



SSR... Series – Single-Phase Solid-State Relay

Single-phase solid-state relays with 230Vac, 24Vac or 12Vdc input and 440Vac rated output for loads up to 80 amps*.

Range Overview

Solid-State Relay

- | | |
|-----------------------|------------------------------------|
| SSR-40A-240VAC | ▪ 240Vac input, 440Vac 40A* output |
| SSR-20A-24VAC | ▪ 24Vac input, 440Vac 20A* output |
| SSR-40A-24VAC | ▪ 24Vac input, 440Vac 40A* output |
| SSR-80A-24VAC | ▪ 24Vac input, 440Vac 80A* output |
| SSR-40A-12VDC | ▪ 12Vdc input, 440Vac 40A* output |

* Requires fan-forced cooling and heat sink. Without fan then down-rate 50% for resistive loads, down-rate 70% for inductive loads

Heat Sink (ordered as separate item):

- | | |
|----------------|---------------------------|
| HH-060 | ▪ SSR 20A |
| HH-061 | ▪ SSR 40A |
| HH-061D | ▪ SSR 40A, DIN rail mount |
| HH-062 | ▪ SSR 60A & 80A |

Thermal Paste: (ordered as separate item):

- | | |
|---------------|----------------|
| HTC20S | ▪ 20ml syringe |
|---------------|----------------|
-

Installation

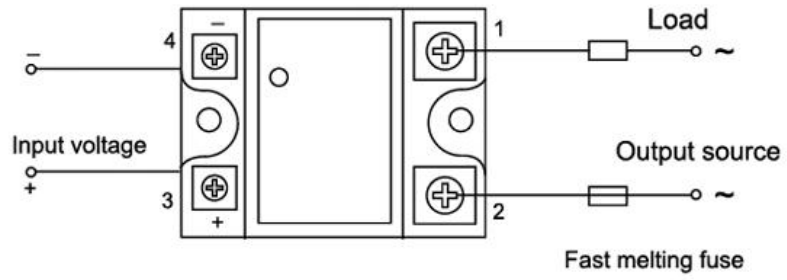


- Always ensure the connected load is within the load limits of the selected SSR
- Stated load is in combination with a heatsink and fan-forced ventilation designed to provide sufficient heat-dissipation. If without fan-forced ventilation then down rate 50% for resistive loads / down-rate 70% for inductive loads
- The SSR should be mounted securely to the selected heatsink
- Heat-conducting paste must be applied between the SSR and the heatsink to ensure efficient heat transfer takes place
- The radiator fins of the Heat sink must be in vertical orientation to ensure good convection flow for heat dissipation
- Adequate ventilation should be provided in the electrical panel, top and bottom, to ensure heat is dissipated from the heatsink efficiently



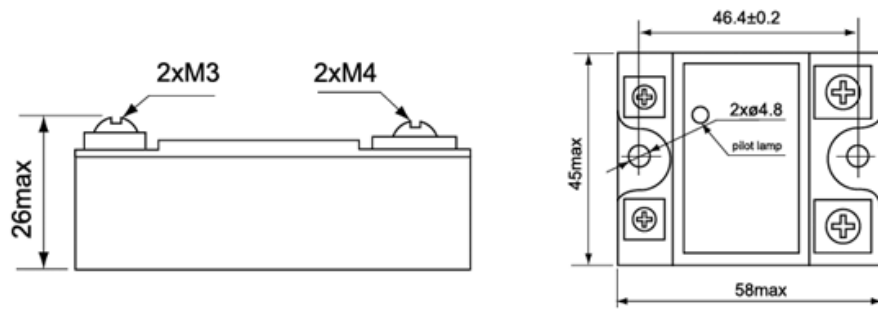
- Only suitably qualified personnel should perform installation or maintenance of these devices
- Always disconnect the mains power supply before carrying out any installation or maintenance of these devices

Connections



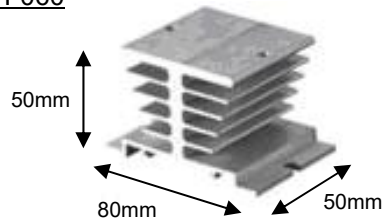
Dimensions

SSR...

