

300VA Sine Wave Inverter for Railway Applications RSI 300-FT Series



- Field-proven rugged design
- Conduction/convection cooled - no fan
- Low profile, compact size
- Sinusoidal wave shape
- Full electronic protection

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. It is a mature design with a track record in numerous applications. The DC/DC input stage boosts the input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output. The high frequency conversion enables a compact construction, low weight and high efficiency. The unit has full electronic protection. The input and output are filtered for low noise. Cooling is via baseplate to a cold plate surface and by additional natural convection. The use of components with established reliability results in high MTBF. The unit meets the requirements of EN 50155 for electronic equipment used on railway rolling stock. It is manufactured at our plant under strict quality control. Customized versions are available.

SPECIFICATIONS

<p>Input Voltage 24Vdc (14.4 – 34V) 36Vdc (22 – 51V) 48Vdc (28 – 67V) 72Vdc (43 – 101V) 96Vdc (58 – 135V) 110Vdc (66 – 154V) Consult factory for other inputs</p> <p>Input Protection Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p> <p>Isolation 1500Vdc input to chassis 3000Vdc input to output</p> <p>Standards Designed to meet C22.2 No. 107.1 - 01, UL 458, EN60950 and EN50155</p> <p>Immunity Meets criteria of EN50155 and EN50121-3-2 including EN 61000-4-2 (ESD) EN61000-4-3 (RF Immunity) EN61000-4-4 (Fast transients) EN50155 (Surge) EN61000-4-6 (Conducted Imm.) EN50155 (Voltage Variations)</p> <p>EMI EN55022 Class B and EN50121-3-2 conducted and radiated</p>	<p>Output Voltage 115Vac @60Hz or 400Hz/2.6A rms continuous; or 230Vac @ 50Hz/1.3A rms continuous. Isolated floating output Consult factory for other output requirements</p> <p>Output Wave Form Sinusoidal</p> <p>Total Harmonic Distortion Less than 5% at full load</p> <p>Line Regulation Maximum 0.5%</p> <p>Load Regulation Maximum $\pm 2\%$ from no load to full load.</p> <p>Load Crest Factor Maximum 3.0 at 90% load</p> <p>Output Noise High frequency ripple is less than 500mVrms (20MHz BW)</p> <p>Output Overload Protection Current limiting with short circuit protection Thermal shutdown with automatic recovery in case of insufficient cooling</p>	<p>Output Overvoltage Protection 140Vac (for 115Vac output) or 280Vac (for 230Vac output) by internal supply voltage limiting</p> <p>Efficiency Typically 80% at full load Dependent on input/output combination</p> <p>Operating Temperature -25 to +50°C cold-plate temperature</p> <p>Temperature Drift 0.05% per °C over operating temperature range</p> <p>Cooling Conduction to customer heatsink or chassis and natural convection</p> <p>Environmental Protection Ruggedizing Conformal coating</p> <p>Shock/Vibration IEC 61373 Cat 1 A&B and Cat 2 as a min.</p> <p>Humidity 5 - 95% non-condensing</p> <p>MTBF 150,000 hours at 45 °C Demonstrated MTBF is significantly higher</p>	<p>Indicators None</p> <p>Control Input None</p> <p>Alarm Output Optional output Fail Alarm (Form C)</p> <p>Dimensions FX: 153 x 67 x 357 mm (6" x 2.7" x 14.1") including terminal block and flanges Mounting holes are clear</p> <p>Weight Approx. 2.2 kg (5 lb.)</p> <p>Connections Barrier-type terminal block with 3/8" spacing.</p> <p>RoHS Compliance Fully compliant</p> <p>Warranty Two years subject to application within good engineering practice</p>
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Enhancements to these general specifications and customizing can be accommodated upon request. Specifications subject to change.

Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility



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