

Input Bypass Capacitor

This Application Note applies to all XP EMCO Product Series and describes the optional use of an input bypass capacitor for improved performance.

Safety Warning

High voltage power supplies present a serious risk of personal injury if not used in accordance with design and/or use specifications, if used in applications on products for which they are not intended or designed, or if they are used by untrained or unqualified personnel.

For more information, please refer to the XP EMCO Safety Warning and Disclaimer located at:

<http://www.xppower.com/High-Voltage/Safety-Warning-Concern-HV.pdf>

General Information

Internal to all XP EMCO units is a small input capacitor. Adding an additional capacitor externally across the input pins can provide performance enhancements. This external capacitor reduces the reflected ripple on the input supply lines and decreases the amount of work being done by the small capacitor inside the unit. A slight increase in efficiency and decrease in output ripple might also be observed.

Capacitor Selection

Select a low impedance electrolytic capacitor (such as United Chemicon's LXZ Series) and place close to the input leads of the converter. The value should be between 10 μ F and 100 μ F. See Figure 1.

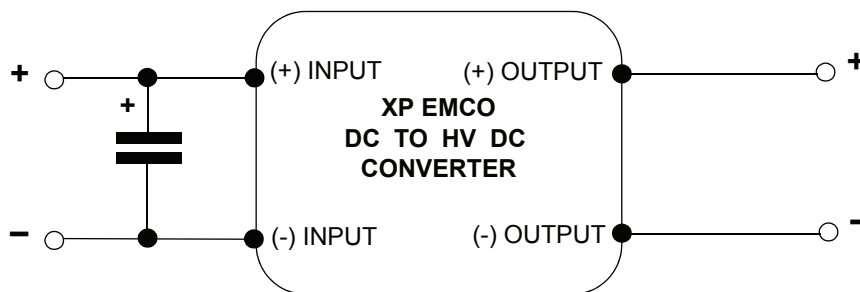


Figure 1

See the product series Data Sheets for more information.

XP EMCO Main Office

1 EMCO Court, Sutter Creek, CA 95685 • (800) 546-3680 • (209) 267-1630 • www.xppower.com

We reserve the right to make changes without notification. AN1-A03