KSC Series

Three Phase Solid State Relays

- 80 x 80mm three phase SSR
- LED indicator of the control input status
- Heatsink integrated SSR available
- Clip cover of IP20 touch protection

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/s²	
Storage Temperature	-30 - +100°C (non-condensing)	
Ambient Temerature	-30 - +80°C (non-condensing)	
Ambient Humidity	45 - 85%RH	

Ordering Information

KSC- ① ② ③ ④ ⑤

① Load Voltage	**2**	90 - 240 VAC
	5	90 - 480 VAC

② Load Current			
015	15A	**050**	50A
030	30A	**060**	60A
040	40A	**080**	80A

③ Operate mode	**Z**	Zero Cross

④ Input voltage	**D**	24VDC(4-32V)
	A	220VAC(90-240V 50/60Hz)

⑤ Heatsink	**no mark**	Mount Type
	H	Heatsink Type
	HF	Heatsink + Fan Type

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

Characteristics

Input Ratings (Ambient Temp of 25°C)

		Operational Voltage Range		
Rated Control Voltage	Control Voltage Range	Pick-up Voltage	Drop-out Voltage	Input Current
24VDC	4-32VDC	Less than 4VDC	More than 1.4VDC	30±3mA
220VAC	90-240VAC	Less than 90VAC	More than 50VAC	30±5mA

Low Voltage Load

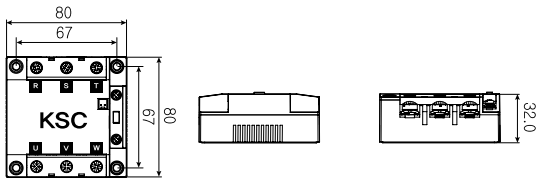
	2015	2030	2040	2050	2060	2080
Rated Load Voltage	220VAC (50/60Hz)					
Load Voltage Range	90-240VAC (50/60Hz)					
Rated Load Current	15A	30A	40A	50A	60A	80A
Load Current Ragne	0.5A - Rated Current @ Ambient Temp of 25°C					
Peak Voltage	600V					
Single Cycle Surge Current Resistance	260	420		520	580	
	60Hz, 1Cycle					
UL Certification	Only on 24VDC Input voltage, with and without heatsink					No UL

High Voltage Load

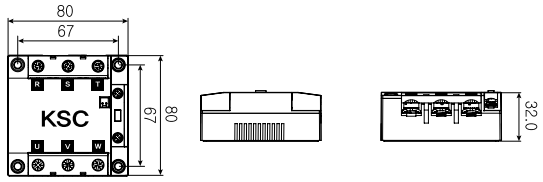
	5015	5030	5040	5050	5060	5080
Rated Load Voltage	440VAC (50/60Hz)					
Load Voltage Range	90-480VAC (50/60Hz)					
Rated Load Current	15A	30A	40A	50A	60A	80A
Load Current Ragne	0.5A - Rated Current @ Ambient Temp of 25°C					
Peak Voltage	1,200V					
Single Cycle Surge Current Resistance	250	370		500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

