

### FEATURES

- Fixed 50, 60 or 400Hz and variable frequency
- Multi-pulse input transformer for low input current distortion
- Small footprint
- Easy installation

## BL PLUS 120KVA, 3-PHASE OUTPUT

### 120 KVA OF AC POWER IN A CABINET ONLY 27"W X 36"D

Behlman's BL Plus solid state AC power frequency converter offers greater efficiency, reduced downtime, and a significantly smaller footprint and easier installation than the motor generator it is designed to replace. The BL Plus has all the quality features you expect from Behlman; fully adjustable voltage and frequency, low output THD, high efficiency plus excellent line and load regulation. There's also a unique overload protection system that folds-back voltage to maintain rated current without output waveform distortion. The BL Plus optional manual controller has three DMM's for volts, frequency and current and a oscillator that has three fixed frequencies of 50 Hz, 60 Hz and 400 Hz as well as a variable frequency of 45-500 Hz. Optional analog remote control is available with the standard controller or you can opt for the Programmable Controller with RS232 interface standard or optional IEEE-488.

Small size, easy installation, quiet operation and high efficiency make the BL Plus ideal for industrial product testing, precision avionic test, power conversion, ATE, bulk power and motor generator replacement.



Shown with PAC2000 Controller

### INPUT

Multi-pulse input transformer for low input current THD

#### Voltage/frequency:

<b>C2:</b> 220/380, 47-53 Hz	<b>C5:</b> 346/600, 47-63 Hz
<b>C3:</b> 277/480, 47-63 Hz	<b>C6:</b> 230/400, 47-53 Hz
<b>C4:</b> 200 delta, 57-63 Hz	<b>C7:</b> 240/415, 47-53 Hz
	<b>X:</b> Custom input

### OUTPUT

<b>Power:</b>	120 KVA
<b>Voltage:</b>	-XXX: Fixed at any L-N voltage
<b>Accuracy:</b>	0.25% of Full Scale +/- 1 V
	-1: 0-132 VAC, L-N, 3 phase
	-2: 0-264 VAC, L-N, 3 phase
	<i>Contact factory for other voltages</i>
<b>Frequency:</b>	-XXX: Fixed at any frequency from 45-500 Hz
<b>Accuracy:</b>	+/- 0.1 Hz
<b>Current:</b>	-1: 304 Amps/phase @ 0-132 V
	-2: 152 Amps/phase @ 0-264 V
<b>Accuracy:</b>	2% of Full Scale +/- 1 A
<b>Peak current:</b>	Repetitive peak not to exceed 500 amps
<b>Power Factor:</b>	100% of rated output into any power factor load
<b>Distortion:</b>	3.0% THD typical, measured at full current 115 Volts, 60 Hz, into a linear load
<b>Line Regulation:</b>	+/- 0.5% for +/- 10% line change
<b>Load Regulation:</b>	+/- 0.7%, no load to full load
<b>Efficiency:</b>	80% typical
<b>Line drop compensation:</b>	+10% adjustment range to compensate for output line losses

### PROTECTIVE CIRCUITS

<b>Input:</b>	Electronic circuit breaker
<b>Constant Current:</b>	Overload automatically causes voltage fold-back to provide maximum current without distorting output waveform
<b>Short Circuit:</b>	Short-circuit overload electronically latches output open to protect load... power restored by recycling circuit breaker
<b>Thermal:</b>	Internal temperature sensor prevents heat damage by turning output off...output will turn on when reaching safe temperature

### CONTROLS / INDICATORS

<b>Power On/Off:</b>	Push to start...push to stop
<b>Line drop compensation:</b>	Three recessed potentiometers for 10% adjustment phase A, B, C

## MECHANICAL SPECIFICATIONS

### Dimensions: including fork lift base

72"H x 36"D x 27"W, plus 6"D junction box  
(182.9 cm x 91.4 cm x 68.6 cm)

**Weight:** 2400 lbs. (908 kg)

**Operating Temperature:** 32 to 104° F, (0 to 40° C)

**Storage Temperature:** -4 to 158° F, (-20 to 70° C)

**Humidity:** 0-95% RH non-condensing

**Input Connections:** Four pressure terminals:  
A, B, C, N...protective ground stud provided

**Output Connections:** Four pressure terminals:  
A, B, C, N



Shown with junction box cover removed

**OPTIONS:** contact factory for additional options including custom input and output

**CE:** CE Mark for Low Voltage Directive 73/23/IEEC

**WF:** "Wild Frequency" range of 350 to 880 Hz

**M:** **MAC2000** manual controller with three fixed frequencies of 50 Hz, 60 Hz and 400 Hz and variable frequency of 45-500 Hz



**P:** **PAC2000** programmable controller with 40 characters X 2 line Vacuum Fluorescent display and front panel pushbutton control or remote control using RS232 interface supplied with controller



**Set:** Volts, frequency, current limit, phase angle and output On/Off

**Display:** Volts A, B, C; current A, B, C; frequency, current limit and fault indication for over voltage (O/V), over current (O/I), over temperature (O/T), constant current (C/C) and overload latch (O/L), watts (W), power factor (PF)

*Remote sense in place of line drop compensation.*

**PI:** PAC2000 controller with IEEE-488 interface

## MODEL SELECTION GUIDE

Model BL+120-3-(Input)-(Output)-(Fixed frequency and/or Options)

Examples:

**Model:** BL+120-3-C3-1-115/400  
**Power:** 120 KVA unit, 3 phase output  
**Input:** 277/480 VAC, 57-63 Hz  
**Output:** 115/200 VAC with fixed frequency of 400 Hz  
**Options:**

**BL+120-3-C2-1-P**  
**120 KVA, 3 phase output**  
**220/380 VAC, 47-53 Hz**  
**0-132 VAC**  
**P: Programmable controller**

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in the U.S.A.

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