Product Description

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

Ordering Information

KMG	480	D	60	R	P	-24	F	(XXX)
KMG Series	Load Voltage 480: 24-530VAC	DC Control	Load Current 25:25Amp 40:40Amp 60:60Amp 80:80Amp	Switching Mode R: Random-on	Control Voltage Blank: Common Cathode P: Common Anode	Control Voltage 12: 12VDC 24: 24VDC	F:Three Phase Switch Blank:Two Phase Switch	Customized Code

		-12		-24	
Common Anode	25A	KMG480D25RP-12F	KMG480D25RP-12	KMG480D25RP-24F	KMG480D25RP-24
	40A	KMG480D40RP-12F	KMG480D40RP-12	KMG480D40RP-24F	KMG480D40RP-24
	60A	KMG480D60RP-12F	KMG480D60RP-12	KMG480D60RP-24F	KMG480D60RP-24
	80A	KMG480D80RP-12F	KMG480D80RP-12	KMG480D80RP-24F	KMG480D80RP-24
Common Cathode	25A	KMG480D25R-12F	KMG480D25R-12	KMG480D25R-24F	KMG480D25R-24
	40A	KMG480D40R-12F	KMG480D40R-12	KMG480D40R-24F	KMG480D40R-24
	60A	KMG480D60R-12F	KMG480D60R-12	KMG480D60R-24F	KMG480D60R-24
	80A	KMG480D80R-12F	KMG480D80R-12	KMG480D80R-24F	KMG480D80R-24

General Specifications

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 (Typical)		80ms (Typical)

Output Specifications(Ta=25°C)	
Load Voltage Range	24-530VAC
Maximum Transient Overvoltage	1200Vpk
Minimum Load Current	100mA
Maximum Turn-off Time	20ms
Maximum On-State Voltage Drop@Rated Current	1.6Vrms
Minimum Off-State dv/dt	500V/μs

General Specifications

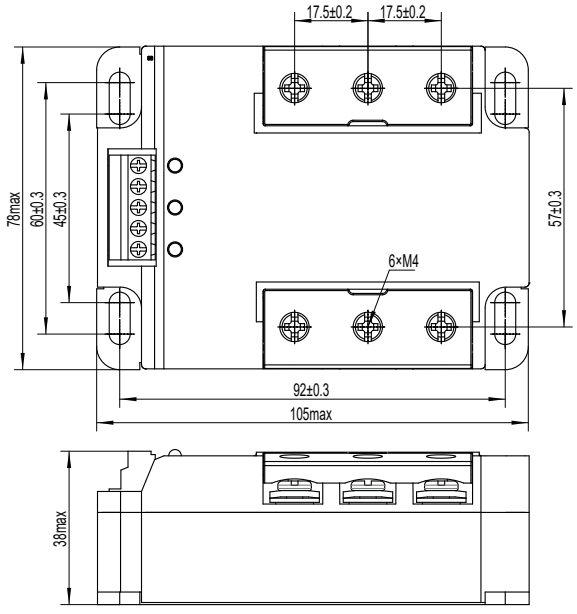
Output Specifications(Ta=25°C)		
Maximum Off-State Leakage Current@Rated Load Voltage	5mA	
Maximum Surge Current (@10ms)	25A	250A
	40A	400A
	60A	600A
	80A	800A
Maximum Motor Power	25A	1.5kW
	40A	2.5kW
	60A	4kW
	80A	6kW
Maximum I²t (@10ms)	25A	312A²s
	40A	800A²s
	60A	1800A²s
	80A	3200A²s

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)		400g
Working Status Indication	Green	Forward Indication
	Red	Reverse Indication

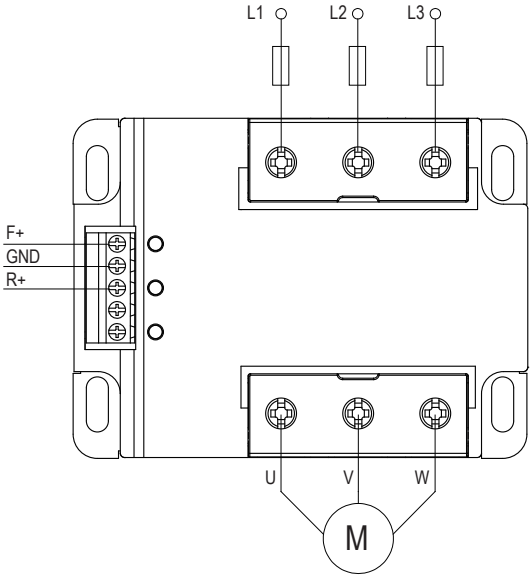
Application

Suitable for motor control.

