

CHONGQING CUMMINS ENGINE PERFORMANCE CURVE

 Engine Model
 Curve No.

 NT855-D(M)
 D(M)-866

 Configuration
 CPL Code
 Date

 D092642MX02
 CQ138
 16-Dec-08

Displacement: 14L [855 in.³] kW [HP] @ r/min Bore: 140mm [5.50 in.] Prime Power: 205 [275] @1500

Stroke: **152mm** [6.00in.]

Fuel System: PT Aspiration: Turbocharged

Cylinders: 6 Exhaust: Wet

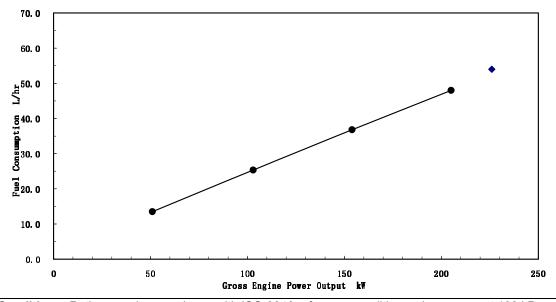
CERTIFIED: This marine diesel engine complies with or is certified to the:

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	
1500	226	302	205	275	

Engine Performance Data @ 1500 r/min

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OU	OUTPUT POWER			FUEL CONSUMPTION				
%	kW	bhp	kg/kW.h	lb/bhp.h	l/hr	gal/hr		
10% Overload Capacity								
110	226	302	0.203	0.329	54.0	14.0		
Prime Power								
100	205	275	0.199	0.328	48.0	12.7		
75	154	206	0.203	0.335	36.8	9.7		
50	103	138	0.209	0.346	25.3	6.7		
25	51	69	0.225	0.368	13.5	3.6		



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.



Chongqing Cummins Engine Co. Ltd.

Auxiliary Marine Engine Performance Data

		DS: CPL:	DS-D093641 CQ138	
		DATE:	16-Dec-08	
General Engine Data ¹		DAIL.	10-200-00	
Engine Model		NT855-D(M)		
Rating Type		Prime Power	Overload	
Rated Engine Powerhp [k		275 [205]	302 [226]	
Governed Engine Speed	•	1500	1500	
Rated HP Production Tolerance	•	±2%		
Rated Engine Torque		962 [1305]	1061 [1439]	
Idle Speed Range	-	575-650	1001[1100]	
Brake Mean Effective Pressurepsi [k	•	170 [1171]	187 [1291]	
Compression Ratio	•	14.5:1	107 [1201]	
Piston Speed		1496 [7.6]		
Friction Powerhp [l	-	29 [22]		
, 1000011 01101111111111111111111111111		20 [22]		
Fuel System ¹				
Fuel Consumptiongal/hr [[l/hr]	12.7 [48]	14 [54]	
Approximate Fuel Flow to Pumpgal/hr [[l/hr]	51 [192]	57 [216]	
Maximum Allowable Fuel Supply to Pump Temperature°F [[°C]	160 [71]		
Approximate Fuel Flow Return to Tankga	al/hr	38 [144]	42.8 [162]	
Fuel Rail Pressurepsi [k	κPa]		127 [875]	
1				
Weight ¹				
Dry - Engine Only		2797 [1270]		
Dry - Engine With Heatexchangerlb.		3040[1380]		
Installation Diagram No			4571	
Hookup Diagram & Drawing, electrical circuit No		4061349	. 4061350	
Air System ¹				
Intake Manifold Pressurein. Hg [k	(Pal	N.A.	42 [142]	
Intake Air Flowcfm [I/s	_	625 [295]	671 [317]	
Heat Rejection to Ambient	-	1480 [26]	1594 [28]	
Treat rejection to Ambient]	1400 [20]	1554 [26]	
Exhaust System ¹				
Exhaust Gas Flowcfm [l/s	sec]	1334 [630]	1440 [680]	
Exhaust Gas Temperature (Turbine Out)°F [[°C]	811 [433]	838 [448]	
Heat Rejection to ExhaustBTU/min [kW]	7286 [128]	8026 [141]	
Cooling System ¹				
Sea Water Pump Specifications				
Pressure Cap Rating (With Heat Exchanger Option)psi [k	κPa]	7 [50]		
Engines without Low Temperature Aftercooler (LTA)				
Jacket Water Aftercooled Engine (JWAC)				
Coolant Flow to Engine Heat Exchangergal/min [l/r				
Standard Thermostat Operating Range (Min)°F [[°C]	180 [82]		
(the prince of the respection of the prince	1001	004 [04]		

TBD = To Be Determined

N/A = Not Applicable

N.A. = Not Avaliable

201 [94]

8766 [154] 9619 [169]

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- 1. All Data at Rated Conditions.
- 2. Consult Installation Direction Booklet for Limitations.
- 3. Heat rejection to coolant values are based on 50% water/50% ethylene glycol mix and do NOT include fouling factors. If sourcing your own cooler, a service fouling factor should be applied according to the cooler manufacturer's recommendation.
- 4. Consult option notes for flow specifications of optional Cummins seawater pumps (if applicable).

Standard Thermostat Operating Range (Max).....°F [°C]

Heat Rejection to Engine Coolant BTU/min [kW]

CHONGQING CUMMINS ENGINE CO. LTD.

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All Data is Subject to Change Without Notice - contact CCEC for most recent data .