# DC/AC Wandler CSI50-IEF1T

**Technische Daten** 





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Model: CSI 50-1EF1T-U5449

COSD: XXXX

Summary description: 50VA Industrial Quality Sine Wave Inverter

12Vdc to 230Vac, 50Hz

Customer Name: Thiele KG/Germany

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. The DC/DC input stage boosts input voltage to a higher DC voltage, which feeds the DC/AC inverter to generate the required AC output. High frequency conversion enables compact construction, low weight and high efficiency. The unit has full electronic protection. Input and output are filtered for low noise. Cooling is via baseplate to a heatsinking surface and by natural convection. The use of components with established reliability results in a high MTBF. The unit is manufactured at our plant under strict quality control.

Special Features: Conformal coating

### Input Voltage

12Vdc nominal 10.5-15Vdc operating range Input current: 6.5A max.

### **Input Protection**

Reverse polarity by crowbar diode Internal safety fuse Lower voltage than the specified minimum input will not damage the unit

### **Isolation**

500Vdc input to chassis 2250Vdc input to output 2250Vdc output to chassis

### Standards

Designed to meet EN 62368-1 and corresponding standards

### EMI

EN55032 Class A with margins

### **Output Voltage**

230Vac / 0.21Arms, 50Hz 50VA continuos Output is floating

### **Wave Form**

Sinusoidal

**Terminal Block Pin-out** 

Terminar Brock rin out								
AC OUTPUT						DC INPUT		
NOT USED	٦?	១ ?	NOT USED		NOT USED	GND H-	+	ı
1	2	3	4	5	6	7	8	9

### SPECIFICATIONS

# **Total Harmonic Distortion**Less than 5% at full load

# Line/Load Regulation

 $\pm$  3% from no load to full load

### **Load Crest Factor**

2 at 70% 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

78% at full load

### **Operating Temperature Range**

0°C to +50°C baseplate temperature for full specifications

### **Temperature Drift**

0.05% per C over operating temperature range

### Cooling

By conduction via baseplate and natural air convection

### **Environmental Protection**

Basic ruggedizing Conformal coating

### Shock / Vibration

IEC 61373 Cat 1 A&B

### Humidity

5 - 95% non-condensing

### **MTBF**

140,000 hours at 45 C

### Indicators

Green OUTPUT ON LED visible through the cooling slots

### **Control Input**

None

### **Alarm Output**

None

### Package Dimensions (W x H x L)

F1: 112 x 51 x 201mm (4.4" x 2" x 7.9") Mounting holes are clear

### Weight

0.8kg (1.8 lb)

### Connections

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

### **RoHS Compliance**

Compliant

### Warranty

Two years subject to application within good engineering practice



### **USV-Anlagen**

Minimieren Sie Ausfallrisiken mit zuverlässigen USV-Systemen.

**#VERSORGTBESSER** 

### Schaltung & Schutz

Schalten und trennen Sie Ihre Lasten stabil und sicher.

#SCHALTETBESSER

# Stromversorgungen

Versorgen Sie Ihre Verbaucher mit der exakt passenden Spannung.

#'WECHSELTBESSER

### Prüftechnik

Simulieren, analysieren und prüfen Sie mit verlässlichen Komponenten.

#TESTETBESSER

### Netzersatzanlagen

Ihre sichere Stromversorgung bei Blackout mit Notstromsystemen.

#ERSETZTBESSER

### **Service & Support**

Darauf können Sie sich immer zu 100% verlassen: THIELE KG

#HANDELTBESSER

## **Energiespeicherung**

Schalten und trennen Sie Ihre Lasten stabil und sicher.

#SPEICHERTBESSER

### **Custom Design**

Bringen Sie Ihr Projekt weiter voran - mit maßgeschneiderten Lösungen.

#PASSTBESSER



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