

Product Description

- ◆ Load Current: 25A, 40A, 60A, 80A
- ◆ Control Voltage: 12VDC or 24VDC
- ◆ Internal RC Protection Circuit
- ◆ High EMC Design
- ◆ SCR Output



Product Selection

KMG	480	D	60	R	P	-24	F	(XXX)
KMG Series	Load Voltage 480: 24-510VAC	Control Mode D: DC Control	Load Current 25:25Amp 40: 40Amp 60: 60Amp 80: 80Amp	Switching Mode R: Random-on	Control Type Blank: Common Cathode P: Common Anode	Control Voltage 12: 12VDC 24: 24VDC	F: Three Phase Switch Blank: Two Phase Switch	Customized Code

Product Selection

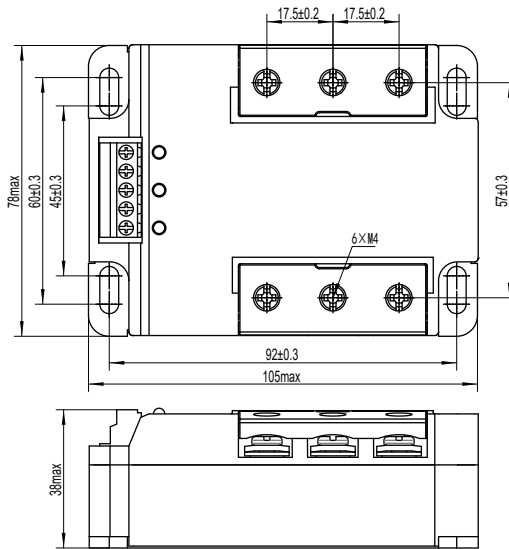
Input Specifications (Ta=25°C)		
Control Voltage Range	-12	9.6-14.4VDC
	-24	15-28.8VDC
Must Turn-on Voltage	-12	9.6VDC
	-24	15VDC
Maximum Input Current	-12	65mA@14.4VDC
	-24	45mA@28.8VDC
Must Turn-off Voltage		4VDC
Turn-on Delay Time		80ms (Typical)
Output Specifications (Ta=25°C)		
Load Voltage Range		24-510VAC
Maximum Transient Overvoltage		1200Vpk
Minimum Load Current		100mA
Maximum Turn-off Time		20ms
Maximum Motor Power	25A	1.5kW
	40A	2.5kW
	60A	4kW
	80A	6kW
Maximum Surge Current (@10ms)	25A	250A
	40A	400A
	60A	600A
	80A	800A
Maximum I ² t (@10ms)	25A	312A ² s
	40A	800A ² s
	60A	1800A ² s
	80A	3200A ² s
Maximum On-State Voltage Drop (@Rated Current)		1.6Vrms
Minimum Off-State dv/dt		500V/μs
Maximum Off-State Leakage Current (@Rated Load Voltage)		5mA

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	2500Vrms
	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(Level 4)
Surge Immunity Level	IEC61000-4-5	2kV/common mould, 1kV/different mould(Level 3)
Electrostatic Discharge Immunity Level	IEC61000-4-2	6kV/contact discharge, 8kV/air discharge(Level 4)
Weight (Typical)	100g	
LED Indication	Green	Forward Indication
	Red	Reverse Indication

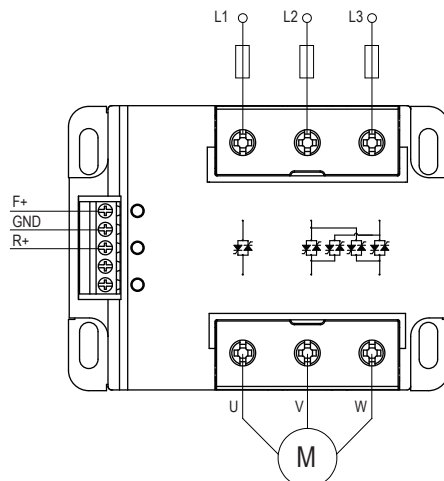
Applications

Suitable for motor control.

