ALLEN-BRADLEY



AC (120/220V) 16A Power Supply

(Cat. No. 1771-P7 Series B)

Installation Instructions

To the Installer

This document provides information on:

- preparing to install the power supply
- installing the power supply
- connecting ac power to the power supply
- troubleshooting
- specifications

Prepare for Installation

The 1771-P7 power supply can power one 1771-A1B, -A2B, -A3B, -A3B1, or -A4B I/O chassis when used with any adapter module or programmable controller (Mini-PLC- $2/02^{\text{(B)}}$, Mini-PLC- $2/05^{\text{(B)}}$, Mini-PLC- $2/16^{\text{(B)}}$, Mini-PLC- $2/17^{\text{(B)}}$, or PLC- 5^{TM} family processor) that does not have an internal power supply.

Important: The power supply is **not compatible** with the 1771-A1, -A2, or -A4 I/O chassis.



ATTENTION: The 1771-P7 is a stand-alone power supply. Do not connect it in parallel with any other power supply. Connecting it in parallel could result in processor memory loss or injury due to unexpected machine operation.



ATTENTION: Under some conditions, electrostatic discharge can degrade performance or damage system components. Observe the following precautions to guard against electrostatic damage:

- Touch a grounded object to rid yourself of charge before handling a module.
- Do not touch the backplane connector or connector pins.
- When not in use, keep modules in their static-shield bags.

Before installing the power supply, you should:

- mount the I/O chassis that the power supply will be connected to. See the Universal I/O Chassis Installation Data (1771-2.210) for information on mounting the I/O chassis.
- set the power supply configuration jumper on the I/O chassis. The 1771-P7 is an external power supply. Set the configuration jumper to the N position.



the I/O chassis backplane.

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Install the 1771-P7 and Connect Backplane Power

A1 backplane common

- A2 backplane +5V dc
- 1 no connection
- 2 backplane processor enable
- 3 backplane +5V dc sense
- 4 backplane signal ground sense
- 5 no connection



The power supply has a D-shell power connector that provides power to

bottom view of power supply

If You Have This I/O Chassis	Use this Power Cable	To Connect A 1771-P7 Mounted
1771-A3B	1771-CP2	within 1.52m (5ft) of the I/O chassis
1771-A1B -A2B -A3B1 or -A4B	1771-CP1	within 0.32m (1.04ft) on the left-side of the I/O chassis
1771-ATD, -A2D, -A3DT, 01 -A4D	1771-CP3 (right angle connector)	within 1.68m (5.5ft) of the I/O chassis

Specifications							
			Nominal Input Voltage/Current		120V ac @ 2.0A 220V ac @ 1.0A		
	45mm (4.53") 1.77"			Input Voltage Ra	ange	120V ac: 97-132V ac 220V ac: 195-264V ac	
•				Input Power (Re	eal/Apparent)	108 Watts/176VA	
			\neg	External Transfo	ormer	270VA at full load	
	Î	ON ON OFF OFF OFF OFF OFF		Frequency Rang	ge	47-63Hz	
				Isolation Voltage	on Voltage 2500V dc for 1s input power to chassis		
				Output Voltage		5.06V dc ±3.8%	
015				Output Current		16A max @ 5V dc	
(12.40")				Power Loss Time Delay — Input Power to Processor Disable		13.6msec ±2.9ms	
	293mm (11.53") © P/S ACTIVE	© P/S Active		Fuse		3A, 250V 3AG normal blow (Bussmann AGC 3 — Littelfuse 312003)	
				Weight		1.95kg (4.3 lbs.)	
				Dimensions (H x W x D)		315mm x 115mm x 159mm (12.40" x 4.53" x 6.25")	
			Environmental Conditions Operating Temperature Storage Temperature Relative Humidity		32 to 140° F (0 to 60° C) -40 to 185° F (-40 to 85° C) 5 to 95%, non-condensing		
Depth is 159mm (6.25")			Cables	1771-CP1 1771-CP2	0.32m (1.04ft) — connects panel mounted I/O chassis to chassis mounted 1771-P7 1.52m (5ft) — connects rack-mounted I/O chassis to remote 1771-P7		

Power Ratings

Use these graphs to determine your:

1771-CP3

- cooling requirements
- power cost
- transformer size (unless the transformer manufacturer has a recommended multiplier for sizing a transformer for an ac-to-dc power supply)

to remote 1771-P7

1.68m (5.5ft) - connects panel-mounted I/O chassis



PLC-2/02, PLC-2/05, PLC-2/16, and PLC-2/17 are registered trademarks of Allen-Bradley Company, Inc. PLC-5 is a trademark of Allen-Bradley Company, Inc.



Publication 1771-2.93 — March 1994 Supersedes 1771-2.93 — February 1993