

- ◆ Zero-crossing or Random-on Switching
- ◆ TRIAC or SCR Output
- ◆ AC or DC Input Control
- ◆ Load current: 10A-125A
- ◆ Dielectric Strength: 4000Vrms
- ◆ Internal MOV/TVS Protection Circuit
- ◆ LED Indicator
- ◆ RoHS Compliant



### Ordering Information

KSI	240	D	25	R	-L	M	(XXX)
KSI Series	Load Voltage 240: 48-280VAC 380: 48-440VAC 480: 48-530VAC 600: 48-660VAC	D: DC Control A: AC Control	Load Current 10: 10Amp 15: 15Amp 20: 20Amp 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp 100: 100Amp 125A: 125Amp	Switching Mode Blank: Zero Crossing R: Random-on	LED Indicator	M: MOV T: TVS (Optional)	Blank: Standard 016: Quick Connection 068: IP20 083: High Profile 80-125A

#### Note:

- ① TVS option is not available for load voltage @380VAC version.
- ② The load current with (016) version is only available from 10A ~ 40A.
- ③ The load current with (083) version is only available from 80A ~ 125A.
- ④ The load current with (068) version is available from 10A ~ 80A. For 80A version, 600VAC load voltage is not available.
- ⑤ The load current of standard version is available from 10A ~ 60A

### General Specifications

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
	AC Control	20mA

### General Specifications

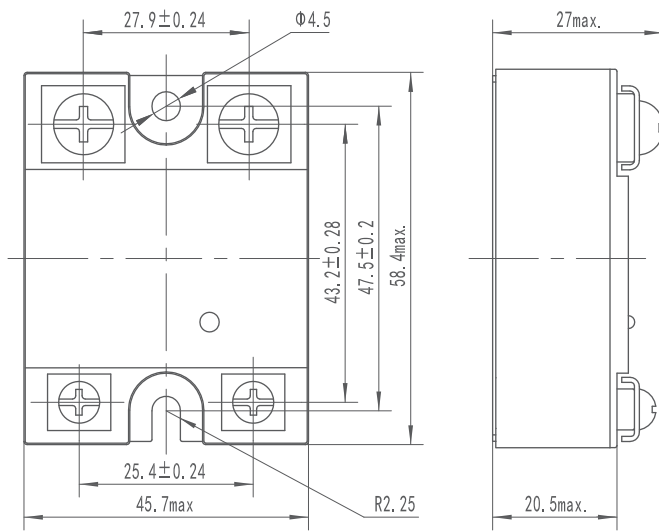
Output Specifications (Ta=25°C)		
Load Voltage Range	240VAC	48-280VAC
	380VAC	48-440VAC
	480VAC	48-530VAC
	600VAC	48-660VAC
Maximum Turn-On Time	Random-on	1ms
	Zero Crossing	10ms
	AC control	40ms
Maximum Turn-Off Time	DC Control	10ms
	AC control	40ms
Maximum Surge Current (@10ms)	10A	120A
	15A	160A
	20A	200A
	25A	250A
	40A	500A
	60A	700A
	80A	1000A
	100A	1250A
Maximum I <sup>2</sup> t for Fusing (@10ms)	10A	72A <sup>2</sup> s
	15A	128A <sup>2</sup> s
	20A	200A <sup>2</sup> s
	25A	312A <sup>2</sup> s
	40A	1250A <sup>2</sup> s
	60A	2450A <sup>2</sup> s
	80A	5000A <sup>2</sup> s
	100A	7812A <sup>2</sup> s
Transient Overvoltage	240VAC	600Vpk
	380VAC	800Vpk
	480VAC	1200Vpk
	600VAC	1600Vpk
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
	Suffix with (083)	180g
	Suffix with (068)	113g

