

**Model:** CSI 10-24W/70E-F1T-T5855  
**COSD:** XXXX  
**Summary Description:** 10VA, Industrial Quality Sine Wave Inverter  
 24Vdc to 70Vac/50Hz  
**Customer Name:** Thiele KG/Germany (KS)  
**Customer Part No.:** 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 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. Input and output are filtered for low noise. Cooling is 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:** 18-30Vdc input range. 70Vac output voltage. 10VA output power. Conformal coating

**SPECIFICATIONS**

**Input Voltage**

24Vdc nominal  
 18-30Vdc operating range (requested)  
 Input current: 0.8A 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**

500Vdc input to chassis  
 1500Vdc input to output  
 1000Vdc output to chassis

**Standards**

Designed to meet EN 60950-1 and corresponding standards

**EMI**

EN55032 Class A with margins

**Output Voltage**

70Vac, 0.14Arms, 50Hz  
 10VA continuous  
 Output is floating

**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

**Output Overvoltage Protection**

90Vac by internal supply voltage limiting

**Efficiency**

80% at full load

**Operating Temperature Range**

0°C to +50°C for full specifications

**Temperature Drift**

0.05% per °C over operating temperature range

**Cooling**

By natural air convection and conduction via baseplate

**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**

None

**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**

0.7kg (1.5 lb)

**Connections**

9-pole barrier-type terminal block with 3/8" spacing. Snap-on cover included

**RoHS Compliance**


Compliant

**Warranty**

Two years subject to application within good engineering practice

**Terminal Block Pin-Out**

70VA OUTPUT			DC INPUT					
NOT USED	L <sub>1</sub>	L <sub>2</sub>	NOT USED	NOT USED	NOT USED	GND	+	-
1	2	3	4	5	6	7	8	9

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