

General Specifications

Gas Turbine

- *Taurus*[™] 60 Industrial, Single-Shaft
- Axial Compressor
 - 12-Stage
 - Variable Inlet Guide Vanes and Stators
 - Compression Ratio: 12.5:1
 - Inlet Airflow: 21.6 kg/sec (47.6 lbs/sec)
 - Speed: 14,944/14,951 rpm (50/60 Hz)
 - Vertically Split Case
- Annular Combustion Chamber
 - Lean-Premixed, Dry, Low Emission (*SoLoNO_x*[™])
 - 12 Fuel Injectors
 - Torch Ignitor System
- Proximity Probe Vibration Transducers
- Turbine
 - 3-Stage, Reaction

Main Reduction Drive

- Epicyclic
 - 1500 or 1800 rpm (50 or 60 Hz)
 - Acceleration Vibration Transducer

Generator

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

Package

- Steel Base Frame with Drip Pans
- Direct-Drive AC Start System
- Natural Gas Fuel System
- *Turbotronic*[®] 4 Control System
 - ControlLogix Controller
 - Standard Display with Discrete Event Log, Strip Chart, Historical Trend, Maintenance Screen
 - Gas Turbine and Generator Control
 - Vibration and Temperature Monitoring
 - CGCM (Combination Generator Control Module) with Load Share, Auto Synchronization, Voltage Control, Reactive Power Control, kW Control
- Integrated Lube Oil System
 - Turbine-Driven Lube Pump
 - Pre/Post Lube Pump
 - Backup Post Lube Pump
 - Air/Oil Cooler
 - Integral Lube Oil Tank
 - Lube Oil Tank Heater
 - Simplex Lube Oil Filter
 - Oil Mist Eliminator
- Documentation
 - Drawings
 - Quality Control Data Book
 - Inspection and Test Plan
 - Test Reports
 - Operation and Maintenance Manuals
- Factory Testing of Turbine and Package

Optional Equipment

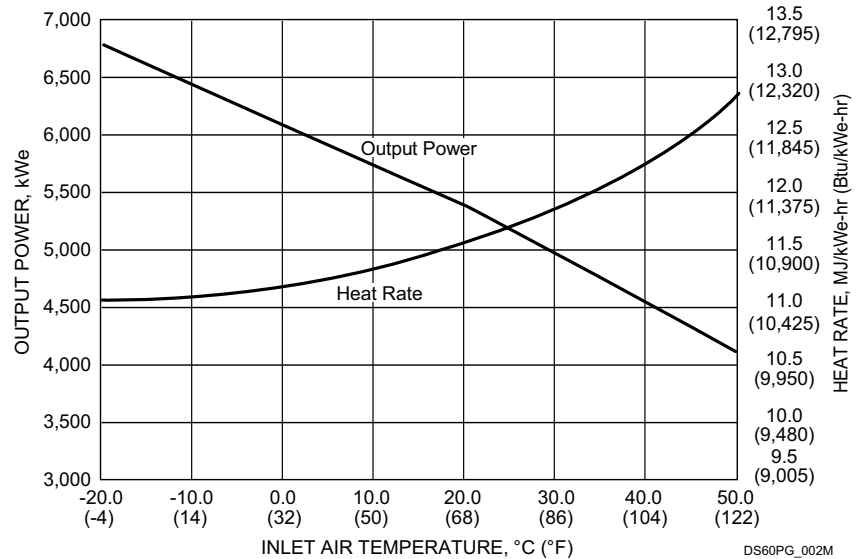
- Generator Options:
 - Standard Voltages: 3300, 6600, 11,000 V 50 Hz; 4160, 6900, 12,470, 13,200, 13,800 V 60 Hz
- Fuel Systems
 - Liquid
 - Dual (Gas/Liquid)
 - Alternate Fuels
- Lube Oil System
 - Water/Oil Lube Oil Cooler
 - Duplex Lube Oil Filters
 - Vent Flame Trap
- Control System
 - Auxiliary and Remote Display/Control Terminal
 - Heat Recovery Application Interface
 - Serial Link Supervisory Interface
 - Turbine Performance Map
 - Printer/Logger
 - Field Programming Terminal
 - Unfired Waste Heat Recovery System Control (Stand-Alone Panel)
 - Multi-Unit Applications: Load Shed Control (Stand-Alone Panel), Import/Export, kW/KVAR Control (Stand-Alone Panel)
- Accessory Equipment
 - 120-VDC Battery/Charger System
- Turbine Cleaning System: On-Crank and On-Line
- Weatherproof Acoustic Enclosure
- Ancillary Equipment
 - Inlet and Exhaust Silencers
 - Self-Cleaning or Prefilter/Barrier Air Inlet Filter
 - Inlet Evaporative Cooler
 - Inlet Chiller Coils

Nominal Performance

Output Power, kW _e	
ISO: 15°C (59°F), sea level	5670
Heat Rate, kJ/kWe-hr (Btu/kWe-hr)	11 425 (10,830)
Exhaust Flow, kg/sec (lbs/hr)	78 280 (172,575)
Exhaust Temperature, °C (°F)	510 (950)

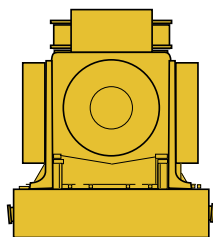
* No inlet or exhaust losses
Relative humidity 60%
Natural gas fuel with
LHV = 31.5 to 43.3 MJ/m³
(800 to 1100 Btu/scf)

Available Power

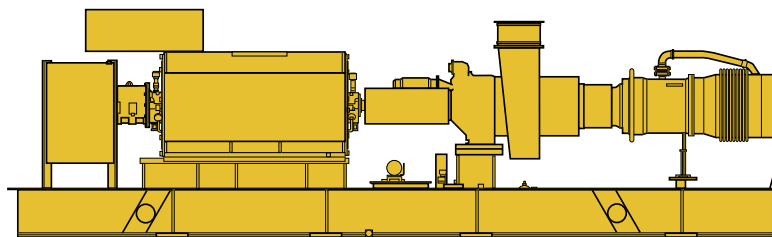


DS60PG_002M

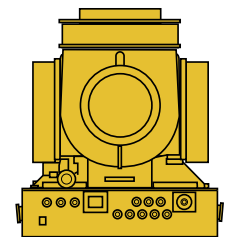
Typical Service Connections



Forward End



Left Side



Aft End

DS60PG-003M

Package Dimensions

Length: 9753 mm (32' 0")
Width: 2489 mm (8' 2")
Height: 2946 mm (9' 8")
Approx. Weight: 33 045 kg (72,700 lb)

Left Side

- Lube Oil Tank and Cooler Vents
- AC Power, Lube Oil Tank Heater
- DC Power, Backup Lube Pump
- Turbine Control Box
- Liquid Fuel Pump Motor

Right Side

- Generator Control Box
- AC Power, Starter Motor

Forward End

- Generator Drip Pan
- Package Ground

Aft End

- Drains: Air Inlet Duct, Fuel, Oil, Combustor, Exhaust Diffuser
- Fuel Inlet

- Package Air Supply
 - Solenoid Actuation
 - Liquid Fuel Atomizing
 - Self-Cleaning Filter
- Turbine Cleaning
- AC Power
 - Pre/Post Lube Oil Pump
 - Liquid Fuel Pump (optional)
- Package Ground