General Specifications

**Taurus™ 60 Gas Turbine**
- Industrial, Single-Shaft
- 12 Stage Axial Compressor
  - Variable Inlet Guide Vanes and Stators
  - Pressure Ratio: 12.2:1
  - Inlet Airflow: 21.5 kg/sec (47.3 lb/sec)
  - Vertically Split Case
- Combustion Chamber, Annular-Type
  - 12 Conventional Fuel Injectors or 12 Lean-Premixed, Dry Low Emissions SoLoNOx™ Injectors
  - Single Torch Ignitor System

**Power Turbine**
- 3-Stage Reaction
  - Clockwise Rotation
- Bearings
  - 3 Radial Journal: Tilt-Pad
  - 1 Thrust, Active: Tilt-Pad
  - 1 Thrust, Inactive: Fixed Tapered Land
- Coatings
  - Compressor: Inorganic Aluminum
  - Turbine and Nozzle Blades: Precious Metal Diffusion Aluminide

**Main Reduction Drive**
- Epicyclic Type
  - 1500 or 1800 rpm (50 or 60 Hz)
  - Vibration monitoring: Acceleration Transducer

**Generator**
- 4 Pole, 3 Phase, 6 Wire, Wye Connected, Synchronous with Permanent Magnet Generator Exciter
- Available Construction Types:
  - Open Drip-Proof Construction
  - CACA/TEAAC (Closed Air, Cooling Air/Totally Enclosed, Air to Air Cooling)*
  - CACW/TEWAC (Closed Air, Cooling Water/Totally Enclosed, Water to Air Cooling)*
- Sleeve Bearings
- Vibration Monitoring; Velocity Transducers

**Package**
- Mechanical Construction
  - Steel Base Frame with Drip Pans
  - 316L Stainless Steel Piping
  - Compression Type Tube Fittings
- Start System
  - Direct Drive AC Motor with VFD Control
- Fuel System
  - Natural Gas
  - Diesel
  - Dual (Natural Gas and Diesel)*
  - Low BTU Gas*
- Integrated Lube Oil System
  - Turbine-Driven Lube Pump
  - AC Motor Driven Pre/Post Lube Pump
  - DC Motor Driven Backup Lube Pump
  - Air to Oil Cooler
  - Water to Oil Cooler*
  - Integral Lube Oil Tank
  - Lube Oil Tank Heater
  - Lube Oil Filter
  - Duplex Lube Oil Filter*
  - Oil Tank Vent Separator with Flame Arrestor
- Air Inlet and Exhaust Systems
  - Carbon Steel
  - Stainless Steel*
  - Barrier Type Filters
  - Self-Cleaning Filters
  - Inlet and Exhaust Silencers
  - Inlet Evaporative Cooler*
  - Inlet Chiller Coils*
- Enclosure
  - Complete Package
  - Driver Only*
  - Fire Detection and CO2 Suppression System

**Turbine Compressor Cleaning Systems**
- On-Crank/On-Line
- Portable Cleaning Tank*

**Package Power**
- 120VDC Battery/Charger System*

**Turbotronic™ On-Skid Gas Turbine and Generator Control System Features**
- Combination Generator Control Module with Load Share, Auto Synchronization, Voltage Control
- Standard Display with Discrete Event Log, Strip Chart, Historical Trend, Maintenance Screen
- Vibration and Temperature Monitoring
- English Display Text and Labels
- Spanish, Portuguese, German, French or Simplified Chinese Display Text and Labels*
- Auxiliary and Remote Display/Control Terminals*
- Turbine Performance Map*
- KW Import Control*
- KVAR/Power Factor Control*
- ControlNet Redundant Media, Ethernet or Modbus RS232C/422/485 Supervisory Interface*
- Heat Recovery Application Interface*
- Multi-Unit Applications: Load Shed Control, Import/Export or kW/KVAR Control Panels*
- InSight Platform™ Equipment Health Management*
- Printer/Logger*

**Electrical System Options**
- Neutral Grounding Resistor or Transformer*
- Switchgear and Generator Protective Relay*
- Motor Control Center with Automatic Transfer Switch*

**Documentation**
- Drawings
- Quality Control Data Book
- Inspection and Test Plan
- Test Reports
- O&M Manuals

**Factory Testing of Turbine**
**Factory Testing of Package Systems**
- Non-Dynamic
- Dynamic

* Option
Performance

Output Power 5670 kWe
Heat Rate 11,430 kJ/kWe-hr (10,830 Btu/kWe-hr)
Exhaust Flow 78,370 kg/hr (172,770 lb/hr)
Exhaust Temp. 510°C (950°F)

Application Performance

Steam (Unfired) 13.5 tonnes/hr (29,750 lb/hr)
Steam (Fired) 58.9 tonnes/hr (129,830 lb/hr)
Chilling (Absorp.) 11,650 kW (3310 refrigeration tons)

Nominal rating – per ISO
At 15°C (59°F), sea level
No inlet/exhaust losses
Relative humidity 60%
Natural gas fuel with
LHV = 35 MJ/Nm³ (940 Btu/scf)
No accessory losses
Engine efficiency: 31.5%
(measured at generator terminals)

Enclosure Access and Maintenance Space

MINIMUM CLEARANCE REQUIRED FOR ENGINE REMOVAL

MINIMUM SPACE CLEARANCE REQUIRED FOR ENCLOSURE ACCESS DOORS AND ROUTINE OPERATION AND MAINTENANCE

Package Height: 3.2 m (10’ 5”)
Package Weight: 37,920 kg (83,600 lb)  
Dry weight, enclosed height

FOR MORE INFORMATION
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