

**Model:** FCP600F-EM-F7WT-T4331  
**COSD:** XXXX  
**Summary description:** 600VA Industrial Quality Frequency Converter  
 230Vac to 115Vac/400Hz  
**Customer Name:** Thiele KG/Germany (KS)  
**Customer Part Number:** Same as above



**Product description:**

This rugged AC/AC frequency converter uses field proven, microprocessor controlled high frequency PWM technology FCP1000 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 AC/DC input stage converts the input voltage to a DC bus 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 by built-in high quality fans. 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**

230Vac nominal, 47-63Hz  
 196-264Vac operating range  
 Input current: 3.7Arms max  
 Power factor meets EN61000-3-2

**Input Protection**

Inrush current limiting  
 Varistor  
 Internal safety fuse  
 Lower voltage than the specified minimum will not damage the unit

**Isolation**

2250Vdc input to chassis/output  
 2250Vdc output to chassis

**Standards**

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

**EMI**

EN55032 Class A with margins

**Output Voltage**

115Vac/5Arms continuous, 400Hz  
 600VA  
 Output is floating

**Output Wave Form**

Sinusoidal

**Total Harmonic Distortion**

Less than 5% at full load

**Line/Load Regulation**

±5% 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**

140Vac by internal supply voltage limiting

**Efficiency**

Min. 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 A&B

**Humidity**

5 - 95% non-condensing

**MTBF**

120,000 hours @ 45°C (Fans excluded)  
 Demonstrated MTBF is significantly higher

**Indicators**

None

**Control Input**

None

**Alarm Output**

Not installed

**Package/Dimensions (WxHxL)**

F7W: 280 x 66 x 361mm  
 (11" x 2.6" x 14.2")  
 Mounting holes are clear

**Weight**

Approx. 4kg (9 lbs)

**Connections**


Input: 6-pole terminal block, 3/8" spacing  
 Output: 12-pole terminal block with 3/8" spacing

**RoHS Compliance**

Compliant

**Warranty**

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

Originated by TS/kv	Date March 7, 2019
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