C4.4 ACERT™ Industrial Power Unit

Tier 4 Interim/Stage IIIB

74.5-129.4 bkW/100-173.5 bhp @ 2200 rpm

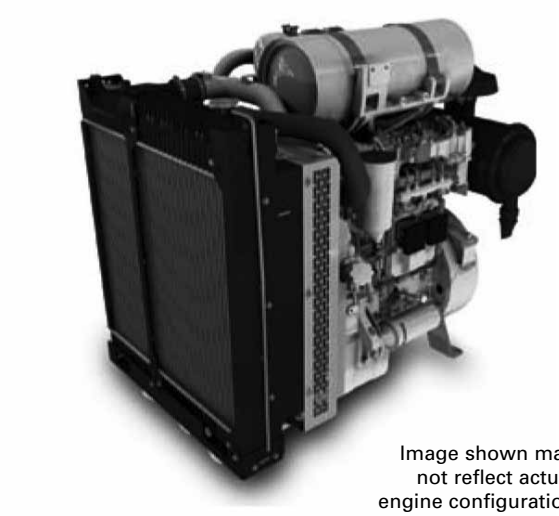


Image shown may not reflect actual engine configuration

CAT® ENGINE SPECIFICATIONS

I-4, 4-Stroke-Cycle Diesel

Bore ..... 105 mm (4.13 in)
Stroke ..... 127 mm (5.00 in)
Displacement ..... 4.4 L (268.5 in^3)
Aspiration ..... Turbocharged-Aftercooled (TA) or Series Turbocharged-Aftercooled (TTA)
Compression Ratio 16.5:1
Combustion System ..... Direct Injection
Rotation (from flywheel end) ... Counterclockwise
Capacity for Liquids
  Cooling System
    > 110 kW (147.5 hp) ..... 9.4 L (8.5 U.S. qts)
    < 110 kW (147.5 hp) ..... 9 L (8.2 U.S. qts)
  Lube System (refill) sump
    dependent ..... 5.2-13.5 L (5.5-14.27 U.S. qts)
Package Weight, Net Dry (approximate)
  TA ..... 650 kg (1433 lbs)
  TTA ..... 700 kg (1543 lbs)

FEATURES

Emissions
Designed to meet 2012 EPA (U.S.) Tier 4 Interim, EU Stage IIIB and Japanese MLIT emissions requirements.

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
Series turbocharging with smart wastegate available on specific ratings for fast response, high power, and increased torque.

Fuel Efficiency
Fuel consumption optimized to match operating cycles of a wide range of equipment and applications. No additional fluids or additives are required, which lowers operating costs.

Fuel & Oil
Tier 4 Interim/Stage IIIB engines require Ultra Low Sulfur Diesel (ULSD) fuel containing a maximum of 15 ppm sulfur, and new oil formulations to support the new technology. Cat® engines are designed to accommodate B20 biofuel. Your Cat dealer can provide more information regarding fuel and oil.

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
Ideal for equipment with narrow engine compartments. Multiple installation options minimize total package size.

Low-Cost Maintenance
Worldwide service delivers ease of maintenance and simplifies the servicing routine. Hydraulic tappets, multi-vee belts, "no ash service" aftertreatment, and 500-hour oil change intervals enable low-cost maintenance. Many service items have a choice of location on either side of the engine to enable choice of service access. The S•O•S℠ program is available from your Cat dealer to determine oil change intervals and provide optimal performance.

Quality
Every Cat engine is manufactured to stringent standards in order to assure customer satisfaction.

World-class Product Support Offered Through Global Cat Dealer Network
- Scheduled maintenance, including S•O•S℠ sample
- 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

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

STANDARD ENGINE EQUIPMENT

Air Inlet
Standard air cleaners

Control System
Full electronic control system, all connectors and wiring looms waterproof and designed to withstand harsh off-highway environments, flexible and configurable software features and well supported SAE J1939 CAN bus enables highly integrated machines

Cooling System
Top tank temperature 108°C (226°F) as standard to minimize cooling pack size, 50:50 water glycol mix, detailed guidance on cooling system design and validation available to ensure machine reliability

Exhaust System
Diesel particulate filter supplied with a range of inlet and outlet options, no ash service requirement, passive regeneration

Flywheels and Flywheel Housing
Wide choice of drivetrain interfaces, including but not limited to SAE2 and SAE3 configurations

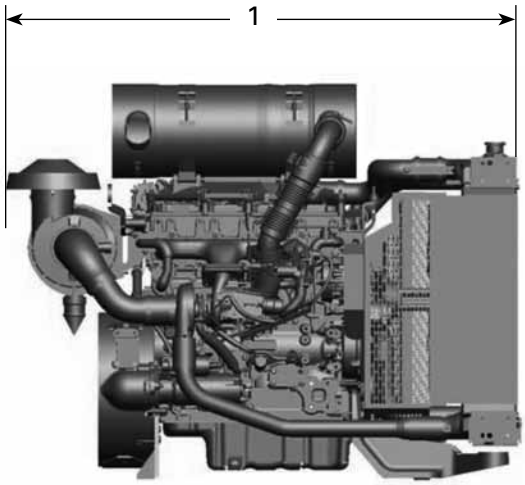
Fuel System
Electronic high pressure common rail, ACERT™ Technology, innovative filter design to ensure maximum protection of the engine.

