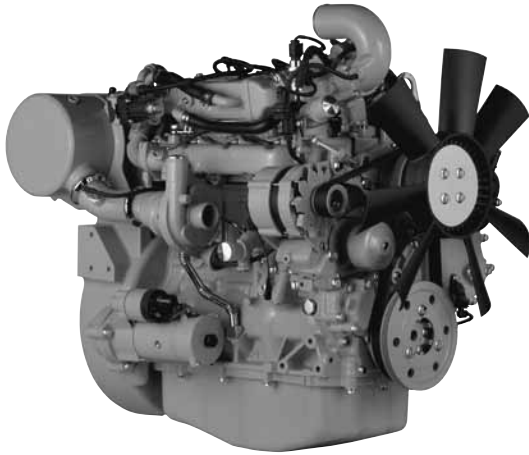




C3.4B Industrial Engine

Tier 4 Interim/Stage IIIB
63-86 bkW/84.5-115.3 bhp @ 2200 & 2500 rpm



Engine Pictured with
Optional Equipment

CAT® ENGINE SPECIFICATIONS

I-4, 4-Stroke-Cycle Diesel

Bore	99 mm (3.9 in)
Stroke	110 mm (4.3 in)
Displacement	3.4 L (207.5 in ³)
Aspiration	Turbocharged-Aftercooled
Compression Ratio	17:1
Combustion System	Direct Injection
Rotation (from flywheel end)	Counterclockwise
Cooling System	6 L (6.3 U.S. qts)
Engine Weight, Net Dry (approximate)	270 kg (595.2 lb)

FEATURES

Emissions

Designed to meet 2012 U.S. Tier 4 Interim, EU Stage IIIB and Japan MLIT Step 4 emission standards.

Reliable, Quiet and Durable Power

World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life.

High Performance

Leading-edge technology provides significant improvements in power, torque, fuel consumption, and response. Technology includes single smart wastegated turbo systems, durable high pressure common rail technology, and closed circuit breathing system.

Fuel Efficiency

Fuel consumption optimized to match operating cycles of a wide range of equipment and applications.

Fuel & Oil

Tier 4 Interim/Stage IIIB engines require Ultra Low Sulfur Diesel (ULSD) fuel containing a maximum of 15 ppm sulfur, and new oil formulations to support the new technology. Cat® engines are designed to accommodate B20 biofuel. Your Cat dealer can provide more information regarding fuel and oil.

Broad Application Range

Industry-leading range of factory configurable ratings and options for agricultural, materials-handling, construction, mining, aircraft ground support, and other industrial applications.

Low-Cost Maintenance

Worldwide service delivers ease of maintenance and simplifies the servicing routine. Capable of optimal oil change intervals of 500 hours. The S•O•SSM program is available from your Cat dealer to determine oil change intervals and provide optimal performance.

Quality

Every Cat engine is manufactured to stringent standards in order to assure customer satisfaction.

