

## Product Description

- ◆ Zero-crossing or Random-on Switching
- ◆ Rated Load Current: 25A
- ◆ SCR Output
- ◆ Photoelectric Isolation
- ◆ Dielectric strength:  $\geq 4000V_{rms}$
- ◆ Built-in RC Snubber Circuit and TVS Optional
- ◆ RoHS Compliant



## Product Selection

KSH	240	D	25	R	N	-T	(XXX)
KSH Series	Load Voltage 240: 240VAC 480: 480VAC 600: 600VAC	DC Control	Load Current 25: 25Amp	Switching Mode Blank: Zero Crossing R: Random-on	None: With RC N: Without RC	None: Without TVS T: With TVS <sup>(1)</sup>	Customized Code

### Available Part Numbers

Load Current	Part Numbers			
240VAC	KSH240D25	KSH240D25N	KSH240D25-T	KSH240D25N-T
	KSH240D25R	KSH240D25RN	KSH240D25R-T	KSH240D25RN-T
480VAC	KSH480D25	KSH480D25N	KSH480D25-T	KSH480D25N-T
	KSH480D25R	KSH480D25RN	KSH480D25R-T	KSH480D25RN-T
600VAC	KSH600D25	KSH600D25N	KSH600D25-T	KSH600D25N-T
	KSH600D25R	KSH600D25RN	KSH600D25R-T	KSH600D25RN-T

Note:(1) TVS option is not available for 600V version.

## Technical Specifications

Input Specifications (Ta=25°C)		
Control Voltage Range	4-32VDC	
Must Turn-on Voltage	4VDC	
Must Turn-off Voltage	1VDC	
Maximum Input Current	Random-on	25mA@32VDC
	Zero Crossing	18mA@32VDC

Output Specifications (Ta=25°C)		
Load Voltage Range	240VAC	12-280VAC
	480VAC	24-530VAC
	600VAC	24-660VAC
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	10ms
Maximum Turn-off Time	10ms	
Maximum Surge Current (@10ms)	250A	

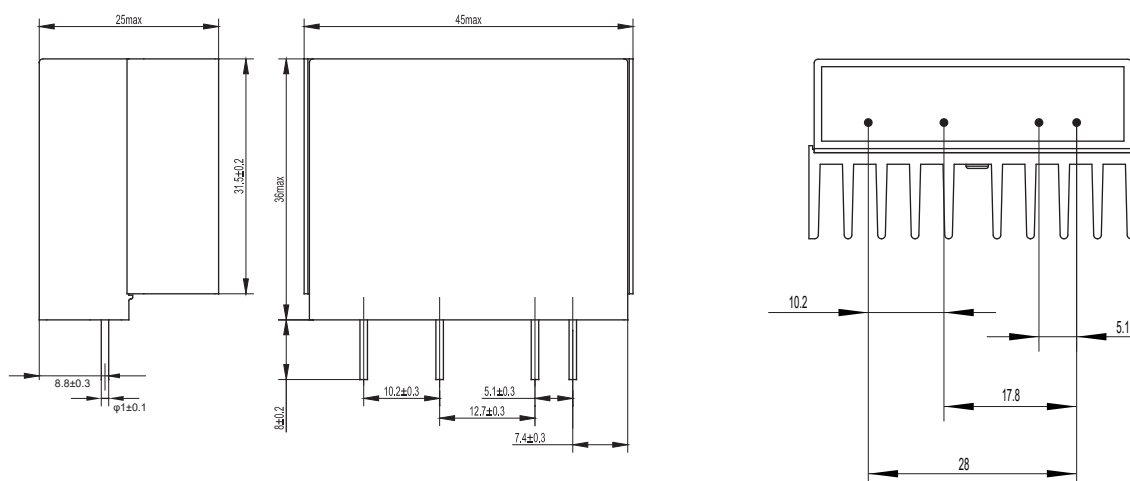
Output Specifications (Ta=25°C)		
Maximum I <sup>2</sup> t for Fusing (@10ms)		312A <sup>2</sup> s
Transient Overvoltage	240VAC	600Vpk
	480VAC/600VAC	1200Vpk
Maximum Off-State Leakage Current (@Rated Voltage)		5mA
Maximum On-State Voltage Drop (@Rated Current)		1.5Vrms
Minimum Off-State (dv/dt @Maximum Rated Voltage)		500 V/μs

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input,Output/Base	2500Vrms
Power Factor		>0.5
Ambient Temperature Range		-30°C ~ +80°C
Storage Temperature Range		-30°C ~ +100°C
Weight (Typical)		50g

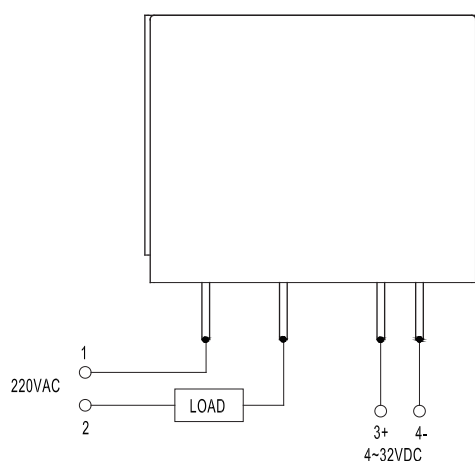
## Applications

Suitable for various applications, such as lighting control, medical equipments, elevator, etc.

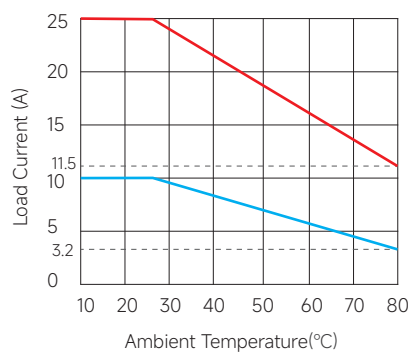
## Outline Dimensions



## Wiring Diagram



## Thermal Derating Curve



Note: the temperature of forced cool air cooling fin shall not exceed 85°C

## General Notes

- When ambient temperature is above 25°C or when solid state relays are installed together, the maximum load current decreases. See thermal derating curve.



## Warnings

- The product's side panels may be hot, allow the product to cool before touching.
- Disconnect all power before installing or working with this equipment.
- Verify all connections and replace all covers before turning on power.

## Certification Standards

Certification	Test Standard
UL	UL508
CE	IEC EN60947