

Product Description

- ◆ 10~32VDC Input Control
- ◆ Internal RC Protection Circuit
- ◆ Dielectric Strength: 4000Vrms
- ◆ RoHS Compliant

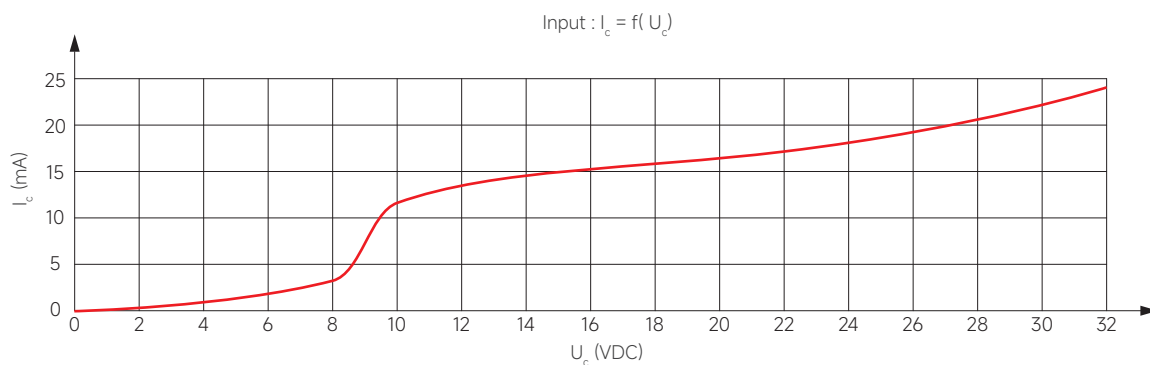


Product Selection

KMTY	480	D	25	R	P	-24
KMTY Series	Load Voltage 480: 480VAC 600: 600VAC	Control Mode D: 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
F	-N	(XXX)				
Blank: Two Phase Switch F: Three Phase Switch	N: without Automatic Phase Correction Function	Customized Code				

Technical Specifications

Input Specifications (Ta=25°C)	Condition	Symbol	Model	Min	Typ	Max	Unit
Control Voltage		U_c		10	24	32	VDC
Input Current (Typ)	@ U_c	I_c		13	20	35	mA
Must Turn-off Voltage		$U_{c\ off}$		4			VDC
Maximum Reverse Voltage		U_{rv}				32	VDC



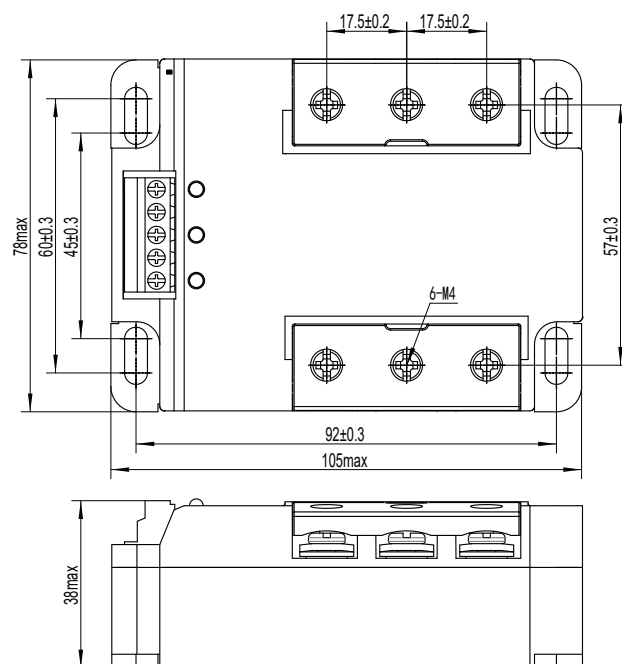
Output Specifications (Ta=25°C)	Condition	Symbol	Model	Min	Typ	Max	Unit
Load Voltage		U_e	480	24		530	VAC
			600	24		660	VAC
Load Current (Motor Load)		I_e	25A	0.1		2.5	A
			40A	0.1		4.5	A
			60A	0.1		7	A
			80A	0.1		13	A
Delay Turn-on Time		t_{rv}		70	80	90	ms
Turn-Off Time		t_{off}				20	ms
On-State Voltage Drop	@ Rated Load Current	U_d			1.3	1.7	Vrms
Off-State Leakage Current	@380VAC	I_{lk}			2.6	5	mA
Motor Load Power	@380VAC	P_n	25A			1.5	kW
			40A			2.5	kW
			60A			4	kW
			80A			7.5	kW
Non-repetitive Surge Current	@10ms	I_{TSM}	25A		250		A
			40A		400		A
			60A		600		A
			80A		800		A
Maximum I^2t for Fusing	@10ms	I^2t	25A		312		A ² s
			40A		800		A ² s
			60A		1800		A ² s
			80A		3200		A ² s
Maximum Transient Overvoltage		U_p	480V		1200		Vpk
			600V		1600		Vpk
Minimum Off-State dv/dt		dv/dt			500		V/μs

