

Product Description

- ◆ Zero-crossing or Random-on Switching
- ◆ Load current: 30A - 75A @ 24-660VAC
- ◆ SCR Output
- ◆ AC or DC Input Control
- ◆ Dielectric Strength: 4000Vrms
- ◆ LED Indicator
- ◆ Internal RC Protection Circuit



Ordering Information

| | | | | | | | |
|------------|-----------------------------|--------------------------------|--|--|---------------|--------------------------------|-----------------|
| KSU | 600 | D | 30 | R | -L | M | (XXX) |
| KSU Series | Load Voltage: 600:600VAC | D: DC Control A: AC Control | Load Current 30:30Amp 50:50Amp 75:75Amp | Switching Mode Blank: Zero Crossing R: Random-on | LED Indicator | M: MOV T: TVS (Optional) | Customized Code |

| | | 30A | 50A | 75A |
|-------------|------|---------------|---------------|---------------|
| D:4-32VDC | 600V | KSU600D30-L | KSU600D50-L | KSU600D75-L |
| | | KSU600D30-LM | KSU600D50-LM | KSU600D75-LM |
| | | KSU600D30-LT | KSU600D50-LT | KSU600D75-LT |
| | | KSU600D30R-L | KSU600D50R-L | KSU600D75R-L |
| | | KSU600D30R-LM | KSU600D50R-LM | KSU600D75R-LM |
| | | KSU600D30R-LT | KSU600D50R-LT | KSU600D75R-LT |
| A:90-280VAC | 600V | KSU600A30-L | KSU600A50-L | KSU600A75-L |
| | | KSU600A30-LM | KSU600A50-LM | KSU600A75-LM |
| | | KSU600A30-LT | KSU600A50-LT | KSU600A75-LT |
| | | KSU600A30R-L | KSU600A50R-L | KSU600A75R-L |
| | | KSU600A30R-LM | KSU600A50R-LM | KSU600A75R-LM |
| | | KSU600A30R-LT | KSU600A50R-LT | KSU600A75R-LT |

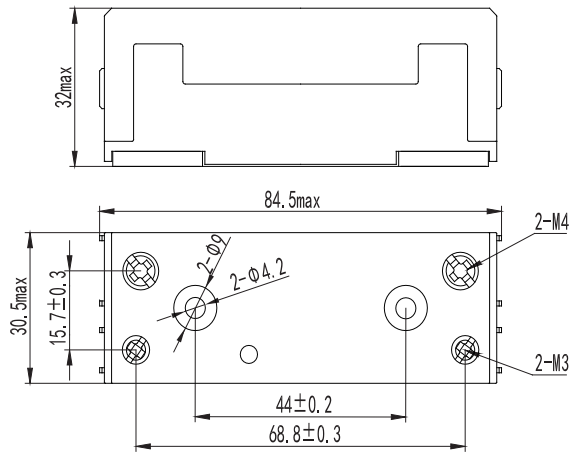
General Specifications

| Input Specifications (Ta=25°C) | | |
|--------------------------------|--------------------------|-----------|
| Control Voltage Range | DC Control | 4-32VDC |
| | AC Control | 90-280VAC |
| Must Turn-on Voltage | DC Control | 4VDC |
| | AC Control | 90VAC |
| Must Turn-off Voltage | DC Control | 1VDC |
| | AC Control | 15VAC |
| Maximum Input Current | DC Control Zero Crossing | 15mA |
| | DC Control Random-on | 18mA |
| | AC Control | 25mA |

