

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

INPUT

Multi-pulse input transformer for low input current THD

Voltage/frequency:

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

OUTPUT

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

PROTECTIVE CIRCUITS

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

CONTROLS / INDICATORS

Power On/Off:	Push to start...push to stop
Line drop compensation:	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:

(C2, C3, C6, C7) A, B, C, (C5) A, B, C, N ...protective ground stud provided

Output Connections: Four pressure terminals:

A, B, C, N

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

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



Shown with junction box cover removed

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

P3: Programmable Controller with dependent Voltage adjust A, B, C with RS232 Interface



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

P3I: Programmable Controller with independent Voltage adjust A, B, C 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



www.behlman.com

ORBIT POWER GROUP
Behlman Electronics

Headquarters:
80 Cabot Court, Hauppauge, NY 11788
631 435-0410 800 874-6727
Fax: 631 951-4341

2363 Teller Road, Suite 108
Newbury Park, CA 91320
805 375-7046 800 456-2006
Fax: 805 498-2147

sales@behlman.com

