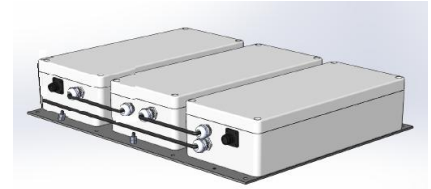


Source Control Document.

Model: CSI 1K-2E-3XD3G-T1741

COSD: XXXX

Summary description: 1000VA, Industrial Quality Sine Wave Inverter
24Vdc to 230Vac/50Hz, in IP66 Enclosure



Product description:

This industrial quality DC/AC inverter utilizes field proven, microprocessor controlled high frequency PWM technology to generate the required output power, with pure sine wave output voltage. It is packaged in three watertight, rugged die-cast aluminum IP66 enclosures. Cooling is by conduction via baseplate to a heat-sinking surface and convection via the walls of the IP66 enclosure. The internal DC/DC module is potted, the inverter module is fully ruggedized and the board is conformal coated to provide additional immunity to shock, vibration and humidity. The DC/DC input stage boosts the input voltage to a higher DC bus voltage, which feeds the DC/AC inverter to generate the required AC output. The input and output are filtered for low noise. Full electronic protection, low component count, large design headroom, and the use of components with established reliability contribute to a high MTBF. The units are manufactured at our plant under strict quality control.

Special Features: Conformal coating, IP66 Enclosure, +60°C

SPECIFICATIONS

Input Voltage

24Vdc nominal
21-29Vdc operating range
Input Current: 56A max total
28A per input module

Input Protection

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

Isolation

1500Vdc input to chassis
2500Vdc input to output
2250Vdc output to chassis
Output neutral is internally connected to chassis

Standards

Designed to meet EN 60950-1 and corresponding standards

EMI

EN 55022 Class A with margins

Output Voltage

230Vac/4.3Arms /50Hz
1000VA continuous
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 10% load to full load

Load Crest Factor

2 at 90% load

Output Noise

Less than 500mVrms (20MHz BW)

Output Protection

Current limiting with short circuit protection
Thermal shutdown with automatic recovery in case of insufficient cooling

Output Overvoltage Protection

By internal supply voltage limiting at 270Vac

Efficiency

85% at full load

Operating Temperature Range

0°C to +60°C for full specification

Temperature Drift

0.05% per °C over operating temperature range

Cooling

Conduction via IP66 enclosure to chassis and by natural convection

Environmental Protection

Basic ruggedizing
Conformal coating
IP66 enclosure

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 100% condensing

MTBF

150,000 hours @45 °C

Indicators

None

Control Input

None

Alarm Output

None

Package/Dimensions (WxHxL)

Three D3 side by side: 406 x 320 x 94mm
(16 x 13.44 x 3.7")

Installed on a 21"x16" size baseplate

Mounting holes are clear

Weight

15 kg (33 lbs))

Connections

Internal 12-pole barrier-type terminal block, 3/8" spacing accessible via cable glands

RoHS Compliance

Not required, but accepted

Warranty

Two years subject to application within good engineering practice

Originated by TS/kv	Date February 12, 2018
Updated by TS	Drawing No./ Rev. SCD T1741A
Approved by TS	