User Specifications		
Input Voltage Range (Tolerance)	100-240 VAC (-15% / +10%)	
Input Voltage Hange (Tolerance)	125VDC (-15% / +20%)	
Rated Operating Frequency	50–60 Hz with ±5% tolerance	
Maximum Input Power	48VA (AC) 20W (DC)	
Cold Start Inrush Current	21A	
Maximum Inrush Current (Hot Start)	21A	
Input Fuse Protection (Internal)	Micro fuse 250V, 1A Non-replaceable	
Efficiency	75%	
Output	24VDC, 0.67 A	
Maximum Output Power	16W	
Isolated User 24VDC Output	None	
Output Protection for Over Current, Over Voltage, and Over Temperature	Self resetting	
Under Input Voltage Lock-out	40-75 VAC - 24VDC On @ 76.15 VAC 55-99 VDC - 24VDC On @ 100.2 VDC	
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	

# VAUTOMATIONDIRECT Productivity

P1-01AC Productivity

> 100-240V = 48VA 50-60Hz 125VDC, 20W

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**VAUTOMATIONDIRECT** 

AC (L) DC (+V)

AC (N) DC (-V)

⊕G

/++ LG

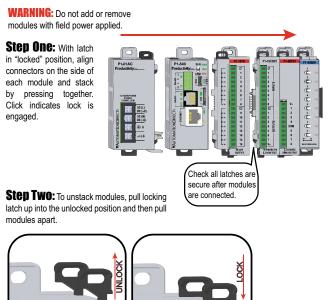
# **P1-01AC Power Supply**

The P1-01AC Universal Power Supply provides isolated power to the Productivity1000 system from an external 100–240 VAC or 125VDC source.

User Specifications	
Power Supply Installation Procedure2	
Wiring	
Warning	
Terminal Block Specifications4	
General Specifications4	

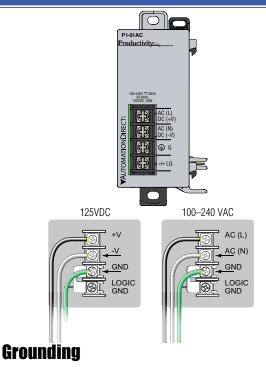
Warranty: Thirty-day money-back guarantee. Two-year limited replacement (See www.productivity1000.com for details).

## **Module Installation**



P1-01AC Productivity.....

### **Power Hookup**



A good common ground reference (earth ground) is essential for proper operation of the Productivity1000 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.

P1-01AC

Productivity:

#### Sales 800-633-0405

WARNING: To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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Terminal Block Specifications	
Positions	4 Screw Terminals
Wire Range	22–12 AWG (0.324–3.31 mm <sup>2</sup> ) Solid / Stranded Conductor 3/64 in (1.2 mm) Insulation Max. 1/4 in (6–7 mm) Strip Length
Conductors	"USE COPPER CONDUCTORS, $75^{\circ}$ C" or equivalent.
Screw Driver Width	1/4 in (6.5 mm) Maximum*
Screw Size	M3
Screw Torque	7–9 lb·in (0.882–1.02 N·m)

\*Recommended Screw Driver TW-SD-MSL-2

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)	
Environmental Air	No corrosive gases permitted	
Vibration	IEC60068-2-6 (Test Fc)	
Shock	IEC60068-2-27 (Test Ea)	
Insulation Resistance	>10MΩ @ 500VDC	
Heat Dissipation	5000mW	
Enclosure Type	Open Equipment	
Voltage Withstand (dielectric)	2100VDC applied for 2 seconds	
Module Location	Power Supply latches to CPU in the module stacking Productivity1000 System.	
EU Directive	See the "EU Directive" topic in the Productivity Suite Help File. Information can also be obtained at: www.productivity1000.com	
Weight	146g (5.1 oz)	
Agency Approvals	UL 61010-1 and UL 61010-2-201 File E139594, Canada & USA CE (EN 61131-2 EMC, EN 61010-1 and EN 61010-2-201 Safety)*	

\*See CE Declaration of Conformance for details.

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#### Tech Support 770-844-4200