

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.

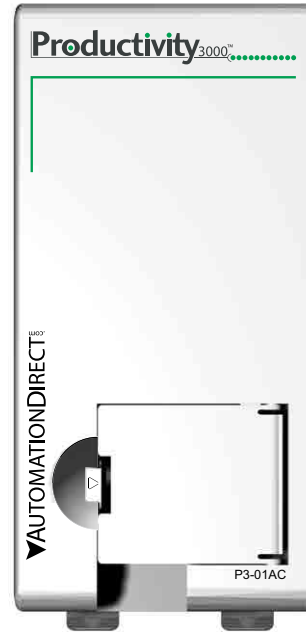
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Terminal Block Specifications

Number of Positions	4 screw terminals
Wire Range	22-14AWG (0.324 to 2.08 sq. mm) solid conductor 22-14AWG (0.324 to 2.08 sq. mm) stranded conductor 3/64 inch (1.2mm) insulation maximum Use copper conductors, 75°C or equivalent
Screw Driver Width	1/4 inch (6.5mm) maximum*
Screw Size	M3 size
Screw Torque	7- 9 inch-pounds (0.882 - 1.02 Nm)

*Recommended Screw Driver TW-SD-MSL-2

P3-01AC and P3-01DC Power Supply



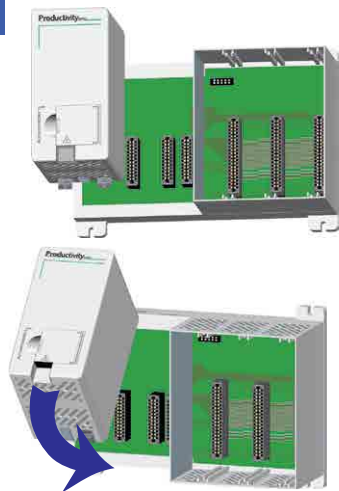
The P3-01AC Universal Input Power Supply provides isolated power to the Productivity3000 base from an external 100 - 240 VAC source.

The P3-01DC Power Supply provides isolated power to the Productivity3000 base from an external 24 - 48 VDC source.

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Warranty: Thirty-day money-back guarantee. Two-year limited replacement. (See www.automationdirect.com/P3000 for details).

Power Supply Installation Procedure



Step One:
Locate the left most socket in the base.

Step Two:
Insert the Power Supply at a 45° angle into the notch located at the top of the base and rotate down until seated in socket.

Step Three:
Snap the two retaining tabs into the locked position.

WARNING: Explosion hazard – Do not connect or disconnect connectors or operate switches while circuit is live unless the area is known to be non-hazardous. Do not hot-swap modules unless the area is known to be non-hazardous.

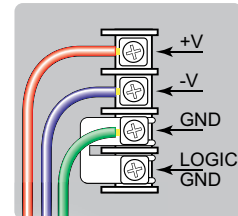
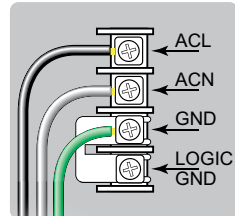
AVERTISSEMENT: Risque d'explosion : ne pas connecter ou déconnecter les connecteurs ni actionner les commutateurs alors que le circuit est sous tension, à moins que la zone ne soit reconnue non dangereuse. Ne pas remplacer à chaud les modules à moins que la zone ne soit reconnue non dangereuse.

Power Hookup

P3-01AC



P3-01DC



Grounding

A good common ground reference (earth ground) is essential for proper operation of the Productivity3000 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.

P3-01AC User Specifications

Input Voltage Range (Tolerance)	90–150 VDC < 10% ripple 100-240 VAC (-15% / +10%)
Rated Operating Frequency	50 to 60 Hz with $\pm 5\%$ tolerance
Maximum Input Power	72W
Cold Start Inrush Current	12A 3mS
Maximum Inrush Current (Hot Start)	12A 3mS
Input Fuse Protection (Internal)	Micro fuse 250V, 2A, slow blow Non-replaceable
Efficiency	83%
Output	24VDC @ 1.4A ($\pm 10\%$) 5VDC @ 2.1A ($\pm 5\%$) 3.3VDC @ 6.1A ($\pm 5\%$)
Maximum Output Power	57W Combined
Heat Dissipation	17W
Isolated User 24VDC Output	None
Output Protection for Over Current, Over Voltage, and Over Temperature	Self resetting for all three voltage outputs to base
Under Input Voltage Lock-out	55-65 VAC
Over Input Voltage Lock-out	265-280 VAC
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

P3-01DC User Specifications

Input Voltage Range (Tolerance)	24 to 48 VDC (-15% / + 20% at 55°C) 24 to 48 VDC (-10% / + 20% at 60°C)
Maximum Input Ripple	< $\pm 5\%$
Maximum Input Power	67W
Cold Start Inrush Current	10.5A, 210 μ S @ 24VDC
Maximum Inrush Current (Hot Start)	10.5A, 210 μ S @ 24VDC
Input Fuse Protection (Internal)	Micro fuse 250V, 4A, Slow blow Non-replaceable
Input Reverse Polarity Protection	Yes
Output	24VDC @ 1A ($\pm 10\%$) 5VDC @ 2A ($\pm 5\%$) 3.3VDC @ 6.09A ($\pm 5\%$)
Maximum Output Power	53W Combined
Heat Dissipation	14W
Isolated User 24VDC Output	None
Output Protection for Over Current, Over Voltage, and Over Temperature	Self resetting for all three voltage outputs to base
Under Input Voltage Lock-out	< 19.8 VDC
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

P3-01AC 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)
Enclosure Type	Open Equipment
Agency Approvals	UL508 file E157382, Canada & USA UL1604 file E200031, Canada & USA CE* (LVD 2014/35/EU, EMC 2014/30/EU, RoHS 2011/65/EU) This equipment is suitable for use in Class 1, Division 2, Groups A, B, C and D or non-hazardous locations only.
Voltage Withstand (dielectric)	1900 VDC applied for 2 seconds
Insulation Resistance	>10M V @ 500VDC
Module Location	Power supply slot in any local, expansion, or remote base in a Productivity3000 System.
Weight	345g (12.1 oz)

*See the Declaration of Conformity for details.

WARNING: Exposure to some chemicals may degrade the sealing properties of materials used in the Sealed Relay Device.

AVERTISSEMENT: L'exposition à certains produits chimiques peut dégrader les propriétés d'étanchéité des matériaux employés dans le dispositif de relais étanche.



Hot-Swapping Information

Note: This device cannot be Hot Swapped.

P3-01DC 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)
Enclosure Type	Open Equipment
Agency Approvals	UL508 file E157382, Canada & USA UL1604 file E200031, Canada & USA CE* (LVD 2014/35/EU, EMC 2014/30/EU, RoHS 2011/65/EU) This equipment is suitable for use in Class 1, Division 2, Groups A, B, C and D or non-hazardous locations only.
Voltage Withstand (dielectric)	750 VDC applied for 2 seconds
Insulation Resistance	>10M V @ 500VDC
Module Location	Power supply slot in any local, expansion, or remote base in a Productivity3000 System.
Weight	558g (19.7 oz)

*See the Declaration of Conformity for details.

WARNING: Explosion hazard – Substitution of components may impair suitability for Class I, Division 2.

AVERTISSEMENT: Risque d'explosion : la substitution de composants peut compromettre la convenance pour la Classe I, Zone 2 ou pour la Classe I, Division 2.

Document Name	Edition/Revision	Date
P3-1AC/DC-M	2nd Edition	10/16/2019

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