

## AC 1000W POWER SUPPLY

## POWER INVERTER



Espey developed this power supply for a major locomotive manufacturer. The high reliability power converter was designed and tested for extreme locomotive environmental conditions. This power supply converts the 25-85 VDC locomotive battery to a dual regulated 100 VAC, 25 kHz square waves with a power rating of 1300 W for each output. These outputs drive multiple, distributed loads consisting of isolated, high power gate drivers for 1000 HP three phase motors.

### Features:

- Output current limit protection
- 20% design margin on power and current ratings
- Power enable control signal
- Soft-start with battery voltage application or enable control signal
- Qualified to locomotive environment extremes
- Qualified for EMI
- High Reliability Design

### Specifications

#### *ELECTRICAL SPECIFICATIONS*

- Input Voltage: 25 - 85 VDC
- Output Voltage: Dual 100 VAC RMS
- Output Frequency: 25 kHz + 10%
- Output Power: 1300 Watts continuous/channel
- Output Current: Saw-tooth 60 Amps/channel, pk, 1 ms
- Regulation, Line & Load: +/- 5%
- Efficiency: 75 % minimum

#### *MECHANICAL SPECIFICATIONS*

- Weight: 40 pounds maximum
- Size: 10" X 10" X 15"
- External forced air-cooled
- Aluminum extrusion with integral heat sink