Package Arrangement

Gas Turbine
- Saturn® 20 Industrial, Single-Shaft
- Axial Compressor – 8 Stages
- Annular Combustion Chamber – 12 Fuel Injectors
- Coatings
  - Compressor: Inorganic Aluminum
  - Turbine and Nozzle Blades: Precious Metal Diffusion Aluminide
- Velocity Vibration Transducers

Main Reduction Drive
- Epicyclic
  - 1800 or 1500 rpm
  - Acceleration Vibration Transducers
- Solid-State Voltage Regulation with H Rise
- Continuous Duty Rating

Generator
- Salient Pole, 3 Phase, 6 Wire, Wye Connected, Synchronous with Brushless Exciter
- Open Drip-Proof Construction
- Sleeve Bearings
- Velocity Vibration Transducers
- NEMA Class H Insulation with H Rise
- Load Synchronization

Package
- Steel Base Frame with Drip Pans
- Direct-Drive AC or Pneumatic Start System
- Natural Gas Fuel System
- Control System
  - Microprocessor-Based PLC
  - Generator Control
  - Vibration and Temperature Monitoring
  - Auto Synchronizing
- Integrated Lube Oil System
  - Turbine-Driven Lube Pump
  - AC Pre/Post Lube Pump
  - Air/Oil Cooler
  - Integral Lube Oil Tank
  - Lube Oil Filter
- Documentation
  - Drawings
  - Quality Control Data Book
  - Inspection and Test Plan
  - Test Reports
  - O&M Manuals
- Factory Testing of Turbine and Package
- Weatherproof Acoustic Enclosure

Optional Equipment/Services

Generator Options:
- Standby Duty Rating
- Standard Voltages: 380, 415, 3300 50 Hz; 240, 480, 2400, 4160 60 Hz
- Fuel Systems
  - Liquid
  - Dual (Gas/Liquid)
  - Water Injection for NOx Control
  - Alternate Fuels (such as naphtha, propane, low Btu)
- Lube Oil System
  - Water/Oil Lube Cooler
  - Electrostatic Demister
  - Lube Oil Tank Heater
- Control System
  - Remote Display/Control Terminal
  - Heat Recovery Application Interface
  - Serial Link Supervisory Interface
  - KW Control
  - KVAR/Power Factor Control
- Accessory Equipment
  - Turbine Cleaning System: On-Crank and On-line
  - Package Lifting Kit
- Ancillary Equipment: Various Air Inlet and Exhaust Systems
  - Inlet and Exhaust Silencers
  - Self-Cleaning or Prefilter/Barrier Air Inlet Filter
  - Inlet Evaporative Cooler
  - Inlet Chiller Coils
  - Ancillary Support Frame
Nominal Performance

Output Power: 1210 kWe
Heat Rate: 14,795 kJ/kWe-hr (14,025 Btu/kWe-hr)
Exhaust Flow: 23,540 kg/hr (51,890 lb/hr)
Exhaust Temp.: 505°C (940°F)

Nominal Rating – per ISO
At 15°C (59°F), at sea level
No inlet/exhaust losses
Relative humidity 60%
Natural gas fuel with LHV = 31.5 to 43.3 MJ/nm³ (800 to 1100 Btu/scf)
AC-driven accessories
Engine efficiency: 24.3%

Available Power

Typical Package Configuration

- LUBE OIL COOLER
- PACKAGE GAUGE PANEL
- VENT SILENCER
- ENCLOSURE VENT AIR INLET
- 813 mm (2' 8")
- 5982 mm (19' 7-1/2")
- ENCLOSURE VENT AIR EXHAUST
- TURBINE EXHAUST
- TURBINE AIR INLET
- WEIGHT: 8980 kg (19,800 lb)

FOR MORE INFORMATION
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