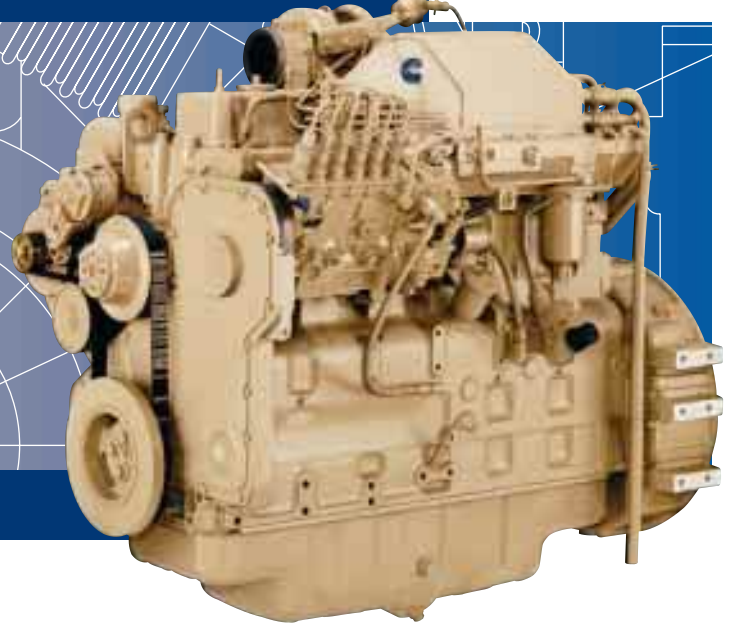


# 6CTA8.3-G2

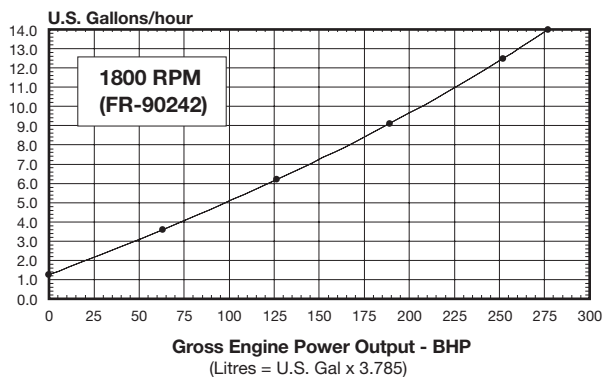
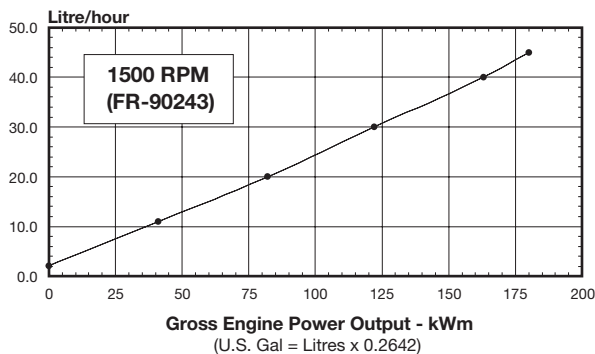


## S P E C I F I C A T I O N S



**6CTA8.3-G2** CPL: 2218 (Dry) Curve: FR-90243 @ 1500 RPM  
FR-90242 @ 1800 RPM

### Fuel Consumption



## SPECIFICATIONS

**4-Stroke Cycle, Turbocharged/Jacket Water Aftercooled, In-line, 6-Cylinder Diesel Engine**

### 1500 RPM Engine Output

Standby Power Rating	<b>180 kWm*</b>	<b>[241 BHP]</b>
Prime Power Rating	<b>163 kWm*</b>	<b>[219 BHP]</b>
Continuous Power Rating	<b>133 kWm*</b>	<b>[178 BHP]</b>

### 1800 RPM Engine Output

Standby Power Rating	<b>207 kWm*</b>	<b>[277 BHP]</b>
Prime Power Rating	<b>188 kWm*</b>	<b>[252 BHP]</b>
Continuous Power Rating	<b>159 kWm*</b>	<b>[213 BHP]</b>

\* 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	[505 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 Dry Weight with Standard Accessories	702 kg	[1,545 lb.]

### Approx. Overall Dimensions:

Width	710 mm	[27.96 in.]
Length	1182 mm	[46.54 in.]
Height	1137 mm	[44.78 in.]

## 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. [110 m] 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.

## RATING GUIDELINES:

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

## OPERATION at ELEVATED TEMPERATURE and ALTITUDE:

The engine may be operated at:

- 1800 RPM up to: 5000 ft. (1525 m) and 104 °F [40 °C] without power deration.
- 1500 RPM up to: 5000 ft. (1525 m) and 104 °F [40 °C] without power deration.

For sustained operation above these conditions derate by: 4% per 1,000 ft. [300 m] and 1% per 10 °F [2% per 11 °C].

# 6CTA8.3-G2



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

### Design Features:

#### Aftercooler

Cooler, denser intake air from jacket water aftercooler increases combustion efficiency, reducing emissions and internal stresses.

#### 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 HX40W delivers altitude compensation as well as lower smoke and noise levels; includes wastegate feature for instant transient response.

### Emissions Certification:

**EPA/CARB:** Complies with Mobile Off-Highway standard per ISO 8178 D2 at 1800 RPM rating.

**TALuft:** Complies with 4 gram NOx standard at 1500 RPM Prime Power rating.

*See Exhaust Emissions Data Sheets 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.*

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