

General Specifications

Titan™ 250 Gas Turbine

- Industrial, Two-Shaft
- Axial Compressor
 - 16-Stage
 - Variable Inlet Guide Vane and 5 Variable Guide Vanes
 - Pressure Ratio: 24:1
 - Inlet Airflow: 73.2 kg/sec (155.2 lb/sec)
 - Vertically Split Case
- Combustion System
 - Annular-Type, Lean-Premixed, Dry, Low Emission (SoLoNOx™)
 - 14 Fuel Injectors (SoLoNOx)
 - Torch Ignitor System
- Gas Generator Turbine
 - 2-Stage, Axial
 - Max. Speed: 10,690 rpm
 - Thrust Bearing, Active: Tilting-Pad
 - Thrust Bearing, Inactive: Fixed Tapered Land
- Power Turbine
 - 3-Stage, Axial
 - Max. Speed: 6500 rpm
 - Full Tilting-Pad Thrust Bearing
- Journal Bearings
 - Tilting-Pad
- Turning Gear
- Coatings
 - Compressor: Inorganic Aluminum
 - Turbine and Nozzle Blades: Precious Metal Diffusion Aluminide
- Vibration Transducer Type
 - Proximity Probes

Key Package Features

- Driver Skid with Drip Pans
- 316L Stainless Steel Piping ≤4" dia.
- Compression-Type Tube Fittings
- Digital Display Panel
- Electrical System Options
 - NEC, Class I, Group D, Div 1, or Div 2
 - ATEX, Zone 2
 - CENELEC, Zone 1
- Turbotronic™ Microprocessor Control System
 - Onskid Control System (Div 2 or ATEX, Zone 2)
 - Freestanding Control Console
 - Color Video Display
 - Vibration Monitoring
- Control Options
 - 120 VDC Battery/Charger System
 - Gas Turbine and Package Temperature Monitoring
 - Serial Link Supervisory Interface
 - Turbine Performance Map
 - Compressor Performance Map
 - Historical Displays
 - Printer/Logger
 - Remote Monitoring and Diagnostics Option
 - Process Controls
 - Compressor Anti-Surge Control
 - Field Programming
- Start Systems
 - Direct-Drive AC
- Natural Gas Fuel System
- Integrated Lube Oil System
 - Turbine-Driven Main Pump
 - AC Motor-Driven Pre/Post Pump
 - DC (120 V) Motor-Driven Backup Pump
 - Oil Cooler and Oil Heater (Options)
 - Tank Vent Separator and Flame Trap
 - Lube Oil Filter
 - DC (120 V) Turning Gear System
- Package Skid Design
 - Accommodates Titan Turbines
 - Optional Modifications for Floating Production Applications
 - Modularized System Design
- Axial Compressor Cleaning Systems
 - On-Crank/On-Line
 - Portable Cleaning Tank
- Gearbox (if applicable)
 - Speed Increaser
 - Speed Decreaser
- Air Inlet and Exhaust System Options (Carbon or Stainless Steel)
- Enclosure and Associated Options
- Factory Testing of Turbine and Package
- Documentation
 - Drawings
 - Quality Control Data Book
 - Inspection and Test Plan
 - Test Reports
 - Operation and Maintenance Manuals

Performance

Output Power	23 790 kW (31,900 hp)
Heat Rate	8880 kJ/kW-hr (6275 Btu/hp-hr)
Exhaust Flow	253 440 kg/hr (558,740 lb/hr)
Exhaust Temp.	460°C (865°F)

Nominal rating – per ISO
At 15°C (59°F), at sea level

No inlet/exhaust losses

Relative humidity 60%

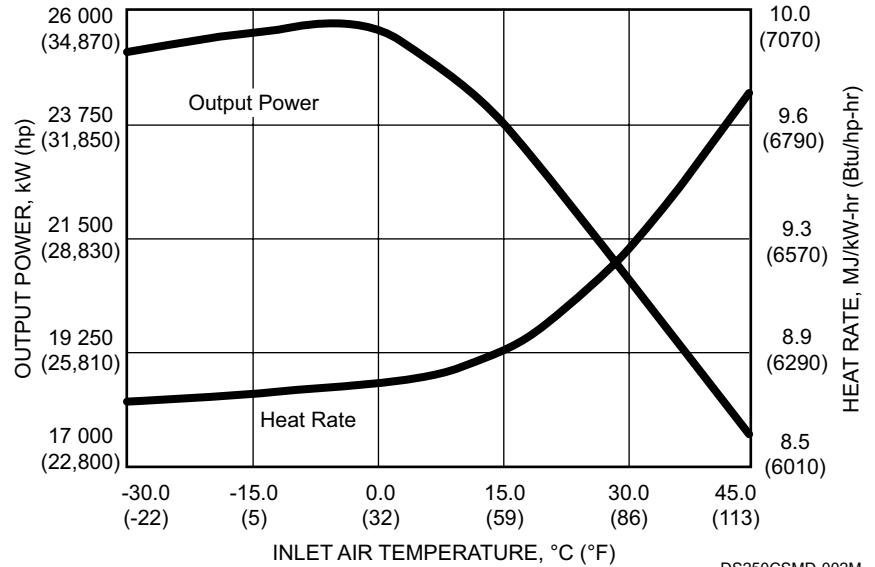
Natural gas fuel with
LHV = 31.5 to 43.3 MJ/nm³
(800 to 1100 Btu/scf)

Optimum power turbine speed

AC-driven accessories

Engine efficiency: 39.9%

Available Power



DS250CSMD-002M

Package Dimensions*

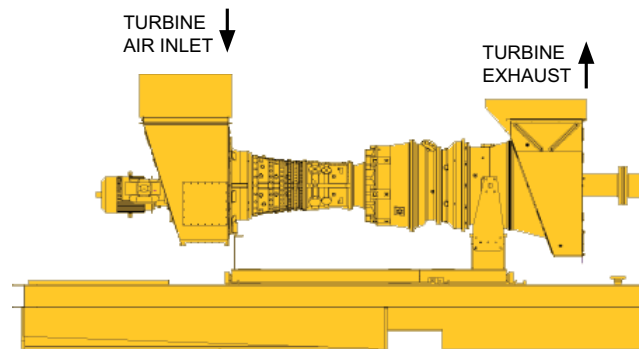
Length: 10.3 m (33' 9")

Width: 3.4 m (11' 1")

Height: 3.9 m (12' 9")

Typical Weight: 49 900 kg (110,000 lb)

*Driver package only, dry weight,
unenclosed height



DS250MD-003M