GFK-0626D
August 1997

Power Supply Adapter Module

Features

- Interfaces an external power supply to an IC697 rack
- Single-slot module
- Plugs into power supply slot in rack
- Easy connection to power supply

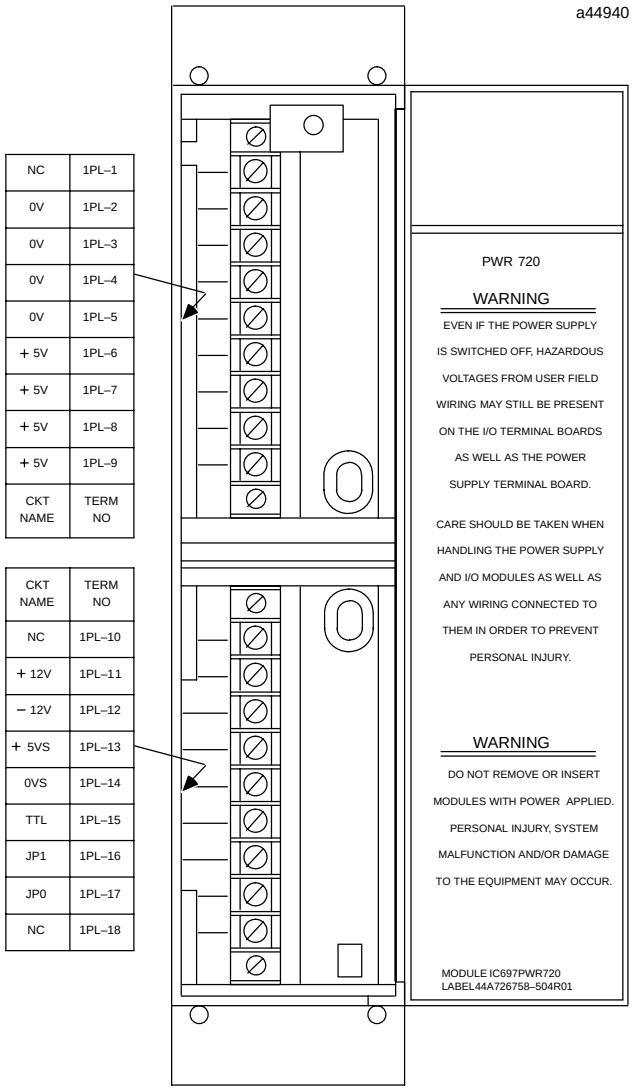
Functions

This **Power Supply Adapter Module** (PSA) for the IC697 I / O system is a single-slot module that plugs into the power supply slot, which is the leftmost slot in an IC697 rack. The PSA module must be connected to an external power supply through a cable. The external power supply can be an IC697 power supply module (see GFK-0717), or other external power supply.

The +5, +12, and –12 VDC outputs, as well as the 5V remote sense, which are generated by an external power supply are connected to the IC697 rack backplane through the PSA. The maximum currents that can be supplied to the backplane through the PSA are: 18 amps on the +5 volt output, 2 amps on the +12 volt output, and 1 amp on the –12 volt output.

The PSA monitors the +5 volt output and the ttl compatible Input Power OK signal (*TTL*) from the external power supply. The Input Power OK signal (*TTL*) indicates that the external power supply input voltage is adequate to maintain hold-up time for an orderly system shutdown. The PSA also develops two backplane signals, *ACFAIL** and *SYSRESET**, which are for the power-up / power-down sequence.

The external power supply must provide adequate hold-up time (5.05 milliseconds minimum, per ANSI / IEEESTD1014-1987) as well as an Input Power OK signal (*TTL*) to ensure an orderly system shutdown when power is removed.



It is recommended that the external power supply have a +5V Remote Sense. When the Remote Sense is connected to the PSA terminal board (positive remote sense to +5VS and negative to 0VS) the +5 volts at the backplane will be regulated to the level set by the power supply.

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The LED indicator on the PSA is ON when the +5 volt output is in regulation at the backplane and the *TTL* signal from the power supply indicates that the power supply input voltage is adequate to maintain hold-up time for an orderly system shutdown. This *TTL* signal can be positive or negative logic. Two terminals on the PSA terminal board (JP1 and JP0) are available for selecting the logic state. If positive logic (Input Power OK if *TTL* = high), no jumper is required; if negative logic (Input Power OK if *TTL* = low), a jumper is required between terminals JP1 and JP0.

