

Product Description

- ◆ Zero Crossing or Random-on Switching
- ◆ Load Current: 20A, 30A@24-660VAC
- ◆ SCR Output
- ◆ DC Input
- ◆ With Integrated Heatsink, Width 35mm
- ◆ Dielectric Strength 4000VACrms
- ◆ LED Indication
- ◆ Built-in RC Snubber Circuit
- ◆ On Panel or 35mm Rail DIN(EN50022)



Ordering Information

KST	480	D	20	R	-L	M	H	S	(XXX)
KST Series ⁽¹⁾	Load Voltage 240:240VAC 480:480VAC 600:600VAC	Control Voltage D:DC Control	Load Current 20:20Amp 30:30Amp	Switching Mode None:Zero Crossing R:Random-on	L:LED	M:MOV T:TVS Without: No Protection (Optional)	Control Types H: Two Poles Single Control Without: Two Poles Dual Control	Heatsink type without: KHS-H90 Series S: KHS-P90 Series	Customized

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

	20A	30A
Two Poles Dual Control	KST240D20-L	KST240D30-L
	KST240D20-LM	KST240D30-LM
	KST240D20-LT	KST240D30-LT
	KST240D20R-L	KST240D30R-L
	KST240D20R-LM	KST240D30R-LM
	KST240D20R-LT	KST240D30R-LT
	KST480D20-L	KST480D30-L
	KST480D20-LM	KST480D30-LM
	KST480D20-LT	KST480D30-LT
	KST480D20R-L	KST480D30R-L
	KST480D20R-LM	KST480D30R-LM
	KST480D20R-LT	KST480D30R-LT
	KST600D20-L	KST600D30-L
	KST600D20-LM	KST600D30-LM
	KST600D20-LT	KST600D30-LT
	KST600D20R-L	KST600D30R-L
	KST600D20R-LM	KST600D30R-LM
	KST600D20R-LT	KST600D30R-LT
Two Poles Single Control	KST240D20-LH	KST240D30-LH
	KST240D20-LMH	KST240D30-LMH
	KST240D20-LTH	KST240D30-LTH
	KST240D20R-LH	KST240D30R-LH
	KST240D20R-LMH	KST240D30R-LMH
	KST240D20R-LTH	KST240D30R-LTH
	KST480D20-LH	KST480D30-LH
	KST480D20-LMH	KST480D30-LMH
	KST480D20-LTH	KST480D30-LTH
	KST480D20R-LH	KST480D30R-LH
	KST480D20R-LMH	KST480D30R-LMH
	KST480D20R-LTH	KST480D30R-LTH
	KST600D20-LH	KST600D30-LH
	KST600D20-LMH	KST600D30-LMH
	KST600D20-LTH	KST600D30-LTH
	KST600D20R-LH	KST600D30R-LH
	KST600D20R-LMH	KST600D30R-LMH
	KST600D20R-LTH	KST600D30R-LTH

General Specifications		
Input Specifications (Ta=25°C)		
Control Voltage Range		4-32VDC
Must Turn-on Voltage		4VDC
Must Turn-off Voltage		1VDC
Maximum Input Current	two poles dual control	18mA@32VDC
	two poles single control	35mA@32VDC
Output Specifications (Ta=25°C)		
Load Voltage Range [47Hz~63Hz]	240V	24-280VAC
	480V	24-530VAC
	600V	24-660VAC
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	10ms
Maximum Turn-off Time		10ms
Maximum Surge Current[@10ms]	20A	250A
	30A	400A
Maximum I ² t For Fusing [@10ms]	20A	312A ² s
	30A	800A ² s
Transient Overvoltage	240V	600Vpk
	480V/600V	1200Vpk
Internal MOV Protection ⁽²⁾	240V	300V
	480V	550V
	600V	680V
Internal MOV Protection ⁽³⁾	240V	480V
	480V	960V
	600V	1200V
Maximum Off-state Leakage Current [@ Rated Voltage]		5mA
Maximum On-state Voltage Drop [@ Rated Current]		1.6Vrms
Minimum Off-state dv/dt [@ Maximum Rated Voltage]		500V/μs

Note:

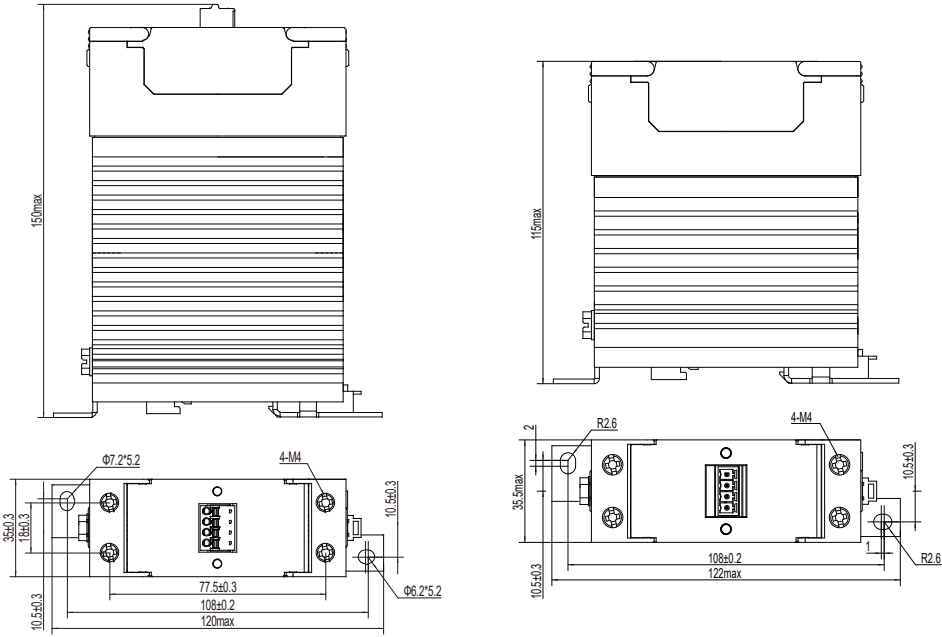
- (2) For the products with built-in varistors, it is rated as the maximum AC voltage Vrms allowed by built-in varistors.
 (3) For the products with built-in TVS, it is rated as the typical operating voltage VBR of built-in TVS.

