

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

Generator

- Salient Pole, 3 Phase, 6 Wire, Wye Connected, Synchronous with Brushless Exciter
- Open Drip-Proof Construction
- Sleeve Bearings
- Velocity Vibration Transducers
- Solid-State Voltage Regulation with Permanent Magnet Generator
- NEMA Class H Insulation with H Rise
- Continuous Duty Rating

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 kW _e
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

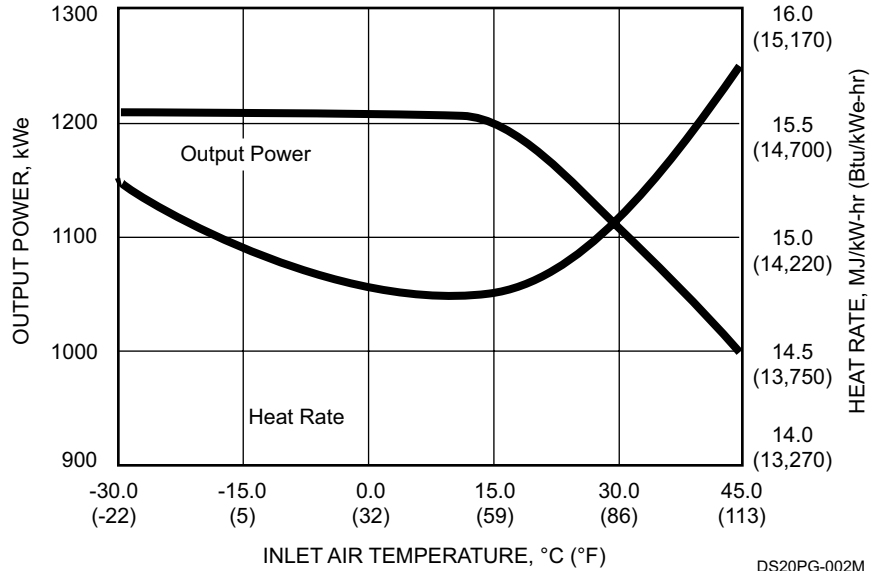
Relative humidity 60%

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

