General Specifications

Input Voltage 115 or 230Vac, +/-15% 47 … 410Hz are standard. Factory set for required input voltage.
- 95 – 264Vac universal input option

Input Protection
- Inrush current limiting
- Internal safety fuse

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

EMI EN55011 Class A conducted

Immunity EN 61000-4

Output Waveform Sinusoidal

Output Voltage 115Vac @ 60Hz or 400Hz/17.4A rms continuous; or 230Vac @ 50Hz/8.7A rms continuous Output neutral is connected to the chassis internally. Isolated floating output optional.

Harmonic Distortion Less than 5% at 100% load.

Load Crest Factor Maximum 2.5% at 90% load

Output Power 2000VA

Regulation Line / Load: ±6% from 10% to 100% load step.

Output Noise High Frequency ripple is better than 500mVrms (20MHz BW)

Protection Current limiting with short circuit protection Self re-setting thermostat for thermal protection

Output Over Voltage Protection Output voltage is limited by internal supply voltage

Efficiency Typically 78%

Operating Temp 0°C to +50°C at rated load. Other options on request

Cooling On Board Fans

Shock & Vibration Basic ruggedizing

Humidity 5-95% non-condensing

MTBF >95,000 hrs at 45°C

Connector Input: compression type terminal block Output: standard AC receptacle Option: compression type terminal block

Dimensions Package size varies from 3U x 9.6” x 16” + 3U x 7.4” x 16” (2 boxes) with modular configuration to a 3U x 19” x 16” (3U7 one box chassis) Chassis-mount and 19” rack-mount versions are available in the 3U7 package.

Weight 14-16kg

Features
- 115 or 230Vac output option
- 2000VA output power
- Frequency options 50Hz / 60Hz / 400Hz
- Sinusoidal output waveform
- Filtered input
- Rugged design for harsh environments
- Full electronic protection

Description
The FC2K AC/AC frequency converter system uses field proven microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. It is a mature design with a track record in numerous applications. The frequency converter is built with internal power modules. The AC/DC input stage boosts the input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output. A built-in fan provides sufficient airflow for operation without derating to the specified temperature. 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.

Options (may not be available on all combinations)

Alarms Output Fail Alarm: voltage free relay contacts

Remote Inhibit Remote ON / OFF

Ruggedized Conformal coating and Ruggedization for use in harsh environments.

Slow Start Slow start up option for powering fans

Connector A variety of terminals / connectors available to suit special customer requirements

Model No Example:
FC2K-EA = (230V 50Hz / 115V / 60Hz)

<table>
<thead>
<tr>
<th>FC</th>
<th>Power</th>
<th>Input AC</th>
<th>Output AC</th>
<th>Factory Allocated</th>
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<tr>
<td>FC</td>
<td>2K</td>
<td>A = 115V 60Hz</td>
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<tr>
<td></td>
<td></td>
<td>M = 115V 400Hz</td>
<td>M = 115V 400Hz</td>
<td></td>
</tr>
</tbody>
</table>

1. Standard input / output combinations are illustrated.
2. Non standard combinations are available on request
3. Final part no will be allocated at time of order to reflect customer specifications and options.