



Features

- Photoelectric isolation
- LED status indicator
- Dielectric strength 4000V
- Zero-cross or random turn-on
- Built-in RC snubber circuit
- Removable protective cover available
- Panel mounting

Input Parameters (Ta=25°C)

Control Voltage range	(4 ~ 32)VDC
Must turn-on voltage	4VDC
Must turn-off voltage	1VDC
Max. input current	35mA
Max. reverse protection voltage	-32VDC

Output Parameters (Ta=25°C)

Load Voltage range	(48 ~ 440)VAC
Max. load current	40A
Max. transient voltage	800Vpk
Max. surge current (10ms)	400Apk
Max. I ² t for fusing (10ms)	800A ² s
Max. on-state voltage drop	1.7Vr.m.s.
Min. load current	100mA
Max. off-state leakage current	10mA
Min. off-state dv/dt	200V/μs
	Zero cross: 1/2 cycle + 1ms
Max. turn-on time	Random: 1ms
Max. turn-off time	1/2 cycle + 1ms
Min. power factor	0.5

Description

Three phase AC output relay (3PST-NO)

The relay offer (4 ~ 32)VDC input control with (48 ~ 440)VAC output voltage and outputs current at 40A. The relay includes a LED indicator to provide input status information. This product is used in three-phase motors, heaters and other controls. 4000VAC optical isolation between input and output.

General (Ta=25°C)

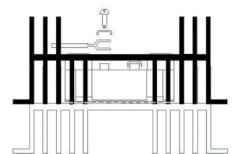
Dielectric strength	4000VAC, 50Hz/60Hz, 1min
Insulation resistance	1000MΩ (500VDC)
Max capacitance (input to output)	10pF
Operating temperature	-30°C ~ 80°C
Storage temperature	-30°C ~ 100°C
Ambient humidity	45% ~ 85% RH
Termination	Screw
Mounting Model	Panel mounting
Unit weight	Approx 315g

Application (Ta=25°C)

Relay load current	40A
Motor power	3kW
Heatsink part number	HF92B-150°C
Cooling fan air flow	115CFM

Installation

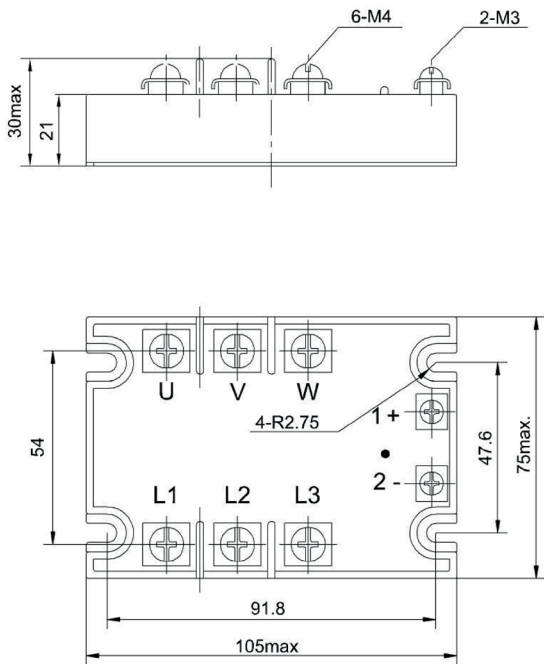
1. Confirm the heat sink surface clean and smooth
2. When mounting SSR on the heat sink surface, first apply some heat conductive grease to the baseplate surface of the SSR. Press the SSR firmly onto the heat sink to ensure a good seal. Scre the SSR baseplate.
3. Wire the screw terminals and securely tighten the screws.