Outline Dimension



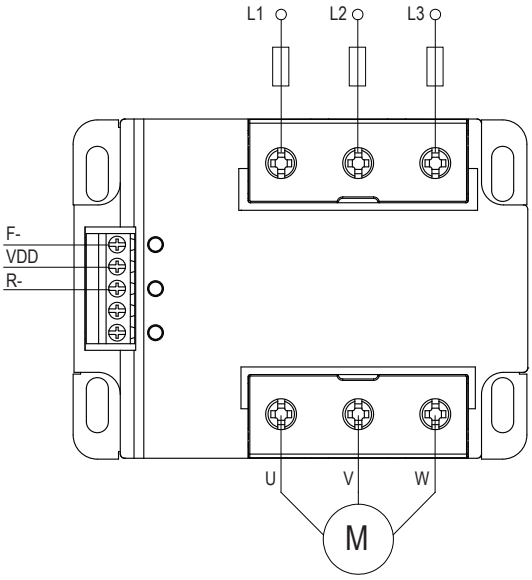
Wiring Diagram



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

Common Cathode

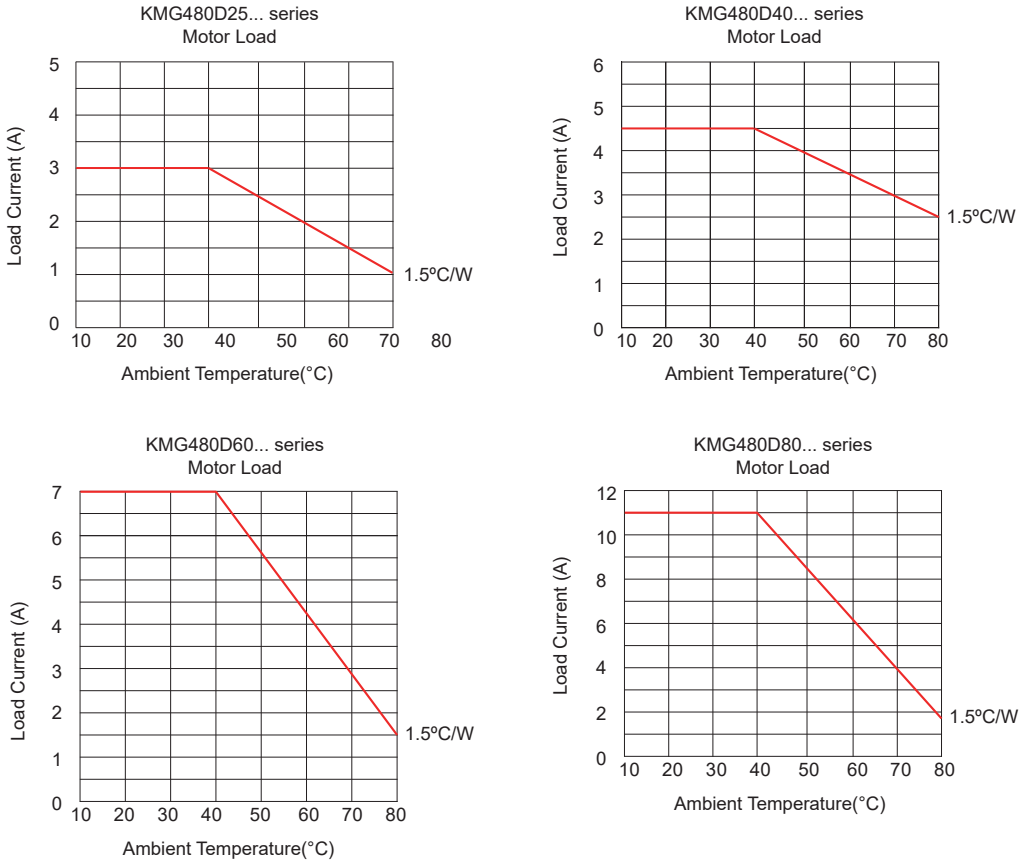


Wiring Instructions of Common Anode Control:
F-: Connect F- to motor forward control
VDD: Common terminal positive +
R-: Connect R- to motor reverse control

L1/L2/L3: Three-phase input terminals
U/V/W: Three-phase load output terminals

Common Anode

Thermal Derating Curve



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. If the connected load will generate high surge current, please pay attention to whether the product can withstand the value of surge current.
3. 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.
4. Please ensure reliable grounding when using the SSR.

! 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.