Power Supplies

P2-02DC \$86.00

The P2-02DC Power Supply provides isolated power to the Productivity ® 2000 base from an external 24VDC source.

No power budgeting is required. Any combination of I/O modules may be installed in any slots without power budget considerations.



DC Input Power Supply

IMPORTANT!



Hot-Swapping Information

NOTE: This device cannot be Hot Swapped.

User Specifications		
Input Voltage Range (Tolerance)	24VDC (±2%)	
Maximum Input Power	50W	
Cold Start Inrush Current	34A	
Maximum Inrush Current (Hot Start)	34A	
Input Fuse Protection (Internal)	Micro Fuse 250V, 4A Non-replaceable	
Efficiency	90%	
Output	24VDC, 1.5 A 3.3 VDC, 4A	
Maximum Output Power	45W combined	
Heat Dissipation	5W	
Isolated User 24VDC Output	None	
Output Protection for Overcurrent, Overvoltage, and Over-Temperature	3.3 V output self-resetting 24V output fused	
Under Input Voltage Lock-out	None	
Over Input Voltage Lock-out	None	
Input Transient Protection	Transorb, plus input choke and filter	
Operating Design Life	>10 years at full load at 60°C ambient	

General Specifications		
Operating Temperature	0° to 60°C (32° to 140°F)	
Storage Temperature	-20° to 70°C (-4° to 158°F)	
Humidity	5 to 95% (non-condensing)	
Altitude	2000m, max.	
Pollution Degree	2	
Environmental Air	No corrosive gases permitted	
Vibration	IEC60068-2-6 (Test Fc)	
Shock	IEC60068-2-27 (Test Ea)	
Overvoltage Category	II	
Enclosure Type	Open equipment	
Voltage Withstand (dielectric)	Non-isolated	
Insulation Resistance	Non-isolated	
Module Location	Power Supply slot in a Productivity®2000 system.	
Weight	90g (3.2 oz)	
Agency Approvals	UL 61010-1 and UL 61010-2-201 File E139594, Canada and USA CE (EN 61131-2 EMC, EN 61010-1 and EN 61010-2-201 Safety)*	

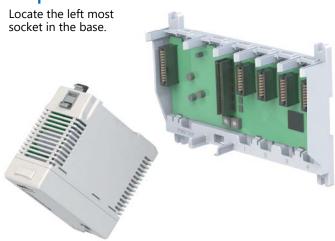
*Meets EMC and Safety requirements. See the D.O.C. for details.

Terminal Block Specifications		
Number of Positions	4 screw terminals	
Wire Range	22–12 AWG (0.324 to 3.31 sq. mm) Solid / stranded conductor 3/64 inch (1.2 mm) insulation maximum (Use copper conductor, 75°C or equivalent)	
Conductors	USE COPPER CONDUCTORS, 75°C or equivalent 1/4 in. (6-7 mm) strip length	
Screw Driver Width	1/4 inch (6.5 mm) maximum	
Screw Size	M3	
Screw Torque	7–9 lb·in (0.882–1.02 N·m)	

Power Supply

Power Supply Installation

Step One:



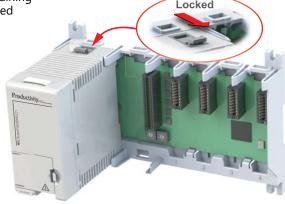
Step Two:

Insert the Power Supply at a 30° angle into the notch located at the bottom of the base and rotate up until seated in socket.



Step Three:

Snap the top retaining tab into the locked position.



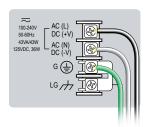
Power Supplies

Power Connections

P2-01DC



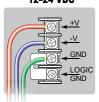
100-240 VAC, 125VDC



P2-01DCAC



12-24 VDC

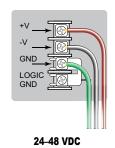


24VAC



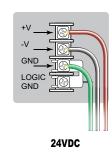
P2-01DC





P2-02DC





Grounding

A good common ground reference (earth ground) is essential for proper operation of the Productivity ® 2000 system. One side of all control circuits, power circuits and the ground lead must be properly connected to earth ground by either installing a ground rod in close proximity to the enclosure or by connecting to the incoming power system ground. There must be a single-point ground (i.e. copper bus bar) for all devices in the enclosure that require an earth ground.

Terminal Block Specifications	
Number of Positions	4 screw terminals
Wire Range	22–12 AWG (0.324 to 3.31 sq. mm) Solid / stranded vonductor 3/64 inch (1.2 mm) insulation maximum (Use copper conductor, 75°C or equivalent)
Conductors	USE COPPER CONDUCTORS, 75°C or equivalent 1/4 in. (6-7 mm) strip length
Screw Driver Width	1/4 inch (6.5 mm) maximum
Screw Size	M3
Screw Torque	7–9 inch-pounds (0.882–1.02 N·m)