This specification describes a 30 KVA precision Frequency Converter designed specifically for supplying high reliability 25 Hz rail signal power. It may be operated in a stand-alone mode or in conjunction with another like unit and a TM30 transfer module in a redundant mode. It provides a precisely controlled 130 VAC, 25 Hz output with levels of redundancy to insure a high level of reliability while in a harsh environment.

**INPUT**

Voltage: Primary and secondary input of 480 VAC, +/- 10% single phase. Upon failure of the primary source the system will automatically switch to the secondary source. Upon return of the primary source the system will automatically switch back to the primary source. An adjustable time delay (1 to 15 minutes) is provided to assure primary source stability. A mode switch is provided to allow the described automatic operation or manual selection of either source. LED indicators and contacts are provided to indicate inputs present and status.

Frequency: 47 - 63 Hz.

**OUTPUT**

Power: 30,000 VA
Voltage: 130 VAC, single phase 3 wire. Output is isolated and neutral may be grounded.
Frequency: 25 Hz +/- 0.01 Hz
Current: 230 Amps
Overload Current: Up to 110% indefinitely.
Power Factor: 100% of rated output into any power factor load.
Distortion: 3.0% typical THD @ full load for linear loads.
Load Regulation: ∀0.5% No Load to Full Load.
Line Regulation: ∀0.1% for ∀10% Line Change
Efficiency: 85 – 90% @ full load.
Line Drop Compensation: Adjustable, +/- 10%, to compensate for output line losses.

**PROTECTIVE CIRCUITS**

Input Protection: Electronic circuit breaker.
Constant Current Mode: Overload automatically causes voltage fold back to provide maximum current without distorting output waveform.
Short Circuit Protection: Short Circuit electronically latches output open to protect load. Power restored by recycling circuit breaker.
Thermal Protection: Internal temperature sensor prevents heat damage by shutting unit off.
CONTROLS / INDICATORS
Push to Start
Push to Stop
Three (3) DMM’s: VOLTS, AMPS, FREQ
Input power select: Three position switch, Auto, 1 or 2
UV/OV transfer
Three LED’s: Constant Current, Overtemp, Overload Latch
Line Drop Compensation
Output: On/Off

MECHANICAL SPECIFICATIONS
Dimensions: 63"H x 31.6"D x 22.1"W, including fork lift base.
Weight: 1100 lbs.
Cooling: Forced air, front intake, rear exhaust with reusable air filters.
Requires 12” minimum clearance at rear.
Operating Temperature: -20 to 40°C.
Storage Temperature: -20 to 70°C
Humidity: 0-95% RH non-condensing.
Input Connections: Pressure type terminals.
Output Connections: Pressure type terminals.