



C9 ACERT™ Industrial Engine

Tier 3/Stage IIIA
224 bkW/300 bhp @ 2200 rpm



Image shown may not reflect actual engine

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

Bore.....	112.0 mm (4.41 in)
Stroke.....	149.0 mm (5.87 in)
Displacement.....	8.8 L (537.01 in ³)
Aspiration.....	Turbocharged Aftercooled
Compression Ratio.....	16.1:1
Rotation (from flywheel end).....	Counterclockwise
Cooling System.....	13.9 liters, 3.7 gallons
Lube Oil System (refill).....	32.0 liters, 8.5 gallons
Weight, Net Dry (approximate kg, lb).....	776 kg, 1711 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
- Factory-designed systems built at Caterpillar ISO 9001:2000 certified facilities
- Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable product.

Testing

Prototype testing on every model:

- proves computer design
- verifies system torsional stability
- functionality tests 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

HEUI 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



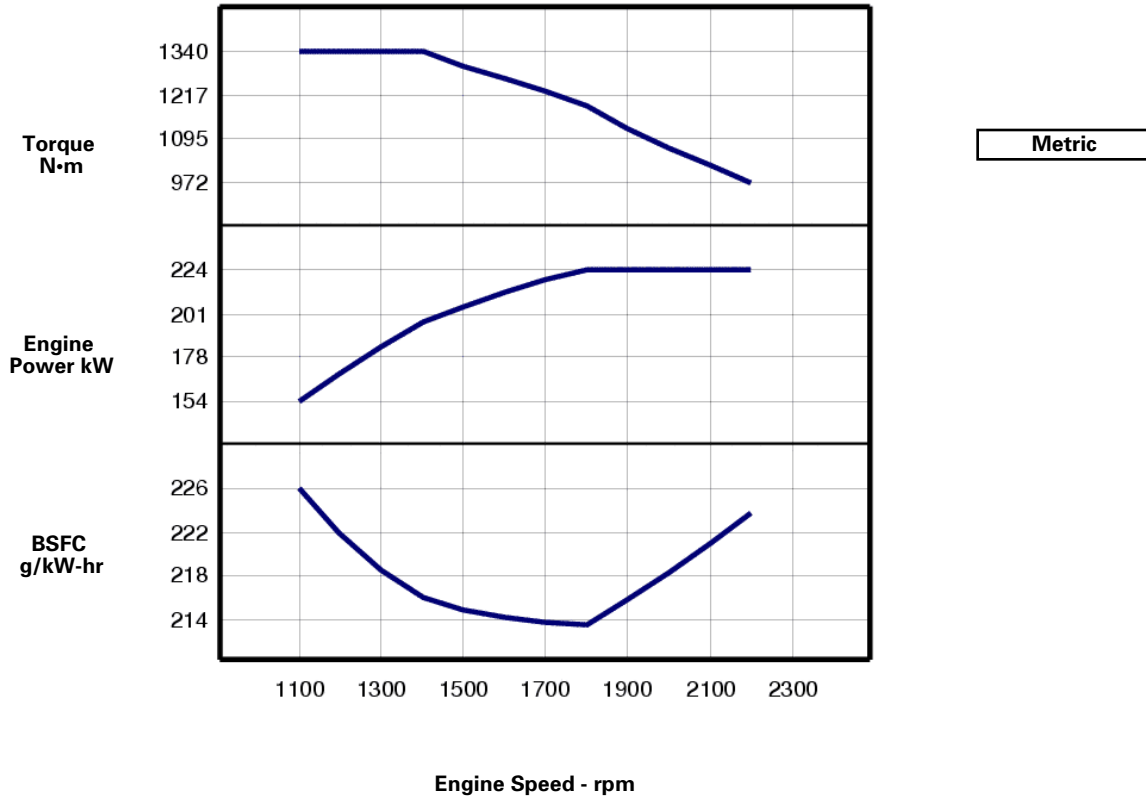
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PERFORMANCE CURVES

IND - B - DM8117-01



Engine Speed rpm	Engine Power kW	Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
2200	224	972	223.7	59.7
2100	224	1019	221.1	59.0
2000	224	1070	218.2	58.3
1900	224	1126	215.8	57.6
1800	224	1188	213.6	57.0
1700	219	1229	213.7	55.7
1600	212	1265	214.1	54.1
1500	204	1300	214.9	52.3
1400	197	1340	216.1	50.6
1300	182	1339	218.6	47.5
1200	168	1340	222	44.5
1100	154	1340	225.9	41.6



