

Source Control Document.

Model: CTP5K-750/3P480-3U7-S5037
COSD: 8N13-1 (8N13-2, 8N13-3, 8N13-4)
Summary Description: 5000VA Industrial Quality, Sine Wave Inverter
 750Vdc to 480Vac (L-L), 3-Phase, 60Hz
Customer Name: GE Energy Storage/USA
Customer Part Number: Same as above



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; an FIB 2000 and three KHH 2000 modules convert the input voltage to an internal DC bus voltage, which feeds the three MSI 2300 output modules. The built-in fans provide 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: 750Vdc input, 3-phase output with neutral, conformal coating, ruggedizing.

SPECIFICATIONS

Input Voltage

750Vdc nominal
 550-850Vdc operating range
 Input current: 11.5A 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

3000Vdc input to chassis/output
 Output neutral is connected to the chassis, internally

Standards

Designed to meet
 C22.2 No. 107.1 – 01.
 UL 458, EN60950-1

EMI

EN55022 Class A with margins

Output Voltage

3-phase 480Vrms (L-L), 60Hz
 6Arms per phase continuous,
 All neutrals are internally connected to chassis in “Y” configuration

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

±6% from 10% load to full load

Load Crest Factor

Maximum 2 at 90% load

Output Noise

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

Output Overload Protection

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

Output Overvoltage Protection

520Vac by internal supply voltage limiting

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 fans

Environmental Protection

Ruggedizing
 Conformal coating

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 95% non-condensing

MTBF

85,000 hours at 45°C
 (Fans excluded)

Indicators

None

Control Input

None

Alarm Output

Not installed

Package Dimensions (WxHxL)

3U7: 432 x 132 x 407mm
 (17” x 5.2” x 16”)
 Chassis mount version

Weight

13.6kg (30lbs)

Connections


Input: 2-pole Phoenix connector 4V-7.62
 Output: 5-pole terminal block with 1/2” spacing

RoHS Compliance

Full compliance

Warranty

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

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