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℃)		
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℃)			
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

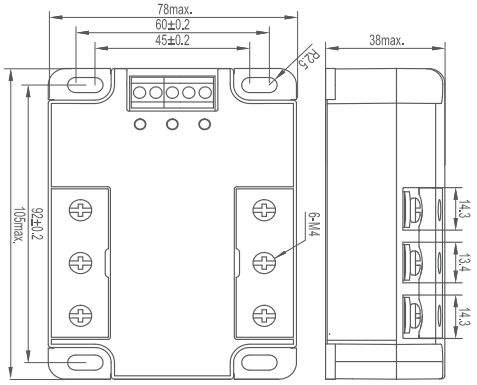
Maximum I^2t for Fusing (@10ms)	25A	$450A^2s$
	40A	$1250A^2s$
	60A	$3698A^2s$
	80A	$8192A^2s$
Maximum Off-State Leakage Current@Rated Load Voltage	10mA	
Maximum On-State Voltage Drop@Rated Current	1.6Vrms	
Minimum Off-State dv/dt@Maximum Rated Voltage	≥500 V/μs	

General Specifications (Ta=25℃)		
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

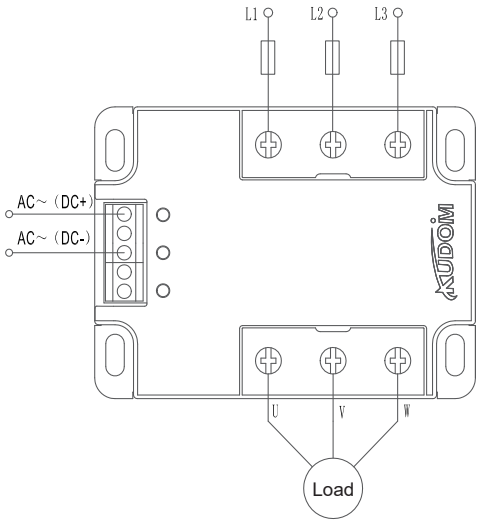
Applications

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

Outline Dimensions



Wiring Diagram

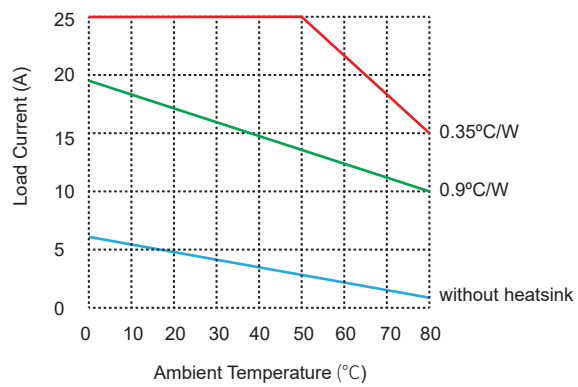


AC~ (DC+): AC Control Input (DC Control Anode Input)

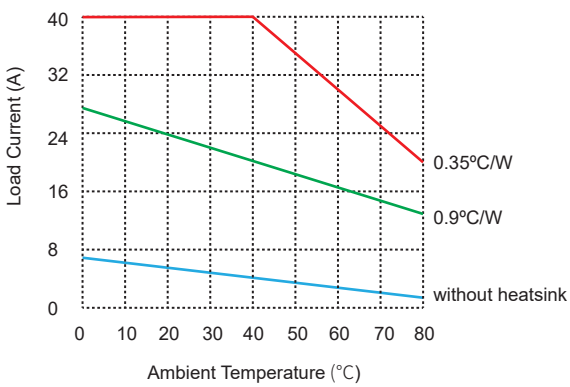
AC~ (DC-): AC Control Input (DC Control Cathod Input)

Thermal Derating Curve

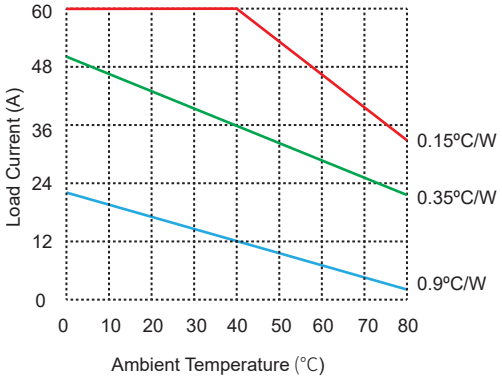
25A



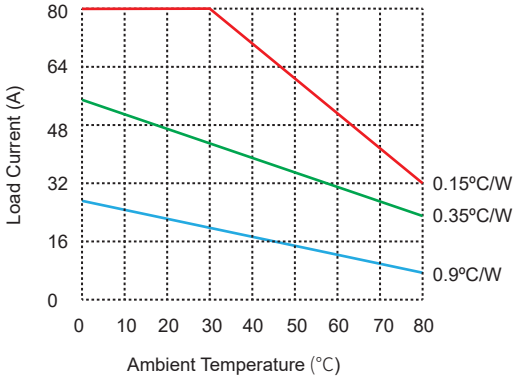
40A



60A



80A



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℃ see thermal derating.

Agency Approvals (Certification)

Trademark Change Notification

Due to the company's strategic development needs, Xiamen Kudom Electronics Technology Co., Ltd will be acquired by i-Autoc (Xiamen) Investment Co., Ltd from 1st of July 2019. After the acquisition, all the products by Xiamen Kudom Electronics Technology Co., will no longer use Kudom trademark, but use i-Autoc trademark. The details of the change are as follows.

The original trademark KUDOM will be changed to i-Autoc. The original trademark KUDOM will still be used until 30th June 2019.

This is a change to the trademark only, the Company Name, Manufacturing Location, Management Team, Product Part Numbers and Safety Approval Licence Numbers (cUL, TUV, CCC, S-mark Etc) are to remain the same.