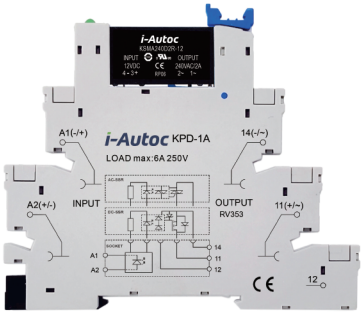
Product Description

- TRIAC Output
- Optocoupler Isolation
- PCB or Socket Mounted
- Load Current: 1A, 2A
- Load Voltage: 240VAC
- Dielectric Strength: 2500VACrms
- RoHS Compliant



Product Selection

KSM	A	240	D	1	R	-5	D
KSM Series	Load Type A: AC Load	Load Voltage 240: 240VAC	Control Mode D: DC Control	Load Current 1: 1Amp 2: 2Amp	Switching Mode Blank: Zero Crossing R: Random-on	Control Voltage 5: 5VDC 12: 12VDC 24: 24VDC	Socket Blank: Without Socket D: With Socket

Available Part Numbers

Control Mode	1A		2A	
5VDC	KSMA240D1-5	KSMA240D1R-5	KSMA240D2-5	KSMA240D2R-5
	KSMA240D1-5D	KSMA240D1R-5D	KSMA240D2-5D	KSMA240D2R-5D
12VDC	KSMA240D1-12	KSMA240D1R-12	KSMA240D2-12	KSMA240D2R-12
	KSMA240D1-12D	KSMA240D1R-12D	KSMA240D2-12D	KSMA240D2R-12D
24VDC	KSMA240D1-24	KSMA240D1R-24	KSMA240D2-24	KSMA240D2R-24
	KSMA240D1-24D	KSMA240D1R-24D	KSMA240D2-24D	KSMA240D2R-24D

Technical Specifications

Input Specifications (Ta=25℃)		
Control Voltage Range	5	4~6VDC
	12	9.6~14.4VDC
	24	19.2~28.8VDC
Must Turn-on Voltage(1)	5	4VDC
	12	9.6VDC
	24	19.2VDC
Must Turn-off Voltage		1VDC
Maximum Input Current		25mA

Note: (1) For KSMA with control voltage at 12V, 24V that operating with the socket, the must control voltage should increase 1.4V, for example, for KSMA240D2-12D, please ensure that the control voltage is 9.6V+1.4V=11V Min.

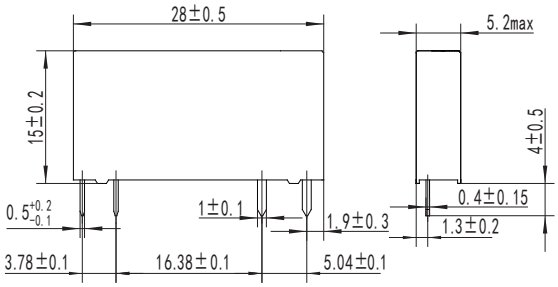
Output Specifications (Ta=25°C)		
Load Voltage Range		24~280VAC
Transient Overvoltage		600Vpk
Load Current Range	1A	0.1~1A
	2A	0.1~2A
Maximum Turn-on Time	Random-on	1ms
	Zero Crossing	1/2cycle+1ms
Maximum Turn-off Time		1/2cycle+1ms
Maximum Surge Current (@10ms)	1A	30A
	2A	40A
Maximum Off-State Leakage Current (@Rated Voltage)		1.5mA
Maximum On-State Voltage Drop (@Rated Current)		1.5Vrms
Maximum On-state Resistance		200V/μs

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	Input/Output	2500Vrms
Minimum Insulation Resistance (@500VDC)		1000MΩ
Ambient Temperature Range		-30°C～+80°C
Storage Temperature Range		-30°C～+100°C
Weight (Typical)	Without Socket	4g
	With Socket	30g

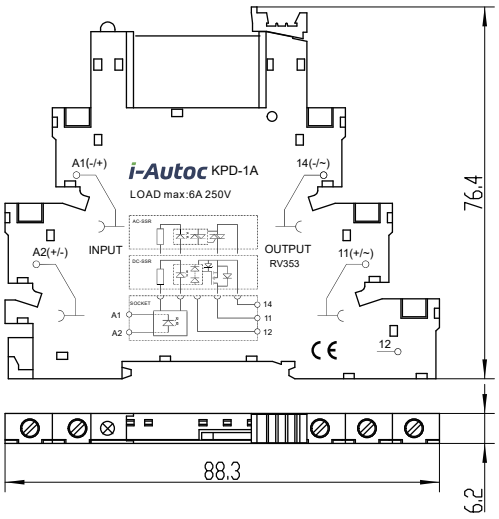
Applications

Suitable for high density PCB mounting, PLC control applications, and etc.

