

BL3100(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: 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: $\pm 1.0\%$ 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

Inverter

| | |
|------------------------|--|
| 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:

BL3100C-8-RR120/100-A-AAR

Input: 120 VAC, single-phase
Output: 120 VAC, 100 Hz
Option: Alarms & AAR terminals



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