

Product Description

- ◆ Zero Crossing or Random-on Switching
- ◆ SCR Output
- ◆ DC Input Control
- ◆ Load Current: 25A, 40A, 50A, 75A
- ◆ IP20 Safety Cover Protection (optional)
- ◆ RoHS Compliant



25A, 40A

25A, 40A

25A, 50A, 75A



Note(1): Products of IP20 structure 600V and 75A do not have TUV certification or S-mark certification; Quick Connection Terminal does not have TUV certification or S-mark certification.

Ordering Information

<b>KSID</b>	<b>240</b>	<b>LD</b>	<b>25</b>	<b>R</b>	<b>P</b>	<b>(XXX)</b>
KSID Series <sup>(2)</sup>	Load Voltage 240: 240VAC 480: 480VAC 600: 600VAC	Control Voltage LD: 4-15VDC HD: 15-32VDC D: 4-32 VDC	Load Current 25: 25Amp 40: 40Amp 50: 50Amp 75: 75Amp	Switching Mode Blank: Zero Crossing R: Random-on	Blank: Quick Connection Terminal P: Screw Terminal (IP20)	Customized Code

(2) Part numbers available are listed in the table below.

		25A	40A	50A	75A	
LD:4-15VDC	240	KSID240LD25/ (168)	KSID240LD40/ (168)	KSID240LD50P	KSID240LD75P	
		KSID240LD25R/ (168)	KSID240LD40R/ (168)	KSID240LD50RP	KSID240LD75RP	
		KSID240LD25P				
		KSID240LD25RP				
		480	KSID480LD25/ (168)	KSID480LD40/ (168)	KSID480LD50P	KSID480LD75P
			KSID480LD25R/ (168)	KSID480LD40R/ (168)	KSID480LD50RP	KSID480LD75RP
	600	KSID480LD25P				
		KSID480LD25RP				
		KSID600LD25/ (168)	KSID600LD40/ (168)	KSID600HD50P	KSID600HD75P	
						KSID600LD25R/ (168)
		KSID600LD25P				
		KSID600LD25RP				
HD:15-32VDC	240	KSID240HD25/ (168)	KSID240HD40/ (168)	KSID240HD50P	KSID240HD75P	
		KSID240HD25R/ (168)	KSID240HD40R/ (168)	KSID240HD50RP	KSID240HD75RP	
		KSID240HD25P				
		KSID240HD25RP				
		480	KSID480HD25/ (168)	KSID480HD40/ (168)	KSID480HD50P	KSID480HD75P
			KSID480HD25R/ (168)	KSID480HD40R/ (168)	KSID480HD50RP	KSID480HD75RP
	600	KSID480HD25P				
		KSID480HD25RP				
		KSID600HD25/ (168)	KSID600HD40/ (168)	KSID600HD50P	KSID600HD75P	
						KSID600HD25R/ (168)
		KSID600HD25P				
		KSID600HD25RP				
D:4-32VDC	240	KSID240D25 (168)	KSID240D40 (168)	KSID240D50P	KSID240D75P	
		KSID240D25R (168)	KSID240D40R (168)	KSID240D50RP	KSID240D75RP	
	480	KSID480D25 (168)	KSID480D40 (168)	KSID480D50P	KSID480D75P	
		KSID480D25R (168)	KSID480D40R (168)	KSID480D50RP	KSID480D75RP	
	600	KSID600D25 (168)	KSID600D40 (168)	KSID600D50P	KSID600D75P	
		KSID600D25R (168)	KSID600D40R (168)	KSID600D50RP	KSID600D75RP	

General Specifications

Input Specifications (Ta=25°C)		
Control Voltage Range	D	4-32VDC
	LD	4-15VDC
	HD	15-32VDC
Must Turn-on Voltage	LD/D	4VDC
	HD	15VDC
Must Turn-off Voltage		1VDC
Maximum Input Current	LD/D	50mA@15VDC
	HD	20mA@32VDC

