

KTA50-G7



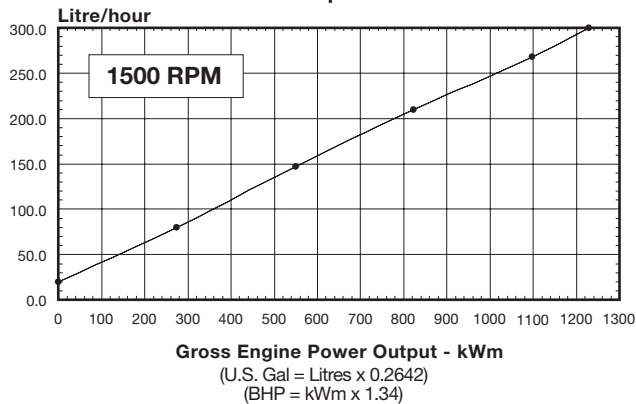
S P E C I F I C A T I O N S



KTA50-G7

**CPL: 6238 (Dry)
Fuel Consumption**

Curve: FR-6230



Engine Emissions

Prime rated engine complies with the following TA-Luft emissions limits:

NOx	:	2000 mg/nm ³
CO	:	650 mg/nm ³
NMHC	:	150 mg/nm ³
Particulates	:	130 mg/nm ³

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.

SPECIFICATIONS

**4-Stroke Cycle, Turbocharged & Jacket Water Aftercooled,
V-16 Cylinder Diesel Engine**

1500 RPM Engine Output

Standby Power Rating	1228 kWm*	[1645 BHP]
Prime Power Rating	1097 kWm*	[1470 BHP]
Continuous Power Rating	866 kWm*	[1160 BHP]

1800 RPM Engine Output

Not available at 1800 RPM

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

General Engine Data:

Bore and Stroke	159x159 mm	[6.25x6.25 in.]
Displacement	50.3 L	[3067 cu. in.]
**Lube System Oil Capacity	223 L	[59 U.S. gal.]
Coolant Capacity	153 L	[40.5 U.S. gal.]
Net Weight with Standard Accessories, Dry	5360 kg	[11,820 lb.]

Approx. Overall Dimensions:

Width	1411 mm	[55.60 in.]
Length	2707 mm	[106.60 in.]
Height	1766 mm	[69.50 in.]

** With Oil Pan Option (OP 6027) and Including Bypass Filter.

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:

- 1500 RPM up to:
3000 ft. (1000 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].

Design Features:

Aftercooler

Large capacity integral aftercoolers are supplied with cooling water separate from the engine jacket. This provides cooler, denser intake air for more complete combustion and reduced engine stresses for longer life and low exhaust emissions.

Cooling System

A two pump, two loop system must be employed; i.e. the engine jacket is cooled by one radiator or heat exchanger and the aftercoolers are cooled by a separate radiator or heat exchanger. Both cooling systems are independent of each other. The jacket water pump is supplied engine mounted from the rear of the gear cover. The aftercooler water pump is customer selectable and can be provided mounted on the front of the gear cover. Cummins provides conventional water inlet and outlet connections for the jacket system. Aftercooler water pump inlet and aftercooler core outlet connections are provided for customer use and ease of plumbing on the aftercooler system.

Lubrication

Large capacity integral gear driven pump provides pressure lubrication to all bearings and provides supply for piston cooling. Cummins supplied large capacity oil pans are recommended for Prime and Continuous Power applications.

Pistons

Pistons are dual Ni-resist, aluminum alloy, ground and shaped to compensate for thermal expansion which assures a precise fit at all normal operating temperatures. Oil cooled for rapid heat dissipation. Two compression rings and one oil ring. Utilizes offset piston pin for reduced susceptibility to liner cavitation.

Emissions Certification:

TA-Luft: Complies with 2000 mg/nm³ NOx requirement at Prime Power rating.

Optional Equipment:

- Fan Drives
- Aftercooler Water Pump
- Positive Head Fuel Transfer System
- Cummins Branded Electric Starters and Alternators
- Electric Fuel Control Governing System "CE" Compliant
- Duplex Changeover Oil and Fuel Filter Heads
- Engine Mounted Air Cleaners
- SAE "0" and "00" Flywheel and Flywheel Housings
- Large Capacity Oil Pans

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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