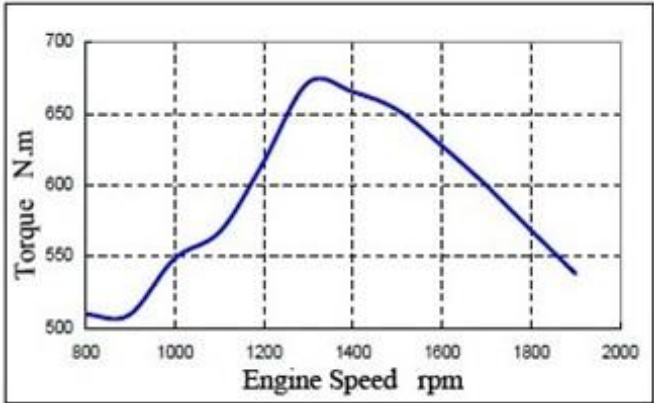


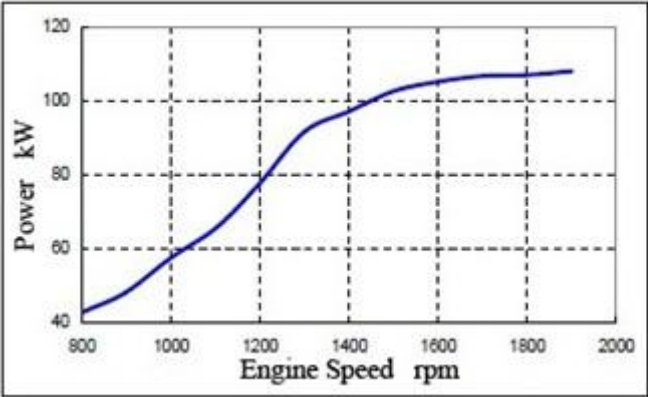
	DONGFENG CUMMINS ENGINE PERFORMANCE CURVE	Engine Model 6CTA8.3-C145	Curve No. FR91997	
			CPL Code 0722	Date 2006-7

Displacement: 8.3L
Bore: 114mm
Stroke: 135mm
Fuel System: Beiyou PB/RSV
Cylinders: 6 Cylinders, in Line

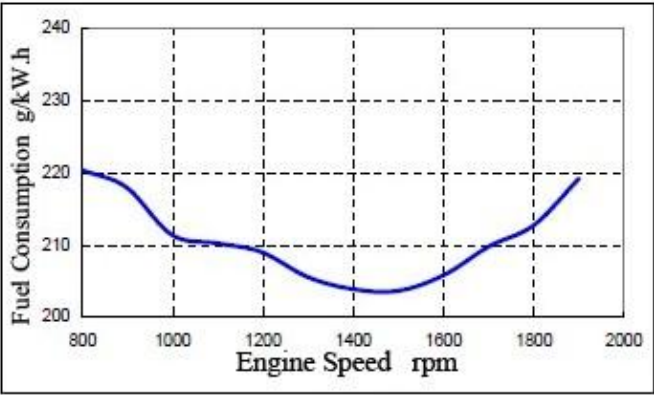
Advertised Power: 108kW@1900 rpm
145HP@1900 rpm
Peak Torque: 538N.m@1900 rpm
Aspiration: Turbocharged & Inter-cooled
Rating Type: Continuous



rpm	Torque N.m
1900	538
1700	600
1600	627
1500	653
1400	665
1300	672
1200	615
1000	549
900	510
800	510



rpm	Power kW
1900	108
1700	107
1600	105
1500	103
1400	97
1300	92
1200	77
1000	57
900	48
800	43



rpm	Fuel Consumption g/kW.h
1900	219
1700	210
1600	206
1500	204
1400	204
1300	206
1200	209
1000	211
900	218
800	220

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



Cummins Engine Co. Ltd

Diesel Engine for Engineering Performance Data

General Engine Data

Engine Dry Weight (Pricing Configuration).....	637 kg
Moment of Inertia of Rotating Components (No Flywheel).....	0.37 kg·m ²
Center of Gravity from Front Face of Block.....	427 mm
Center of Gravity above Crankshaft Centerline.....	163 mm
Crankshaft Thrust Bearing Load Limit	
—Maximum Intermittent.....	
—Maximum Continuous.....	

