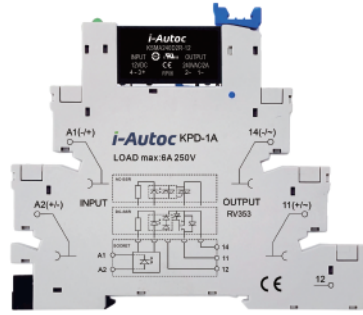


Product Description

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



Ordering Information

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

(1) The part number selection is subject to the following list.

	1A		2A	
5:4-6VDC	KSMA240D1-5	KSMA240D1R-5	KSMA240D2-5	KSMA240D2R-5
	KSMA240D1-5D	KSMA240D1R-5D	KSMA240D2-5D	KSMA240D2R-5D
12:9.6-14.4VDC	KSMA240D1-12	KSMA240D1R-12	KSMA240D2-12	KSMA240D2R-12
	KSMA240D1-12D	KSMA240D1R-12D	KSMA240D2-12D	KSMA240D2R-12D
24:19.2-28.8VDC	KSMA240D1-24	KSMA240D1R-24	KSMA240D2-24	KSMA240D2R-24
	KSMA240D1-24D	KSMA240D1R-24D	KSMA240D2-24D	KSMA240D2R-24D

General Specifications

Input Specifications (Ta=25°C)			
Control Voltage Range	-5		4-6VDC
	-12		9.6-14.4VDC
	-24		19.2-28.8VDC
Must Turn-on Voltage ⁽²⁾	-5		4VDC
	-12		9.6VDC
	-24		19.2VDC
Must Turn-off Voltage			1VDC
Maximum Input Current			25mA

Note: (2) 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

General Specifications

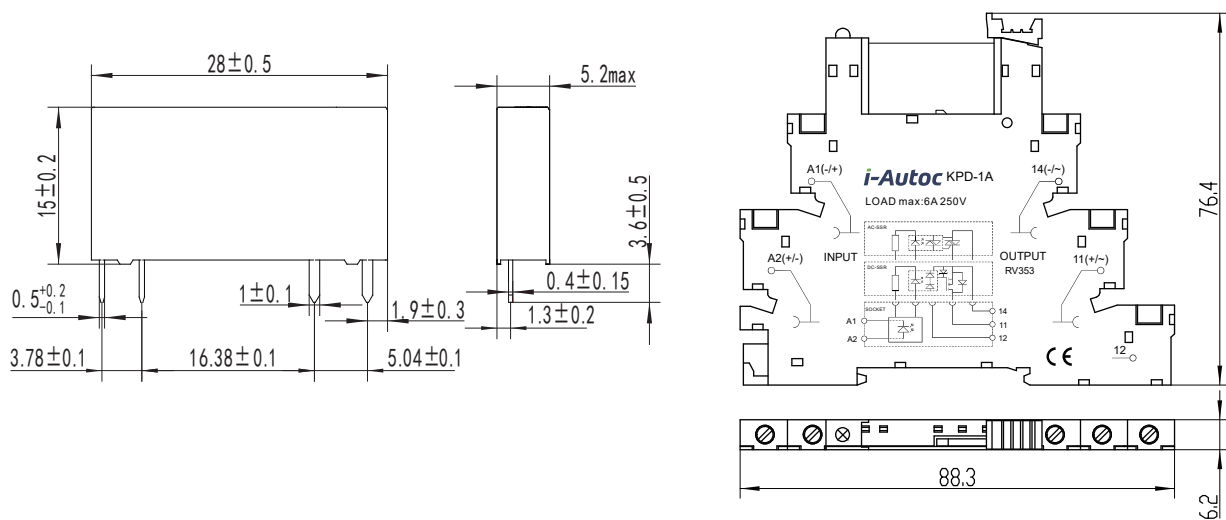
Output Specifications (Ta=25°C)		
Load Voltage Range	24-280VAC	
Maximum Transient Overvoltage	600Vpk	
Load Current Range	1A	0.1 - 1A
	2A	0.1 - 2A
Maximum Turn-on Time	Zero Crossing	1/2cycle+1ms
	Random-on	1ms
Maximum Turn-off Time	1/2cycle+1ms	
Maximum Surge Current (@10 ms)	1A	30A
	2A	40A
Maximum Off-State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

