



| Model             |   | ABCDEF3000-11   |        |        |         | ABCDEF3000-22     |         |         |                   |
|-------------------|---|---|--------|--------|---------|-------------------|---------|---------|-------------------|
| Topology          |   | True On-line, Double-Conversion, IGBT Design, Internal Isolation Transformer                                      |        |        |         |                   |         |         |                   |
| INPUT             | Voltage (VAC)   | 100   | 115    | 120    | 200     | 208               | 220     | 230     | 240               |
|                   | Voltage Range (VAC)   | 70-115  | 81-132 | 84-138 | 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    | 3240 VA   |   |        |        | 3240 VA |                   |         |         |                   |
| OUTPUT            | Capacity  | 3000VA/ 2700W   |        |        |         |                   |         |         |                   |
|                   | Voltage (VAC)   | 100   | 115    | 120    | 200     | 120<br>208<br>240 | 220     | 230     | 120<br>208<br>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<br>± 6.0% for 100% step load change<br>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<br>150% for 30 seconds<br>300% for 500ms   |        |        |         |                   |         |         |                   |
|                   | Efficiency  | AC-AC >85.0%  |        |        |         | AC-AC >85.0%      |         |         |                   |
|                   |   | DC-AC >77.0%  |        |        |         | DC-AC >76.0%      |         |         |                   |
| Common Mode Noise | < 0.5 VRMS  |   |        |        |         |                   |         |         |                   |
| Output Connection | Hardwired Standard; Output Receptacles Optional (Consult factory) |   |        |        |         |                   |         |         |                   |
| BYPASS            | Input Voltage (VAC)   | 100   | 115    | 120    | 200     | 208               | 220     | 230     | 240               |
|                   | Output Voltage (VAC)  | 100   | 115    | 120    | 200     | 120<br>208<br>240 | 220     | 230     | 120<br>208<br>240 |
|                   | Transformer Voltage Regulation                                    | ± 3.0%  |        |        |         |                   |         |         |                   |
|                   | Overload  | 125% for 10 minutes<br>150% for 500ms<br>1000% for 1 cycle  |        |        |         |                   |         |         |                   |
|                   | Efficiency  | > 95.0%   |        |        |         |                   |         |         |                   |

|                    |                           |   |  |
|--------------------|---------------------------|---|--|
| <b>BATTERY</b>     | Voltage (VDC)             | 96.0, nominal<br>109.2, float   |  |
|                    | Battery                   | 12V, 34W flame retardant<br>High Rate, Sealed Lead-Acid   |  |
|                    | Quantity                  | 16  |  |
|                    | Charge Current (ADC)      | 3.0   |  |
|                    | Backup Time (min)         | > 12.0  |  |
|                    | Recharge Time             | 8 Hours to 90%  |  |
| <b>ENVIRONMENT</b> | Temperature (°C)          | 0 to 40, operating<br>-20 to 60, transit  |  |
|                    | Altitude (m)              | 2,000, operating<br>12,000, transit   |  |
|                    | Humidity                  | 5.0% to 90.0%, non condensing   |  |
|                    | Audible (dBA)             | 50-55 @ 1m from front of unit   |  |
|                    | Heat Dissipation (BTU/hr) | 1626  |  |
| <b>AGENCIES</b>    | EMC                       | FCC Part 15J Class A<br>EN 55022 Class A/ CISPR 22<br>EN 50091-2<br>IEC 61000-3-2   |  |
|                    | Safety Agencies           | UL1778 4 <sup>th</sup> Ed.<br>cUL to CSA22.2 No.107.1<br>CE (-22 only):<br>IEC62040, w/CB report and cert<br>IEC61000-4-2, Electrostatic Discharge<br>IEC61000-4-3, Radiated Electromagnetic Field Immunity<br>IEC61000-4-4, Electrical Fast Transient/ Burst Immunity<br>IEC61000-4-5, Surge Immunity<br>IEC61000-4-6, Immunity to Conducted Radio Frequency Disturbances<br>IEC61000-4-8, Power Frequency Magnetic Field Immunity<br>IEC61000-4-11, Voltage Dips, Short Interruptions, and Voltage Variations |  |
|                    | RoHS                      | All units are RoHS compliant  |  |
| <b>OTHER</b>       | Communication             | RS-232<br>USB<br>DB-9 Dry Contacts<br>Internal SNMP Adapter (option)  |  |
|                    | Unit Weight               | -11 Models 294 lbs. / 132 kg.<br>-22 Models 300 lbs. / 135 kg.  |  |
|                    | Shipping Weight           | -11 Models 389 lbs. / 175 kg.<br>-22 Models 395 lbs. / 178 kg.  |  |
|                    | Plug & Receptacle*        | L5-30P (2)5-20R (1)L5-30R   | 208 VAC Input L6-30P (2)5-20R (1)L6-30R<br>240 VAC Input L6-20P (2)5-20R (1)L6-20R |

