

**DATA SHEET**

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| <b>SPECIFICATIONS</b> | <b>MODEL #5571 AC GENERATOR<br/>25KVA - 12,000 RPM</b> |
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**VOLTAGE:** 115/200 VAC  
**PHASE:** THREE  
**FREQUENCY:** 400 HZ  
**POWER FACTOR:** 0.85 LAGGING TO UNITY  
**REGULATION:** 114 TO 116 VRMS LINE to NEUTRAL

**SPEED RANGE:** 9,420-12,400 RPM  
**OVERSPEED:** 14,132 RPM  
**CONTINUOUS RATING:** 25 KVA CONTINUOUS

**OVERLOADS:** 20.5 KVA 9900 - 9420 RPM  
 30 KVA 5.0 MINUTES  
 45 KVA 20 SECONDS  
 50 KVA 7.0 SECONDS  
 3 PER UNIT 7.0 SECONDS MIN.

**EFFICIENCY:** 85% AT RATED LOAD

**COOLING:** INTERNAL FAM  
**AMBIENT:** -55°C to +71°C

**WEIGHT:** GEN 33.9 LBS  
 GCU 3.0 LBS  
 CTA 0.5 LBS

**PROTECTIVE FUNCTIONS:** OVERVOLTAGE  
 UNDERVOLTAGE UNDER  
 FREQUENCY FEEDER FAULT  
 OVERCURRENT CURRENT  
 LIMITING OPEN POINT OF  
 REGULATION  
 PHASE SEQUENCE DETECTION  
 BUILT IN TEST

**COMPLIANCE:** MIL-G-21480  
 DO-160C MIL-E-5400 MIL-  
 STD-454



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| <b>DESCRIPTION</b> |
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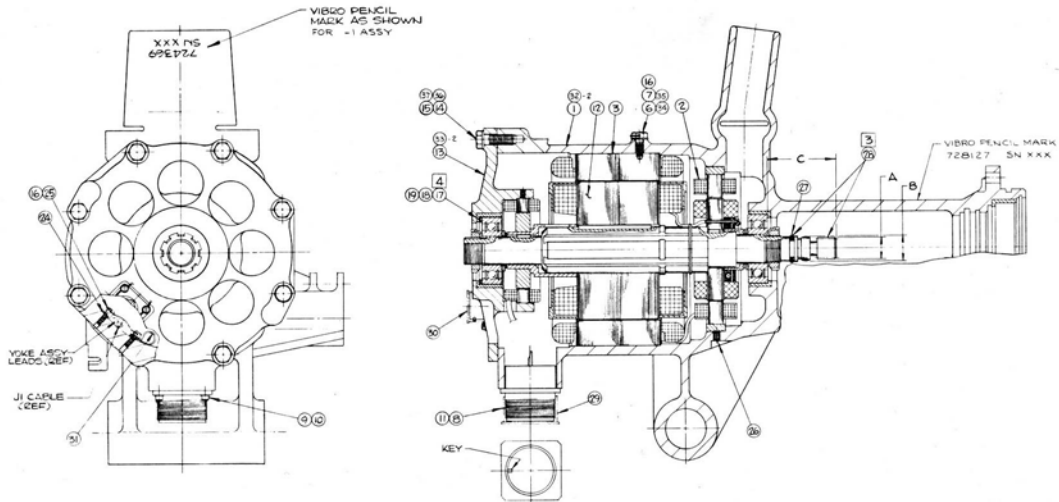
Model 5571 Electrical Power Generation System consists of an AC generator, a generator control unit (GCU) and a remote current transformer assembly (CTA).

This wide speed range, variable frequency system is used on the BA609 tilt rotor aircraft primarily as a power source for the rotor and nacelle de-icers.

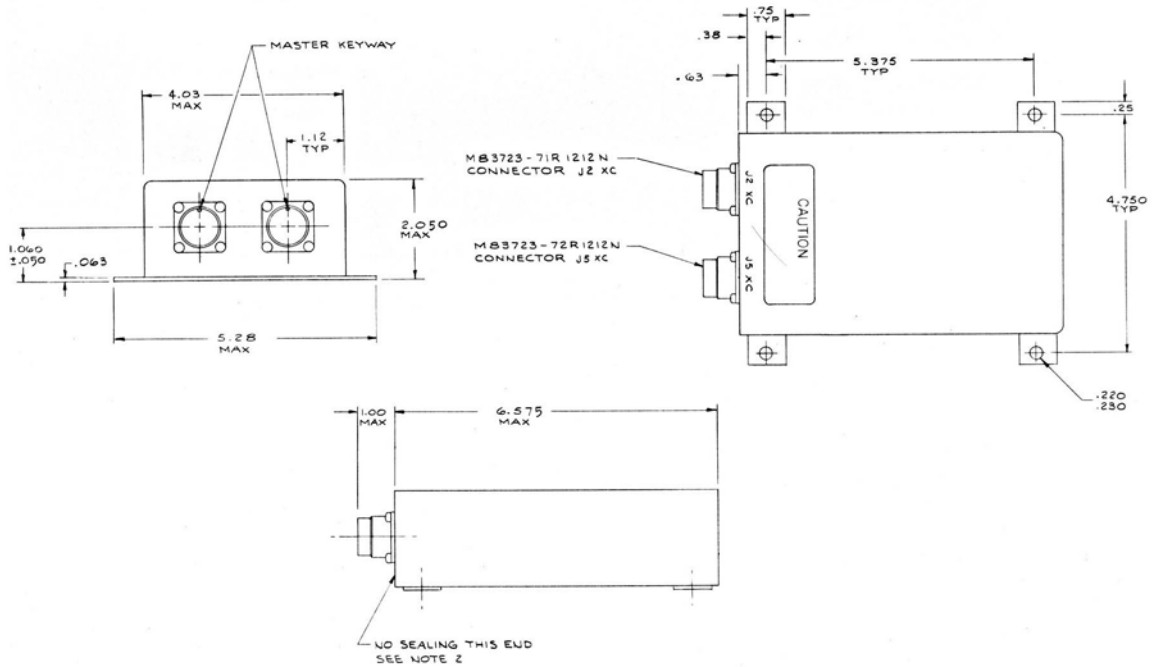
The generator is configured as a three-phase, four-wire AC machine with an exciter and integral PMG to achieve brushless operation, self-excitation and precise voltage control. The PMG is oversized, featuring two, thermally isolated 3-phase windings, one used for generator excitation and the other as an independent source for the flight control computer. The GCU regulates the voltage for the generator, monitors system health and performance, controls the system power contactors and provides protective functions, as listed.

The current transformer assembly (CTA) is used by the system to protect against feeder faults and differential currents.

**OUTLINE DETAILS**



**GENERATOR**



**GENERATOR CONTROL UNIT**