

DATA SHEET
SPECIFICATIONS
**MODEL #5066
DC GENERATOR
4KW – 30,000 RPM**

DUAL OUTPUT VOLTAGE: OUTPUT NO. 1:
27 VDC TO 29 VDC
OUTPUT NO. 2:
24 VDC TO 40 VDC

SPEED RANGE: 29,000 - 41,000 RPM
OVERSPEED: 45,000 RPM
CONTINUOUS RATING: 4 KW TOTAL

OVERLOAD: 75A PER OUTPUT
EFFICIENCY: 85% AT RATED LOAD

COOLING: BLAST AIR
AMBIENT: -54°C TO +75°C
ALTITUDE: 0 TO 30,000 FT

WEIGHT: 16 LBS (SYSTEM)

COMPLIANCE: MIL-STD 704
MIL-STD-810
MIL-STD-461B

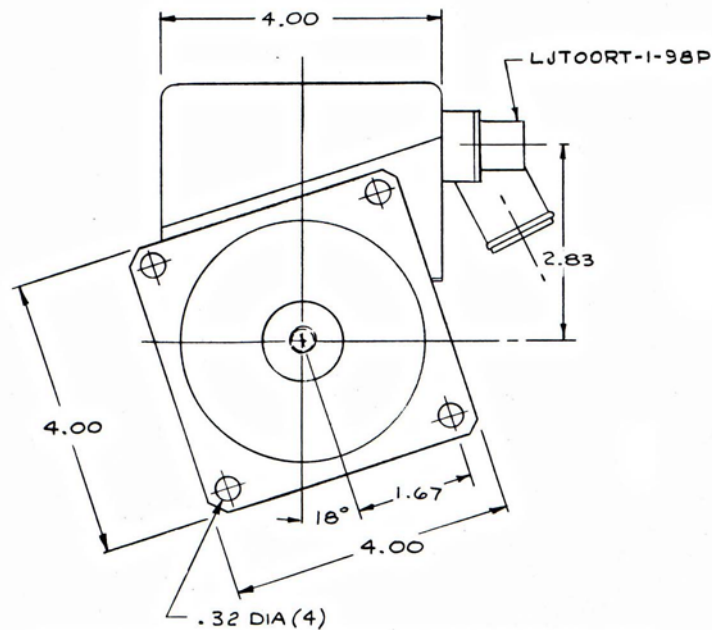
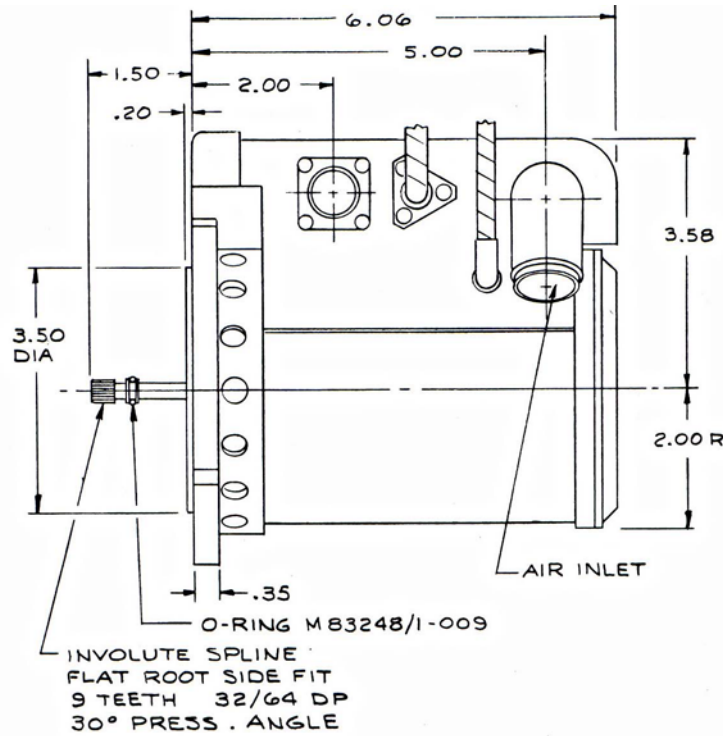

DESCRIPTION

Model 5066 brushless generator system was developed to satisfy the unique load profiles of the U.S. Navy Tomahawk Cruise Missile. The system comprises a generator and a power conditioning unit (PCU) integrated within a single unit.

The generator utilizes high energy Samarium Cobalt magnets complemented by a homopolar inductor section for voltage control over the required speed and load profile. The dual outputs are electrically isolated from each other, thereby preventing cross interaction between loads. The generator is pad-driven by the Williams International F107 engine.

The integral PCU provides the system with rectification, filtering and voltage regulation functions.

OUTLINE DETAILS



GENERATOR / POWER CONDITIONING UNIT-SET