

### Product Description

- ◆ 10-32VDC Input
- ◆ Internal RC/MOV Protection Circuit
- ◆ Automatic Phase Correction, Phase Sequence Detection or Phase Loss Protection Function (Option)
- ◆ RoHS Compliant



### Ordering Information

|              |                             |            |  |  |   |              |  |   |
|--------------|-----------------------------|------------|--|--|---|--------------|--|---|
| KMTYM        | 380                         | D          | 25                                     | R  | P   | -24          | F  | -N  |
| KMTYM Series | Load Voltage<br>380: 380VAC | DC Control | Load Current<br>15: 15Amp<br>25: 25Amp | Blank:<br>Zero Crossing<br>R:<br>Random-on | Blank:<br>Common Cathod<br>P:<br>Common Anode | 24: 10~32VDC | F:<br>Three Phase Switch<br>Blank:<br>Two Phase Switch | Blank:<br>with automatic<br>phase correction<br>function<br>N:<br>without automatic<br>phase correction<br>function |

### General Specifications

| Input Specifications (Ta=25°C)    |               |            |
|-----------------------------------|---------------|------------|
| Control Voltage Range             |               | 10-32VDC   |
| Must Turn-On Voltage              |               | 10VDC      |
| Must Turn-Off Voltage             |               | 4VDC       |
| Maximum Input Current             | Common Cathod | 35mA@32VDC |
|                                   | Common Anode  | 18mA@32VDC |
| Minimum Reversible Switching Time |               | 80±10ms    |

| Output Specifications (Ta=25°C)                      |     |           |
|--|-----|-----------|
| Load Voltage Range                                   |     | 24-440VAC |
| Maximum Transient Overvoltage                        |     | 800Vpk    |
| Minimum Load Current                                 |     | 100mA     |
| Maximum Turn-Off Time                                |     | 20ms      |
| Maximum Surge Current (@10ms)                        | 15A | 150A      |
|  | 25A | 250A      |
| Maximum Off-State Leakage Current@Rated Load Voltage |     | 5mA       |
| Maximum On-State Voltage Drop@Rated Current          |     | 1.7Vrms   |
| 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       | 2kV/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 |

### General Specifications

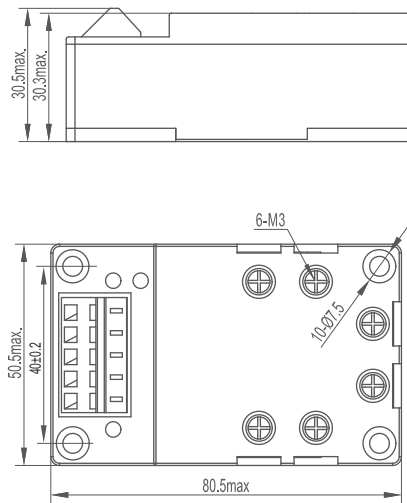
#### General Specifications (Ta=25°C)

|                           |      |                                     |
|---------------------------|------|-------------------------------------|
| Weight (Typical)          | 180g |                                     |
| Working Status Indication | LED1 | Forward Indication                  |
|                           | LED2 | Reverse Indication                  |
|                           | LED3 | Three-phase Power Status Indication |

### Applications

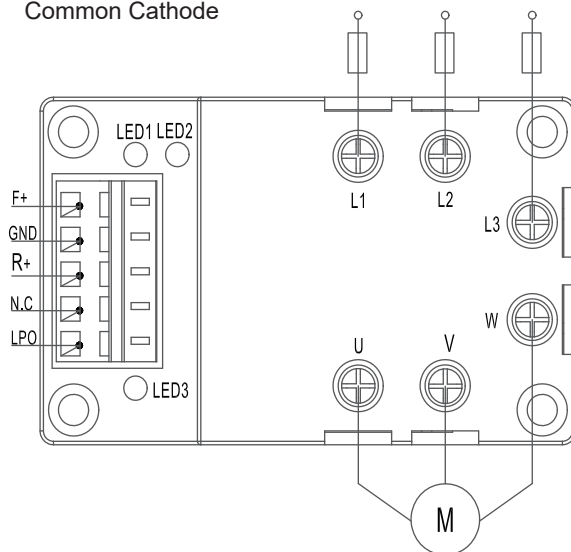
Three phase motor reversing control, such as the valve controls, and etc.

