

- ◆ 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

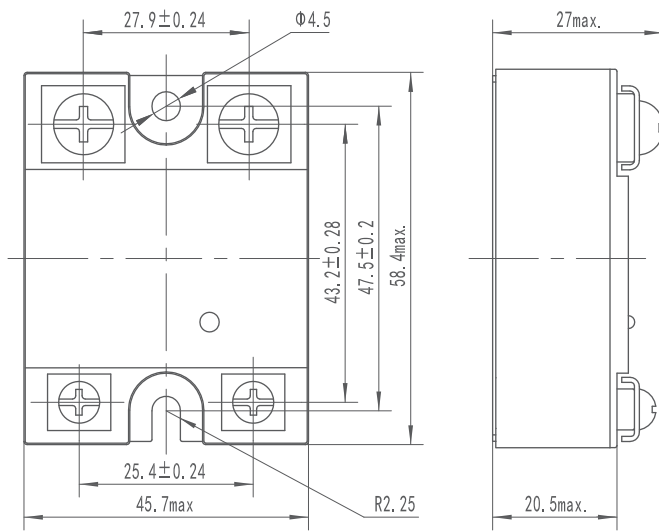
Output Specifications (Ta=25°C)		
Load Voltage Range	240VAC	48-280VAC
	380VAC	48-440VAC
	480VAC	48-530VAC
	600VAC	48-660VAC
Maximum Turn-On Time	Random-on	1ms
	Zero Crossing	10ms
	AC control	40ms
Maximum Turn-Off Time	DC Control	10ms
	AC control	40ms
Maximum Surge Current (@10ms)	10A	120A
	15A	160A
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

