

# SIEMENS

## Installation Instructions

Model FP2012-U1

300W Power Supply Module

### INTRODUCTION

The Model FP2012-U1 is a modular power supply that provides primary regulated 24VDC power for normal operation. The FP2012-U1 is rated 11.5A@24VDC and regulation is under all load/line cases.

The module incorporates two 6.3A replaceable, non-resettable slow-blow fuses on the primary input and includes a built-in AC line filter for surge and noise suppression. (Refer to Figure 3 for the location of the fuses.) The FP2012-U1 mounts in a standard enclosure or FHB2002-xx FS20 Backbox. A green LED illuminates to indicate that the module is powered up.

There are no serviceable parts to be maintained.

### INSTALLATION



**Remove all system power before installation, first battery then AC. (To power up, connect the AC first, then the battery.)**

The installation kit for the FP2012-U1 includes the following:

- 1 FP2012-U1 Power Supply Unit
- 4 #10 lock nuts
- 1 Installation Instruction



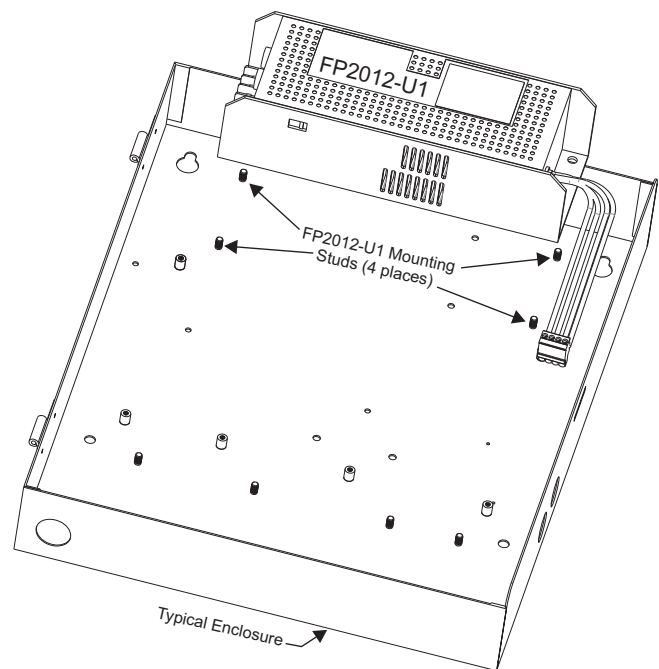
**For 240VAC installation, reference the Voltage Selector Switch on Figure 3 before installing the FP2012-U1 module.**

### Mounting

Mount the enclosure to the wall before mounting the FP2012-U1 power supply to the enclosure.

1. Make sure that the dedicated circuit breaker for the FP2012-U1 is turned off at the mains.

2. Place the FP2012-U1 housing over the four studs provided in the enclosure indicated in the system installation manual. (Refer to Figure 1 for a typical example.) Note that depending on the enclosure, it is possible to mount the FP2012-U1 in either a horizontal or vertical position.
3. Using the lock nuts provided, secure the FP2012-U1 to the mounting studs of the enclosure.



**Figure 1**  
**FP2012-U1 Mounting in Typical Enclosure**

## Wiring

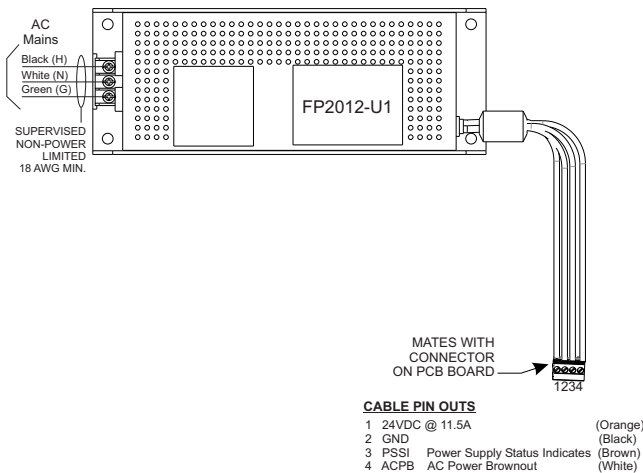
The FP2012-U1 is designed to operate from a 120/240VAC, 50/60Hz power source. Use a separate or dedicated circuit breaker. Wire in accordance with the authority having jurisdiction and Article 760 of the NEC NFPA 70 latest edition.

Run the earth ground from a suitable source to the FP2012-U1. Check local requirements. Conduit is not an acceptable earth ground conductor.

1. Remove the safety cover from the 3-position terminal block and place it to one side.
2. Connect the AC mains to the 3-position terminal block on the FP2012-U1 as shown in Figure 2.

Black (H - Hot)  
 White (N - Neutral)  
 Green (G - Earth Ground)

3. Replace the safety cover back on the terminal block for the AC mains.
4. Connect the end of the cable to the terminal block (TB) indicated in the system installation manual. This cable is keyed and will connect in only one way.



**Figure 2**  
**Wiring the FP2012-U1**

## ELECTRICAL RATINGS

Primary Power:

Input: 120/240VAC  
 50/60Hz, 3.0A Max. @ 120VAC  
 1.5A Max. @ 240VAC

Output: 24VDC

Max Current: 11.5A@24VDC  
 Filtered and Regulated

## Operating Temperature Range

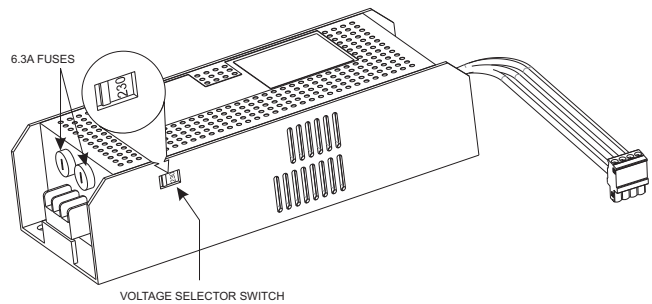
0 - 49°C (32 - 120°F)

## VOLTAGE SELECTOR SWITCH FOR 240VAC



**Remove all system power before installation, first battery then AC. (To power up, connect the AC first, then the battery.)**

If the AC input is 240VAC, you will need to set the red switch on the side of the FP2012-U1 housing to the 220 or 230 position as shown in Figure 3.



**Figure 3**  
**Voltage Selector Switch on FP2012-U1**