

Model: RISI1500-4E-3U3-S9774

Summary description: 1500VA Industrial Quality Sinewave Inverter
48Vdc to 230Vac/50Hz



Product description:

This rugged, DC/AC inverter system uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. The inverter is built with internal power modules. The built-in fan provides sufficient airflow for operation without de-rating to the specified temperature. The 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. The use of components with established reliability results in high MTBF. The unit is manufactured at our plant under strict quality control.

Special Features: Conformal coating, snap-on terminal block cover.

SPECIFICATIONS

Input Voltage

48Vdc nominal
42-56Vdc operating range
Input current: 44A max.

Input Protection

Inrush current limiting
Varistors,
Reverse polarity protection
Internal safety fuse
Lower voltage than the specified minimum input will not damage the unit

Isolation

2250Vdc input to chassis/output
Output neutral is connected to the chassis internally

Standards

Designed to meet
C22.2 No. 107.1 – 01,
UL 458 and EN 60950-1

EMI

EN 55022 Class A with margins

Output Voltage

230Vac/50Hz/6.5Arms continuous
Output neutral is internally connected to chassis

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

Maximum $\pm 6\%$ combined from 10% load to full load

Load Crest Factor

Maximum 2 at 90% load

Output Ripple/Noise

Better than 500mVrms (20MHz BW)

Output Overload Protection

Current limiting with short circuit protection. Thermal shutdown with automatic recovery in case of continuous overload or insufficient airflow.

Output Overvoltage Protection

By internal supply voltage limiting at 270Vac output

Efficiency

82% at full load

Operating Temperature Range

0°C to +50°C

Temperature Drift

0.05% per °C over operating temperature range

Cooling

By built-in high quality fan

Environmental Protection

Basic ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 95% non-condensing

MTBF

135,000 hours @ 45°C
(Fan excluded)

Indicators

None

Control Input

None

Alarm Output

Not installed

Package Dimensions (W x H x L)

3U3: 187 x 132 x 407mm
Chassis mount

Weight

7kg

Connections

Input: Terminal block
Output: Terminal block
Snap-on covers included

RoHS Compliance

Compliant

Warranty

Two years subject to application within good engineering practice
Contamination related failures and shipping cost excluded