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:** 5000 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: High strength rack cabinet with casters 30"H x 31.6"D x 22.1"W.
Weight: 400lbs
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:

**BL5100-C9-RR480/100-A-AAR**

Input: 230 VAC, single-phase
Output: 480 VAC, 100 Hz
Option: Alarms & AAR terminals