Operation of the Power Supply Adapter

This Power Supply Adapter Module operates from +5 VDC power which it receives from the +5 VDC power bus on the IC697 rack backplane.

Dual Rack Operation

A single external power supply can provide power for two racks. In this application, the PSA must be installed in the first rack. For detailed information on this application, refer to the applicable *Programmable Controller Installation Manual.*

Mounting

The Power Supply Adapter is a single-slot module that plugs into the power supply slot, which is the leftmost slot of an IC697 rack. It connects to the external power supply module through a cable that has one end connected to the power supply. The free end of the cable should have spring spade or ring lugs which must be connected to designated terminals on a terminal board on the Power Supply Adapter. This terminal board is accessed by opening the hinged door on the Power Supply Adapter module.

Power Supply Adapter Module Door

The Power Supply Adapter 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.

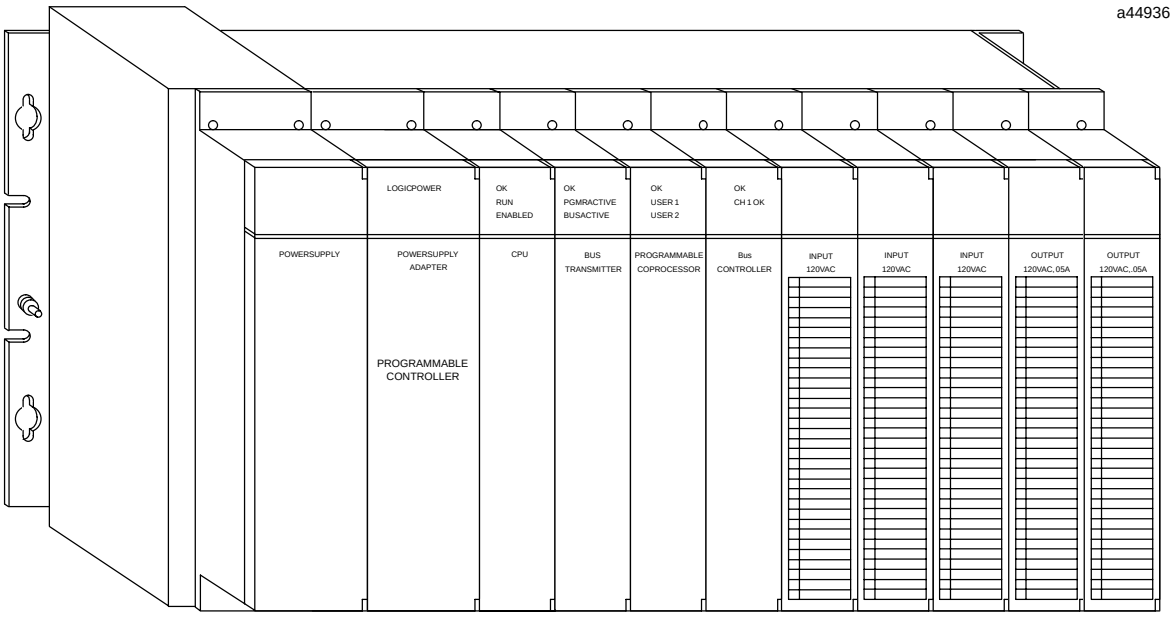

Figure 1. Location of Power Supply Adapter Module in an IC697 PLC Installation

Power Supply Adapter Module

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Table 1. Specifications for IC697PWR720 †

Power Supply Voltage to Rack Backplane:	+5.02 to +5.12 VDC (5.07 volts nominal) +11.58 to +12.42 VDC (+12 volts nominal) –11.4 to –12.6 VDC (–12 volts nominal)
Power Supply Current to Rack Backplane: (maximum with PSA only)	+5 VDC at 18A +12 VDC at 2A –12 VDC at 1A
Current Required from 5 V Bus	50 mA (.250W)
VME	System designed to support the VME standard C.1

† Refer to GFK-0867B, or later for product standards and general specifications. For installations requiring compliance to more stringent requirements (for example, European Union), refer to *Installation requirements for Conformance to Standards.*

Table 2. Ordering Information

Description	Catalog Number
Power Supply Adapter module	IC697PWR720
Power Supply Extension Cable (includes cable and faceplate for vacant power supply slot in second rack)	IC697CBL700

Note: For Low Temperature Testing option please consult the factory for price and availability.