

Power Supplies

P2-01DC \$113.00

The P2-01DC Universal Input Power Supply provides isolated power to the Productivity® 2000 base from an external 24–48 VDC 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.

P2-01DC Specifications

User Specifications	
Input Voltage Range (Tolerance)	24 to 48 VDC (-15% / +20% @60°C)
Maximum Input Power	38W
Cold Start Inrush Current	34A
Maximum Inrush Current (Hot Start)	34A
Input Fuse Protection (Internal)	Micro Fuse 250V, 4A Non-replaceable
Efficiency	75%
Output	UL Rated: 24VDC, 0.85 A 3.3 VDC, 3.81 A
Maximum Output Power	29W combined
Heat Dissipation	9W
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	<19.8 V
Over Input Voltage Lock-out	None
Input Transient Protection	Varistor, 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	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 Category	II
Enclosure Type	Open equipment
Voltage Withstand (dielectric)	750VDC applied for 2s
Insulation Resistance	>10MΩ @ 500VDC
Module Location	Power Supply slot in a Productivity®2000 system.
Weight	363g (12.8 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.

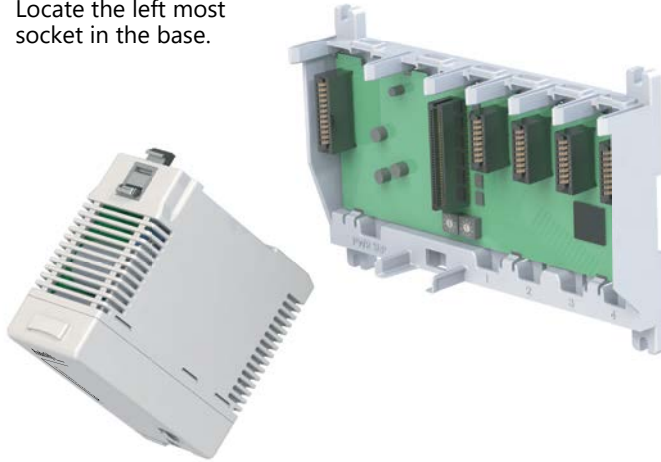
Terminal Block Specifications	
Number of Positions	4 Screw Terminals
Wire Range	22–12 AWG (0.324 to 3.31 sq. mm) Solid Conductor 3/64 inch (1.2 mm) insulation maximum (Use copper conductor, 75°C or equivalent)
Screw Driver Width	1/4 inch (6.5 mm) maximum
Screw Size	M3
Screw Torque	7–9 inch-pounds (0.882–1.02 N·m)

Power Supply

Power Supply Installation

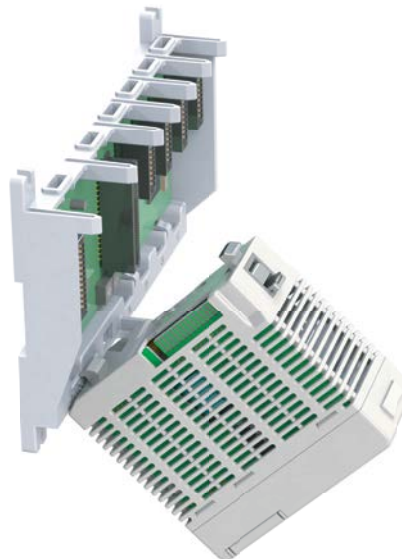
Step One:

Locate the left most socket in the base.



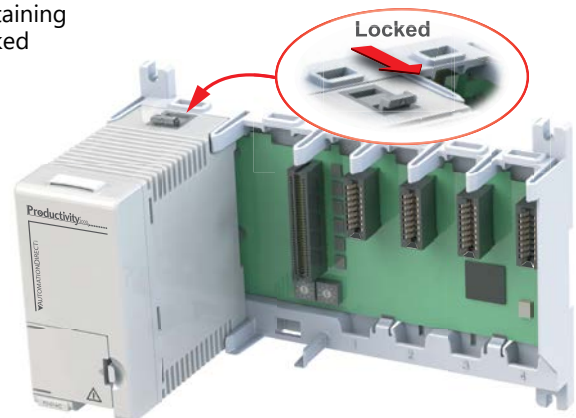
Step Two:

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.



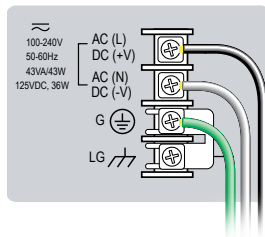
Power Supplies

Power Connections

P2-01DC



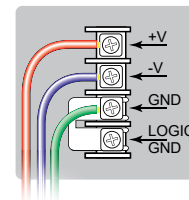
100-240 VAC, 125VDC



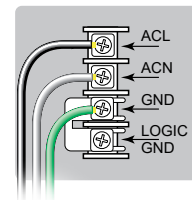
P2-01DCAC



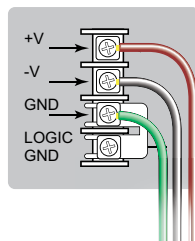
12-24 VDC



24VAC

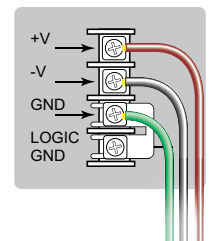


P2-01DC



24-48 VDC

P2-02DC



24VDC

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 vovnductor 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)