HFS24(JG-24F) THREE-PHASE SOLID STATE RELAY

Features

- Photo isolation
- LED status indicator
- 4000V dielectric strength
- Zero cross or random turn-on
- Built-in snubber
- Removable finger proof cover available
- Panel mount
- RoHS compliant

INPUT

Control voltage range	3 to 32VDC
Must operate voltage	3VDC
Must release voltage	1VDC
Max. input current	35mA (at 32VDC)
Max. reverse protection voltage	-32VDC

OUTPUT

Load voltage range	48 to 400VAC
Load current range	D380A10Z: 10A D380A15Z: 15A D380A25Z: 25A D380A40Z: 40A D380A60Z: 60A
Transient overvoltage	800Vpk
Max. surge current	D380A10Z: 100Apk D380A15Z: 150Apk D380A25Z: 250Apk D380A40Z: 400Apk D380A60Z: 600Apk
Max. on-state voltage drop	1.5VAC
Min. load current	100mA
Max. leakage current	10mA
Min. off-state dv/dt	200V/μs
Max. turn-on time (at 50Hz)	10ms
Max. turn-off time (at 50Hz)	10ms
Min. power factor	0.5

GENERAL

Dielectric strength (input to output)		4000VAC 1min.
Insulation resistance		1000MΩ (at 500VDC)
Max. capacitance (input to output)		8pF
Ambient temperature	Operating	-30˚C to +80˚C
	Storage	-30˚C to +100˚C
Ambient Humidity		45 to 85% RH
Termination		Screw
Mounting model		Panel mount
Unit weight		Max. 315g

DESCRIPTION

The HFS24 is three-phase AC output relay (3PST-NO).The relay offer 3 to 32VDC input control, with outputs rated at 10A, 15A, 25A, 40A or 60A.The relays include a LED indicator to provide input status information.All models include an internal snubber. The relays provide 4000Vac opto-isolation, between input and output.Encapsulation, thermally conductive epoxy.

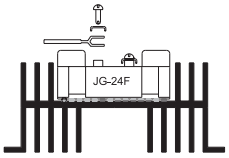
INSTALLATION

1、When mounting the relays side by side,provide a space equivalent to the width of a single SSR between two adjacent SSRs.Otherwise,reduce the load current flow to 1/2 to 1/3 of the rated current.

2、When mounting relays on heat sink surface,first apply a heat conductive grease to the metal back surface of the SSR.Press

3、the SSR firmly onto the heat sink to ensure a good seal.Screw the SSR down to the heat sink.

Next,wire the screw terminals and securely tighten the screws.



PRECAUTIONS

1. Before connecting a load that generates a high surge current, such as a lamp load to the SSR,make sure that the SSR can withstand the surge current of the load.
2. The product data sheet shows the non-repetitive peak value of the surge current that flows through the SSR.Normally,use 1/2 of the non-repetitive peak surge current as the standard value.If a surge current exceeding that value is expected, connect a quick-blowing fuse to protect the SSR.
3. When using the HFS24 for an AC load with a peak voltage of more than 750V,connect the load terminals of the relay to an inrush absorber.

ORDERING INFORMATION

HFS24 /	D-	380	A	10	Z-	Y	L	P	3	XXX

Type	
Input voltage	**D**: 3 to 32VDC
Load voltage	**380**: 380V
Load voltage form	**A**: AC
Load current	**10**: 10A **15**: 15A **25**: 25A **40**: 40A **60**: 60A
Zero cross function	**Z**: Zero cross turn-on **P**: Random turn-on
Varistor protection	**Y**: With varistor protection **Nil:** Without varistor protection
LED indicator	**L**: With LED
Phase loss protection	**P**: With phase loss protection **Nil**: Without phase loss protection
Output number	**3**: Three
Special request code	(Only for special requirements, e.g. 555 stand for RoHS compliant)

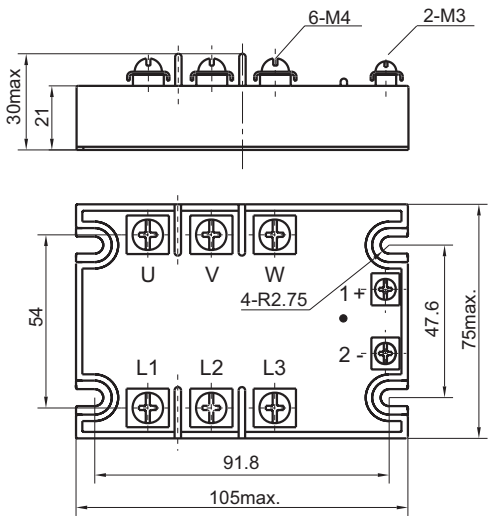
Notes: HFS24 is an environmental friendly product, please mark special code (555) when order.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND MOUNTING HOLES

