

Engine Pictured with Optional Equipment

### CAT® ENGINE SPECIFICATIONS

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

Bore .....	84.0 mm (3.3 in.)
Stroke .....	100 mm (3.9 in.)
Displacement .....	2.216 L (135.0 in <sup>3</sup> )
Aspiration .....	Naturally Aspirated
Compression Ratio .....	23.3:1
Combustion System .....	Indirect injection
Rotation (from flywheel end) .....	Counterclockwise
Capacity for Liquids	
Cooling System	
(engine only) .....	3.6 L (3.8 U.S. qts.)
Lube Oil System (refill) .....	10.6 L (11.2 U.S. qts.)
Engine Weight, Net Dry (approximate)	
with standard equipment .....	184.0 kg (406.0 lbs.)

### FEATURES

#### Emissions

Meets 2008 Tier 4 Interim, Stage IIIA emissions requirements. Tier 4 Interim refers to EPA (U.S.) standards. Stage IIIA refers to European standards.

#### Reliable, Quiet, and Durable Power

World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life.

#### High Performance

Substantial torque rise delivers impressive performance through a wide speed range while maintaining low operating costs.

#### Fuel Efficiency

Fuel consumption optimized to match operating cycles of a wide range of equipment and applications.

#### Broad Application Range

Industry leading range of factory configurable ratings and options for agricultural, materials-handling, construction, mining, aircraft ground support, and other industrial applications.

#### Package Size

Ultra-compact package size ensures ease of installation as well as exceptional power density.

#### Low-Cost Maintenance

Single-side servicing improves ease of maintenance and simplifies the servicing routine. Service intervals at 500 hours are standard.

#### Testing

Every Cat® engine is quality tested to ensure proper engine performance.

#### World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance
- Customer Support Agreements (CSA)
- Cat Extended Service Coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

### STANDARD EQUIPMENT

Options must be selected for the following features. See your Cat dealer for a detailed description of options for each feature.

#### Air Inlet

Inlet manifold with choice of inlets

#### Control System

Alternator 12 volt 65 amp, starter motor 12 volt, glow plug starting aid

#### Cooling System

Belt-driven coolant pump, coolant temperature switch, choice of cooling fans

#### Flywheels and Flywheel Housing

SAE No. 7 1/2 flywheel, SAE No. 8, or SAE No. 10 flywheel, choice of SAE No. 4 or standard backplate flywheel housing

#### Fuel System

CTD fuel injection pump, spin-on fuel filter, Electronic Shut-off Solenoid (ESOS)

#### Lube System

Alternative oil fillers, spin-on lube oil filter, lube oil pressure switch, lube oil sump

#### General

Cast iron engine block, cast iron exhaust manifold — side outlet, cold start capability to -20° C (-4° F), Gradeability 35° Continuous

**Web Site: For additional information on all your power requirements, visit [www.cat-industrial.com](http://www.cat-industrial.com).**



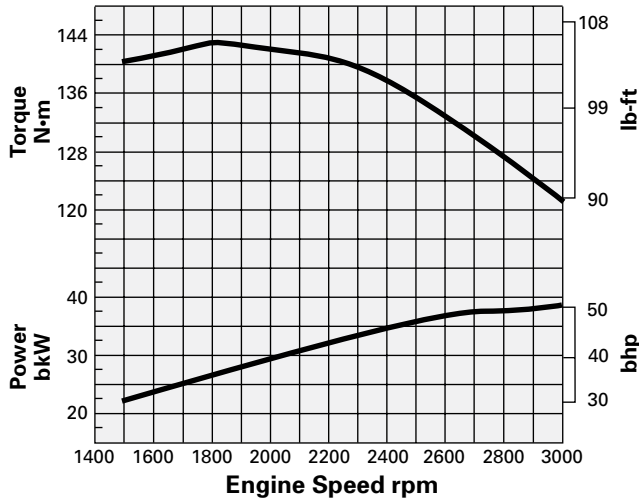
## Industrial Engine

C2.2

31.0-38.0 bkW/  
41.6-51.0 bhp

### PERFORMANCE DATA

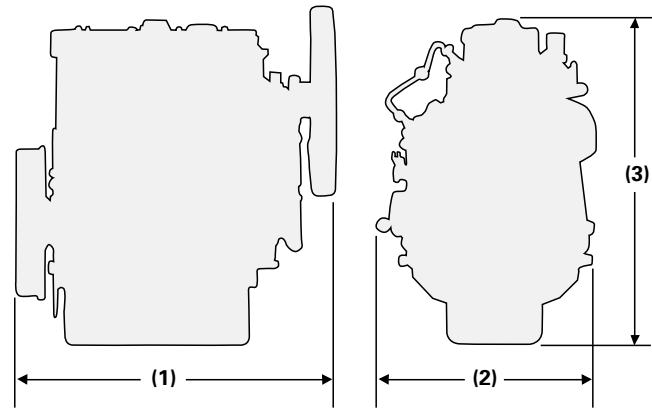
Naturally Aspirated — 3000 rpm



Speed rpm	Power bkW	Torque N·m	Power bhp	Torque lb-ft
3000	38.0	121	51.0	89.2

\*Consult factory for application approval.

### DIMENSIONS



(1) Length	664 mm (26.14 in.)
(2) Width	459 mm (18.07 in.)
(3) Height	725 mm (28.54 in.)

Note: Dimensions depend on final specifications.

### RATING DEFINITIONS AND CONDITIONS

**IND-C (Intermittent)** is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

Additional ratings are available for specific customer requirements. Consult your Cat dealer.

**Rating Conditions for Diesel Engines — up to 6.6 liter** are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in. Hg), with a vapor pressure of 1 kPa (.295 in. Hg), and 25°C (77°F). Performance is measured using fuel to specification EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

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