DC Generator
Model 5287

Model 5287 include a generator and a converter/regulator. The 270 VAC generator is an oil cooled, brushless, self-contained hybrid generator utilizing high-energy permanent magnets and a homopolar inductor section for voltage regulation. This high-speed machine provides three-phase 270 VAC to the converter/regulator.

The converter/regulator rectifies and conditions the alternator power for dual outputs of 28 VDC and 135 VDC. It features a pulse-width modulated field regulator that controls the generator output voltage, based on the 28 VDC output. The 135 VDC output is thereby semi-regulated. The converter/regulator also controls the system contactors for both outputs, in addition to providing various system protective functions.

Specifications

**Dual output voltage:**
- 27.5 VDC to 28.5 VDC
- 125 VDC to 145 VDC

**Speed Range:**
- 23,250 to 40,000 RPM

**Overspeed:**
- 44,000 RPM

**Efficiency:**
- 85% at rated load

**Rating:**
- 10 KVA

**Weight:**
- 68.0 lbs

**Cooling:**
- Fluid cooling

**Altitude:**
- 0 to 70,000 ft

**Compliance:**
- MIL-STD-704B
- MIL-STD-810
- MIL-STD-461B
- MIL-STD-462
- MIL-G-6162B