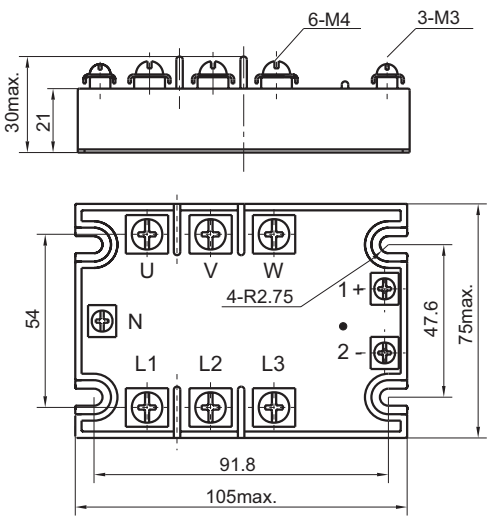
Unit: mm

Outline Dimensions

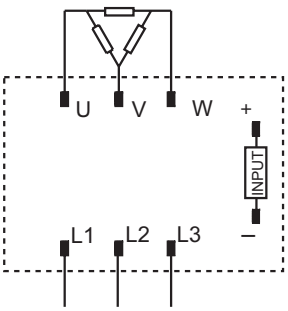
HFS24 (Non phase loss protection)

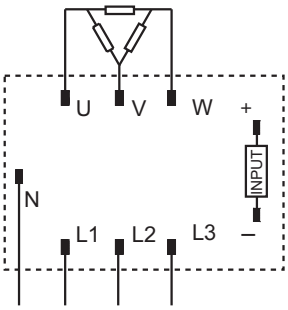


HFS24 (With phase loss protection)



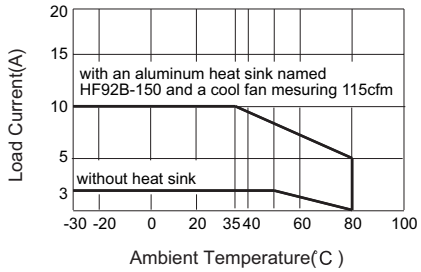
Wiring Diagram

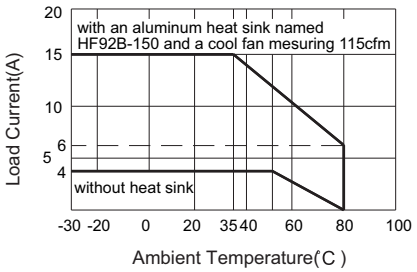


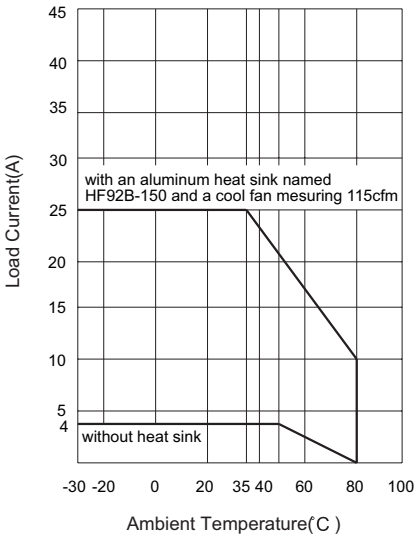


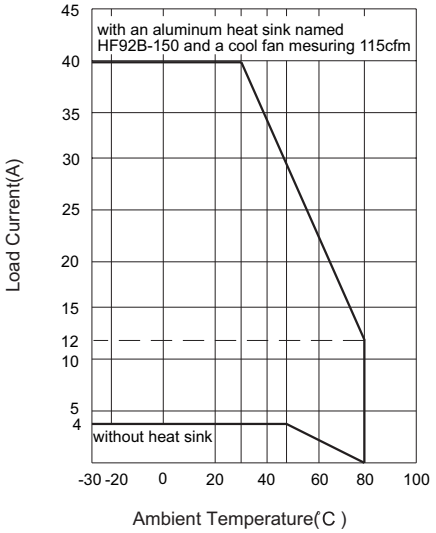
CHARACTERISTIC CURVE

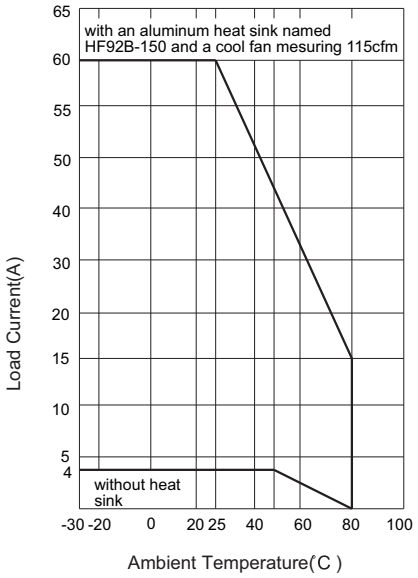
Max. Load Current vs. Ambient Temperature



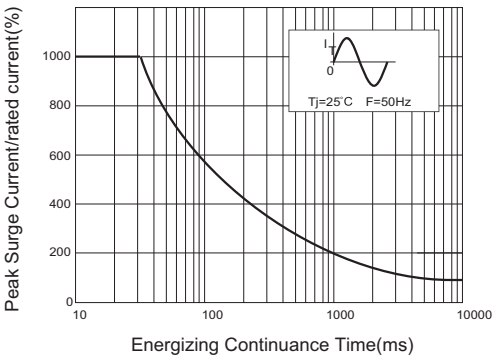








Max. Permissible Non-repetitive
Peak Surge Current vs. Continuance Time



Disclaimer

This datasheet is for the customers' reference. All the specifications are subject to change without notice.
We could not evaluate all the performance and all the parameters for every possible 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 Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.