CAT® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle Diesel

Certifications ........................................ FM/UL/NFPA 20
Bore ............................................... 137 mm (5.4 in)
Stroke .................................................. 152 mm (6.0 in)
Displacement .......................................... 27 L (1650 in³)
Aspiration ............................................ Turbocharged-Aftercooled
Rotation (from flywheel end) ................. Counterclockwise
Refill Capacity
  Cooling System ............................... 58 L (15.5 U.S. gal)
  Lube Oil System ............................... 139 L (36.8 U.S. gal)
Oil Change Interval, ....... 19000 L of fuel/250 service hrs
Engine Weight, Net Dry (approximate) ........ 2730 kg (6018 lbs)
Flywheel and Flywheel Housing .............. SAE No. 0
Flywheel Teeth ..................................... 136

FEATURES

- Available for global non-regulated areas
- FM approved
- UL listed — U.S. and Canada
- Meets NFPA 20 requirements
- Proven reliability and durability
- Robust diesel strength design prolongs life and lowers owning and operating costs
- Market-leading power density
- Core engine components designed for reconditioning and reuse at overhaul

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

World-class 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

STANDARD ENGINE EQUIPMENT

Air Inlet System
Air cleaner, regular-duty, dry, panel-type with service indicator (for watercooled manifold/turbo)

Charging System
Charging alternator 24V, 35A

Control System
Governor control, vernier
Governor, hydra-mechanical

Cooling System
Thermostats and housing
Jacket water pump, gear-driven, centrifugal, RH
Heat exchanger (installed)
Expansion tank

Exhaust System
Exhaust manifold
Exhaust elbow, dry 203 mm (8 in) on all T engines and TA with wet exhaust

Flywheels and Flywheel Housing
Flywheel — SAE No. 0
Flywheel housing — SAE No. 0
SAE standard rotation

Fuel System
Fuel filter, LH
Fuel transfer pump
Primary fuel filter
Fuel priming pump

Instrumentation
Instrument panel, LH
Engine oil pressure gauge
Fuel pressure gauge
Ammeter and water temperature gauges
Tachometer
Electric hour meter

Lube System
Crankcase breather
Oil cooler RH
Oil filler in valve cover and dipstick, RH
Oil filter, RH
Rear sump oil pan

Mounting System
Supports

Power Take-Off
Flywheel stub shaft

Protection System
Stop-start system, automatic (compatible with NFPA 20 requirements, energizable from either of two battery sources and capable of manual starter actuation)

Starting System
24V LH electric starting motor
Jacket water heater (6 kW, 240-480V)

General
Paint, red
Vibration damper and guard
Lifting eyes

Literature
**RATING DEFINITIONS AND CONDITIONS**

**Standby Fire Pump** — Ratings represent the output which may be utilized to drive stationary fire pumps where the pumping equipment has been sized according to NFPA 20 standards. Engine rating is FM approved and UL listed (US and Canada).

**Rating Conditions** are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29°C (84.2°F) with a density of 838.9 g/L.

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**DIMENSIONS**

<table>
<thead>
<tr>
<th>Engine Dimensions</th>
<th>mm</th>
<th>in</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Length</td>
<td>1980</td>
<td>78.0</td>
</tr>
<tr>
<td>(2) Width</td>
<td>1300</td>
<td>51.2</td>
</tr>
<tr>
<td>(3) Height</td>
<td>1285</td>
<td>50.6</td>
</tr>
<tr>
<td>Weight — dry (approx.)</td>
<td>2730</td>
<td>6018</td>
</tr>
</tbody>
</table>

Note: For general dimensions only, not actual configuration. Do not use for installation design. See general dimension drawings for detail.