



C9 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..... 112.0 mm (4.41 in)
Stroke..... 149.0 mm (5.87 in)
Displacement..... 8.8 L (537.01 in³)
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



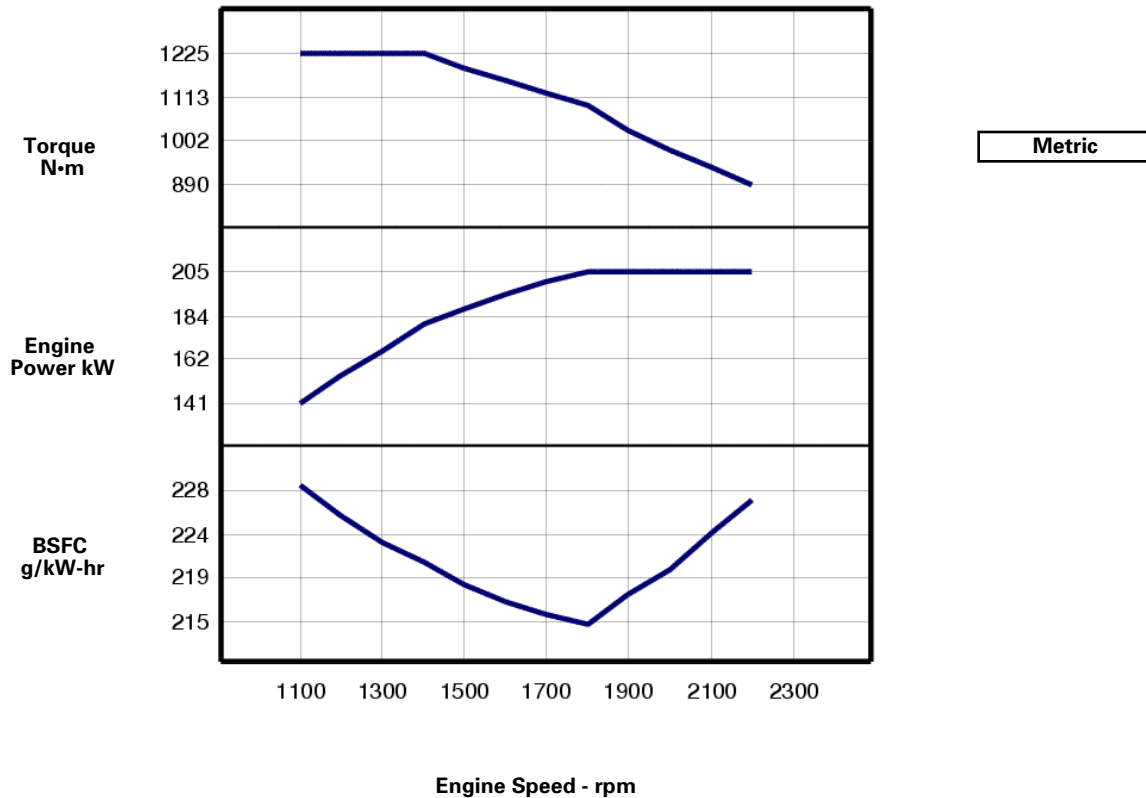
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PERFORMANCE CURVES

IND - A (Continuous) - DM8116-01



Engine Speed rpm	Engine Power kW	Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
2200	205	890	226.9	55.5
2100	205	933	223.8	54.7
2000	205	980	220.1	53.8
1900	205	1031	217.8	53.3
1800	205	1089	214.9	52.6
1700	200	1123	215.8	51.4
1600	194	1157	217	50.1
1500	187	1190	218.7	48.7
1400	180	1225	220.8	47.3
1300	167	1225	222.8	44.3
1200	154	1224	225.3	41.3
1100	141	1225	228.3	38.4



