i-Autoc

KSU Series Single Phase AC Output

- Zero-crossing or Random-on Switching
- Load current: 30A - 75A @ 24-660VAC
- SCR Output
- AC or DC Input Control
- Dielectric Strength: 4000Vrms
- LED Indicator
- Internal RC Protection Circuit

Ordering Information

KSU	240	D	30	R	–	L	M	(XXX)
KSUSeries	Load Voltage: 240:240VAC 600:600VAC	D: DC Control A: AC Control	Load Current 30:30Amp 50:50Amp 75:75Amp	Switching Mode Blank: Zero Crossing R: Random-on		LED Indicator	M: MOV T: TVS (Optional)	Customized Code

Technical Specification

Input Specifications (Ta=25℃)		
Control Mode	DC Control	AC Control
Control Voltage Range	4-32VDC	90-280VAC
Must Turn-on Voltage	4VDC	90VAC
Must Turn-off Voltage	1VDC	15VAC
Maximum Input Current	Zero Crossing：15mA / Random-on：18mA	25mA

General Specifications

Output Circuit(Ta=25°C)	240V	600V
Load Voltage Range（47Hz～63Hz）	24-280VAC	24-660VAC
Transient Overvoltage	600Vpk	1200Vpk (1)
Internal MOV Protection (2)	300Vrms	680Vrms
Internal TVS Protection (3)	480V	1100V
Minimum Off-state dv/dt[@ Maximum Rated Voltage]	500V/μs	
Maximum Off-state Leakage Current [@ Rated Voltage]	5mA	
Min.power factor	0.5	

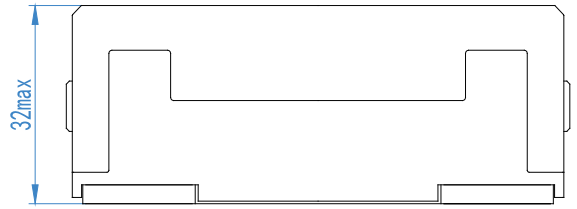
Output Circuit(Ta=25°C)	30A	50A	75A
Maximum Surge Current (@10ms)	400A	600A	800A
Maximum I^2t for Fusing (@10ms)	800A^2s	1800A^2s	3200A^2s
Maximum On-State Voltage Drop@Rated Current	1.6Vrms		
Minimum Load Current	100mA		
Maximum Turn-On Time	DC Control，Zero Crossing：10ms；DC Control，Random-on：1ms；AC Control:40ms		
Maximum Turn-Off Time	DC Control：10ms；AC Control:20ms		

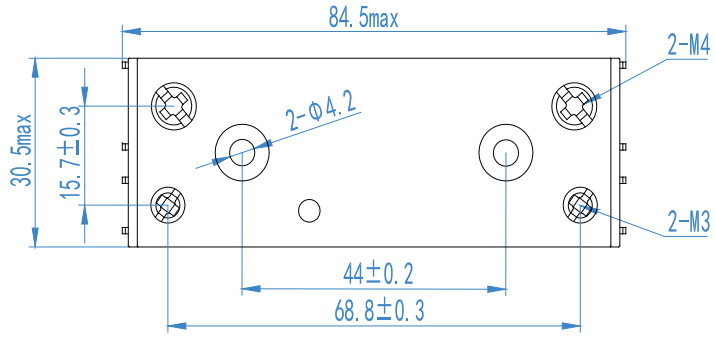
General Specifications

General Specifications(Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	4000 Vrms
	Input, output/Base	2500 Vrms
Insulation Resistance (@500VDC)	Input/Output	1000 MΩ
	Input, output/Base	
Ambient Operating Temperature Range	-30 ～ +80°C	
Ambient Storage Temperature Range	-30 ～ +100°C	
Weight [Typical]	30A/50A	100g
	75A	130g
Recommended Torque	Input Terminal(3、4)：0.58~0.98N·m；Load Terminal（1、2）：0.98~1.37N·m；base Mount：0.98~1.37N·m	
Stripping Length	Input Terminal(3、4)：7mm；Load Terminal（1、2）：10mm	
Optional Wire	Single Core Cable(3、4):1x0.5~2.5mm² / 2x0.5~1mm²; Load Terminal（1、2）：2x1.5~6mm²	
	Multi-core (With ferrule) (3、4):1x0.5~2.5mm² / 2x0.5~1mm²; Load Terminal（1、2）：2x1.5~6mm²	
	Input Terminal(3、4)：1x20 to 12 AWG; Load Terminal（1、2）：2x14 to 10 AWG	

