

# Product Details and Certifications

## Cross Reference RA Part Number: 1609-P3000N A

 Product: **1609-P3000N**

Description: 1609-P Commercial Series UPS, 3000 VA, 120V AC



Representative Photo Only (actual product may vary based on configuration sections)

### **POWER SUPPLY DATA**

---

Bulletin Number	1609 Power Supplies
Power Supply Type	Commercial Series UPS
Rated Capacity	3000 VA
Output Voltage	120V AC
Voltage Range Default (V AC)	90...150V

### **CERTIFICATIONS AND APPROVALS**

---

UL  
CE  
CSA  
FCC

For UL Certifications Directory:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

# Industrial Uninterruptible Power Supply

Catalog Number Explanation/Product Selection/Accessories



## Bulletin 1609-P Series — Industrial Uninterruptible Power Supply

- Rugged industrial design
- Tower/rack compatible
- Extended runtime
- Battery management system
- Hot-swappable batteries
- Comprehensive network management
- Remote monitoring/configuration
- Double conversion online
- Pure sine wave output
- Frequency and voltage regulation
- Automatic internal bypass

### Certifications

UL Listed (File No. E190749, Guide YEDU)  
CSA Certified (File LR1234)

### Standards Compliance

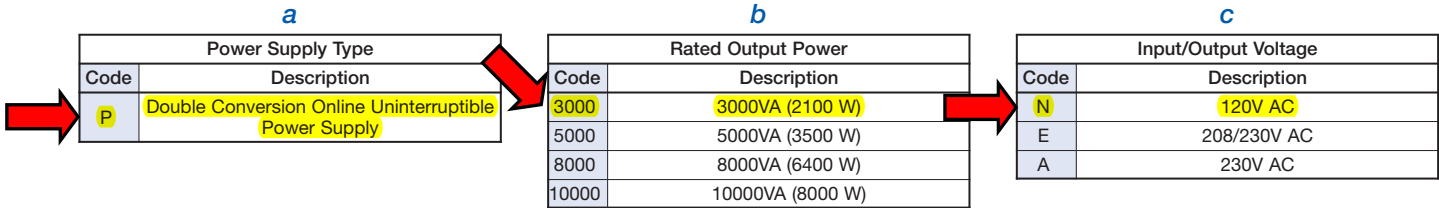
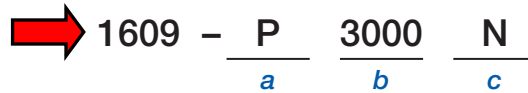
UL 1778  
CE  
CSA C22.2, No. 107  
FCC

### Table of Contents

Overview ..... this page  
Cat. No. Explanation this page  
Product Selection ..... this page  
Accessories..... this page  
Specifications..... 8-33  
Approx. Dimensions . 8-34

The Bulletin 1609-P has multiple options for remote management. Please see page 8-28 for details.

### Catalog Number Explanation



### Product Selection

Output Power	Input Voltage	Cat. No.
3000VA (2100 W)	120V AC	<b>1609-P3000N</b>
3000VA (2100 W)	230V AC	1609-P3000A
5000VA (3500 W)	208/230V AC	1609-P5000E
8000VA (6400 W)	208/230V AC	1609-P8000E
10000VA (8000 W)	208/230V AC	1609-P10000E

### Accessories

Description	Cat. No.
Network management card (Standard on units 5 kVA and larger)	1609-NMC
Remote start cable	1609-RSC
Replacement battery	1609-PBAT
External battery pack	1609-PXBP
5000VA CCT (120V step down transformer)	1609-5000CCT
Rail kit	1609-PRK1
Hardwire kit (for 3 and 5 kVA units)	1609-HDK1
Service bypass switch (16 kVA)	1609-PSB1

