

DATA SHEET

SPECIFICATIONS	MODEL #5142 AC GENERATOR 5 KVA - 12000 RPM
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VOLTAGE: 120/208 VAC
PHASE: THREE
FREQUENCY: 400 HZ
POWER FACTOR: 0.75 LAG TO UNITY
REGULATION: ±2.5 VAC

SPEED RANGE: 10,800-13,200 RPM
OVERSPEED: 15,000 RPM
CONTINUOUS RATING: 5 KVA
EFFICIENCY: 87% AT RATED LOAD

COOLING: AIR
AMBIENT: 0 TO +185° F
ALTITUDE: 0 TO 35,000 FT

WEIGHT: GEN: 18.0 LBS
 GCU: 2.25 LBS
 CT: 0.25 LBS

PROTECTIVE FUNCTIONS: OVERVOLTAGE
 UNDERVOLTAGE
 OVERLOAD
 OVERFREQUENCY
 CURRENT LIMITING
 DIFFERENTIAL FAULT

COMPLIANCE: MIL-STD-704B
 MIL-STD-461A
 MIL-G-21480
 MIL-G-6099(1)



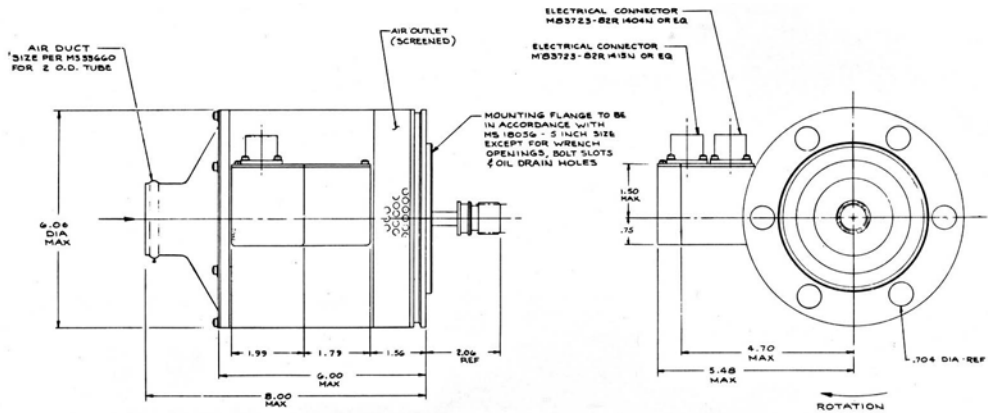
DESCRIPTION

Model 5142 brushless generator is a wound field, salient pole, synchronous machine with its own permanent magnet section for complete self-excitation.

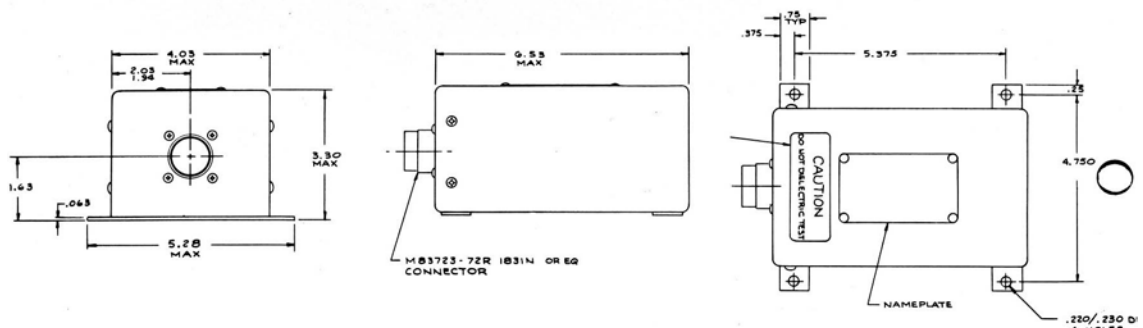
The separate generator control unit contains a pulse width modulated regulator. Together with the current transformer, the GCU provides all the protective functions as listed.

The generator system was developed for the Falcon Jet, Guardian HU-25A aircraft.

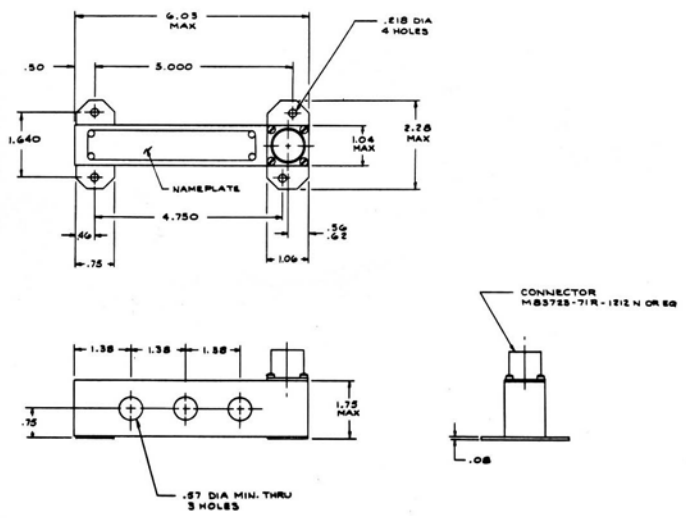
OUTLINE DETAILS



GENERATOR



GENERATOR CONTROL UNIT



CURRENT TRANSFORMER