



# Aircraft Power Converter Specification Data Sheet

## 28VS50Y-30



<b>Converter:</b>	50 Amperes
<b>Rating:</b>	Continuous Duty, High Surge Current and Overload
<b>Overload:</b>	100 Amperes (200%) for 60 Seconds and 250 Amperes (500%) for 7 Seconds
<b>Cooling:</b>	Self-cooled, Fan
<b>Input:</b>	3 Phase 115/200 VAC 380-420 Hz 5.0 Amperes
<b>Output:</b>	28 Volts DC (Nominal) Positive/Negative Studs: 1/4-28 UNF
<b>Efficiency:</b>	> 82.5% (Full Load)
<b>Power Factor:</b>	> 0.95 (Full Load)
<b>Weight:</b>	6.65 lbs Maximum
<b>Size:</b>	Overall Dimensions L 9.5 X W 4.6 X H 4.2 inches maximum
<b>Receptacle Type:</b>	MS27472E16B8P (Pins A, B, C & D are Phase A, B, C & Neutral)
<b>Thermal Sensor:</b>	Pin F "High" is Normal and "Low" is Overheat, Pin G is reference (-)

**Design Specification:** General Specification for Aircraft Converters MIL-C-7115F

1. Ripple Voltage Maximum(nominal input conditions):
  - a.  $0.5 V_{pk-pk}$  One Half of Rated Load
  - b.  $0.7 V_{pk-pk}$  Full Rated Load
2. Transient Voltage Surge Suppression/Surge Protection Device (Clamping Voltage)  
40 Volts DC maximum peak output at full load during 180 VAC 50 msec input

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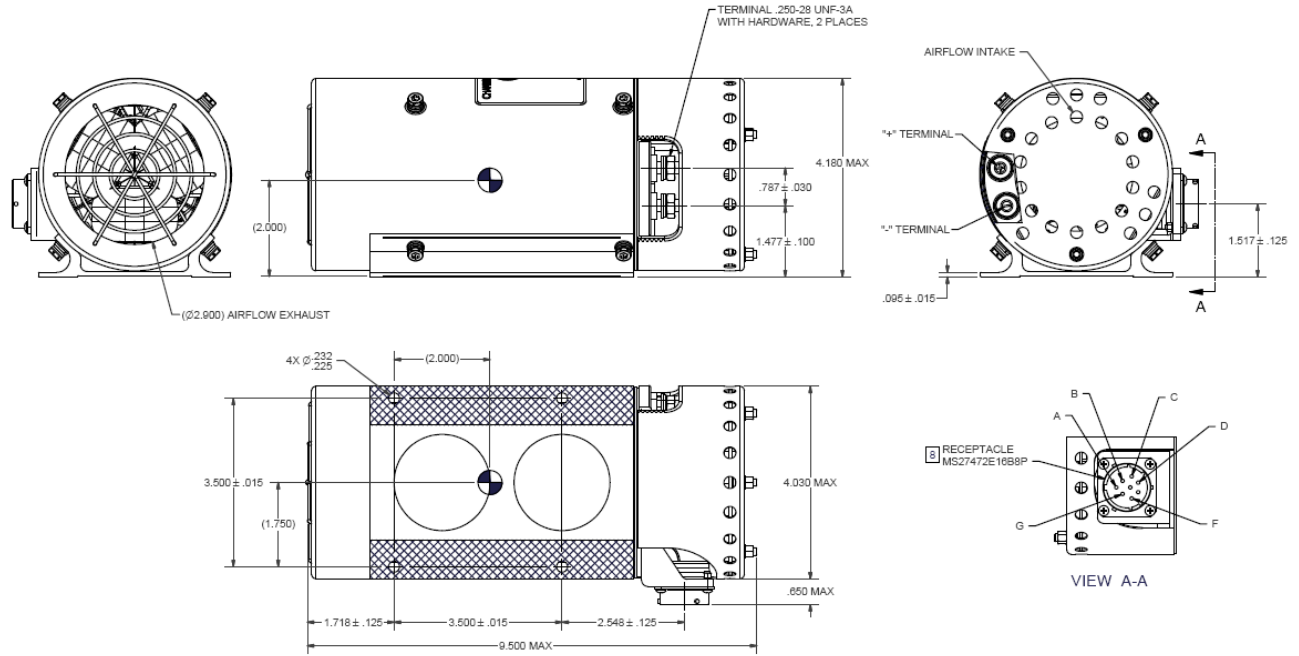