General Specifications (Ta=25°C)	Condition	Symbol	Model	Min	Typ	Max	Unit
Dielectric Strength	50/60Hz, Input/Output	V_{ISO}			4000		Vrms
	50/60Hz, Input, Output/Base				2500		Vrms
Insulation Resistance	@500VDC	R_{ISO}			1000		MΩ
Operating Temperature		T_{OPR}		-30		+80	°C
Storage Temperature		T_{SPR}		-30		+100	°C
Weight					400		g
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		6kV/contact discharge, 8kV/air discharge		
LED Indication			LED1		Forward		
			LED2		Reverse		

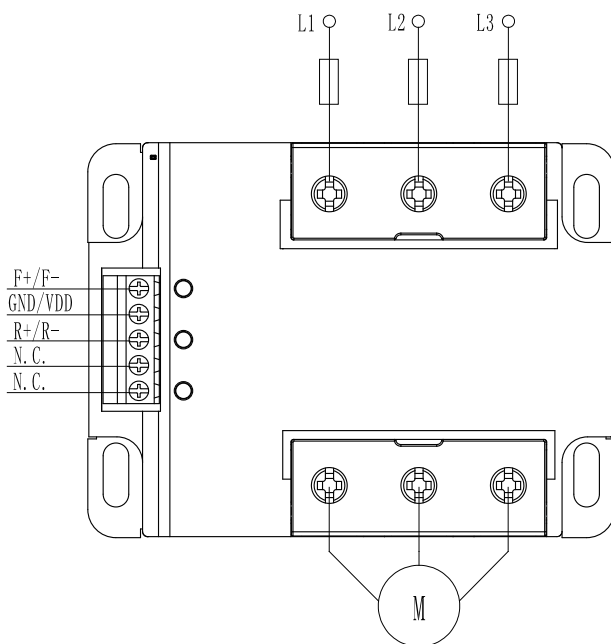
Applications

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

Outline Dimensions



Wiring Diagram



Input control on Common Cathode

F+: Forward control please input Anode+
GND: Common Port please input CathodeR+:
Reversing control please input Anode+

