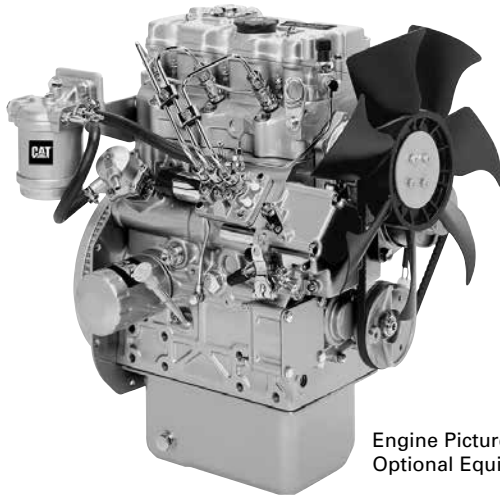




C1.1 Industrial Engine Stage IIIA 14.7-21 kW/19.7-28.2 bhp @ 2200-3400 rpm



Engine Pictured with
Optional Equipment

CAT® ENGINE SPECIFICATIONS

I-3, 4-Stroke-Cycle Diesel

Bore	77 mm (3.03 in)
Stroke	81 mm (3.19 in)
Displacement	1.13 L (69.0 in ³)
Aspiration	Naturally Aspirated
Compression Ratio	23:1
Combustion System	Indirect injection
Rotation (from flywheel end)	Counterclockwise
Capacity for Liquids	
Cooling System	
(engine only)	1.9 L (2.0 U.S. qts)
Lube Oil System (refill)	4.4 L (4.6 U.S. qts)
Engine Weight, Net Dry (approximate)	
with standard equipment	87.0 kg (191.0 lbs)

FEATURES

Emissions

Available for Europe and, depending on applicable emission standards, may be introduced in other regulated areas. Nonroad engines less than 19 kW (25 hp) are not currently subject to EU 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

Delivers impressive performance throughout 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

STANDARD EQUIPMENT

Air Inlet

Inlet manifold with choice of inlets

Control System

Alternator 12 volt 40 amp, starter motor 12 volt, cold start capability to -20°C (-4°F)

Cooling System

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

Flywheel and Flywheel Housing

SAE No. 6 1/2 flywheel, choice of SAE No. 5 or standard backplate flywheel housing

Fuel System

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

Lube System

Lube oil filter, lube oil pressure switch, lube oil sump

Power Take Off

Provision for PTO

General

Cast iron engine block and cylinder head, cast iron exhaust manifold — side outlet

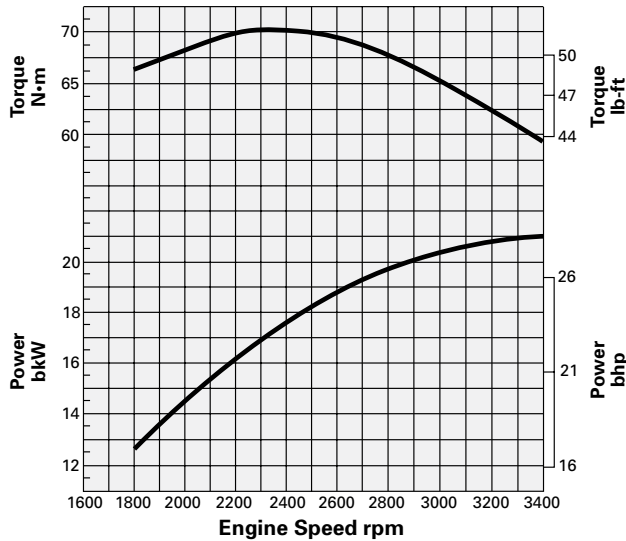
Web Site: For additional information on all your power requirements, visit www.cat-industrial.com.



C1.1
Industrial Engine
 Stage IIIA
 14.7-21 bkW/19.7-28.2 bhp @ 2200-3400 rpm

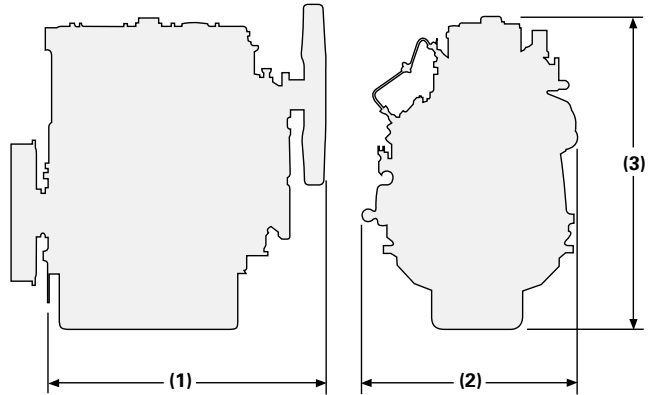
PERFORMANCE DATA

Naturally Aspirated — 3400 rpm



Speed rpm	Power kW	Torque N·m	Power bhp	Torque lb-ft
3400	21	59	28.2	43.5

DIMENSIONS



(1) Length	491 mm (19.33 in)
(2) Width	400 mm (15.74 in)
(3) Height	576 mm (22.67 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).

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.