Power Supplies

P2-01AC

\$104.00

The P2-01AC Input Power Supply provides isolated power to the Productivity ® 2000 base from an external 100-240 VAC or 125VDC source.

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



AC Input Power Supply

IMPORTANT!



Hot-Swapping Information

NOTE: This device cannot be Hot Swapped.

User Specifications		
Input Voltage Range (Tolerance)	100 to 240 VAC (-15% / +10%) 125VDC* (-15% / +20%)	
Rated Operating Frequency	50 to 60 Hz with ±5% tolerance	
Maximum Input Power	37.4 W	
Cold Start Inrush Current	23.6 A	
Maximum Inrush Current (Hot Start)	25.6 A	
Input Fuse Protection (Internal)	Micro fuse 250V, 2A, Non-replaceable	
Efficiency	75%	
Output	UL Rated: 24VDC, 0.85 A 3.3 VDC, 3.81 A	
Maximum Output Power	29W Combined	
Heat Dissipation	8.4 W	
Isolated User 24VDC Output	None	
Output Protection for Over Current, Over Voltage, and Over Temperature	Self resetting for both voltage outputs to base	
Under Input Voltage Lock-out	<70 VAC	
Over Input Voltage Lock-out	None	
Input Transient Protection	Varistor, plus input choke and filter	
Operating Design Life	10 years at full load at 40°C ambient and 5 years at 60°C ambient	

^{*}Only available on Rev. B and up.

General Specifications		
	<u> </u>	
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	2,000 meters, max.	
Pollution Degree	2	
Environmental Air	No corrosive gases permitted	
Vibration	IEC60068-2-6 (Test Fc)	
Shock	IEC60068-2-27 (Test Ea)	
Overvoltage	II	
Enclosure Type	Open equipment	
Voltage Withstand (dielectric)	2100VDC applied for 2 seconds	
Insulation Resistance	>10MV @ 500VDC	
Module Location	Power Supply slot in a Productivity2000 system.	
Weight	294g (10.4 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 Declaration of Conformity for details.

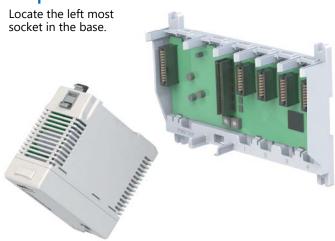
**To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific component part number web page.

Terminal Block Specifications		
Number of Positions	4 Screw Terminals	
Wire Range	22–12 AWG (0.324 to 2.08 sq. mm) Solid/Stranded Conductor 3/64 inch (1.2 mm) insulation maximum Use copper conductors, 75°C or equivalent	
Screw Driver Width	1/4 inch (6.5 mm) maximum	
Screw Size	M3 size	
Screw Torque	7–9 inch-pounds (0.882 - 1.02 N·m)	

Power Supply

Power Supply Installation

Step One:



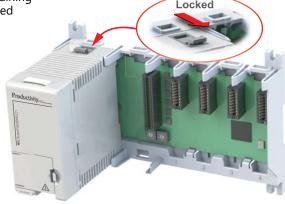
Step Two:

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.



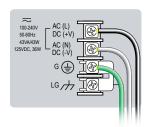
Power Supplies

Power Connections





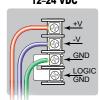
100-240 VAC, 125VDC



P2-01DCAC



12-24 VDC

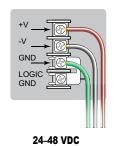


24VAC



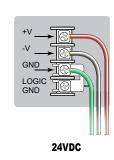
P2-01DC





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)