

Product Description

- ◆ 10-32VDC Input Control
- ◆ Internal RC Protection Circuit
- ◆ Dielectric Strength: 4000Vrms
- ◆ 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	Control Voltage 24: 10~32VDC	Blank: Two Phase Switch F: Three Phase Switch	N: without Automatic Phase Correction Function

		25A	40A	60A	80A
Common Cathode	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

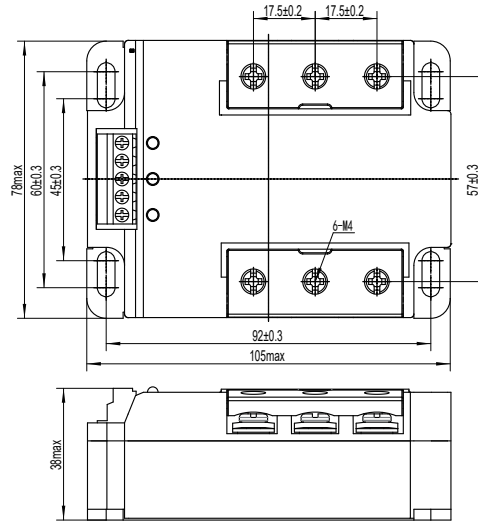
Output Specifications (Ta=25°C)		
Load Voltage Range	480VAC	24-510VAC
	600VAC	24-660VAC
Maximum Transient Overvoltage	480VAC	1200Vpk
	600VAC	1600Vpk
Minimum Load Current	100mA	
Maximum Turn-off Time	20ms	
Maximum Surge Current (@10ms)	25A	250A
	40A	400A
	60A	600A
	80A	800A
Maximum Off-State Leakage Current@Rated 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	
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
	LED2	Reverse

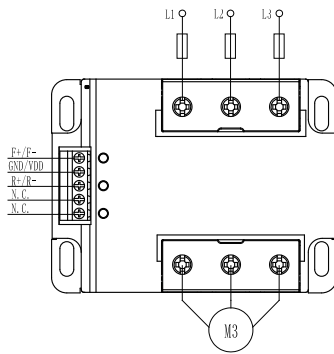
Application

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

Outline Dimension



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-

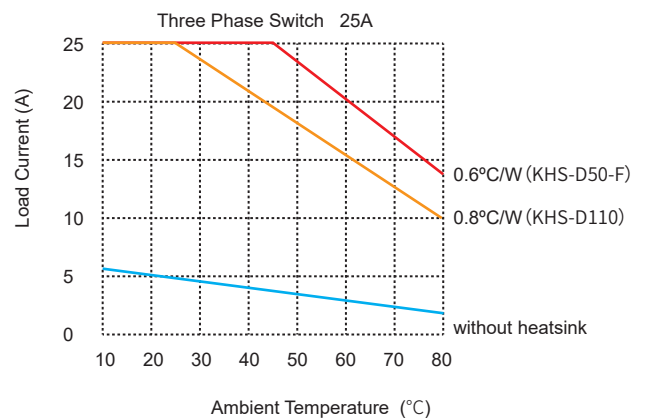
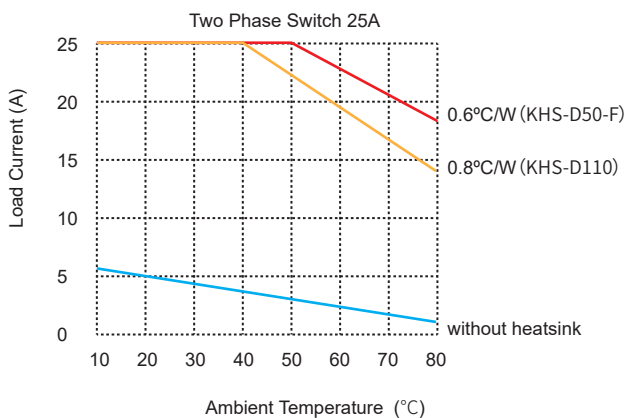
N.C.:No Connection