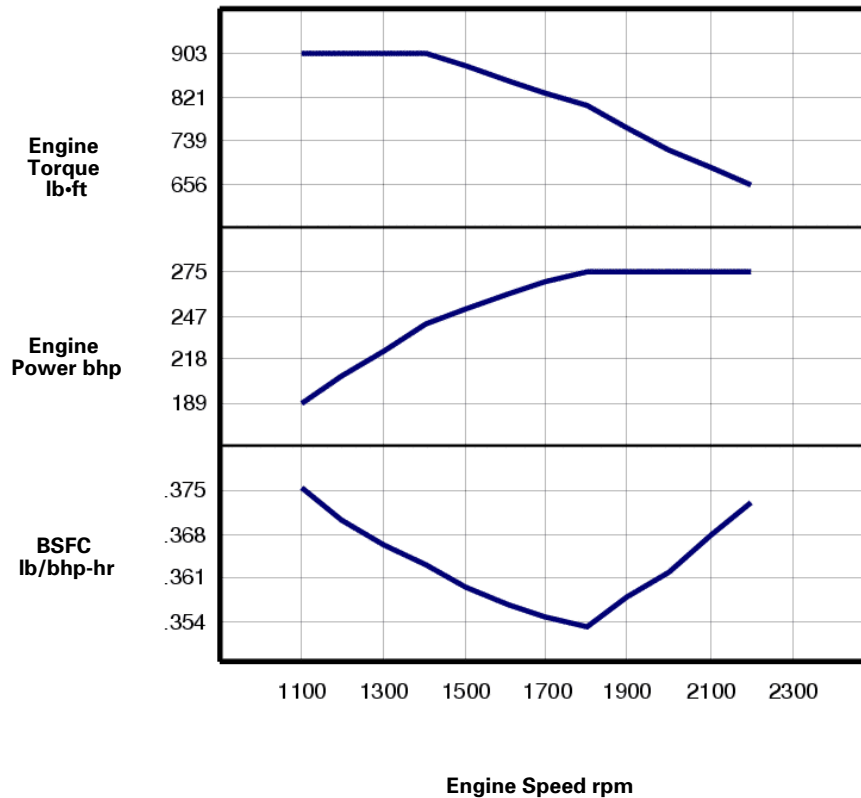
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PERFORMANCE CURVES

IND - A (Continuous) - DM8116-01



Engine Speed rpm	Engine Power bhp	Engine Torque lb·ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2200	275	656	.373	14.7
2100	275	688	.368	14.5
2000	275	723	.362	14.2
1900	275	760	.358	14.1
1800	275	803	.353	13.9
1700	268	828	.355	13.6
1600	260	853	.357	13.2
1500	251	878	.360	12.9
1400	241	904	.363	12.5
1300	224	904	.366	11.7
1200	206	903	.370	10.9
1100	189	904	.375	10.1



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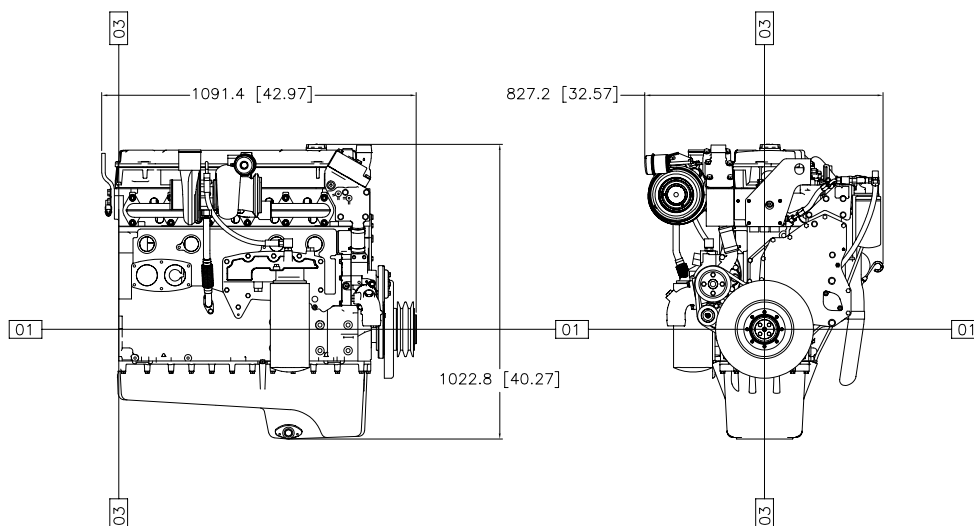
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RATINGS AND CONDITIONS

IND - A (Continuous) Continuous heavy duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

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: DM8116-01

Feature Code: C09D110 Arr. Number: 2524430

Materials and specifications are subject to change without notice.

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