

Source Control Document.

Model: FC4K-E60/E-3U7-S2439

COSD: XXXX

Summary description: 4000VA, Industrial Quality, Frequency Converter
230Vac/60Hz to 230Vac/50Hz

Customer Name: Trenew/CH (KS)

Customer Part Number: Same as above



Product description:

This rugged, DC/AC inverter system uses field proven, microprocessor controlled frequency converter utilizes PWM technology to generate the required output power with pure sine wave output voltage. It is built with internal power modules. Four CAP 500 input modules convert the input voltage to an internal DC bus voltage, which feeds two 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: PFC input, Conformal coating

SPECIFICATIONS

Input Voltage

230Vac nominal, 60Hz
190-264vac operating range
Input Current: 25Arms max.
Input power factor is min. 0.97
at full load for the entire input range
Meets EN61000-3-12

Input Protection

Inrush current limiting
Varistor
Internal safety fuse
Lower voltage than specified
input min. will not damage unit

Isolation

2250Vdc input to chassis
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

EN55022 Class A with margins

Output Voltage

230Vac/17Arms, 50Hz

Output Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line/Load Regulation

± 6% from no load to
full load

Load Crest Factor

Maximum 2 at 90% load

Output Noise

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

Output Overload Protection

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

Output Overvoltage Protection

270Vac 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

Basic Ruggedizing
Conformal coating

Shock/Vibration

IEC 61373 Cat 1 &AB

Humidity

5 – 95% non-condensing

MTBF

110,000 hours at 45 °C

Indicators

None

Control Input

None

Alarm Output

Not installed

Package/Dimensions (WxHxL)

3U7: 432 x 132 x 432mm
(17" x 5.2" x 17")
Chassis mount

Weight

12kg (26 lbs)

Connections

Input: Terminal block
Output: Terminal block


RoHS Compliance

Fully compliant

Warranty

Twelve months subject to application
within good engineering practice
Contamination related failures and
shipping cost excluded

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TS	