

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

		25A	40A	60A	80A
D:4-32VDC	480	KSQF480D25	KSQF480A40	KSQF480A60	KSQF480A80
		KSQF480D25R	KSQF480A40R	KSQF480A60R	KSQF480A80R
	600	KSQF600D25	KSQF600A40	KSQF600A60	KSQF600A80
		KSQF600D25R	KSQF600A40R	KSQF600A60R	KSQF600A80R
A:90-280VAC	480	KSQF480A25	KSQF480A40	KSQF480A60	KSQF480A80
		KSQF480A25R	KSQF480A40R	KSQF480A60R	KSQF480A80R
	600	KSQF600A25	KSQF600A40	KSQF600A60	KSQF600A80
		KSQF600A25R	KSQF600A40R	KSQF600A60R	KSQF600A80R

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

General Specifications

Output Specifications (Ta=25°C)			
Load Voltage Range		480VAC	24-530VAC
		600VAC	24-660VAC
Maximum Turn-on Time	DC Control	AC Control	40ms
		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	700A
		80A	1280A
Transient Overvoltage		480VAC	1200Vpk
		600VAC	1600Vpk

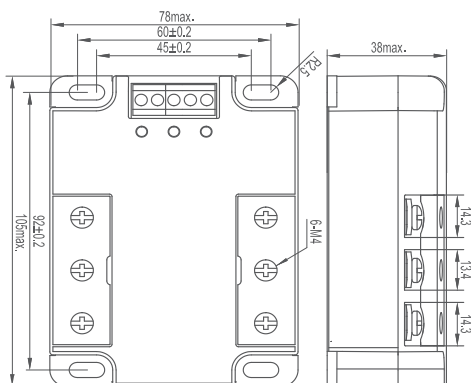
Maximum I ² t for Fusing (@10ms)		25A	450A ² s
		40A	1250A ² s
		60A	2450A ² s
		80A	8192A ² s
Maximum Off-State Leakage Current@Rated Load Voltage			5mA
Maximum On-State Voltage Drop@Rated Current			1.6Vrms
Minimum Off-State dv/dt@Maximum Rated Voltage			500 V/μs

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	520g

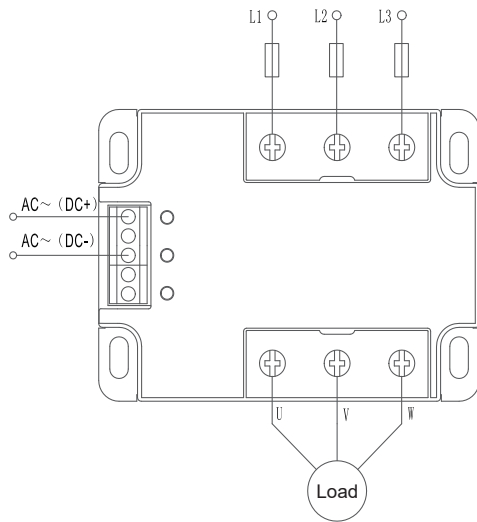
Applications

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

Outline Dimensions



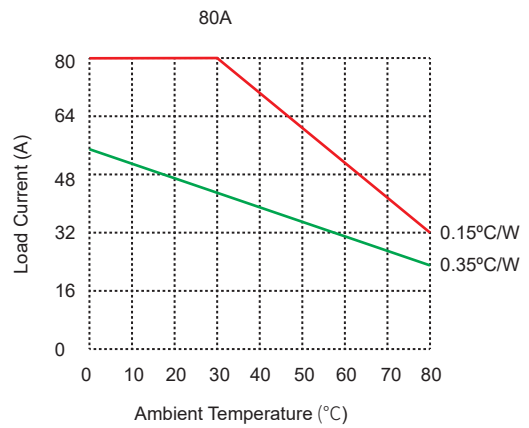
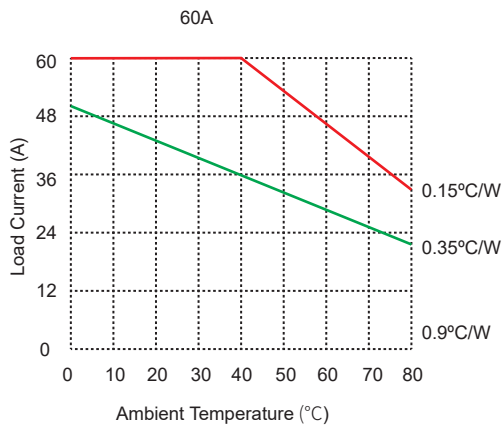
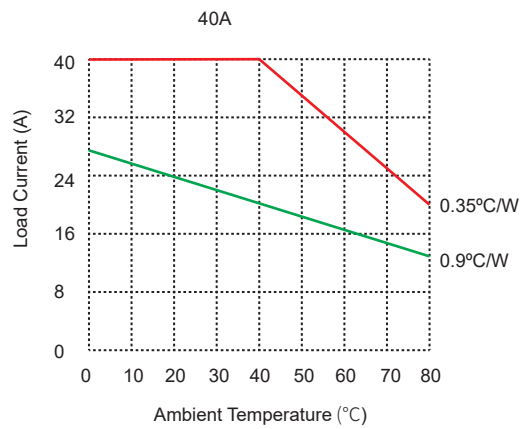
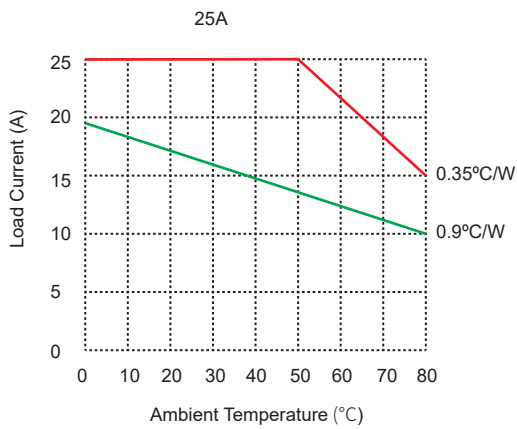
Wiring Diagram



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

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

General Specifications



General Notes

1. If the connection of the load will produce high surge current, please pay attention to the solid state relay and see if it is able to withstand the surge current value.
2. When the operation temperature is high, please consider the derating as per the thermal curve.