

C11 ACERT[™] Industrial Engine

Tier 3/Stage IIIA 242 bkW/325 bhp @ 2100 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 | 140.0 mm (5.51 in) |
| Displacement | |
| Aspiration | |
| Compression Ratio | |
| Rotation (from flywheel end) Weight, Net Dry (approximation |) Counterclockwise te kg, lb) 930 kg (2050 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

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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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Metric

PERFORMANCE CURVES



IND - A (Continuous) - DM7690-05

Engine Speed - rpm

| rpm | kW | | 2010 g, | |
|------|-----|------|---------|------|
| 2100 | 242 | 1101 | 237.5 | 68.5 |
| 2000 | 242 | 1156 | 231.3 | 66.7 |
| 1900 | 242 | 1216 | 226.5 | 65.4 |
| 1800 | 242 | 1284 | 221.7 | 63.9 |
| 1700 | 240 | 1348 | 216.5 | 61.9 |
| 1600 | 235 | 1405 | 211.9 | 59.4 |
| 1500 | 227 | 1445 | 212.1 | 57.4 |
| 1400 | 218 | 1487 | 212.8 | 55.3 |
| 1300 | 200 | 1469 | 211.5 | 50.4 |
| 1200 | 180 | 1432 | 213.2 | 45.8 |
| 1100 | 152 | 1320 | 216.1 | 39.2 |

| Engine Speed rpm | Engine Power kW | Torque N•m | BSFC g/kW-hr | Fuel Rate L/hr |
|---------------------|--------------------|------------|--------------|----------------|
| 0100 | 0.10 | 4404 | 007 5 | 00 F |



PERFORMANCE CURVES

English



IND - A (Continuous) - DM7690-05

Engine Speed rpm

| Engine Speed rpm | Engine Power bhp | Engine Torque Ib•ft | BSFC lb/bhp-hr | Fuel Rate gal/hr |
|---------------------|---------------------|------------------------|----------------|---------------------|
| 2100 | 325 | 812 | .390 | 18.1 |
| 2000 | 325 | 853 | .380 | 17.6 |
| 1900 | 325 | 897 | .372 | 17.3 |
| 1800 | 325 | 947 | .364 | 16.9 |
| 1700 | 322 | 994 | .356 | 16.4 |
| 1600 | 316 | 1036 | .348 | 15.7 |
| 1500 | 304 | 1066 | .349 | 15.2 |
| 1400 | 292 | 1097 | .350 | 14.6 |
| 1300 | 268 | 1083 | .348 | 13.3 |
| 1200 | 241 | 1056 | .351 | 12.1 |
| 1100 | 204 | 974 | .355 | 10.4 |



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.

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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 | 1054.4 mm (41.51 in) | |
| (3) Height | 1185.5 mm (46.67 in) | |

Performance Number: DM7690-05

Feature Code: C11DI00 Arr. Number: 2364572

Materials and specifications are subject to change without notice. 16287067 Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2588858).

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