



KSR Series

Single Phase Solid State Relays

- Slim type single phase SSR
- LED indicator of the control input status
- Over heat alarm output of SSR with connector cable
- Heatsink integrated SSR available



Ordering Information

KSR ① ② ③ ④ ⑤

① Load Voltage	②	90 - 240 VAC \overline{VAC}
	⑤	90 - 480 VAC

② Load Current			
005 \overline{VAC}	5A	050 \overline{VAC}	50A
015 \overline{VAC}	15A	060 \overline{VAC}	60A
030 \overline{VAC}	30A	080 \overline{VAC}	80A
040 \overline{VAC}	40A		

③ Operate mode	Z	Zero Cross
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④ Input voltage	D	24VDC(4-32V) \overline{VAC}
	A	220VAC(90-240V 50/60Hz)

⑤ Heatsink	no mark	Mount Type
	H	Heatsink Type \overline{VAC}
	HF	Heatsink + Fan Type

Specifications

	Low Voltage	High Voltage
Release Time	Cycle of 1/2 Load + Less than 1 ms	
Output on Voltage Drop	Less than 1.6V (RMS)	Less than 1.8V (RMS)
Leakage Current	Less than 10mA (AC200V)	Less than 20mA (AC480V)
Insulation Resistance	more than 100MΩ (DC500V)	
Withstand Voltage	AC 5,000V 50/60Hz 1min	
Vibration Resistance	10-55-10Hz Peak Amplitude 0.35mm (Dual Amplitude 0.7mm)	
Shock Resistance	294m/s ²	
Storage Temperature	-30 - +100°C (non-condensing)	
Ambient Temperature	-30 - +80°C (non-condensing)	
Ambient Humidity	45 - 85%RH	

Over temperature alarm specification

Output	NPN Open Collector	
Maximum Switching Current Rating	Opens at 95 ± 5°C of SSR Body temperature	
Alarm Voltage Drop	Typical	50mADC
	Maximum	2.8VDC
Visual Indication	Normal : Green LED, Overheat alarm : Red LED	
UL Certification	4VDC	
	Only on 24VDC Input voltage, with and without heatsink	

Characteristics

Input Ratings (Ambient Temp of 25°C)

Rated Control Voltage	Control Voltage Range	Control Voltage Levels			Input Current
		Pick-up Voltage	Drop-out Voltage		
24VDC	4-32VDC	Less than 4VDC	More than 1.4VDC	10±3mA	
220VAC	90-240VAC	Less than 90VAC	More than 50VAC	10±5mA	

Low Voltage Load

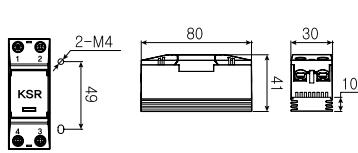
	2005	2015	2030	2040	2050	2060	2080
Rated Load Voltage	AC 220V (50/60Hz)						
Load Voltage Range	AC 90-240V (50/60Hz)						
Rated Load Current	5A	15A	30A	40A	50A	60A	80A
Load Current Ragne	0.5A - Rated Current @ Ambient Temp of 25°C						
Peak Voltage	600V						
Single Cycle	84	260	420	520	580		
Surge Current Resistance	60Hz, 1 Cycle						

High Voltage Load

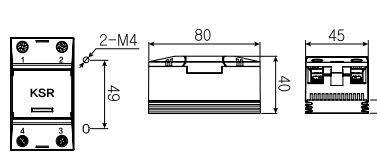
	5005	5015	5030	5040	5050	5060	5080
Rated Load Voltage	AC 440V (50/60Hz)						
Load Voltage Range	AC 90-480V (50/60Hz)						
Rated Load Current	5A	15A	30A	40A	50A	60A	80A
Load Current Ragne	0.5A - Rated Current @ Ambient Temp of 25°C						
Peak Voltage	1,200V						
Single Cycle	80	250	370	500	580		
Surge Current Resistance	60Hz, 1/2 Cycle						

