

**Product Description**

- ◆ Small Size
- ◆ Load Current: 10A or 20A
- ◆ 12VDC or 24VDC Input
- ◆ Internal RC/MOV Protection Circuit
- ◆ 3 Phase 2 Control, Internal Delay Circuit, Interlock Circuit
- ◆ Output Connected with Wires
- ◆ RoHS Compliant



**Ordering Information**

<b>KMGB</b>	<b>380</b>	<b>D</b>	<b>10</b>	<b>R</b>	<b>-24</b>	<b>(XXX)</b>
KMGB Series <sup>(1)</sup>	Load Voltage 480: 480VAC	D: DC Control	Load Current 10: 10Amp 20: 20Amp	Switching Mode R: Random-on	Control Voltage 12: 12VDC 24: 24VDC	XXX: Customized Code

(1) The part number selection is subject to the following list.

Information	10A	20A
12VDC	KMGB480D10R-12	KMGB480D20R-12
24VDC	KMGB480D10R-24	KMGB480D20R-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
Must Turn-off Voltage	2VDC	
Maximum Input Current	-12	55mA
	-24	38mA

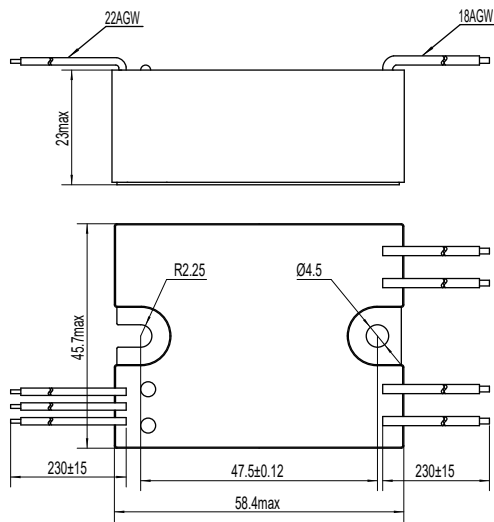
Output Specifications (Ta=25°C)		
Load Voltage Range	24-530VAC	
Maximum Transient Overvoltage	1200Vpk	
Minimum Load Current	100mA	
Minimum Delay Turn-on Time	100ms	
Maximum Turn-off Time	20ms	
Maximum 1 Cycle Surge Current (@10ms)	10A	160A
	20A	200A
Maximum I <sup>2</sup> t (@10ms)	10A	120A <sup>2</sup> s
	20A	200A <sup>2</sup> s
Maximum Off-State Leakage Current@Rated Load Voltage	5mA	
Maximum On-State Voltage Drop@Rated Current	1.5Vrms	
Minimum Off-State dv/dt@Maximum Rated Voltage	200V/μs	

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	4000Vrms
	Input, output/Base	2500Vrms
Minimum Insulation Resistance (@500VDC)		1000MΩ
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)		130g
Working Status Indication		Forward:Green
		Reversion:Red

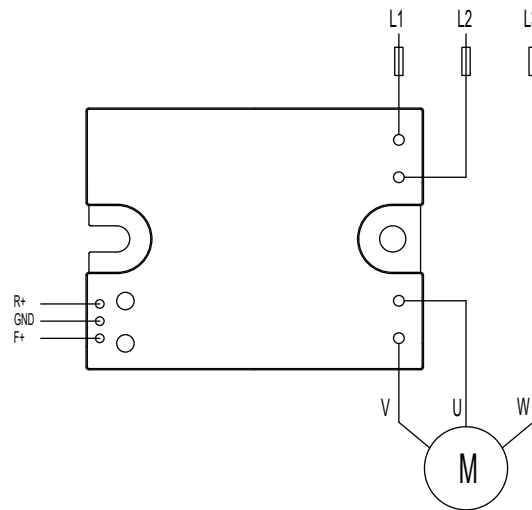
### Applications

Three phase motor reversing control, such as electric actuator, transformer with onload voltage regulating, and etc.

### Outline Dimensions/Wiring Diagram

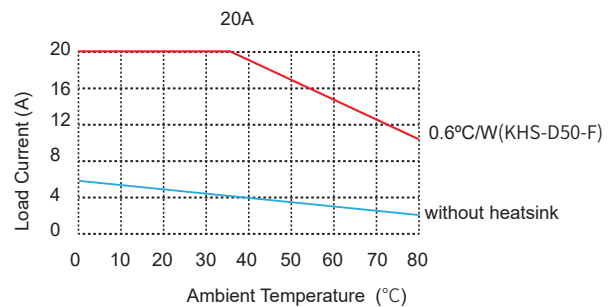
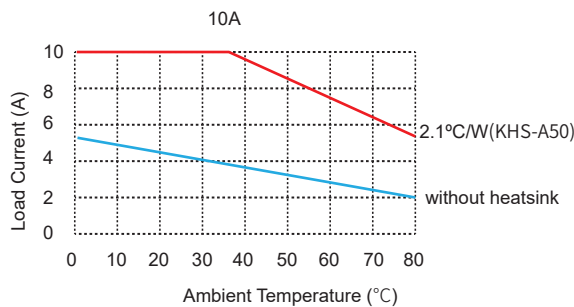


Outline Dimensions



Wiring Diagram

### 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.
2. When the operation temperature is above 25℃, please consider the derating as per the Thermal Derating Curve.
3. Please ensure reliable grounding when using the SSR.
4. Switching time must exceed 100ms.
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.