Outline Dimensions

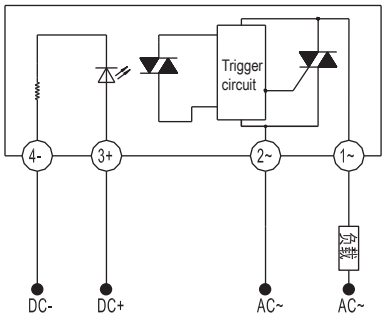


KSMA SSR

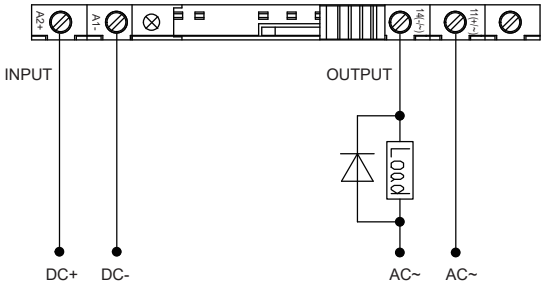


KSMA+KPD-1A

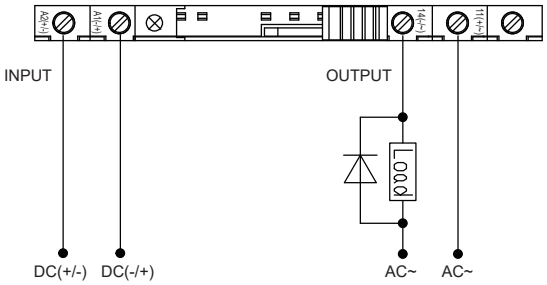
Wiring Diagram



KSMA SSR

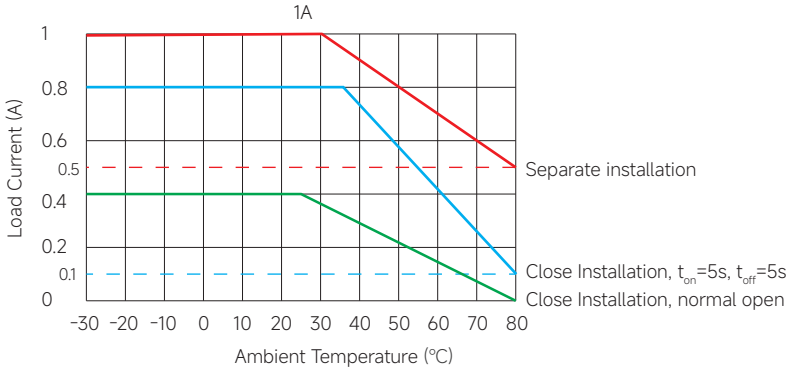


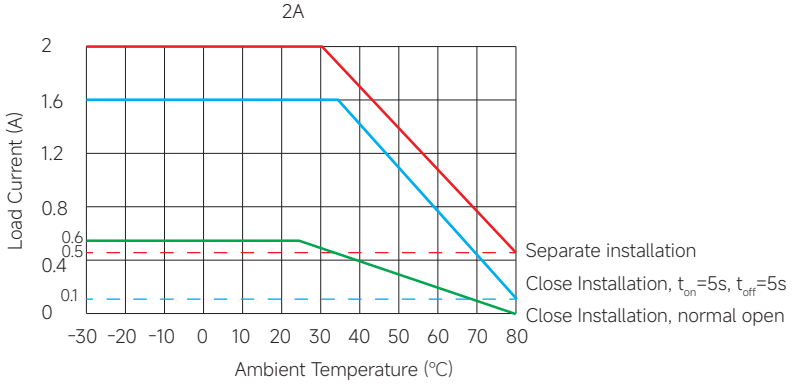
KSMA...-5D



KSMA...-12/24D

Thermal Derating Curve





Installation Instructions

1. Install the relay
Set the blue clip of socket in the open state (see Figure 1), and insert the relay into the socket cavity (see Figure 2). Then press the relay down until the relay is fully installed in the socket (see Figure 3).

