

Product Description

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



Ordering Information



<b>KMTY Series</b>	<b>Load Voltage</b> 480: 480VAC 600: 600VAC	<b>DC Control</b>	<b>Load Current</b> 25: 25Amp 40: 40Amp 60: 60Amp 80: 80Amp	<b>Switching Mode:</b> Blank: Zero Crossing R: Random-on	<b>Blank:</b> Common Cathod P: Common Anode	<b>Control Voltage</b> 24: 10~32VDC	<b>Blank:</b> Two Phase Switch F: Three Phase Switch	<b>N:</b> without automatic phase correction function
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		25A	40A	60A	80A
Common Cathod	Two Phase Switch	KMTY480D25-24-N	KMTY480D40-24-N	KMTY480D60-24-N	KMTY480D80-24-N
		KMTY600D25-24-N	KMTY600D40-24-N	KMTY600D60-24-N	KMTY600D80-24-N
		KMTY480D25R-24-N	KMTY480D40R-24-N	KMTY480D60R-24-N	KMTY480D80R-24-N
	Three Phase Switch	KMTY600D25R-24-N	KMTY600D40R-24-N	KMTY600D60R-24-N	KMTY600D80R-24-N
		KMTY480D25-24F-N	KMTY480D40-24F-N	KMTY480D60-24F-N	KMTY480D80-24F-N
		KMTY600D25-24F-N	KMTY600D40-24F-N	KMTY600D60-24F-N	KMTY600D80-24F-N
Common Anode	Two Phase Switch	KMTY480D25P-24-N	KMTY480D40P-24-N	KMTY480D60P-24-N	KMTY480D80P-24-N
		KMTY600D25P-24-N	KMTY600D40P-24-N	KMTY600D60P-24-N	KMTY600D80P-24-N
		KMTY480D25RP-24-N	KMTY480D40RP-24-N	KMTY480D60RP-24-N	KMTY480D80RP-24-N
	Three Phase Switch	KMTY600D25RP-24-N	KMTY600D40RP-24-N	KMTY600D60RP-24-N	KMTY600D80RP-24-N
		KMTY480D25P-24F-N	KMTY480D40P-24F-N	KMTY480D60P-24F-N	KMTY480D80P-24F-N
		KMTY600D25P-24F-N	KMTY600D40P-24F-N	KMTY600D60P-24F-N	KMTY600D80P-24F-N
		KMTY480D25RP-24F-N	KMTY480D40RP-24F-N	KMTY480D60RP-24F-N	KMTY480D80RP-24F-N
		KMTY600D25RP-24F-N	KMTY600D40RP-24F-N	KMTY600D60RP-24F-N	KMTY600D80RP-24F-N

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
Delay Conduction Time (typical)	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 <sup>2</sup> t for Fusing (@10ms)	25A	312A <sup>2</sup> s
	40A	800A <sup>2</sup> s
	60A	1800A <sup>2</sup> s
	80A	3200A <sup>2</sup> s
Minimum Off-State dv/dt@Maximum Rated Voltage	200V/μs	

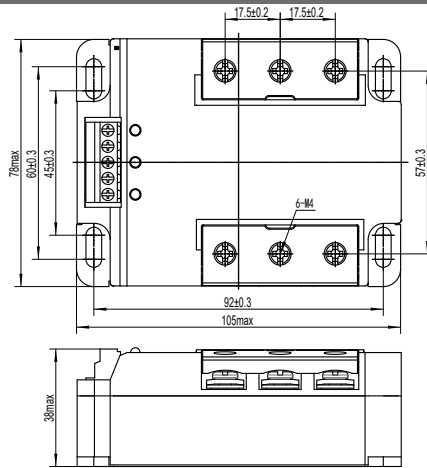
General Specifications (Ta=25°C)

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	
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

