## DC Generator Model 5066

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.



## **Specifications**

**Dual output voltage:** 

27 VDC to 29 VDC 24 VDC to 40 VDC

**Speed Range:** 

29,000 to 41,000 RPM

Overspeed:

45,000 RPM

Efficiency:

85% at rated load

Rating:

4 KW

Cooling:

Blast air

Overload

75 A per output

Weight:

16.0 lbs

**Ambient:** 

-54 C to 75 C

Altitude:

o to 30,000 ft

Compliance:

MIL-STD-704 MIL-STD-810 MIL-STD-461B





