

Heatsink Function

To dissipate heat from solid-state relays, solid-state voltage regulators, and power semiconductor modules, preventing overheating and damage to components.

Selection Considerations

Selection is primarily based on the actual load current, heatsink size, ambient temperature, ventilation method, and installation density, and is less related to the relay's nominal current.

Heat Generation Calculation

Heat generation = Actual load current $\times$ 1.5W/A; for three-phase solid-state relays, use the sum of the three-phase currents.

Temperature Control Protection Requirements

The device's base plate temperature must be $\leq 80^{\circ}\text{C}$. A 75°C normally closed temperature switch can be installed within 20mm of the mounting surface edge, connected in series in the control circuit, to cut off the output protection device in case of over-temperature. This is recommended for applications with a current per phase $>50\text{A}$, dense installation, or high ambient temperature.

Compatibility Range

Compatible with single-phase solid-state relays, applicable current $<20\text{A}$.

