





Chongqing Cummins Engine Co. Ltd.

Propulsion Marine Engine Performance Data

Curve No.: M-814
DS: DS-4962
CPL: CQ154
DATE: 27-Aug-08

General Engine Data

| | |
|--|--------------------------|
| Engine Model..... | NTA855-M |
| Rating Type | Continuous |
| Rated Engine Power..... hp [kW] | 400 [298] |
| Rated Engine Speed.....rpm | 1800 |
| Peak Engine Torque @ 1500 rpm.....lb.·ft. [N·m] | 1021 [1385] |
| Brake Mean Effective Pressure.....psi [kPa] | 206 [1419] |
| 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 | 3150 [1430] |
| Installation Diagram No..... | 4061314 |

Fuel System¹

| | |
|---|-------------|
| Fuel Consumption at Rated Speed.....gal/hr [l/hr] | 19 [72] |
| Approximate Fuel Flow to Pump.....gal/hr [l/hr] | 57 [216] |
| 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] | 129 [889] |

Air System¹

| | |
|--|-------------|
| Intake Manifold Pressure.....in. Hg [kPa] | 46 [156] |
| Intake Air Flow.....cfm [l/sce] | 911 [430] |
| Heat Rejection to Ambient.....BTU/min [kW] | 2106 [37] |

Exhaust System¹

| | |
|--|--------------|
| Exhaust Gas Flow.....cfm [l/sec] | 2054 [970] |
| Exhaust Gas Temperature (Turbine Out).....°F [°C] | 781 [416] |
| Exhaust Gas Temperature (Manifold).....°F [°C] | 1051 [566] |

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] | 62 [234] |
| 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] | 12750 [224] |

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).

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