

Product Description

- ◆ Zero Crossing or Random-on Switching
- ◆ SCR Output
- ◆ DC or AC Input
- ◆ Load Current: 10A ,20A,30A ,40A
- ◆ Dielectric Strength: 4000Vrms
- ◆ Built-in RC Snubber Circuit
- ◆ With Integrated Heatsink, Width 30mm (for 10A-30A) or 50mm (for 40A)
- ◆ 35mm Rail (DIN EN50022)
- ◆ LED Indicator
- ◆ RoHS Compliant



Ordering Information

KSV	480	D	30	R	-L	M	(XXX)
KSV Series (1)	Load Voltage 240: 240VAC 480: 480VAC	D: DC Control A: AC Control	Load Current 10: 10Amp 20: 20Amp 30: 30Amp 40: 40Amp	Switching Mode Blank: Zero Crossing R: Random-on	L: LED	M: MOV (Optional)	Customized Code

Note (1): The part number selection is subject to the following list.

Information	10A	20A	30A	40A
DC:4-32VDC	KSV240D10-L (M)	KSV240D20-L (M)	KSV240D30-L (M)	KSV240D40-L (M)
	KSV240D10R-L (M)	KSV240D20R-L (M)	KSV240D30R-L (M)	KSV240D40R-L (M)
	KSV480D10-L (M)	KSV480D20-L (M)	KSV480D30-L (M)	KSV480D40-L (M)
	KSV480D10R-L (M)	KSV480D20R-L (M)	KSV480D30R-L (M)	KSV480D40R-L (M)
AC:90-280VAC	KSV240A10-L (M)	KSV240A20-L (M)	KSV240A30-L (M)	KSV240A40-L (M)
	KSV240A10R-L (M)	KSV240A20R-L (M)	KSV240A30R-L (M)	KSV240A40R-L (M)
	KSV480A10-L (M)	KSV480A20-L (M)	KSV480A30-L (M)	KSV480A40-L (M)
	KSV480A10R-L (M)	KSV480A20R-L (M)	KSV480A30R-L (M)	KSV480A40R-L (M)

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	15VAC
Maximum Input Current	25mA	

General Specifications

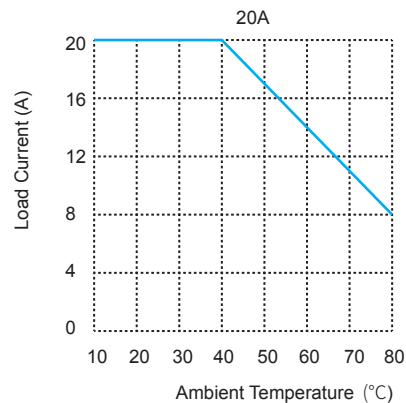
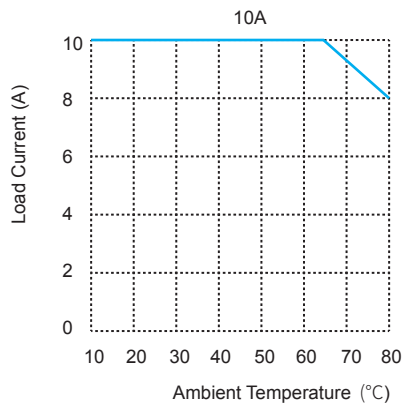
Output Specifications (Ta=25°C)		
Load Voltage Range	240VAC	24-280VAC
	480VAC	24-530VAC
Maximum Turn-On Time	DC Control Random-on	1ms
	DC Control Zero Crossing	10ms
	AC Control	40ms
Maximum Turn-Off Time	DC Control	10ms
	AC Control	40ms
Maximum Surge Current (@10ms)	10A	200A
	20A	300A
	30A	500A
	40A	600A
Maximum I ² t for Fusing (@10ms)	10A	200A ² s
	20A	450A ² s
	30A	1250A ² s
	40A	1800A ² s
Maximum Transient Overvoltage	240VAC	600Vpk
	480VAC	1200Vpk
Maximum Off-State Leakage Current@Rated Load Voltage	10mA	
Maximum On-State Voltage Drop@Rated Current	1.6Vrms	
Minimum Off-State dv/dt@Maximum Rated Voltage	500V/μs	

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input, output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)	1000MΩ	
Minimum Power Factor (at Maximum load)	0.5	
Ambient Temperature Range	-30°C ~ +80°C	
Storage Temperature Range	-30°C ~ +100°C	
Weight (Typical)	10A/20A/30A	355g
	40A	540g

