



	Model	ABCDEF4000-22				
	Topology	True On-Line, Double-Conversion, IGBT Design, Internal Isolation Transformer				
INPUT	Voltage (VAC)	200	208	220	230	240
	Voltage Range (VAC)	140-230	146-239	154-253	161-264	168-276
	Voltage Tolerance	+ 15% ~ -30% before switching to batteries				
	Frequency (Hz)	50/60				
	Frequency Tolerance	42 Hz to 69 Hz before switching to batteries				
	Input PF	> 0.95				
	Input Current THD	< 5.0%				
	Input Connection	Hardwired Standard; Line Cord Optional (Consult factory)				
Input Capacity	4320 VA					
OUTPUT	Capacity	4000VA/ 3600W				
	Voltage (VAC)	200	120/208/240	220	230	120/208/240
	Voltage Regulation	± 3.0% Max, ± 1.0% Normal				
	Output Voltage THD	< 3.0%				
	Power Factor	0.9				
	Step Load Response	± 4.0% for 50% step load change ± 6.0% for 100% step load change Return to ±3.0% of nominal within 3 cycles				
	Crest Factor	3:1				
	Frequency (Hz)	50/60				
	Frequency Regulation	± 0.1Hz				
	Overload	125% for 2 minutes 150% for 30 seconds 300% for 500ms				
	Efficiency	AC-AC >85.0% DC-AC >78.0%				
Common Mode Noise	< 0.5 VRMS					
Output Connection	Hardwired Standard; Output Receptacles Optional (Consult factory)					
BYPASS	Input Voltage (VAC)	200	208	220	230	240
	Output Voltage (VAC)	200	120/208/240	220	230	120/208/240
	Transformer Voltage Regulation	± 3.0%				
	Overload	125% for 10 minutes 150% for 500ms 1000% for 1 cycle				
	Efficiency	> 95.0%				

BATTERY	Voltage (VDC)	96.0, nominal 109.2, float
	Battery	12V, 34W flame retardant High Rate, Sealed Lead-Acid
	Quantity	16
	Charge Current (ADC)	3.0
	Backup Time (min)	> 8.0
	Recharge Time	8 Hours to 90%
ENVIRONMENT	Temperature (°C)	0 to 40, operating -20 to 60, transit
	Altitude (m)	2,000, operating 12,000, transit
	Humidity	5.0% to 90.0%, non condensing
	Audible (dBA)	50-55 @ 1m from front of unit
	Heat Dissipation (BTU/hr)	3252
AGENCIES	EMC	FCC Part 15J Class A EN 55022 Class A/ CISPR 22 EN 50091-2 IEC 61000-3-2
	Safety Agencies	UL1778 4 th Ed. cUL to CSA22.2 No.107.1 CE: IEC62040, w/CB report and certificate IEC61000-4-2, Electrostatic Discharge IEC61000-4-3, Radiated Electromagnetic Field Immunity IEC61000-4-4, Electrical Fast Transient/ Burst Immunity IEC61000-4-5, Surge Immunity IEC61000-4-6, Immunity to Conducted Radio Frequency Disturbances IEC61000-4-8, Power Frequency Magnetic Field Immunity IEC61000-4-11, Voltage Dips, Short Interruptions, and Voltage Variations
	RoHS	All units are RoHS compliant
OTHER	Communication	RS-232 USB DB-9 Dry Contacts Internal SNMP Adapter (option)
	Unit Weight	317 lbs. / 143 kg.
	Shipping Weight	412 lbs. / 185 kg.
	Plug & Receptacle*	L6-30P (2)5-20R (1)L6-30R

*Hardwire unit is standard. Plug & Receptacle is optional. Contact factory for part numbers.

NOISE REJECTION-ISOLATION: With unit under power and an ANSI/IEEE C62.41Cat. A pulse applied either normal or common mode at the input, the noise output voltage will be less than 10V normal mode and less than 0.5V common mode in all four quadrants (CM-NM, NM-NM, CM-CM, NM-CM).

SURGE VOLTAGE WITHSTAND CAPABILITY: Tested under power to ANSI/IEEE C62.41 Cat. A & B (formerly IEEE587-1980). Cat. A - 6000V @ 200 amps, 0.5 usec risetime, 100 kHz decay, Cat. B - 6000V @ 500 amps, 0.5 usec risetime, 100 kHz decay.

Compatible External (Extended Run) Battery Cabinets:

Model: D9632-22 Description: 4 Pack (32 Batt) Extended Run Battery Cabinet

Model: D9648-22 Description: 6 Pack (48 Batt) Extended Run Battery Cabinet

ABCDEF4000-22 TYPICAL RUN-TIMES (MINS)				
	25% (900 W)	50% (1800 W)	75% (2700 W)	100% (3600 W)
Internal Batteries Only	25	17	11	8
Internal + 1) D9632-22	120	75	50	35
Internal + 2) D9632-22	250	150	100	75
Internal + 3) D9632-22	375	220	150	110
Internal + 4) D9632-22	550	325	210	160
Internal + 5) D9632-22	>12 Hrs	425	275	210
Internal + 1) D9648-22	170	110	75	55
Internal + 2) D9648-22	375	220	150	120
Internal + 3) D9648-22	625	375	250	185
Internal + 4) D9648-22	>12 Hrs	525	350	275
Internal + 5) D9648-22	>12 Hrs	>12 Hrs	475	350

Notes: Run-Times are based on new fully charged batteries at 25 deg C ambient.

Battery Life Disclaimer: POWERVAR's standard battery warranty applies only to UPS and UPM products which are continuously connected to AC mains power, except during utility power outages. Products which are regularly and intentionally disconnected from AC mains power will experience battery discharge/charge cycles potentially far more numerous than those for which the battery was designed. As a result, products used in such applications will experience substantially reduced battery life. For that reason, POWERVAR's standard battery warranty does not apply for applications in which the UPS or UPM product is regularly and intentionally disconnected from AC mains power. POWERVAR UPS and UPM products used in such applications shall receive a 90 day warranty on batteries.

Warranty/Support: POWERVAR warrants the electronics and transformers used in its uninterruptible power supplies to be free from defects in materials and workmanship for a period of three years from the date of shipment. Batteries are warranted for a period of two years from the date of shipment for standby use; 90 days for cyclic use. For North American service or support on any POWERVAR product, please contact POWERVAR Technical Support at (800) 369-7179 (in Illinois call (847-596-7000)). For service and support in EMEA, contact POWERVAR, Ltd. in the United Kingdom at +44 (0) 1793 553980. Or visit the POWERVAR website at www.powervar.com.

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