

Image shown with optional attachments.

### CAT® ENGINE SPECIFICATIONS

#### V-12, 4-Stroke-Cycle-Diesel

Emissions	Not Emissions Certified
Bore	170 mm (6.7 in.)
Stroke	190 mm (7.5 in.)
Displacement	51.8 L (3258 cu. in.)
Aspiration	Turbocharged-Aftercooled
Governor and Protection	Woodward
Engine Weight, net dry (approx)	5580 kg (12,301 lb.)
Module Weight, net dry (approx)*	15,714 kg (34,644 lb.)
Capacity for Liquids	
Lube Oil System (refill)	318 L (84 U.S. gal.)
Cooling System (engine only)	157 L (41.5 U.S. gal.)
Cooling System (radiator)	185 L (48.9 U.S. gal.)
Oil Change Interval	500 hours

\*Module weight includes — inner and outer base, radiator, generator, and engine

### FEATURES

#### Engine Design

- Proven reliability and durability
- Robust diesel strength design prolongs life and lowers owning and operating costs
- Assembled, tested, and validated as a package to minimize package vibration and maximize component life
- Market-leading power density
- Designed to perform in oilfield conditions, including high ambient high altitude applications
- Long overhaul life proven in oilfield applications
- Core engine components designed for reconditioning and reuse at overhaul

#### Safety

- E-Stop pushbutton on instrument panel
- Air shutoff and explosion relief valves
- Configurable alarm and shutdown features
- Extra alarm switches available for customer-supplied panel

#### Ease of Installation and Packaging

- Available 25' outer base
- Inner base frame three-point mount maintains factory alignment
- Installed radiator
- Customer interface harness
- Simple engine/package wiring
- Adapters, fittings, and connectors available for cooling, air and exhaust system

#### Improved Serviceability

Large inspection openings allow convenient access to core engine internals

#### Reduction of Owning and Operating Costs

- Long filter change intervals, aligned with service intervals
- Excellent fuel economy — direct injection electronic unit injectors precisely meter fuel

#### Custom Packaging

For any petroleum application, trust Caterpillar to meet your exact needs with a factory custom package. Cat® engines, generators, enclosures, controls, radiators, transmissions — anything your project requires — can be custom designed and matched to create a one-of-a-kind solution. Custom packages are globally supported and are covered by a one-year warranty after startup.

#### Full Range of Attachments

Large variety of factory-installed engine attachments reduces packaging time

#### Testing

Every engine is full-load tested to ensure proper engine performance.

#### Product Support Offered Through Global Cat Dealer Network

More than 2,200 dealer outlets

Cat factory-trained dealer technicians service every aspect of your petroleum engine

Cat parts and labor warranty

Preventive maintenance agreements available for repair-before-failure options

S•O•S<sup>SM</sup> program matches your oil and coolant samples against Caterpillar set standards to determine:

- Internal engine component condition
- Presence of unwanted fluids
- Presence of combustion by-products
- Site-specific oil change interval

#### Over 80 Years of Engine Manufacturing Experience

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable products.

- Cast engine blocks, heads, cylinder liners, and flywheel housings
- Machine critical components
- Assemble complete engine

#### Web Site

For all your petroleum power requirements, visit [www.catoilandgas.cat.com](http://www.catoilandgas.cat.com).

**STANDARD EQUIPMENT**

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**Air Inlet System**

Aftercooler core — corrosion resistant  
Air cleaner — regular duty (dry, circular type, with soot filter and service indicators)

**Control System**

Governor, Woodward EG6PC actuator — RH (controls provided by the SCR supplier)  
Magnetic pickup

**Cooling System**

Thermostats and housing (dual outlet)  
Jacket water pump — gear-driven

**Exhaust System**

Exhaust flexible fitting  
Exhaust adapters  
Weldable flange  
Exhaust manifolds — dry

**Flywheels and Flywheel Housings**

SAE No. 00  
SAE standard rotation

**Fuel System**

Fuel filter  
Fuel transfer pump  
Fuel return line — hard, with flexible connection  
Fuel priming pump — LH

