

# C11 ACERT™ Industrial Engine

Tier 3/Stage IIIA 287 bkW/385 bhp @ 2100 rpm



Image shown may not reflect actual engine

#### **CAT® ENGINE SPECIFICATIONS**

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

Bore	(5.12 in)
	140.0 mm (5.51 in)
	11.1 L (677.36 in <sup>3</sup> )
Aspiration	Turbocharged Aftercooled
Compression Ratio	
Rotation (from flywheel end	d) Counterclockwise
Weight, Net Dry (approxim	ate kg, lb) 930 kg (2050 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.



#### STANDARD ENGINE EQUIPMENT

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#### 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**

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)

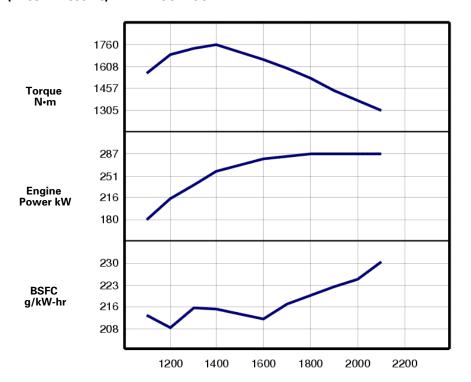
#### General

Paint, Caterpillar Yellow Vibration damper Lifting eyes



## **PERFORMANCE CURVES**

## IND - C (Intermittent) - DM7692-05



Metric

Engine Speed - rpm

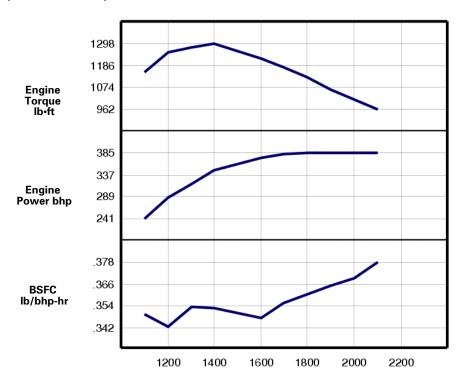
Engine Speed rpm	Engine Power kW	Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
2100	287	1305	230.1	78.7
2000	287	1370	224.6	76.9
1900	287	1443	222.1	76.0
1800	287	1523	219	74.9
1700	284	1595	216.4	73.3
1600	278	1659	211.4	70.1
1500	269	1712	212.9	68.3
1400	258	1760	214.5	66.0
1300	236	1734	214.9	60.5
1200	213	1695	208.4	52.9
1100	180	1563	212.7	45.6



## **PERFORMANCE CURVES**

# 287 bkW/385 bhp @ 2100 rpm

## IND - C (Intermittent) - DM7692-05



English

**Engine Speed rpm** 

Engine Speed rpm	Engine Power bhp	Engine Torque lb•ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2100	385	963	.378	20.8
2000	385	1010	.369	20.3
1900	385	1064	.365	20.1
1800	385	1123	.360	19.8
1700	381	1176	.356	19.4
1600	373	1224	.348	18.5
1500	361	1263	.350	18.0
1400	346	1298	.353	17.4
1300	316	1279	.353	16.0
1200	286	1250	.343	14.0
1100	241	1153	.350	12.0



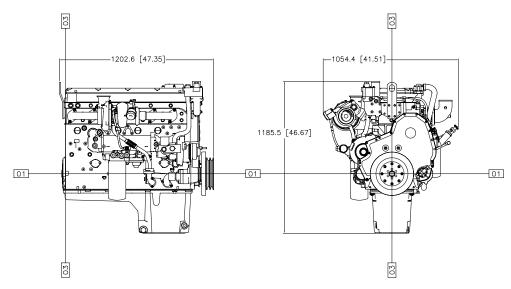
#### **RATINGS AND CONDITIONS**

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**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	1202.6 mm (47.35 in)			
(2) Width	1054.4 mm (41.51 in)			
(3) Height	1185.5 mm (46.67 in)			

Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2588858 ).

Performance Number: DM7692-05

Feature Code: C11DI02 Arr. Number: 2364572

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Materials and specifications are subject to change without notice.

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