Behlman Power Products

AC Power Source/ Frequency Converter

FEATURES

- Multi-Pulse Input Rectification Low Harmonic Distortion
- Analog Remote Control Remote Programming
- Low cost per VA Cost Savings
- Compact Size Less rack space

MANUAL CONTROL OR PROGRAMMABLE AC POWER

The BL5000 High-Power Series delivers all the quality features our customers have come to expect from Behlman; clean sine wave output with excellent line and load regulation, high efficiency and low harmonic distortion. A multi-pulse input transformer offers low-input harmonic distortion and high power factor as required by MIL-STD-1399 and European standards. Unique protection circuitry provides for over-temperature protection, short-circuit protection and voltage fold-back during overloads to maintain undistorted waveforms.

Amplitude and Frequency adjustment, line drop compensation, phase angle adjust and output on/off

See table 1

47-63 Hz

5000 VA

45-500 Hz

+/-2 % of full scale

12.5 Amps / phase

0.1 Amp, +/-1 digit

+/-2 % of full scale

power factor load

100% of rated output into any

3.0% THD typical, measured at full load, 115 Volts, 60 Hz

+/- 0.1% for +/- 10% line change

+/- 0.7%, no load to full load

(Option E: 45-1000 Hz)

1 V

1 Hz

3:1

+/-2 Hz

0-135 V, L-N, 3 phase, isolated

INPUT

Voltage: Frequency:

OUTPUT

Power: Voltage: Resolution: Accuracy: Frequency:

> Resolution: Accuracy:

Current: Resolution: Accuracy:

Crest Factor: Power Factor:

Distortion:

Line Regulation: Load Regulation: Efficiency:

PROTECTIVE CIRCUITS

Input: Fast-acting main circuit breaker Constant Current: Overload automatically causes voltage fold back to provide maximum current without distorting output waveform

80% typical

come standard. Units are supplied with analog remote control and available optional RS-232 and IEEE-488 remote control interfaces. Other options include Extended Frequency range up to 1000 Hz and Motor Test option which has the capability to soft-start motors, pumps and compressors thereby eliminating the need for high power devices.

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

PROTECTIVE CIRCUITS (cont)

Short Circuit:	Short circuit electronically latches
	output open to protect load
	power restored by cycling circuit
	breaker
Thermal:	Internal temperature sensor
	prevents heat damage

CONTROLS / INDICATORS

Power On/Off:	Circuit breaker		
Meters:	Three (3) DMM: True RMS		
	Volts, True RMS Amps,		
	Frequency		
Voltage Adjust:	Ten-turn potentiometer to adjust		
	voltage		
Frequency Adjust:	Ten-turn potentiometer to adjust		
	frequency		
Phase select:	Three-position switch for phase		
	A, B or C		
Phase angle adjust: Allows for front panel adjustment o			
	phase angle A-B and B-C		
Output:	Toggle switch		
Indicators:	Power On, Constant Current,		
	Over-temp, Overload Latch		
External Synch:	Synchronizes AC output with		
	external input		
Remote Control	0-10 VDC programming for		
	voltage and frequency		
	contact closure for output		
	on/offexternal synch		



BL5000

MECHANICAL & ENVIRONMENTAL

-9A - (2) 19" (48.3 cm) rack-mount
chassis 7" H and 8.75" H x 22" D
(17.8 cm and 22.2 cm H x 55.9 cm D)
-9 - High-strength cabinet with casters
28.3" H x 31.6" D x 22.1" W
(71.9 cm H x 80.3 cm D x 55.6 cm W)
2) 19" (48.3 cm) rack-mount chassis
7" H and 8.75" H x 22" D
17.8 cm and 22.2 cm H x 55.9 cm D)
250 lbs (113.5 kgs) three phase Input

ENVIRONMENTAL / CONNECTIONS

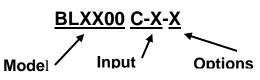
Operating Temp:	32° F to 131° F (0-55° C)
Humidity:	0-95% RH non-condensing
Input Connections:	Barrier strip on rear
Output Connections:	Barrier strip on rear
Remote Control:	DB-9 connector

Input Voltages Table 1

OPTIONS

E:	Extended frequency range, 45-1000 Hz
l:	IEEE-488 Interface
IR:	RS232 Interface
L:	Locking pot
MA:	Mounting Angles (2 per chassis)
MT:	Motor test
R:	Ruggedized for use in areas with shock
	and vibration
S:	Slides
T5:	0-300 VAC, L-N (adds 7" chassis)
T5D:	0-135 & 0-270 VAC (adds 7" chassis)
V:	Fixed output voltage (ie 115VAC)
F:	Fixed output frequency (ie 400Hz)
21-00:	Cabinet with casters

Ordering Information



Contact factory for additional options.

Option	Voltage +/- 10%	Frequency	Comments
C1	120/208 VAC, 3 phase	47Hz – 63Hz	
C2	220/380 VAC, 3 phase	47Hz – 63Hz	
C3	277/480 VAC, 3 phase	47Hz – 63Hz	
C4	200 VAC, DELTA, 3 phase	47Hz – 63Hz	
C5	346/600 VAC, 3 phase	47Hz – 63Hz	Requires contactor and fuses in place of circuit breaker
C6	230/400VAC, 3 phase	47Hz – 63Hz	
C7	240/415 VAC, 3 phase	47Hz – 63Hz	
C8	N/A	N/A	N/A
C9	230 VAC, 1 phase	47Hz – 63Hz	Includes 21-00 stand alone cabinet
C9A	230 VAC, 1 phase	47Hz – 63Hz	In a 8.75"H chassis
C10	480 VAC, 1 phase	47Hz – 63Hz	Includes 21-00 stand alone cabinet

Contact factory for other input voltages

Ground Stud	Fan connections used with option "T"	Ground Stud	I or IR options		
DC connection (cable supplied)	AC Input Connectio	n	(cable supplie		in the U.S.A.
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ORBIT POWER G	an Electronics	Headquarters: 80 Cabot Court, Haupp 631 435-0410 800 Fax: 631 951-4341 6 S @ b e h l i	874-6727	805 375-7046 Fax: 805 498-2	CA 91320 800 456-2006