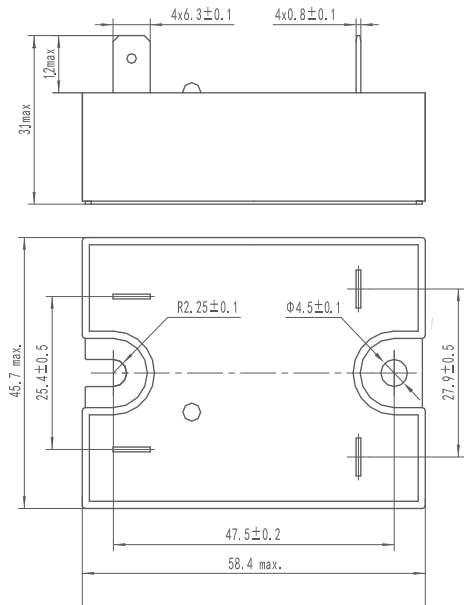
### Applications

Temperature Chamber, Plastics Machinery, Food Processing Machinery, Incubator, Oiling machines, HVAC, Lighting, Fountain Controller and etc.

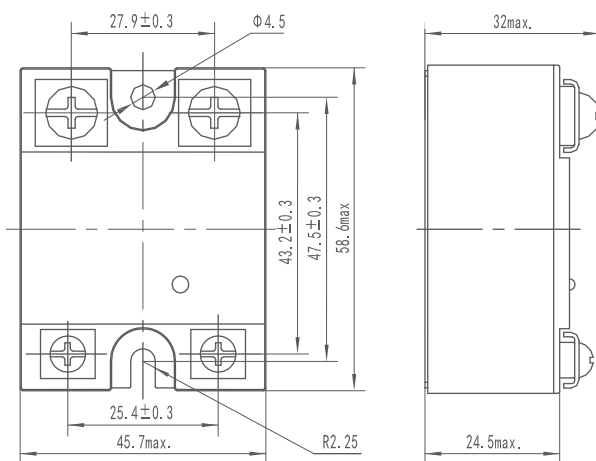
### Outline Dimensions/Wiring Diagram



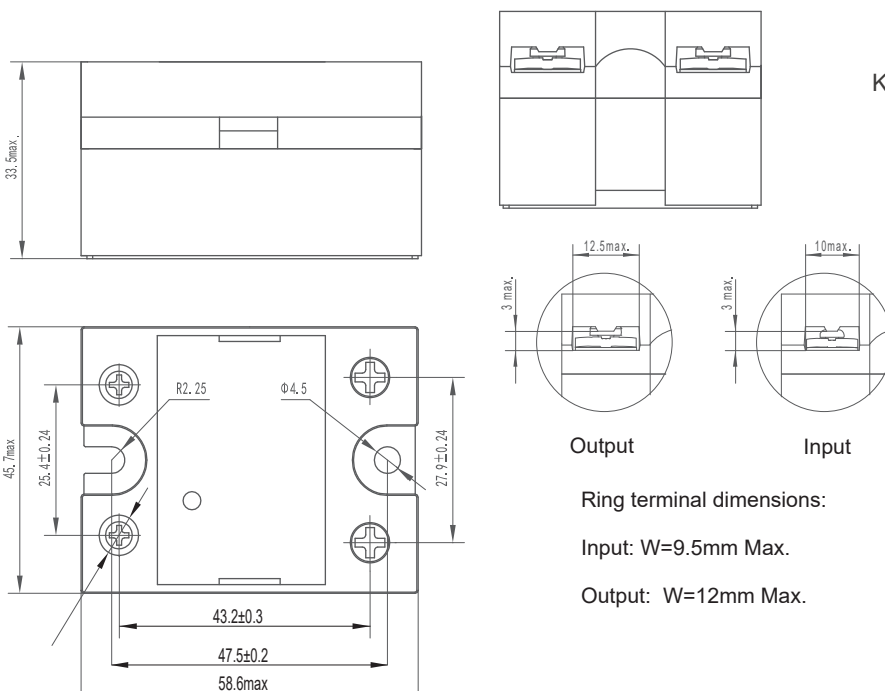
Standard Version



KSI (016) Outline Dimensions



KSI (083) Outline Dimensions



KSI (068) Outline Dimensions

Output

Input

Ring terminal dimensions:

Input: W=9.5mm Max.