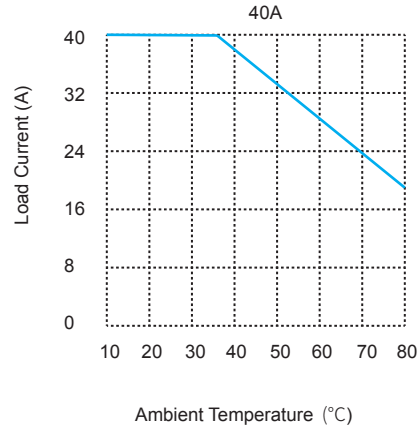
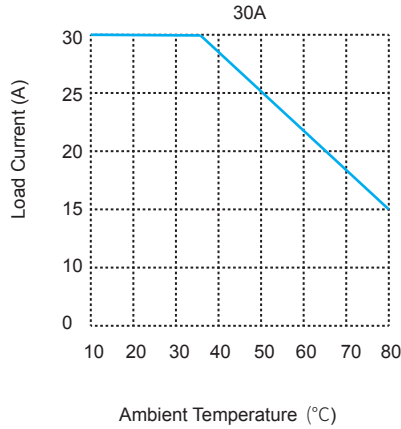
Applications

Suitable for Temperature Chamber, Injection Molding Machine, Packaging Machine, and etc.

Thermal Derating Curve



Thermal Derating Curve



General Notes

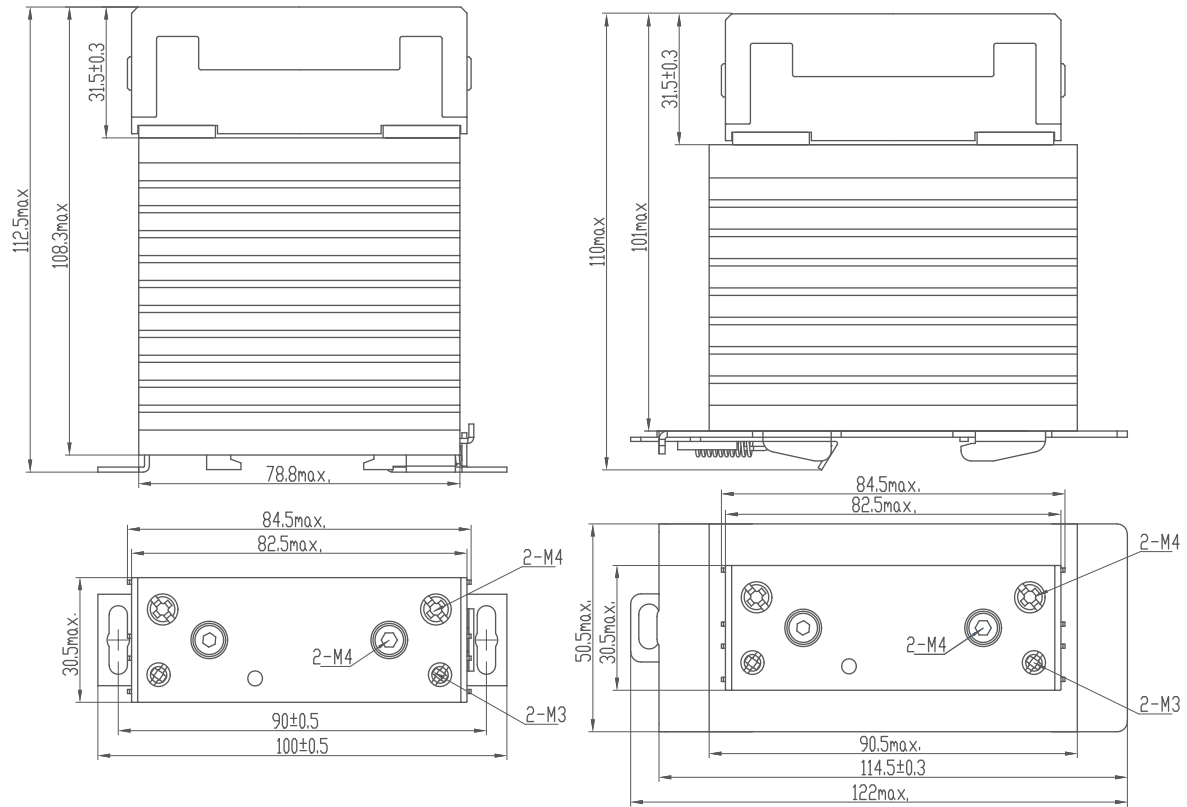
1. When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.
2. When connecting wiring to SSR please ensure screws are torqued down to the specs below
3. Please use a suitable screwdriver to mount the relay, please refer to the following requirements:

		INPUT TERMINAL (3, 4)	LOAD TERMINAL (1, 2)
Recommended Torque		0.6N·m	1N·m
Stripping Length		7mm	10mm
Optional Wire	Single Core Cable	1x0.5~2.5mm ² 2x0.5~1mm ²	2x1.5~6mm ²
	Multi-core Cable (with ferrule)	1x0.5~2.5mm ² 2x0.5~1mm ²	1x1.5~10mm ² 2x1.5~6mm ²

Agency Approvals (Certification)



Outline Dimensions



10A-30A SSR

40A SSR

Connection Example

When mounting relays side by side please see recommended minimum spacing below.

