

C9 ACERT™ Industrial Engine

Tier 3/Stage IIIA 261 bkW/350 bhp @ 2200 rpm



Image shown may not reflect actual engine

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:
- provés computer design
- verifies system torsional stability
- functionality tests every model

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

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

Bore	- ()
Stroke	149.0 mm (5.87 in)
Displacement	
Aspiration	.Turbocharged Aftercooled
Compression Ratio	
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 (approxima	te kg, lb) 776 kg, 1711 lb

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.



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

C9 ACERT™ Industrial Engine Tier 3/Stage IIIA

261 bkW/350 bhp @ 2200 rpm

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



C9 ACERT[™] Industrial Engine Tier 3/Stage IIIA 261 bkW/350 bhp @ 2200 rpm

1557 1416 1274 Torque N∙m 1133 261 237 Engine Power kW 213 189 226 220 BSFC g/kW-hr 215 209 1300 1500 1700 1900 2100 2300

IND - C (Intermittent) - DM8119-02

PERFORMANCE CURVES

Engine Speed - rpm

rpm	kW	•	•	-
2200	261	1133	226.2	70.4
2100	261	1187	223.1	69.4
2000	261	1246	218.3	67.9
1900	261	1312	215.1	66.9
1800	261	1385	212.3	66.1
1700	254	1428	209.7	63.5
1600	247	1474	208.7	61.4
1500	238	1513	211.8	60.0
1400	228	1557	212.9	57.9
1300	207	1517	211.6	52.1
1200	189	1501	214.8	48.3

Engine Speed Engine Power Torque N·m BSFC g/kW-hr Fuel Rate L/hr

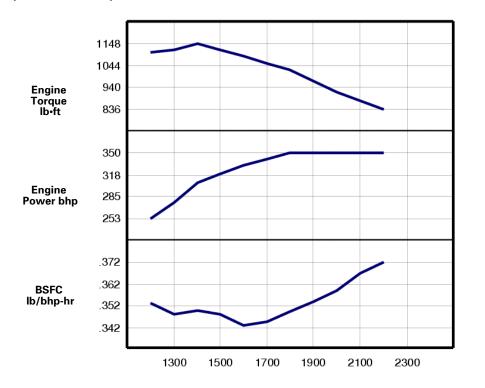
Metric



C9 ACERT™ Industrial Engine Tier 3/Stage IIIA 261 bkW/350 bhp @ 2200 rpm

English

PERFORMANCE CURVES



IND - C (Intermittent) - DM8119-02

Engine Speed rpm

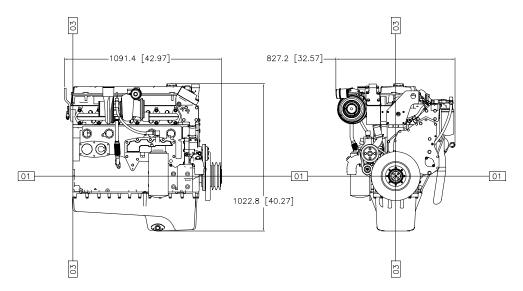
Engine Speed rpm	Engine Power bhp	Engine Torque lb•ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2200	350	836	.372	18.6
2100	350	875	.367	18.3
2000	350	919	.359	17.9
1900	350	968	.354	17.7
1800	350	1022	.349	17.5
1700	341	1053	.345	16.8
1600	331	1087	.343	16.2
1500	319	1116	.348	15.9
1400	306	1148	.350	15.3
1300	277	1119	.348	13.8
1200	253	1107	.353	12.8



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

Performance Number: DM8119-02

Feature Code: C09DI13 Arr. Number: 2446783

Materials and specifications are subject to change without notice. 16289378 Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2651026).

© 2012 Caterpillar

All rights reserved.

The International System of Units (SI) is used in this publication.

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow," 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.