



KSR Series

Single Phase Solid State Relays



- Slim type single phase SSR
- LED indicator of the control input status
- Heatsink integrated SSR available

Ordering Information

KSR ① ② ③ ④ ⑤

Load Voltage	2	90 - 240 VAC	
	5	90 - 480 VAC	
Load Current			
005	5A	050	50A
015	15A	060	60A
030	30A	080	80A
040	40A		
③ Operate mode	Z	Zero Cross	
	D	24VDC(4-32V)	
④ Input voltage	A	220VAC(90-240V 50/60Hz)	
⑤ Heatsink	no mark	Mount Type	
	H	Heatsink Type	
	HF	Heatsink + Fan Type	

Specifications

	Low Voltage	High Voltage
Release Time	Cycle of ½ 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	
	Opens at 95 ± 5°C of SSR Body temperature	
Maximum Switching Current Rating	50mADC	
Alarm Voltage Drop	Typical	2.8VDC
	Maximum	4VDC
Visual Indication	Normal : Green LED, Overheat alarm : Red LED	
UL Certification	Only on 24VDC Input voltage, with and without heatsink	

Characteristics

Input Ratings (Ambient Temp of 25°C)

Control Voltage Levels				
Rated Control Voltage	Control Voltage Range	Pick-up Voltage	Drop-out Voltage	Input Current
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

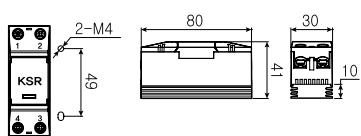
	2005	2015	2030	2040	2050	2060	2080
Rated Load Voltage				AC 220V (50/60Hz)			
Load Voltage Range				AC 90-240V (50/60Hz)			
Rated Load Current	5A	15A	30A	40A	50A	60A	80A
Load Current Range				0.5A - Rated Current @ Ambient Temp of 25°C			
Peak Voltage				600V			
Single Cycle Surge Current Resistance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

High Voltage Load

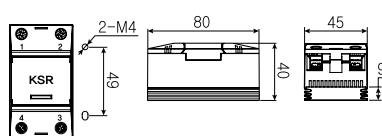
	5005	5015	5030	5040	5050	5060	5080
Rated Load Voltage				AC 440V (50/60Hz)			
Load Voltage Range				AC 90-480V (50/60Hz)			
Rated Load Current	5A	15A	30A	40A	50A	60A	80A
Load Current Range				0.5A - Rated Current @ Ambient Temp of 25°C			
Peak Voltage				1,200V			
Single Cycle Surge Current Resistance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

Dimensions

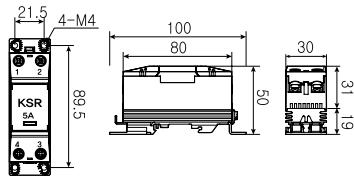
Mount Type 5 / 15 / 30A



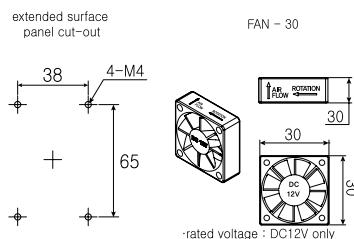
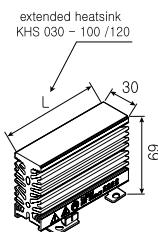
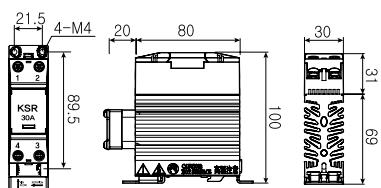
Mount Type 40 / 50 / 60 / 80A



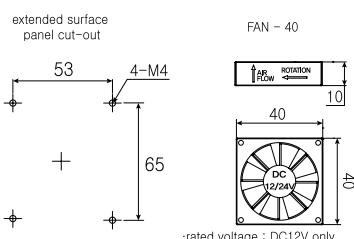
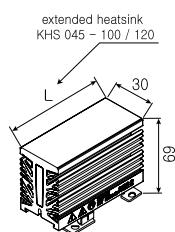
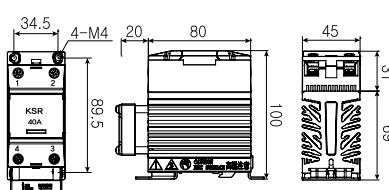
Heatsink Type 5A



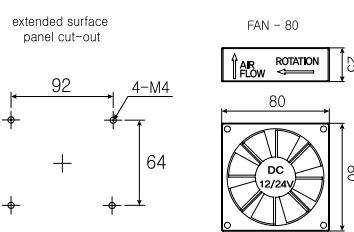
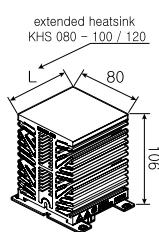
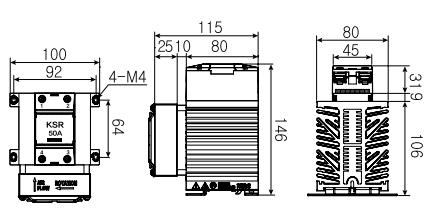
Heatsink + Fan Type 30A



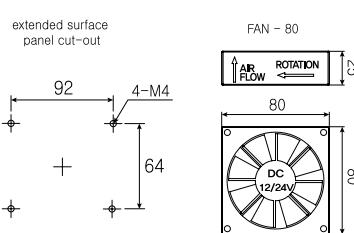
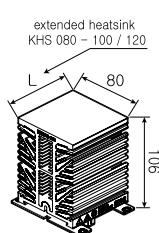
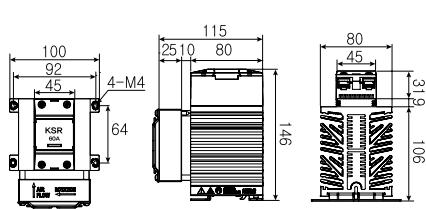
Heatsink + Fan Type 40A



Heatsink + Fan Type 50A



Heatsink + Fan Type 60A



Heatsink + Fan Type 80A

