The BL3300 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 various regulatory 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 come standard. Units are supplied with analog remote control and available optional RS-232 and IEEE-488 remote control interfaces. Extended frequency range up to 1000 Hz and Motor Test option, which has the capability to start motors, pumps and compressors thereby eliminating the need for high power devices, available on most models; contact factory for additional details related to these options.

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.

**INPUT**

- **Voltage:** See table 1
- **Frequency:** 47-63 Hz

**OUTPUT**

- **Power:** 3000 VA
- **Voltage:** 0-135 V, L-N, 3 phase, isolated
  - Resolution: 1 V
  - Accuracy: +/-2 % of full scale
- **Frequency:** 45-500 Hz
  - Resolution: 1 Hz
  - Accuracy: +/-2 Hz
- **Current:** 7.5 Amps / phase
  - Resolution: 0.1 Amp, +/-1 digit
  - Accuracy: +/-2 % of full scale
- **Crest Factor:** 3:1
- **Power Factor:** 100% power, 0.7 lead to 0.7 lag
- **Distortion:** 3.0% THD typical, measured at full load, 115 Volts, 60 Hz
- **Line Regulation:** +/- 0.1% for +/- 10% line change
- **Load Regulation:** +/- 0.7%, no load to full load
- **Efficiency:** 80% typical

**PROTECTIVE CIRCUITS**

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

**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 of 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/off...external synch
MECHANICAL & ENVIRONMENTAL

Dimensions:
Single ø Input: (2) 19” (48.3 cm) rack-mount chassis
7” H and 7” H x 22” D
(17.8 cm and 17.8 cm H x 55.9 cm D)
Three ø Input: (2) 19” (48.3 cm) rack-mount chassis
3.5” H and 7” H x 22” D
(8.9 cm and 17.8 cm H x 55.9 cm D)

Weight: Varies by model and options selected; contact Behlman factory for details.

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

OPTIONS

-E: Extended frequency range, 45-1000 Hz
-I: 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
-T3-270: 0-270VAC @ 3.75A †
-T3-300: 0-300VAC @ 3.3A †
-T3D-135/270: 0-135VAC @ 7.5A / 0-270VAC @ 3.75A †
-T3D-150/300: 0-150VAC @ 6.7A / 0-300VAC @ 3.3A †
-V: Fixed output voltage (e.g., 115VAC)
-F: Fixed output frequency (e.g., 400Hz)
-21-00: Cabinet with casters
† All voltages are L-N; add 3.5” chassis
†‘T3D’ output ranges switch-selectable

Table 1: Input Voltages

<table>
<thead>
<tr>
<th>Input Codes</th>
<th>Voltage +/- 10%</th>
<th>Frequency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>120/208 VAC, 3 phase</td>
<td>47Hz – 63Hz</td>
<td></td>
</tr>
<tr>
<td>C-2</td>
<td>220/380 VAC, 3 phase</td>
<td>47Hz – 63Hz</td>
<td></td>
</tr>
<tr>
<td>C-3</td>
<td>277/480 VAC, 3 phase</td>
<td>47Hz – 63Hz</td>
<td></td>
</tr>
<tr>
<td>C-4</td>
<td>200 VAC, DELTA, 3 phase</td>
<td>47Hz – 63Hz</td>
<td></td>
</tr>
<tr>
<td>C-5</td>
<td>346/600 VAC, 3 phase</td>
<td>47Hz – 63Hz</td>
<td>Requires contactor and fuses in place of circuit breaker</td>
</tr>
<tr>
<td>C-6</td>
<td>230/400VAC, 3 phase</td>
<td>47Hz – 63Hz</td>
<td></td>
</tr>
<tr>
<td>C-7</td>
<td>240/415 VAC, 3 phase</td>
<td>47Hz – 63Hz</td>
<td></td>
</tr>
<tr>
<td>C-8</td>
<td>115/230 VAC, 1 phase</td>
<td>47Hz – 63Hz</td>
<td>Requires 7”H chassis in place of 3.5”H</td>
</tr>
<tr>
<td>C-9</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>C-9A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>C-10</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

(Contact factory for other input options)

Ordering Information

BL 3 3 0 0 C - N – V – F - X

Model Input Options (see above)

Examples:
BL3300C-1-T3-270-E
120/208VAC 3-Phase Input Optional 45-1000Hz Extended Frequency
Optional 0-270VAC Output Transformer

BL3300C-3-120-6
277/480VAC 3-Phase Input 60Hz Fixed Output Frequency
120VAC Fixed Output Voltage

(Contact factory for additional options)
Rear View