KS15 Solid State Relay

c UL us
Certificate NO.:E365647

TÜV
Certificate NO.:B130174964006

CQC
Certificate NO.: CQC12001085989

CE

Features

- Built-in RC snubber circuit
- Photoelectric isolation
- Triac output
- Removable protective cover avaliable
- Dielectric strength 4000V
- Zero-cross or random turn-on
- Panel mount

Input Parameters(Ta=25°C)

Control voltage range (DC input)	(3~32)VDC (Without LED) (4~32)VDC (With LED)
Control voltage range (AC input)	(85 ~ 132)VAC (110V Input) (175 ~ 264)VAC (220V Input) (19.2 ~ 28.8)VAC (24V Input)
Must turn-on voltage (DC input)	3VDC (Without LED) 4VDC (With LED)
Must turn-on voltage (AC input)	85VAC (110V Input) 175VAC (220V Input) 19.2VAC (24V Input)
Must turn-off voltage(DC input)	1VDC
Must turn-off voltage (AC input)	10VAC (110V, 220V Input) 2VAC (24V Input)
Max. input current	25mA (DC) 15mA (AC)
Max. reverse protection voltage(DC input)	- 32VDC

Output Parameters(Ta=25°C)

	□-□□10-□	□-□□15-□	□-□□20-□	□-□□25-□	□-□□40-□
Load voltage range	□-24□□				(48 ~ 280)VAC
	□-38□□				(48 ~ 440)VAC
Max. transient voltage	□-24□□				600Vpk
	□-38□□				800Vpk
Load current range	0.1 to 10	0.1 to 15	0.1 to 20	0.1 to 25	0.1 to 40
Max. I^2t(10ms, A^2s)	78	144	312	312	880
Max. surge current (10ms)	100Apk	150Apk	200Apk	250Apk	400Apk
Max. off-state leakage current	10mA				
Max. on-state voltage drop	1.5Vr.m.s.				
Max. turn-on time (DC input)	Zero-cross: 1/2cycle + 1ms,Random: 1ms				
Max. turn-on time (AC input)	30ms				
Max. turn-off time	AC Input:40ms, DC Input:1/2cycle + 1ms				
Min. off-state dv/dt	200V/μs				
Min. power factor	0.5				

GENERAL (Ta=25°C)

Dielectric strength	2500VAC, 50Hz/60Hz, 1min, input,output to base 4000VAC, 50Hz/60Hz, 1min, input to output
Insulation resistance	1000MΩ (500VDC)
Operating temperature	-30°C ~ 80°C
Storage temperature	-30°C ~ 100°C
Unit weight	Approx 70g

DESCRIPTION

KS15 is a panel-mounted AC Solid State Relay, offer (3~32)VDC or 24VAC, 110VAC, 220VAC input voltage control, with outputs current at 10A, 15A, 20A, 25A or 40A and etc. Load voltage range from 48VAC to 440VAC. The relays provide 4000VAC opto-isolation, between input and output.With built-in RC snubber circuit. Encapsulation,thermally conductive epoxy.

PRECAUTIONS

1.When choosing a SSR,please pay more attention to actual load current and ambient temperature. When the SSR is used for full load operation, we'd better install an adequate heatsink or take other effective cooling measures. When the ambient temperature is high, the load current must be reduced. Please refer to the curve of "Max. Load Current vs Ambient Temperature".

2.Apply heat-conducting silicon grease or a thermal transfer pad on the space between SSR and heat sink. Then, screw the heatsink firmly. In that case, it would keep the SSR from damaging by overheat.

3.It's recommended to use the matched heatsink by Jinxinrong. If the user needs to use home-made heatsink, it's needed to ensure that the SSR base temperature does not exceed 85°C.

4.Tighten the module screw terminals properly. If the screws are loose, the module would be damaged by heat generated from connection. Also excessive screw mounting torque may damage module internal components. Recommended screw mounting torque as follows: M4 screw mounting torque of (0.98~1.37)N • m, M3 screw mounting torque of (0.58~0.98)N • m.

5.Please do not use the relay beyond the descriptions in the data sheet.

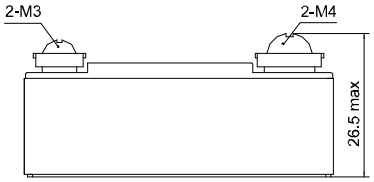
ORDERING INFORMATION

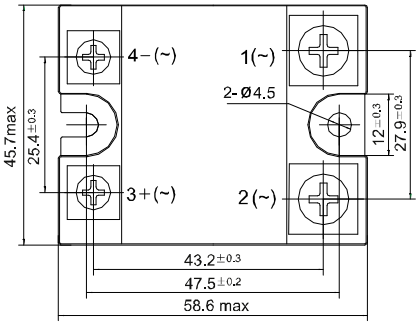
	KS15 /	D-	24	Z	10	-L	(XXX)
Type							
Control voltage	D: (3 ~ 32)VDC(Without LED),(4 ~ 32)VDC(With LED) 24A: 24VAC 110A: 110VAC 220A: 220VAC						
Load voltage	24: 240VAC 38: 380VAC						
Zero cross function	Z: Zero cross turn-on P: Random turn-on						
Load current	10: 10A 15: 15A 20: 20A 25: 25A 40: 40A						
LED indicator	L: With LED Nil: Without LED						
Customer special code							

