Behlman Power Products

AC Power Source/ Frequency Converter

FEATURES

BL PLUS 30KVA, 3-PHASE OUTPUT

- Fixed 50, 60 or 400Hz and variable frequency and voltage
- Low input current distortion
- Small footprint
- Easy installation

30 KVA OF AC POWER IN A CABINET ONLY 22"W X 32"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 was 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 output current without waveform distortion.

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.



INPUT

Multi-pulse input transformer for low input current THD **Voltage/frequency:**

C1: 120/208, 57-63 Hz
C2: 220/380, 47-63 Hz
C3: 277/480, 57-63 Hz
C4: 200 delta, 57-63 Hz
CX: Custom input

C5: 346/600, 57-63 Hz
C6: 230/400, 47-63 Hz
C7: 240/415, 47-63 Hz
CX: Custom input

OUTPUT

Accuracy:

Power: 30 KVA

Voltage: -XXX: Fixed at any L-N, 3-phase

Accuracy: 0.25% of Full Scale +/- 1 V

-1: 0.132 VAC L-N 3-phase

-1: 0-132 VAC, L-N, 3-phase-2: 0-264 VAC, L-N, 3-phase-3: 0-305 VAC, L-N, 3-phase-XXX: Fixed at any frequency from

Frequency: -XXX: Fixed at any frequency from

45-500 Hz +/- 0.1 Hz

Current: -1: 76 Amps/phase @ 0-132 V

-2: 38 Amps/phase @ 0-264 V **-3:** 33 Amps/phase @ 0-305 V

Accuracy: 2% of Full Scale +/- 1 A

Peak current: Repetitive peak not to exceed 150 amps 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 +/- 0.7%, no load to full load

Efficiency: 80% typical

Line drop compensation: +10% adjustable 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: -1: 49"H x 31.6"D x 22.1"W.

(134.6 cm X 80.3 cm X 56.1 cm)

including fork lift base -2: 59"H x 31.6"D x 22.1"W, (160 cm x 80.3 cm x 56.1 cm) including fork lift base **-3:** 59"H x 31.6"D x 22.1"W, (160 cm x 80.3 cm x 56.1 cm) including fork lift base

Weight: **-1:** 900 lbs. (408 kg)

-2: 1200 lbs. (544 kg) **-3:** 1200 lbs. (544 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 Four pressure terminals: **Input Connections:**

A, B, C, N...protective ground stud provided

Output Connections: Four pressure terminals:

A, B, C, N

NOTES:

1. See separate specification for PAC 2000

MODEL SELECTION GUIDE

Model BL+30-3-(Input)-(Output V/F)-(Options)

Examples:

Model: BL+30-3-C1-1-115/400 Power: 30 KVA unit, 3 phase output Input: 120/208 VAC, 57-63 Hz Output: Fixed volts (115/200 VAC),

fixed frequency (400 Hz)

OPTIONS: Contact factory for additional options including

custom input and output

WF: "Wild Frequency" range of 350 to 880 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.

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 with IEEE-488 interface

P31: Programmable Controller with independent

Voltage adjust A, B, C with IEEE-488 Interface

BL+30-3-C2-1-P-WF 30 KVA, 3 phase output 220/380 VAC, 47-53 Hz 0-132 VAC, L-N, 3-phase P: Programmable controller

WF: Frequency range, 350-880 Hz



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