LED1: Forward Indication

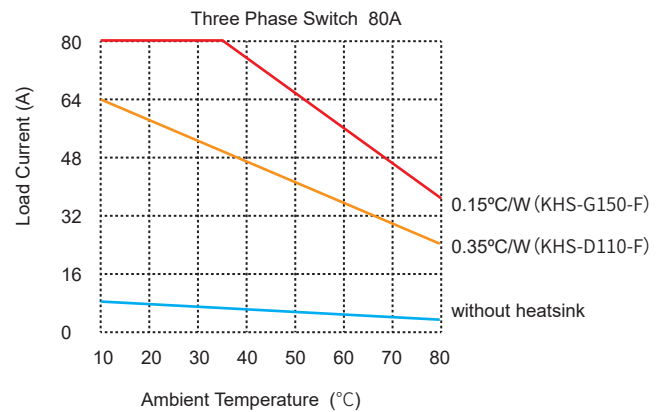
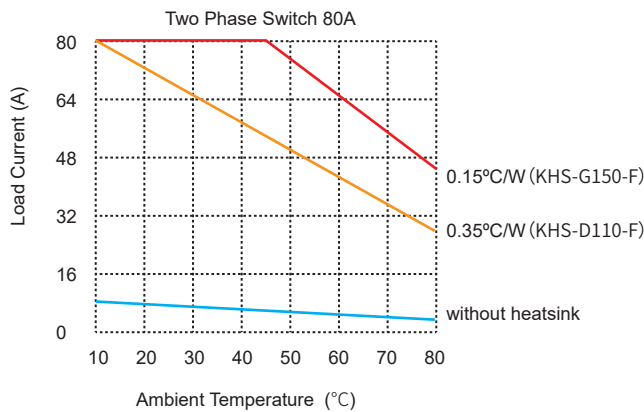
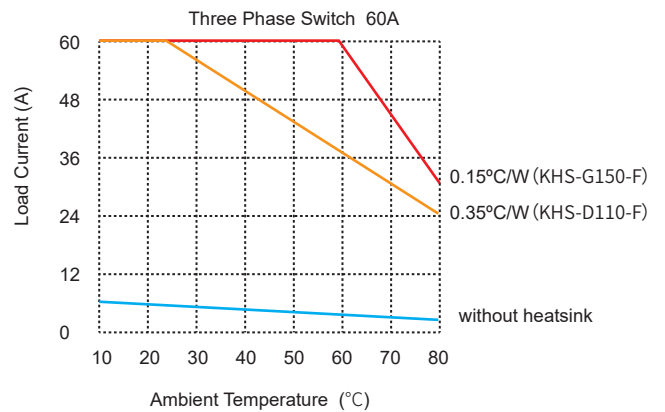
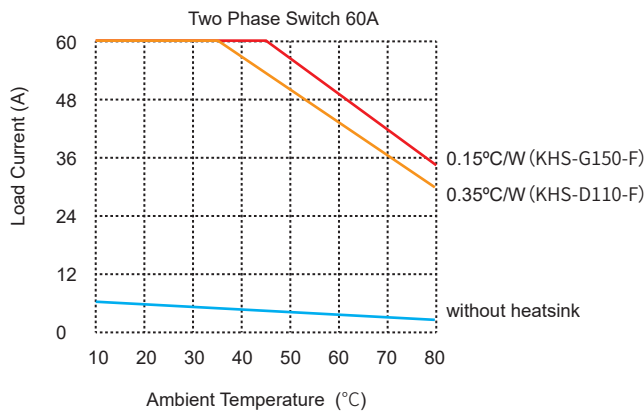
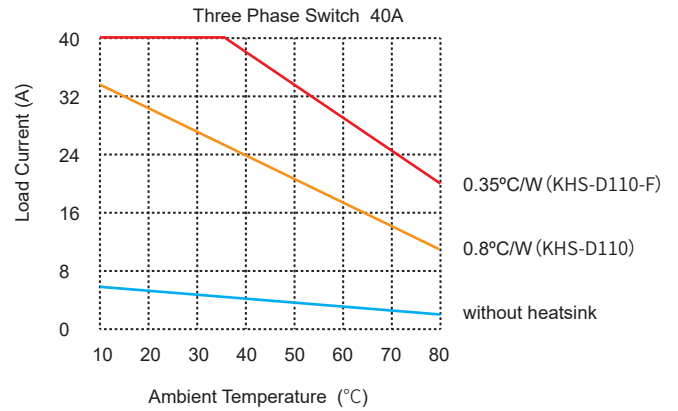
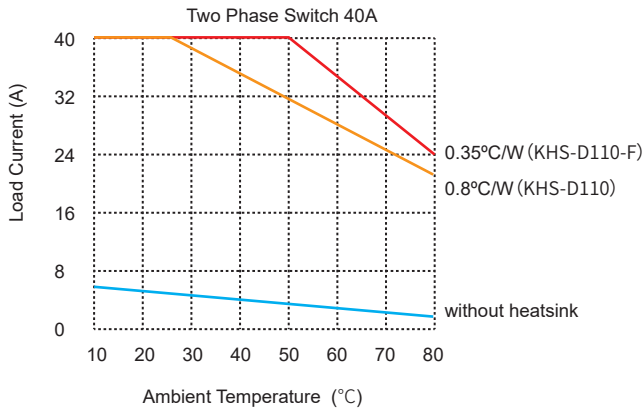
LED2: Reversing Indication

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

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 the relay and the heat sink.
2. When connecting wiring to SSR please ensure screws are torqued down properly. Recommended torque for input screw is 4.43in-lb / (0.2-0.5)N·m, output screw is (18-20)in-lb / (2.0-2.2)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.