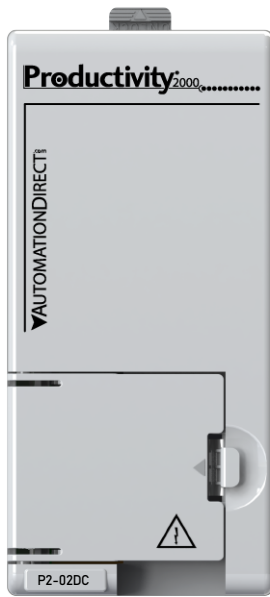


# Power Supplies

## P2-02DC \$85.00

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

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

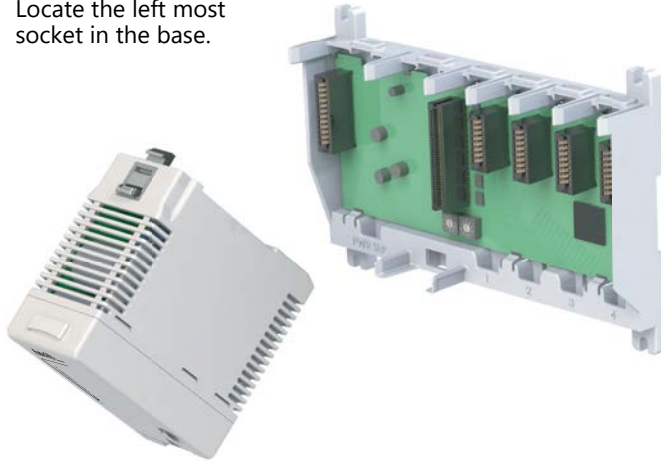
Terminal Block Specifications	
<b>Number of Positions</b>	4 screw terminals
<b>Wire Range</b>	22–12 AWG (0.324 to 3.31 sq. mm) Solid / stranded conductor 3/64 inch (1.2 mm) insulation maximum (Use copper conductor, 75°C or equivalent)
<b>Conductors</b>	USE COPPER CONDUCTORS, 75°C or equivalent 1/4 in.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

# Power Supply

## Power Supply Installation

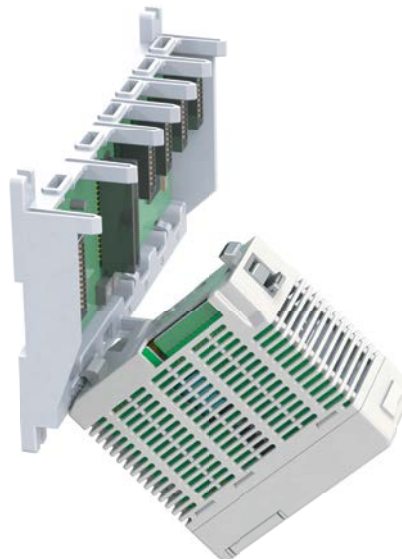
### Step One:

Locate the left most socket in the base.



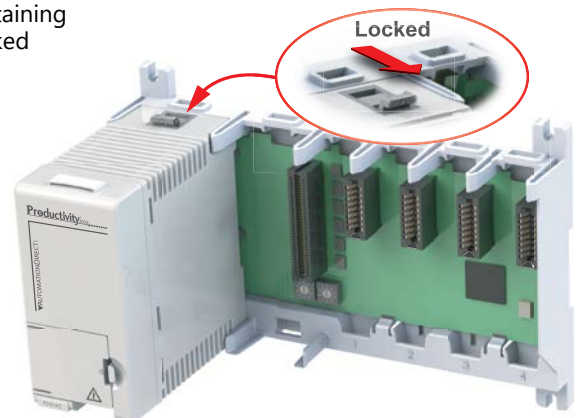
### Step Two:

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.



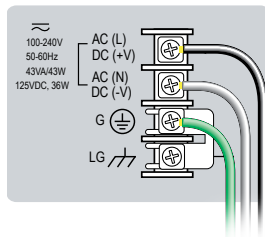
# Power Supplies

## Power Connections

**P2-01DC**



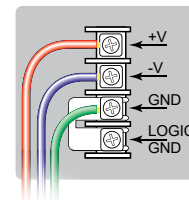
**100-240 VAC, 125VDC**



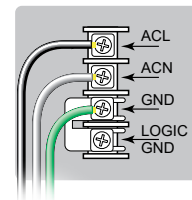
**P2-01DCAC**



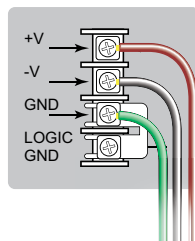
**12-24 VDC**



**24VAC**

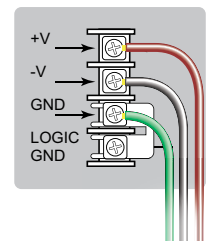


**P2-01DC**



**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	
<b>Number of Positions</b>	4 screw terminals
<b>Wire Range</b>	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)
<b>Conductors</b>	USE COPPER CONDUCTORS, 75°C or equivalent 1/4 in. (6-7 mm) strip length
<b>Screw Driver Width</b>	1/4 inch (6.5 mm) maximum
<b>Screw Size</b>	M3
<b>Screw Torque</b>	7–9 inch-pounds (0.882–1.02 N·m)