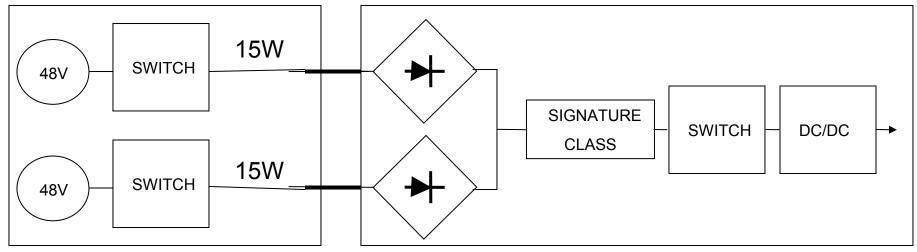
Question: May a 4P AT-PSE power each 2P autonomously?

Answer:

No

Situation:

4P AT-PSE AF-PD



Problem:

In this situation, the AF-PD would see double inrush current (900mA) which might stress a FET, cap, or fuse. The PD would have 30W available which might allow fire in fault condition.

Solution:

As a minimum, 4P PSE must check for above condition when an AF-PD is detected and limit power/current to AF levels.

To maintain identical AF operation, I would propose AF-PDs be powered over 2P, as is done today.