CATERPILLAR® ENGINE SPECIFICATIONS

In-Line 4 Cylinder, Four-Stroke-Cycle Diesel
Bore — in (mm) ..................... 3.94 (100)
Stroke — in (mm) .................... 5.00 (127)
Displacement — cu in (liter) ........... 243 (4.0)
Combustion System ............ Direct injection
Rotation (from flywheel end) . . Counterclockwise
Capacity for Liquids — U.S. gal (L)
    Cooling System (engine only)
        DIT ................................... 2.9 (11.0)
        DITA .................................. 3.0 (11.4)
Lube Oil System (refill) typical....... 3.5 (13.3)
Weight, Net Dry (approximate) — lb (kg)
    Turbocharged (T)................... 614 (279)
    Turbocharged-Aftercooled (TA) ..... 627 (285)
Rated Engine Speed, Full Load
    Intermittent — rpm ..................... 2400
    Continuous — rpm ..................... 2200

CATERPILLAR® ENGINE FEATURES

BENEFITS

■ FUEL ECONOMY
Consistent performance and excellent fuel economy over entire operating range.

■ BROAD APPLICATION RANGE
Big displacement, more performance for your money, and convenient installation.

■ RELIABILITY AND DIESEL DURABILITY
Diesel tough components and conservative speed for smooth operation and long engine life.

■ HIGH PERFORMANCE
Horsepower and torque capabilities optimized. Substantial 20 percent torque rise.

■ CLEAN AND QUIET POWER
Cleaner and quieter, free from visible smoke throughout operational speed range.

■ EASY LOW-COST MAINTENANCE
Convenient positioning of service points on right-hand side for easy accessibility.

FEATURES

Options must be selected for the following features. See your Caterpillar dealer for a detailed description of options for each feature.

Adapter plate  Fan and extensions  Lubricating oil filter and cooler
Alternator  Fan drive
Balancer  Flywheel and starter ring
Belt-driven auxiliaries  Flywheel housing
Cab heater connections  Front end drives
Cold start aid  Fuel filter
Coolant pump and thermostat housing  Fuel pre-filter
Coolant temperature gauge and sender  Heater switch
Engine mountings  Induction manifolds
Exhaust manifolds  Lifting eyes
Lubricating oil fillers and breathers
Lubricating oil pressure switch
Paint
Radiator
Rating
Starter motor
Stop and throttle controls
Timing case and gear-driven auxiliaries
Turbocharger, manifolds
**PERFORMANCE DATA**

**Turbocharged**

<table>
<thead>
<tr>
<th>Engine Speed rpm</th>
<th>Torque lb-ft</th>
<th>Power bhp</th>
<th>Continuous</th>
<th>Intermittent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>250</td>
<td>70</td>
<td>72.5 kW (97 bhp)</td>
<td>80.5 kW (108 bhp)</td>
</tr>
<tr>
<td>1300</td>
<td>280</td>
<td>80</td>
<td>82 kW (110 bhp)</td>
<td>91 kW (122 bhp)</td>
</tr>
<tr>
<td>1600</td>
<td>310</td>
<td>90</td>
<td>87 kW (115 bhp)</td>
<td>100 kW (132 bhp)</td>
</tr>
<tr>
<td>1900</td>
<td>340</td>
<td>100</td>
<td>83 kW (115 bhp)</td>
<td>108 kW (144 bhp)</td>
</tr>
<tr>
<td>2200</td>
<td>370</td>
<td>110</td>
<td>87 kW (115 bhp)</td>
<td>120 kW (160 bhp)</td>
</tr>
<tr>
<td>2500</td>
<td>400</td>
<td>120</td>
<td>83 kW (115 bhp)</td>
<td>130 kW (176 bhp)</td>
</tr>
</tbody>
</table>

**Turbocharged-Aftercooled**

<table>
<thead>
<tr>
<th>Engine Speed rpm</th>
<th>Torque lb-ft</th>
<th>Power bhp</th>
<th>Continuous</th>
<th>Intermittent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>230</td>
<td>50</td>
<td>72.5 kW (97 bhp)</td>
<td>80.5 kW (108 bhp)</td>
</tr>
<tr>
<td>1300</td>
<td>260</td>
<td>60</td>
<td>82 kW (110 bhp)</td>
<td>91 kW (122 bhp)</td>
</tr>
<tr>
<td>1600</td>
<td>290</td>
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<td>120 kW (160 bhp)</td>
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<tr>
<td>2500</td>
<td>380</td>
<td>100</td>
<td>83 kW (115 bhp)</td>
<td>130 kW (176 bhp)</td>
</tr>
</tbody>
</table>

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbocharged</td>
<td>30.4 in (772 mm)</td>
</tr>
<tr>
<td>Turbocharged-Aftercooled</td>
<td>25.4 in (646 mm)</td>
</tr>
<tr>
<td>Turbocharged-Aftercooled</td>
<td>25.4 in (646 mm)</td>
</tr>
</tbody>
</table>

**RATING DEFINITIONS AND CONDITIONS**

**Intermittent** is the horsepower and speed capability of the engine which can be used for about one hour, followed by an hour of operation at or below the continuous rating.

**Continuous** is the horsepower and speed capability of the engine which can be used without interruption or load cycling. Additional ratings are available for specific customer requirements.

Additional ratings are available for specific customer requirements. Consult your Caterpillar dealer.

Ratings are based on SAE J1995 standard conditions of 29.61 in Hg (100 kPa) and 77° F (25° C). These ratings also apply at ISO3046/1, DIN6271 and BS5514 standard conditions of 29.61 in Hg (100 kPa), 81° F (27° C) and 30% relative humidity.

**Fuel consumption** is based on fuel oil having an LHV of 18 390 Btu/lb (42 780 kJ/kg) and weighing 7.001 lb/U.S. gal (838.9 g/liter). Power ratings are based on engine equipped with fuel, lube oil and jacket water pumps but without fan.

Materials and specifications are subject to change without notice.

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