



Chongqing Cummins Engine Co. Ltd.

Propulsion Marine Engine Performance Data

Curve No.: M-194
DS: DS-4962
CPL: 0990
DATE: 27-Aug-08

General Engine Data

Engine Model.....	NTA855-M
Rating Type	Heavy Duty
Rated Engine Power..... hp [kW]	450 [336]
Rated Engine Speed.....rpm	1800
Peak Engine Torque @ rpm.....lb.·ft. [N·m]	N.A.
Brake Mean Effective Pressure.....psi [kPa]	232 [1600]
Minimum Idle Speed Setting..... rpm	575-650
Normal Idle Speed Variation.....±rpm	25
High Idle Speed Range Minimum..... rpm	1962
Maximum..... rpm	2106
Aspiration	Turbocharged/Aftercooled
Compression Ratio	14.5:1
Piston Speed..... ft/min [m/sec]	1791 [9.1]
Weight (Dry) - Engine Only - Average.....lb. [kg]	2870 [1303]
Weight (Dry) - Engine With HeatexchangerSystem - Average.....lb. [kg]	3150 [1430]
Installation Diagram No.....	4061314

Fuel System¹

Fuel Consumption at Rated Speed.....gal/hr [l/hr]	22 [83]
Approximate Fuel Flow to Pump.....gal/hr [l/hr]	66 [249]
Maximum Allowable Fuel Supply to Pump Temperature..... °F [°C]	160 [71]
Approximate Fuel Return to Tank Temperature..... °F [°C]	N.A.
Maximum Heat Rejection to Drain Fuel.....BTU/min [kW]	N.A.
Fuel Pressure - Pump Out / Rail Mechanical Gauge.....psi [kPa]	163 [1123]

Air System¹

Intake Manifold Pressure.....in. Hg [kPa]	58 [196]
Intake Air Flow.....cfm [l/sce]	932 [440]
Heat Rejection to Ambient.....BTU/min [kW]	2391 [42]

Exhaust System¹

Exhaust Gas Flow.....cfm [l/sec]	2097 [990]
Exhaust Gas Temperature (Turbine Out).....°F [°C]	790 [421]
Exhaust Gas Temperature (Manifold).....°F [°C]	1060 [571]

Cooling System¹

Sea Water Pump Specifications.....MAB 0.08.17-07/16/2001	
Pressure Cap Rating (With Heat Exchanger Option).....psi [kPa]	7 [50]

Engines without Low Temperature Aftercooler (LTA)

Jacket Water Aftercooled Engine (JWAC)

Coolant Flow to Engine Heat Exchanger.....gal/min [l/min]	70 [264]
Standard Thermostat Operating Range (Start to Open).....°F [°C]	180 [82]
Standard Thermostat Operating Range (Full Open).....°F [°C]	201 [94]
Heat Rejection to Engine Coolant ³BTU/min [kW]	14344 [252]

TBD = To Be Determined

N/A = Not Applicable

N.A. = Not Available

1. All Data at Rated Conditions.

2. Consult Installation Direction Booklet for Limitations.

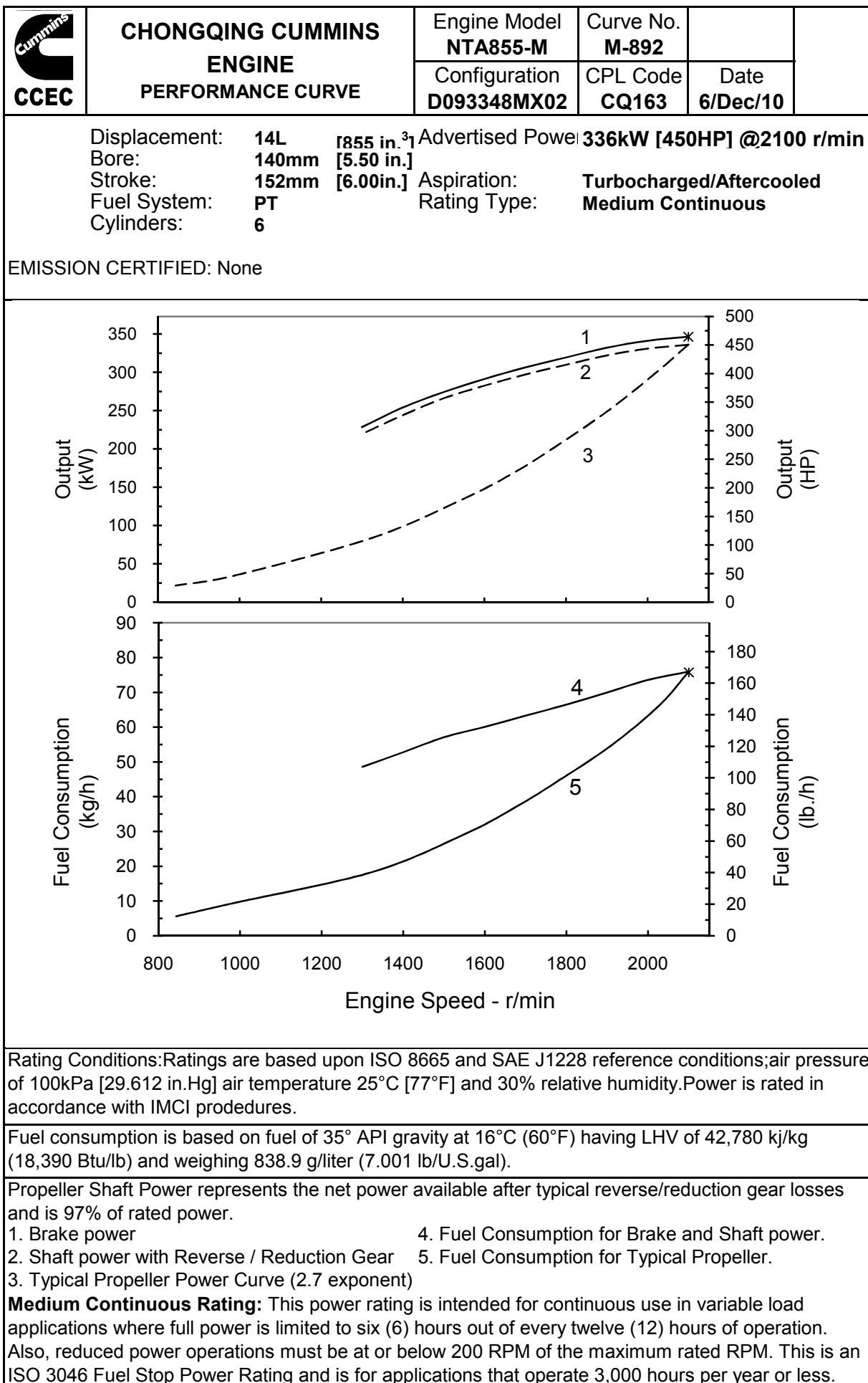
3. Heat rejection to coolant values are based on 50% water/50% ethylene glycol mix.

