

3406 C **Industrial Engine**

Non-Certified 343 bkW/460 bhp @ 2100 rpm



Image shown may not reflect actual engine

FEATURES

Emissions

Non-certified rating. Meets emission levels for Tier 1 Wide range of bolt-on system expansion / Stage I standards.

Single Source Supplier

Caterpillar

- Casts engine blocks, heads, cylinder liners, and flywheel housings
- Machines critical components
- Assembles complete engine

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable product.

Factory-designed systems built at Caterpillar ISO certified facilities.

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.

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

BoreStroke DisplacementTurbocha Compression RatioTurbocha Compression Ratio Rotation (from flywheel end) Capacity for Liquids Cooling System Lube Oil System (refill) Engine Weight Net Dry (approximat	165.1 mm (6.5 in) 14.64 L (893.39 in ³) arged / Aftercooled 14.5:1 . Counterclockwise 20.8 L (5.5 gal) 38.0 L (10.0 gal)
Engine Weight, Net Dry (approximat lb)	e) 1,501 kg (3,309

Full Range of Attachments

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 cleaner, Regular duty, dry, panel type with service indicators, turbocharger, jacket water aftercooled

Control System

Governor, Hydra-mechanical

Cooling System

Thermostats and housing, Jacket water pump, gear driven, centrifugal, RH

Exhaust System

Exhaust manifold, dry, front exhaust Exhaust elbow, dry, 152 mm (6 in), 4 bolt flange 127 mm (5 in) on 406DO12

Flywheels and Flywheel Housings

Flywheel, SAE No. 1 Flywheel housing, SAE No. 1, SAE standard rotation

Fuel Systems

Fuel Filter, LH Fuel transfer pump Fuel priming pump

Instrumentation

Instrument Panel, LH Engine oil pressure gauge Fuel pressure gauge Water temperature gauge Service meter

Lube System

Crankcase breather Oil cooler, RH Oil filter, RH Oil filler in valve cover and dipstick, both RH Rear sump oil pan

Mounting System

Supports

General

Paint, Caterpillar Yellow Vibration damper and guard Lifting eyes

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Metric

PERFORMANCE CURVES



IND - C (Intermittent) - DM0347-01

Engine Speed - rpm

Engine Speed rpm	Engine Power kW	Torque N∙m	BSFC g/kW-hr	Fuel Rate L/hr
2100	343	1560	214.8	87.8
2000	343	1635	213.1	86.9
1900	340	1709	211.1	85.3
1800	335	1778	209.2	83.4
1700	328	1844	208.5	81.4
1600	320	1911	208.5	79.3
1500	308	1962	208.8	76.5
1400	292	1989	209.3	72.6
1300	269	1975	210.3	67.6
1200	244	1941	211.9	61.6



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English

PERFORMANCE CURVES



IND - C (Intermittent) - DM0347-01

Engine Speed rpm

Engine Speed rpm	Engine Power bhp	Engine Torque lb•ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2100	460	1151	.353	23.2
2000	459	1206	.350	23.0
1900	456	1260	.347	22.5
1800	450	1311	.344	22.0
1700	440	1360	.343	21.5
1600	429	1409	.343	20.9
1500	413	1447	.343	20.2
1400	391	1467	.344	19.2
1300	361	1457	.346	17.9
1200	327	1432	.348	16.3



RATINGS AND CONDITIONS

IND - C (Intermittent) Intermittent service where maximum power and/or speed are cyclic. The power and speed capability of the engine can be utilized for one uninterrupted hour followed by one hour of operation at or below IND - A. Time at full load is not to exceed 50% of the duty cycle. Typical service examples are: agricultural tractors, harvesters and combines, off highway trucks, fire pump application power, blast hole drills, rock crushers and wood chippers with high torque rise, and oil field hosting. **Engine Performance** Engine performance is corrected to inlet air standard conditions of 99 KPA (29.31 IN HG) dry barometer and 25 deg C (77 deg F) temperature. These values correspond to the standard atmospheric pressure and temperature as shown in SAE J1995.

Performance measured using a standard fuel with fuel gravity of 35 degrees API having a lower heating value of 42,780 KJ/KG (18,390 BTU/LB) when used at 29 DEG (84.2 DEG F) where the density is 838.9 G/L (7.001 LB/US GAL).

The corrected performance values shown for Caterpillar engines will approximate the values obtained when the observed performance data is corrected to SAE J1995, ISO 3046-2 and 8665 and 2288 and 9249 and 1585, EEC 80/1269 and DIN 70020 standard reference conditions.



Engine Dimensions		
(1) Length	1659.7 mm (65.34 in)	
(2) Width	911.6 mm (35.89 in)	
(3) Height	1335.0 mm (52.56 in)	

Performance Number: DM0347-01

Feature Code: 406DI08 Arr. Number: 1091349

Materials and specifications are subject to change without notice. 16282188 Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 3N9438).

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