Engine Mounting

Maximum (Static) Bending Moment at Front Support Mounting Surface.....	495N.m
Maximum (Static) Bending Moment at Side Pad Mounting Surface.....	TBD N.m
Maximum (Static) Bending Moment at Rear Face of Block.....	1356N.m
Moment of Inertia of Complete Engine	
— Roll Axis.....	23.6 kg·m ²
— Pitch Axis.....	65.2 kg·m ²
— Yaw Axis.....	55.9kg·m ²

Exhaust System

Maximum Back Pressure.....	76 mmHg
Exhaust Pipe Size Normally Acceptable.....	75 mm
Maximum Static Supported Weight at the Turbocharger Outlet Flange.....	22.7N·m
Exhaust Manifold Insulation Acceptable.....	No
Turbocharger Insulation Acceptable.....	No

Air Intake System

Maximum Intake Air Restriction with Heavy Duty Air Cleaner	
— Clean Element.....	381 mmH ₂ O
— Dirty Element.....	635 mmH ₂ O
Minimum Dirt Holding Capacity with Heavy Duty Air Cleaner.....	53 g/liter/sec.
Maximum Temperature Rise from Ambient to the Inlet of the Turbocharger.....	17 °C
Maximum Pressure Drop from the Turbocharger Outlet to the Intake Manifold.....	TBD kPa

Lubrication System

Normal Operating Oil Pressure Range.....	276 – 345kPa
Maximum Lube Oil Flow for Engine Accessories.....	7.6 liter/min.
Maximum Sump Oil Temperature.....	121 °C
Minimum Engine Oil Pressure for Engine Protection Devices:	
— At Rated Speed and Load.....	276kPa
— At Torque Peak Speed and Load.....	207kPa

— At Low Idle.....	69kPa
Minimum Required Lube System Capacity - Sump plus Filters.....	21.9liter
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.....	9.8 L
Maximum Engine Cooling Circuit External Resistance.....	34kPa
Minimum Pump Inlet Pressure with Open Thermostat and no Pressure Cap.....	TBD
Maximum Static Head of Coolant Above Engine Crankshaft Centerline.....	TBD
Standard (modulating) Thermostat Range.....	79-91 °C
Maximum Block Coolant Pressure with Closed Thermostat and no Pressure Cap.....	276kPa
Minimum Pressure Cap.....	50kPa
Maximum Engine Coolant Temperature at Engine Outlet.....	98.9°C
Maximum Engine Coolant Temperature for Engine Protection Devices.....	104.4°C
Minimum Engine Coolant Temperature.....	79.4°C
Minimum Fill Rate.....	19 liter/min
Maximum Initial Fill Time.....	5 min
Minimum Coolant Expansion Space of System Capacity.....	6%
Maximum Deaeration Time.....	25 min.
Minimum Drawdown of Total System Capacity.....	11%
(Drawdown Must Exceed the Volume Not Filled at Initial Fill & Must Not Include Expansion Space)	
Fan-on Engine Coolant Outlet Temperature.....	93°C
Shutter Opening Coolant Outlet Temperature.....	93°C
Shutter Opening Intake Manifold Air Temperature.....	TBD
Fuel System	
Maximum Fuel Flow on the Supply Side of the Fuel Pump.....	300 kg/hr
Maximum Fuel intake Restriction	
— with clean fuel filter.....	102 mmHg
— with dirty fuel filter.....	203 mmHg
Maximum Fuel Drain Restriction	
— with check valves.....	510mmHg
— less check valves.....	N/A
Maximum Fuel Inlet Temperature.....	71°C
Minimum Fuel Tank Air Venting Capability Required at 6 in. H2O Back Pressure.....	340 liter/hr
Low Idle Set Speed.....	850 rpm
Maximum Governed Speed (10% of Rated Torque)	2100 rpm
Maximum Over speed Capability.....	3750 rpm
Emission	

Estimated Free Field Sound Pressure Level At 15 m (50 ft.) and Full-Load Governed Speed

(Excludes Noise from Intake, Exhaust, Cooling System and Driven Components)

—Right Side.....	83dBa
—Left Side.....	83dBa
—Front.....	82dBa
—Rear.....	N/A

Fuel Rating Option used for these Data: FR91997

Engine Speed.....	-rpm
Gross Power Output.....	-kW
Torque.....	- N.m
Intake Manifold Pressure.....	-kPa
Motoring Friction Horsepower.....	-kW
Turbocharger Compressor Outlet Pressure.....	-kPa
Exhaust Air Flow.....	-litre/sec
Exhaust Gas Temperature	-°C
Heat Rejection to Ambient (Dry Manifold).....	-kW
Heat Rejection to Coolant (Dry Manifold).....	-kW
Heat Rejection to Fuel.....	-kW
Engine Coolant Flow.....	-liter/sec
External Cooling Circuit Resistance@2500r/min.....	- Kpa△P
Altitude Limitations:	
—Intermittent.....	-m
—Continuous.....	-m
Steady Smoke.....	-Bosch

Rated Power	Max. Power Point	Peak Torque
1900		1300
108		92
543		674
106		64
TBD		TBD
110		67
367		238
365		463
68		51
91		75
0.5		0.4
4.5		3
34.5		17.2
TBD		TBD
3000		3000
1.0		1.5

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.