

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



Notes: No TUV or S-mark for AC input.

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

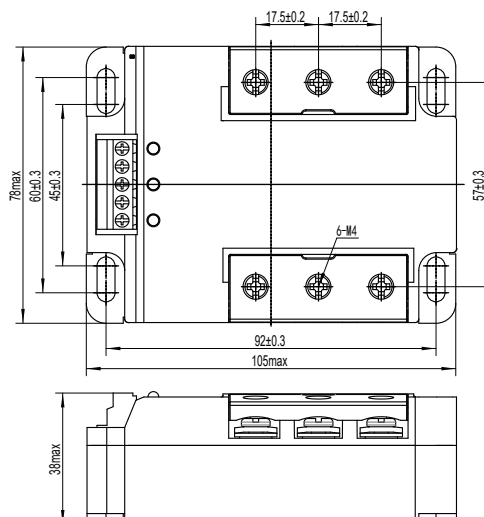
Output Specifications (Ta=25°C)			
Load Voltage Range		480VAC	24-530VAC
		600VAC	24-660VAC
Maximum Turn-on Time	DC Control	AC Control	40ms
		Zero Crossing	10ms
		Random-on	1ms
Maximum Turn-off Time		AC Control	20ms
		DC Control	10ms
Maximum Surge Current (@10ms)		25A	300A
		40A	500A
		60A	700A
		80A	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

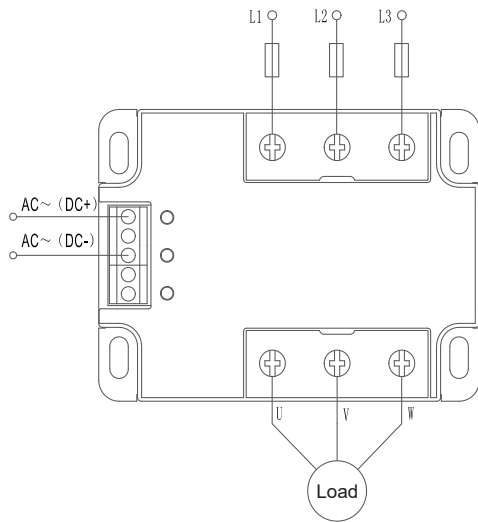
Applications

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

Outline Dimensions



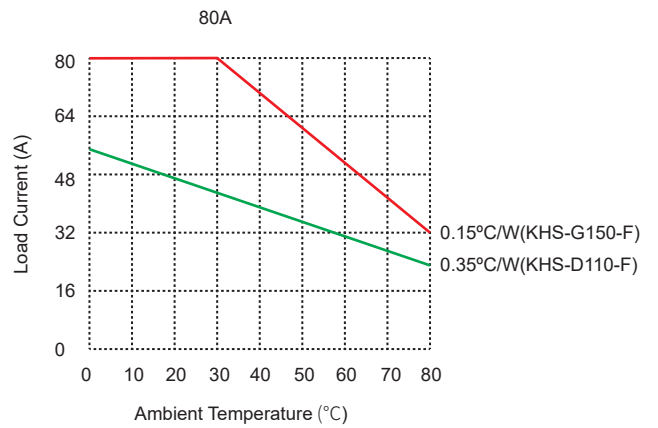
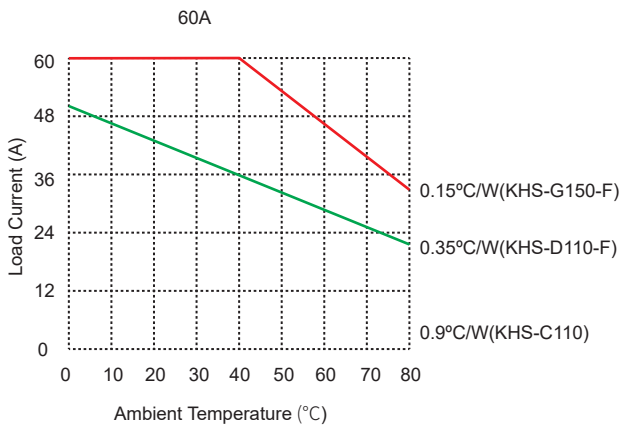
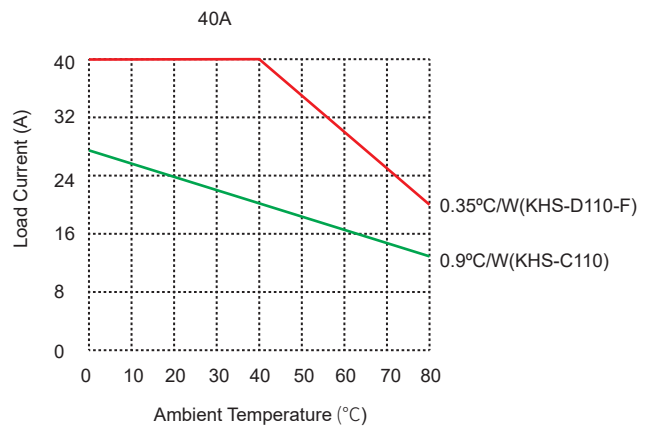
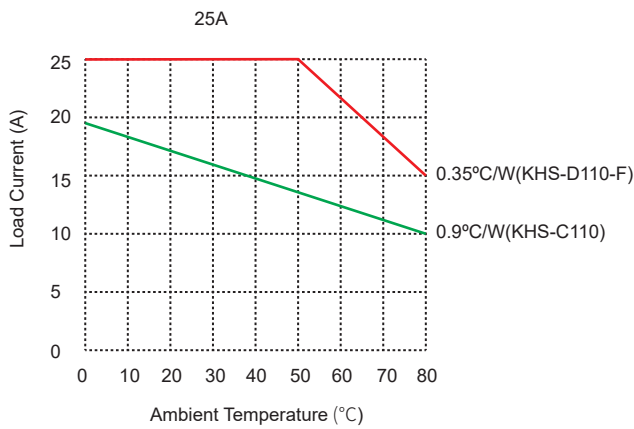
Wiring Diagram



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

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

General Specifications



General Notes

1. 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 18-20/2.0-2.2in-lb/Nm.
2. When connection wiring to SSR, please ensure screws are torqued down properly (input 13-15/1.5-1.7in-lb/Nm, output 18-20/2.0-2.2 in-lb/Nm).
3. SSR's carrying load capacity is related to the operation ambient temperature and heat dissipation condition, please refer to the Thermal Derating Curve for derating.