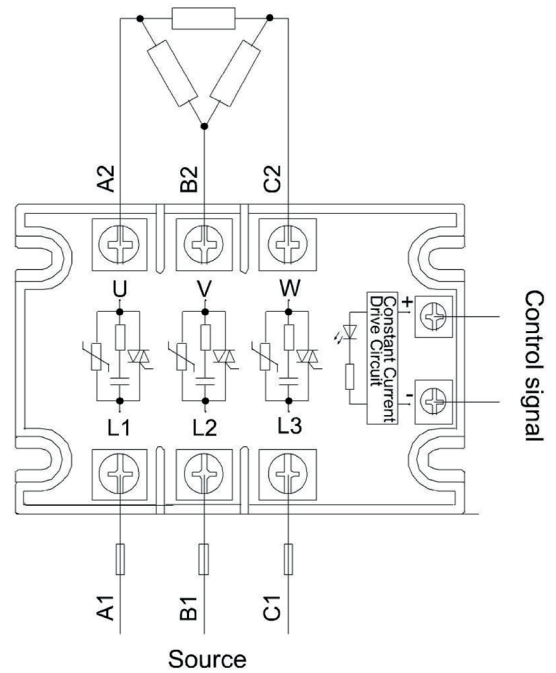
Precautions

1. The product datasheet shows the non-repetitive peak value of the surge current. Normally, use 1/2 of the nonrepetitive peak surge current as the standard value. If the actual surge current may exceed the standard value, connect semiconductor fuses to the SSR power side in series is required. At the same time, 1st value of semiconductor fuses should be smaller than the SSR nominal value
2. If the load may generate high shock voltage(such as motor), make sure that the SSR can withstand this transient voltage.
3. The product datasheet shows the non-repetitive peak value of the transient voltage. In practice, if the transient voltage may be larger than nominal value, a varistor should be mounted to the load terminal in parallel to prevent the SSR breakdown. The recommended varistor voltage range(750~1000)V.
4. For phase loss protection SSR, when three-phase power supply occurs phase missing (lack of one phase or two phases) or phase voltage are extremely unbalanced, the SSR would turn off the output current and the input LED indicator and then run into the self-locking state. We need to cut off the input power to reset relay. Using this kind of product, L1, L2, L3, N terminals should connect with three phase power, U, V, W terminal should connect with three phase load, otherwise phase loss protection function does not work.
5. Please pay more attention to actual load current and ambient temperature for SSR selection. 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, please refer to the curve of Max. Load Current vs Ambient Temperature for derating.
6. Tighten the SSR terminal screws properly. If the screws are loose, the SSR will be damaged by heat generated from connections. Also excessive mounting torque may damage relay internal components. Recommended screw mounting torque as follows: output screw mounting torque range is(0.98~1.37)N · m, input screw mounting torque range is(0.58~0.98)N · m.
7. It's recommended to use the matched heatsink by CD Automation. If the user needs to use home-made heatsink, it's needed to ensure that the SSR base temperature does not exceed 85°C.
8. Since the SSR internal electronic components are assembled to a whole body by filling epoxy resin, excessive baseplate mounting torque may damage internal components. Therefore, we recommend using (0.98 ~ 1.37)N.m torque to fix the SSR.
9. Please do not use the relay beyond the descriptions in the datasheet.If it is a must to use it beyond descriptions, please contact CD Automation for more technical support.

Outline dimensions

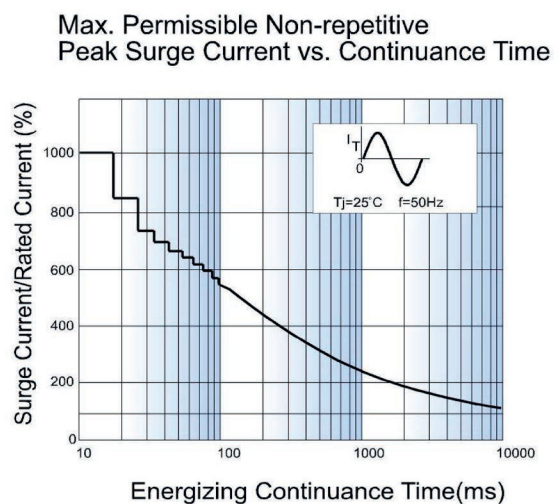
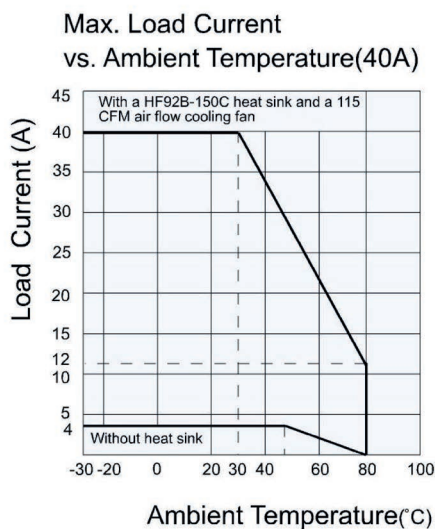


Wiring diagram



Notes: F1, F2, F3 should be semiconductor fuses

Characteristic Curves



Disclaimer:

This datasheet is for the customers' reference. All the specifications are subject to change without notice. CD Automation 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 CD Automation for the technical service. However, it is the user's responsibility to determine which product should be used only.