

Model: RISI500-28M-3U2-S9698

**Summary Description: 500VA Sine Wave Inverter
28Vdc to 115Vac, 400Hz**



Product description:

This rugged, DC/AC inverter system utilizes 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. 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 TB cover

SPECIFICATIONS

Input Voltage

28Vdc nominal
23-33Vdc operating range
Input Current: 28A max

Input Protection

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

Isolation

1700Vdc input to chassis/output
Output neutral is internally connected to chassis

Standards

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

EMI

EN55022 Class A with margins

Output Voltage

115Vac/4.3Arms continuous, 400Hz
Output neutral is internally connected to chassis

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

± 5% from no load to full load

Load Crest Factor

Maximum 2.5 at 70% load

Output Noise

High frequency ripple is less than 500mVrms (20MHz BW)

Output Overload Protection

Current limiting with short circuit protection. At approximately 600VA unit enters cycling mode (hiccup)
Thermal shutdown with automatic recovery in case of continuous overload or insufficient airflow

Output Overvoltage Protection

By internal supply voltage limiting at 140Vac

Efficiency

80% 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

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 95% non-condensing

MTBF

100 000 hours at 45°C (fan excluded)

Indicators

None

Control Input

None

Alarm Output

None

Package/Dimensions

3U2: 132 x 132 x 407mm
Installation by four L-brackets on the sides

Weight

5kg

Connections

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

RoHS Compliance

Compliant

Warranty

Twelve months subject to application within good engineering practice