AC Generator Model 5571

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.



Specifications

Voltage:

115/200 VAC

Speed Range:

9420 to 12,400 RPM

Overspeed:

14,132 RPM

Efficiency:

85% at rated load

Rating:

25 KVA continuous

Cooling:

Internal fan

Frequency:

400 HZ

Weight:

37.4 lbs

Ambient:

-55 C to 71 C

Compliance:

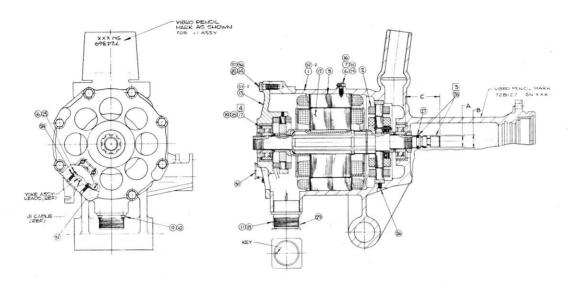
MIL-G-21480 MIL-E-5400

MIL-STD-454

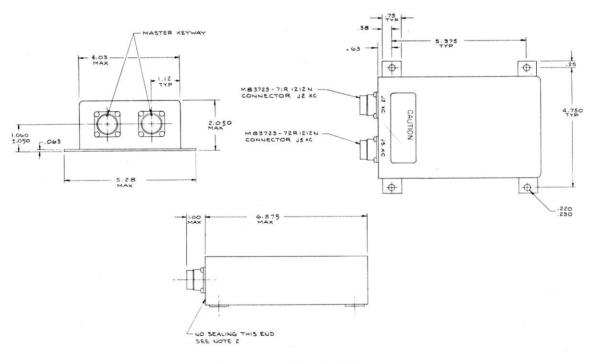
DO-160C

Power factor:

.85 LAG to unity



GENERATOR



GENERATOR CONTROL UNIT