\*Hardwired 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.

**ABCDEF3000-11 Compatible External (Extended Run) Battery Cabinets:**

Model: D9632-11 Description: 4 Pack (32 Batt) Extended Run Battery Cabinet  
 Model: D9648-11 Description: 6 Pack (48 Batt) Extended Run Battery Cabinet

| ABCDEF3000-11 TYPICAL RUN-TIMES (MINS) |             |              |              |               |
|--|-------------|--------------|--------------|---------------|
|  | 25% (675 W) | 50% (1350 W) | 75% (2025 W) | 100% (2700 W) |
| Internal Batteries Only                | 40          | 24           | 17           | 12            |
| Internal + 1) D9632-11                 | 170         | 100          | 70           | 55            |
| Internal + 2) D9632-11                 | 325         | 200          | 140          | 110           |
| Internal + 3) D9632-11                 | 550         | 325          | 225          | 170           |
| Internal + 4) D9632-11                 | >12 Hrs     | 450          | 310          | 230           |
| Internal + 5) D9632-11                 | >12 Hrs     | 600          | 400          | 300           |
|  |             |              |              |               |
| Internal + 1) D9648-11                 | 250         | 150          | 100          | 80            |
| Internal + 2) D9648-11                 | 550         | 325          | 220          | 160           |
| Internal + 3) D9648-11                 | >12 Hrs     | 525          | 350          | 250           |
| Internal + 4) D9648-11                 | >12 Hrs     | >12 Hrs      | 525          | 375           |
| Internal + 5) D9648-11                 | >12 Hrs     | >12 Hrs      | 700          | 525           |

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

**ABCDEF3000-22 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

| ABCDEF3000-22 TYPICAL RUN-TIMES (MINS) |             |              |              |               |
|--|-------------|--------------|--------------|---------------|
|  | 25% (675 W) | 50% (1350 W) | 75% (2025 W) | 100% (2700 W) |
| Internal Batteries Only                | 35          | 23           | 15           | 12            |
| Internal + 1) D9632-22                 | 160         | 100          | 70           | 55            |
| Internal + 2) D9632-22                 | 325         | 200          | 140          | 110           |
| Internal + 3) D9632-22                 | 500         | 300          | 210          | 165           |
| Internal + 4) D9632-22                 | >12 Hrs     | 425          | 300          | 230           |
| Internal + 5) D9632-22                 | >12 Hrs     | 575          | 400          | 300           |
|  |             |              |              |               |
| Internal + 1) D9648-22                 | 230         | 150          | 100          | 80            |
| Internal + 2) D9648-22                 | 500         | 300          | 210          | 160           |
| Internal + 3) D9648-22                 | >12 Hrs     | 500          | 350          | 270           |
| Internal + 4) D9648-22                 | >12 Hrs     | >12 Hrs      | 525          | 375           |
| Internal + 5) D9648-22                 | >12 Hrs     | >12 Hrs      | 675          | 500           |

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).

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