



C13 ACERT™
Industrial Engine
Tier 3/Stage IIIA
328 bkW/440 bhp @ 2100 rpm



Image shown may not reflect actual engine

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

Bore.....	130.0 mm (5.12 in)
Stroke.....	157.0 mm (6.18 in)
Displacement.....	12.5 L (762.8 in ³)
Aspiration.....	Turbocharged Aftercooled
Compression Ratio.....	17.3:1
Rotation (from flywheel end).....	Counterclockwise
Weight, Net Dry (approximate kg, lb).....	939 kg, 2070 lb

FEATURES

Emissions

Meets U.S. EPA Tier 3, EU Stage IIIA emission requirements.

Worldwide Supplier Capability

Caterpillar

- Casts engine blocks, heads, and cylinder liners.
- Machines critical components
- Assembles complete engine

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable product.

Factory-designed systems built at Caterpillar ISO certified facilities.

Testing

Prototype testing on every model:

- proves computer design
- verifies system torsional stability
- tests functionality on every model

Every Caterpillar engine is dynamometer tested under full load to ensure proper engine performance.

Full Range of Attachments

Wide range of bolt-on system expansion attachments, factory designed and tested.

Unmatched Product Support Offered Through Worldwide Caterpillar Dealer Network

More than 1,500 dealer outlets.

Caterpillar factory-trained dealer technicians service every aspect of your industrial engine.

99.7% of parts orders filled within 24 hours worldwide.

Caterpillar parts and labor warranty.

Preventive maintenance agreements available for repair before failure options.

Scheduled Oil Sampling program matches your oil sample against Caterpillar set standards to determine:

- internal engine component condition
- presence of unwanted fluids
- presence of combustion by-products

Web Site

For all your industrial power requirements, visit www.cat-industrial.com.



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STANDARD ENGINE EQUIPMENT

Air Inlet System

Air to air aftercooled (ATAAC)
Turbocharged

Control System

Electronic governing, PTO speed control
Programmable ratings
Cold mode start strategy
Automatic altitude compensation
Power compensation for fuel temperature
Programmable low and high idle and total engine limit
Electronic diagnostics and fault logging
Engine monitoring system
J1939 Broadcast (diagnostic and engine status)
ADEM™ A4

Cooling System

Thermostats and housing, vertical outlet
Jacket water pump, centrifugal
Water pump, inlet

Exhaust System

Exhaust manifold, dry
Optional exhaust outlet

Flywheels and Flywheel Housing

SAE No. 1 Flywheel housing

Fuel System

MEUI injection
Fuel filter, secondary (2 micron high performance)
Fuel transfer pump
Fuel priming pump
ACERT™ Technology

Lube System

Crankcase breather
Oil cooler
Oil filler
Oil filter
Oil pan front sump
Oil dipstick
Oil pump (gear driven)

