AC Generator Model 5177

Model 5177 is a two bearing self-contained 6 phase homopolar inductor generator designed for minimum ripple. The separate Power Conditioning Unit (PCU) contains a parallel bridge rectifier and a field-control voltage regulator. The generator is adapted to a small 700 pound thrust turbine engine used in an aerial unmanned target vehicle.



The PCU has the following specifications:

- Output power is 1.2 KW
- Voltage is 28 VDC +/- VDC
- Ripple is 2V peak
- Cooling occurs .8 lbs/ min @ 89 C
- Compliance: MIL-STD-704

Specifications

Voltage:

22 V

Speed Range:

20,510 to 29,300 RPM

Overspeed:

35,000 RPM for 5 minutes

Efficiency:

84% @ rated load

Frequency:

1025 to 1465 Hz

Weight:

9.2 lbs

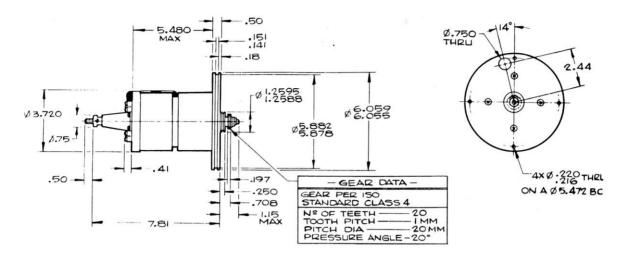
Ambient:

-54 C to 104 C

Power factor:

.95 LAG to unity





GENERATOR