Dimensions

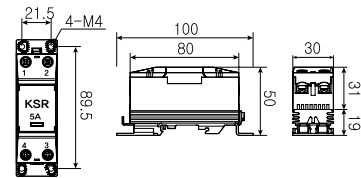
Mount Type 5 / 15 / 30A



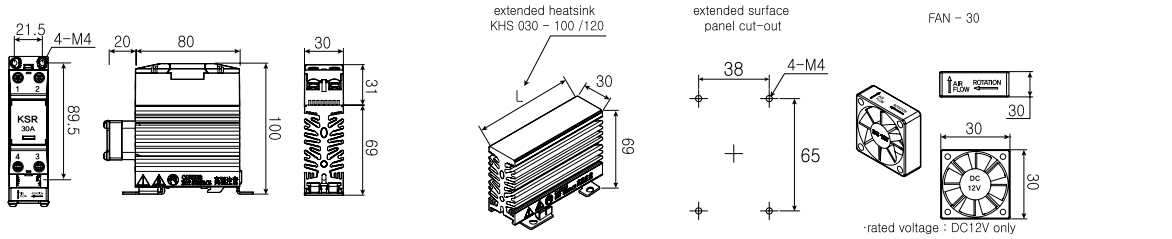
Mount Type 40 / 50 / 60 / 80A



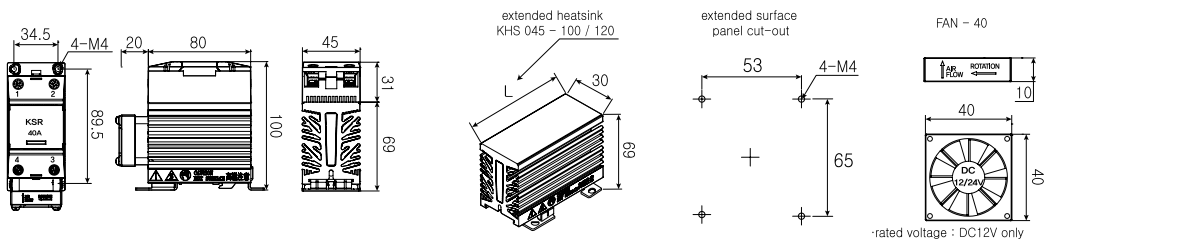
Heatsink Type 5A



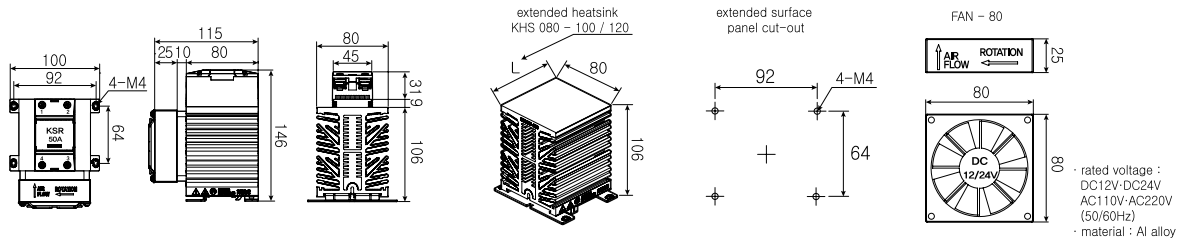
Heatsink + Fan Type 30A



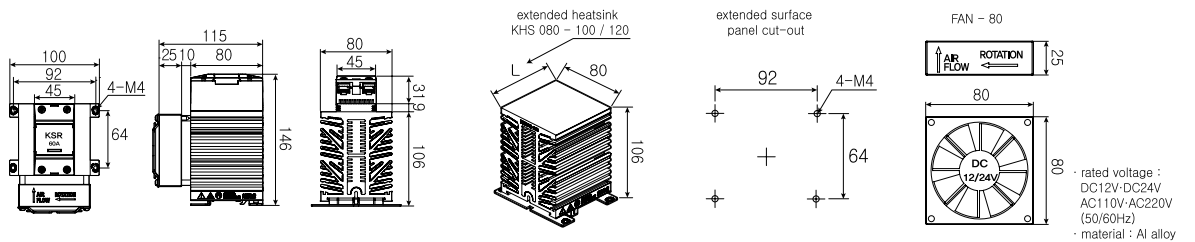
Heatsink + Fan Type 40A



Heatsink + Fan Type 50A



Heatsink + Fan Type 60A



Heatsink + Fan Type 80A