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input,Output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)	Input/Output	1000MΩ
	Input,Output/Base	
Min.power factor		0.5
Ambient Operating Temperature Range		-30°C ~ +80°C
Ambient Storage Temperature Range		-30°C ~ +100°C
Weight [Typical]		553g

Application

Plastic machinery, electric injection molding machine, packaging machine.

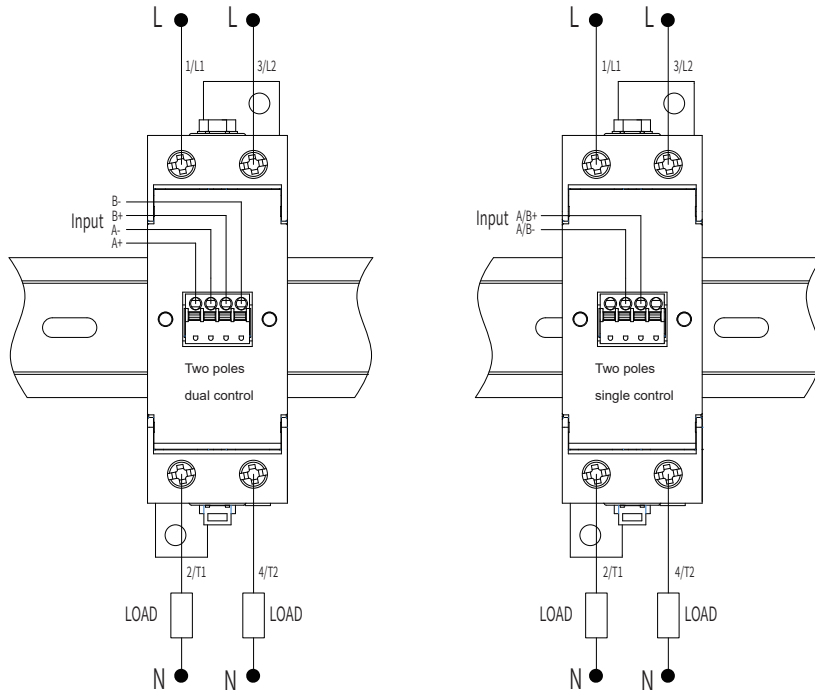
Outline Dimensions



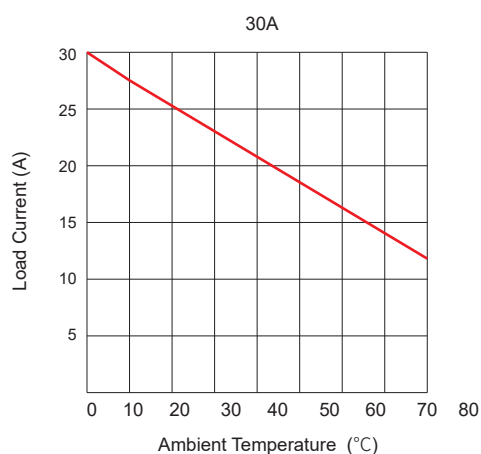
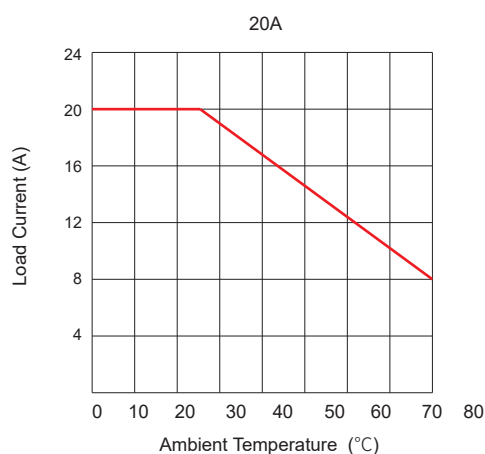
with KHS-P90 heat sink

with KHS-H90 heat sink

Wiring Diagram



Thermal Derating Curve



General Note

1. SSR's carrying load capacity is related to the operation ambient temperature and heat dissipation condition, when there are many pieces SSR installed closely, please refer to the Thermal Derating Curve for derating.
2. When connection wiring to SSR, please ensure screws are torqued down properly. Recommended torque for input screw is (18-20)/(2.0-2.2) in-lb/Nm, output screw is (18-20)/(2.0-2.2) in-lb/Nm).

Warnings

1. The product's side panels may be hot, 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.