General Specifications (Ta=25°C)		
Dielectric Strength (50/60Hz)	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
	D: with Socket	30g

Applications

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

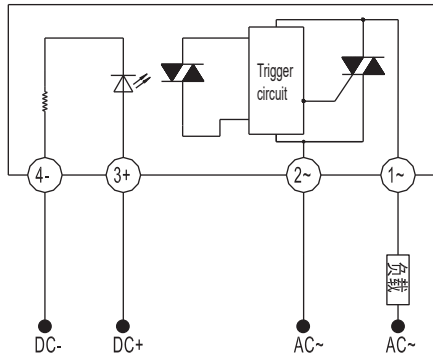
Outline Dimensions



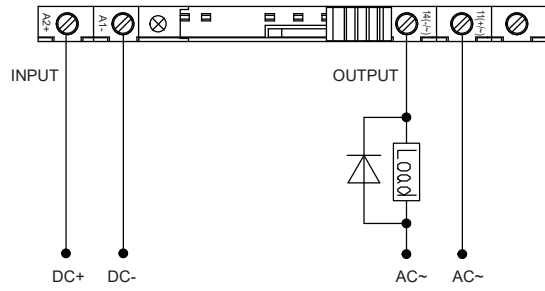
SSR

Socket Installation Drawing (Type: KPD-1A)

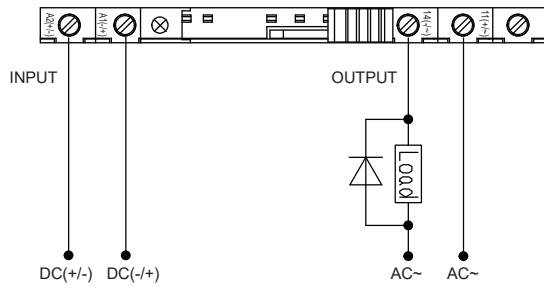
Wiring Diagram



SSR

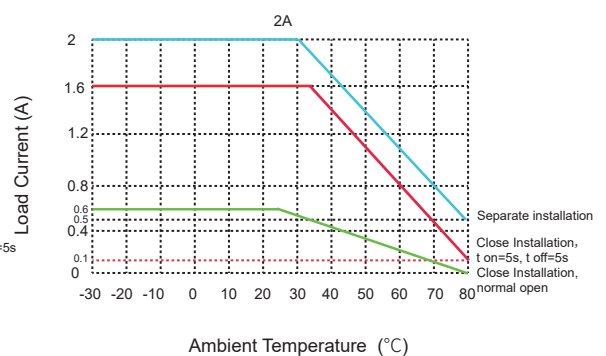
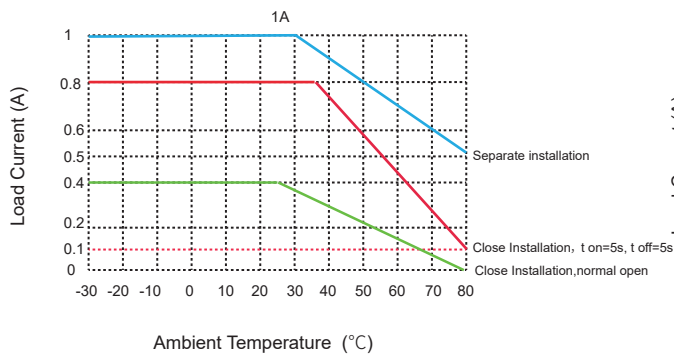