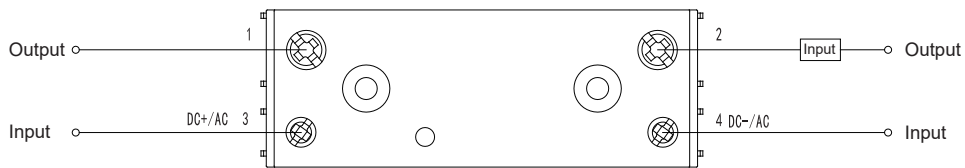
| Output Specifications (Ta=25°C) | | |
|--|--------------------------|----------------------|
| Load Voltage Range | | 24-660VAC |
| Maximum Turn-on Time | DC Control Zero Crossing | 10ms |
| | DC Control Random-on | 1ms |
| | AC Control | 40ms |
| Maximum Turn-off Time | DC Control | 10ms |
| | AC Control | 40ms |
| Maximum Surge Current (@10ms) | 30A | 400A |
| | 50A | 600A |
| | 75A | 800A |
| Maximum I ² t for Fusing (@10ms) | 30A | 800A ² S |
| | 50A | 1800A ² S |
| | 75A | 3200A ² S |
| Transient Overvoltage | | 1200Vpk |
| 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 | | 500V/μs |

| General Specifications (Ta=25°C) | | |
|----------------------------------|--------------------|----------------|
| Dielectric Strength (50/60Hz) | Input/Output | 4000Vrms |
| | Input, output/Base | 2500Vrms |
| Minimum Load Current | | 100mA |
| Power Factor | | 0.5 |
| Ambient Temperature Range | | -30°C ~ +80°C |
| Storage Temperature Range | | -30°C ~ +100°C |
| Weight (Typical) | 30A/50A | 100g |
| | 75A | 130g |

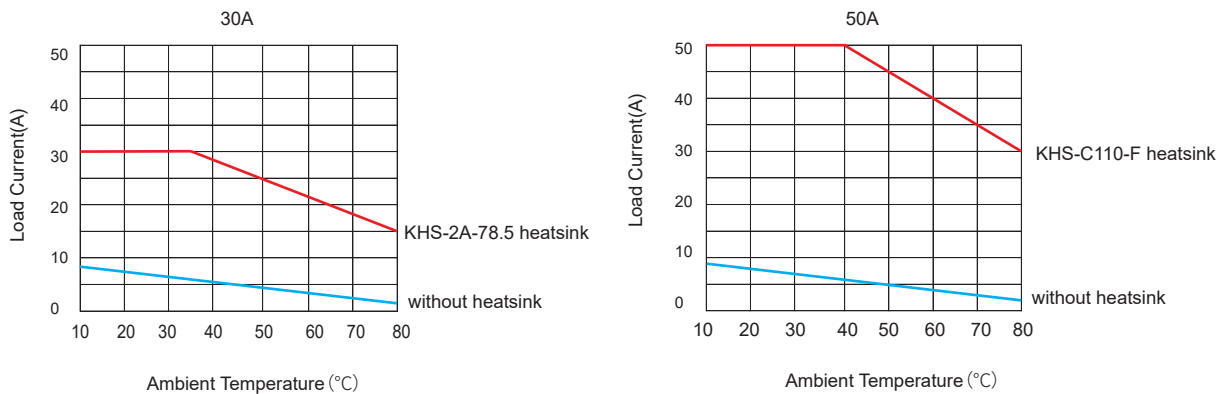
Outline Dimensions



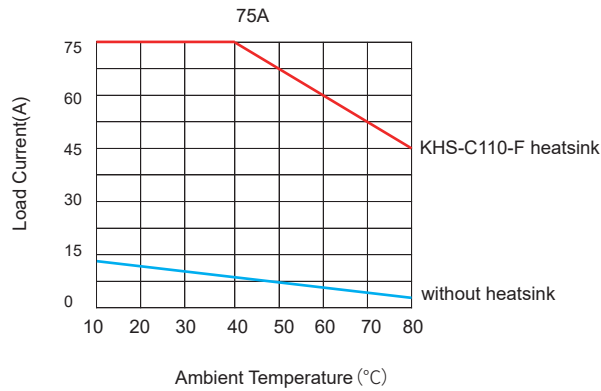
Wiring Diagram



Thermal Derating Curve



Thermal Derating Curve



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.

Warnings

1. The product's side panels may be hot, allow the product to cool before touching.
2. Disconnect all power before installing or working with this equipment.
3. Verify all connections and replace all covers before turning on power.