

# 3406 C

# **Industrial Engine**

**Non-Certified** 298 bkW/400 bhp @ 1800 rpm

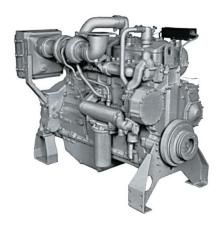


Image shown may not reflect actual engine

## CAT® ENGINE SPECIFICATIONS

#### I-6, 4-Stroke-Cycle Diesel

Bore	137.2 mm (5.4 in)
Stroke	165.1 mm (6.5 in)
Displacement	14.64 L (893.39 in <sup>3</sup> )
Aspiration	.Turbocharged / Aftercooled
	15.9:1
	d) Counterclockwise
Capacity for Liquids	
	20.8 L (5.5 gal)
Lube Oil System (refill)	38.0 L (10.0 gal)
Engine Weight, Net Dry (ap	proximate) 1,514 kg (3,338
lb)	

### **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.

#### **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

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#### **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

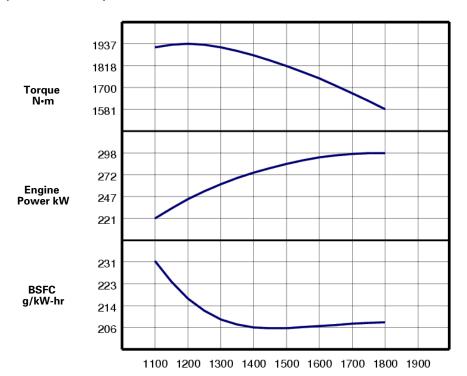
#### General

Paint, Caterpillar Yellow Vibration damper and guard Lifting eyes



# **PERFORMANCE CURVES**

## IND - C (Intermittent) - DM2160-02



Metric

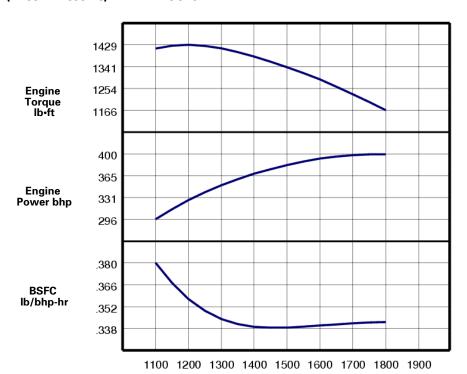
Engine Speed - rpm

Engine Speed rpm	Engine Power kW	Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
1800	298	1581	208.1	73.9
1750	298	1625	207.9	73.7
1700	297	1668	207.6	73.3
1650	295	1709	207.1	72.7
1600	293	1749	206.7	71.9
1550	290	1784	206.3	70.9
1500	285	1816	205.9	69.8
1450	280	1846	205.9	68.6
1400	275	1874	206.2	67.3
1350	268	1898	207.3	66.1
1300	261	1918	209.2	64.9
1250	253	1931	212.5	63.7
1200	243	1937	217.1	62.6
1150	233	1932	223.4	61.7
1100	221	1917	231.2	60.9



# **PERFORMANCE CURVES**

# IND - C (Intermittent) - DM2160-02



English

**Engine Speed rpm** 

Engine Speed rpm	Engine Power bhp	Engine Torque lb•ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
1800	400	1166	.342	19.5
1750	399	1199	.342	19.5
1700	398	1230	.341	19.4
1650	396	1260	.340	19.2
1600	393	1290	.340	19.0
1550	388	1316	.339	18.7
1500	382	1339	.338	18.4
1450	376	1362	.338	18.1
1400	368	1382	.339	17.8
1350	360	1400	.341	17.5
1300	350	1415	.344	17.1
1250	339	1424	.349	16.8
1200	326	1429	.357	16.5
1150	312	1425	.367	16.3
1100	296	1414	.380	16.1



# RATINGS AND CONDITIONS

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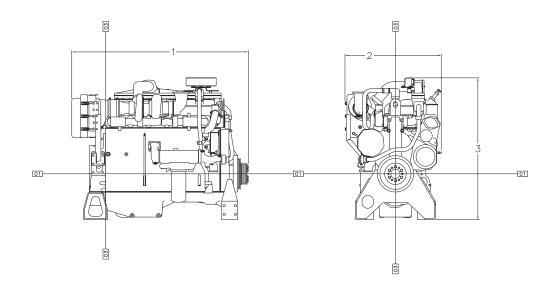
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IND - C (Intermittent) Intermittent service where maximum power and/or speed are cyclic. The power and speed capability of the engine can be utilized for one uninterrupted hour followed by one hour of operation at or below IND - A. Time at full load 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	1660.1 mm (65.36 in)			
(2) Width	905.7 mm (35.66 in)			
(3) Height	1335.0 mm (52.56 in)			

Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 1324895).

Performance Number: DM2160-02

Feature Code: 406DI03 Arr. Number: 1247634

Materials and specifications are subject to change without notice.

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