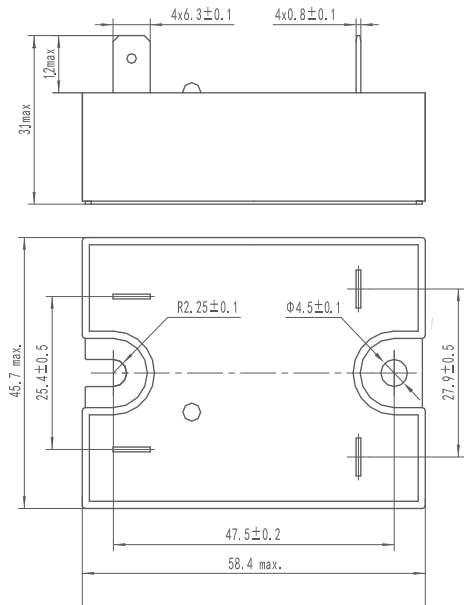
Applications

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

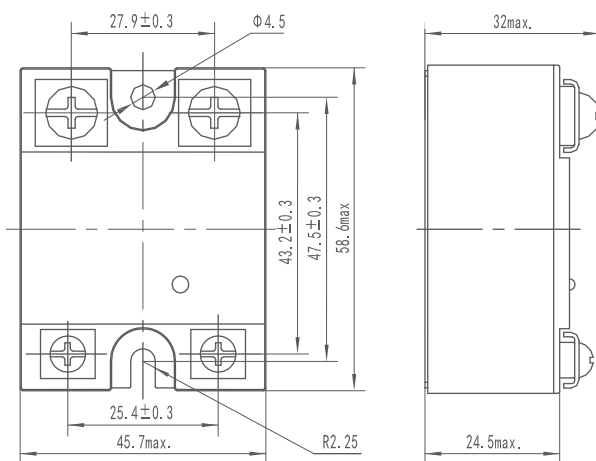
Outline Dimensions/Wiring Diagram



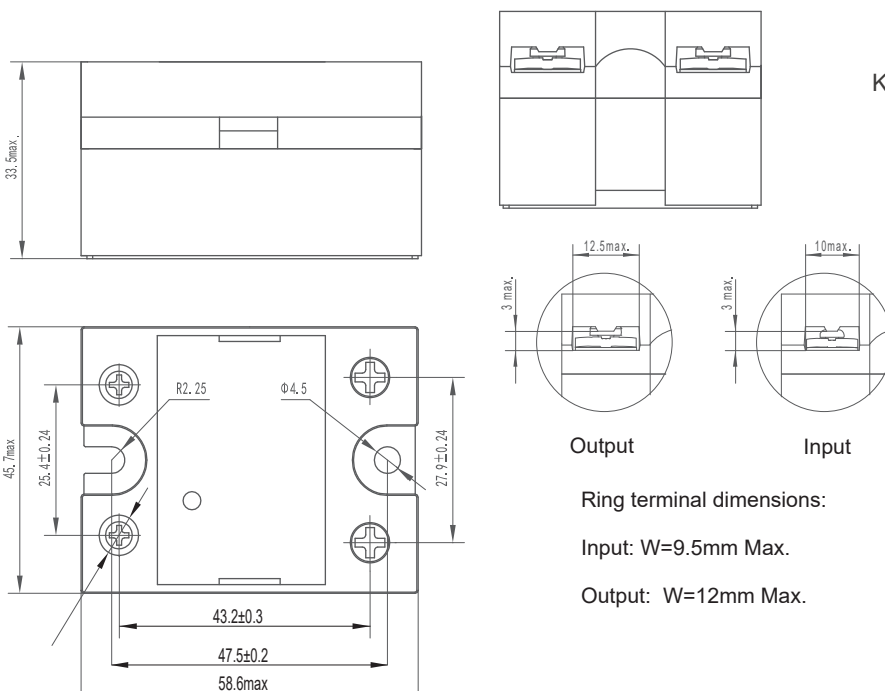
Standard Version



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

Torque

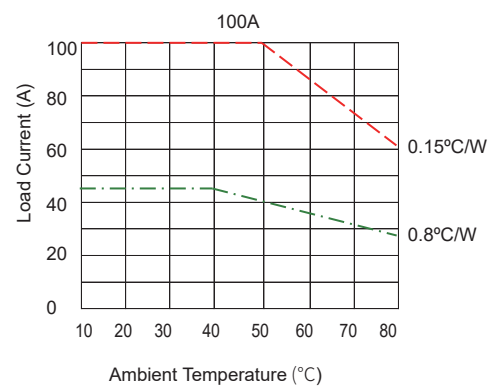
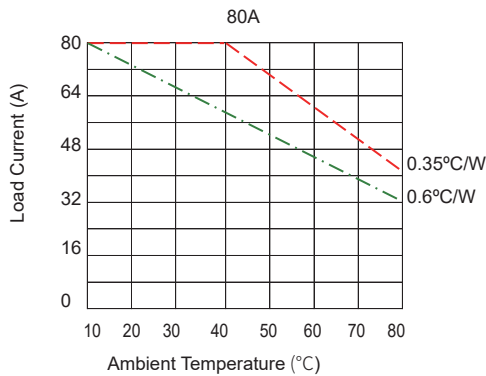
