FEATURES

- Stackable for higher power or 3-phase
- Unique overload protection
- Remote programming

1350 VA OF AC POWER IN A 3.5” HIGH CHASSIS

In the BL1350 Series you’ll find 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. Units are supplied with analog remote control and available with optional RS-232 and IEEE-488 remote control interfaces. Other options include extended frequency range out 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 BL1350 Series ideal for industrial product testing, precision avionic test, power conversion, ATE, bulk power and motor generator replacement.

INPUT

See Model Selection Guide (reverse)

OUTPUT

Power: 1350 VA
Units can be stacked for increased power, or 2- or 3-phase output

Voltage:
- 0-135 V or 0-270 V
Resolution: 1 V
Accuracy: +/-2 % of full scale

Frequency:
- 45-500 Hz (Option E: 45-1000 Hz)
Resolution: 1 Hz
Accuracy: +/-2 Hz

Current:
- 10 Amps, 0-135 V Range,
- 5 Amps, 0-270 V Range
Resolution: 0.1 Amp, +/-1 digit
Accuracy: +/-2 % of full scale

Crest Factor: 3 : 1

Power Factor: 100% of rated output into any power factor load

Distortion: 0.5% THD typical, measured at full load, 100 Volts, 50 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

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

CONTROLS / INDICATORS

Power On/Off: Circuit breaker

Meter: DMM: True RMS Volts, True RMS Amps, Frequency

Volts adjust: Ten-turn pot to adjust voltage

Frequency adjust: Ten-turn pot to adjust Frequency

Meter select switch: Volts, Amps, Frequency

Indicators: Constant Current, Overtemp, Overload Latch

Phase adjust: Potentiometer (pot)

Output On/Off: Toggle switch

Range: Hi/Lo Switch

Binding post: Hot, Neut, Gnd

Remote Control: 0-10 VDC programming for voltage and frequency... contact closure for Output On/Off and range change

External Synch: Synchronizes AC output with external input

MECHANICAL & ENVIRONMENTAL

Dimensions: High-strength 19” (48.3 cm) rack mount chassis,
3.5”H X 22”D (8.9 cm X 55.9 cm)

Weight:
- BL1350B-1 & pf: 45 lbs (20.43 kgs),
- C-2 & C4: 70 lbs (31.78 kgs)

Operating Temperature: 32° to 131° F (0° to 55° C)

Input Connections: Barrier strip on rear

Output Connections: Barrier strip on front and barrier strip on rear

PWM In/Out: Barrier strip on rear

External Synch: Barrier strip on rear

Remote control: DB-9 connector

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## BL1350 Series Model Selection Guide

### OPTIONS:

- **A:** Safety sockets
- **B:** Rubber feet
- **E:** Extended frequency range, 45-1000 Hz
- **H:** Cabinet enclosure for 3 units
- **I:** IEEE-488 interface
- **IR:** RS232 Interface
- **J:** Input: 100/200 VAC single-phase
- **L:** Locking pot
- **MT:** Motor Test available on model B-1, C-2 and C4...see below
- **P:** Parallel wiring for 2- or 3- units
- **R:** Ruggedization
- **S:** Slides
- **T:** Output: 0-150 or 0-300 VAC
- **T2:** Output: 0-34 or 0-135 VAC
- **W:** Wiring for 3-phase configuration

### NOTE 1:
Options I, IR & P are not available for the BL1350pf.

### NOTE 2:
Other input frequencies are available. Contact factory.

### OPTION MT: MOTOR TEST

In addition to all of the specifications of the standard BL Series, the Motor Test includes the following features to meet the requirements for motor testing:
- Unique overload protection prevents output distortion.
- "Soft Start" allows starting motors in "locked rotor" condition by folding back the voltage and slowly increasing it as the motor starts to accelerate.
- Capable of starting motors, which normally requires 140 Amps locked rotor starting currents.
- Capable of supplying a running current up to 14 Amps at 50% duty cycle.

### Model Selection Table

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Voltage</th>
<th>Input (Note2) Frequency</th>
<th>Output Voltage</th>
<th>Isolation Input to Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL1350B-1</td>
<td>115 VAC, +/-10%</td>
<td>47-63 Hz</td>
<td>0 – 135 VAC or 0 – 270 VAC</td>
<td>No</td>
</tr>
<tr>
<td>BL1350C-2</td>
<td>115/230 VAC, +/-10%</td>
<td>47-63 Hz</td>
<td>0 – 135 VAC or 0 – 270 VAC</td>
<td>Yes</td>
</tr>
<tr>
<td>BL1350C-4</td>
<td>120/208 VAC, 3 phase</td>
<td>47-63 Hz</td>
<td>0 – 135 VAC or 0 – 270 VAC</td>
<td>Yes</td>
</tr>
<tr>
<td>BL1350pf</td>
<td>85 – 270 VAC</td>
<td>47-63 Hz</td>
<td>0 – 135 VAC or 0 – 270 VAC</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Diagram

**Rear View**

The BL1350 Series is easily modified to meet your requirements.