

**DATA SHEET**
**SPECIFICATIONS**
**MODEL #5638  
AC GENERATOR  
7 KVA - 12,000 RPM**

<b>VOLTAGE:</b>	115/200 VAC
<b>PHASE:</b>	THREE
<b>FREQUENCY:</b>	400 HZ
<b>POWER FACTOR:</b>	0.75 LAG TO UNITY
<b>REGULATION:</b>	±2.5V
<b>SPEED RANGE:</b>	12,000 RPM
<b>OVERSPEED:</b>	15,000 RPM FOR 10 MIN
<b>RATING:</b>	7 KVA
<b>CONTINUOUS OVERLOADS:</b>	10.5 KVA 2.0 MINUTES 14.0 KVA 5.0 SECONDS 3/UNIT SC CURRENT
<b>EFFICIENCY:</b>	73% MIN – RATED LOAD
<b>COOLING:</b>	SELF-COOLED INTERNAL FAN
<b>AMBIENT:</b>	-54°C TO +70°C
<b>ALTITUDE:</b>	0 TO 50,000 FT
<b>BEARING LIFE:</b>	2,000 HOURS
<b>WEIGHT:</b>	GEN 16.5 LBS MAX GCU 1.3 LBS MAX
<b>PROTECTIVE FUNCTIONS:</b>	UNDERVOLTAGE
<b>COMPLIANCE:</b>	MIL-STD-704D MIL-STD-461 MIL-STD-810


**DESCRIPTION**

Model 5638 Electrical Power Generator System comprises an AC generator and a generator control unit. The system is used to provide emergency electrical power for the KTX-2 fighter/trainer aircraft.

The air-cooled generator is a brushless, wound rotor, self excited machine. An integrated PMG supplies power for one external contactor and for generator excitation.

The GCU regulates the output voltage of the generator and implements undervoltage protection.