

### Model FC5003-C1-115-400

## Three-phase 60 Hz to 400 Hz Frequency Converter

Behlman's FC5003 is a "turn Key", ruggedly built, COTS frequency converter designed to convert 120/208 VAC, 3-phase, 60 Hz, ground power to 115/200 VAC, 3-phase, 400 Hz, aircraft power. The FC5003 is in a rugged 6U (10.5"H) 19 inch rack mount chassis with an input line cord with plug and an output receptacle.

Small size, quiet operation and high efficiency make the FC5003 ideal for precision Military and industrial avionic product test and power conversion and motor generator replacement.

### SPECIFICATIONS

**INPUT:** 120/208 VAC +10%,-15%, 3-phase, 57-63 Hz  
Multi-pulse input transformer for low input current THD.

**OUTPUT:**

Power:	6,000 VA
Voltage:	115/200 VAC, 3-phase
Current:	16 amps continuous, per/phase (17 amps for five minutes per/phase).
Frequency:	400 Hz +/- 0.5 Hz
Current Crest Factor:	3:1 Typical
Distortion:	2.5% Typical THD with full resistive load
Load Regulation:	+/- 0.7% No Load to Full Load
Line Regulation:	+/- 0.1% for ±10% Line Change
Power Factor:	100% of rated output into any power factor load.
Efficiency:	85 typical



### PROTECTIVE CIRCUITS:

Input:	Fast acting main circuit breaker with guard and indicator
Constant Current:	Overload automatically causes voltage fold back to provide maximum current without distorting output waveform.
Short Circuit:	Short Circuit electronically latches output open to protect load. Power restored by cycling circuit breaker.
Thermal:	Internal temperature sensor prevents heat damage.

### CONTROLS/INDICATORS:

Meters:	Two DMM's, True RMS Volts with 0.1V resolution. +/- 1% of full scale +/- 1LSB and Amps with 0.1Amp resolution . +/- 1% full scale +/- 1 LSB
Phase select:	Three-position switch for phase A, B, C
Fault:	Three LED's for Constant Current, Overload Latch & OverTemp
Output On/Off:	Push-button switch with indicator

**MECHANICAL SPECIFICATIONS:**

Rack mount chassis: 19" rack-mount chassis 10.50"H (6U) x 22"D with handles front & rear  
Weight: Approximately 160 lbs.  
Cooling: Internal fans; air in- front & sides, air out- rear  
Operating Temp: 0 - 40° C  
Storage Temp: -20 - +60° C  
Humidity: 0 - 95% RH non-condensing.  
Input connection: Pre-wired six foot line cord with NEMA L21-30P type plug. (Hubbell # 2811)  
Output Connections: NEMA type FSL4-FR compliant receptacle on rear

**STANDARD OPTIONS:**

**S:** Slides  
**TSC-6:** 24" black case fixed composite with aluminum frame and isolation system.