### Outline Dimensions



### Wiring Diagram

#### Common Cathode



#### Wiring Instructions:

F+: Forwarding control should input anode;

GND: Control power supply should connect with cathode;

R+: Reversing control should input anode;

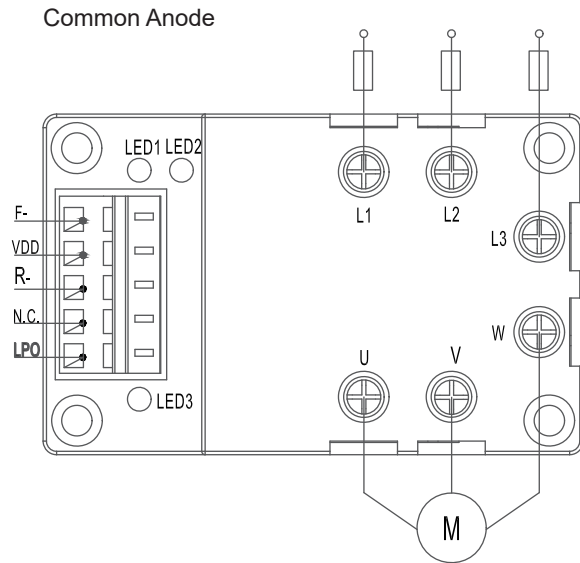
N.C.: No Connection

LPO: Phase loss output, high impedance status when there is phase loss in three-phase electricity.

Max. output current is 50mA;

Note: there is no connection wire in LPO terminal when the product does not have phase loss protection or automatic phase correction function.

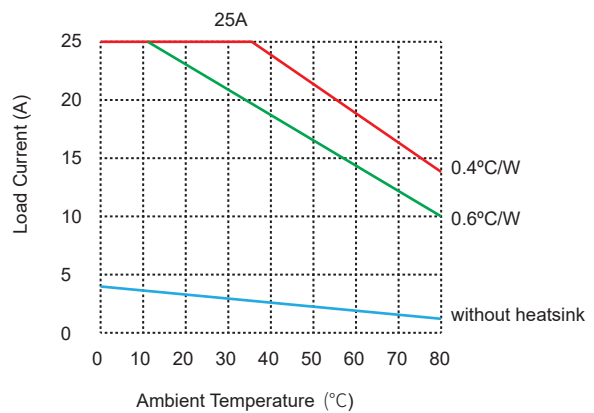
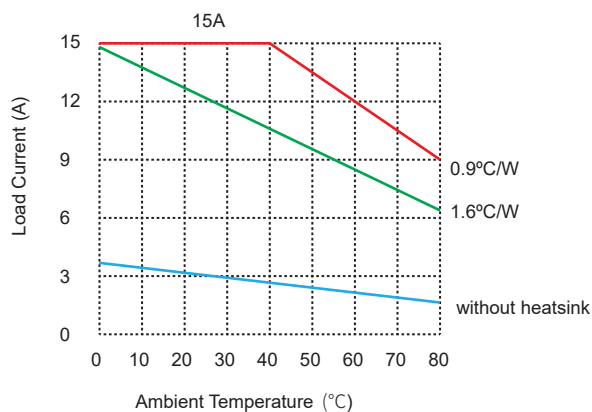
### Wiring Diagram



#### Wiring Instructions:

- F-: Forwarding control should input cathode;
- VDD: Control power supply should connect with anode, 10-32VDC;
- R-: Reversing control should input cathode;
- N.C.: No Connection
- LPO: Phase loss output, high impedance status when there is phase loss in three-phase electricity.
- Max. output current is 50mA;
- Note: there is no connection wire in LPO terminal when the product does not have phase loss protection or automatic phase correction function.

### 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 and heat sink and be torqued down to 18-20/2.0-2.2 in-lb/N·m.
2. When connecting wiring to SSR please ensure screws are torqued down properly (input 4.43/0.5 in-lb/N·m, output 5.13-8.67/0.58-0.98 in-lb/N·m)
3. When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.

### Agency Approvals (Certification)

