

- ◆ 10-32VDC Input Control
- ◆ Internal RC/MOV Protection Circuit
- ◆ Dielectric Strength: 4000Vrms
- ◆ Built-in Phase Correction & Phase Loss Protection Functions
- ◆ RoHS Compliant



Ordering Information

KMTY	480	D	25	R	P	-24	F	-N
KMTY Series	Load Voltage 480: 480VAC 600: 600VAC	DC Control	Load Current 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp	Switching Mode: Blank: Zero Crossing R: Random-on	Blank: Common Cathode P: Common Anode	24: 10~32VDC	Blank: Two Phase Switch F: Three Phase Switch	Blank: with automatic phase correction function N: without automatic phase correction 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	35 mA@32VDC
Minimum Reversible Switching Time	80±10ms

Output Specifications (Ta=25°C)		
Load Voltage Range	480VAC	24-530VAC
	600VAC	24-660VAC
Maximum Transient Overvoltage	480VAC	1200Vpk
	600VAC	1600Vpk
Minimum Load Current	100mA	
Maximum Turn-Off Time	20ms	
Maximum Surge Current (@10ms)	25A	250A
	40A	400A
	60A	600A
	80A	800A
Maximum Off-State Leakage Current@Rated Load Voltage	5mA	
Maximum On-State Voltage Drop@Rated Current	1.7Vrms	
Maximum I ² t for Fusing (@10ms)	25A	312A ² s
	40A	800A ² s
	60A	1800A ² s
	80A	3200A ² s
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	

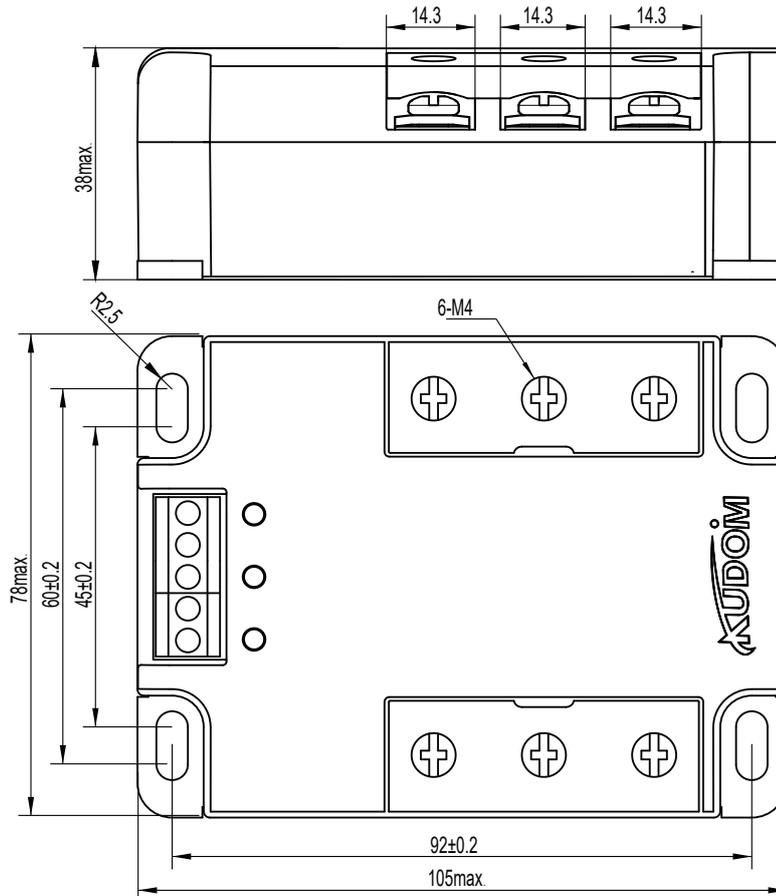
Product Description

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)	400g	
Working Status Indication	LED1	Forward Indication
	LED2	Reverse Indication
	LED3	Fault Indication