Outline Dimensions



Wiring Diagram



Common Cathode

Wiring Instructions of Common Cathode Control

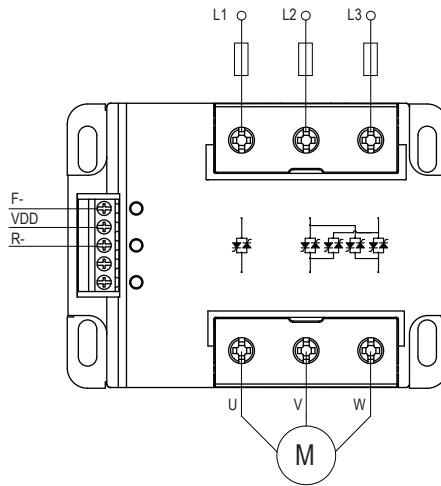
F+: Connect F+ to motor forward control

GND: Common terminal negative -

R+: Connect R+ to motor reverse control

L1/L2/L3: Three-phase input terminals

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



Wiring Instructions of Common Anode Control:

F-: Connect F- to motor forward control

VDD: Common terminal positive +

R-: Connect R- to motor reverse control

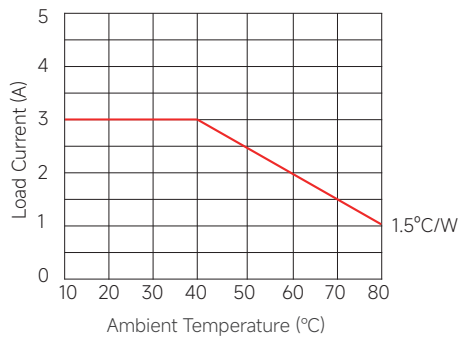
L1/L2/L3: Three-phase input terminals

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

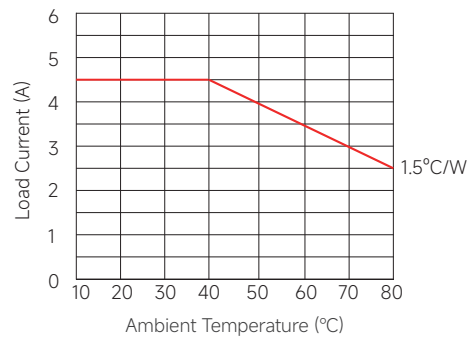
Common Anode

Thermal Derating Curve

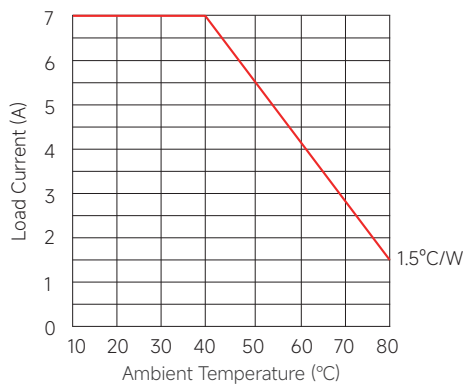
KMG480D25... Series
Motor Load



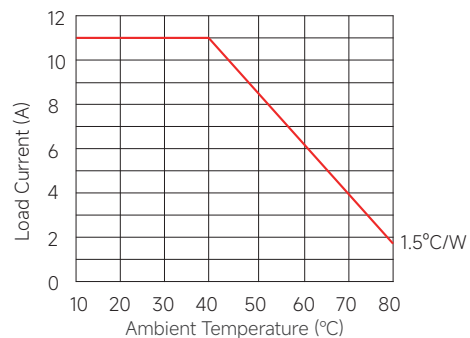
KMG480D40... Series
Motor Load



KMG480D60... Series
Motor Load



KMG480D80... Series
Motor Load



Note: This product can be installed on a panel with a thermal resistance of ≤ 1.5 °C/W to assist in 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 the relay and the heat sink.
2. When connecting wiring to SSR please ensure screws are torqued down properly. Recommended torque for input screw is 4.43in-lb / (0.2-0.5)N·m, output screw is (18-20)in-lb / (2.0-2.2)N·m.
3. If the connected load will generate high surge current, please pay attention to whether the product can withstand the value of surge current.
4. 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.
5. Please ensure reliable grounding when using the SSR.
6. The forward and reverse module should avoid dropping or falling due to improper installation. If the module falls, it may be damaged or suffer from reduced reliability, which could shorten its service life. If the product is accidentally dropped, it is not recommended to continue using it.

! Warnings

1. The product 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.