# GE Series 90-70 Series Service Manual

IC697PWR710

## 1. Description

The IC697PWR710 is a Power supply module that is part of the Series 90-70 platform, currently under Emerson Automation, formerly produced by GE Fanuc. This power supply module is installed to a Series 90-70 baseplate, operable at input voltages of 120 / 240 VAC or 125VDC with maximum output power of 56 Watts and output voltage of 4.90 - 5.25 VDC and nominal voltage of 5.1 VDC.

## 2. Specifications

| Specification | Value |
|---|---|
| Brand | **GE Fanuc** |
| Series | **Series 90-70** |
| Manufacturer | **GE Fanuc** |
| Manufacturer | **GE Fanuc (Former); Emerson Automation (Current)** |
| Part | **Number IC697PWR710** |
| Product | **Description Power Supply module** |
| Series | **Series 90-70** |
| Nominal | **Rated Voltage: 120/240 VAC or 125 VDC** |
| Nominal | **Rated Voltage 120/240 VAC or 125 VDC** |
| Input | **Voltage 90-264 VAC, 47-63 Hz; 100-150 VDC** |
| Input | **Voltage Range 90 to 264 VAC or 100 to 150 VDC** |
| Input | **Power 90 Watts at full load** |
| Input | **half cycle peak inrush 3 A, typical** |
| Input | **Power 90 Watts, maximum** |
| Output | **Power 56 Watts, maximum** |
| Power | **factor > .95** |
| Output | **Power 56 Watts** |
| DC | **Output 5VDC up to 11 Amps** |
| Output | **voltage, nominal 5.1 VDC** |
| Location | **on Baseplates Leftmost Slot** |
| Mounting | **location Leftmost Slot** |
| Output | **voltage, range 4.90 - 5.25 VDC** |
| DC | **Output 5VDC up to 11 Amps** |
| Overvoltage | **Limit 6.2 volts (typical), electronic overvoltage protection** |
| Overcurrent | **protection 12 A, typical** |
| Overcurrent | **Limit 12 amps (typical), electronic current limit** |
| Overvoltage | **protection 6.2 Volts, typical** |
| Protection | **Type Fu** |

## 3. Product Information

The IC697PWR710 is a Power supply module that is part of the Series 90-70 platform, currently under Emerson Automation, formerly produced by GE Fanuc. This power supply module is installed to a Series 90-70 baseplate, operable at input voltages of 120 / 240 VAC or 125VDC with maximum output power of 56 Watts and output voltage of 4.90 - 5.25 VDC and nominal voltage of 5.1 VDC.

Technical specifications for IC697PWR710

Brand GE Fanuc

Series Series 90-70

Manufacturer GE Fanuc

Manufacturer GE Fanuc (Former); Emerson Automation (Current)

Part Number IC697PWR710

Product Description Power Supply module

Series Series 90-70

Nominal Rated Voltage: 120/240 VAC or 125 VDC

Nominal Rated Voltage 120/240 VAC or 125 VDC

Input Voltage 90-264 VAC, 47-63 Hz; 100-150 VDC

Input Voltage Range 90 to 264 VAC or 100 to 150 VDC

Input Power 90 Watts at full load

Input half cycle peak inrush 3 A, typical

Input Power 90 Watts, maximum

Output Power 56 Watts, maximum

Power factor > .95

Output Power 56 Watts

DC Output 5VDC up to 11 Amps

Output voltage, nominal 5.1 VDC

Location on Baseplates Leftmost Slot

Mounting location Leftmost Slot

Output voltage, range 4.90 - 5.25 VDC

DC Output 5VDC up to 11 Amps

Overvoltage Limit 6.2 volts (typical), electronic overvoltage protection

Overcurrent protection 12 A, typical

Overcurrent Limit 12 amps (typical), electronic current limit

Overvoltage protection 6.2 Volts, typical

Protection Type Fuses

Ride Through Time 21 milliseconds minimum (from loss of AC input)

Ride through time 21 ms

VME System support VME standard C.1

Power Supply Extension Cable IC697CBL700 / IC697CBL 713

Product lifecycle Discontinued / Obsolete

The IC697PWR710 is a Programmable Logic Controller (PLC) power supply module that is installed to a Series 90-70 Baseplate. This module provides the necessary backplane power that is used to energize the modules installed within the same baseplate. The IC697PWR710 operates when connected to an external AC or DC power source specifically, 90-264 VAC at frequency of 47-63 Hz or 100-150 VDC. The module's input power is maximum of 90 Watts at full load, input half cycle peak inrush of 3 Amperes, typical and power factor of greater that .95. It deliver a maximum output power of 56 Watts and nominal output voltage of 5.1 VDC with an output voltage range of4.90-5.25 VDC. The IC697PWR710 has an integral overvoltage and overcurrent limits, specifically, 6.2 Volts, typical which is provided by the internal electronic voltage protection and 12 Amperes, typical via the integral electronic current limit. This power supply is also features a ride through time of 21 ms from loss of AC input and designed in compatibility with VME standard C.1. The IC697PWR710 comes with a ground terminal that can be used for improving system noise immunity. Use an American Wire Gauge (AWG) #12 or 3.3 mm2 wire for establishing connection to the module ground terminal. This module GND terminal is intended to be connected to the rack GND terminal which is then designed to be connected to a functional earth GND. Tighten connections at Torque of 12 in-lb or 1.3 N-m and only use copper conductors with temperature rating of 75 Degree Celsius.

The IC697PWR710 power supply module is a 120 to 240 Volts AC or 125 Volts DC rated power supply module made by GE Fanuc. The IC697PWR710 power supply module is part of the Series 90-70 platform that is manufactured by GE Fanu. It comes with active power factor correction circuits for maintaining a cohesive power factor that eliminates the need for oversized circuit breakers and wiring. The IC697PWR710 comes with an overvoltage protection feature. The electronic overvoltage protection circuit clamps the output in case of the 5 Volts bus voltage rising and exceeding 6.2 Volts. This prevents an external overvoltage on the output from causing the power supply fuse to open. The IC697PWR710 power supply module is set so that if an internal fault in the power supply happens as a result of an overvoltage condition, the fuse does not open. The IC697PWR710 power supply module also comes with over-current protection in the form of an electronic over-current limit of 12 Amps. If the maximum current rating is exceeded, the output voltage will drop. Ideally, the IC697PWR710 power supply module will remain safe until the high load is removed or reduced so that the current overload does not result in the opening of the fuse. The IC697PWR710 power supply module features dual rack protection through 2 racks that function under different conditions. For instance, only 5 Volts of power is required in the second rack, and the total power required for both racks falls within the capability of the power supply. The IC697PWR710 power supply module is a plug-in module that can be installed in the leftmost slot of any standard IC697 rack or in the VME integrator rack. The power supply door can be easily opened by simply grasping the left corner of the door firmly.