

## 2500VA Frequency Converter with Sine Wave Output

### Rugged, Industrial Quality

### FC 2K5 Series

- Sinusoidal output voltage
- 2500VA output power
- Filtered input
- Cooling by internal fan
- Full electronic protection
- Field-proven design topology



The FC 2K5 Series is a rugged, compact AC/AC frequency converter which uses field proven topology to generate 2500VA output power. It is a mature design with a track record in hundreds of applications. The unit features full electronic protection and low output noise. Cooling is by built-in fan. This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in a high demonstrated MTBF. The FC 2K5 is manufactured at our plant under strict quality control. Customized versions are also available.

### 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  
Internal safety fuse  
Lower voltage than the specified  
minimum input will not damage  
the unit

#### Isolation

2250Vdc input to chassis/output  
Output neutral is connected to  
the chassis internally  
Floating output as option

#### Standards

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

#### EMI

EN 55022 Class A  
as a minimum

#### Output Voltage

115Vac @ 60Hz or  
400Hz/22A rms continuous;  
or 230Vac @ 50Hz/11A rms  
continuous.  
Output neutral is connected to the  
chassis internally.

Isolated floating output optional  
Consult factory for other output  
requirements

#### Output Wave Form

Sinusoidal

#### Total Harmonic Distortion

Less than 5% at full load

#### Line/Load Regulation

Maximum  $\pm 6\%$  from no load  
to full load.  
 $\pm 2\%$  load regulation option is  
available

#### 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

140Vac (for 115Vac output) or  
280Vac (for 230Vac output) by  
internal supply voltage limiting

#### Efficiency

Typically 80% at full load

#### Operating Temperature Range

0° C to +50° C for full specification  
without derating.  
Extended temperature ranges  
available

#### Temperature Drift

0.05% per °C over operating  
temperature range

#### Cooling

Built-in fan drawing air into  
the unit

#### Environmental Protection

Basic ruggedizing  
Full ruggedizing and conformal  
coating as option

#### Humidity

5 - 95% non-condensing

#### MTBF

Min. 95,000 hours at 45°C  
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)

4U (6.97" x 19" x 19"  
177 x 482.6 x 482.6 mm  
Dimensions include connectors, not  
handles.  
Mounting holes are clear

#### Weight

16 Kg (35 lb) max.

#### Connections

Input: Terminal block  
Outputs: Terminal block

#### 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.*



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