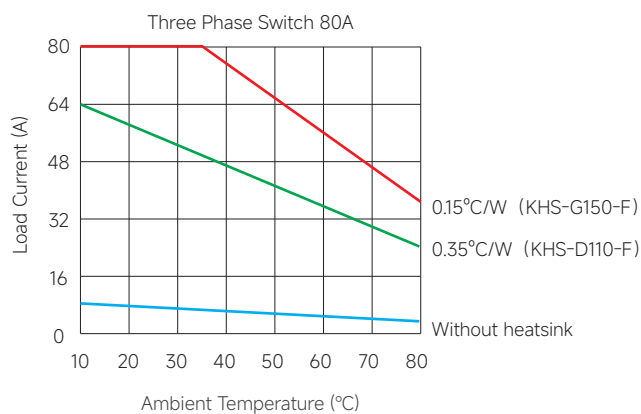
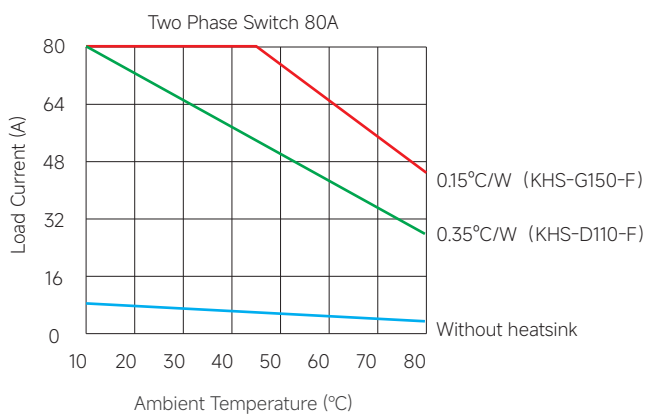
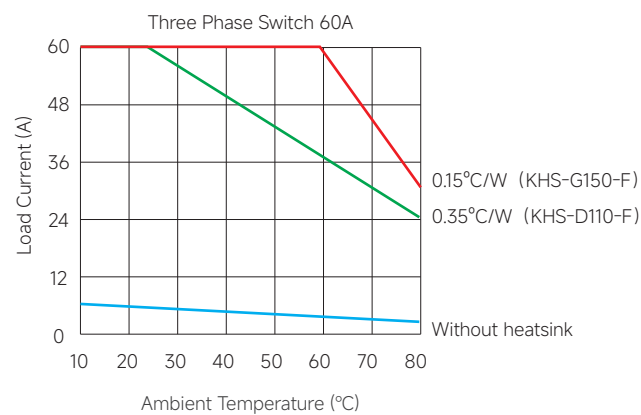
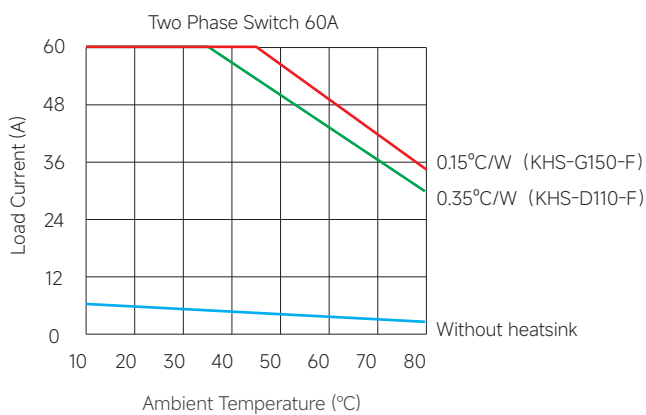
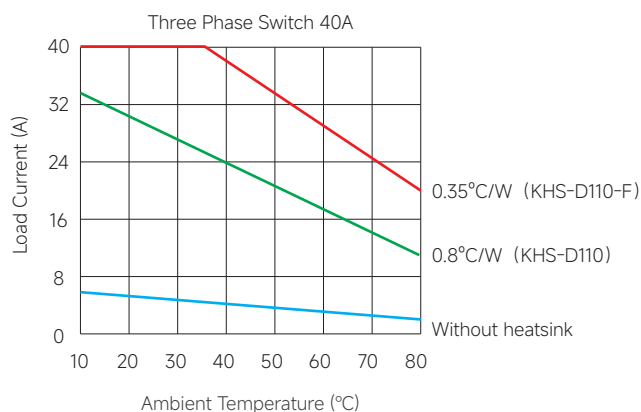
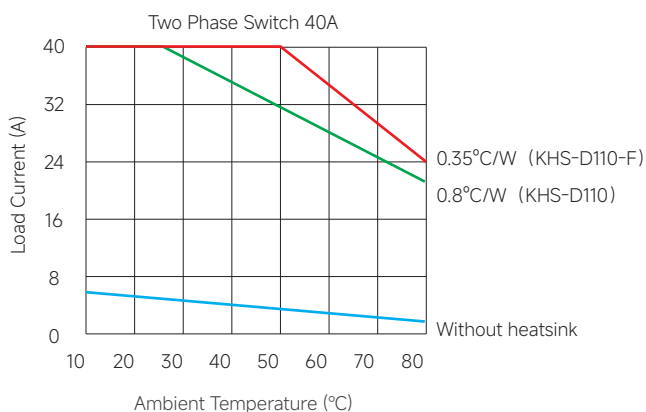
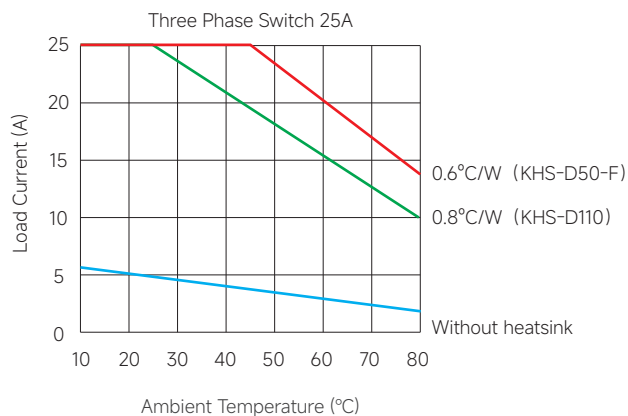
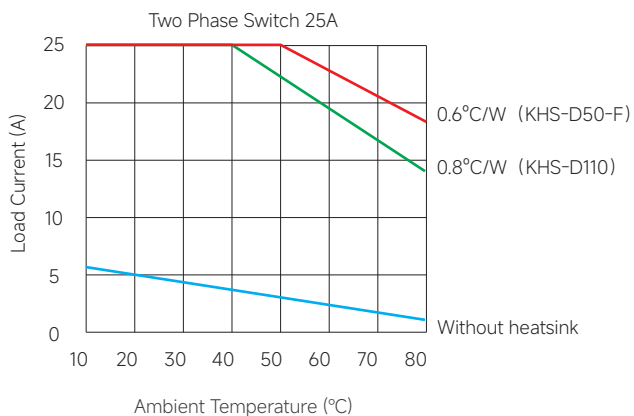
Input control on Common Anode

F-: Forward control please input CathodeVDD:
Control power please input Anode+
R-: Reversing control please input CathodeN.C.:

No Connection

LED1: Forward Indication
LED2: Reversing Indication
L1/L2/L3: three-phase power supply input

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 module.

! Warnings

1. The product 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.