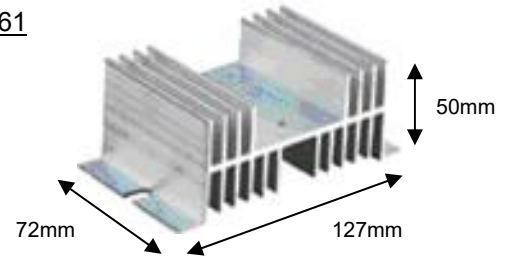


Heatsink

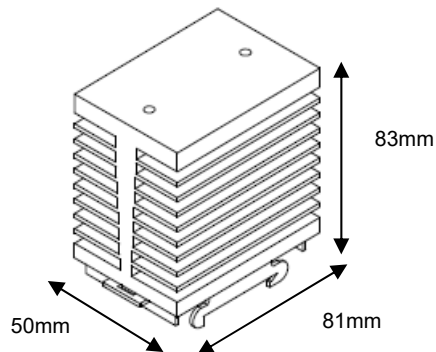
HH-060



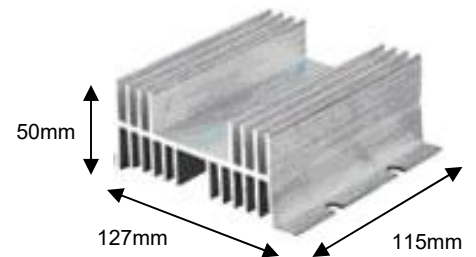
HH-061



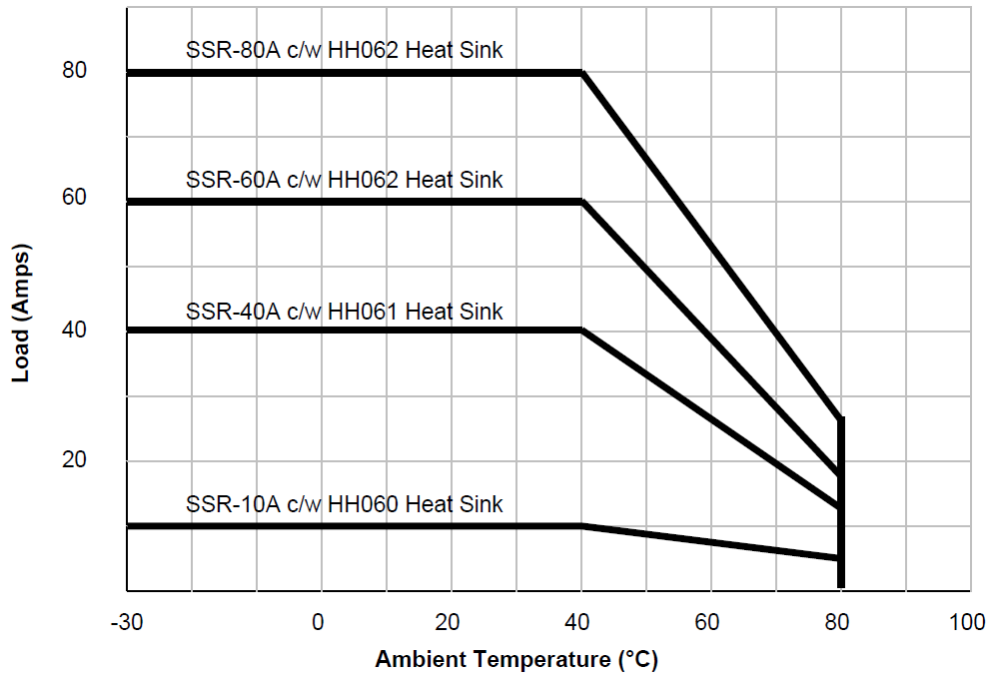
HH-061D



HH-062



Temperature Load Curves (fan-forced cooling)



Technical Data

Input voltage – 24Vac versions:	18...32Vac
Input voltage – 12Vdc versions:	3...12Vdc
	On state >3Vdc
	Off state <2Vdc
Input current:	6...35mA
Rated output voltage:	440Vac
Rated output current (I _N):	10A, 20A, 30A, 40A, 60A, 80A
ON state voltage drop:	<1.8V
Transition time:	<10ms
OFF state leakage current:	<10mA
Isolation voltage:	>2kV
Ambient operating temperature (T _A):	-25...+70°C with heat sink and fan-forced cooling. Above 40°C down-rate: $I_{MAX} = I_N - (I_N * (T_A - 40) * 0.01875)$
Operating indication:	LED