

We Cut Confusion About Switching All Hot Legs!

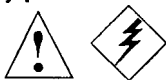
A common question we receive from the field about solid state switching is **“Why don’t they switch both electrically hot lines?”**

On a single phase circuit, using 120 or 277VAC, one side will always be grounded (neutral) and one wire will be electrically hot. Per the National Electric Code (NEC), the neutral must never be switched or fused; not with solid state nor with mechanical switching.

On a single phase circuit using two “hot” wires, 240 and 480VAC, for example, technically only one hot line needs to be switched to control the circuit.

However, for overtemperature protection and personnel safety reasons you must mechanically disconnect ALL hot lines. A solid state switch; triac, SSR, and SCR is considered to be a specialty device by UL, and may not be used as an overtemperature or safety disconnect.

On three phase loads, the same basic rules apply. Anyone working on a heater must first disconnect the power to the application. **There is no substitute for good safety procedures.**



WARNING:

Power control (power switching) wiring must conform to National Electric Code (NEC) safety practices, as well as to locally-applicable safety codes. Failure to conform could result in death or personal injury.