4. Consult option notes for flow specifications of optional Cummins seawater pumps (if applicable).

CHONGQING CUMMINS ENGINE CO. LTD.

CHONGQING, P.R.CHINA, 400031

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



Chongqing Cummins Engine Co. Ltd.

Propulsion Marine Engine Performance Data

Curve No.: M-892
DS: DS-4962
CPL: CQ163
DATE: 6-Dec-10

General Engine Data

Engine Model.....	NTA855-M
Rating Type	Medium Continuous
Rated Engine Power..... hp [kW]	450 [336]
Rated Engine Speed.....rpm	2100
Peak Engine Torque @ rpm.....lb.·ft. [N·m]	N.A. [不可用]
Brake Mean Effective Pressure.....psi [kPa]	199 [1371]
Minimum Idle Speed Setting..... rpm	575-650
Normal Idle Speed Variation.....±rpm	35
High Idle Speed Rang Minimum..... rpm	2290
Maximum..... rpm	2415
Aspiration	Turbocharged/Aftercooled
Compression Ratio	14.0:1
Piston Speed..... ft/min [m/sec]	2094 [10.64]
Weight (Dry) - Engine Only - Average.....lb. [kg]	2870 [1303]
Weight (Dry) - Engine With Heatexchanger System - Average.....lb. [kg]	3150 [1430]
Installation Diagram No.....	4061358

Fuel System¹

Fuel Consumption at Rated Speed.....gal/hr [l/hr]	24 [89]
Approximate Fuel Flow to Pump.....gal/hr [l/hr]	71 [267]
Maximum Allowable Fuel Supply to Pump Temperature.....°F [°C]	160 [71]
Approximate Fuel Return to Tank Temperature.....°F [°C]	N.A.
Maximum Heat Rejection to Drain Fuel.....BTU/min [kW]	N.A.
Fuel Pressure - Pump Out / Rail Mechanical Gauge.....psi [kPa]	194 [1337]

Air System¹

Intake Manifold Pressure.....in. Hg [kPa]	50 [169]
Intake Air Flow.....cfm [l/sec]	979 [462]
Heat Rejection to Ambient.....BTU/min [kW]	2561 [45]

Exhaust System¹

Exhaust Gas Flow.....cfm [l/sec]	2237 [1056]
Exhaust Gas Temperature (Turbine Out).....°F [°C]	882 [472]
Exhaust Gas Temperature (Manifold).....°F [°C]	1152 [622]

Cooling System¹

Sea Water Pump Specifications.....MAB 0.08.17-07/16/2001	
Pressure Cap Rating (With Heat Exchanger Option).....psi [kPa]	7 [50]

Engines without Low Temperature Aftercooler (LTA)

Jacket Water Aftercooled Engine (JWAC)

Coolant Flow to Engine Heat Exchanger.....gal/min [l/min]	70 [264]
Standard Thermostat Operating Range (Start to Open).....°F [°C]	180 [82]
Standard Thermostat Operating Range (Full Open).....°F [°C]	201 [94]
Heat Reiection to Engine Coolant ³BTU/min [kW]	16678 [293]

TBD = To Be Determined

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2. Consult Installation Direction Booklet for Limitations.

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4. Consult option notes for flow specifications of optional Cummins seawater pumps (if applicable).

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