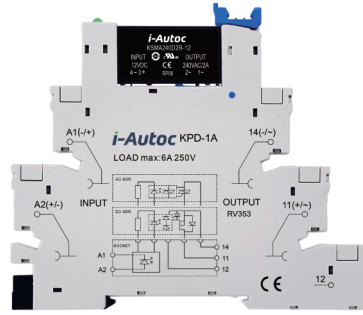


Product Description

- ◆ 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 equipped with a socket, the control voltage limit should be increased by 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	

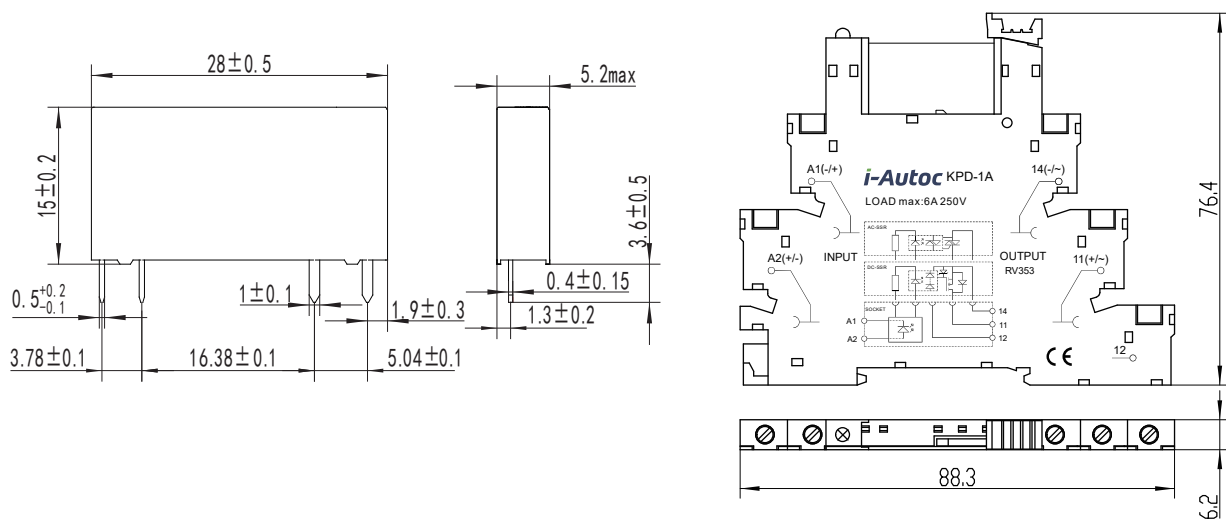
General Specifications (Ta=25°C)

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.

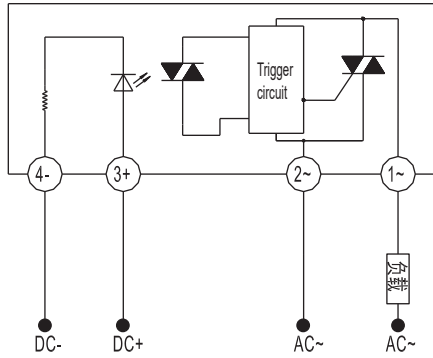
Outline Dimensions



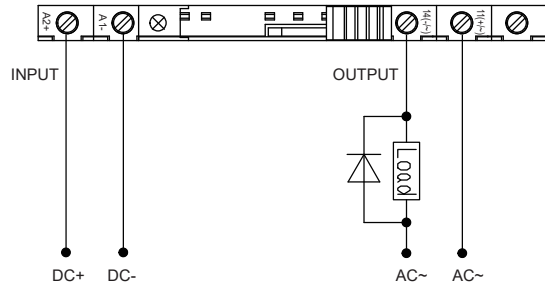
SSR

Socket Installation Drawing (Type: KPD-1A)

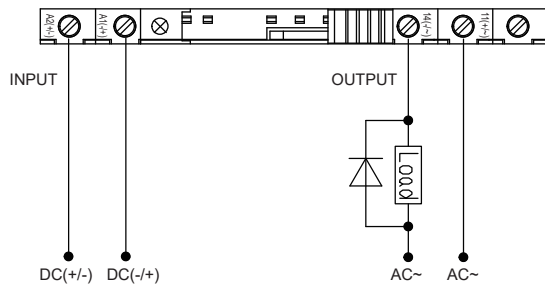
Wiring Diagram



SSR

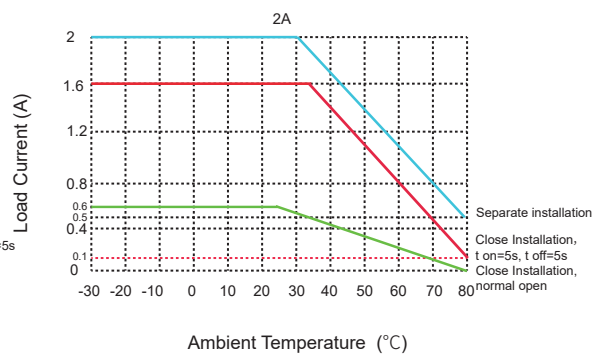
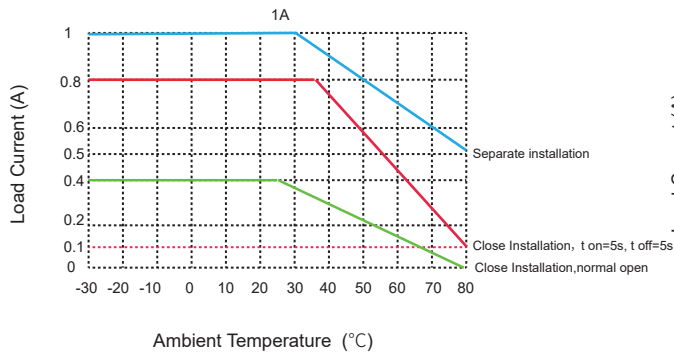


KSMA***-5D
with Socket



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

Thermal Derating Curve



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 ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.

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