DC / AC Sine Wave Inverters: 1000 VA





Features

- Designed for Rail applications to EN 50155
- Sinusoidal output waveform
- 1000VA output power
- Fully encapsulated internal modules, no fans
- Frequency options 50Hz / 60Hz / 400Hz
- Wide range of input options: 24 ~ 125VDC
- Optional output fail alarm on some models
- Low profile 67mm
- Rugged design for harsh environments
- Full electronic protection
- Non standard input voltage options

General Specifications

Input Voltage 24VDC, (15-34) 36VDC (22-51)

> 48VDC (28-67) 72VDC (43-101) 96VDC (58-135) 125VDC (66-154)

Input Protection Inrush current limiting

Internal safety fuse,

Reverse Polarity Protection

Input - Output: 3000vdc Isolation

Input - Chassis: 1500vdc Output - Chassis: 200vdc

EMI EN50121-3-2 Conducted & Radiated

EN50155 (Surge) **Immunity**

EN50121-3-2,

EN61000-4-2 (ESD), EN61000-4-3 (RF) EN61000-4-4 (Fast Transients) EN61000-4-6 (Conducted Immunity) EN50155 (Voltage Variations)

115VAC / 230VAC options **Output voltage**

Output neutral connected to chassis internally.

Isolated / Floating output option.

Output Waveform Sinusoidal

Harmonic

Less than 5% at 100% load.

Distortion

Output Freq. 50Hz, 60Hz, 400Hz options

Load Crest Factor Maximum 3% at 90% load

Output Power 1000VA

Regulation Load: ±2% from 10% to 100% load step.

Line: ±1.0% over input range

Output Noise High Frequency ripple is better than

500mVrms (20MHz BW)

Current limiting with short circuit protection Protection

Self re-setting thermostat for thermal

protection

Output Over voltage

Output voltage is limited by internal supply

Voltage Protection

Efficiency Input voltage / model dependent typically

80% at 100% load

-25°C to +50°C at rated load. **Operating Temp**

Other options on request

Cooling Conduction / Convection cooled

Shock & Vibration Designed to meet IEC61373 Cat 1 A & B

Humidity 5-95% non-condensing **MTBF** >150,000 hrs at 45°C

LED Indicator Optional

Connector Terminal block, other options on request

Dimensions 483 x 68 x 356m (F31) (7kg)

Description

The RSI1KP- is rugged DC/AC inverter with internal modules fully encapsulated and designed for a variety of Rail applications and designed to meet EN 50155.

It uses field proven, microprocessor controlled high frequency PWM technology to generate 1000VA output power with pure sine wave output voltage.

It is a mature design with a track record in numerous Rail & Industrial 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.

Options (may not be available on all combinations)

Output Fail Alarm: voltage free relay contacts **Alarms**

Remote ON / OFF Remote Inhibit

Conformal coating and Ruggedization for use in Ruggedized

harsh environments.

Slow start up option for powering fans **Slow Start**

A variety of terminals / connectors available to suit Connector

special customer requirements

2U x 19in Rack Mount **Rack Mount**

Model No Example:

RSI1KP-4E-FT (48VDC / 230VAC 50Hz)

RSI	Power	Input Vdc	Output	Factory Allocated	
RSI	1KP	2 = 24V	A = 115V/60Hz		
		3 = 36V	E = 230V/50Hz		
		4 = 48V			
		7 = 72V	M = 115V/400Hz		
		9 = 96V			
		5 = 125V			

- Standard input / Output combinations are illustrated.
- Non standard combinations are available on request
- Final Part no will be allocated at time of order to reflect customer specifications and options.