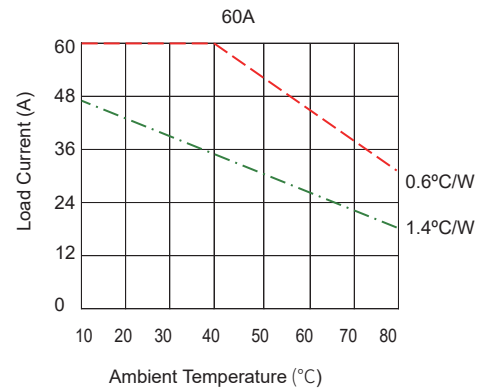
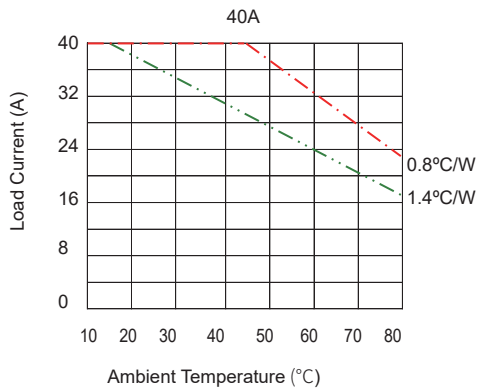
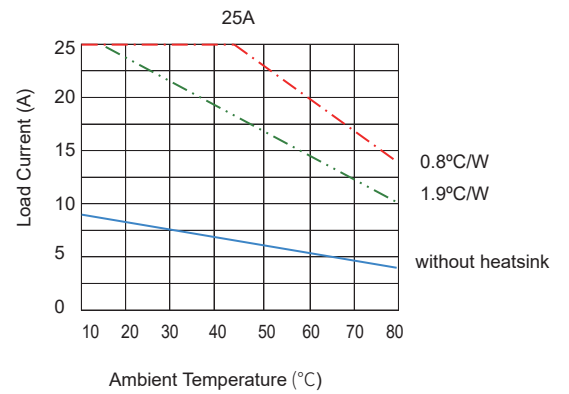
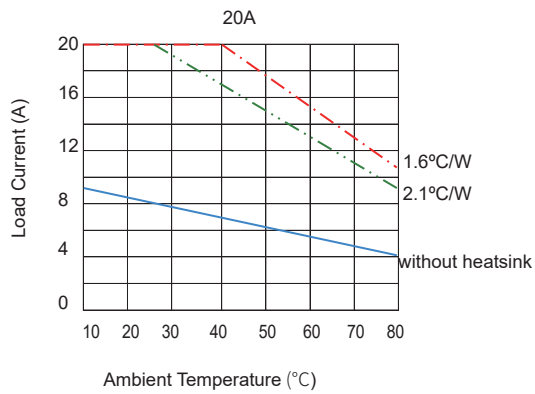
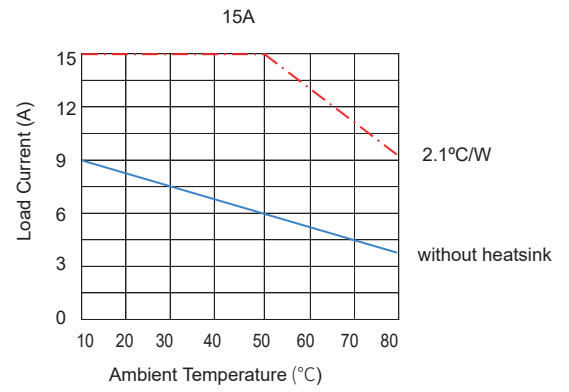
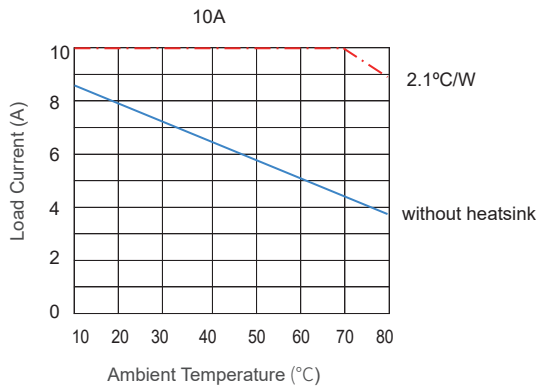
Input: 3mm² Max.

Output: 2x7mm² Max.

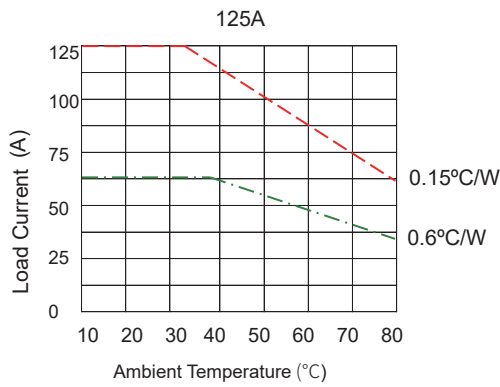
Input: 1.5N·m Max.

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