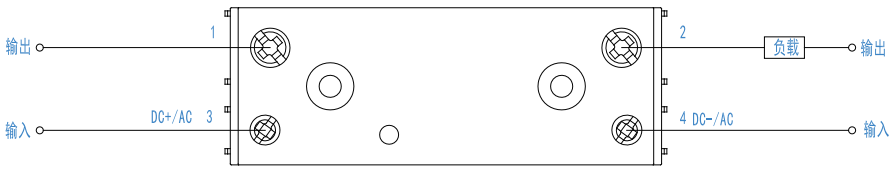
Note: (1) The version of transient overvoltage @1600Vpk is available, when you order this version, please add the suffix（H）after the part number, such as KSU600D50-L(H).
(2) For product with built-in MOV(varistor), the nominal protection voltage is the maximum Vrms of the MOV.
(3) For product with built-in TVS, the nominal operation voltage is the typical value TVS(V_{BR}).

Installation

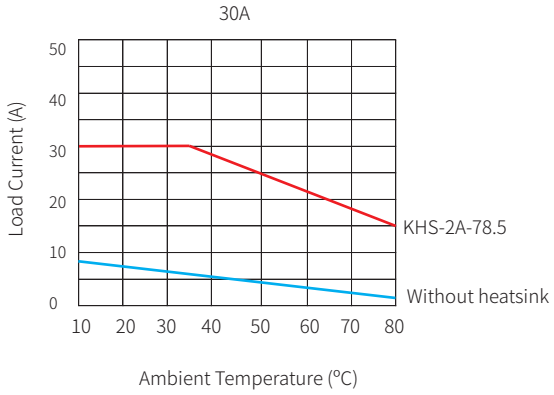


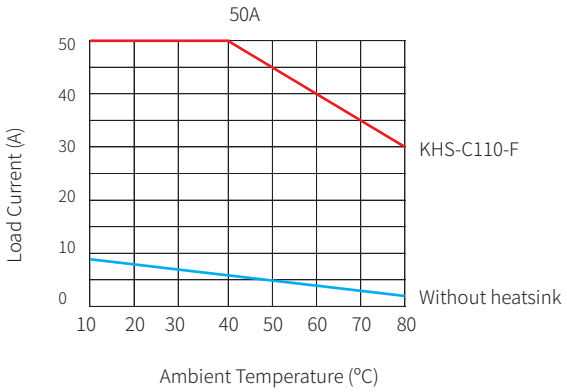


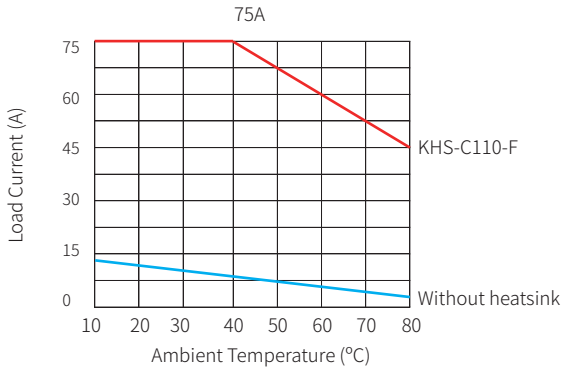
Connection Example



Thermal Curve







Important Notice

1. When the operation temperature is high, please consider the derating as per the thermal curve.
2. When connecting wiring to SSR please use a suitable screwdriver refer to the “Recommended Torque".