



## C2.2 Industrial Engine

Tier 4 Final, Stage IIIB  
36.4-45.5 bkW/48.8-61 bhp @ 2600-3000 rpm



Engine Pictured with  
Optional Equipment

### CAT® ENGINE SPECIFICATIONS

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

Bore.....	84 mm (3.3 in)
Stroke.....	100 mm (3.9 in)
Displacement.....	2.216 L (135 in <sup>3</sup> )
Aspiration.....	Turbocharged
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 (approx)	
with standard equipment.....	228 kg (502.6 lb)

### FEATURES

#### Emissions

Meets 2013 U.S. EPA Tier 4 Final, EU Stage IIIB emission 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)
- Caterpillar Extended Service Coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

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

## STANDARD EQUIPMENT

### Air Inlet

Inlet manifold with choice of inlets

### Control System

Alternator 12V 85A, starter motor 12V, glow plug starting aid

### Cooling System

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

### Flywheel & Flywheel Housing

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

### Fuel System

Simple, robust indirect injection fuel pump, spin-on fuel filter

### Lube System

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

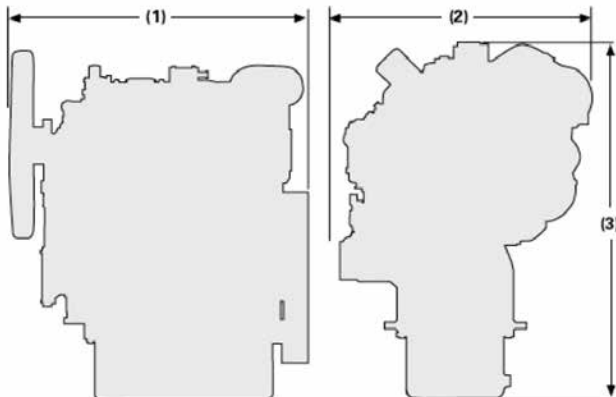
### Power Take-Off

SAE A PTO drive

### General

Cast iron engine block, cast iron exhaust manifold – side outlet, cold start capability to -20°C (-4°F), gradeability 35° continuous

## DIMENSIONS



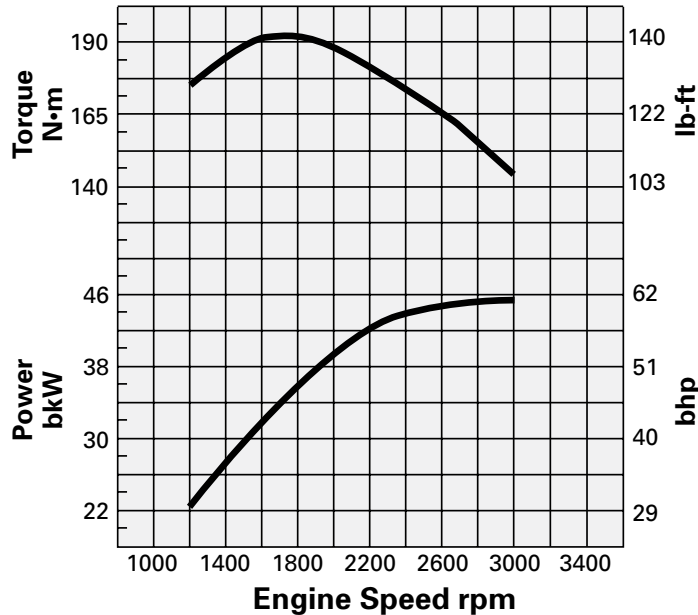
(1) Length	727 mm (28.6 in)
(2) Width	618 mm (24.24 in)
(3) Height	766 mm (30.2 in)

**Note:** Dimensions depend on final specifications.



**PERFORMANCE DATA — PRELIMINARY**

Turbocharged — 2600-3000 rpm



Rating	Speed rpm	Peak Power bkW	Peak Power bhp	Speed rpm	Peak Torque N·m	Peak Torque lb-ft
C	3000	45.5	61.0	1800	192.0	141.6

**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 7.1 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 U.S. 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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### AFTERTREATMENT CONFIGURATION

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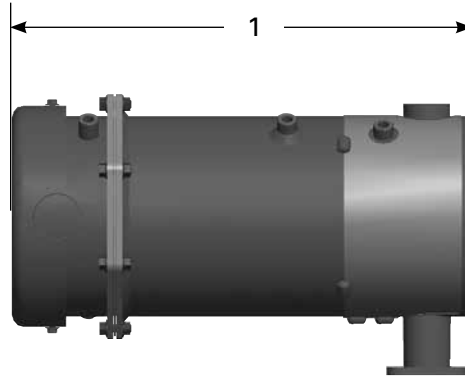


Image shown may not reflect actual aftertreatment.

#### 198 mm (7.8 in) Diameter Base Configuration

##### Approximate Size and Weight

(1) Length — 449 mm (17.6 in)

Weight — 16 kg (35.3 lbs)

**Note:** Final weight and dimensions will depend on completed specification.

### AFTERTREATMENT FEATURES

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#### Regeneration:

Highly effective passive regeneration under most operating environments and cycles. Automatic, transparent active regeneration backup system during light load or adverse operating cycles. Wall flow DPF and through-flow DOC to effectively remove and manage emissions.

**Mounting:** Multiple off- and on-engine installation options provide customers with simple and flexible solutions for many applications.

**Service:** Minimum 3,000 hour DPF ash service intervals.

### STANDARD EMISSIONS CONTROL EQUIPMENT

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**DPF:** Diesel Particulate Filter with range of outlet options

**DOC:** Diesel Oxidation Catalyst

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