

**ALLEN-BRADLEY**

Allen-Bradley Redundant Power Supplies

(Cat. No. 1771-P4R and 1771-P6R)

Installation Data

To the Installer

This document provides you with the following information:

- what this package contains
- tasks on installing your power supply module
- how to interpret indicators
- flow charts for troubleshooting your power supply module

What This Power Supply Package Contains

When you receive your 1771-P4R or -P6R power supply, you should see the following in the box:

- one 1771-P4R or 1771-P6R power supply module
- one 3-position terminal block (attached to module)
- one 5-position terminal block (attached to module)
- one redundant cable

Installing the Power Supply Module

To install your power supply module you need to know how to perform the following tasks:

- set the jumpers
- set the I.D. selection and configuration switches
- place the power supplies
- connect the redundancy cables
- wire the alarm relay
- connect input power

Installation Data
Power Supply Modules
(Cat. No. 1771-P4R and -P6R)

Table C
Switch Positions

If Configuration Zone Is	Set Switches:
A	5 and 6 OPEN
B	5 CLOSED and 6 OPEN
C	5 OPEN and 6 CLOSED

Place the Power Supplies



WARNING: Turn off the power supply module before removing it from or inserting it into a chassis. Failure to observe this warning could alter processor memory, damage module circuitry, and cause unintended operation which could possibly cause injury to personnel.

You can place these power supply modules into any I/O module slot in any current chassis (1771-A1B, -A2B, -A3B, -A3B1, -A4B, -PSC).

The primary requirement for placing redundant power supplies is the need to allocate 2 to 4 adjacent slots in your 1771I/O chassis for the modules.

Important: Series A I/O chassis **CANNOT** be used with 1771-P4R, -P6R modules.

Connect the Redundancy Cables

The power supply redundancy cables allow the power supplies to communicate load-sharing data. The two connectors on each supply are in parallel to permit three or four supplies to be daisy-chained together in a redundant system.

To connect the cables:

1. Connect the redundancy cable between the connectors labeled P/S REDUNDANT on the power supply as shown in figure 3.
2. Loop the cable over the top of the I/O chassis to avoid picking up signals induced from I/O wiring.

Installation Data
Power Supply Modules
(Cat. No. 1771-P4R and -P6R)

Specifications

	1771-P4R	1771-P6R
Input Voltage	120V ac	220V ac
Input Voltage Range	97-132V ac rms	194-264V ac rms
Weight	2 lbs (0.84 kg)	
Frequency	47-63Hz	
Output Voltage	5V dc	
Output Current	8A	
Fuse	1.5 A 250V Slow-Blow	
Size	1 I/O slot per module	
Conductors Wire Size Category	14 AWG maximum (single wire only) 2 ¹	
Environmental Operating Storage Relative Humidity	0 to 60°C (32 to 140°F) -40 to 85°C (-40 to 185°F) 5 to 95% (without condensation)	
Wiring Blocks ac Power Relay	A-B part number 941274-05 (Wago PN 231-205/000-008) A-B part number 941274-03 (Wago PN 231-203/000-008)	
Alarm Relay Rating	250V ac	
Maximum System Output Current at 60°C using N+1 Redundancy	8A (2 unit system) 14A (3 unit system) 20A (4 unit system)	

¹ Refer to publication 1770-4.1 Programmable Controller Wiring and Grounding Guidelines