



**FRONT**

**SIDE**

**REAR**

	<b>Model</b>	<b>ABCDEF12.0-22</b>				
	Topology	True On-Line, Double Conversion, IGBT Design, Internal Isolation Transformer				
<b>INPUT</b>	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	42Hz to 69Hz before switching to batteries				
	Input PF	>0.95				
	Input Current THD	< 5.0%				
	Input Connection	Hardwired Standard; 2 wire + GROUND				
Input Capacity	11424VA/ 11424W					
<b>OUTPUT</b>	Capacity	12000VA/10800W				
	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 or 60				
	Frequency Regulation	±0.1Hz				
	Overload	125% for 2 minutes 150% for 30 seconds 300% for 500ms				
	Efficiency	AC-AC >87.0% DC-AC >85.0%				
Common Mode Noise	< 0.5Vrms					
Output Connection	Hardwired Standard; Output Receptacles Optional (Consult factory)					
<b>BYPASS</b>	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%				

<b>BATTERY</b>	Voltage (VDC)	288.0, nominal 327.6, float
	Battery	12V, 51W flame retardant High Rate, Sealed Lead-Acid
	Quantity	24
	Charge Current (ADC)	2.5
	Backup Time (min)	>7.0
	Recharge Time	8 Hours to 90%
<b>ENVIRONMENT</b>	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)	55-60 @ 1m from front of unit
	Heat Dissipation (BTU/hr)	5069
<b>AGENCIES</b>	EMC	FCC Part 15J Class A EN 55022 Class A/ CISPR 22 EN 50091-2 IEC 61000-3-2
	Safety Agencies	UL1778, 4 <sup>th</sup> Ed. cUL to CSA22.2 No.107.1 IEC62040, w/CB report and certificate CE 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
<b>OTHER</b>	Communication	RS-232 USB DB-9 Dry Contacts Internal SNMP Adapter (option)
	Unit Weight	719.0 lbs./ 326.1kg
	Shipping Weight	807.0 lbs./ 366.0kg

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

**NOISE REJECTION-ISOLATION:** With unit under power and an ANSI/IEEE C62.41 Cat. 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: D28848-22 Description: 2 String x 24 (48 Batt) Extended Run Battery Cabinet

ABCDEF12.0-22 TYPICAL RUN-TIMES (MINS)				
	25% (2700 W)	50% (5400 W)	75% (8100 W)	100% (10800 W)
Internal Batteries Only	35	17	10	7
Internal + 1) D28848-22	160	70	40	25
Internal + 2) D28848-22	300	130	80	55
Internal + 3) D28848-22	475	210	120	85
Internal + 4) D28848-22	675	275	170	110
Internal + 5) D28848-22	>12 Hrs	375	230	150

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](http://www.powervar.com).

**POWERVAR, Inc. - 1450 Lakeside Drive, Waukegan, IL 60085**