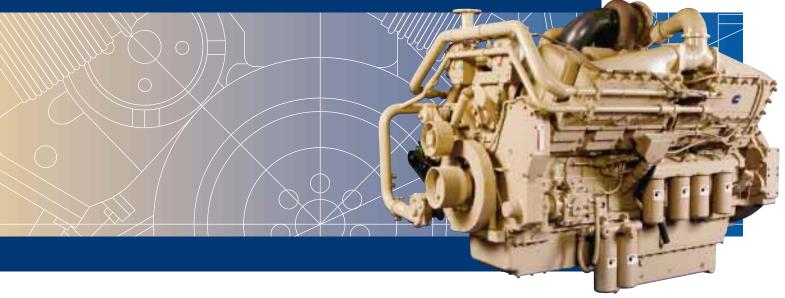
# **KTA38-G7**



# SPECIFICATIONS



ETA38-G7 CPL: 2257 (Dry) Curve: FR-6206

Fuel Consumption

200.0

150.0

0.0

100

200

300

400

500

600

700

800

900

Gross Engine Power Output - kWm (U.S. Gal = Litres x 0.2642) (BHP = kWm x 1.34)

## **Engine Emissions**

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

 NOx
 :
 2000 mg/nm³

 CO
 :
 650 mg/nm³

 NMHC
 :
 150 mg/nm³

 Particulates
 :
 130 mg/nm³

#### 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 & Jacket Water Aftercooled, V-12 Cylinder Diesel Engine

1500 RPM Engine Output		
Standby Power Rating	895 kWm*	[1200 BHP]
Prime Power Rating	806 kWm*	[1080 BHP]
Continuous Power Rating	656 kWm*	[880 BHP]

## 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	37.8 L	[2300 cu. in.]
**Lube System Oil Capacity	155 L	[41 U.S. gal.]
Engine Coolant Capacity	124 L	[32.7 U.S. gal.]
Net Dry Weight with		
Standard Accessories	4200 kg	[9261 lb.]
Approx. Overall Dimensions:		
Width	1436 mm	[56.54 in.]
Length	2291 mm	[90.19 in.]
Height	1765 mm	[69.49 in.]
** With Oil Dan Ontion (OD CO1	E) and Including	Dumana Filtor

<sup>\*\*</sup> With Oil Pan Option (OP 6015) 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: 5% per 1,000 ft. [300m] and 3% per 5 °F [4% per 5 °C].





## SPECIFICATIONS

# **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/nm<sup>3</sup> 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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