

## RR5100-C9-120/100-5291 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 signal 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 with conformal coated boards
- Removable washable air filters
- Alarm contacts and bi-color LED indicators
- AAR terminals for input & output



### INPUT

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

**Frequency:** 57 - 63 Hz

### OUTPUT

**Power:** 5000 VA

**Voltage/current:** **Transformer Isolated**, single-phase, adjustable +/- 10%, with locking device  
**120 VAC @ 42 Amps**

**Frequency:** 100 Hz, +/- 0.25 Hz

**Crest Factor:** 3:1

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

**Distortion:** 2.0% THD typical, full resistive load.

**Load Regulation:** ±1.0% no load to full load

**Line Regulation:** ±0.5% for ±10% line change

### CONTROL CIRCUIT

**External Sync:** Synchronize AC output with 120 VAC external input

## PROTECTIVE CIRCUITS / INDICATORS

**Input:** Main electronic circuit breaker, surge arrestor, under-voltage, over-voltage, over current and electronic soft-start  
**Amber Lamp-** AC input  
**Green Lamp-** Power On  
**Red LED-** Under Voltage (UV) or Over Voltage (OV)  
**Red LED-** Over Current

**Constant Current:** Overload automatically causes voltage fold-back to provide maximum current without distorting output waveform.

**Overload:** Short Circuit overload electronically disables output to protect Inverter with Automatic reset upon overload removal.  
**Red LED-** Fault

**Fan LED:** **Yellow LED-** Fan On

**Thermal:** Internal temperature sensor prevents heat damage

**Output:** surge arrestor

**Meters:** Digital Meters for Volts, Amps & Frequency  
Accuracy, +/-2% full scale  $\pm$  1 digit

## ALARMS - Four form C contacts with bi-color (Green/Red) LED indicators

1. Sync LED-Green (OK) / RED (Fault)
2. Lock LED-Green (OK) / RED (Fault)
3. Inverter LED-Green (OK) / RED (Fault)
4. Temp LED-Green (OK) / RED (Fault)

## MECHANICAL SPECIFICATIONS-Rugged construction with conformal coated boards

**Dimensions:** High strength rack cabinet with casters 30"H x 31.6"D x 22.1"W

**Weight:** 400 lbs

**Operating Temperature:** 0 to 50° C

**Cooling:** Internal fans (Air flow front to rear)

**Air Filter:** Removable, washable filter

**Humidity:** 0 – 95 % Non-condensing

**Connections:**

**Input:** AAR Terminals. **LINE, NEUT, GND**

**Output:** AAR Terminals. **HI, LO, GND**

**Sync:** AAR terminals. **HI, LO**

**Alarms:** AAR terminals. (4) sets **NC, C, NO**

### 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  
RR5100-5291 .03 April 08