



How to Select an HBControls Solid State Power Controller

For example, let's look at the product selection process for an application with a 35 amp, 240Vac single-phase load controlled by a PLC or control board providing a 5Vdc control signal. From the home page of hbcontrols.com you would follow the path; [Products](#) -> [AC Output Single-Phase](#) -> [A Series DC Input](#). Seven standard options are available on the resulting page, with three of those having load-current ratings >35 amps capable of switching AC loads between 48-660Vac.

Let's look at another example using the same application parameters but replace the 5Vdc control signal requirement with an analog signal, such as a 0-10Vdc or 4-20mA supply. You would again start with the [Products](#) page, but in this case you would select [Proportional Control: Phase-Angle & Burst Fire](#). From here you would follow the same drill-down process, starting with either a phase-angle or burst fire controller, depending upon the output mode required.

Additional Product Selection Information

- HBControls power controllers are rated to continuously switch their full load-current rating in a 40°C ambient temperature. The solid-state relay is pre-assembled onto the heat sink, which eliminates the need for thermal calculations or additional component sourcing.
- The "series" of HBControls power controllers denotes the [heat sink](#) used in the assembly, such as the S, A, L, K, N, G, F and F7 series. The -11 series compact power controllers are PCB solid-state relays mounted on a compact DIN clip.
- Two or three independent AC output, single-phase power controllers can also be used to control three-phase loads. Wiring their input terminals in parallel would allow all three controllers to turn on simultaneously.
- Stripwire power controllers utilize box-clamp terminals that can accommodate bare-wire termination. They're available in either single-phase or three-phase configurations.
- Zero-crossing power controllers are suitable for most types of AC loads. Instantaneous (or "random" turn-on) power controllers are also available for switching highly inductive loads or for phase-control applications.
- Most HBControls power controllers have options for either DIN or panel mounting. Please [contact us](#) if the mounting option you're looking for isn't available directly from our website.
- Phase-angle and burst fire controllers both proportionally control power to AC loads but do so in a slightly different manner. More information on the difference between the two modes is available in the FAQ section at the bottom of their [online catalog page](#)

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There are thousands of possible power controller configurations and customized solutions available that may not have made it to the website. Please contact our support team @ 800.879.7918 / support@hbcontrols.com if you need assistance in finding the right product for your application or would like to further discuss specific technical requirements.