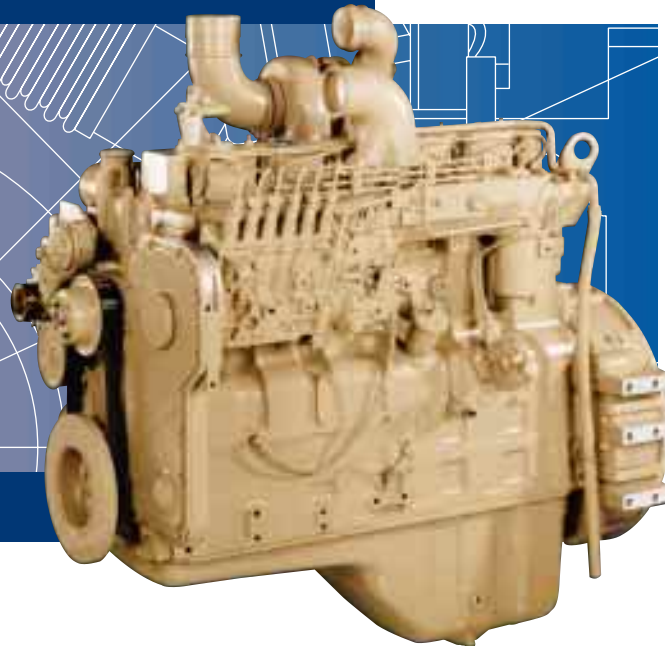


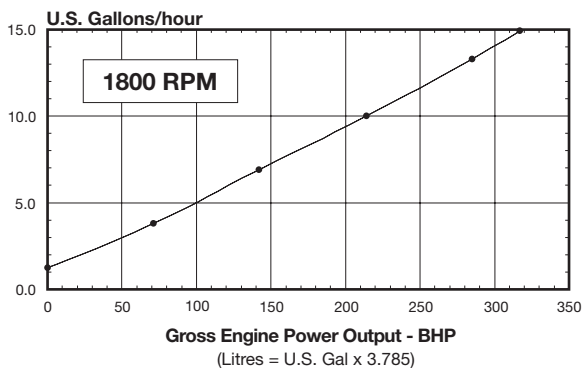
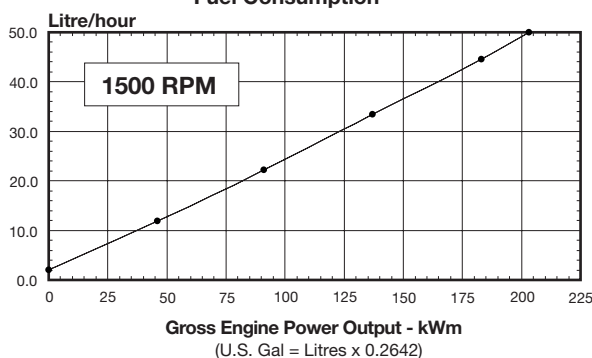
6CTAA8.3-G1



S P E C I F I C A T I O N S



6CTAA8.3-G1 CPL: 2082 (Dry) Curve: FR-90153
Fuel Consumption



PERFORMANCE:

Standard Conditions:

Data Shown Above Are Based On:

- Engine operating with fuel system, water pump, lubricating oil pump, air cleaner and exhaust silencer; not included are battery charging alternator, fan and optional driven components.
- Engine operating with diesel fuel corresponding to grade No. 2D per ASTM D975.
- ISO-3046, Part 1, Standard Reference Conditions of: 29.53 in. Hg. [100 kPa] barometric pressure (361 ft. [110m] altitude), 77 °F [25 °C] air temperature and a relative humidity of 30%.

NOTES:

- Cummins Engine Company recommends that Cummins engines be operated at a minimum load of 30% of their respective Standby Power rating.

SPECIFICATIONS

4-Stroke Cycle, Turbocharged and Charge Air Cooled, In-line, 6-Cylinder Diesel Engine

1500 RPM Engine Output

Standby Power Rating	203 kWm*	[272 BHP]
Prime Power Rating	183 kWm*	[245 BHP]
Continuous Power Rating	120 kWm*	[161 BHP]

1800 RPM Engine Output

Standby Power Rating	237 kWm*	[317 BHP]
Prime Power Rating	213 kWm*	[285 BHP]
Continuous Power Rating	200 kWm*	[268 BHP]

* Refers to gross power available from engine, not generator set.

General Engine Data:

Bore and Stroke	114x135 mm	[4.49x5.32 in.]
Displacement	8.3 L	[504.5 cu. in.]
Lube System Oil Capacity	23.8 L	[6.3 U.S. gal.]
Coolant Capacity	12.3 L	[3.25 U.S. gal.]
Net Weight with Standard Accessories, Dry	684 kg	[1505 lb.]

Approx. Overall Dimensions:

Width	717 mm	[28.23 in.]
Length	1129 mm	[44.42 in.]
Height	1171 mm	[46.08 in.]

RATING GUIDELINES:

Based on ISO8528 and defined in Cummins Power Rating Application Guidelines. Ref: AEB 26.02.

OPERATION at ELEVATED TEMPERATURE and ALTITUDE:

When fitted with cooling system RA 9050, the engine may be operated without derating at:

- 1800 RPM up to:
3280 ft. (1000 m) and 113 °F [45 °C] cooling air to fan.
- 1500 RPM up to:
3280 ft. (1000 m) and 90 °F [32 °C] cooling air to fan.

For sustained operation above these conditions, or when fitted with other cooling systems, refer to the engine Data Sheet.

6CTAA8.3-G1



S P E C I F I C A T I O N S

Design Features:

Aftercooler

Charge air cooling is utilized to improve combustion efficiency, yielding reduced emissions and a significant increase in power density.

Cylinder Head

One-piece crossflow cylinder head for maximum structural stiffness of block/head assembly. Low swirl intake passages optimize combustion for reduced emissions. Fitted with premium valves for enhanced durability. Contains replaceable valve guides and seats.

Cylinder Liners

Replaceable wet liners are plateau-honed and feature mid-stop clamping method, eliminating need for packing rings and crevice seals.

Filters

Fleetguard spin-on fuel filter, corrosion resistor, and combination full flow/bypass lube oil filter.

Fuel System

In-line type Bosch P-Series pump operates at high injection pressures for cleaner combustion and lower emissions. Injection pump lubricated by pressurized engine oil. Lift pump revised for higher flow rates to ensure cooling and longevity of injection pump.

Pistons

Dual Ni-Resist piston with three-ring design and full-floating piston pin minimizes oil consumption and improves durability through reduced wear.

Turbocharger

Holset H1E delivers altitude compensation as well as lower smoke and noise levels.

Emissions Certification:

EPA/CARB: Complies with Mobile Off-Highway standard per ISO 8178 D2 at all ratings.

TALuft: Complies with 4 gram NOx standard at Prime Power ratings.

See Exhaust Emissions Data Sheet for further details.

Optional Equipment:

Please contact your local Cummins representative for additional information regarding engine options.

Cummins has always been a pioneer in product improvement. Thus, specifications may change without notice. Illustrations may include optional equipment.

Cummins Engine Company, Inc.
Box 3005
Columbus, IN 47202-3005
U.S.A.