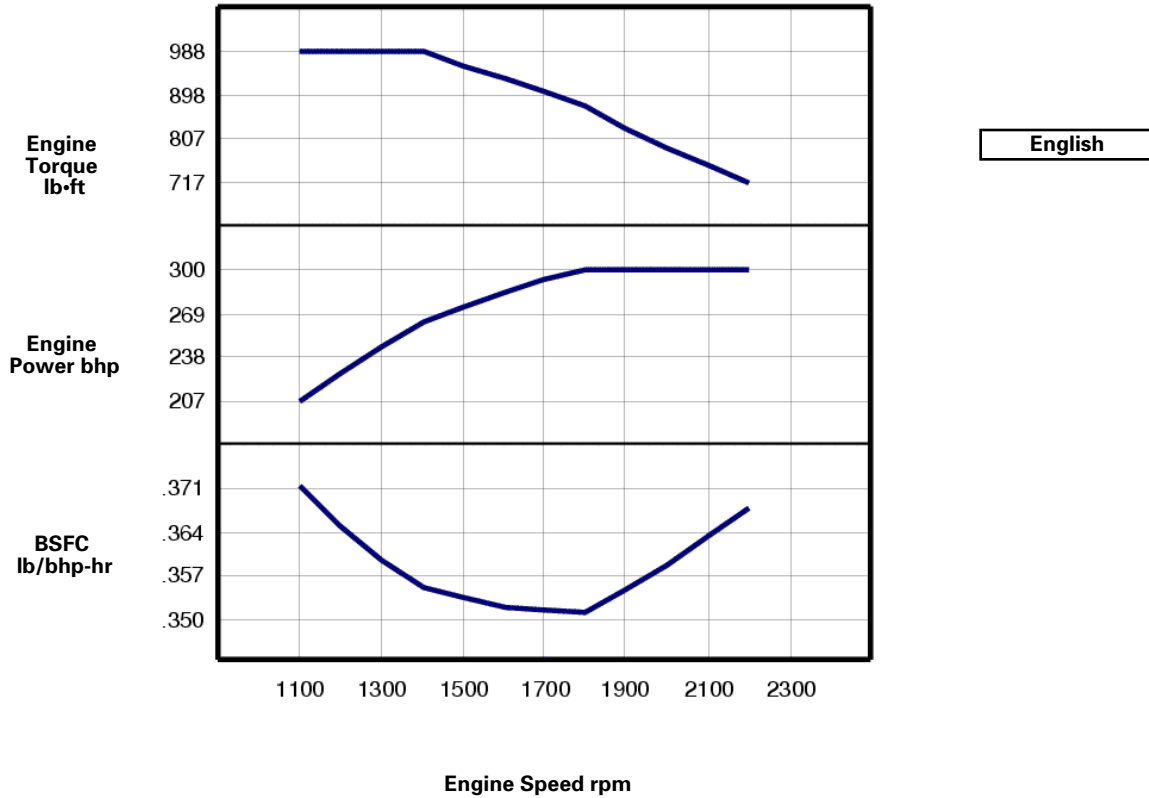
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PERFORMANCE CURVES

IND - B - DM8117-01



Engine Speed rpm	Engine Power bhp	Engine Torque lb-ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2200	300	717	.368	15.8
2100	300	752	.363	15.6
2000	300	789	.359	15.4
1900	300	830	.355	15.2
1800	300	876	.351	15.1
1700	293	906	.351	14.7
1600	284	933	.352	14.3
1500	274	959	.353	13.8
1400	264	988	.355	13.4
1300	244	988	.359	12.5
1200	226	988	.365	11.8
1100	207	988	.371	11.0



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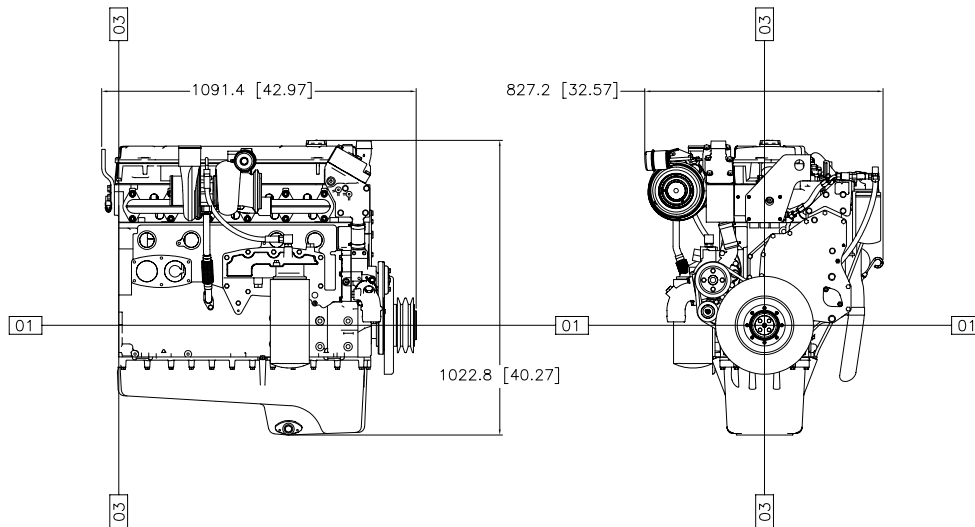
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RATINGS AND CONDITIONS

IND - B For service where power and/or speed are cyclic (time at full load not to exceed 80%).

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	1091.4 mm (42.97 in)
(2) Width	827.2 mm (32.57 in)
(3) Height	1022.8 mm (40.27 in)

Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2651026).

Performance Number: DM8117-01

Feature Code: C09D111 Arr. Number: 2524430

Materials and specifications are subject to change without notice.

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