

Preliminary

Model: FC 2K8-UE-3U7-U2519

COSD: XXXX

Summary description: 2760VA Industrial Quality Frequency Converter

Universal AC to 230Vac, 50Hz

Customer Name: Thiele KG/Germany

Customer Part Number: Same as above

Product description:

This rugged, AC/AC frequency converter system uses field proven, microprocessor controlled high frequency PWM technology to generate the required output power with pure sine wave output voltage. The frequency converter is built with internal power modules. Five CAP1200 modules convert the input voltage to an internal DC voltage, which feeds two MSI 2300 AC 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

Special Features: Universal AC input with PFC, 35-70Hz range, Conformal coating.

SPECIFICATIONS

Input Voltage

85-264Vac universal, 35-70Hz Input current: 39Arms max.

Power Factor meets EN 61000-3-2, and -12

Input Protection

Inrush current limiting

Varistor

Internal safety fuse

Lower voltage than specified minimum input will not damage the unit

Isolation

2250Vdc input to chassis

Output neutral is internally connected

to chassis

Standards

Designed to meet C22.2 No. 107.1 - 01,

UL 458 and EN 62368-1

Thiele KG • Vorderer Weinberg 26 • D-71522 Backnang • Tel.: +49 (0)7191 3560-0 • Fax.: +49 (0)7191 3560-19 • info @thiele-kg.de • www.thiele-kg.de

EN55032 Class A with margins

Output Voltage

230Vac, 12Arms continuous, 50Hz Output neutral is internally connected to chassis

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

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

 $0 \circ C$ to $+50 \circ C$

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 A&B

Humidity

5 – 95% non-condensing

105,000 hours at 45 °C

Indicators

None

Control Input

None

Alarm Output

Package/Dimensions (WxHxL)

3U7: 432 x 132 x 407mm (17" x 5.2" x 16") Mounting holes are clear

Weight

14kg (31 lbs)

Connections

Input: Terminal block Output: Terminal block

RoHS Compliance

Compliant

Warranty

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

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