Output: W=12mm Max.

Wire dimension

Input: 3mm<sup>2</sup> Max.

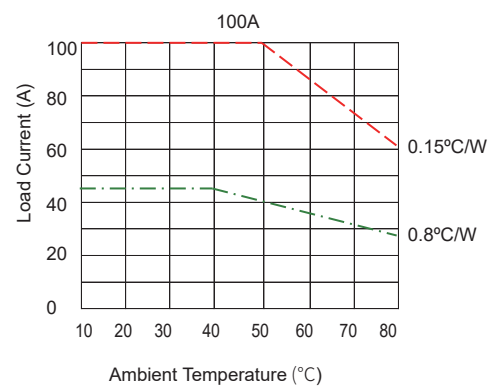
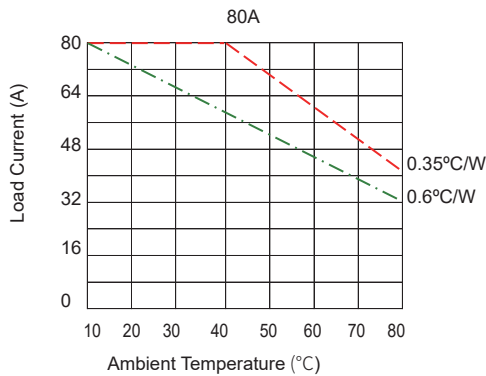
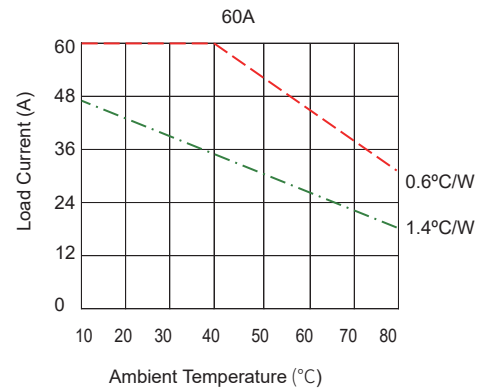
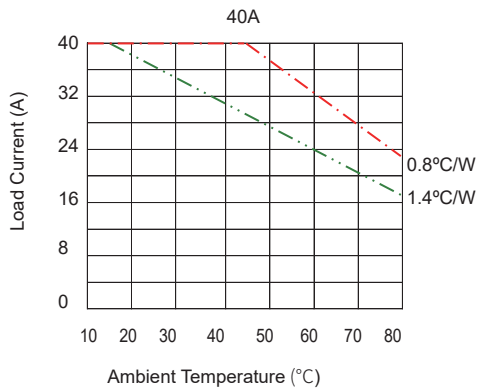
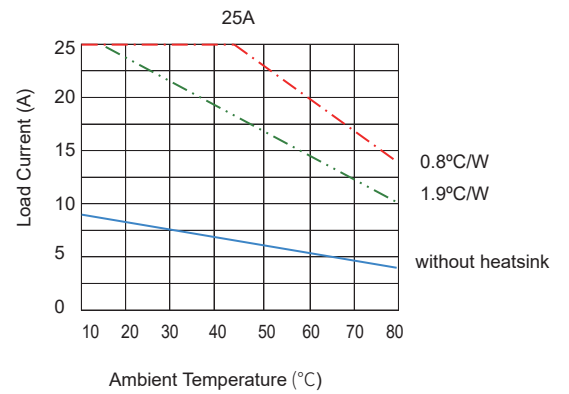
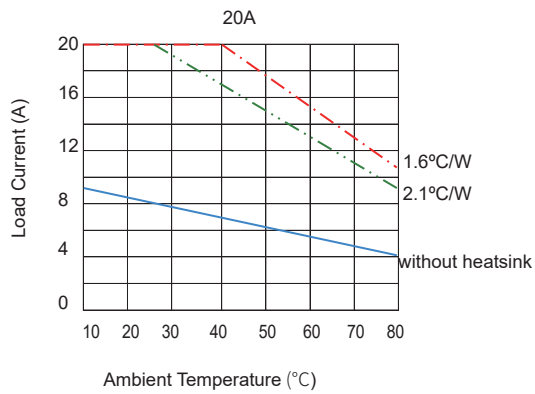
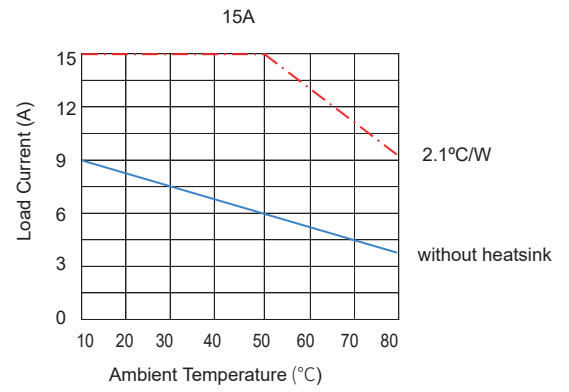
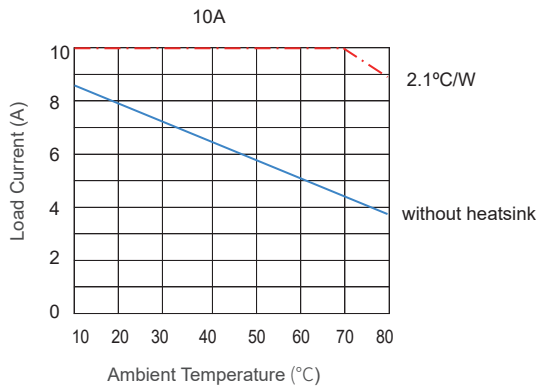
Output: 2x7mm<sup>2</sup> Max.

