



Marine Engine Performance Data  
 Dongfeng Cummins Engine Co., Ltd.  
 Xiangfan, Hubei Province, China  
<http://www.dcec.com.cn>

Basic Engine Model:  
**6CTAA8.3-M260**  
**FR92292**

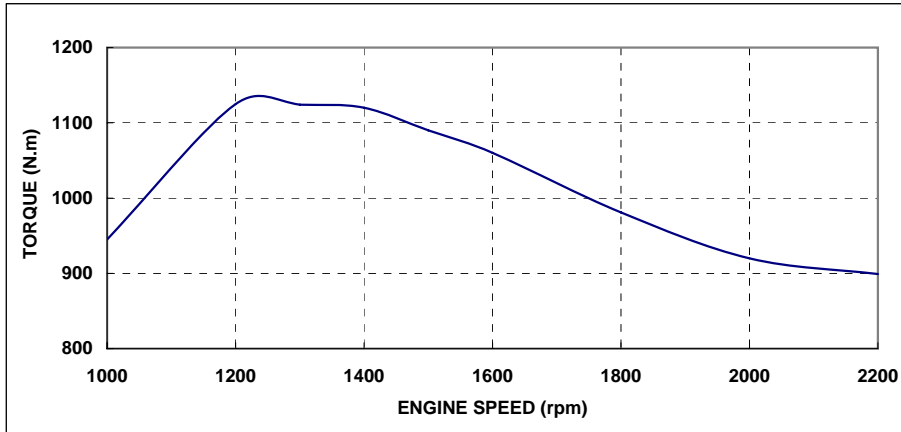
**260 BHP (190kW) @ 2134 RPM**  
**1125 N.m @ 1400 RPM**

Configuration	CPL Code	Revision
D413069MX03	2673	2009-4-25

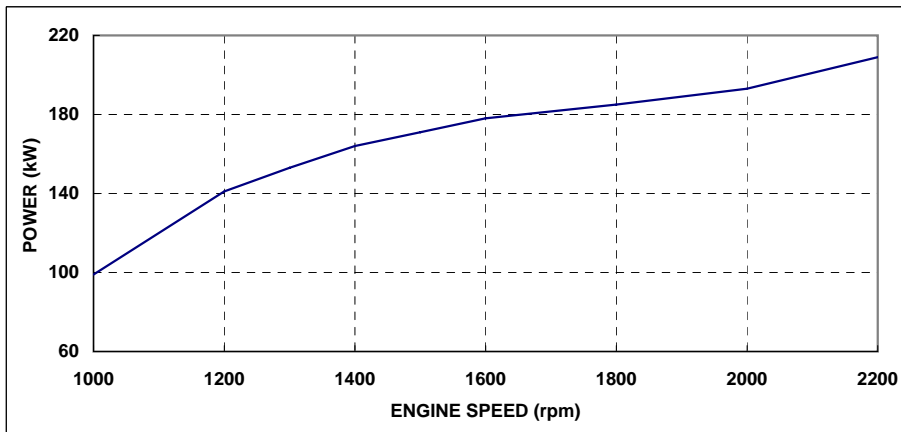
Compression Ratio: <b>17.5:1</b>	Aspiration: <b>Turbocharged and Charge Air Cooled</b>
Bore: <b>114 mm</b>	Displacement: <b>8.3 L</b>
Stroke: <b>135 mm</b>	No. of Cylinders: <b>6</b>
	Fuel System: <b>WEIFU PW2000/RQV_K</b>

All data is based on the engine operating with fuel system, water pump, and 10 in H<sub>2</sub>O (2.488 kPa) inlet air restriction with 5.98 in (152 mm) inner diameter, and with 2.01 in Hg (7 kPa) exhaust restriction with 4.02 in (102 mm) inner diameter; not included are alternator, fan, optional equipment and driven components. Coolant flows and heat rejection data based on coolants as 50% ethylene glycol/50% water. All data is subject to change without notice.

