A
Min. Load Current			100mA
	KSK25series		800Apk
Surge Current (@10ms)	KSK50series		850Apk
	KSK75series		900Apk
	KSK25series		3200A²s
Max. I <sup>2</sup> t For Fusing (@10ms)	KSK50series		3612A <sup>2</sup> s
	KSK75series		4050A <sup>2</sup> s
		Random-on	1ms
Max. Turn-on Time	KSKDseries	Zero Crossing	1/2cycle+1ms
	KSKEseries		30ms
Max. Turn-off Time	KSKDseries		1/2cycle+1ms
	KSKEseries		30ms
	KSK240T series		480V
Breakdown Voltage of Internal TVS	KSK600T series		1100V
Max. Off-State Leakage Current (@ Rated Voltage)			5mA
Max. On-state Voltage Drop (@ Rated Current)			1.5Vrms
Min. Off-state dv/dt			1000V/µs

#### General Specifications(Ta=25°C) Input/Output 4000Vrms Dielectric Strength(50/60Hz) 4000Vrms Input,Output/Heatsink Insulation Resistance(@500V) 1000MΩ Ambient Operating Temperature Range -30°C ~ +80°C Ambient Storage Temperature Range -30°C ~ +100°C KSK...25...-K series 190g KSK...25...-L series 260g KSK...50...-L series 260g KSK...50...-I series 420g Weight(Typical) KSK...75...-IF24DC series 470g 24VDC Fan Voltage





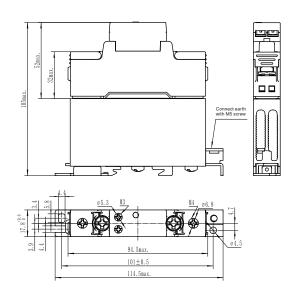
## Wiring Diagram

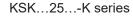


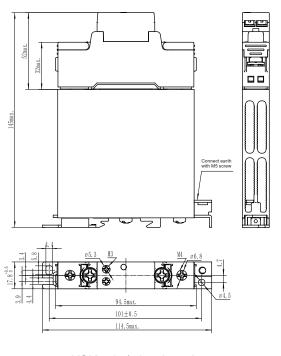
Note: For the KSK...D... series, the control signal is A1+&A2-, and for the KSK...E... series, the control signal is A1&A2.

**Outline Dimensions** 

Unit:mm,Tolerances:±0.3mm







KSK...25/50...-L series

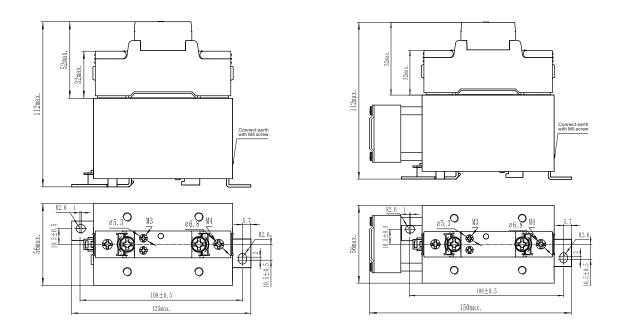


KSK...75...-IF24DC series

(45001)

(ISO 9001

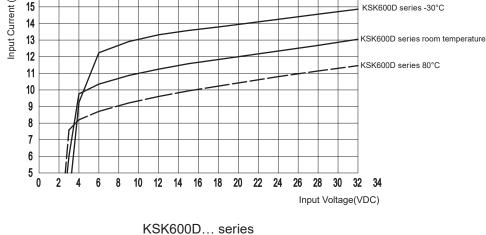
(14001

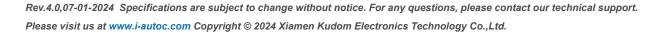


KSK...50...-I series

Input Current vs. Input Voltage

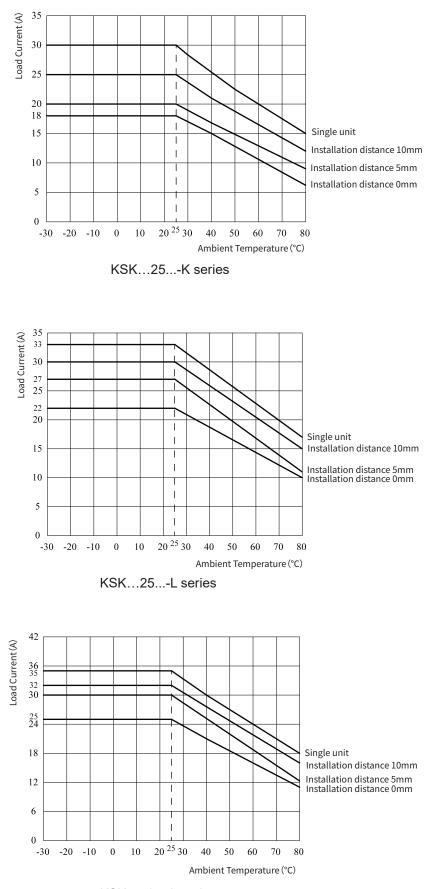
Input Current (mA) 16 KSK240D series -30°C 15 14 KSK240D series room temperature 13 12 KSK240D series 80°C 11 10 9 8 7 6 5 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 Input Voltage(VDC) KSK240D... series Input Current (mA) 16 15 KSK600D series -30°C 14 KSK600D series room temperature 13 12 KSK600D series 80°C 11 10 9 8

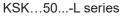






Thermal Curve

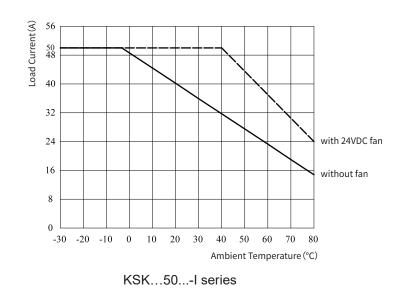


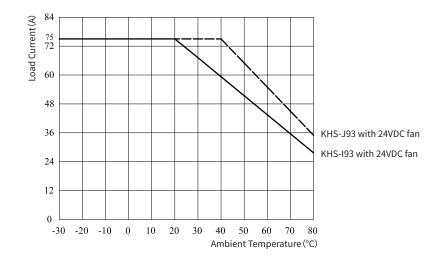


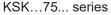
Rev.4.0,07-01-2024 Specifications are subject to change without notice. For any questions, please contact our technical support. Please visit us at www.i-autoc.com Copyright © 2024 Xiamen Kudom Electronics Technology Co.,Ltd.











## Important Notice

- 1. When the temperature of the product is high, please refer to the temperature curve.
- 2. The recommended mounting torque for the input M3 terminal, when using screw driver head of PH2, is (0.35–0.5)N·m or (3.1–4.4) in.-lbs.

For the output M4 terminal, when using screw driver heads of PZ2, the recommended torque is (0.98–1.37)N·m or (8.7–12.1)in.-lbs. 3. The relay terminal should ensure a reliable connection, poor connection may lead to the product overheating and damaging it.

4. The cabinet where the product is installed should be equipped with a fan, and the air duct should be optimized to effectively cool the solid-state relay product. Sufficient space should be reserved for product installation to prevent overheating and ensure proper ventilation.

5. If a thermal protector is required, please contact us for technical support.

## Warnings

- 1. The product may be hot during use, 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.

Rev.4.0,07-01-2024 Specifications are subject to change without notice. For any questions, please contact our technical support. Please visit us at www.i-autoc.com Copyright © 2024 Xiamen Kudom Electronics Technology Co.,Ltd.

