

# RISI200 DC/AC Pure-Sinewave Inverter



## DC/AC Inverters RISI200 Series Pure-Sinewave

### Description

This rugged industrial sinewave inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 200VA output power. 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 use of 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 heatsinking surface and by natural convection.

The use of components with established reliability results in high MTBF.

The unit is manufactured at our plant under strict quality control.



Pure sinewave



Convection cooling (no fan)



High frequency technology



Light weight, compact size



Full electronic protection



Optional extended temperature range



Optional output fail alarm (Form C)

### Applications

- Railway / Transportation
- Mining
- Oil Rigs
- Military Applications
- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Industrial Controls
- OEM Applications

### Features

- Input is filtered to EN 55022 Class A
- Very low input ripple current
- Compact size, light weight
- Sinusoidal wave shape
- 200VA of output power
- Full electronic protection
- Field-proven design topology

## Specifications ( Specifications Subject to Change Without Notice )

<b>Input Voltage</b>	24VDC, 36VDC, 48VDC, 125VDC +/-15% are standard Other inputs available, please consult factory
<b>Input Protection</b>	Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than specified input min. will not damage unit
<b>Isolation</b>	Compliant to input and output voltages according to the corresponding standards
<b>Standards</b>	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
<b>EMI</b>	EN 55022 Class A as a minimum
<b>Output Voltage</b>	115VAC / 60Hz or 400Hz / 1.7A or 230VAC / 50Hz / 0.86A With isolated floating output (Consult factory for other output requirements)
<b>Wave Form</b>	Sinusoidal
<b>Total Harmonic Distortion</b>	Less than 5% at full load
<b>Line / Load Regulation</b>	Maximum $\pm 2\%$ from no load to full load
<b>Load Crest Factor</b>	Maximum 3.0 at 90% load
<b>Output Noise</b>	High frequency ripple is better than 500mVrms (20MHz BW)
<b>Output Overload Protection</b>	Current limiting with short circuit protection.
<b>Output Overvoltage Protection</b>	Output voltage is limited by internal supply voltage
<b>Efficiency</b>	Input voltage dependent, Typically 80% at full load
<b>Operating Temperature Range</b>	0°C to +50°C for full specification without derating derating linearly 2.5% per °C rise above +50°C to +70°C max. Extended temperature range available
<b>Temperature Drift</b>	0.05% per °C over operating temperature range
<b>Cooling</b>	Conduction to customer heatsink or chassis and natural convection
<b>Environmental Protection</b>	Basic ruggedizing Full ruggedizing and conformal coating as option
<b>Shock/Vibration</b>	IEC 61373 Cat 1 A&B
<b>Humidity</b>	5 - 95% non-condensing
<b>MTBF</b>	130,000 hours at 45°C, demonstrated MTBF is significantly higher
<b>Indicators</b>	None
<b>Control Input</b>	None
<b>Alarm Output</b>	None Optional output fail alarm (Form C)
<b>Package / Dimensions</b>	F3: 132 x 62 x 300 mm including terminal block and flange
<b>Weight</b>	2 Kg
<b>Connections</b>	Barrier-type terminal block with 3/8" spacing
<b>RoHS Compliance</b>	Fully compliant
<b>Warranty</b>	2 years

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