Torque

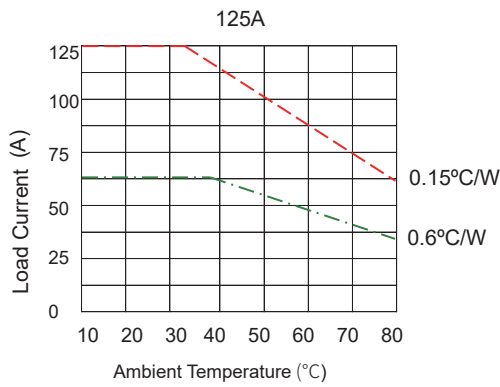
Input: 1.5N·m Max.

Output: 2.0N·m Max.

### Thermal Derating Curve



**Thermal Derating Curve**



**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 18-20/2.0-2.2 in-lb/N·m.
2. When connection wiring to SSR please ensure screws are torqued down properly (input 13-15/1.5-1.7in/lb/N·m, output 18-20/2.0-2.2 in-lb/N·m).
3. When Ambient temperature is above 25 °C see thermal derating curve.

**Agency Approvals (Certification)**






**Note:**

(1) TUV is not available for TVS option or load current more than 100A

## Trademark Change Notification

Due to the company's strategic development needs, Xiamen Kudom Electronics Technology Co., Ltd will be acquired by i-Autoc (Xiamen) Investment Co., Ltd from 1<sup>st</sup> of July 2019. After the acquisition, all the products by Xiamen Kudom Electronics Technology Co., will no longer use Kudom trademark, but use i-Autoc trademark. The details of the change are as follows.

The original trademark  will be changed to . The original trademark  will still be used until 30<sup>th</sup> June 2019.

This is a change to the trademark only, the Company Name, Manufacturing Location, Management Team, Product Part Numbers and Safety Approval Licence Numbers (cUL, TUV, CCC, S-mark Etc) are to remain the same.