

Product Description

- ◆ Load Current: 25A, 40A@24-530VAC
- ◆ 12VDC or 24VDC Input Control
- ◆ Internal RC/MOV Protection Circuit
- ◆ High EMC design
- ◆ SCR output
- ◆ RoHS Compliant



Ordering Information

<b>KMGS</b>	<b>480</b>	<b>D</b>	<b>50</b>	<b>R</b>	<b>-24</b>	<b>F</b>	<b>(XXX)</b>
KMGS Series	Load Voltage 480: 480VAC	DC Control	Load Current 50: 50Amp	R: Random-on	12: 12Vd.c. 24: 24Vd.c.	Blank: Two-phase Switch F: Three-phase Switch	XXX: Customized Code

Information	-12	-24
50A	KMGS480D50R-12F	KMGS480D50R-24F

General Specifications

Input Specifications (Ta=25°C)		
Control Voltage Range	-12	9.6-14.4VDC
	-24	21-28.8VDC
Must Turn-on Voltage	-12	9.6VDC
	-24	21VDC
Maximum Input Current	-12	65mA@14.4VDC
	-24	45mA@28.8VDC
Must Turn-off Voltage		4VDC
Minimum Reversible Switching Time (Typical)		70-100ms

Output Specifications (Ta=25°C)	
Load Voltage Range	24-530VAC
Maximum Transient Overvoltage	1600Vpk
Minimum Load Current	100mA
Maximum Turn-off Time	20ms
Maximum On-State Voltage Drop@Rated Current	1.5Vrms
Minimum Off-State dv/dt@Maximum Rated Voltage	500V/μs

General Specifications

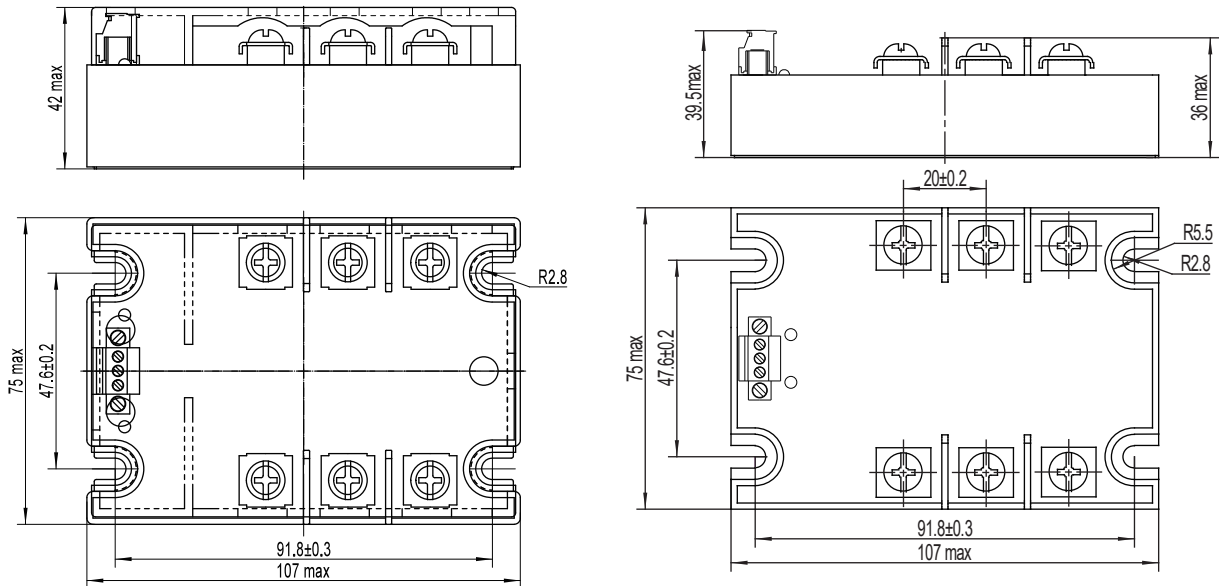
Output Specifications(Ta=25°C)	
Maximum Off-State Leakage Current@Rated Load Voltage	5mA
Maximum Surge Current (@10ms)	400A
Maximum Motor Load Power	2.5kW
Maximum I <sup>2</sup> t for Fusing (@10ms)	800A <sup>2</sup> s

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	3000Vrms
	Input, output/Base	2500Vrms
Ambient Temperature Range	-30°C ~ +80°C	
Storage Temperature Range	-30°C ~ +100°C	
Pulse Immunity Level	IEC61000-4-4	4kV/100kHz
Surge Immunity Level	IEC61000-4-5	2kV/common mould, 1kV/different mould
Electrostatic Discharge Immunity Level	IEC61000-4-2	4kV/contact discharge, 8kV/air discharge
Weight (Typical)	390g	
LED Light	Forward: green	
	Reversing: red	

Applications

Motor control.

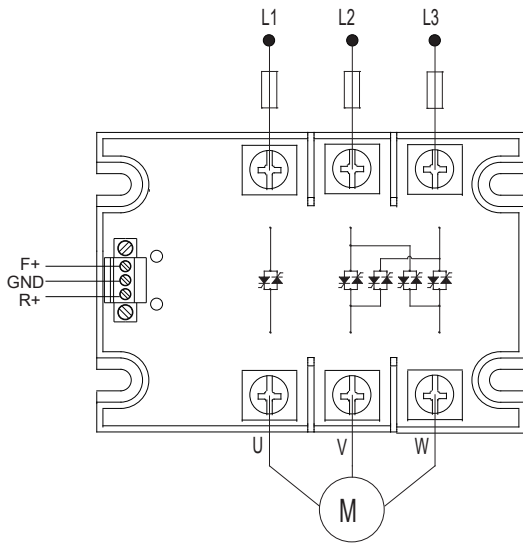
Outline Dimensions / Wiring Diagram



KMGS+KPC-1A Outline Dimensions

KMGS Outline Dimensions

Wiring Diagram



Wiring instructions

Input

F+: Forward control please input Anode+.

GND: Control the negative terminal of the power supply.

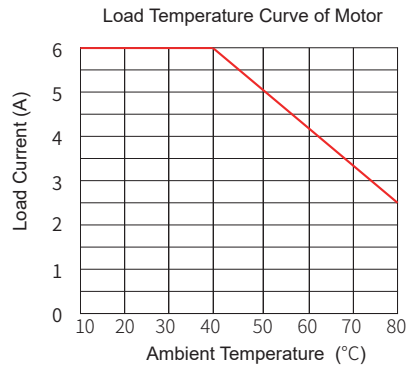
R+: Reversing control please input Anode+.

Output

L1/L2/L3: Three-phase power supply input.

U/V/W: Three-phase load output.

Thermal Derating Curve



Note: The product can be installed on the panel with thermal resistance  $\leq 1.5 \text{ }^\circ\text{C/W}$  to assist heat dissipation.

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.
2. When connecting wiring to SSR please ensure screws are torqued down properly. Recommended torque for input screw is 4.43/0.5 in-lb/N·m, output screw is (18-20)/(2.0-2.2) in-lb/N·m.
3. When the operation temperature is above 25 °C, please consider the derating as per the Thermal Derating Curve.
4. Please ensure reliable grounding when using the SSR.
5. Avoid using the product under the condition of strong magnetic field. The external strong magnetic field will affect the product's performance such as switching on and off.

! 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.