

Selecting the Bypass Module

General

UPS systems are complex high power electronic devices. When combined with auxiliary sources (battery and an alternate AC feed), the UPS becomes the lifeline of any critical

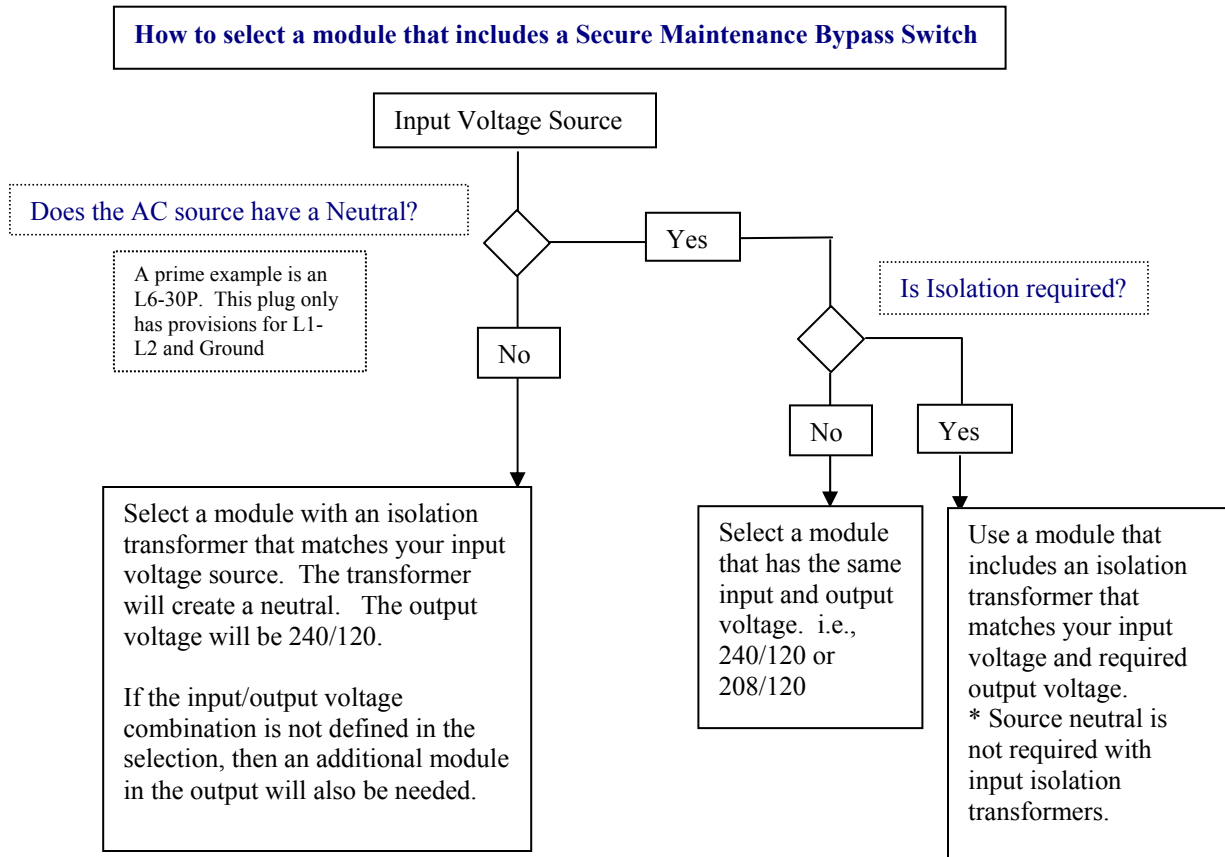
operation. Whether running data, security, or life support systems, a UPS must work automatically and supply uninterrupted power 100% of the time; even during maintenance or if the UPS

malfunctions. Accomplishing a 100% uptime requires a high-speed automatic static bypass system and a manually switched wrap around maintenance bypass.

The UltraUPS's unique modular secure bypass and distribution system provides a simple, yet versatile approach to a 100% uptime.

Selecting the Right Distribution Module

Any Dual Phase 3 or 5 kVA System using an input isolation transformer converts the output to a 240/120 (4 wire: L1,L2,N,Gnd) system.



Examples:

CASE 1

Dual Phase 5 kVA

Input 208V AC
Source L6-30R (previously installed)

This receptacle has no neutral. Therefore, it is necessary to do one of the following:

- (1) Have an electrician install the neutral wire and replace the L6-30 with a L14-30R.
- (2) Include one of the distribution modules that accepts 208Vac and produces an output of 240/120
** All distribution Modules that include the Secure Bypass Switch are pre-wired and made to properly match voltage and phase.

CASE 2

Single Phase 3 kVA

Input 480V AC
Output 120V AC
Source Hard wired

The UltraUPS input must be 120V ac with respect to neutral. Thus, include the 480V AC input option Distribution Module. The input is automatically stepped down to 120V AC. The Secure Bypass Switch uses the transformer's 120V AC when in the bypass mode.

CASE 3

Dual Phase 5 kVA

Input 240/120V AC
Output 120V AC
Source Hardwired

The UltraUPS input must include two 120V AC sources with respect to neutral. Therefore use the distribution module that accepts 240/120. The UPS input automatically receives the same because no transformer is used. Select the Distribution Module that produces 120V AC output. The 240 to 120 volt transformer is connected to the output of the UPS, using the 240V AC on it's primary winding. The Secure Bypass Switch uses the 240V AC when in the bypass mode, while the load remains at 120V AC.

Also See Application Note: *Secure Maintenance Bypass*