**Instrumentation**

Instrument panel — LH, 8 hole, 7 gauge  
Oil pressure  
Fuel pressure  
Oil filter differential pressure  
Water temperature  
Tachometer  
Service meter  
Exhaust temperature — dual

**Lube System**

Crankcase breather  
Oil cooler  
Oil filter  
Shallow oil pan  
Oil drain extension, 2" NPT female connection

**Mounting System**

Oilfield base 7.85 m (25 ft 9 in) length  
Heavy-duty land rig inner baseframe — three-point mount to oilfield base

**Power Take-Offs**

Accessory drive

**Protection System**

Hydra-mechanical shutoffs (low oil pressure, high water temperature and overspeed, air inlet shutoff); monitoring gauge and emergency remote shutoff  
Alarm switches, low oil pressure, high water temperature (Marine Society approved) for connection to customer-supplied alarm panel  
Manual shutoff control — LH

**Starting System**

Air starting motor  
Air silencer

**General**

Paint — Cat yellow  
Vibration damper and guard  
Lifting eyes  
Lift and cable tow provisions

**OPTIONAL EQUIPMENT**

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**Air Inlet System**

Air cleaners  
Remote air inlet adapters

**Charging Systems**

Charging alternators

**Control System**

Load sharing modules  
Governor conversion  
2301A load sharing governors

**Cooling Systems**

High gloss black conventional core radiator  
Coolant regulator conversions  
Belt guard, radiator guard  
Blower fan  
Fan drive and fan pulley  
Radiator mounting  
Water level switch gauge  
Coolant level sensors

**European Union Certifications****Exhaust System**

Removal — flexible exhaust fitting  
Elbows  
Mufflers

**Fuel System**

Primary fuel filter  
Fuel cooler

**Generator**

Oilfield spec, twin-bearing, close-coupled  
Factory aligned

**Generator Attachments**

Air filter  
Low voltage extension box  
Potential transformer  
Manual voltage control  
Current droop transformers  
Cable access box  
Bearing temperature detectors

**Instrumentation**

Customer management device  
Gauges and instrument panels  
Switches and contractors

**Lube System**

Fumes disposal  
Oil filter  
Oil pan accessories

**Mounting System**

Outer oilfield inner base with three-point mount  
Base removal

**Power Take-Offs**

Front stub shaft  
Pulleys

**Protection System**

Explosion relief valve  
Air shutoffs  
Hydra-mechanical shutoffs  
Switches and contractors