Applications

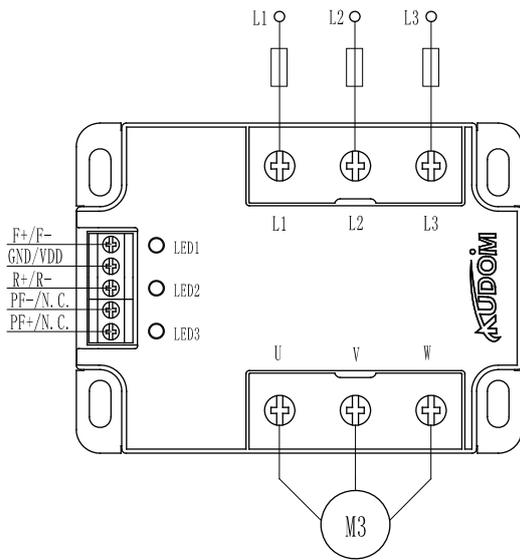
Three phase motor reversing control, such as the valve controls, and etc.

Outline Dimensions



Outline Dimensions

Wiring Diagram



Input control on Common Cathode:

- F+: Forward control please input Anode+;
- GND: Common Port please input Cathode;
- R+: Reversing control please input Anode+;

Input control on Common Anode:

- F-: Forward control please input Cathode-;
- VDD: Control power please input Anode+;
- R-: Reversing control please input Cathode-;

PF-: Lack of phase fault please connect Cathode in output (N.C.:No Connection)

PF+: Lack of phase Fault please connect Anode in output (N.C.:No Connection)

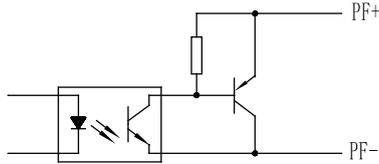
LED1: Forward Indication

LED2: Reversing Indication

LED3: Fault Indication: When there is lack of phase, LED is bright; When Three-phase are normal LED is off (Without automatic phase correction function LED3 is always OFF)

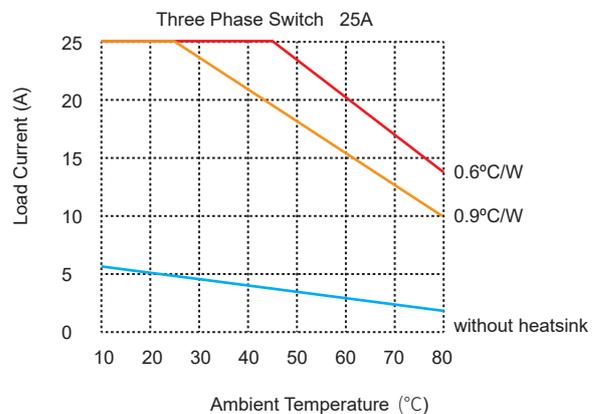
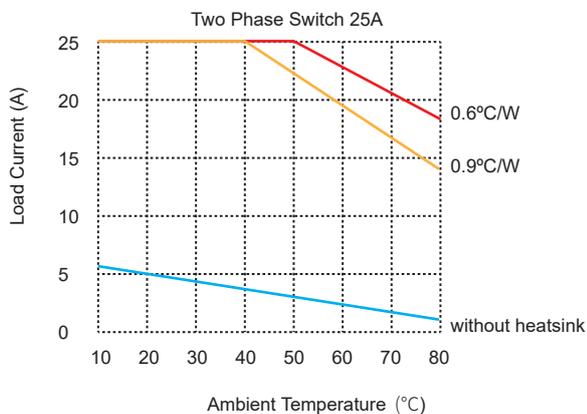
L1/L2/L3: three-phase power supply input