Figure 1: Installation Drawing

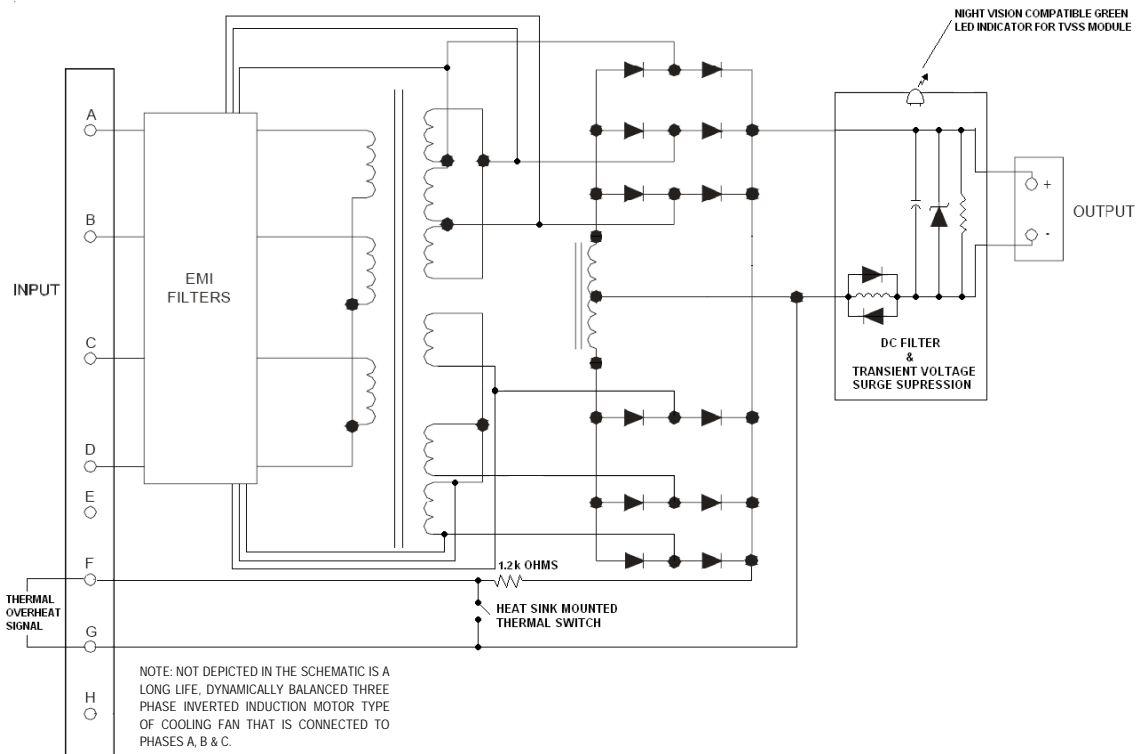


Figure 2: Schematic

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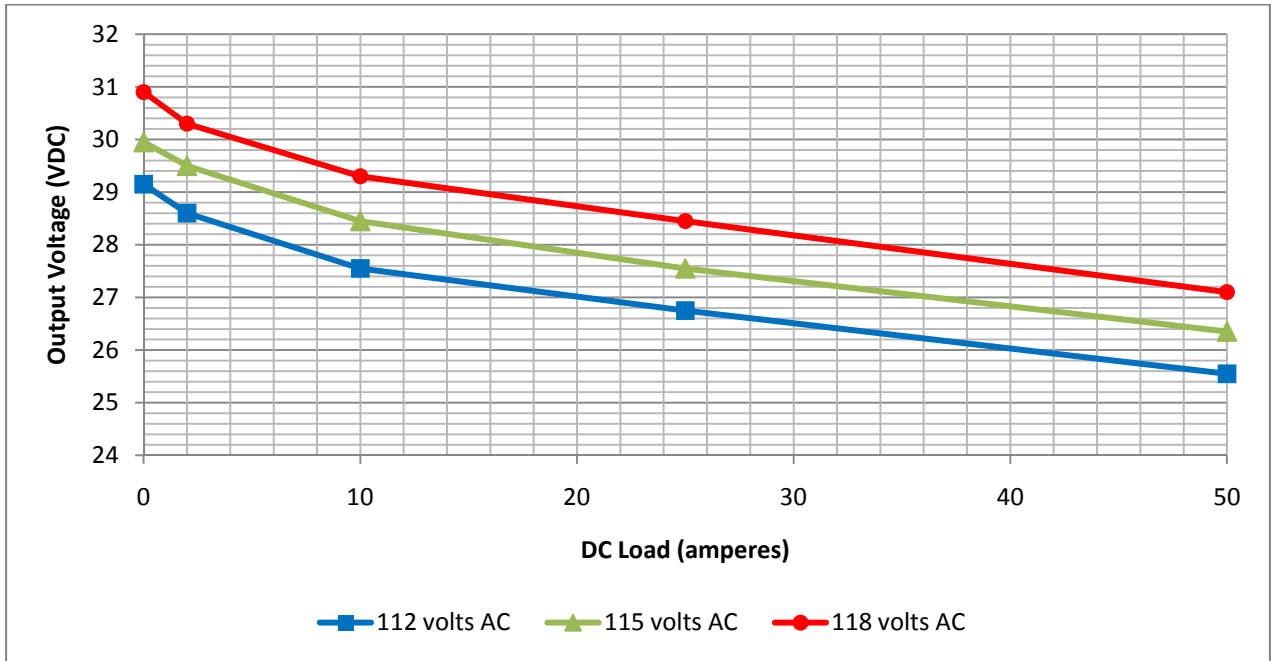