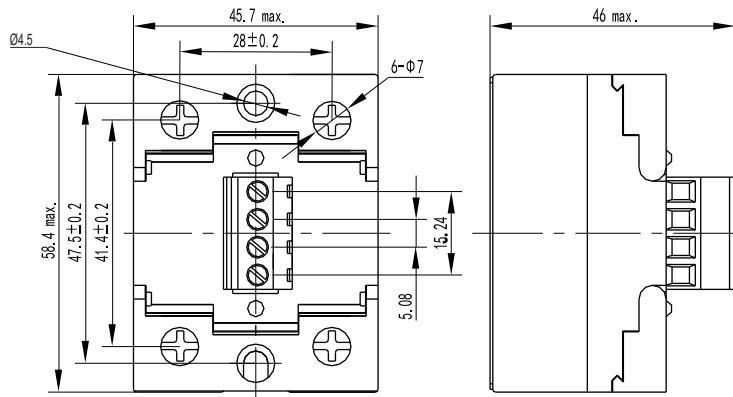
Output Specifications (Ta=25°C)		
Load Voltage Range	240VAC	24-280VAC
	480VAC	24-530VAC
	600VAC	24-660VAC
Maximum Turn-on Time	Zero Crossing	10ms
	Random-on	1ms
Maximum Turn-off Time		10ms
Maximum 1 Cycle Surge Current (50Hz)	25A	300A
	40A (Quick Connection)	
	40A (168)	400A
	50A	500A
	75A	750A
Maximum I <sup>2</sup> t for Fusing (@10ms)	25A	450A <sup>2</sup> s
	40A	800A <sup>2</sup> s
	50A	1250A <sup>2</sup> s
	75A	2812A <sup>2</sup> s
Transient Overvoltage	240VAC	600Vpk
	480VAC/600VAC	1200Vpk
Maximum Off-State Leakage Current@Rated Load Voltage		5mA
Maximum On-State Voltage Drop@Rated Current		1.5Vrms
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	
Ambient Temperature Range		-30°C ~ +80°C	
Storage Temperature Range		-30°C ~ +100°C	
Weight (Typical)	Quick Connection Terminal	100g	
	Screw Terminal (IP20)	25A	150g
		50A/75A	185g

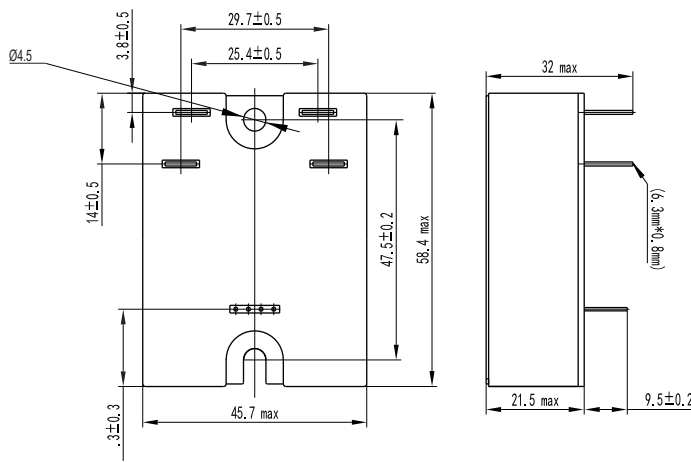
Applications

Temperature Chamber, Plastics Machinery, Food Processing Machinery, Glass Machinery, Incubator, Oiling Machines, HVAC, Lighting Controller, and etc.

