

Solid State Relay

KSI480 Series Single Phase AC Output

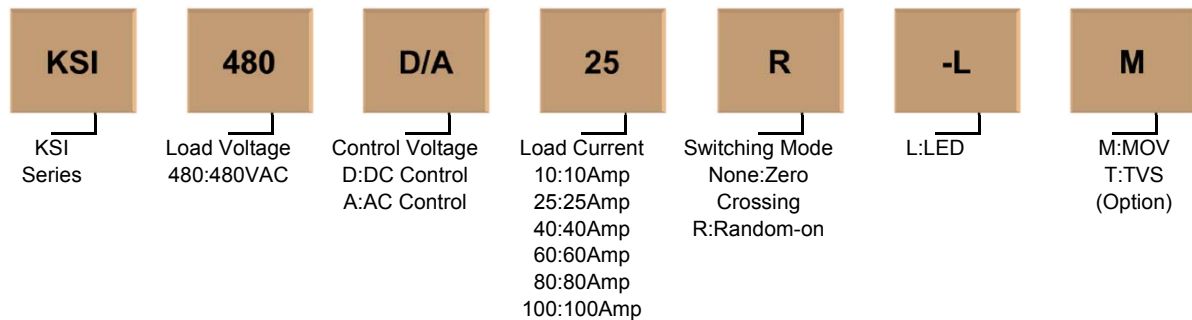


- Zero switching or random-on
- Ratings from 10A to 100A @ 48-530VAC
- SCR output for heavy industrial loads
- AC or DC input
- DBC substrate for superior thermal performance
- Dielectric strength 4000VACrms
- LED indication
- Internal RC/MOV and TVS protection circuit as option

Product Description

KSI480 series industrial single phase relay with SCR output is the most widely used in industry application. The relay can be used for resistive, inductive and capacitive loads. The control input voltage is 4-32VDC or 90-280VAC, output current rate 10A, 25A, 40A, 60A, 80A, 100A @ 48-530VAC.

Product Selection



| Description | 10A | 25A | 40A | 60A | 80A | 100A |
|--------------|------------|------------|------------|------------|------------|-------------|
| D:3-32VDC | KSI480D10 | KSI480D25 | KSI480D40 | KSI480D60 | KSI480D80 | KSI480D100 |
| | KSI480D10R | KSI480D25R | KSI480D40R | KSI480D60R | KSI480D80R | KSI480D100R |
| AC:90-280VAC | KSI480A10 | KSI480A25 | KSI480A40 | KSI480A60 | KSI480A80 | KSI480A100 |

Technical Specification

Input Circuit

| | | |
|--------------------------|----------|-----------|
| Control Voltage Range | DC Input | 4-32VDC |
| | AC Input | 90-280VAC |
| Minimum Turn-On Voltage | DC Input | 4VDC |
| | AC Input | 90VAC |
| Minimum Turn-Off Voltage | DC Input | 1VDC |
| | AC Input | 10VAC |
| Maximum Input Current | DC Input | 25mA |
| | AC Input | 10mA |

Output Circuit

| | |
|--------------|-----------|
| Load Voltage | 48-530VAC |
| Random-On | 1ms |

| | | |
|--|---------------|-----------------------|
| Maximum Turn-On Time | Zero Crossing | 1/2AC Cycle + 1ms |
| | AC Input | 20ms |
| Maximum Turn-Off Time | DC Input | 1/2AC Cycle + 1ms |
| | AC Input | 40ms |
| Maximum Surge Current [@10ms] | 10A | 150A |
| | 25A | 400A |
| | 40A | 440A |
| | 60A | 860A |
| | 80A | 1280A |
| | 100A | 1550A |
| Maximum I ² t For Fusing [@10ms] | 10A | 350A ² S |
| | 25A | 900A ² S |
| | 40A | 970A ² S |
| | 60A | 3698A ² S |
| | 80A | 8192A ² S |
| | 100A | 12012A ² S |
| Transient Overvoltage | | 1200Vpk |
| Maximum Off-State Leakage Current [@ Rated Voltage] | | 3mA |
| Maximum On-State Voltage Drop [@ Rated Current] | | 1.6Vrms |
| Minimum Off-State dv/dt [@ Maximum Rated Voltage] | | 500V/μs |

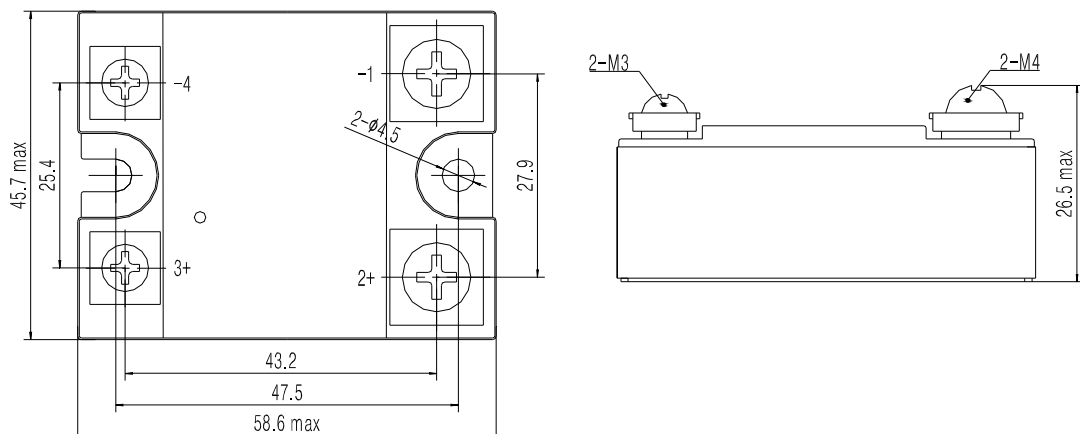
General Information

| | |
|---|----------------|
| Dielectric Strength, Input/Output/Base [50/60Hz] | ≥4000Vrms |
| Ambient Operating Temperature Range | -30°C ~ +80°C |
| Ambient Storage Temperature Range | -30°C ~ +100°C |
| Weight [typical] | 85g |