World-class Product Support Offered Through Global Cat Dealer Network

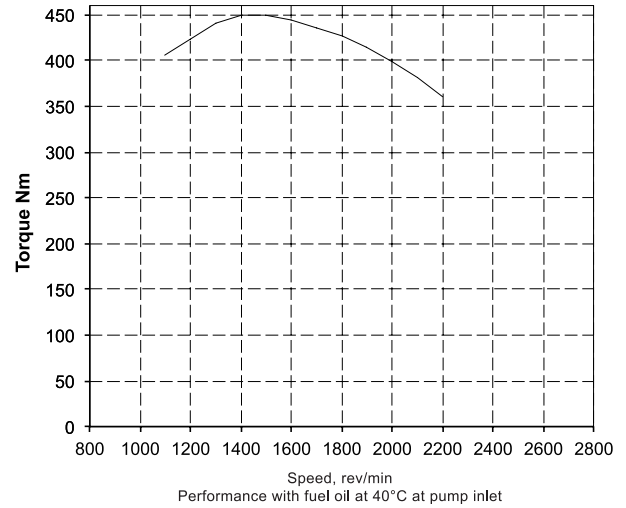
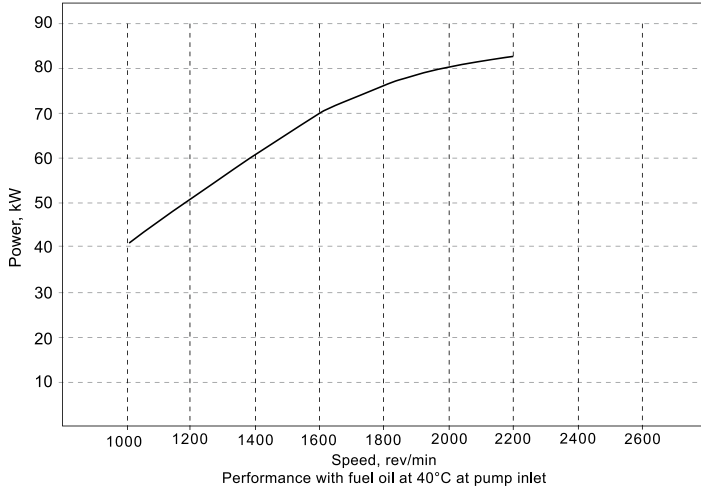
- Scheduled maintenance, including S•O•SSM sample
- Customer Support Agreements (CSA)
- Cat Extended Service Coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

Web Site: For additional information on all your power requirements, visit www.cat-industrial.com.

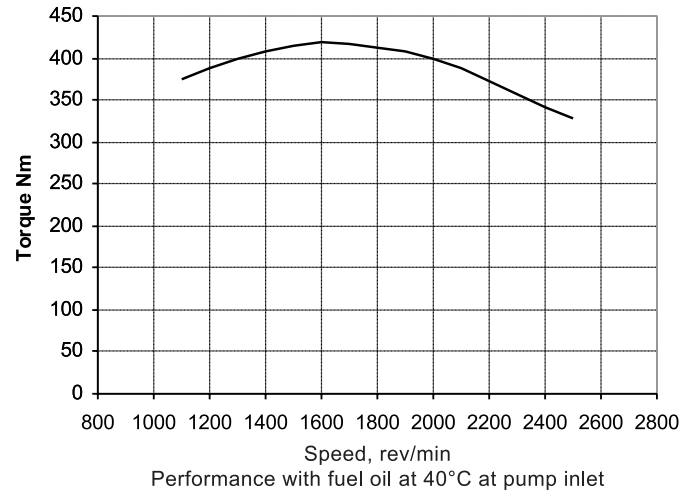
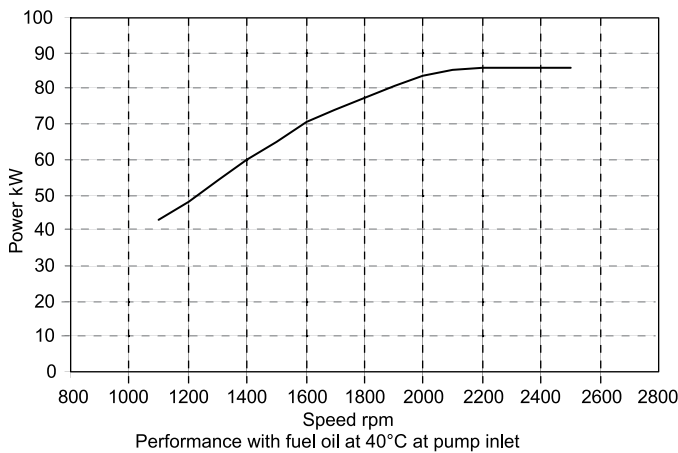


PERFORMANCE DATA — PRELIMINARY

Rated Speed @ 2200 rpm



Rated Speed @ 2500 rpm

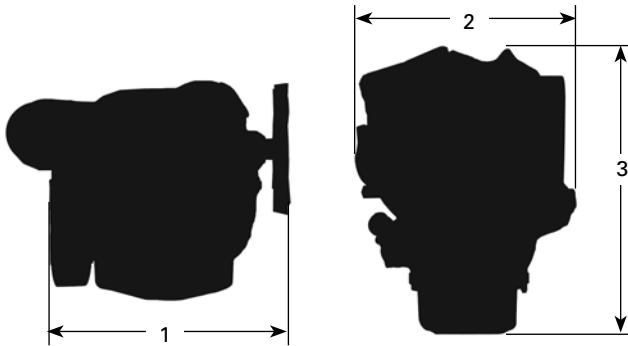


Max. Rating (bkW)	Speed (rev/min)	Torque N·m	Speed (rev/min)
83	2200	450	1400
86	2500	420	1600

Rating Standard ISO 14396:2002

Unless otherwise specified, all stated data is for maximum rated speed and 100% load.