Electrical Ratings		1609-P3000N	1609-P3000A	1609-P5000E	1609-P8000E	1609-P10000E
Input	V nom. (V AC)	120	230	208/230	208/230	208/230
	Voltage Range, default (V AC)	90...150V	160...280V			
	Current (A)	20 nom., 28 max.	11 nom., 14 max.	19 nom., 24 max.	30 nom., 40 max.	39 nom., 48 max.
	Capacity	3000VA (2100 W)		5000VA (3500 W)	8000VA (6400 W)	10 000VA (8000 W)
	Frequency	45...65 Hz (self sensing)				
	PFC	> 0.95				
	Protection	N/A	N/A	N/A	70 A input circuit breaker	
Output	V nom.	120V	208V			
	Capacity	3000VA (2100 W)		5000VA (3500 W)	8000VA (6400 W)	10 000VA (8000 W)
	Protection	3...15 A circuit breaker			N/A	N/A
On Battery	Frequency	Nominal +/- 3 Hz				
	Reg.	+/- 2% static +/- 5% dynamic	+/- 1% static, +/- 5% dynamic			
	THD	<5% at full load				
	Crest Factor	3:01				
Efficiency	On Battery	86%				
	On Line	88%				
Protection	Surge	IEC 1000-4-4				
	Overload	125% : 1 minute, 150% : 30 seconds				
	Output Short	Input circuit breakers and/or premises branch protection				
	Thermal Protection	Yes				
Regulatory	Bypass	N/A			70 A input circuit breaker	
	Safety	UL 1778, cULus, IEC 60950	EN 61000-3-2	UL 1778, cULus, IEC 60950		
	EMC	FCC (Class A)	EN50091-2	FCC (Class A), EN50091-2		
	Markings	cULus, CSA	CE	cULus, CSA, CE		
Battery Pack	Run Time	14 minutes @ full load, 34 minutes @ half load		5...7 minutes @ full load, 13...18 minutes @ half load		
	Type	Sealed Lead Acid, valve regulated, hot swappable, user replaceable				
	Voltage	192V				
	Charger	Temperature compensated current limited, float charger				
	Recharge Time	Less than 3 hours to 90% capacity	Less than 3 hours to 85% capacity			
	Lifetime	2...4 years @ 25 °C ambient				
Environment	Temperature	0...40 °C (operating), -20...60 °C (short term storage)				
	Altitude	10 000 ft (operating)				
	Humidity	0...95% non-condensing (operating)				
	Heat Output (Full Load)	655 BTU/hour		1040 BTU/hour	1536 BTU/hour	2216 BTU/hour
	Audible Noise	<50 dB @ 1 meter (full load)	<55 dB @ 1 meter (full load)			
Rear Panel	AC Outlets	(6) NEMA 5...15 (2) NEMA 5...20	(8) IEC C13 (2) IEC C19	(12) IEC C13 (2) IEC C19		
	AC Inlets	NEMA L5...30	IEC C14	IEC C20	3 position terminal blocks	
Communication	DB9	Serial and Contact Closures				
	EPO	Via Contact Closure				
	Network	Via Network Management Card (1609-NMC, provided as standard with units >3 KVA)				
Indicators and Controls	LED Status	On-line, In Bypass Mode, On Battery, Overload and Replace Battery, Fault, Bar graph for Load, Bar graph for Battery Fuel Gauge, Bar graph for Measured Input Voltage when recessed switch is held				
	Control	(Front panel) On/self-test/alarm silence/cold start/load off				
	Audible	On Battery: 4 short beeps repeats about 20 seconds (mutable), Low Battery: persistent 0.5 second beep every 1 second (mutable), In Bypass: continuous beeping, Failure: continuous tone, Replace Battery: occasional on/off change - single beep				

**ATTENTION**

- Wiring of the UPS should be performed by a qualified electrician. Use appropriate size wires.
- In 230V AC applications, the UPS must be protected with a circuit breaker that complies with European standards for branch rated protection per the country of installation.
- In 208V AC applications, the UPS must be protected by a dual-pole, 10 A branch rated, UL 489 circuit breaker.
- The 120V AC 1609-P3000N has supplementary circuit breaker protection. The unit should be protected by a single-pole, 15 A branch rated, UL 489 circuit breaker. Allen-Bradley part number 1492-MCAA115 is suggested.
- **The branch circuit breaker must be off prior to wiring the unit.**