



EMAC INTERNATIONAL GROUP LIMITED

Tel: 86-755-82314520

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Add: 10TH FLOOR, BANLI BUILDING, DAHE ROAD, LONGHUA DISTRICT, SHENZHEN, CHINA.



DONGFENG CUMMINS ENGINE PERFORMANCE CURVE

Engine Model
6LTAA8.9-C325

Curve No.
FR92213

CPL Code
8670

Date
2006-9

Displacement: 8.9L

Bore: 114mm

Stroke: 145mm

Fuel System: P7100 Pump/RQV-K

Cylinders: 6

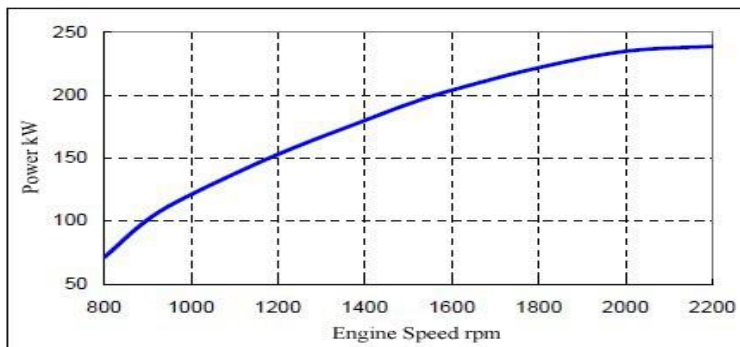
Advertised Power: 239kW@2200 rpm

325HP@2200 rpm

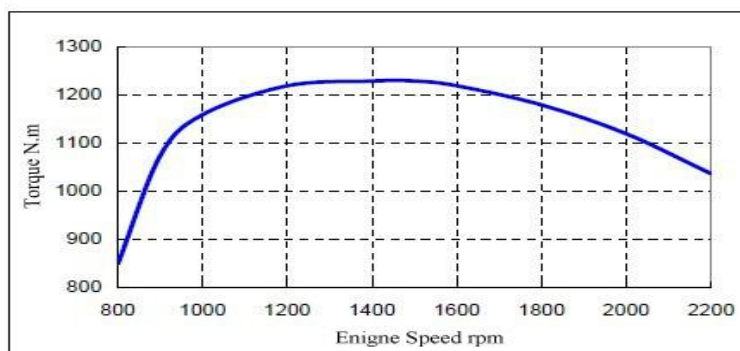
Peak Torque: 1230N.m@1500 rpm

Aspiration: Turbocharged & Intercooled

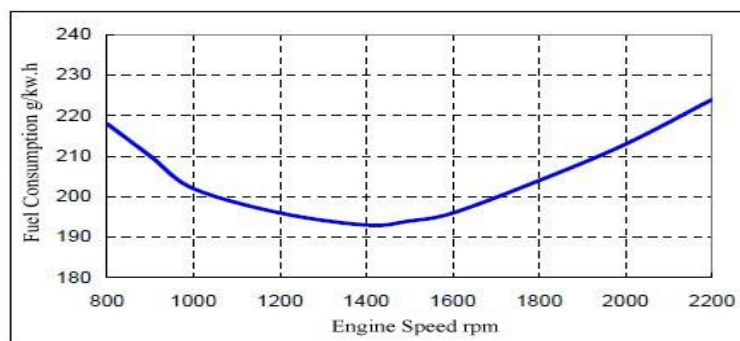
Rating Type: Continuous



rpm	Power	
		kW
800		71
900		101
1000		121
1200		153
1400		180
1500		193
1600		204
1800		222
2000		235
2200		239



rpm	Torque	
		N.m
800		850
900		1075
1000		1160
1200		1220
1400		1230
1500		1230
1600		1220
1800		1180
2000		1120
2200		1037



rpm	Fuel Consumption	
		g/kw.h
800		218
900		210
1000		202
1200		196
1400		193
1500		194
1600		196
1800		204
2000		213
2200		224

All performance data based on the standard status and GB/T18297 conditions.



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Cummins Engine Co. Ltd

Diesel Engine for Construction Performance Data

General Engine Data

Engine Wet Weight (Pricing Configuration).....	650 kg
Maximum Over Speed Performance.....	3150rpm
Moment of Inertia of Rotating Components (No Flywheel).....	0.72 kg·m ²
Center of Gravity from Front Face of Block.....	427 mm
Center of Gravity above Crankshaft Centerline.....	163 mm

Engine Mounting

Maximum (Static) Bending Moment at Front Support Mounting Surface.....	495 N.m
Maximum (Static) Bending Moment at Side Pad Mounting Surface.....	250 N.m
Maximum (Static) Bending Moment at Rear Face of Block.....	1356 N.m
Moment of Inertia of Complete Engine	
— Roll Axis.....	29.8 kg·m ²
— Pitch Axis.....	76.8 kg·m ²
— Yaw Axis.....	66.9 kg·m ²