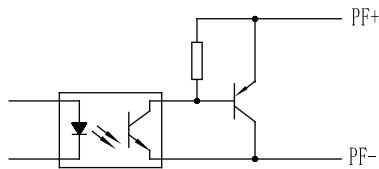
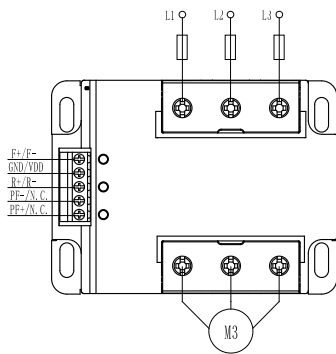
Applications

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

Outline Dimensions



Wiring Diagram



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

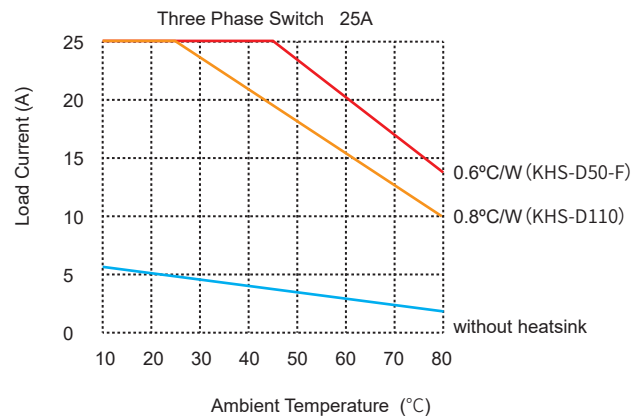
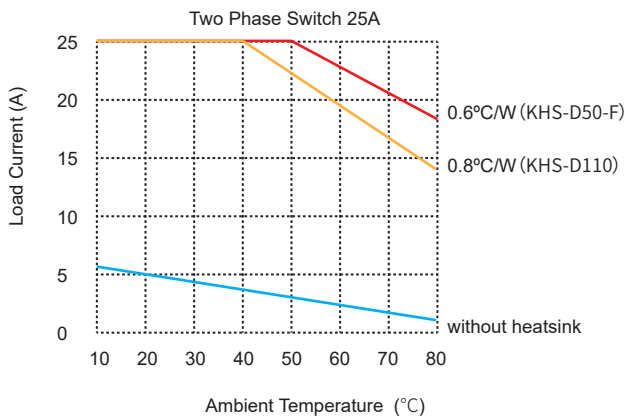
LED2: Reversing Indication

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)

