

## RIPEENERGY The Power Conversion Company

# RISI200 INDUSTRIAL SINEWAVE INVERTER

#### **SERIES RISI200**

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate 200VA 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 use of high frequency conversion enables a compact construction, low weight and high efficiency.

The input and output are filtered for low noise.

Cooling is via baseplate to a heat-sinking surface and by natural convection.

Full electronic protection, generous design headroom and the exclusive use of components with established reliability also contribute to high MTBF.

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

#### **APPLICATIONS**

- Industrial Controls
- Mining
- Oil Rigs
- Steel Mills
- Marine & other rugged environments
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power
- Telecom Power Plants
- Railway / Transportation
- Military Applications
- Manufacturing Location
- OEM Applications

### **FEATURES**

- Sine wave output voltage
- Up to 125Vdc input voltage
- Field-proven rugged design
- Conduction / convection cooled, no fan
- Filtered input and output
- Full electronic protection
- Low profile
- Compact size
- 200VA of output power











Light weight, Full electronic compact size protection



Conduction convection cooled



Optional Extended temperature range



Optional Output fail alarm (Form C)

### **SPECIFICATIONS**

Input Voltage	24Vdc 36Vdc 48Vdc 125Vdc ± 15% are standard Consult factory for other inputs					
Input Protection	Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit					
Isolation	Compliant to input and output voltages according to the corresponding standards					
Output Voltage	230Vac @ 50Hz/0.86A rms continuous or 115Vac @ 60Hz or 400Hz/1.7A rms continuous Isolated floating output Consult factory for other output requirements					
Output Wave Form	Sinusoidal					
Total Harmonic Distortion	Less than 5% at full load					
Load/Line Regulation	± 2% from no load to full load					
Load Crest Factor	3.0 at 90% load					
Output Ripple Noise	High frequency ripple is less than 500mVrms (20MHz BW)					
Efficiency	Typically 80% at full load Dependent on input/output combination					
Output Overload Protection	Current limiting with short circuit protection					
Output Overvoltage Protection	Output voltage is limited by internal supply voltage					

Standards	Designed to meet C22.2 No. 107.1 - 01, UL 458, EN 60950-1, EN 62368-1 and CE					
EMI	EN 55032 Class A with margins					
Operating Temperature	0 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 on request					
Humidity	5 - 95% non-condensing					
Temperature Drift	0.05% per °C over operating temperature range					
Cooling	Conduction to customer heat sink or chassis and natural convection					
Environmental Protection	Basic ruggedizing Full ruggedizing and conformal coating as option					
Shock/Vibration	IEC 61373 Cat 1 A&B					
Dimensions	F3: 132 x 64 x 300 mm (W x H x L) including terminal block and flanges Mounting holes are clear					
Weight	2 Kg					
Connections	12-pole Barrier type terminal block with 3/8" spacing					
MTBF	130,000 hours at 45°C Demonstrated MTBF is significantly higher					
Indicators	None					
Control Input	None					
Alarm output	None Optional output Fail Alarm (Form C)					
RoHS Compliance	Fully compliant					
Warranty	2 years					

#### **Terminal Block Pin-out**

AC OUTPUT				ALARM (OPTION)			DC INPUT				
NOT USED	25	2 ₪	NOT USED	il B	FAIL OPEN	сом	FAIL CLOSED	ı	1	+	+
1	2	3	4	5	6	7	8	9	10	11	12



