

DATA SHEET
SPECIFICATIONS
**MODEL #5610
DC GENERATOR
12 KW – 8000 RPM**

OUTPUT VOLTAGE: 30 VDC

SPEED RANGE: 5,500-9,000 RPM
OVERSPEED: 10,000 RPM

RATING:
CONTINUOUS 400 A
OVERLOAD 600 A, 2 MINUTES
EFFICIENCY: 800 A, 5 SECONDS
70% MIN AT RATED POWER

COOLING: SELF-COOLED, INTERNAL FAN
AIR FLOW: DE TO ADE*
AMBIENT: -54°C TO +71° C
ALTITUDE: 0 TO 25,000 FT
BEARINGS: TWO + TWO**

WEIGHT: GEN: 29.0 LBS
GCU: 2.7 LBS

PROTECTIVE FUNCTIONS: OVERVOLTAGE
UNDERVOLTAGE
OVERCURRENT
UNDERSPEED DETECTION
SHORTED FIELD PROTECTION
OPEN POR DETECTION
FAILED DIODE DETECTION
FAILED BEARING DETECTION
CURRENT LIMITING

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


DESCRIPTION

Model 5610 comprises a 12 KW Generator and complementary Generator Control Unit (GCU).

The generator is a brushless, self-exciting, three-in-one unit that provides main DC power to the Bell 609 Tilt Rotor Aircraft over a speed range of 5,500-9,400 RPM. This is a commercial grade unit which features long life, auxiliary bearings, reverse air flow, and excess flow capacity to aerate the mid-wing compartment

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 also features end-to-end self-test (BIT) and full lightning and HIRF protection per the latest DO-160 levels.

* DRIVE END TO ANTI DRIVE END

** AUXILIARY BEARING SYSTEM AND BEARING FAILURE INDICATION

OUTLINE DETAILS

