

Product Description

- ◆ Zero Crossing or Random-on Switching
- ◆ SCR Output
- ◆ Optical Isolation
- ◆ Control Voltage:DC4-32V or AC 90-280VAC
- ◆ Load Current: 25A, 40A, 60A, 80A
- ◆ Dielectric Strength: 4000Vrms
- ◆ Internal RC/MOV Protection Circuit
- ◆ RoHS Compliant



Ordering Information

KSQF	480	D	80	R	(XXX)
KSQF Series	Load Voltage 480: 480VAC 600: 600VAC	Control Mode D: DC Control A: AC Control	Load Current 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp	Blank: Zero Crossing R: Random-on	Customized Code

General Specifications

Input Specifications (Ta=25°C)			
Control Voltage Range	AC Control	90-280VAC	
	DC Control	4-32VDC	
Must Turn-On Voltage	AC Control	90VAC	
	DC Control	4VDC	
Must Turn-Off Voltage	AC Control	15VAC	
	DC Control	1VDC	
Maximum Reverse Voltage	DC Control	32VDC	
Maximum Input Current	AC Control	30mA@280VAC	
	DC Control	35mA@32VDC	

Output Specifications (Ta=25°C)			
Load Voltage Range	480VAC		24-530VAC
	600VAC		24-660VAC
Maximum Turn-On Time	AC Control	40ms	
	DC Control	Zero Crossing	10ms
		Random-on	1ms
Maximum Turn-Off Time	AC Control	20ms	
	DC Control	10ms	
Maximum Surge Current (@10ms)	25A		300A
	40A		500A
	60A		860A
	80A		1280A
Transient Overvoltage	480VAC		1200Vpk
	600VAC		1600Vpk

General Specifications

Maximum I ² t for Fusing (@10ms)	25A	450A ² s
	40A	1250A ² s
	60A	3698A ² s
	80A	8192A ² s
Maximum Off-State Leakage Current@Rated Load Voltage	10mA	
Maximum On-State Voltage Drop@Rated Current	1.6Vrms	
Minimum Off-State dv/dt@Maximum Rated Voltage	≥500 V/μs	

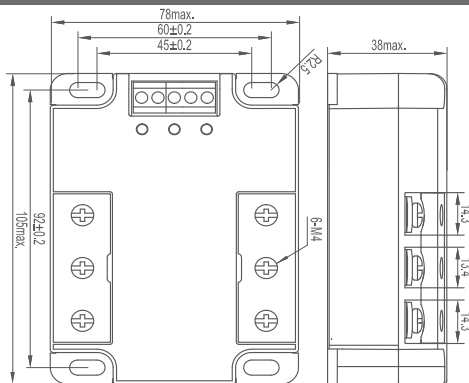
General Specifications (Ta=25°C)

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)	25A, 40A	385g
	60A, 80A	530g

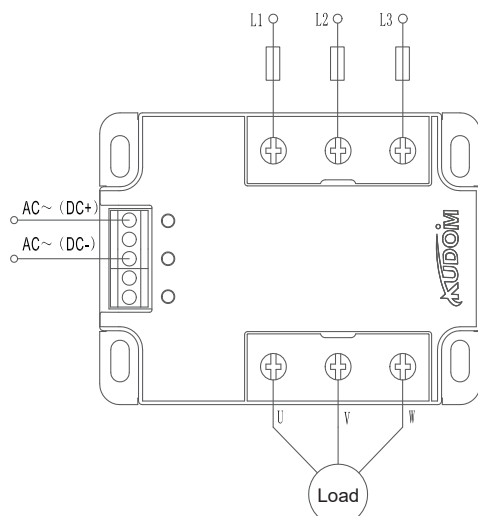
Applications

Suitable for three phase motor control, temperature control, large oven, and etc.

Outline Dimensions



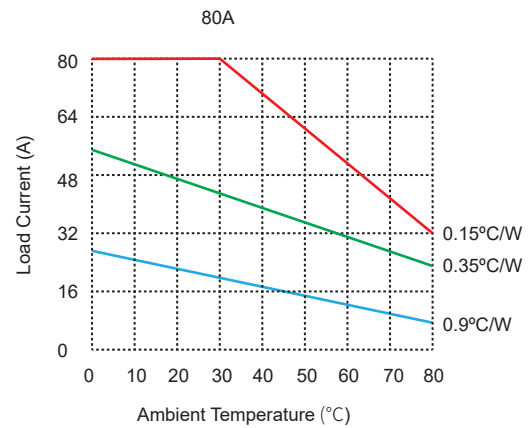
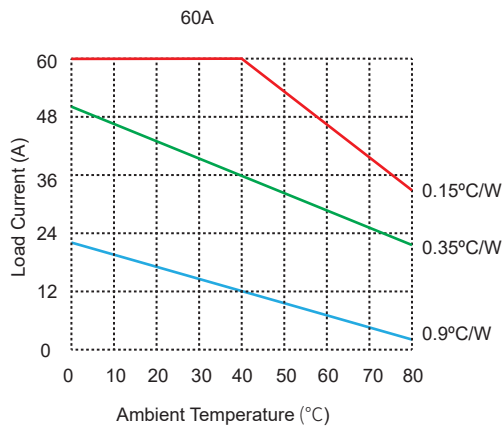
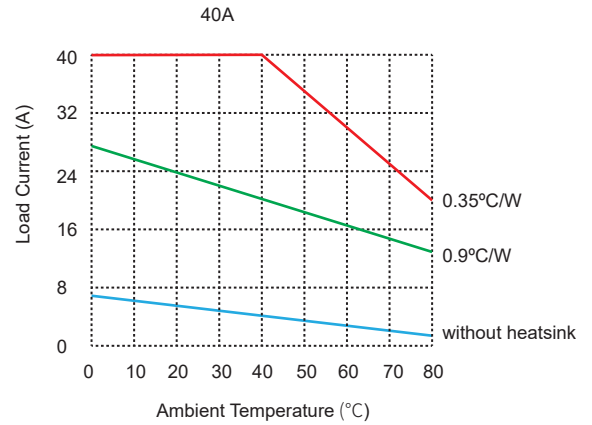
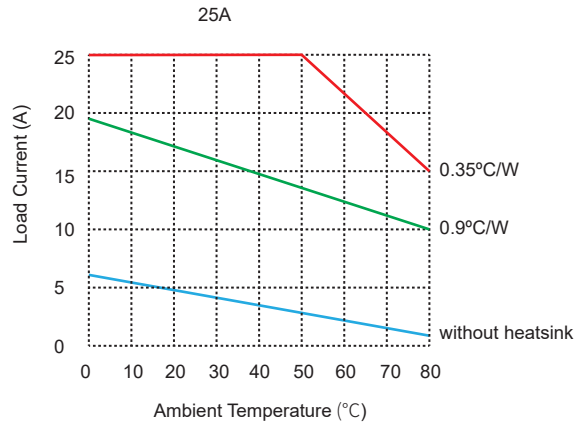
Wiring Diagram



AC~ (DC+): AC Control Input (DC Control Anode Input)

AC~ (DC-): AC Control Input (DC Control Cathode Input)

Thermal Derating Curve



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 18-20/2.0-2.2 in-lb/N·m.
2. When connection wiring to SSR please ensure screws are torqued down properly (input 4.43/0.5in lb/N·m, output 18-20/2.0-2.2 in-lb/N·m).
3. When Ambient temperature is above 25 °C see thermal derating.

Agency Approvals (Certification)