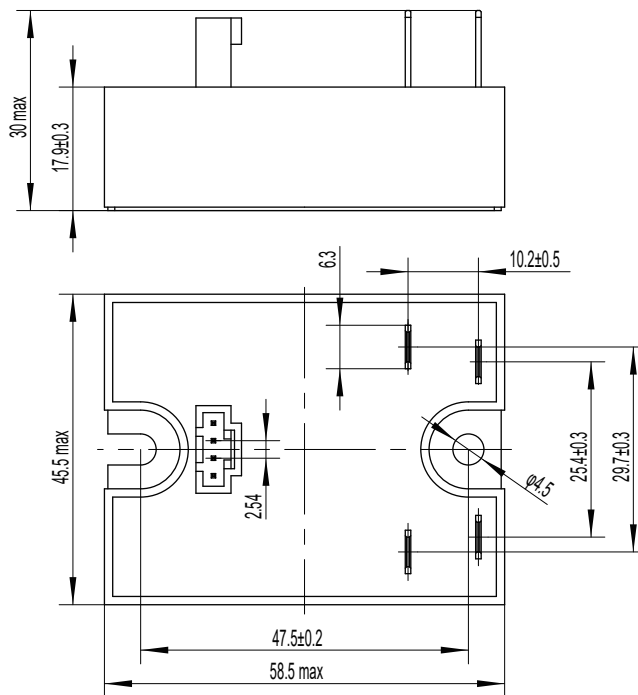
Outline Dimensions



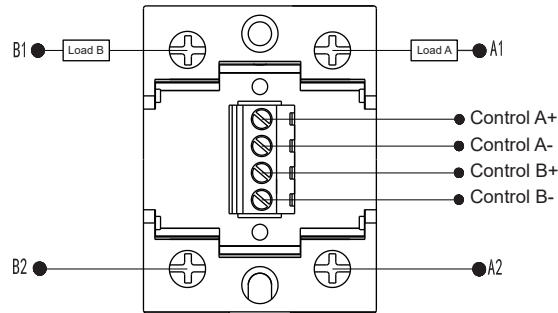
Bolt terminal(IP20)



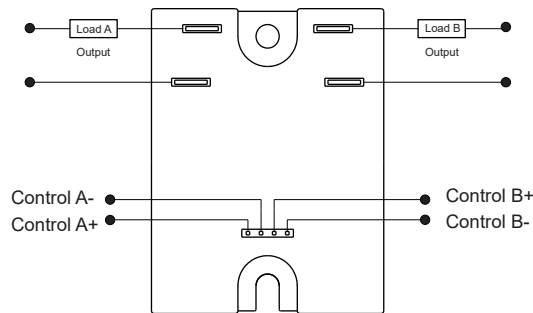
Quick connection terminal



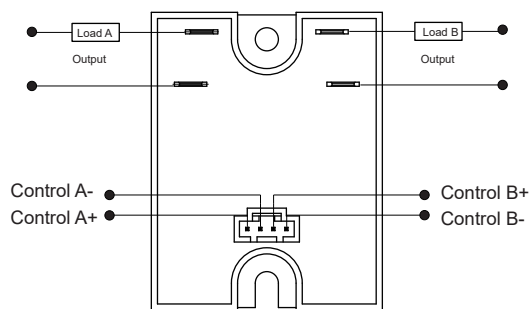
Outline Dimensions / Wiring Diagram



Bolt terminal(IP20)