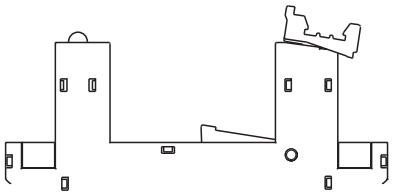


Figure 1

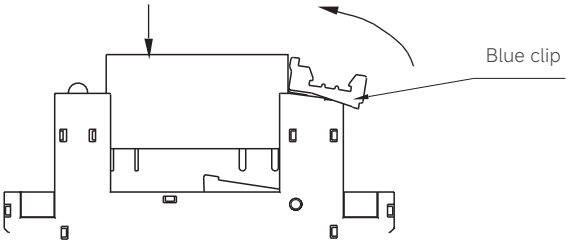


Figure 2

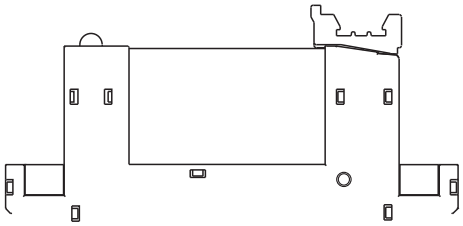


Figure 3

2. Remove the relay
Pull the blue clip of socket to remove the relay (see Figure 4-6).
Note: When disassembling the relay, in order to prevent the relay from being ejected and causing it to fall, please be sure to hold the relay and then pull the blue clip to remove the relay.

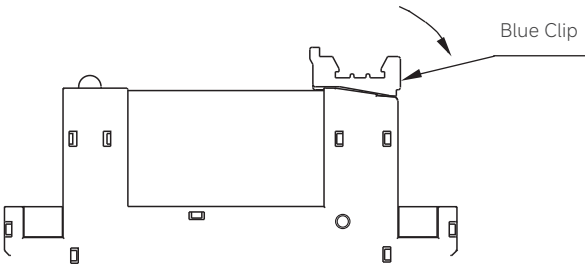


Figure 4

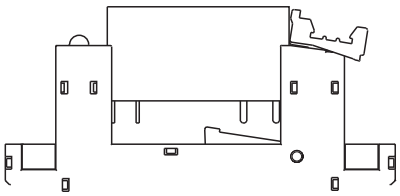


Figure 5

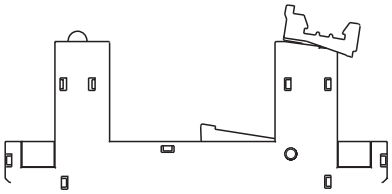


Figure 6

3. Install the socket
Insert part A of the socket into the din-rail first, and then press the socket down in the direction of the arrow(see Figure 7).

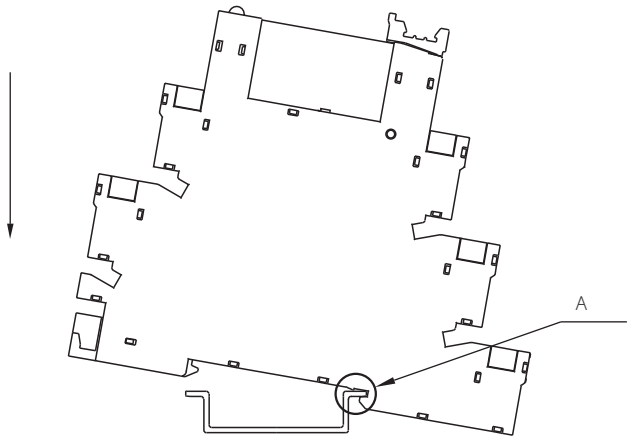


Figure 7

4. Remove the socket
Insert a proper size screwdriver into part B of the socket, turn the screwdriver in the direction of the arrow, and then remove the socket (see Figure 8).

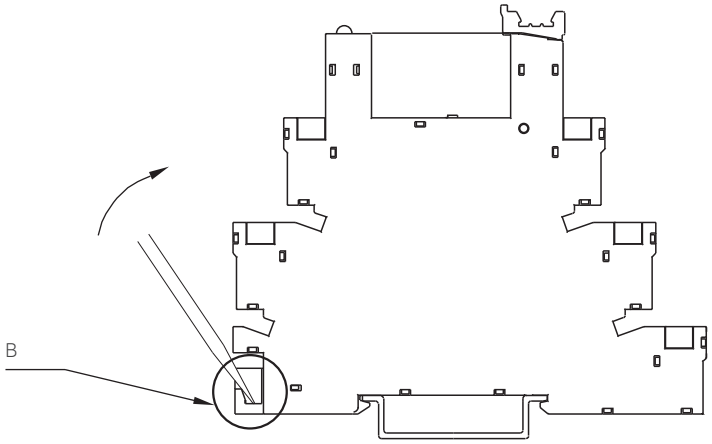


Figure 8

General Notes

1. Soldering must be finished within 10 seconds at 260℃,or finished within 5 seconds at 350℃. Otherwise it may cause damage to the relay.
2. Terminal polarity must be observed. Otherwise it may cause damage to the relay.
3. When the ambient temperature of the product is high, derate the product according to the temperature curve.

! Warnings

1. The product's may become hot during operation, allow it 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.

Certification Standards

Certification	Test Standard
UL	UL508
	C22.2 No. 14-13
CE	EN 60947-1:2007/A2:2014
	EN 60947-5-1:2017
TUV	EN 60947-1:2007/A2:2014
	EN 60947-5-1:2017

