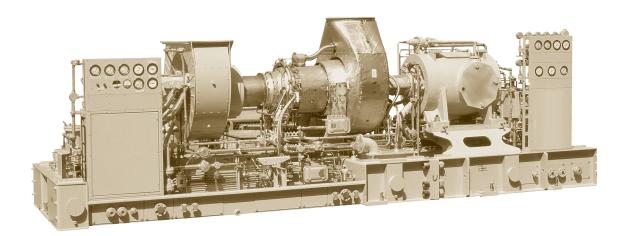
### **TAURUS 60**

### **Gas Turbine Compressor Set**

Oil & Gas Applications



#### **General Specifications**

#### Taurus<sup>™</sup> 60 Gas Turbine

- · Industrial. Two Shaft
- · Axial Compressor
- 12 Stage
- Variable Inlet Guide Vanes
- Pressure Ratio: 12.2:1
- Inlet Airflow:
  - 21.3 kg/sec (47.0 lb/sec)
- Vertically Split Case
- · Combustion Chamber
  - Annular Type
  - Conventional or Lean-Premixed, Dry, Low Emission (SoLoNOx™)
  - 12 Fuel Injectors
  - Torch Ignitor System
- · Gas Producer Turbine
  - 2 Stage, Reaction
  - Max. Speed: 15,000 rpm
- · Power Turbine
  - 2 Stage, Reaction
  - Max. Speed: 14,300 rpm
- Bearings
  - Journal: Tilting Pad
  - Thrust, Active: Tilting Pad
  - Thrust, Inactive: Fixed Tapered Land
- Coatings
  - Compressor: Inorganic Aluminum
  - Turbine Nozzles and Blades:
     Precious Metal Diffusion Aluminide
- Vibration Transducer Type
  - Proximity Probes

#### **Key Package Features**

- · Driver Skid with Drip Pans
- · Driven Equipment Skid
  - Compressor
  - Compressor Auxiliary Systems
- 316L Stainless Steel Piping ≤ 4"
- Compression-Type Tube Fittings
- Electrical System Options
  - NEC Class I, Group D, Div. 1
  - CENELEC Zone 1
- Turbotronic<sup>™</sup> Microprocessor Control System
- Freestanding Control Console
- Color Video Display
- Vibration Monitoring
- · Control Options
  - 120-VDC Control Battery/ Charger System
  - Gas Turbine and Package
     Temperature Monitoring
  - Serial Link Supervisory Interface
  - Turbine Performance Map
  - Compressor Performance Map
  - Historical Displays
  - Printer/Logger
  - Process Controls
  - Compressor Anti-Surge Control
- Field Programming
- Start Systems
- Pneumatic
- Direct Drive AC

- · Fuel System: Natural Gas
- Integrated Lube Oil System
  - Turbine-Driven Accessories
- Oil System Options
  - Oil Cooler
  - Oil Heater
  - Tank Vent Separator
  - Flame Trap
- · Axial Compressor Cleaning Systems
  - On-Crank
  - On-Crank/On-Line
  - Stationary Cleaning Tank
- · Gearbox (if applicable)
  - Speed Increaser
  - Speed Decreaser
- Air Inlet and Exhaust System Options
- · 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 Instruction Manual

# **Solar Turbines**

#### A Caterpillar Company

## **TAURUS 60**

### **Gas Turbine Compressor Set**

Oil & Gas Applications

(113)

DS60CS-002M

(86)

#### **Performance**

Output Power	5740 kW (7700 hp)
Heat Rate	11 250 kJ/kW-hr (7950 Btu/hp-hr)
Exhaust Flow	77 980 kg/hr (171,910 lb/hr)
Exhaust Temp.	510°C (950°F)

Nominal Rating – ISO At 15°C (59°F), sea level

No inlet/exhaust losses

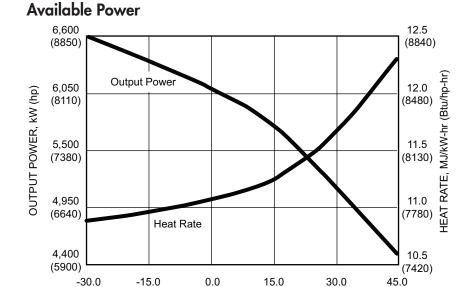
Relative humidity 60%

Natural gas fuel with LHV = 35 MJ/nm<sup>3</sup> (940 Btu/scf)

Optimum power turbine speed

Without driven accessories

Engine efficiency: 32%



(32)

(59)

INLET AIR TEMPERATURE, °C (°F)

(-22)

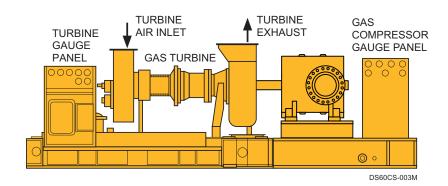
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### Package Dimensions\*

Length: 6.0 m (19' 9")
Width: 2.5 m (8' 1")
Height: 2.7 m (8' 11")

Typical Weight: 15 420 kg (34,000 lb)

\*Driver package only, dry weight, unenclosed height





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