

# Behlman

## BL12000-(Input)-RR-(V/F) Railroad Signal Source SPECIFICATIONS

Behlman's RR series of Railroad Signal Sources/Frequency Converters are low cost, highly reliable, switch mode units built for Railroad Signaling. The RR series can be supplied with any single or three-phase input and outputs a clean, regulated AC at a precise frequency from 25 Hz to 250 Hz. These rugged signal sources are built to support the rigors of operating in the harsh environment of Railroad signaling equipment.

### FEATURES

- Input & Output Isolation Transformers
- Short circuit protection with Auto-reset
- Rugged construction
- Optional Alarm contacts and LED indicators
- Optional AAR terminals for input & output



### INPUT

Voltage

**C8:** 120 VAC +/- 10%, Single-phase

**C9:** 240 VAC +/- 10%, Single-phase

**C10:** 480 VAC +/- 10%, Single-phase

Frequency:

57 - 63 Hz. Other frequency available, contact factory.

### OUTPUT

Voltage:

Any Fixed voltage 100 to 480 VAC, single-phase,  
**Transformer Isolated and Floating.**

Frequency:

Any Fixed Frequency from 50 to 250 Hz +/- 0.25 Hz

Power:

12000 VA

Current Crest Factor:

3:1

Power Factor:

100% of rated output into any power factor load

Distortion:

2.0% Typical THD, full resistive load.

Load Regulation:

$\pm 1.0\%$  No Load to Full Load

Line Regulation:

$\pm 0.5\%$  for  $\pm 10\%$  Line Change

Efficiency:

80% typical

### CONTROL CIRCUIT

External Sync:

Synchronize AC output with 120 VAC external input.

## PROTECTIVE CIRCUITS / INDICATORS

Input:	Main circuit breaker and surge arrestors.
Constant Current Mode:	Overload automatically causes voltage fold-back to provide maximum current without distorting output waveform.
Overload Protection:	Short Circuit overload electronically disables output to protect load. <b>Automatic reset upon overload removal.</b>
Thermal Protection:	Internal temperature sensor prevents heat damage.
Output:	Surge arrestors & transformer isolated.
Meters:	Digital Meters for Volts, Amps & Frequency Accuracy, +/- 2% Full Scale / +/- 1 digit.

## MECHANICAL SPECIFICATIONS

Dimensions:	High strength rack cabinet with casters 44"H x 31.6"D x 22.1"W.
Weight:	600lbs
Operating Temperature:	0 to 50° C.
Cooling:	Internal fans.
Input connections:	Screw type terminals.
Output connections:	Screw type terminals.
Sync connections:	Screw type terminals

## OPTIONS:

- A: Alarms**, Contact closure & Indicator
1. Inv OK - Loss of Inverter output.
  2. Sync - Loss of sync input
  3. Lock - Out of phase condition between Inverter output and Sync Input
  4. Over Temp - Over Temperature

**AAR: AAR Terminals**, input and output

**ID: Input Turn on Delay**

## Model Selection:

### **BL12000-C10-RR480/100-A-AAR**

Input: 480 VAC, single-phase, 57-63 hZ

Output: 480 VAC, 100 Hz

Option: Alarms & AAR terminals

#### World Headquarters

80 Cabot Court Hauppauge, NY 11788  
(631)435-0410 (800)874-6727 Fax(631)951-4341

## **Behlman**

e-mail: sales@behlman.com  
Web-site: www.behlman.com

#### West Coast Office

2363 Teller Road Suite 108 Newbury Park , CA 91320  
(805)375-7046 (800)456-2006 Fax(805)498-2147  
BL12K RR .01 Apr 08