DIMENSIONS



Side Turbo

1) Length	747.5 mm (29.4 in)
2) Width	662 mm (26.0 in)
3) Height	822 mm (32.4 in)

Top Turbo

1) Length	747.5 mm (29.4 in)
2) Width	660 mm (25.98 in)
3) Height	830 mm (32.7 in)

Note: Dimensions dependent on selected options.

RATING DEFINITIONS AND CONDITIONS

IND-C (Intermittent) is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

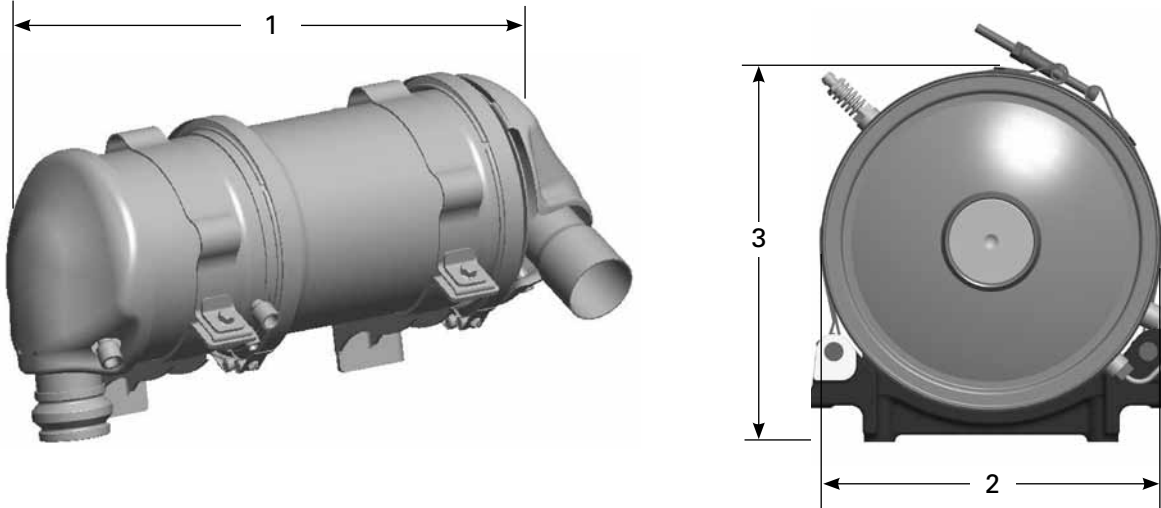
IND-D is for service where maximum power is required for periodic overloads (time at full load not to exceed 10% of the duty cycle).

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

Rating Conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance measured using fuel to EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).



AFTERTREATMENT CONFIGURATION



Images shown may not reflect actual aftertreatment.

Approximate Size and Weight

Wall-Flow

- (1) Length — 541 mm (21.3 in)
 - (2) Diameter — 180 mm (7.1 in)
- Weight — 20 kg (44 lbs)

AFTERTREATMENT FEATURES

Regeneration:

Wall Flow DPF — The transparent system allows the operator to run his machine without any loss in productive time, performance, or power during a continuous regeneration. No operator intervention is required unless the operator wants to prohibit the active regeneration.

Mounting: Multiple off and on engine installation options provide customers with simple and flexible solutions for many applications.

Service: Minimum 3,000 hour DPF ash service intervals.

STANDARD EMISSIONS CONTROL EQUIPMENT

DPF: Diesel Particulate Filter

DOC: Diesel Oxidation Catalyst

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.