

C15 ACERT[™] Industrial Engine

Tier 3/Stage IIIA 444 bkW/595 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, cylinder liners, and flywheel housings

- 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.

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

Bore	137.2 mm (5.4 in)
Stroke	
Displacement	15.2 L (927.56 in ³)
Aspiration	
Compression Ratio	
Rotation (from flywheel end)	Counterclockwise
Weight, Net Dry (approximation	te kg. ib) 1469 kg (3239 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 1,800 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

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)

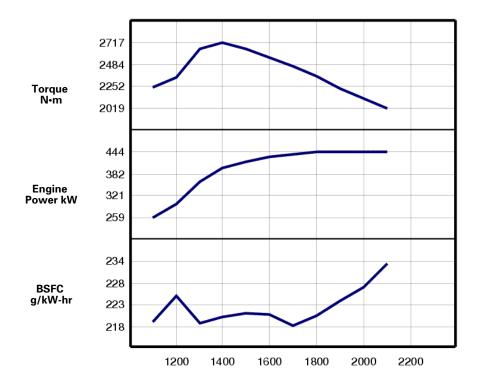
General

Paint, Caterpillar Yellow Vibration damper Lifting eyes



PERFORMANCE CURVES

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IND - E - DM7772-01

Engine Speed - rpm

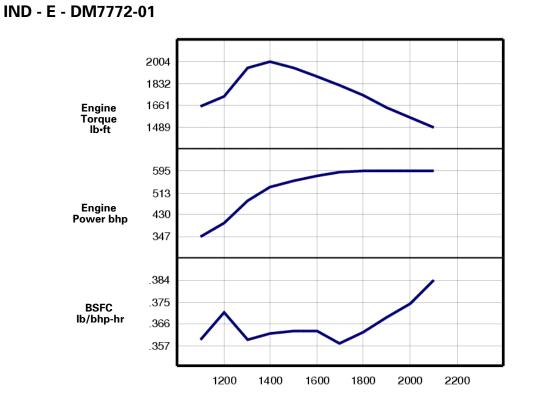
Engine Speed rpm	Engine Power kW	Torque N•m	BSFC g/kW-hr	Fuel Rate L/hr
2100	444	2019	233.7	123.7
2000	444	2120	227.6	120.5
1900	444	2231	224.1	118.6
1800	444	2355	220.4	116.6
1700	439	2464	217.7	113.8
1600	429	2561	220.8	112.9
1500	416	2649	220.9	109.6
1400	398	2717	220.2	104.5
1300	361	2651	218.6	94.1
1200	296	2351	225.5	79.4
1100	259	2247	218.7	67.5

Metric



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English

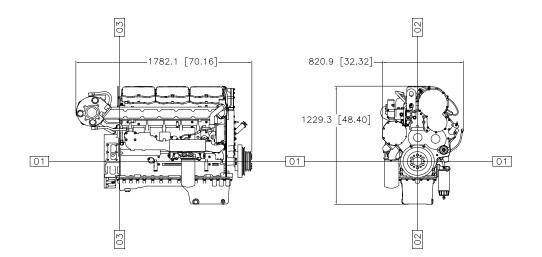
Engine Speed rpm

Engine Speed rpm	Engine Power bhp	Engine Torque lb•ft	BSFC lb/bhp-hr	Fuel Rate gal/hr
2100	595	1489	.384	32.7
2000	595	1564	.374	31.8
1900	595	1645	.368	31.3
1800	595	1737	.362	30.8
1700	588	1817	.358	30.1
1600	575	1889	.363	29.8
1500	558	1954	.363	29.0
1400	534	2004	.362	27.6
1300	484	1955	.359	24.9
1200	396	1734	.371	21.0
1100	347	1657	.360	17.8



RATINGS AND CONDITIONS

IND - E For service where maximum power is required for a short time for initial starting or sudden overload. For emergency service where standard power is unavailable (time at full load not to exceed 5% of the duty cycle). 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	1380.9 mm (54.37 in)	
(2) Width	926.4 mm (36.47 in)	
(3) Height	1248.3 mm (49.15 in)	

Performance Number: DM7772-01

Feature Code: C15DI14 Arr. Number: 2543835

Materials and specifications are subject to change without notice. 16287418 Note: Do not use for installation design. See general dimension drawings for detail (Drawing # 2579952).

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