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:** 230 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: 3000 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: +1.0% No Load to Full Load
Line Regulation: +0.5% for +/-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. **Automatic reset upon overload removal.**
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: Two high strength 19” rack mount chassis, each: 7.0"H x 22"D.
Weight: 225 lbs
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**

21-00: High strength **Rack Cabinet** with casters 30"H x 31.6"D x 22.1”W.

**Model Selection:**

**BL3100-C8-RR120/100-A-AAR**
Input: 120 VAC, single-phase
Output: 120 VAC, 100 Hz
Option: Alarms & AAR terminals