Figure 3: Voltage Regulation

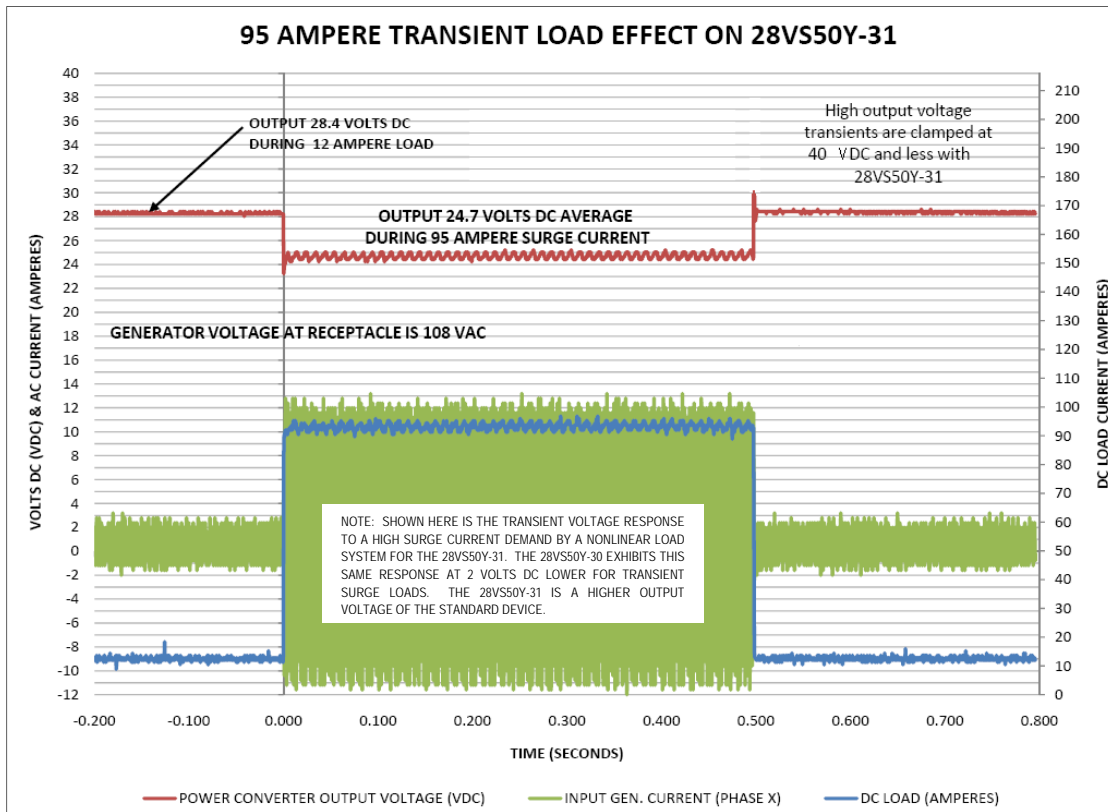


Figure 4: Transient Response to Surge Load

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