## **Behlman Power Products**

## AC Power Source/ Frequency Converter

## **FEATURES**

# **BL PLUS 25KVA, 1-PHASE OUTPUT**

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

### 25 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.

Optional analog remote control is available with the standard controller or you can opt for the microprocessor controller with

RS232 interface standard and 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.



#### **INPUT**

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

C1: 120/208, 57-63 Hz	C5: 346/600, 57-63 Hz
C2: 220/380, 47-63 Hz	C6: 230/400, 47-63 Hz
C3: 277/480, 57-63 Hz	<b>C7:</b> 240/415, 47-63 Hz
C4: 200 delta, 57-63 Hz	X: Custom input

#### OUTPUT

Power:	25 KVA	
Voltage:	-XXX: Fixed at any L-N, 1-phase	
Accuracy:	0.25% of Full Scale +/- 1 V	
•	-1: 0-132 VAC, L-N, 1-phase	
	-2: 0-264 VAC, L-N, 1-phase	
	-3: 0-305 VAC, L-N, 1-phase	
Frequency:	-XXX: Fixed at any frequency from	
	45-500 Hz	
Accuracy:	+/- 0.1 Hz	
Current:	-1: 190 Amps@ 0-132 V	
	-2: 95 Amps@ 0-264 V	
	-3: 82 Amps@ 0-305 V	
Accuracy:	2% of Full Scale +/- 1 A	
Peak current:	Repetitive peak not to exceed 400 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	
Line Regulation:	+/- 0.5% for +/- 10% line change	
Load Regulation:	+/- 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			
Constant current limit:				
	Ability to set the constant current limit			
	from 10% to full scale			
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 offoutput will turn on when reaching safe temperature			

#### **CONTROLS / INDICATORS**

Power On/Off: Push to start...push to stop Line drop compensation: Recessed potentiometer for 10% adjustment



#### **MECHANICAL SPECIFICATIONS**

Dimensions:	<b>-1:</b> 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
	<b>-2:</b> 59"H x 31.6"D x 22.1"W,
	(160 cm x 80.3 cm x 56.1 cm)
	including fork lift base
	<b>-3:</b> 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
Input Connections:	Four pressure terminals:
	A, B, C, Nprotective ground
	stud provided
Output Connections:	Two pressure terminals:
	A, N

#### **OPTIONS:**

Contact factory for additional options including custom input and output

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

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 and output On/Off Display: Volts, current, 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

#### **MODEL SELECTION GUIDE**

Model BL+25-1-(Input)-(Output)-(Fixed frequency and/or Options)

#### Examples:

Model:	BL+25-1-C1-1-115-400	BL+25-1-C2-1-WF-P
Power:	25 KVA unit, 1 phase output	25 KVA, 1 phase output
Input:	120/208 VAC, 57-63 Hz	220/380 VAC, 47-53 Hz
	Fixed volts (115 VAC), fixed frequency (400 Hz)	0-132 VAC, L-N, 1-phase
Options:		WF: Frequency range, 350-880 Hz P: Programmable controller



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