General

Paint, Caterpillar Yellow
Vibration damper
Lifting eyes



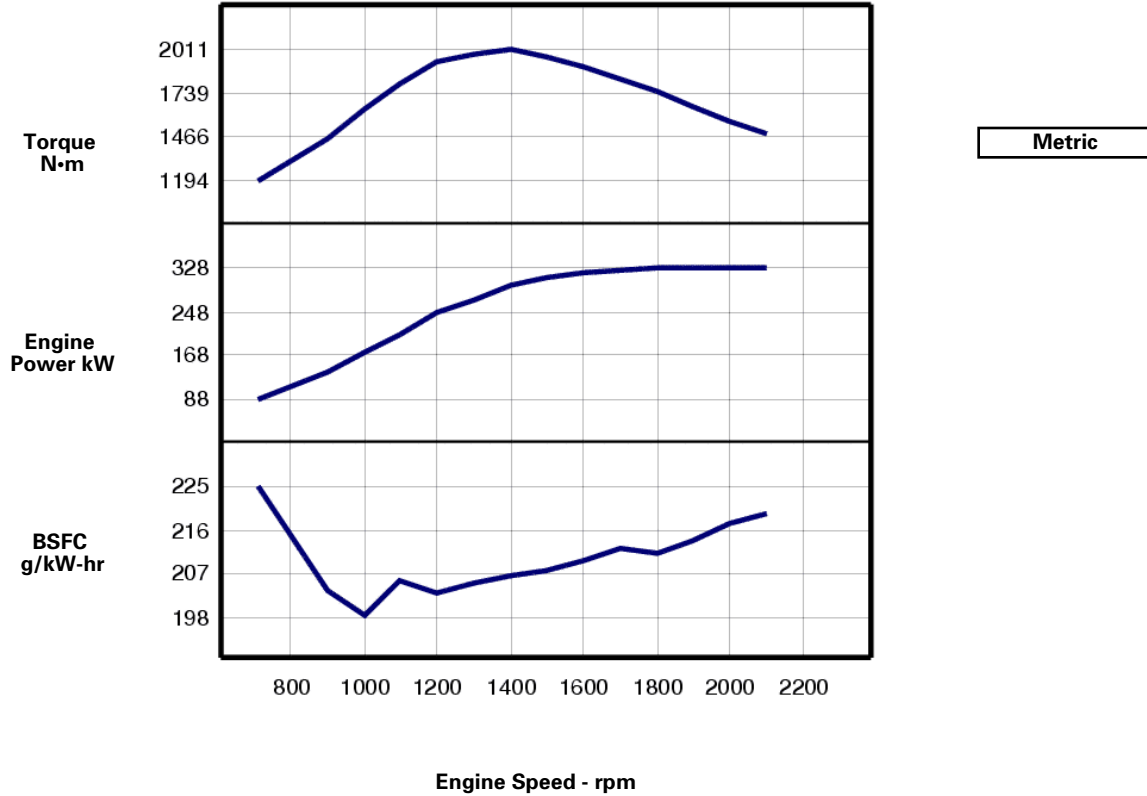
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PERFORMANCE CURVES

