RISI100 Series DC/AC Pure-Sinewave Inverter

- Pure sinewave
- Convection cooling (no fan)
- HF — High frequency technology
- Light weight, compact size
- Full electronic protection
- °C — 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

DC/AC Inverters

RISI100 Series Pure-Sinewave

Description

This rugged industrial sinewave inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 100VA 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.

Features

- Input is filtered to EN 55022 Class A
- Very low input ripple current
- Compact size, light weight
- Plug-in or stand-alone package
- Sinusoidal wave shape
- Multiple input and output voltages available
- 100VA of output power
- Full electronic protection
- Field-proven design topology

Specifications *(Specifications Subject to Change Without Notice)*

Input Voltage	24VDC, 36VDC, 48VDC, 125VDC +/-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	Compliant to input and output voltages according to the corresponding standards
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 / 0.86A or 230VAC / 50Hz / 0.43A With isolated floating output (Consult factory for other output requirements)
Wave Form	Sinusoidal
Total Harmonic Distortion	Less than 5% at full load
Line / Load Regulation	Maximum ± 2% from no load to full load
Load Crest Factor	Maximum 3.0 at 90% load
Output Noise	High frequency ripple is better than 500mVrms (20MHz BW)
Output Overload Protection	Current limiting with short circuit protection.
Output Overvoltage Protection	Output voltage is limited by internal supply voltage
Efficiency	Input voltage dependent, Typically 80% at full load
Operating Temperature Range	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
Temperature Drift	0.05% per °C over operating temperature range
Cooling	Stand alone version: conduction via base plate and convection Plug-in version: convection only
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Humidity	5 - 95% non-condensing
MTBF	130,000 hours at 45ºC, demonstrated MTBF is significantly higher
Indicators	None
Control Input	None
Alarm Output	None Optional output fail alarm (Form C)
Package / Dimensions	F1: 114 x 51 x 201 mm including terminal block and flanges optional Plug-in: 3U x 160mm x 10HP (2”)
Weight	0.8 Kg
Connections	Plug-in module: H15 Stand-alone: barrier-type terminal block with 3/8” spacing
RoHS Compliance	Fully compliant
Warranty	2 years

Available from:

RIPEnergy®

The power conversion company

RIPEnergy AG
Wägitalstrasse 24
CH-8854 Siebnen
Switzerland

Ph +41-(0)43-818 53 85
Fax +41-(0)43-818 53 87
www.ripenergy.ch

Version 1.10.12