

Model: CSI 50-5EF1T-T7214
COSD: XXXX
Summary Description: 50VA Industrial Quality Sine Wave Inverter
 125Vdc to 230Vac/50Hz
Customer Name: Thiele KG/Germany (KS)
Customer Part Number: Same as above



Product Description:

This rugged DC/AC inverter uses field proven, microprocessor controlled high frequency PWM technology 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 DC/DC input stage boosts the input voltage to a higher DC 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 via base plate to a heat sinking surface and by natural convection. The use of components with established reliability results in high MTBF. The unit is manufactured at our plant under strict quality control.

Special Features : 80-140Vdc input range. Conformal coating

SPECIFICATIONS

Input Voltage

125Vdc nominal
 80 – 140Vdc operating range
 Input current: 1.8A max

Input Protection

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

Isolation

1700Vdc input to chassis
 2250Vdc output to chassis

Standards

Designed to meet EN 60950-1 and related standards

EMI

EN55032 Class A with margins

Output Voltage

230Vac/50Hz /0.2Arms
 50VA continuous
 Output is floating, either terminal can be grounded

Wave Form

Sinusoidal

Total Harmonic Distortion

Less than 5% at full load

Line / Load Regulation

±3% from no load to full load

Load Crest Factor

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 cooling

Output Overvoltage Protection

270V by internal supply voltage limiting

Efficiency

80% at full load

Operating Temperature Range

0°C to 50°C cold plate temperature

Temperature Drift

0.05% per °C over operating temperature range

Cooling

Convection / conduction

Environmental Protection

Basic ruggedizing
 Conformal coating

Shock / Vibration

IEC 61373 Cat 1 A&B

Humidity

5 – 95% non-condensing

MTBF

150,000 hours at 45°C

Indicators

None

Alarm Output

None

Package / Dimensions (W x H x L)

F1: 112 x 51 x 201mm
 (4.4" x 2" x 7.8")
 Mounting holes are clear

Weight

0.8 kg (1.8 lbs)

Connections

9-pole barrier type terminal block with 3/8" spacing

RoHS Compliance

Not required, but accepted

Warranty

Two years subject to application within good engineering practice

Terminal Block Pin-out

VAC OUTPUT					VDC INPUT			
NOT USED	L1	L2	NOT USED	NOT USED	NOT USED	GND	+	-
1	2	3	4	5	6	7	8	9

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