SPECIFICATIONS

V-16, 4-Stroke-Cycle-Diesel

Emissions ...................................... IMO
Displacement ................................. 78.1 L (4,765.66 cu. in.)
Rated Engine Speed ........................... 1600
Bore ............................................. 170.0 mm (6.69 in.)
Stroke .......................................... 215.0 mm (8.46 in.)
Aspiration ..................................... Turbocharged-Aftercooled
Governor ....................................... Electronic
Cooling System ............................... Heat Exchanger
Weight, Net Dry (approx) ................. 8028 kg (17,699 lb)
Refill Capacity
  Cooling System ......................... 365.5 L (96.6 gal)
  Lube Oil System ......................... 798.7 L (211.0 gal)
Oil Change Interval ......................... 1000 hr
  Caterpillar Diesel Engine Oil 10W30 or 15W40
  Deep Sump Oil Pan
Rotation (from flywheel end) ............... CCW or CW
Flywheel and Flywheel Housing .......... SAE No. 00
Flywheel Teeth ................................ 183

Air Inlet System
Corrosion resistant separate circuit aftercooler core, heavy duty air cleaners with service indicator, dual turbochargers

Control System
Dual Advanced Diesel Engine Management (ADEM II) modules with electronically controlled unit injectors

Cooling System
Auxiliary fresh water pump, gear-driven centrifugal jacket water pump, expansion tank, engine oil cooler, thermostats and housing

Exhaust System
Dry gas-tight exhaust manifolds with thermo-laminated heat shields, dual turbochargers with watercooled bearings and thermo-laminated heat shields, vertical exhaust outlet

Fuel System
Electronically controlled unit injectors, RH fuel filter with service indicators, fuel transfer pump

Instrumentation
RH electronic instrument panel with analog gauges and digital display of data for oil and fuel pressure, oil and fuel filter differential, system DC voltage, exhaust and water temperature, fuel pressure, and air inlet restriction; digital display only for tachometer, service meter, and fuel consumption (total and instantaneous); engine start/stop switch

Lube System
Top-mounted dual crankcase breathers, RH oil filter with service indicators, RH oil level gauge, RH oil filler, gear-type oil pump, deep sump oil pan

Mounting System
Ledge-type engine mounting rails

Power Take-Offs
Accessory drive on upper RH and lower LH, two-sided front housing

Protection System
ADEM II electronic monitoring system with customer programmable engine deration strategies, emergency stop pushbutton

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes (Engines for heat exchanger cooling do not include heat exchanger. Keel cooling conversion available.)
### MARINE ENGINE PERFORMANCE

**B Rating — DM6806-00**

Aftercooler Temperature 60°C (140°F)

**IMO Compliant**

#### Performance Data

<table>
<thead>
<tr>
<th>Engine Speed (rpm)</th>
<th>Power (kW)</th>
<th>BSFC (g/hp)</th>
<th>Fuel Rate (L/hr)</th>
<th>Boost Pressure (kPa)</th>
<th>Intake Air Flow (m³/min)</th>
<th>Exhaust Gas Flow (g/min)</th>
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#### Brake Mean Effective Pressure

- **Pressure**: 1844 kPa
- **Heat Rejection to Coolant**: 631 kW
- **Heat Rejection to Aftercooler**: 405 kW
- **Heat Rejection to Exhaust**: 1681 kW
- **Heat Rejection to Atmosphere from Engine**: 124 kW

#### Brake Mean Effective Pressure

- **Pressure**: 267 psi
- **Heat Rejection to Coolant**: 35888 btu/min
- **Heat Rejection to Aftercooler**: 23032 btu/min
- **Heat Rejection to Exhaust**: 94461 btu/min
- **Heat Rejection to Atmosphere from Engine**: 7052 btu/min

[PD-DM6806-00.pdf](PD-DM6806-00.pdf)

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LEHM3026-01
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers’ engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar’s control.

Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

Fuel rates are 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/L (7.001 lb/U.S. gal). Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.