

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

| | | | | | | |
|----------------------------|-----------------------------|---------------|--|--------------------------------|---|-------------------------|
| KMGB | 380 | D | 10 | R | -24 | (XXX) |
| KMGB Series ⁽¹⁾ | 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 | 15mA | |

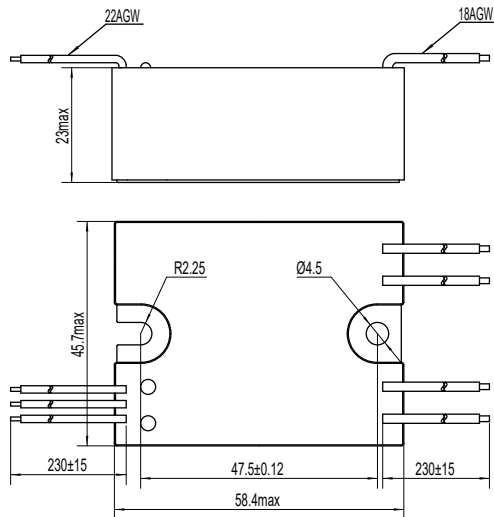
| Output Specifications (Ta=25°C) | | |
|--|-----------|---------------------|
| Load Voltage Range | 24-530VAC | |
| Maximum Transient Overvoltage | 1200Vpk | |
| Minimum Load Current | 100mA | |
| Minimum Delay Turn-on Time | 100ms | |
| Maximum Turn-off Time | 20ms | |
| Maximum 1 Cycle Surge Current (@10ms) | 10A | 160A |
| | 20A | 200A |
| Maximum I ² t (@10ms) | 10A | 120A ² s |
| | 20A | 200A ² 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 | |

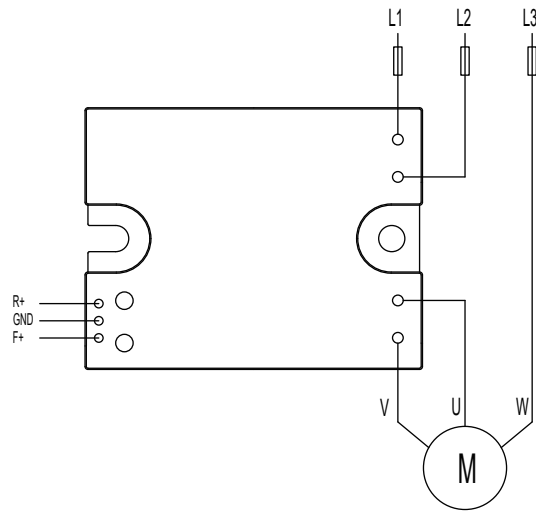
Applications

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

Outline Dimensions/Wiring Diagram

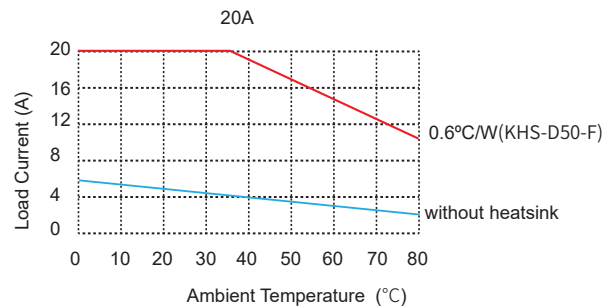
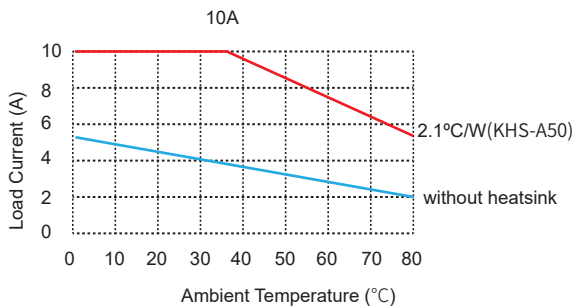


Outline Dimensions



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°C, 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.