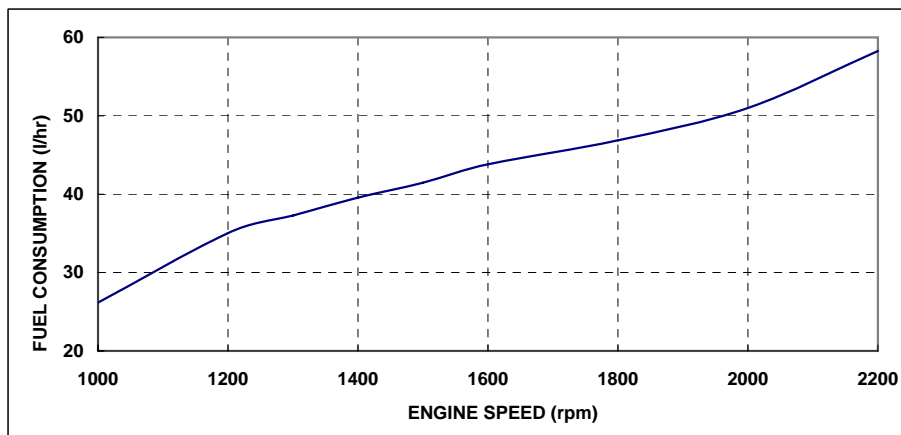
Performance curve



Torque Output	
rpm	N.m
1000	945
1200	1125
1300	1124
1400	1120
1500	1090
1600	1060
1800	981
2000	920
2200	899



Power Output	
rpm	kW
1000	99
1200	141
1300	153
1400	164
1500	171
1600	178
1800	185
2000	193
2200	209



Fuel Consumption	
rpm	l/hr
1000	26
1200	35
1300	37
1400	40
1500	41
1600	44
1800	47
2000	51
2200	58

Curves shown above represent gross engine performance capabilities obtained and corrected in accordance with GB/T18297 conditions of 100kPa (29.61 in. Hg) barometric pressure [80 m (263 ft.) altitude], 25°C (77°F) inlet air temperature, and 1 kPa (0.30 in. Hg) water vapor pressure with No.0# diesel fuel.

**GENERAL ENGINE DATA**

Engine Model.....	6CTAA8.3-M260
Rating Type .....	Continuous
Rated Engine Power.....	-kW [bhp] 190kW (260 BHP)
Rated Engine Speed.....	-rpm 2134
Max Power.....	-kW 209
Max Power Speed.....	-rpm 2200
Peak Engine Torque @ 1400 rpm .....	-N•m 1125
Idle Speed Setting.....	-rpm 600-800
High Idle Speed .....	-rpm 2430
Compression Ratio .....	17.5:1
Piston Speed* .....	-m/sec 9.6
Firing Order.....	1-5-3-6-2-4
Weight (Dry) Engine only - Average.....	-kg 636
Center of Gravity from Rear Face of Block.....	-mm 429
Center of Gravity above Crankshaft Centerline.....	-mm 212

**ENGINE MOUNTING**

Maximum (Static) Bending Moment at Front Support Mounting Surface.....	-N•m 495
Maximum (Static) Bending Moment at Rear Face of Block.....	-N•m 1356
Installation/Operating Angles - Engine Installation Angles	
-In-Line drive: Installation: Static Installed Engine Pitch Angle	
-Engine Front Up From Horizontal .....	Min. 0°
-Engine Front Up From Horizontal.....	Max. 12°
-Vee Drive: Installation: Static Installed Engine Pitch	
-Engine Front Up From Horizontal .....	Min. 3°
-Engine Front Up From Horizontal .....	Max. 12°

**EXHAUST SYSTEM\***

Maximum Back Pressure.....	-kPa 10.1
Exhaust Gas Flow.....	-litre/sec TBD
Exhaust Gas Temperature Turbine Out.....	-°C 570
Exhaust Pipe Size Normally Acceptable.....	-mm 75
Maximum Static Supported Weight at the Turbocharger Outlet Flange.....	-N•m 14