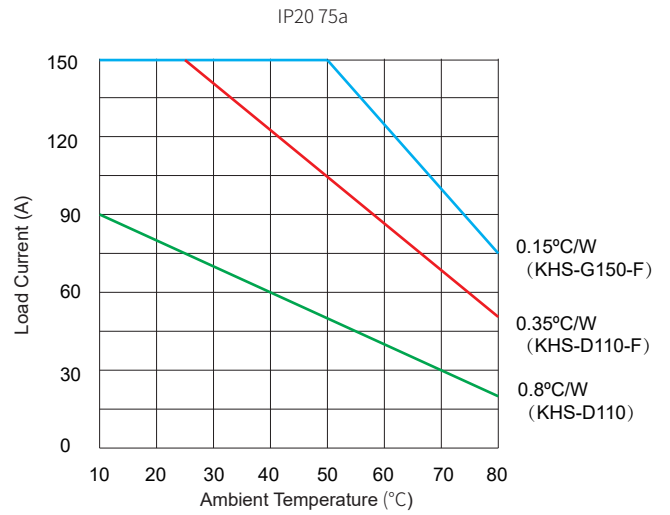
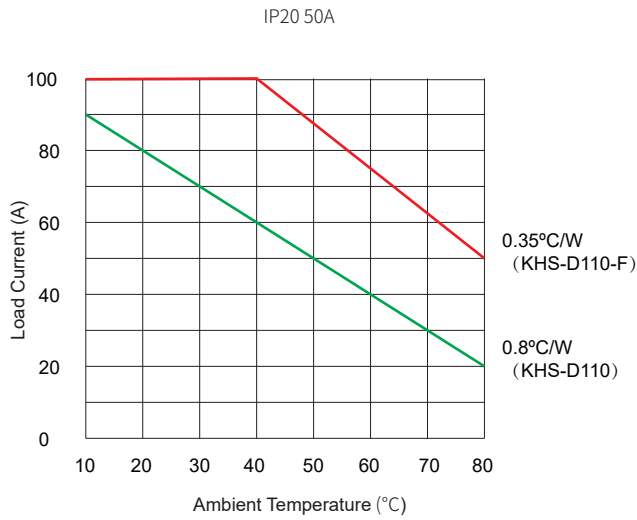
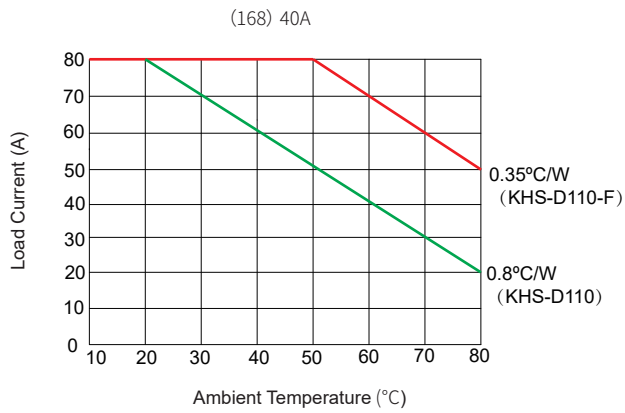
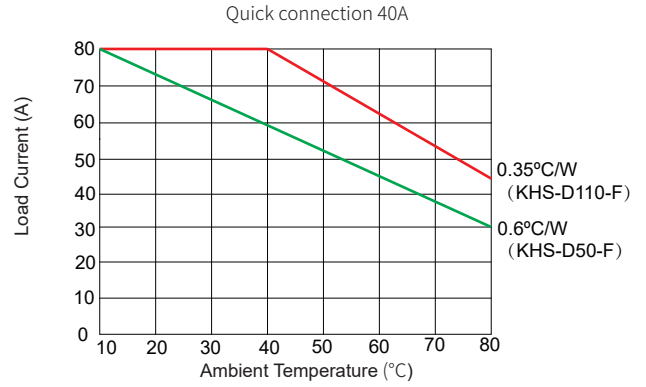
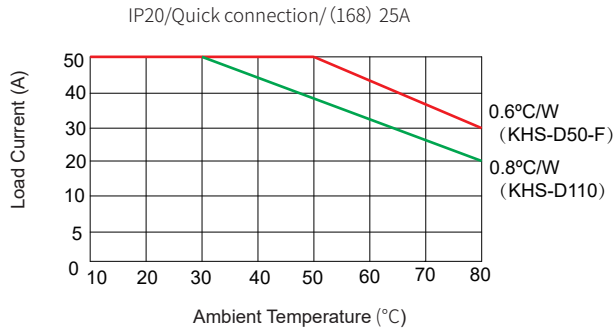


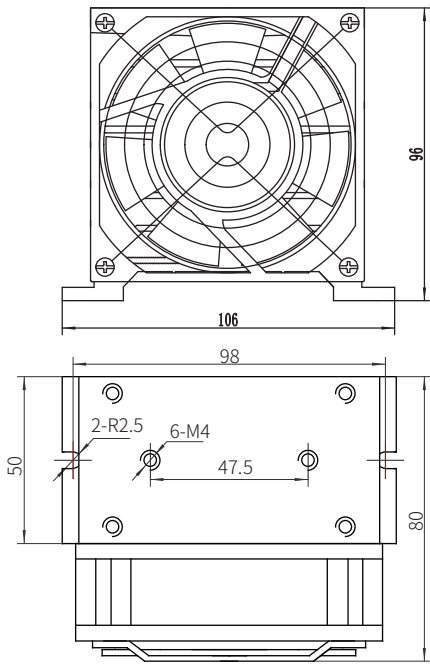
Quick connection terminal



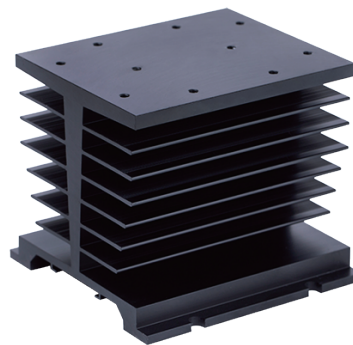
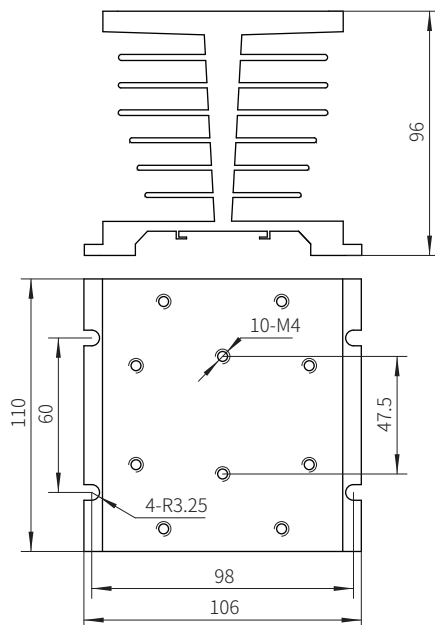
**Thermal Derating Curve**