OUTLINE DIMENSIONS, WIRING DIAGRAM AND MOUNTING HOLES

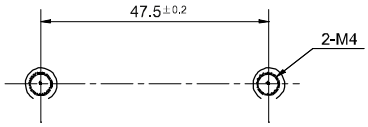
Unit:mm

Outline Dimensions

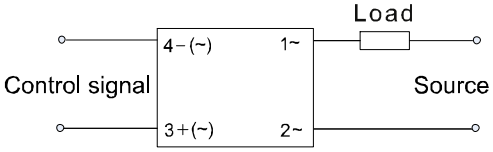




Mounting Holes

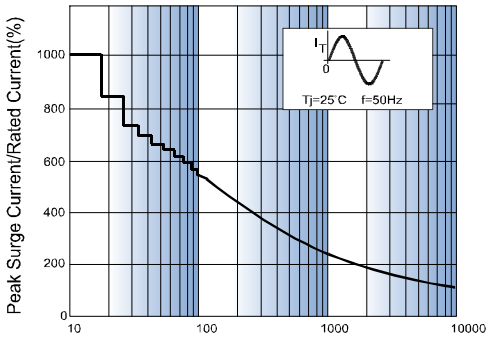


Wiring Diagram

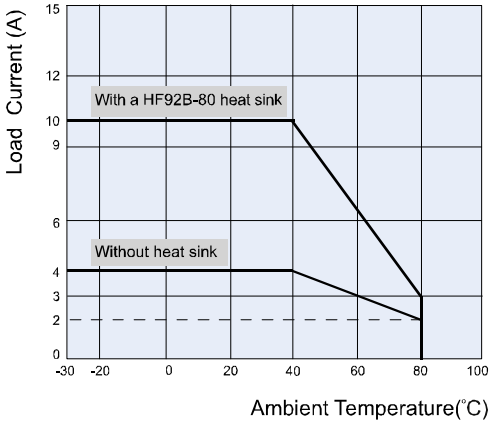


CHARACTERISTIC CURVES

Max. Permissible Non-repetitive Peak Surge Current vs. Continuance Time

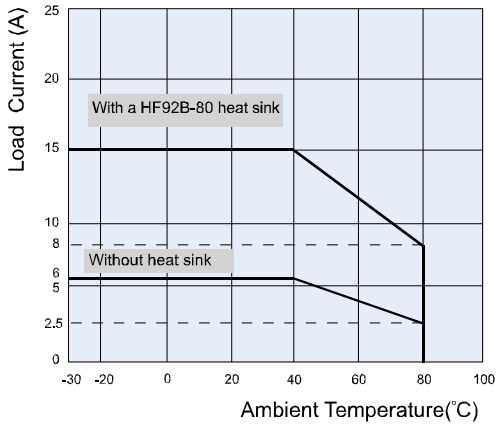


Max. Load Current vs. Ambient Temperature(10A)

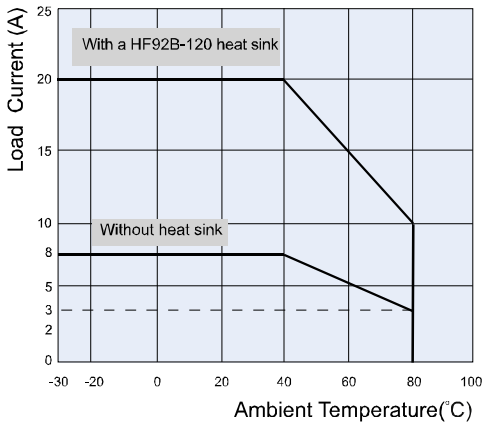


CHARACTERISTIC CURVES

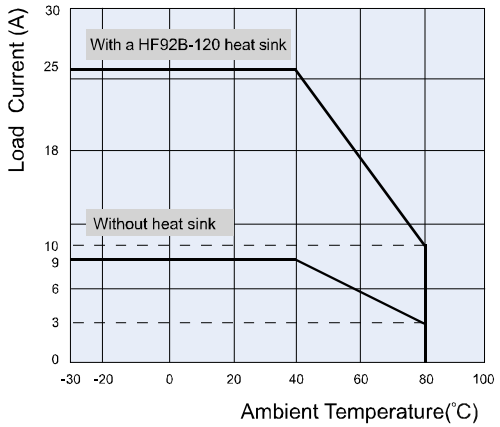
Max. Load Current vs. Ambient Temperature(15A)



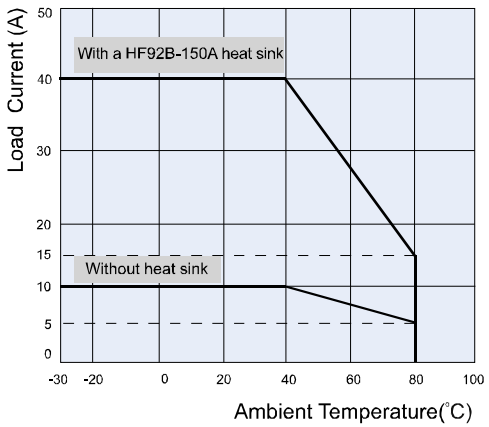
Max. Load Current vs. Ambient Temperature(20A)



Max. Load Current vs. Ambient Temperature(25A)



Max. Load Current vs. Ambient Temperature(40A)



Disclaimer:

This datasheet is for the customers' reference. All the specifications are subject to change without notice.
Jinxinrong could not evaluate all the performance and all the parameters for every possiable application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Jinxinrong for the technical service.However, it is the user's responsibility to determine which product should be used only.

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