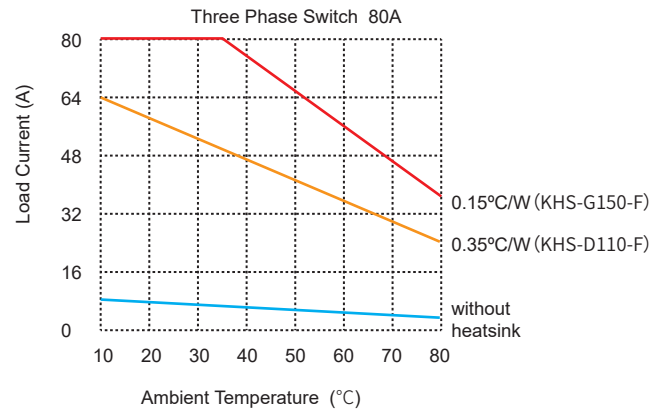
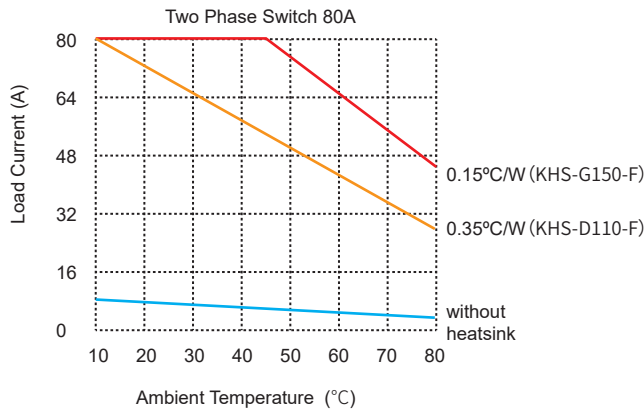
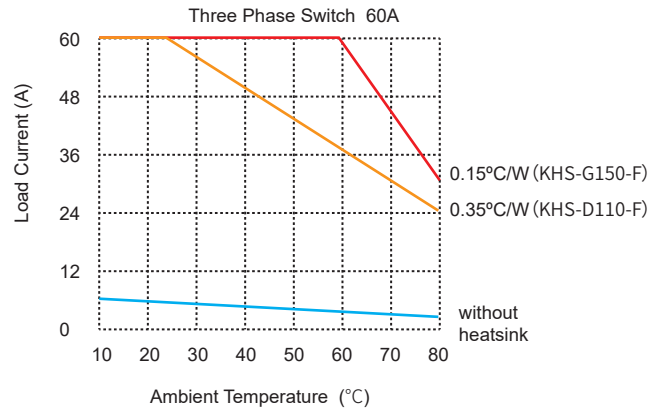
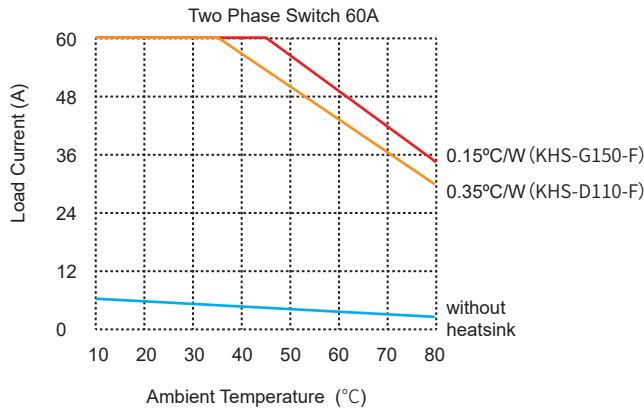
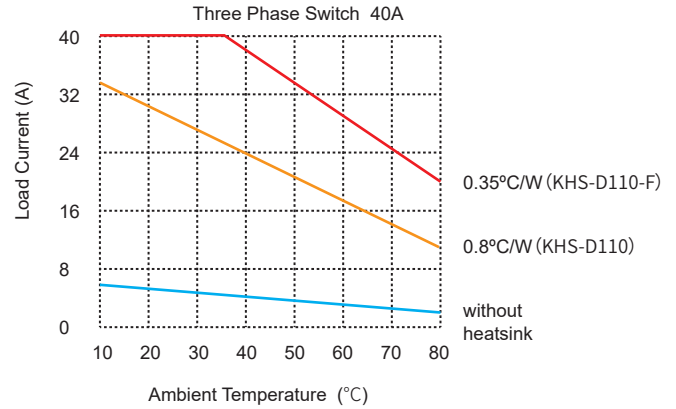
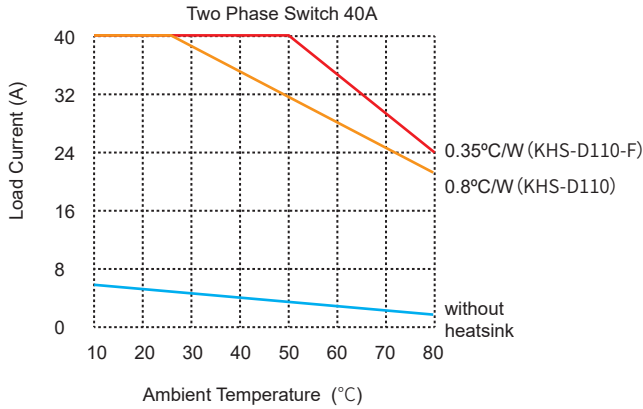
L1/L2/L3: three-phase power supply input

U/V/W: three-phase load output

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 thermal pad must be used between relay.
2. When connecting wiring to SSR please ensure screws are torqued down properly. Recommended torque for input screw is 4.43/0.5 in-lb/N·m, output screw is (18-20)/(2.0-2.2) in-lb/N·m.
3. When the operation temperature is above 25 °C, please consider the derating as per the Thermal Derating Curve.
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.