**AIR INTAKE SYSTEM**

Maximum Intake Air Restriction with Heavy Duty Air Cleaner	
— Dirty Element.....	-kPa 6
— Clean Element.....	-kPa 4
Minimum Dirt Holding Capacity with Heavy Duty Air Cleaner.....	-g/cfm 53
Maximum Temperature Rise from Ambient to the Inlet of the Turbocharger. °C	17
Intake Air Flow*.....	-kg/hr 50
Heat Rejection to Ambient .....	-kW TBD
Recommended intake piping size (inner diameter).....	-mm 65

**CHARGE AIR COOLING SYSTE**

Maximum allowable pressure drop across charge air cooler and OEM CAC piping(IMPD):.....	
.....	-kPa 15
Maximum Intake Manifold Temperature Differential (Ambient to IMT) (IMTD) °C	35
Intake manifold temperature for Fan-ON.....	-°C 60

**FUEL SYSTEM**

Maximum Fuel Flow on the Supply Side of the Fuel Pump.....	-litre/hr 300
Maximum fuel supply restriction at fuel pump inlet	
— with clean fuel filter element(s) at maximum fuel flow.....	-kPa 13.6
— with dirty fuel filter element(s) at maximum fuel flow .....	-kPa 27.1
Maximum fuel drain restriction (total head)	
— before (or without) check valve.....	-kPa 69
<b>Maximum fuel inlet temperature.....</b>	<b>-°C 60</b>

**COOLING SYSTEM\***

Coolant capacity - engine only.....	-litre	11.4
Minimum water pump inlet pressure with non-deaerating or partially deaerating cooling system.....	-kPa	TBD
Maximum static head of coolant above crankshaft centerline.....	-m	TBD
Standard (modulating) Thermostat Range.....	-°C	82-95
Max. Allowable Block Coolant System Pressure .....	-kPa	TBD
Minimum pressure cap rating at sea level.....	-kPa	50
Maximum coolant operating temperature at engine outlet (max. top tank temp):.....	-°C	100
Minimum operating block coolant temperature.....	-°C	70
Minimum coolant expansion space (% of system capacity).....	- %	6
Heat Rejection to Coolant.....	-kW	TBD
Maximum recommended external coolant flow restriction in engine circuit:.....	-kPa	34
Maximum deaeration time.....	-min.	25
Minimum drawdown (% total cooling system capacity).....	- %	11
Full ON Fan engine coolant outlet temperature.....	-°C	93

**LUBRICATION SYSTEM**

Normal Operating Oil Pressure Range		
— minimum low idle.....	-kPa	69
—maximum rated speed.....	-kPa	426
Maximum Lube Oil Flow for Engine Accessories.....	-litre/min.	7.6
Maximum Sump Oil Temperature.....	-°C	121
Minimum Required Lube System Capacity - Sump plus Filters.....	-litre	23.6
By-pass Filtration Required.....	-Yes/No	Yes
Angularity of Standard Oil Pan: (Values stated are for intermittent operation only):		
— Front Down.....	- °	45
— Front Up.....	- °	45
— Side to Side.....	- °	45

**CRANKING SYSTEM**

Minimum Battery Capacity - Cold Soak at 0°F (-18°C) or Above		12V	24V
— Engine Only - Cold Cranking Amperes.....	-CCA	1250	625
— Engine Only - Reserve Capacity.....	-min.	360	180
Maximum Starting Circuit Voltage Drop.....	-Volts	TBD	
Minimum Ambient Temperature for Unaided Cold Start.....	-°C(°F)	-12	
Minimum Cranking Speed Required for Unaided Cold Start.....	-rpm	120	
Maximum starting circuit resistance.....	-Ohm	0.00075	0.002

**EMISSIONS DATA**

NO <sub>x</sub> (Oxides of Nitrogen).....	-g/kW.h	TBD
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\*All Data at Rated Conditions

ALL DATA CERTIFIED WITHIN 5%

TBD = To Be Decided

N/A = Not Applicable

N.A. = Not Available

All data is subject to change without notice, sorry for inform.

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