

Model: FTS 550R-3P480/A-F7WT-U1546
COSD: XXXX
Summary description: 550VA Railway Quality Sine Wave Inverter System
 480Vac, 3-phase to 115Vac/60Hz
Customer Name: Thiele KG/Germany
Customer Part Number: Same as above



Product description:

This rugged, industrial quality sine wave inverter utilizes field-proven FCA500 technology to generate the required output power. Cooling is by high quality built-in fans with which draw air into the unit, and by conduction via the baseplate. All heat generating components are installed on aluminum heatsink blocks which are thermally connected to the base plate. This also provides exceptional mechanical ruggedness. Conformal coating provides protection against humidity and airborne contaminants. Full electronic protection, low component count, large design headrooms and the exclusive use of components with established reliability contribute to a high MTBF. The unit is manufactured at our plant under strict quality control.

Special Features: Conformal coating. Fan cooling

SPECIFICATIONS

Input Voltage
 480Vac, 3-phase, 47-63Hz
 410-550 Vac operating range
 Input current: 2.8 Arms max per phase

Input Protection
 Inrush current limiting
 Varistors
 Internal safety fuses
 Lower voltage than specified
 minimum input will not damage unit

Isolation
 700Vdc input to chassis
 4300Vdc input to output
 Output neutral is connected to the chassis

Standards
 Designed to meet C22.2 No. 107.1 – 01.
 UL 458, UL 508, EN 60950-1, EN50155

Immunity
 Meets criteria as requested in EN50155 and EN50121-3-2 according to the following standards:
 EN 61000-4-2 (ESD)
 EN 61000-4-3 (RF Immunity)
 EN 61000-4-4 (Fast Transients)
 EN 50155 (Surge)
 EN 61000-4-6 (Conducted Immunity)
 EN 50155 (Voltage Variations)

EMI
 EN50121-3-2

Output Voltage
 115Vac/4.7Arms continuous, 60Hz
 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
 140V by internal supply voltage limiting

Efficiency
 80% at full load

Operating Temperature Range
 -25°C to +55°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
 110,000 hours at 45°C (Fans excluded)

Indicators
 None

Control Input
 None

Alarm Output
 None

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

Weight
 Approx. 4.5kg (10 lbs)

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

RoHS Compliance
 Compliant

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

Drawn by TS/lp	Date Feb 28, 2022
Checked by TS	Drawing No./ Rev. SCD U1546A
Approved by TS	