U/V/W: three-phase load output

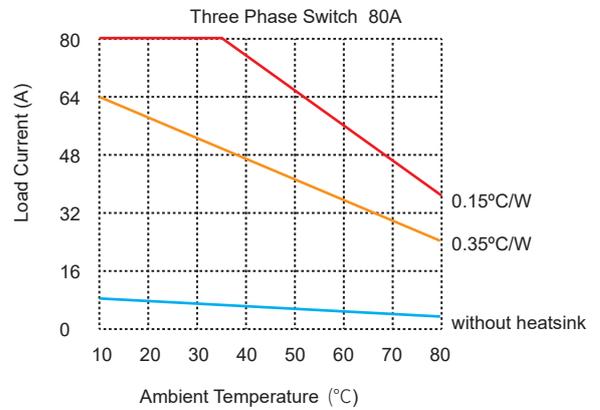
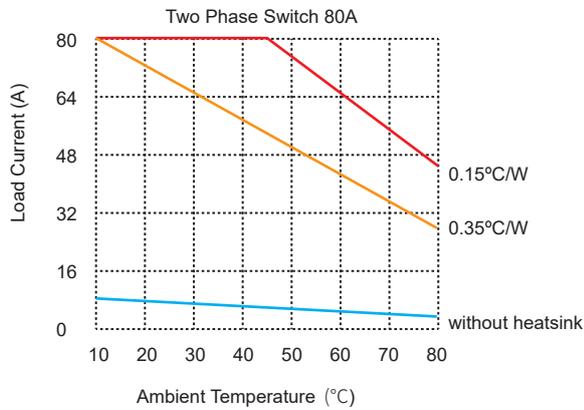
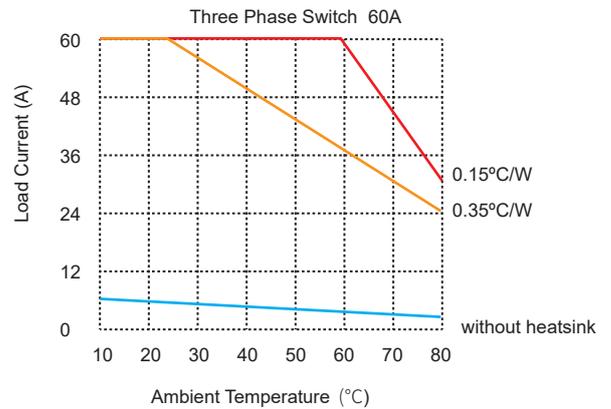
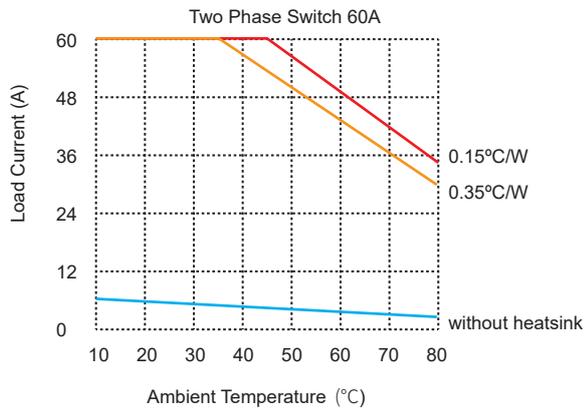
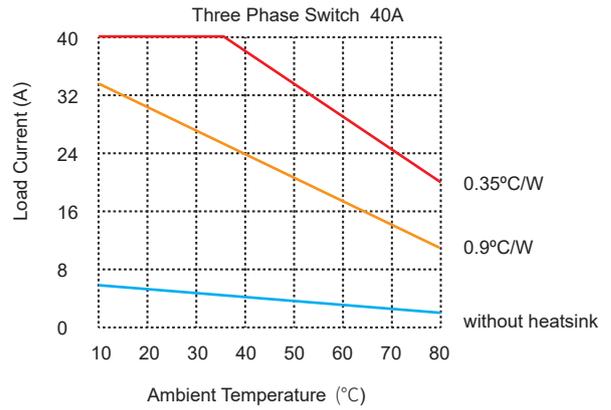
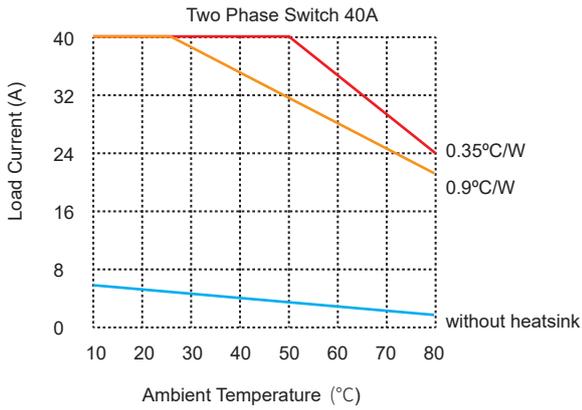


Wiring Diagram

Thermal Derating Curve



Thermal Derating Curve



General Notes

1. Relay must be mounted to proper sized heat sink based on thermal curves. Thermal grease or a therma 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)

