GFK-1448B August 1997 Power Supply Module, 100W, 120/240 VAC or 125 VDC

Power Supply Door

The power supply door can easily be opened by grasping the upper left corner of the door with your right thumb or a fingernail and gently pulling the door towards you. Use care when opening the door since pulling from the bottom can cause the hinge or the door to break.

Field Wiring Connections

The power input terminal board has four terminals. The top two (L1 and N) are for 120/240 VAC or 125 VDC input power connections; the third and fourth terminals are for ground and overvoltage protection device connections, respectively. Power input connections should be made with copper AWG #16 (1.3 mm²) wire rated for 75°C (167°F). Each terminal can accept solid or stranded wires, but the wires into any given terminal should be the same type and size.

It is recommended that the ground terminal on the power supply be connected to the GND terminal on the rack and to earth using copper AWG #12 (3.3 mm²) wire rated for 75°C (167°F) to ensure adequate grounding. Use of a nut and star washer for each wire on the ground terminal is recommended.

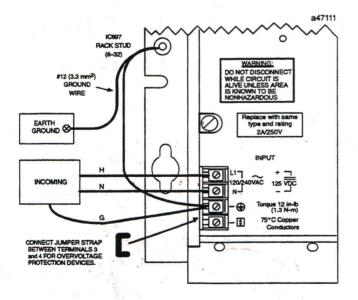


Figure 4. Terminal Board Connections for IC697PWR711/713, Versions H and Later

Overvoltage Protection Devices

The overvoltage protection devices (see Figure 5) for this power supply are connected internally to terminal 4 (bottom terminal) on the input terminal board. This pin is normally connected to frame ground (terminal 3) with the supplied jumper strap which is installed at the factory. If overvoltage protection is not required or is supplied upstream, this feature can be disabled by leaving terminal 4 unconnected by removing the jumper strap.

If you want to Hi-pot test this supply, overvoltage protection *must be disabled* during the test by removing the terminal board strap. Re-enable overvoltage protection after testing by reinstalling the strap.

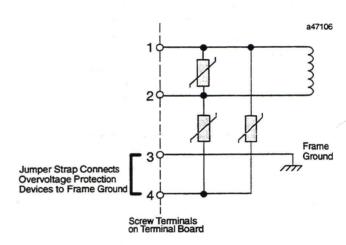


Figure 5. Overvoltage Protection Devices and Jumper

System Noise Immunity

Two easy steps must be taken to properly ground the programmable controller system to reduce the possibility of errors due to electrical noise (see Figure 5).

- The Ground terminal on the power supply must be connected to the GND terminal on either side of the rack using AWG #12 (3.3 mm²) wire. The Ground terminal should be also be connected to incoming safety ground.
- 2. The GND terminal on the rack must be connected to a good earth ground.