

# 6000VA, Single Phase to 3-Phase Frequency Converter

## Rugged, Industrial Quality

### FTP 6K Series



**6U x 19" chassis  
(4 x 3U3)**

- 3-Phase sinewave output voltage
- Filtered input
- Cooling by internal fans
- Full electronic protection
- Field-proven design topology

The FTP 6K Series is a rugged modular AC/AC frequency converter system uses field-proven technology to deliver 3-Phase, 6000VA continuous output power. It is a mature design with a track record in numerous of applications. The standard 3-phase outputs are 380Vrms or 400Vrms (L-L). Phase-to-neutral voltages can also be used: 220Vrms or 240Vrms. All output neutrals are internally connected to chassis (GND) in "Y" configuration. The input modules perform the AC to DC voltage conversion. The output module performs the DC voltage to 3-phase AC voltage conversion. The high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. The use of components with established reliability results in high MTBF. Cooling is by built-in fans, which draw air into the unit. The FTP 6K is manufactured at our plant under strict quality control. The system is customized for exact requirements.

### SPECIFICATIONS

<p><b>Input Voltage</b> 115 or 230Vac, +/-15% 47 ... 410Hz are standard Factory set for required input</p> <p><b>Input Protection</b> Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p><b>Isolation</b> Compliant to input and output voltages according to the corresponding standards</p> <p><b>Standards</b> Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950</p> <p><b>EMI</b> EN 55022 Class A as a minimum</p>	<p><b>Output Voltage</b> 380Vrms or 400Vrms (L-L)/ 3-phase continuous at 50 or 60Hz. All neutrals are internally connected to chassis (GND) in "Y" configuration (Phase-to-neutral voltages can also be used: 220Vrms or 240Vrms) Consult factory for other voltages, frequencies and options</p> <p><b>Output Wave Form</b> Sinusoidal</p> <p><b>Total Harmonic Distortion</b> Less than 5% at full load</p> <p><b>Line/Load Regulation</b> Maximum <math>\pm 6\%</math> from no load to full load.</p> <p><b>Load Crest Factor</b> Maximum 2.5 at 90% load</p> <p><b>Output Noise</b> High frequency ripple is less than 500mVrms (20MHz BW)</p> <p><b>Output Overload Protection</b> Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling.</p>	<p><b>Output Overvoltage Protection</b> Output voltage is limited by internal supply voltage</p> <p><b>Efficiency</b> Typically 76% at full load</p> <p><b>Operating Temperature Range</b> 0°C to +50°C for full specification without derating. Extended temperature ranges available</p> <p><b>Temperature Drift</b> 0.05% per °C over operating temperature range</p> <p><b>Cooling</b> Built-in fans draw air into the unit</p> <p><b>Environmental Protection</b> Basic ruggedizing Full ruggedizing and conformal coating as option</p> <p><b>Shock/Vibration</b> IEC 61373 Cat 1 A&amp;B</p> <p><b>Humidity</b> 5 - 95% non-condensing</p> <p><b>MTBF</b> Min. 95,000 hours at 45°C Demonstrated MTBF is significantly higher Fans excluded</p>	<p><b>Indicators</b> None</p> <p><b>Control Input</b> None Remote shutdown as option</p> <p><b>Alarm Output</b> None Option: output fail alarm (Form C)</p> <p><b>Package/Dimensions (H x W x D)</b> 19" rack-mount or chassis-mount assembly. 6U x 19" (4 x 3U3) chassis: 264 x 483 x 432 mm (10.4" x 19" x 17") including connectors.</p> <p><b>Weight</b> 28 kg (62 lb)</p> <p><b>Connections</b> Input: Terminal block or threaded studs depending on input voltage Output: Terminal block Interconnections: Terminal block</p> <p><b>RoHS Compliance</b> Fully compliant</p> <p><b>Warranty</b> Two years subject to application within good engineering practice</p>
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**Enhancements to these general specifications can be accommodated upon request. Specifications are subject to change**

*Designer and manufacturer of quality ac-dc power supplies and battery chargers, converters, inverters, dc-output UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility.*



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