

**DATA SHEET**
**SPECIFICATIONS**
**MODEL #5650  
DC GENERATOR  
12 KW – 12,000 RPM**

**OUTPUT VOLTAGE:** 30 VDC

**SPEED RANGE:** 5,500 – 12,000 RPM  
**OVERSPEED:** 14,400 RPM

**RATING:**  
**CONTINUOUS:** 400 A  
**OVERLOAD:** 600A, 2 MINUTES  
 800A, 5 SECONDS

**EFFICIENCY:** 70% MIN AT RATED POWER



**COOLING:** SELF-COOLED, INTERNAL FAN AND  
**AIR FLOW:** BLAST COOLED  
 ADE TO DE \*

**AMBIENT:** -54°C TO +71°C  
**ALTITUDE:** 0 TO 51,000 FT  
**BEARINGS:** TWO + TWO \*\*

**WEIGHT:** GEN: 29.0 LBS  
 GCU: 2.7 LBS

**PROTECTIVE FUNCTIONS:** OVERVOLTAGE  
 OVERCURRENT  
 FEEDER FAULT  
 FAILED DIODE DETECTION  
 FAILED BEARING DETECTION

**COMPLIANCE:** DO-160D  
 MIL-G-6162  
 MIL-STD-454  
 MIL-STD-704  
 MIL-STD-5400  
 MIL-STD-461

**DESCRIPTION**

MODEL 5650 comprises a 12 KW Generator and complementary Generator Control Unit (GCU).

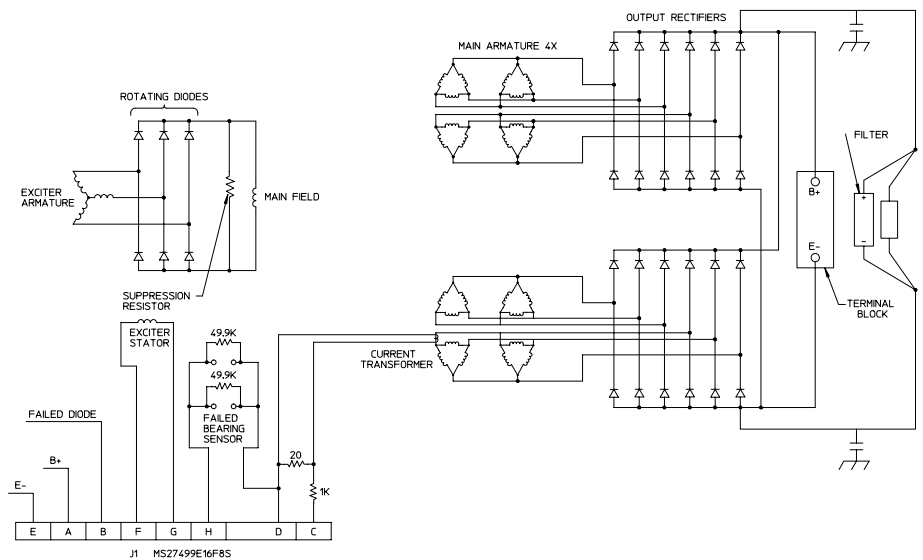
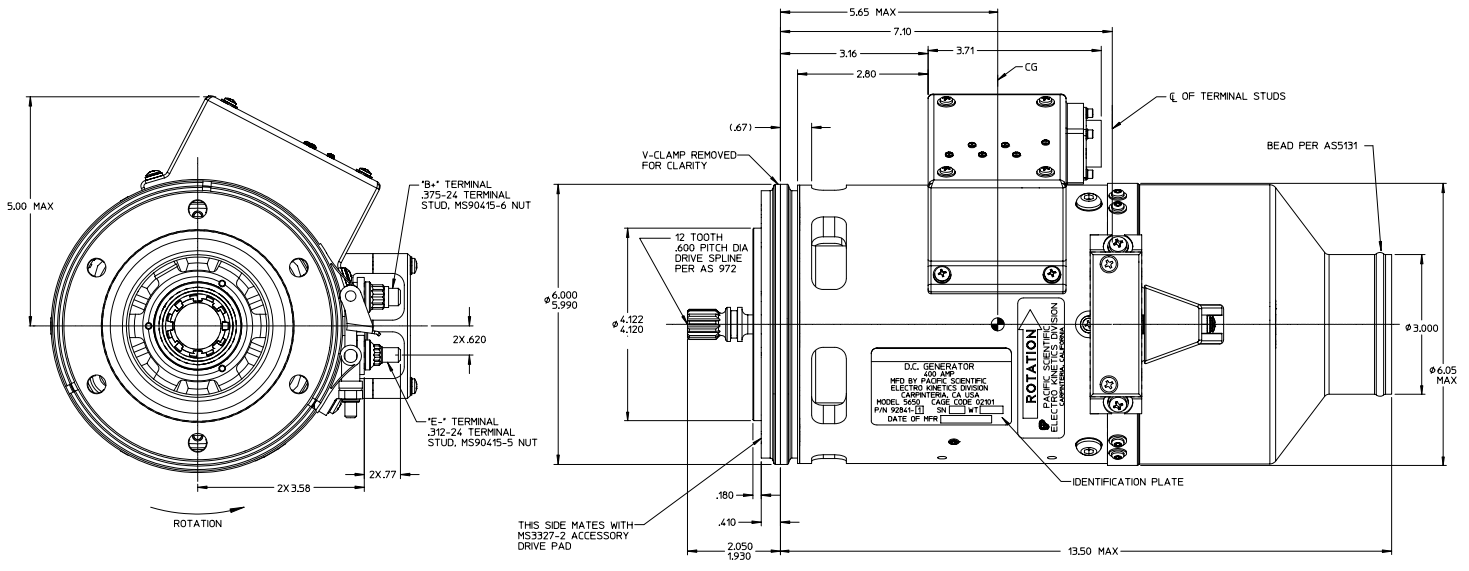
The generator is a brushless, self-exciting unit that provides main DC power to a business jet, over a speed range of 5,500-12,000 RPM. This is a commercial grade unit which features long service life, an auxiliary bearing system, and has provisions for blast air cooling.

The GCU regulates the voltage of the generator. Regulation is accomplished by pulse width modulating the control field. The GCU also implements the protective and supervisory functions as listed in the specification table. The GCU features full lightning and HIRF protection per the latest DO-160 levels.

\* ANTI DRIVE END TO DRIVE END

\*\*AUXILIARY BEARING SYSTEM AND BEARING FAILURE INDICATION

**OUTLINE DETAILS**



GENERATOR SCHEMATIC DIAGRAM

