

SPECIFICATIONS

4-Stroke Cycle, Turbocharged/Aftercooled,
V-12 Cylinder Diesel Engine.

1800 RPM Engine Output

Standby Power Rating	1340 BHP	[1000 kWm*]
Prime Power Rating	1220 BHP	[910 kWm*]
Continuous Power Rating	1040 BHP	[776 kWm*]

1500 RPM Engine Output

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

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

Bore and Stroke	6.25x6.25 in.	[159x159 mm]
Displacement	2300 cu. in.	[38 L]
**Lube System Oil Capacity	35.7 U.S. gal.	[135 L]
Coolant Capacity	32.7 U.S. gal.	[124 L]

Net Weight with Standard Accessories, Dry	9,261 lb.	[4200 kg]
Approx. Overall Dimensions:		
Width	52.9 in.	[1343 mm]
Length	89.1 in.	[2263 mm]
Height	65.3 in.	[1659 mm]

** Spin-on bypass filter is included in total.

RATING GUIDELINES:

Standby Power Rating is applicable for supplying emergency electric power for the duration of the utility power outage. No overload capability is available for this rating. Under no condition is an engine allowed to operate in parallel with the public utility at the Standby Power rating.

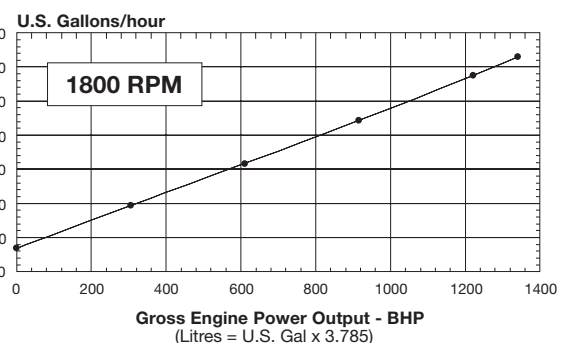
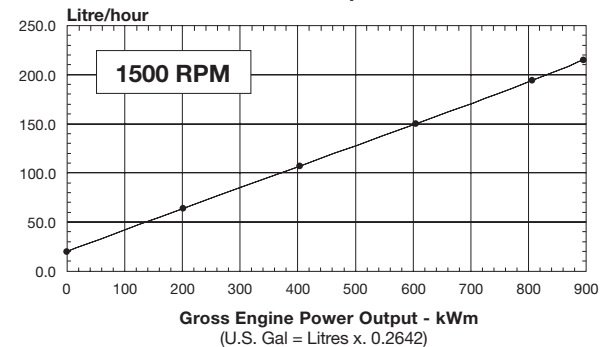
Prime Power Rating is applicable for supplying electric power in lieu of commercially purchased power. Prime Power is the maximum power available at variable load for an unlimited number of hours. A 10% overload capability is available.

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].

KTA38-G3 CPL: 1251 (Dry) Curve: FR-6123
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. [110 m] altitude), 77 °F [25 °C] air temperature and a relative humidity of 30%.

NOTES:

- For Continuous Power or Base Power, Interruptible Power (Utility Power Curtailment) and Peak Shaving, contact the local Cummins representative.
- Cummins Engine Company recommends that Cummins engines be operated at a minimum load of 30% of their respective Standby Power rating.

KTA38-G3

GENERATOR DRIVE

DESIGN FEATURES

Aftercooler: Large capacity aftercooler results in cooler, denser intake air for more efficient combustion and reduced internal stresses for longer life. Aftercooler is located in engine coolant system, eliminating need for special plumbing.

Bearings: Replaceable, precision type, steel backed inserts. Nine main bearings, 6.5 in. [165 mm] diameter. Connecting rod bearings 4.25 in. [108 mm] diameter.

Camshaft: Dual camshafts precisely control valve and injector timing. Lobes are induction hardened for long life. Eighteen replaceable precision type bushings 3.0 in. [76 mm] diameter.

Camshaft Followers: Induction hardened, roller type for long cam and follower life.

Connecting Rods: Drop forged, I-beam section 11.4 in. [290 mm] center-to-center length. Rifle drilled for pressure lubrication of piston pin. Rod is tapered on piston pin end to reduce unit pressures.

Cooling System: Gear driven centrifugal water pump. Large volume water passages provide even flow of coolant around cylinder liners, valves, and injectors. Four modulating bypass thermostats regulate coolant temperature. Spin-on corrosion resistors check rust and corrosion, control acidity and remove impurities.

Crankshaft: High tensile strength steel forging with induction hardened fillets and journals. Fully counterweighted and dynamically balanced.

Cylinder Block: Alloy cast iron with removable wet liners. Cross bolt support to main bearing cap provides extra strength and stability.

Cylinder Heads: Alloy cast iron. Each head serves one cylinder. Valve seats are replaceable corrosion resistant inserts. Valve guides and cross head guides are replaceable inserts.

Cylinder Liners: Replaceable wet liners dissipate heat faster than dry liners and are easily replaced without reboring the block.

Fuel System: Cummins exclusive low pressure PT™ system with wear compensating pump and integral dual flyweight governor. Camshaft actuated fuel injectors give accurate metering and timing. Fuel lines are internal drilled passages in cylinder heads. Spin-on fuel filter.

Gear Train: Timing gears and accessory drive gears are induction hardened helical gears driven from crankshaft and located at front of block.

Lubrication: Large capacity gear pump provides pressure lubrication to all bearings and oil supply for piston cooling. All pressure lines are internal drilled passages in block and heads. Oil cooler, full flow filters, and bypass filters maintain oil condition and maximize oil and engine life.

Pistons: Aluminum alloy, cam ground and barrel shaped to compensate for thermal expansion assures precise fit at operating temperatures. Grooved skirt finish provides superior lubrication. Oil cooled for rapid heat dissipation. Two compression and one oil ring.

Piston Pins: Full floating, tubular steel retained by snap rings 2.4 in. [61 mm] diameter.

Turbocharger: Holset exhaust gas driven turbocharger mounted at top of engine. Turbocharging provides more power, improved fuel economy, altitude compensation, and lower smoke and noise levels.

Valves: Dual 2.22 in. [56 mm] diameter poppet type intake and exhaust valves. Wear resistant face on exhaust valves.

AVAILABLE EQUIPMENT

Cooling System

1. Fan drive for radiator (0.5:1 drive ratio, 24.0 in. [610 mm] center).
2. Remote cooling (engine water pump only).

Exhaust System:

1. Dry exhaust manifold.
2. Flexible exhaust connection.

Filters: Fleetguard. Lubricating oil: Spin-on paper element full flow and bypass type. Fuel: dual spin-on paper element type.

Flywheel: To fit SAE-518 (22.500 in. [571.5 mm] diameter) or SAE-521 (26.500 in. [673 mm] diameter), generator flexible drive disk - reference SAE standard J162a.

Flywheel Housing: SAE No. 0 or SAE No. 00, dry type.

Governors: Electric or hydraulic; for droop or isochronous operation. Cummins EFC (electric fuel control) or others.

Starting System:

1. Electric starter (24 volt positive engagement).
2. Compressed air starter.
3. Battery charging alternator (24 volt, 35 ampere).
4. For other available equipment consult factory.

For other available equipment consult your local Cummins representative.

AGENCY APPROVAL

Certification: Consult your local Cummins representative.

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



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