Note: The following load current curve shows the total current, each channel current cannot exceed 1/2 of the total current.

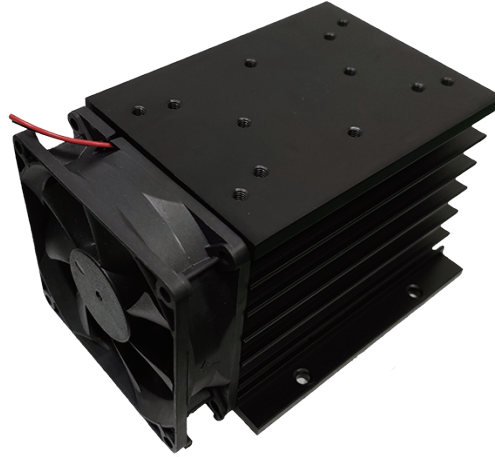
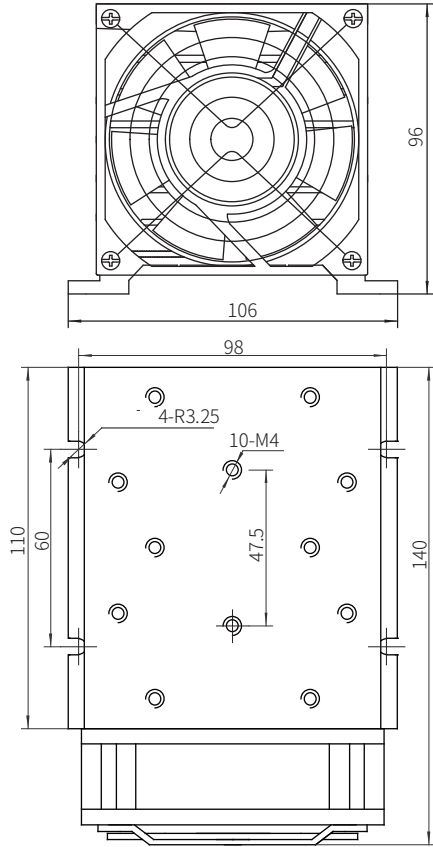




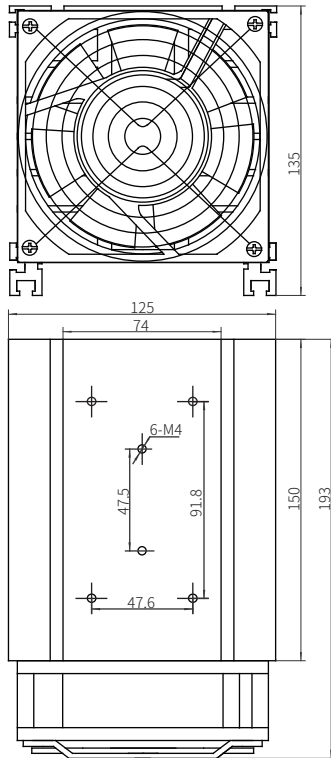
KHS-D50-F



KHS-D110



KHS-D110-F



KHS-G150-F

### 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 18-20/2.0-2.2in-lb/Nm.
2. When connection wiring to SSR, please ensure screws are torqued down properly (input 4.43/0.5 in-lb/N-m, output 18-20/2.0-2.2 in-lb/Nm).
3. SSR's carrying load capacity is related to the operation ambient temperature and heat dissipation condition, please refer to the Thermal Derating Curve for derating.

### Certification Standards

Certification	Test Standard
UL	UL508
	C22.2 No. 14-13
TUV	EN 62314:2006
S-MARK	EN 62314:2006