# C1.1 Industrial Power Unit Tier 4 Final

with then

Engine Pictured with Optional Equipment

# FEATURES

#### Emissions

Designed to meet U.S. EPA Tier 4 Final 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. The introduction of a simple electronic governor system gives customers the flexibility of electronic machine integration if needed.

#### **High Performance**

This radiator-cooled package delivers impressive performance up to a 2800 rpm rating.

#### **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.

# 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

#### **Control System**

Alternator 12 volt 40 amp, starter motor 12 volt, glow plug starting aid

#### **Cooling System**

Belt-driven coolant pump, coolant temperature switch, mounted radiator and fan

#### **Flywheels and Flywheel Housing**

Standard backplate flywheel housing and flatface flywheel

14.4-18.4 bkW/19.3-24.7 bhp @ 2200-2800 rpm

# **CAT® ENGINE SPECIFICATIONS**

#### I-3, 4-Stroke-Cycle Diesel

Stroke81 mm (3.19 in)Displacement1.131 L (69.0 in³)AspirationNaturally AspiratedCompression Ratio23:1Combustion SystemIndirect InjectionRotation (from flywheel end)Counterclockwise
Aspiration
Compression Ratio
Combustion System Indirect Injection Rotation (from flywheel end) Counterclockwise
Rotation (from flywheel end) Counterclockwise
•
Capacity for Liquids
Cooling System 5.21 L (5.5 U.S. qts)
Lube Oil System (refill) 4.9 L (5.2 U.S. qts)
Engine Weight, Net Dry (approximate)
with radiator package 129 kg (284 lb)

#### **Package Size**

Ultra-compact package size ensures ease of installation as well as exceptional power density. Radiators have been designed and air filters positioned for easy installation. No change to the core engine or hook-up points and a high level of component commonality from Tier 4 Interim to Tier 4 Final. This results in minimum equipment change and development costs to upgrade to Tier 4 Final, as well as common equipment configurations for export markets.

#### 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<sup>®</sup> 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

# Fuel System

Fuel injection pump, fuel filter

#### Lube System

Spin-on lube oil filter, lube oil pressure switch, lube oil sump

#### **Power Take Off**

Provision for timing case rear facing PTO

#### General

Cast iron engine block, cast iron exhaust manifold — side outlet, mounted air cleaner, cold start capability to  $-20^{\circ}C$  (- $4^{\circ}F$ )

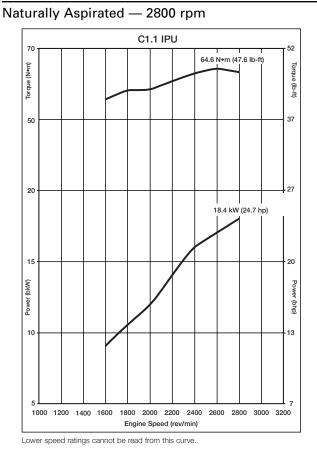
Web Site: For additional information on all your power requirements, visit www.cat-industrial.com.



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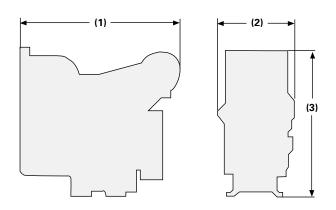
14.4-18.4 bkW/19.3-24.7 bhp @ 2200-2800 rpm

# **PERFORMANCE DATA**



Speed	Power	Torque	Power	Torque
rpm	bkW	N∙m	bhp	lb-ft
2800	18.4	64.6	24.7	47.6

# DIMENSIONS



(1) Length	778 mm (30.6 in)	
(2) Width	438 mm (17.2 in)	
(3) Height	730 mm (28.7 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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