**CATERPILLAR® ENGINE SPECIFICATIONS**

**I-4, 4-Stroke-Cycle-Diesel**

- **Emissions**: 60 Hz meets EPA Tier 3*, 50 Hz meets EU 97/68EC Stage II regulations
- **Displacement**: 2.2 L (135 cu. in.)
- **Bore**: 84 mm (3.31 in.)
- **Stroke**: 100 mm (3.94 in.)
- **Aspiration**: Turbocharged
- **Governor**: Electrical Isochronous

**Estimated Dry Weight**
- **Open Set**: 420 kg (926 lb)
- **Enclosed Set**: 527 kg (1162 lb)

**Refill Capacity**
- **Cooling System**: (engine and expansion tank) . . . 9 L (2.4 U.S. gal)
- **Lube Oil System**: 10.6 L (2.8 U.S. gal)
- **Oil Change Interval**: 500 hrs
- **Rotation (from flywheel end)**: Counterclockwise

*EPA Tier 3 enforced from January 1, 2008 for engines < 37 kW

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**STANDARD EQUIPMENT**

- **Air Inlet System**: Air cleaner, single element canister type with rain cap (open generator set only)
- **Control System**: Electronic isochronous governor
- **Cooling System**: Cast aluminum expansion tank and exhaust manifold, triple pass heat exchanger with optional keel cooling, seawater pump with ceramic seals
- **Exhaust System**: Watercooled exhaust manifold and elbow
- **Fuel System**: Fuel filter — RH or LH service, fuel priming, fuel transfer pump, flexible fuel lines
- **Generator**
  - Single-phase — brushless, shunt excited, 4-pole, 4-lead reconnectable with class H insulation, automatic voltage regulation ±0.5%, 2/3 pitch, IP23 water protection, solid state voltage regulator with integral voltage adjustment potentiometer, connection poles;
- **Lube System**: Lubricating oil, oil filter (RH), dipstick (RH), fumes disposal (closed system)
- **Mounting System**: Anti-vibration mounts, connected to drip tray and steel base sitting on PVC foam sound-absorbent pad
- **Protection System**: Electronic automatic safety shutdown for low oil pressure, high water temperature, high exhaust (wet exhaust only) temperature, and overspeed
- **Starting System**: 12 or 24 volt electronic starting motor, 12 volt 55 amp alternator
- **General**: Single-side service (RH), decals, literature

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**PERFORMANCE DATA**

**60 Hz**

- **Fuel Consumption**
  - @ Full Power: 6.2-8.5 L/hour, 1.64-2.25 gph

**50 Hz**

- **Fuel Consumption**
  - @ Full Power: 5.2-7.1 L/hour, 1.37-1.88 gph

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**C2.2 Turbocharged Ratings Chart**

<table>
<thead>
<tr>
<th>Speed</th>
<th>Power Factor</th>
<th>Rating ekW</th>
<th>Arrangement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
<td>0.8</td>
<td>24.5</td>
<td>318-1680</td>
</tr>
<tr>
<td>1800</td>
<td>0.8</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
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<td></td>
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RATING CONDITIONS

Ratings are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in. Hg), 27°C (81°F), and 60% relative humidity.

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.

CATERPILLAR GENERATOR

Power Factor ................................................ 1.0
Frame .................................................. 2.2
Insulation ............................................... Class H
Temperature Rise
  @ 40°C Ambient ........................ Class H (150°K)
Winding Pitch Code .............................. 2/3
Terminals ............................................. 12 lead reconnectable
Drip Proof .......................................... IP 23
Air Flow 60 Hz ...................... 0.44 m³/s (932 cfm)
Excitation System ................................. AREP
Voltage Regulation (steady state) ........ ±0.5%
Total Harmonic Content LL/LN .......... <4%
Wave Form: NEMA=TIF ................. <50
Wave Form: I.E.C.=THF ................ <2%

OPTIONAL ATTACHMENTS

Sound attenuated enclosure
Deluxe instrument panel
Basic instrument panel
Remote instrument panel extension harness
AC circuit breakers
Flexible fuel lines
Primary fuel filter/water separator
Siphon break
Keel-cooling kit
Exhaust system components
Oil drain pump
Insulated electric system
Noise reducing air inlet duct

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<th>Open mm (in)</th>
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CATERPILLARenerative for additional information.

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