

## CHONGQING CUMMINS ENGINE PERFORMANCE CURVE

 Engine Model
 Curve No.

 KTA38-D(M)
 D(M)-649

 Configuration
 CPL Code
 Date

 D233036MX02
 1542
 6-Nov-08

kW [HP] @ r/min

1007 [1350] @1800

Displacement: 38L [2300 in.³]
Bore: 159mm [6.25 in.] Prime Power:

Stroke: 159mm [6.25 in.]

Fuel System: PT Aspiration: Turbocharged/Aftercooled

Cylinders: 12 Exhaust: Dry

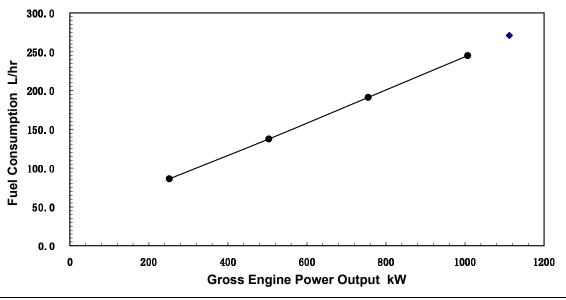
CERTIFIED: This marine diesel engine complies with or is certified to the:

IMO-NOx requirements of the International Maritime Organization (IMO), MARPOL 73/78 Annex VI, Regulation 13

Engine Speed	Overload	Capacity	Prime Power	
r/min	kW	bhp	kW	bhp
1800	1112	1490	1007	1350

Engine Performance Data @ 1800 r/min

Engine i enemanee Bata & 1000 i/iiiii									
OUTPUT POWER		FUEL CONSUMPTION							
%	kW	bhp	kg/kW.h	lb/bhp.h	l/hr	gal/hr			
10% Overload Capacity									
110	1112	1490	0.207	0.343	271.0	72.0			
Prime Power									
100	1007	1350	0.207	0.340	245.0	64.7			
75	755	1013	0.215	0.354	191.0	50.5			
50	504	675	0.232	0.382	137.4	36.3			
25	252	338	0.291	0.479	86.2	22.8			



**Rating Conditions:** Ratings are in accordance with ISO-3046 reference conditions; air pressure at 100 kPa (29.61.in Hg.), air temperature 25°C (77°F), and 30% relative humidity. The fuel consumption data is based on GB252 No.0 diesel fuel (No. 2 diesel fuel in U.S.) weight at 0.85 kg/litre (7.1 lb/U.S. gal).

Power output curves are based on the engine operating with fuel system, water pump, and lubricating oil pump; not included are battery charging alternator, fan, optional equipment, and driven components.

Operation at Elevated Temperatures for sustained operation above 40°C (104°F), derate 2% per 11°C (1% per 10° **Prime Power Rating** is applicable for supplying continual electrical power at varied load. The following are the Prime Rating parameters:

- \* Prime Power is available for an unlimited number of hours per year in a variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 250 hours.
- \* The total operating time at 100% Prime Power shall not exceed 500 hours per year.
- \* There is a 10% overload capability for a period of 1 hour within a 12 hour period of operation. Total operating time at 10% overload shall not exceed 25 hours per year.