

1000W, High Input Voltage, Rugged, Industrial Quality, AC-DC Power Supply with PFC-input PFHI 1K-FXW Series

- Fixed frequency power factor correction (PFC)
- High input voltage
- Rugged industrial quality
- Cooling by internal fans
- Single phase input
- Full electronic protection
- N+1 redundancy available as option



This rugged, industrial quality, high input voltage AC-DC power supply with PFC input uses field proven PFHI 1000 topology to deliver the required output power. An optional built-in redundancy diode allows for parallel connection to achieve higher output power or N+1 redundancy, and also makes the unit suitable for battery charging applications. Cooling is by high quality built-in fans which draw air into the unit, and by conduction via the baseplate. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. This also ensures exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large design headroom and the exclusive use of components with established reliability contribute to a high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

<p>Input Voltage 400Vac nominal 180-480Vac operating range 47-63Hz Input Current: 6.5Arms max at 180Vac Power Factor is better than 0.97 at full load for the entire input range. Meets EN61000-3-2</p> <p>Input Protection Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p>Isolation 3000VDC input to chassis 4300VDC input to output 8mm spacing 1300VDC output to chassis</p> <p>Standards Designed to meet EN60950-1 and related UL/CSA standards</p> <p>EMI EN55032 Class A with margins</p> <p>Switching Frequency Input Stage: 80kHz \pm3kHz Output Stage: 55kHz \pm3kHz</p> <p>Hold Up Time Min. 5ms at nominal input for 5% drop of the output voltage at any input</p>	<p>Output Voltage/Current 24Vdc/40A, 48Vdc/20A, 110Vdc/9A or 125Vdc/8A Output is floating; either terminal can be grounded Other outputs available on request</p> <p>Redundancy Diode Not installed Available as an option</p> <p>Line/Load Regulation \pm1% combined from zero load to full load</p> <p>Dynamic Response Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</p> <p>Output Ripple/Noise Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHz BW)</p> <p>Overload Protection Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self-resetting)</p> <p>Output Overvoltage Protection Second regulator loop completely stable and independent of the main regulator loop</p>	<p>Efficiency Output voltage dependent Typically 80% at full load</p> <p>Operating Temperature 0°C to 50°C cold plate temperature for full specification Extended temperature range available</p> <p>Temperature Drift 0.03% per °C over Operating temperature range</p> <p>Cooling Forced air by two high quality built-in fans and conduction via base plate</p> <p>Environmental Protection Basic ruggedizing Conformal coating</p> <p>Shock/Vibration IEC61373 Cat 1 A&B</p> <p>Humidity 5-95% non-condensing</p> <p>MTBF 140,000 hours @ 45°C (fans excluded) Demonstrated MTBF is significantly higher</p>	<p>Indicators Green "Output ON" LED visible through the cooling slots</p> <p>Control Input None on standard version Available as option</p> <p>Alarm Outputs Not installed on standard version Available as option</p> <p>Package/ Dimensions (W x H x L) FXW: 185.4 x 69.3 x 351mm 7.3" x 2.7" x 13.8" Includes baseplate, excludes connector/terminal block Mounting holes are clear</p> <p>Weight 2.9 kg (6.4 lb)</p> <p>Connections 12-pole barrier-type terminal block with 3/8" spacing</p> <p>RoHS Compliance Compliant</p> <p>Warranty: Two years subject to application within good engineering practice Contamination related failures and shipping costs excluded.</p> <p>Terminal Block Pin-out</p>
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24VDC OUTPUT				ALARM			400VAC INPUT				
+	+	-	-	F/D	COM	F/C	GND	NOT USED	N	NOT USED	PH
1	2	3	4	5	6	7	8	9	10	11	12

ABSOPULSE power supplies are designed and built to customer requirements. The specifications on this data sheet are generic guidelines only and are subject to change.

OEM of industrial and railway quality DC-DC converters, AC-DC power supplies and battery chargers, DC-AC sine-wave inverters, phase and frequency converters, DC-output UPS systems and complete power systems in 19" and 23" racks since 1982. Custom or standard. ABSOPULSE is a BABT-approved Facility.



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