





Chongqing Cummins Engine Co. Ltd.

Auxiliary Marine Engine Performance Data

Curve No.: D(M)-645
DS: DS-4983
CPL: CQ607
DATE: 11-Dec-08

General Engine Data¹

Engine Model.....	KTA38-D(M)	
Rating Type	Prime Power	Overload
Rated Engine Power..... hp [kW]	890 [664]	980 [731]
Governed Engine Speed.....rpm	1500	1500
Rated HP Production Tolerance.....	±2%	
Rated Engine Torque.....lb. ft. [N·m]	3117 [4227]	3432 [4654]
Idle Speed Range..... rpm	725-775	
Brake Mean Effective Pressure.....psi [kPa]	203 [1398]	223 [1539]
Compression Ratio	14.5:1	
Piston Speed..... ft/min [m/sec]	1565 [7.95]	
Friction Power.....hp [kW]	115 [86]	

Fuel System¹

Fuel Consumption.....gal/hr [l/hr]	44.1 [167]	49 [184]
Approximate Fuel Flow to Pump.....gal/hr [l/hr]	80 [303]	85 [322]
Maximum Allowable Fuel Supply to Pump Temperature.....°F [°C]	140 [60]	140 [60]
Approximate Fuel Flow Return to Tank..... gal/hr	36 [136]	36 [138]
Fuel Rail Pressure.....psi [kPa]	76 [524]	86 [593]

Weight¹

Dry - Engine Only	lb. [kg]	8546 [3880]
Dry - Engine With Heatexchanger	lb. [kg]	8989[4081]
Installation Diagram No.....		4915140
Hookup Diagram & Drawing, electrical circuit No.....		4061349、4061350

Air System¹

Intake Manifold Pressure.....in. Hg [kPa]	N.A.	N.A.
Intake Air Flow.....cfm [l/sce]	1800 [850]	1949 [920]
Heat Rejection to Ambient.....BTU/min [kW]	5749 [101]	6318 [111]

Exhaust System¹

Exhaust Gas Flow.....cfm [l/sec]	5077 [2397]	5577 [2633]
Exhaust Gas Temperature (Turbine Out).....°F [°C]	1006 [541]	1026 [552]
Heat Rejection to Exhaust.....BTU/min [kW]	29086 [511]	31648 [556]

Cooling System¹

Coolant Flow to Engine Heat Exchanger/Keel Cooler		
Jacket Water Aftercooled Engines (JWAC)		
Coolant Flow to Main Cooler (with open thermostat).....l/min [gal/min]	409 [108]	
Standard Thermostat Operating Range (Min).....°F [°C]	180 [82]	
Standard Thermostat Operating Range (Max).....°F [°C]	199 [93]	
Heat Rejection to Engine Coolant ³BTU/min [kW]	23166 [407]	25500 [448]
Heat Rejection to LTA Coolant ³BTU/min [kW]	N.A.	
Sea Water Flow @ 10 psi Pump Discharge Pressurel/min [gal/min]	N.A.	
Pressure Cap Rating (With Heat Exchanger Option).....psi [kPa]	7 [50]	

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 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).

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