

# 500VA, Low Profile, Sine Wave Inverter for Railway Applications RSI 500-XX-FT Series

- Input is filtered to EN 55022 Class B
- Low profile, compact size
- Sinusoidal wave shape
- 500VA output power
- Conduction/convection cooled - no fan
- Full electronic protection
- Field-proven design topology



The RSI 500-XX-FT Series low profile, DC/AC inverter utilizes microprocessor controlled high frequency PWM technology to deliver 500VA sine wave power. It is ruggedized and conformal coated to ensure reliability in railway applications. This inverter is conduction/ convection cooled and rated for operation over a 0°C to 50°C ambient temperature range. A -40°C to +65°C temperature range is available as an option. The RSI 500-XX-FT features full electronic protection, high efficiency and filtering to meet EN55022 Class B EMI requirements.

## SPECIFICATIONS

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| <p><b>Input Voltage</b><br/>110Vdc (77 – 154Vdc)<br/>Consult factory for other inputs</p> <p><b>Input Protection</b><br/>Thermal fuse<br/>Inrush current limiting<br/>Reverse polarity protection</p> <p><b>Isolation</b><br/>Input to chassis: 1500Vdc<br/>Input to output: 3000Vdc<br/>Output to chassis: 2250Vdc</p> <p>Designed to meet<br/>C22.2 No. 107.1 - 01,<br/>UL 458 , EN60950<br/>and EN50155</p> <p><b>Immunity</b><br/>Meets EN50155 and<br/>EN50121-3-2</p> <p><b>EMI</b><br/>EN 55022 Class B</p> | <p><b>Output Voltage</b><br/>115VAC/4.4A continuous at<br/>60Hz or 400Hz; or<br/>230VAC/2.2A continuous at<br/>50Hz, with grounded neutral.<br/>Isolated floating output optional<br/>Consult factory for other outputs</p> <p><b>Wave Form:</b><br/>Sinusoidal</p> <p><b>Total Harmonic Distortion</b><br/>Less than 5% at full load</p> <p><b>Line Regulation</b><br/>Maximum 0.5%</p> <p><b>Load Regulation</b><br/>Maximum ± 6% from no load<br/>to full load. A 2% load regulation<br/>option is available.</p> | <p><b>Output Protection</b><br/>Current limiting with short circuit<br/>protection<br/>Thermal shutdown with automatic<br/>recovery in case of insufficient<br/>cooling</p> <p><b>Efficiency</b><br/>Min 78% at full load</p> <p><b>Load Crest Factor</b><br/>Maximum 3.0 at 90% load</p> <p><b>Operating Temperature Range</b><br/>0°C to +50°C. Wider temperature<br/>range as option.</p> <p><b>Temperature Drift</b><br/>0.05% per °C over operating<br/>temperature range</p> | <p><b>Humidity</b><br/>5 - 95% non-condensing</p> <p><b>Cooling</b><br/>Conduction/ convection</p> <p><b>Environmental Protection</b><br/>Ruggedized, conformal coated</p> <p><b>Dimensions</b><br/>10" x 2.58" x 13.8" enclosed case<br/>(W x H x D)</p> <p><b>Connections</b><br/>Input &amp; output:<br/>Compression-type terminal</p> <p><b>Weight</b><br/>9lb, 4.2kg</p> |
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Warranty: Twelve months subject to application within good engineering practice  
Enhancements to these general specifications can be accommodated upon request  
Specifications are subject to change

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