Exhaust System

Maximum Back Pressure.....	10.1kPa
Exhaust Pipe Size Normally Acceptable.....	100 mm
Maximum Static Supported Weight at the Turbocharger Outlet Flange.....	14 N·m
Exhaust Manifold Insulation Acceptable.....	No
Turbocharger Insulation Acceptable.....	No

Air Intake System

Maximum Intake Air Restriction with Heavy Duty Air Cleaner	
— Clean Element.....	3.7 kPa
— Dirty Element.....	6.2 kPa
Minimum Dirt Holding Capacity with Heavy Duty Air Cleaner.....	53 g/litre/sec.
Maximum Temperature Rise from Ambient to the Inlet of the Turbocharger.....	17 °C
Minimum Diameter Size of the Intake Manifold.....	125 mm

Turbocharged Inter-cooled System

Allowable Maximum Intake Manifold Temperature(25°C Ambient Temperature).....	60 °C
Allowable Pressure Difference Before and After Cold.....	14kPa
Allowable Temperature Difference for the Exhaust Temperature with Ambient Temperature.....	35 °C



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Lubrication System

Normal Operating Oil Pressure Range

Minimum Oil Pressure at Idle Speed.....	69 kPa
Maximum Oil Pressure at Rated Speed.....	426 kPa
Maximum Lube Oil Flow for Engine Accessories.....	7.6 litre/min.
Maximum Sump Oil Temperature.....	138 °C
Minimum Required Lube System Capacity(Sump plus Filters).....	27.6 litre
By-pass Filtration Required.....	Yes
Angularity of Standard Oil Pan: (Values stated are for intermittent operation only):	
— Front Down.....	45 °
— Front Up.....	45°
— Side to Side.....	45°

Cooling System

Coolant Capacity - Engine Only.....	11.1 L
Maximum Engine Cooling Circuit External Resistance.....	34 kPa
Minimum Pump Inlet Pressure with Open Thermostat and no Pressure Cap.....	0 kPa
Maximum Static Head of Coolant Above Engine Crankshaft Centerline.....	1 m
Standard (modulating) Thermostat Range.....	82-93 °C
Minimum Pressure Cap.....	50 kPa
Maximum Engine Coolant Temperature at Engine Outlet.....	100°C
Maximum Engine Coolant Temperature for Engine Protection Devices.....	104°C
Minimum Engine Coolant Temperature.....	70°C
Minimum Fill Rate.....	19 litre/min
Maximum Initial Fill Time.....	5 min
Minimum Coolant Expansion Space.....	6%
Maximum Deaeration Time.....	25 min.
Minimum Drawdown.....	11%
(Drawdown Must Exceed the Volume Not Filled at Initial Fill & Must Not Include Expansion Space)	
Shutter Opening Coolant Outlet Temperature.....	85°C
Shutter Opening Intake Manifold Air Temperature.....	60°C

Cool Start System

	12V	24V
Minimum Battery Capacity(below -18°C)		
— Engine Cold Starting Current.....CCA	1500	750
—Engine Reserve Capacity.....min	360	180
Minimum Environmental Temperature When Cold Start Unassisted.....°C	-12	
Minimum Engine Speed When Cold Start Unassisted.....rpm	120	

Fuel System

Maximum Fuel Flow on the Supply Side of the Fuel Pump.....	315 l/hr
Maximum Fuel Supply Restriction:	
— with clean fuel filter.....	20 kPa



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— with dirty fuel filter..... 34 kPa

Maximum Fuel Drain Restriction:

— with check valves..... N/A

— less check valves..... 69 kPa

Maximum Fuel Inlet Temperature..... 71°C

Minimum Fuel Tank Air Venting Capability..... 0.055 L/s

Minimum Idle Speed..... 700±100 rpm

Maximum Governed Speed (10% of Rated Torque) 2500 rpm

Allowable Maximum Highest Altitude..... 2000 m

Torque When Accelerator Closed at 550rpm/min..... 650N.m

Limited Load for Thrust Bearing

—Instantaneous Maximum..... 5338 N.m

—Continuous Maximum..... 2670 N.m

Fuel Rating Option used for these Data: FR91536

Engine Speed..... -rpm

Gross Power Output..... -kW

Torque..... -N.m

Intake Manifold Pressure..... -kPa

Turbocharger Compressor Outlet Pressure..... -kPa

Intake Air Flow..... - m3/min

Exhaust Air Flow..... -m3/min

Exhaust Gas Temperature - Dry Stack..... -°C

Heat Rejection to Ambient (Dry Manifold)..... -kW

Heat Rejection to Coolant (Dry Manifold)..... -kW

Heat Rejection to Fuel..... -kW

Engine Coolant Flow..... -litre/sec

External Cooling Circuit Resistanc..... - Kpa△P

Altitude Limitations:

—Intermittent..... -m

—Continuous..... -m

Steady State Smoke..... -Weifu

Rated Power	Max. Power Point	Peak Torque
2200		1400
239		180
1037		1230
164		141
171		144
21.2		11.2
56		35
510		505
65		29
108		66.8
N/A		N/A
4.67		2.92
34.5		17.3
N/A		N/A
2000		2000
1.5		2.0

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.