Dimensions

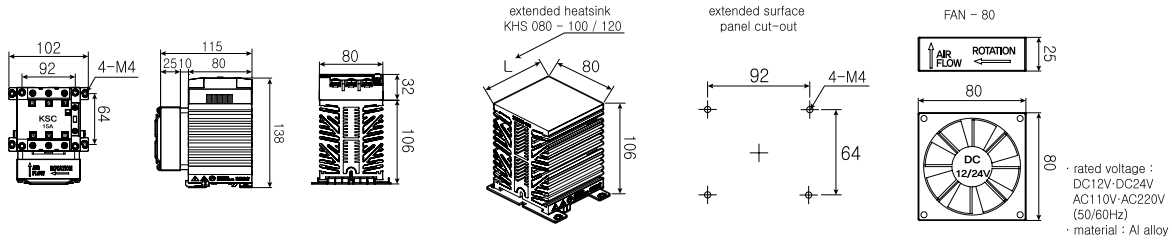
Mount Type 15 / 30A



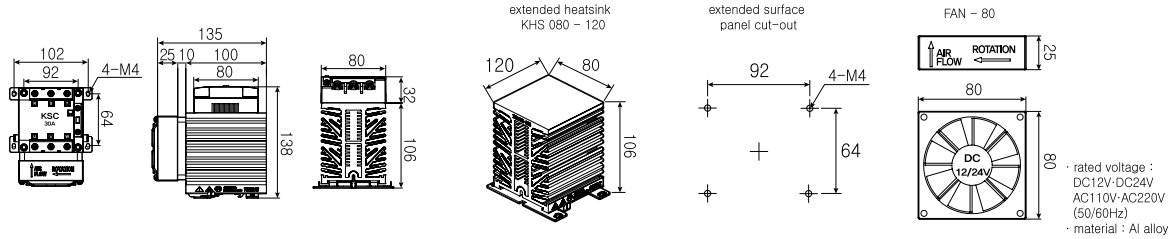
Mount Type 40 / 50 / 60 / 80A



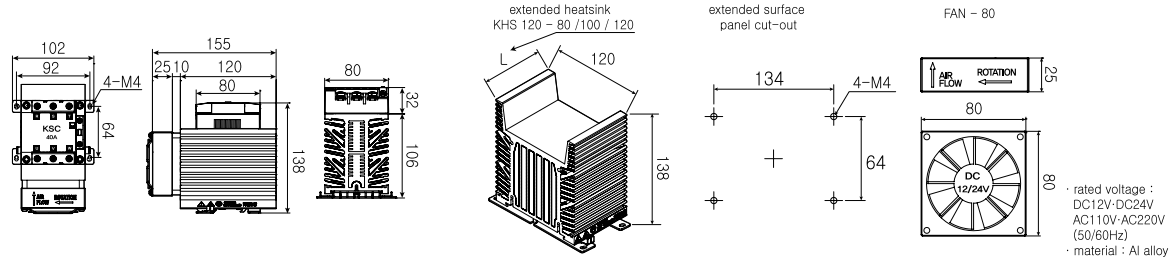
Heatsink Type 15A



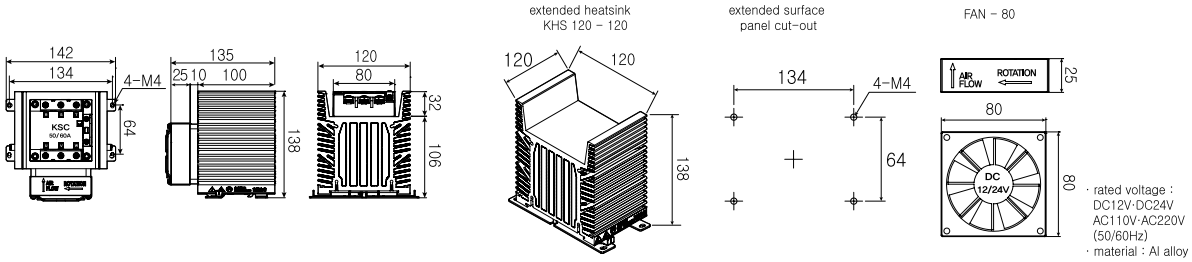
Heatsink Type 30A



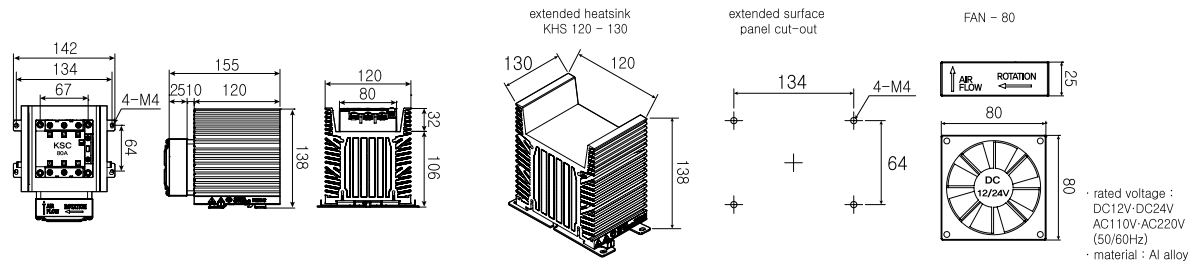
Heatsink Type 40A



Heatsink Type 50 / 60A



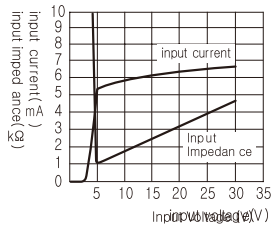
Heatsink Type 80A



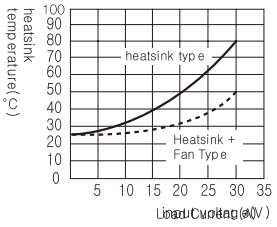
Technical Data

KSR & KSC Series

Input current and Impedance



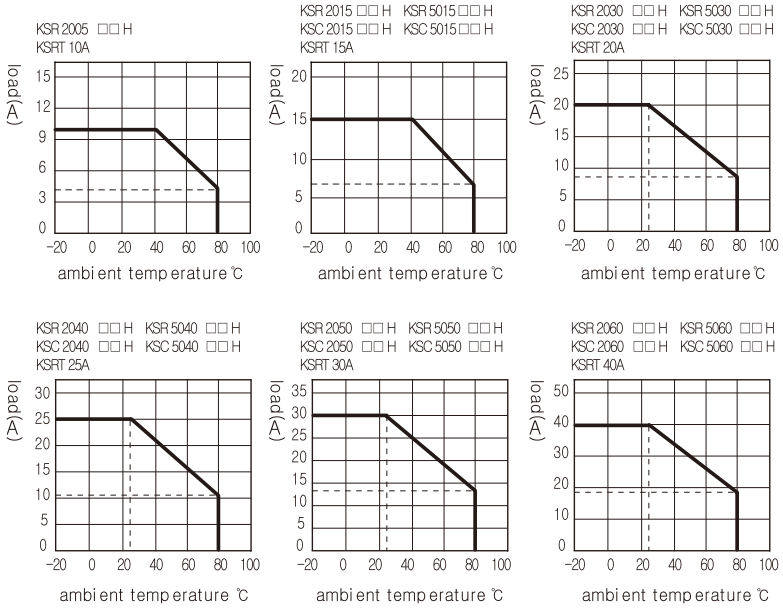
Heatsink type & Heatsink + Fan type



※(ambient temperature 25°C) ertical mounting

☞(ambient temperature 25°C) vertical mounting

Ambient Temperature-load current



▶ Caution

- The radiator fan reduces the radiator temperature by up to 35 ~ 40 % (ambient temperature of 25°C / vertical mounting)
- In the design process, note that the load current characteristic worsens with the increase in the ambient temperature.
- With the high-voltage type, design the system at 80 % of the rating or less.
- The device life is prolonged when the temperature decreases.

Note