KSMA***-5D
with Socket



KSMA***-(12-24) D
with Socket

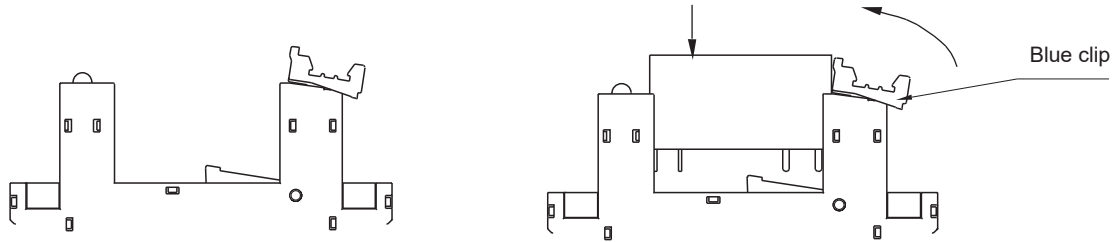
Thermal Derating Curve



Installation instructions

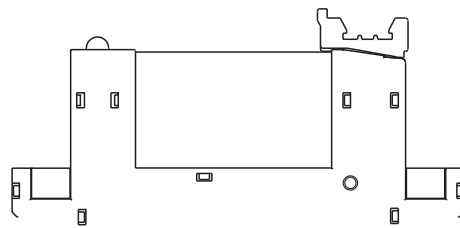
1. Install the relay

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)

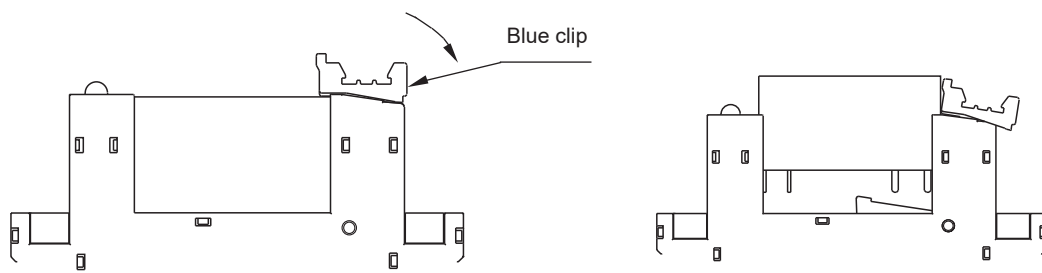


(Figure 3)

2. Remove the relay

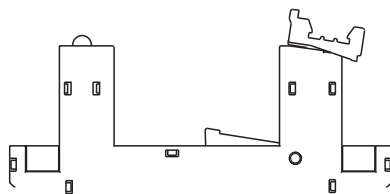
Pull the blue clip of socket to remove the relay (see Figure 4-6).

Note: When disassembling a 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)

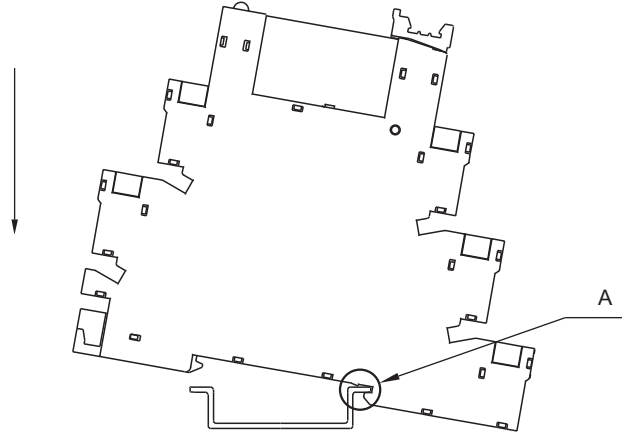
(Figure 5)



(Figure 6)

3. Install the socket

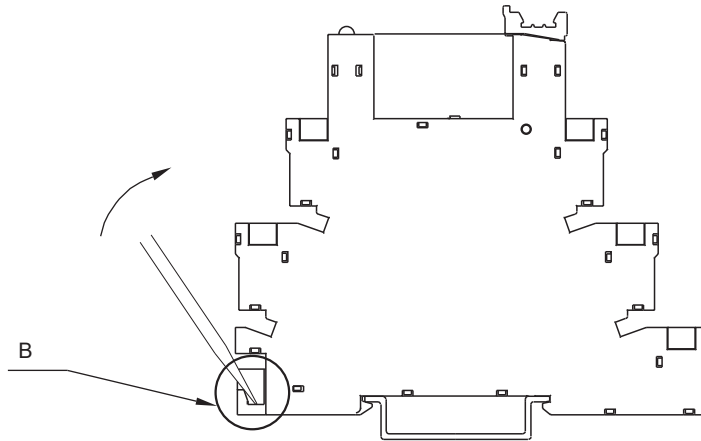
Insert part A of the socket into the din-rail first, and then press the socket down in the direction of the arrow(see Figure 7).



(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°C, or finished within 5 seconds at 350°C. 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 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.

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