

RISI1000-F Series DC/AC Pure-Sinewave Inverter



Pure sinewave



Convection cooling (no fan)



High frequency technology



Light weight, compact size



Full electronic protection



Extended temperature range



Output fail alarm (Form C)

Applications

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

DC/AC Inverters

RISI1000-F Series Pure-Sinewave

Description

This rugged industrial sinewave inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 1000VA output power. It is a mature design with a track record in hundreds of 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.

Suitable for a wide range of applications, the series features full electronic protection and low output noise.

The unit requires conduction cooling to customer chassis, cabinet or heatsink.

Perforations on the case assist cooling by air convection.

This chassis-mount design is optimized for low component count and high efficiency. The use of components with established reliability results in a high demonstrated MTBF.

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

Versions meeting EN 50155 railway specifications and customized versions are also available.

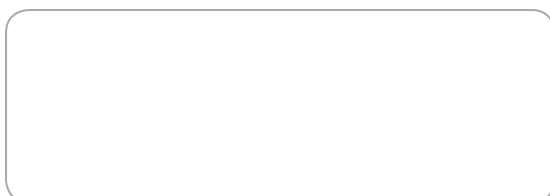
Features

- Rugged construction
- Conduction/convection cooling
- Sinusoidal output voltage
- Filtered input
- Full electronic protection
- Field-proven design topology

Specifications (Specifications Subject to Change Without Notice)

Input Voltage	24VDC, 36VDC, 48VDC, 125VDC, 250VDC +/-15% are standard Other inputs available, please consult factory
Input Protection	Inrush current limiting Varistors Reverse polarity protection Internal safety fuse Lower voltage than specified input min. will not damage unit
Isolation	500Vdc input to chassis for input voltages up to 48Vdc; 1700Vdc input to chassis for input voltage 125Vdc 2250Vdc input to chassis for input voltage 250Vdc 2250Vdc input to output Output neutral is connected to the chassis, internally Floating output as option
Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458 and EN60950
EMI	EN 55022 Class A as a minimum
Output Voltage	115VAC / 60Hz or 400Hz / 8.7A continuous or 230VAC / 50Hz / 4.35A continuous Output neutral is connected to the chassis internally. Isolated floating output optional Consult factory for other outputs
Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Line Regulation	± 0.5% max.
Load Regulation	Maximum ± 6% from no load to full load. A ± 2% load regulation option is available
Load Crest Factor	Maximum 3 at 90% load
Output Noise	High frequency ripple is better than 500mVrms (20MHz BW)
Output Overload Protection	Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of insufficient cooling
Output Overvoltage Protection	140Vac (for 115Vac output) or 280Vac (for 230Vac output) by internal supply voltage limiting
Efficiency	Depends on input and output voltage combination. Typically 76% at full load
Operating Temperature Range	0°C to +50°C cold-plate temperature for full specification without derating derating linearly 2.5% per °C rise above +50°C to +70°C max. Extended temperature range available
Temperature Drift	0.05% per °C over operating temperature range
Cooling	By conduction/convection
Environmental Protection	Basic ruggedizing
Humidity	5 - 95% non-condensing
MTBF	Min. 140,000 hours at 45°C, demonstrated MTBF is significantly higher Fan excluded
Indicators	None
Control Input	None Remote shutdown as option
Alarm Output	Output fail alarm (Form C)
Package / Dimensions	F31: 483 x 67 x 355 mm Including terminal blocks and flanges. Mounting holes are clear
Weight	7kg
Connections	Input/output: Compression-type terminals
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:



RIPEnergy®

The power conversion company



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