

## IC693PWR330 High Capacity Power Supply, 120/240 VAC/125 VDC Input

The IC693PWR330 High Capacity Power Supply is rated for 30 watts output. *For applications requiring greater +5V current capacity than is available with the standard supply (IC693PWR321), this supply allows all 30 watts to be consumed from the +5V supply.* It can operate from an input voltage source in the range of 85 to 264 VAC or 100 to 300 VDC. This power supply provides the following outputs:

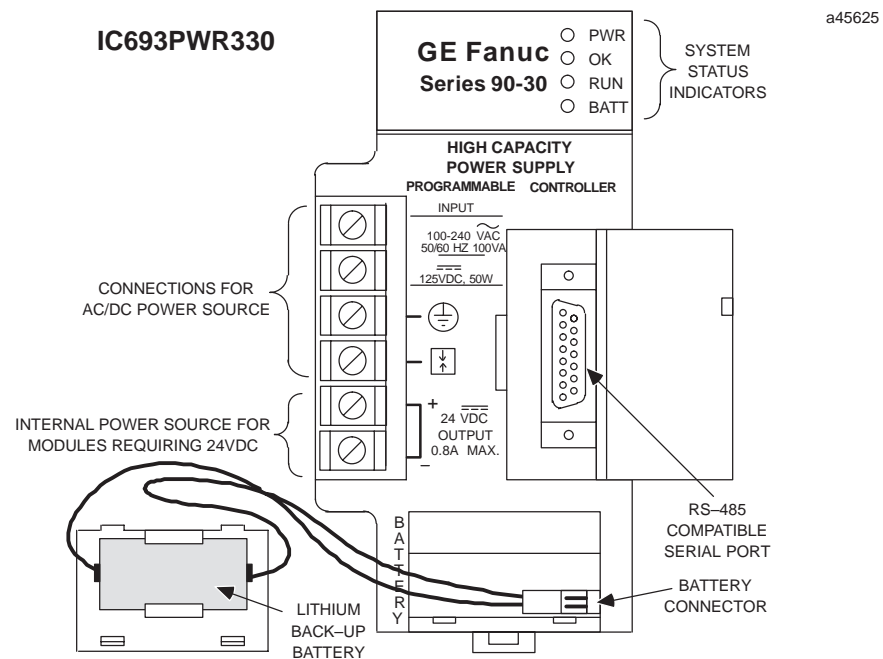
- +5 VDC output.
- +24 VDC "Relay" power output which provides power to circuits on Series 90-30 Output Relay modules.
- "Isolated" +24 VDC, which is used internally by some modules, can also be used to provide external power for 24 VDC Input modules.

The load capacity for each output of this power supply is shown in the following table.

**Table 4-4. IC693PWR330 Power Supply Capacities**

Catalog Number	Load Capacity	Nominal Input	Output Capacities (Voltage/Power †)		
IC693PWR330	30 Watts	100 to 240 VAC or 125 VDC	+5 VDC 30 watts	+24 VDC Isolated 20 watts	+24 VDC Relay 15 watts

† Total of all outputs combined cannot exceed 30 watts.



**Figure 4-2. High Capacity AC/DC Input Power Supply - IC693PWR330**

**Table 4-5. Specifications for IC693PWR330 High Capacity AC/DC Input Power Supply**

<b>Nominal Rated Voltage</b>	120/240 VAC or 125 VDC
<b>Input Voltage Range</b>	
<b>AC</b>	85 to 264 VAC
<b>DC</b>	100 to 300 VDC
<b>Input Power</b> (Maximum with Full Load)	100 VA with VAC Input 50 W with VDC Input
<b>Inrush Current</b>	4A peak, 250 ms maximum
<b>Output Power</b>	<b>5 VDC:</b> 30 watts maximum <b>24 VDC Relay:</b> 15 watts maximum <b>24 VDC Isolated:</b> 20 watts maximum <i>NOTE: 30 watts maximum total (all three outputs)</i>
<b>Output Voltage</b>	<b>5 VDC:</b> 5.0 VDC to 5.2 VDC (5.1 VDC nominal) <b>24 VDC Relay:</b> 24 to 28 VDC <b>24 VDC Isolated:</b> 21.5 VDC to 28 VDC
<b>Protective Limits</b>	
<b>Overvoltage:</b>	<b>5 VDC output:</b> 6.4 to 7 V
<b>Overcurrent:</b>	<b>5 VDC output:</b> 7 A maximum
<b>Ride-Through Time:</b>	20 ms minimum

## Field Wiring Connections for the AC/DC Input Power Supplies

The two AC/DC input power supplies have six terminals for user connections. These connections are described below.

### AC Power Source Connections

The Hot, Neutral, and Ground wires from the 120 VAC power source or L1, L2, and Ground wires from the 240 VAC power source connect to the system through the top three terminals of the terminal strip on the front of the power supply.

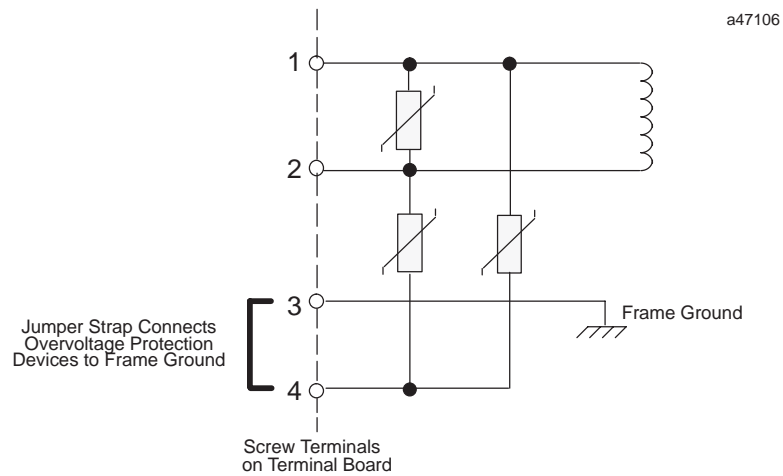
### DC Power Source Connections

Connect the + and – wires from the 125 VDC (nominal) power source to the top two terminals on the terminal connector. These connections are not polarity-sensitive on an AC/DC input power supply; however, for systems with more than one baseplate, the input wiring polarity must be consistent (see the section “DC Power Source Connections” in Chapter 2 for details on this). **NOTE:** The DC Input-only type supplies, which are discussed later in this chapter, are polarity sensitive.

### Input Overvoltage Protection Devices

**This information applies to all Series 90-30 power supplies that have six-terminal boards.** The overvoltage protection devices for this power supply are connected internally to pin 4 on the user terminal strip. This pin is normally connected to frame ground (pin 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 removing the jumper strap from pins 3 and 4.

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



**Figure 4-3. Overvoltage Protection Devices and Jumper Strap**

### Isolated 24 VDC Supply Output Connections

The bottom two terminals of the power supply terminal strip provide connections to the Isolated +24 volt DC output which can be used to provide power for external circuits (within power limitations of the supply).

### Caution

**If the Isolated 24 VDC supply is overloaded or shorted, the Programmable Logic Controller will stop operation.**