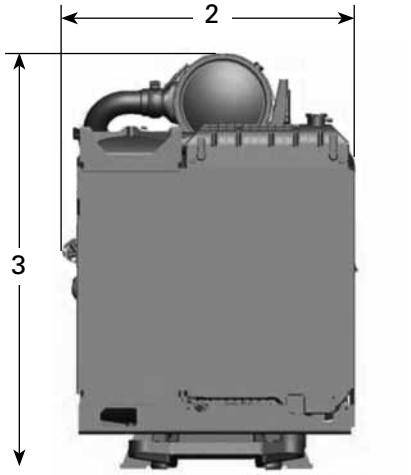
Lube System
Choice of sumps for different applications

Power Take Off
SAE A or SAE B flanges on left-hand side, additional SAE A flange available on LHS, engine power can also be taken from the front of the engine on some applications, factory fitted compressors are also available

General
Available with or without a balancer

DIMENSIONS





(1) Length —
TA: 1433 mm (56.4 in)
TTA: 1433 mm (56.4 in)

(2) Width —
TA: 820 mm (32.3 in)
TTA: 795 mm (31.3 in)

(3) Height (including aftertreatment) —
TA: 1126 mm (44.3 in)
1150 mm (45.3 in) [> 82 bkW]
TTA: 1150 mm (45.3 in)

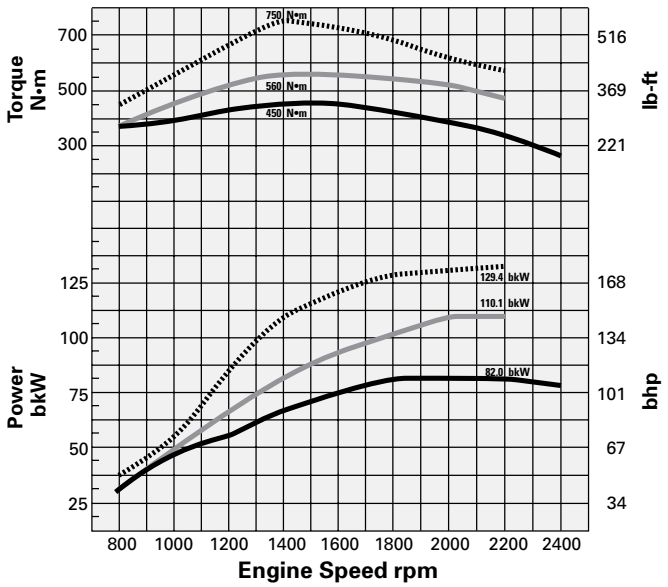
Height (aftertreatment shipped loose) —
TA: 980 mm (38.6 in)
TTA: 1040 mm (40.9 in)

Note: Final dimensions dependent on selected options

PERFORMANCE DATA — PRELIMINARY

Turbocharged-Aftercooled — 2200 rpm

Rated Speed



Speed Range

Rating	Speed rpm	Peak Power bkW	Peak Power bhp	Speed rpm	Peak Torque N•m	Peak Torque lb-ft
C	2200	74.5	100.0	1400	450	331.9
C*	2200	82.0	110.0	1400	450	331.9
B	2200	92.5	124.0	1400	530	390.9
C	2200	102.1	137.0	1400	560	413.0
C*	2200	110.1	147.6	1400	560	413.0
C	2200	117.0	157.0	1400	683	503.8
C*	2200	129.4	173.5	1400	750	553.2

*Curve shown

RATING DEFINITIONS AND CONDITIONS

IND-B for service where power and/or speed are cyclic (time at full load not to exceed 80%).

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%).

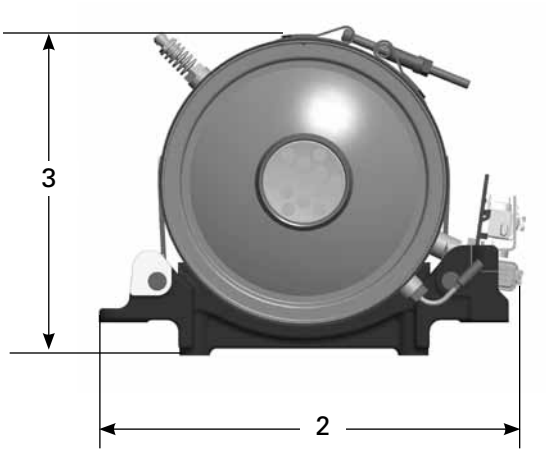
Additional ratings are available for specific customer requirements. Consult your Cat dealer.

Rating Conditions 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 EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

C4.4 ACERT™
Industrial Power Unit

Tier 4 Interim/Stage IIIB
74.5-129.4 bkW/100-173.5 bhp @ 2200 rpm

AFTERTREATMENT CONFIGURATION



Less than or equal to 82 bkW (110 bhp)
244.9 mm (9.6 in) DIAMETER BASE CONFIGURATION
Approximate Size and Weight
(1) Length — 802.5 mm (31.6 in)
(2) Width — 365 mm (14.3 in)
(3) Height — 279 mm (11 in)
Weight — 34 kg (75 lbs)

Greater than 82 bkW (110 bhp)
270.3 mm (10.6 in) DIAMETER BASE CONFIGURATION
Approximate Size and Weight
(1) Length — 828 mm (32.6 in)
(2) Width — 365 mm (14.3 in)
(3) Height — 300.5 mm (11.8 in)
Weight — 37 kg (81.6 lbs)

AFTERTREATMENT FEATURES

Regeneration: Passive regeneration completely transparent to the operator

Mounting: Extensive range of inlets and outlets, as well as remote and on-engine installations, provide flexibility for many installations.

Service: Service-free DPF for the emissions life of the engine

Available in 12V or 24V systems

STANDARD EMISSIONS CONTROL EQUIPMENT

DOC: Diesel Oxidation Catalyst

DPF: Diesel Particulate Filter

3" flex pipe connection kit with straight, 45°, and 90° options for flexibility

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, ACERT, S•O•S, "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.

LEHH0515-02 (2-12)

©2012 Caterpillar
All rights reserved.