IND - C (Intermittent) - DM7687-05

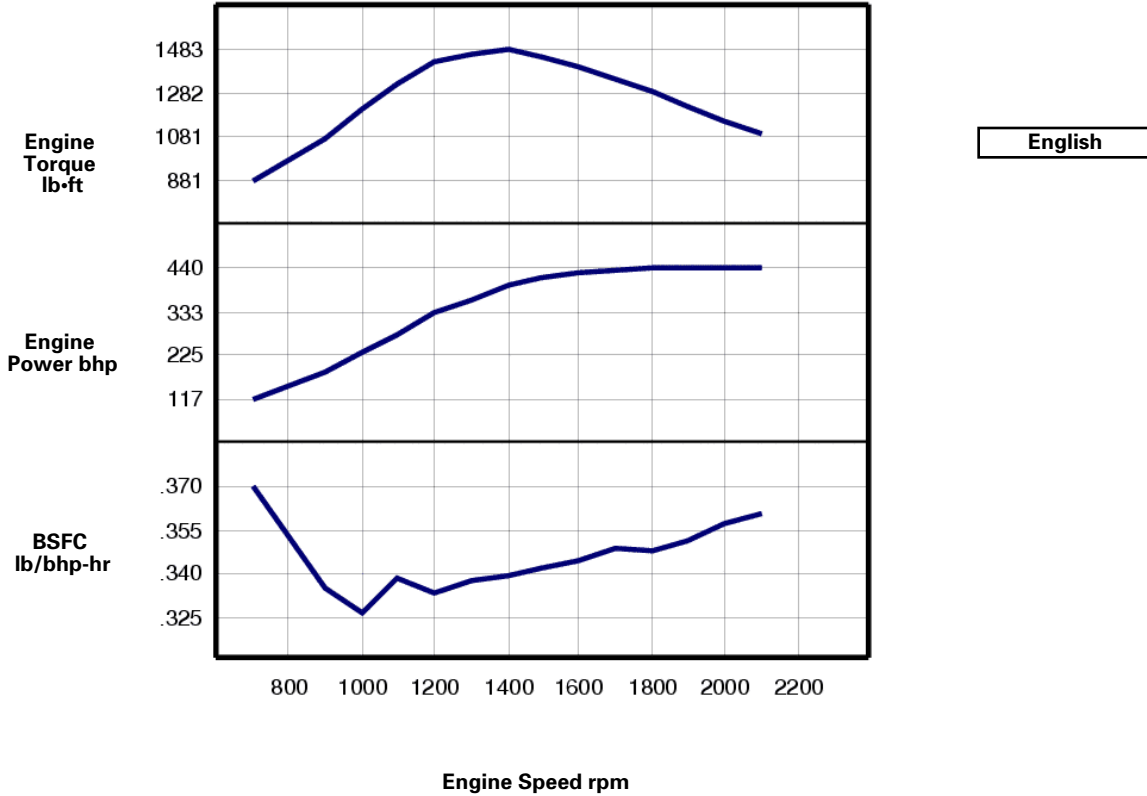


Engine Speed rpm	Engine Power kW	Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
2100	328	1492	219.6	85.9
2000	328	1567	217.2	85.0
1900	328	1650	213.7	83.6
1800	328	1741	211.4	82.7
1700	325	1824	212	82.1
1600	318	1896	209.4	79.3
1500	308	1961	207.7	76.3
1400	295	2011	206.5	72.6
1300	270	1985	205.2	66.1
1200	244	1940	202.8	58.9
1100	206	1791	205.7	50.6
1000	172	1642	198.4	40.7
900	137	1449	203.6	33.1
700	88	1194	225.2	23.5



PERFORMANCE CURVES

IND - C (Intermittent) - DM7687-05



Engine Speed rpm	Engine Power bhp	Engine Torque lb-ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2100	440	1100	.361	22.7
2000	440	1156	.357	22.5
1900	440	1217	.351	22.1
1800	440	1284	.348	21.8
1700	435	1345	.349	21.7
1600	426	1398	.344	20.9
1500	413	1446	.341	20.2
1400	395	1483	.339	19.2
1300	362	1464	.337	17.5
1200	327	1431	.333	15.6
1100	277	1321	.338	13.4
1000	231	1211	.326	10.8
900	183	1069	.335	8.7
700	117	881	.370	6.2



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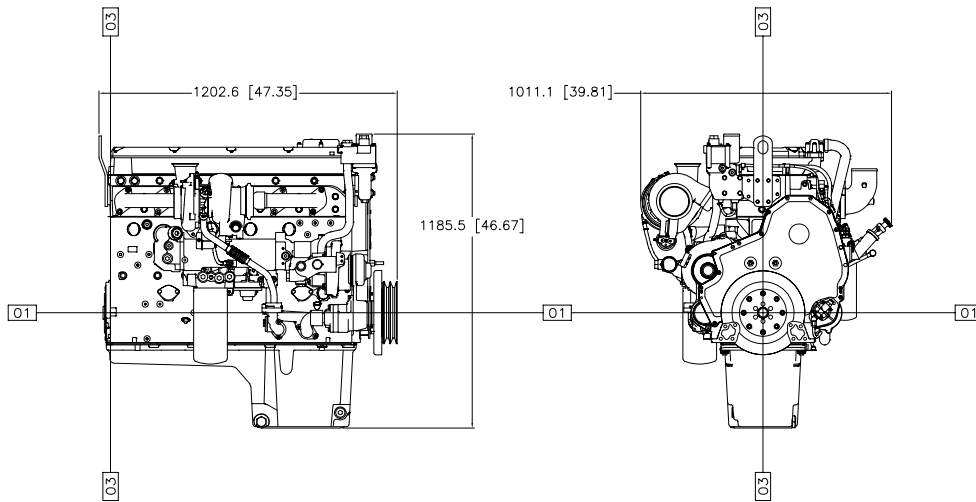
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RATINGS AND CONDITIONS

IND - C (Intermittent) Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

Engine Performance Diesel Engines — 7 liter and higher All 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.



Engine Dimensions

(1) Length	1202.6 mm (47.35 in)
(2) Width	1011.1 mm (39.81 in)
(3) Height	1185.5 mm (46.67 in)

Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2588857).

Performance Number: DM7687-05

Feature Code: C13DI02 Arr. Number: 2413804

Materials and specifications are subject to change without notice.

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