**Starting System**

Air pressure regulator  
Starting aids

**General**

Tool set

**GENERATOR DATA**

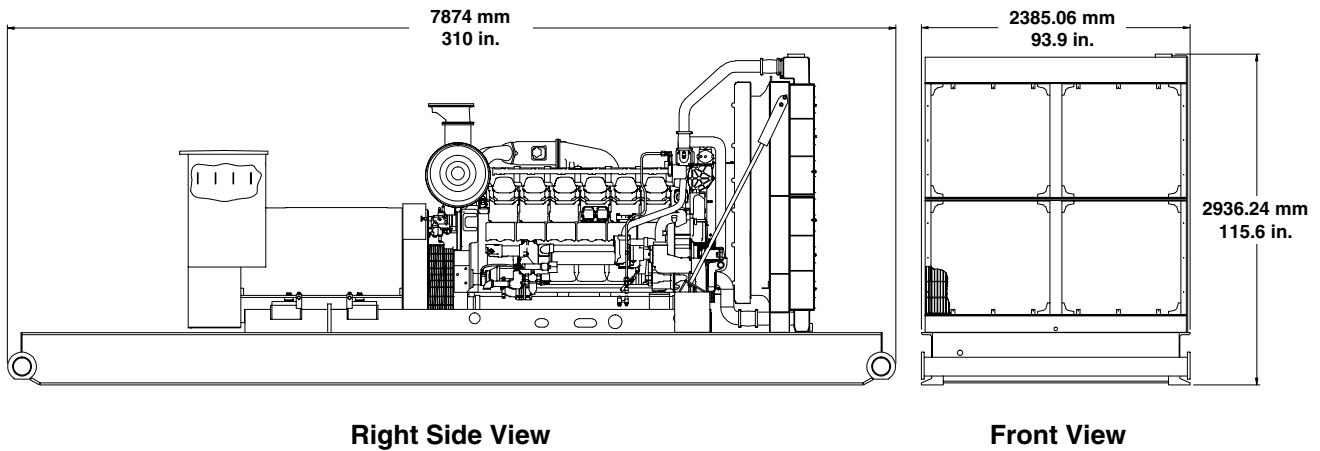
	60 Hz — Standard			50 Hz Standard	
ekW Rating	1225	1050	840	1050	1050
kVA Rating	1750	1500	1200	1500	1500
rpm	1200	1200	1200	1500	1500
Rated PF	0.7	0.7	0.7	0.7	0.7
Temperature Rise	80°C @ 50°C Ambient	80°C @ 50°C Ambient	80°C @ 50°C Ambient	80°C @ 50°C Ambient	80°C @ 50°C Ambient
Insulation Class	H	H	H	H	H
Overload	50% / 2 min	50% / 2 min	50% / 2 min	50% / 2 min	50% / 2 min
Excitation	Permanent Magnet	Permanent Magnet	Permanent Magnet	Permanent Magnet	Permanent Magnet
Voltage	600	600	600	600	600
Voltage Regulator	Optional	Optional	Optional	Optional	Optional
Configuration	2-Bearing Free-Standing	2-Bearing Free-Standing	2-Bearing Free-Standing	Two-Bearing Close-Coupled	2-Bearing Close-Coupled
Coastal Protection	Yes	Yes	Yes	Yes	Yes
Space Heater	Included	Included	Included	Included	Included
Construction	Form Wound	Form Wound	Form Wound	Form Wound	Form Wound
Frame Size	867	866	864	825	824

**ALTITUDE CAPABILITY\***

Approximate Power (bhp) as a function of Altitude and Inlet Manifold Temperature for DM6801-00									
Ambient Operating Temp. (°F)	Altitude (feet)								
	10,499	9843	8202	6562	4921	3281	1640	984	0
50	1144	1173	1250	1330	1415	1462	1462	1462	1462
68	1105	1133	1207	1285	1367	1452	1462	1462	1462
86	1067	1096	1167	1242	1321	1404	1462	1462	1462
104	1034	1061	1129	1203	1279	1360	1444	1462	1462
122	1002	1027	1094	1165	1239	1317	1399	1434	1462
Normal	1145	1169	1231	1295	1364	1434	1462	1462	1462

\*Contact dealer for Altitude Capability for other ratings

### LAND ELECTRIC DRILLING MODULE



Module Dimensions		
<b>Length</b>	7874 mm	310 in.
<b>Width</b>	2385.06 mm	93.9 in.
<b>Height</b>	2936.24 mm	115.6 in.
<b>Engine Weight (dry)</b>	5580 kg	12,301 lb.
<b>Module Weight (dry)*</b>	15,714 kg	34,644 lb.

Note: Do not use for installation design.  
See general dimension drawings for detail.  
(Drawing #231-4621)

\*Module weight includes — inner and outer base, radiator, generator, and engine

### RATING DEFINITIONS AND CONDITIONS

**Ratings** are based on SAE J1995 standard conditions of 100 kPa (29.61 in Hg) and 25° C (77° F). These ratings also apply at ISO3046/1, DIN6271, and BS5514 standard conditions of 100 kPa (29.61 in Hg), 27° C (81° F), and 60% relative humidity. Ratings are valid for air cleaner inlet temperatures up to and including 50° C (122° F).

**Fuel consumption** has a tolerance of +5% and is based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18 390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal). Fuel consumption shown with all oil, fuel, and water pumps, engine driven.

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