



C7 ACERT™ Industrial Engine

Tier 3/Stage IIIA
205 bkW/275 bhp @ 2200 rpm



Image shown may not reflect actual engine

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

Bore.....	110.0 mm (4.33 in)
Stroke.....	127.0 mm (5.0 in)
Displacement.....	7.2 L (442 in ³)
Aspiration.....	Turbocharged ATAAC
Compression Ratio.....	17:1
Rotation (from flywheel end).....	Counterclockwise
Lube Oil System (refill).....	28 L (7.4 U.S. gal)
Weight, Net Dry (approximate kg, lb).....	588 kg (1296 lbs)

FEATURES

Emissions

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

Worldwide Supplier Capability

Caterpillar
- Casts engine blocks and heads
- 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 Electronic Control Unit (ECU)

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



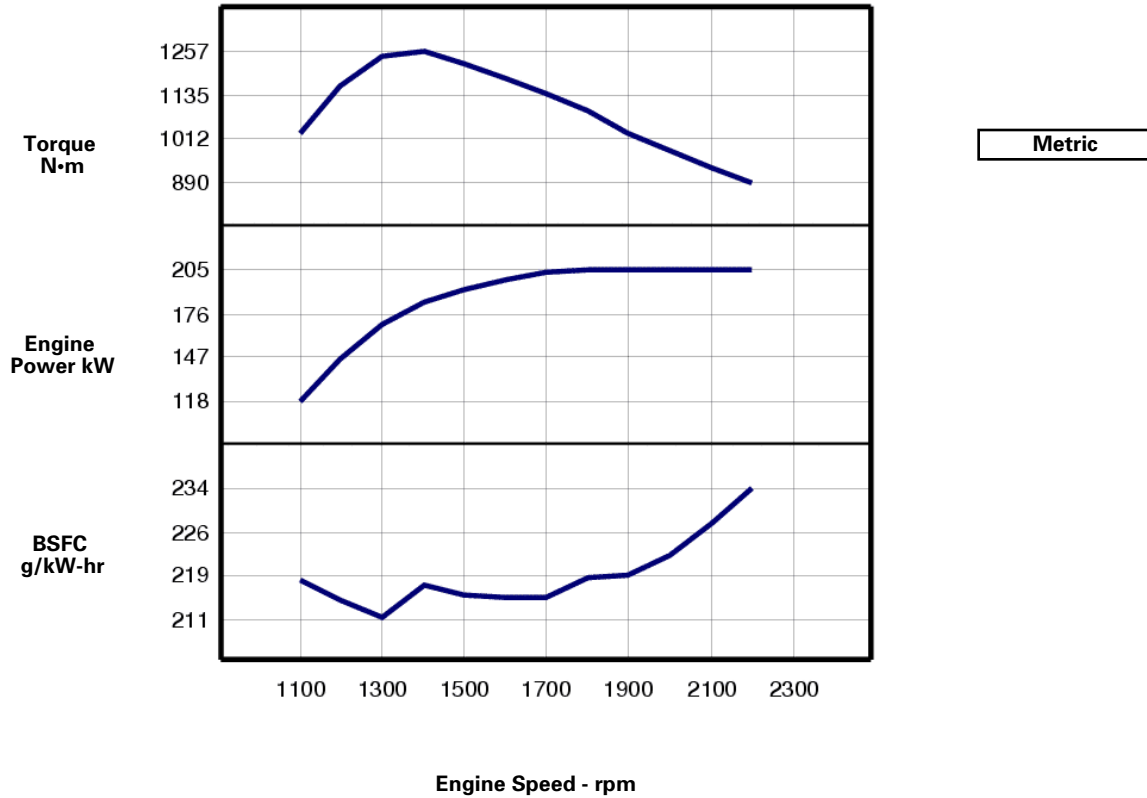
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PERFORMANCE CURVES

IND - C (Intermittent) - DM9222-01



Engine Speed rpm	Engine Power kW	Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
2200	205	890	234.1	57.2
2100	205	932	227.9	55.7
2000	205	979	222.1	54.3
1900	205	1030	218.5	53.4
1800	205	1088	218.3	53.3
1700	203	1140	214.5	51.9
1600	198	1182	214.8	50.7
1500	192	1222	215	49.2
1400	184	1257	216.8	47.6
1300	169	1241	211	42.5
1200	146	1162	214.4	37.3
1100	118	1024	218	30.7



