

### Model BL3X500C-8-5632

## 1-Phase 60 Hz to 3-Phase 400 Hz Frequency Converter

Behlman's BL3X500C-8-5632 is a "turn-key", COTS frequency converter designed to convert 115 or 230 VAC, 1-phase, 60/50 Hz, ground power to 115/200 VAC, 3-phase, 400 Hz, aircraft power. The BL3X500 is in a rugged 4U (7.00"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 BL3X500 ideal for precision Military and industrial avionic product test and power conversion and motor generator replacement.

### SPECIFICATIONS

#### INPUT

Voltage 115 or 230 VAC, +/- 10%, 1 phase  
Frequency 47-63 Hz

#### OUTPUT

Voltage: 115/200 VAC, 3 phase, **Isolated and Floating.**  
Resolution: 1 V  
Accuracy: +/-2 % of full scale

#### Power

1500 VA

#### Frequency:

400 Hz

Resolution:

1 Hz

Accuracy:

+/-2 Hz

#### Current:

4.3 Amps/phase

Resolution:

0.1 Amp, +/-1 digit

Accuracy:

+/-2 % of full scale

#### Crest Factor:

3:1

#### Power Factor:

100% of rated output into any power factor load

#### Distortion:

3% THD Typical

#### Line Regulation:

0.1% for +/- 10% line change

#### Load Regulation:

0.7% no load to full load

#### Efficiency:

80% typical



#### CONTROLS/ INDICATORS

##### Power On/Off:

Circuit breaker

##### Meters:

Three (3) DMM: True RMS Volts, True RMS Amps, Frequency

##### Phase select:

Three-position switch for phase A, B or C

##### Line Drop:

Allows for front panel adjustment of output to compensate for voltage drop over long distance

##### Phase angle adjust:

Allows for front panel adjustment of phase angle A-B and B-C

##### Output:

Toggle switch

##### Indicators:

Power On, Constant Current, Overtemp, Overload Latch

##### External Synch:

Synchronizes AC output with external input

##### Remote Control

0-10 VDC programming for voltage and frequency...contact closure for output on/off...external synch

### PROTECTIVE CIRCUITS

- Input:** Main circuit breaker
- Constant Current Mode:** Overload automatically causes voltage fold-back to provide maximum current without distorting output waveform.
- Overload Protection:** Short Circuit overload electronically disables output to protect load. Power restored by cycling circuit breaker
- Thermal Protection:** Internal temperature sensor prevents heat damage.

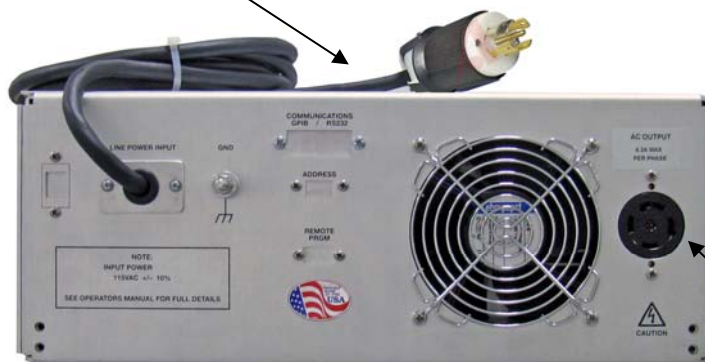
### ENVIRONMENTAL / CONNECTIONS

- Operating Temp:** 32° F to 131° F (0-55° C)
- Humidity:** 0-95% RH non-condensing
- Input Connections:** Three meters cable with NEMA L5-30 plug
- Output Connections:** FSL4-FR type female receptacle on the rear panel
- Remote Control:** DB-9 connector

### MECHANICAL SPECIFICATIONS

- Dimensions:** 19" (48.3 cm) rack-mount chassis 7" H and 22" D (17.8 cm x 55.9 mm D)...65 lbs (29.5 kgs)
- Cooling:** Internal fans
- OPTION 5632:** Fixed output voltage at 115/200VAC, 3-phase and frequency at 400Hz  
Three meters cable with NEMA L5-30 plug  
FSL4-FR type female receptacle on the rear panel
- AVAILABLE OPTIONS:**
- TSC-4:** 24" black case fixed composite with aluminum frame and isolation system.

Input cable with NEMA L5-30 plug



Output receptacle, FSL4-FR



[www.behlman.com](http://www.behlman.com)

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