3000VA, Single Phase to 3-Phase Frequency Converter
Rugged, Industrial Quality
FTP 3K Series

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

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

The FTP 3K Series is a rugged modular AC/AC frequency converter system uses field-proven technology to deliver 3-Phase, 3000VA continuous output power. It is a mature design with a track record in numerous of applications. The standard 3-phase outputs are 208Vrms, 380Vrms or 400Vrms (L-L). Phase-to-neutral voltages can also be used: 115Vrms, 220Vrms or 240Vrms. All output neutrals are internally connected to chassis (GND) in "Y" configuration. The number of modules depends on the input/output combination. (The unit in the photograph is a typical example of one 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 3K is manufactured at our plant under strict quality control. The system is customized for exact requirements.

SPECIFICATIONS

Input Voltage
115 or 230Vac, +/-15%
47 … 410Hz are standard
Factory set for required input
95 – 264Vac universal input with PFC is also available

Input Protection
Inrush current limiting
Varistors
Reverse polarity protection
Internal safety fuse
Lower voltage than the specified minimum input will not damage the unit

Isolation
Compliant to input and output voltages according to the corresponding standards

Standards
Designed to meet
C22.2 No. 107.1 - 01,
UL 458 and EN60950

EMI
EN 55022 Class A
as a minimum

Output Voltage
208Vrms (L-L)/3-phase continuous at 60 or 400Hz or
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: 115Vrms, 220Vrms or 240Vrms)
Consult factory for other voltages, frequencies and options

Output Wave Form
Sinusoidal

Total Harmonic Distortion
Less than 5% at full load

Line/Load Regulation
Maximum ± 6% from no load to full load.

Load Crest Factor
Maximum 2.5 at 90% load

Output Noise
High frequency ripple is less than 500mVrms (20MHz BW)

Output Overload Protection
Current limiting with short circuit protection.
Thermal shutdown with automatic recovery in case of insufficient cooling

Output Overvoltage Protection
Output voltage is limited by internal supply voltage

Efficiency
Depends on input and output voltage combination.
Typically 76% at full load

Operating Temperature Range
0^{o}C to +50°C for full specification without derating.
Extended temperature ranges available

Temperature Drift
0.05% per $^{\circ}$C over operating temperature range

Cooling
Built-in fans draw air into the unit

Environmental Protection
Basic ruggedizing
Full ruggedizing and conformal coating as option

Shock/Vibration
IEC 61373 Cat 1 A&B

Humidity
5 - 95% non-condensing

MTBF
Min. 95,000 hours at 45ºC
Demonstrated MTBF is significantly higher
Fans excluded

Indicators
None

Control Input
None
Remote shutdown as option

Alarm Output
None
Option: output fail alarm (Form C)

Package/Dimensions (H x W x D)
19" rack-mount or chassis mount assembly.
Size varies from 3U x 19" to 6U x 19" depending on input/output combination

Weight
For 6U x 19" chassis: 25 kg (55 lb.)

Connections
Input: Terminal block or threaded studs depending on input voltage
Output: Terminal block
Interconnections: Terminal blocks

RoHS Compliance
Fully compliant

Warranty
Two years subject to application within good engineering practice

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.

ABOPULSE ELECTRONICS LTD
110 Walgreen Road
Ottawa, Ontario. K0A 1L0. CANADA
Tel: (613) 836-3511 Fax: (613) 836-7488
E-mail: absopulse@absopulse.com
www.absopulse.com