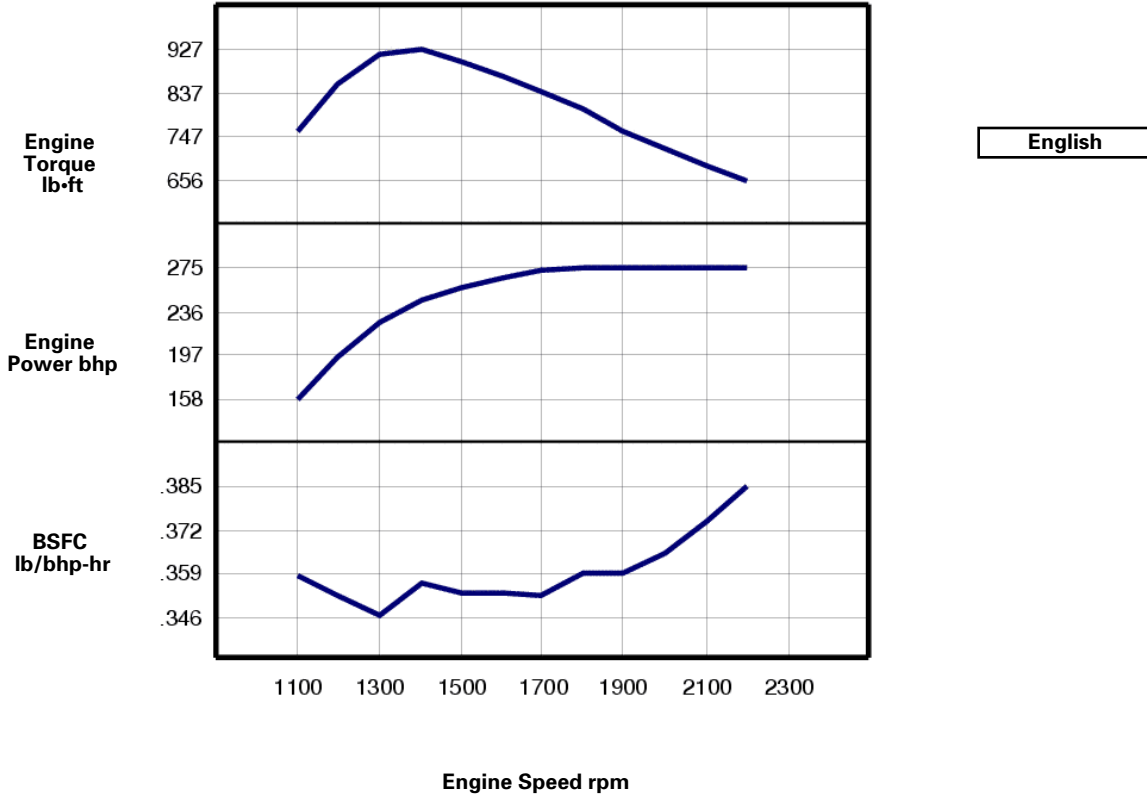
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PERFORMANCE CURVES

IND - C (Intermittent) - DM9222-01



Engine Speed rpm	Engine Power bhp	Engine Torque lb-ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2200	275	656	.385	15.1
2100	275	687	.375	14.7
2000	275	722	.365	14.3
1900	275	760	.359	14.1
1800	275	802	.359	14.1
1700	272	841	.353	13.7
1600	266	872	.353	13.4
1500	257	901	.353	13.0
1400	247	927	.356	12.6
1300	227	915	.347	11.2
1200	196	857	.352	9.9
1100	158	755	.358	8.1



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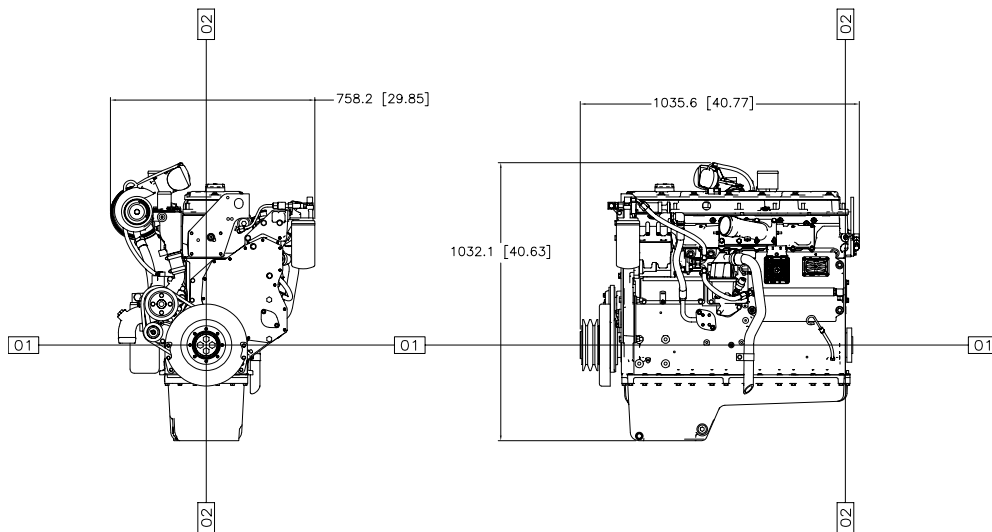
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RATINGS AND CONDITIONS

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	1052.7 mm (41.44 in)
(2) Width	758.2 mm (29.85 in)
(3) Height	1032.1 mm (40.63 in)

Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2835788).

Performance Number: DM9222-01

Feature Code: C07DI03 Arr. Number: 2903976

Materials and specifications are subject to change without notice.

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