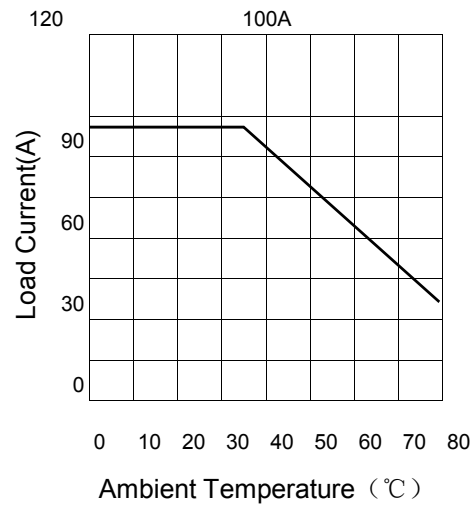
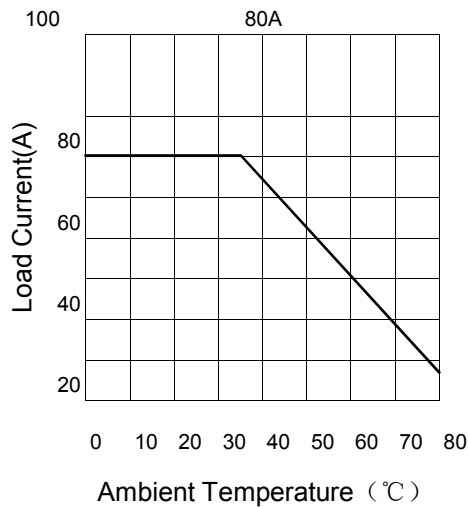
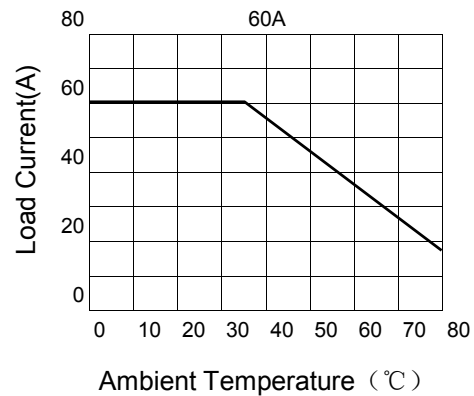
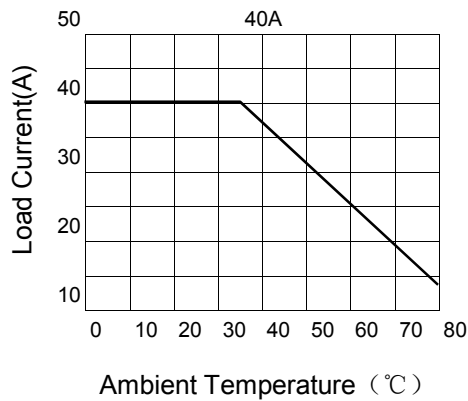
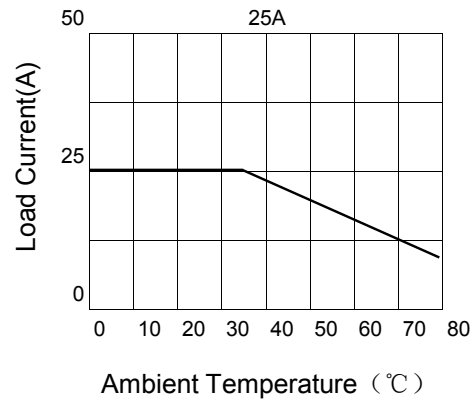
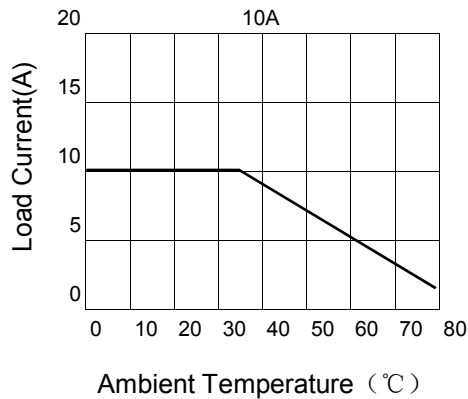
Application

High-low Temperature Chamber, Plastics Machinery, Incubation Machine, Oiling Machine, HVAC, Elevator, Lighting, Fountain Controller.

Installation



Thermal Curve



Important Notice

1. When the ambient temperature is over 40°C or many KSI series are installed closely together, the user should take load discount into account according to the thermal curve.
2. If the load current is over 5A, suitable heatsink should be added to the SSR.
3. Plastic cover can be option depends on application to reach IP20.

Product Certification



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