

## Solid State Relay

### KSQ Series Three Phase AC Output

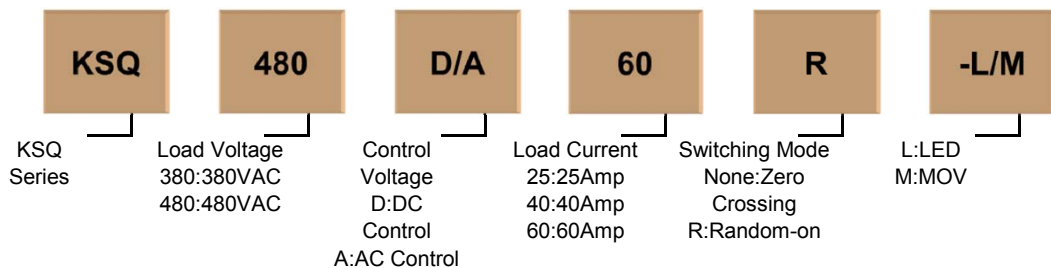


- Zero crossing or random-on
- Rated 25A-60A @48-530VAC
- 4-32VDC control
- SCR output
- LED indication
- Dielectric strength  $\geq 4000\text{VACrms}$
- Internal MOV/RC protection circuit
- Provide phase-lack protection product
- RoHS compliant

#### Product Description

KSQ480 series is three-phase AC output solid state relay. Control voltage is 4-32VDC, 90-280VAC, load current is 25A, 40A, 60A. Load voltage range 48-440VAC, 48-530VAC. SCR output with zero crossing or random-on.

#### Product Selection



Description	25A	40A	60A
380VAC	KSQ380D25	KSQ380D40	KSQ380D60
	KSQ380D25R	KSQ380D40R	KSQ380D60R
	KSQ380A25	KSQ380A40	KSQ380A60
	KSQ380A25R	KSQ380A40R	KSQ380A60R
480VAC	KSQ480D25	KSQ480D40	KSQ480D60
	KSQ480D25R	KSQ480D40R	KSQ480D60R
	KSQ480A25	KSQ480A40	KSQ480A60
	KSQ480A25R	KSQ480A40R	KSQ480A60R

#### Technical Specification

##### Input Circuit

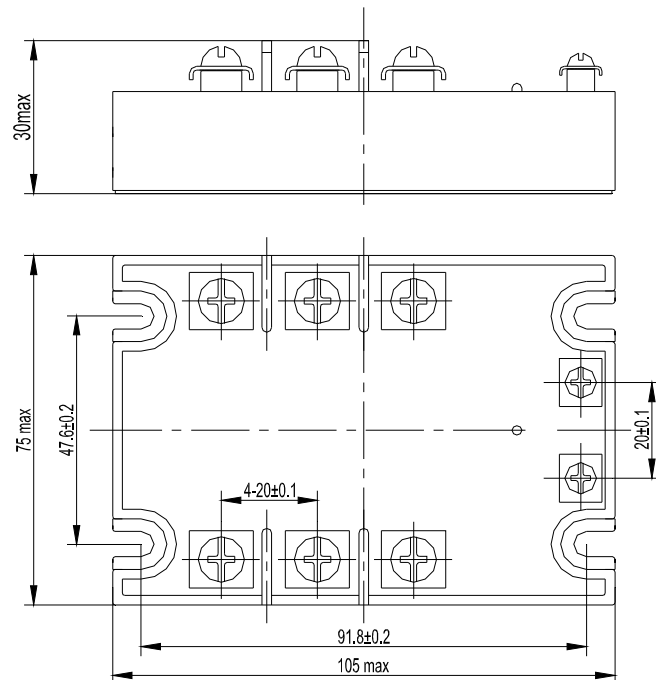
Control Voltage Range	DC Control	4-32VDC
	AC Control	90-280VAC
Minimum Turn-On Voltage	4VDC/90VAC	
Minimum Turn-Off Voltage	1VDC	
Maximum Input Current	35 mA@32VDC	

Output Circuit		
Load Voltage Range	380	48-440VAC
	480	48-530VAC
Transient Overvoltage	380	1100Vpk
	480	1200Vpk
Maximum Turn-On Time	Random-on	1mS
	Zero Crossing	1/2AC Cycle + 1mS
Maximum Turn-Off Time		1/2AC Cycle + 1mS
Maximum Off-State Leakage Current [ @ Rated Voltage]		5mA
Maximum On-State Voltage Drop [ @ Rated Current]		1.3Vrms
Minimum Off-State dv/dt [ @ Maximum Rated Voltage]		500V/ $\mu$ S

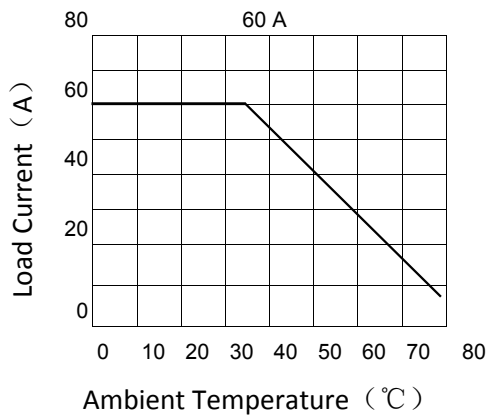
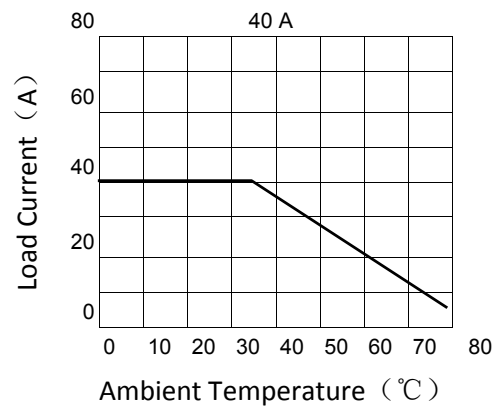
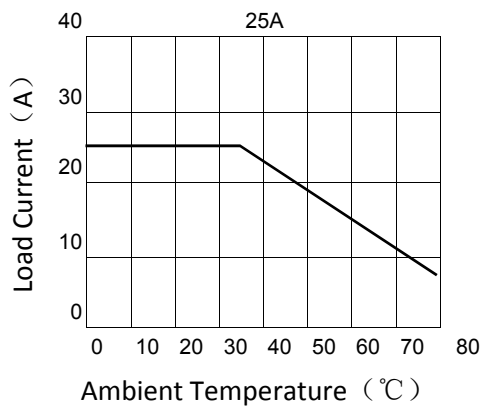
General Information	
Dielectric Strength, Input/Output/Base (50/60Hz)	$\geq 4000$ Vrms
Ambient Operating Temperature Range	-30 $^{\circ}$ C ~ +80 $^{\circ}$ C
Ambient Storage Temperature Range	-30 $^{\circ}$ C ~ +100 $^{\circ}$ C
Weight (typical)	350g

**Application**  
 Three-phase motor control, furnace temperature control system, Large oven, etc.

**Installation**



## Thermal Curve



## Important Notice

1. If the connected load will produce a high surge current, please pay attention to the solid state relay is able
2. If the connected load will produce a high peak inverse voltage, please pay attention to the solid state relay
3. Relay selection, please pay special attention to the load current and environment temperature. When the ambient temperature is high, the user should take load discount into account according to the thermal curve.

## Product Certification

