Behlman Power Products

AC Power Source/ Frequency Converter

FEATURES

BL PLUS 120KVA, 3-PHASE OUTPUT

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

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:**

C5: 346/600, 47-63 Hz
C2: 220/380, 47-53 Hz
C3: 277/480, 47-63 Hz
C4: 200 delta, 57-63 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 phaseContact 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:

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

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



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



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 BL+120-3-C2-1-P

Power: 120 KVA unit, 3 phase output 120 KVA, 3 phase output 120 kVA, 3 phase output 277/480 VAC, 57-63 Hz 220/380 VAC, 47-53 Hz

Output: 115/200 VAC with fixed frequency of 400 Hz 0-132 VAC

Options: P: Programmable controller

www.behlman.com

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