

CSI24-300-24

DC/AC Inverter 24VDC to 24VAC 300VA



Product description:

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology to generate the required 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 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.

Special Features: Conformal coating

SPECIFICATIONS

Input Voltage

24Vdc nominal
21-30Vdc operating range
Input current: 16A max

Input Protection

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

Isolation

1000Vdc input/output
2250Vdc input to output
1500V output 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

24Vac/12A, 50Hz
300W continuous
Output is floating

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

±3% from no load to full load.

Output Noise

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

Load Crest Factor

2 at 90% load

Output Protection

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

Output Overvoltage Protection

By internal supply voltage limiting at 30Vac

Efficiency

80% at full load

Operating Temperature Range

0°C to +50°C for full specification

Temperature Drift

0.05% per °C over operating temperature range

Cooling

Conduction/convection cooled

Environment Protection

Basic ruggedizing
Conformal coating

Shock/ Vibration

IEC 61373 Cat 1 A&B

Humidity

5 -95% non-condensing

MTBF

130,000 hours at 45°C

Indicators

None

Control Input

None

Alarm Output

Not installed

Package/Dimensions (W x H x L)

FX: 153 x 67 x 357mm
(6" x 2.7" x 14.1")
Mounting holes are clear

Weight

2.2 kg (4.9 lbs)

Connections

12-pole barrier-type terminal block with 3/8" spacing

RoHS compliance

Not required but accepted

Terminal Block Pin-out

AC OUTPUT							DC INPUT				
L1	L2	N/A	N/A	N/A	N/A	N/A	GND	-	-	+	+
1	2	3	4	5	6	7	8	9	10	11	12