



DONGFENG CUMMINS ENGINE  
PERFORMANCE CURVE

Engine Model  
**6CTAA8.3-G2**

Curve No.  
**FR92110**

Engine Family  
**D41**

CPL Code  
**1783**

Date  
**06-2006**

Displacement: 8.3L

Advertised Power: 183kW@1500 rpm

Bore: 114mm

245HP@1500 rpm

Stroke: 135mm

Fuel System: Beiyou P7100 Pump, GAC Electrical Governor

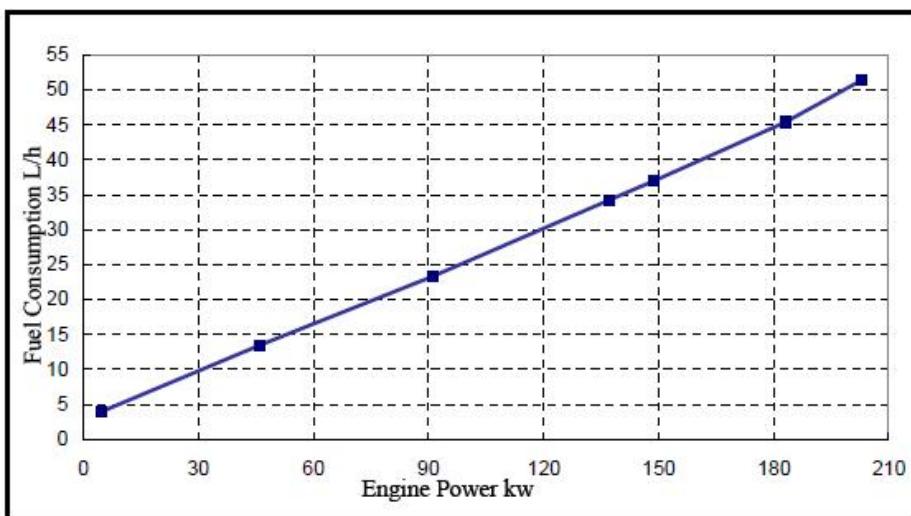
Aspiration: Turbocharged & Inter-cooled

Cylinders: 6 Cylinders, in Line

Rating Type: Continuous

Engine Speed	Standby Power		Rated Power		Continuous Power	
RPM	KW	HP	KW	HP	KW	HP
1500	203	272	183	245	149	200

Output Power			Fuel Consumption	
%	KW	HP	g/kw.h	L/h
<b>Standby Power</b>				
100	203	272	209	51.4
<b>Rated Power</b>				
100	183	245	205	45.4
75	137	184	206	34.0
50	91	123	211	23.3
25	46	61	241	13.5
<b>Continuous Power</b>				
100	149	200	205	37.0



Performance data obtain under normal conditions, according to GB/T18297 test conditions

# Cummins Engine Co. Ltd

## Diesel Engine for Generator Set Performance Data

### Technical Request

Aspiration.....	Turbocharged & Inter-cooled
Net Weight(Dry)-Engine Only.....	684kg
Instantaneous inertia at Rotating: (without Flywheel).....	0.37kg.m2
Distance from Center of Gravity to the Front Engine Block.....	541mm
Distance from Center of Gravity to the Crankshaft Centerline.....	163mm

### Engine Mounting

Maximum (Static) Bending Moment at Rear Face of Block.....	1356 N.m
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### Exhaust System

Maximum Back Pressure.....	75 mmHg
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### Air Intake System

Maximum Intake Air Restriction:

— with Dirty Filter Element.....	635 mmH2O
— with Normal Clean Air Filter and Clean Filter Element.....	254 mmH2O
— with Heavy-duty Clean Air Filter and Clean Filter Element.....	381 mmH2O

### Lubrication System

Normal Operating Oil Pressure Range:

— at Idle Speed.....	103 kPa
— at Rated Speed .....	276 – 414 kPa

Maximum Sump Oil Temperature..... 121 °C

Angularity of Standard Oil Pan: Oil Capacity(Max.-Min.)..... 18.9-15.1 litre

Minimum Required Lube System Capacity - Sump plus Filters..... 23.8 litre

Angularity of Standard Oil Pan:

— Front Down.....	45 °
— Front Up.....	45°
— Side to Side.....	45°

### Fuel System

Type of Fuel System..... Beiyou P7100Direct Fuel Injection Pump

The Maximum Resistance of Fuel Pump When Use Clean Filter..... 102mmHg

Maximum Fuel Return Oil Resistance..... 254mmHg

Return Fuel in Total(Constant Load)..... 208mmHg

### Cooling System

Coolant Capacity - Engine Only..... 12.3 L

Maximum Engine Cooling Circuit External Resistance.....	28kPa
Minimum Pump Inlet Pressure with Open Thermostat and no Pressure Cap.....	18.3m
Standard (modulating) Thermostat Range.....	83-95 °C
Minimum Pressure Cap.....	69 kPa
The Highest Coolant Temperature(Standby/Rated Power).....	104/100 °C

### Electrical System

Starter Motor.....	12V	24V
Battery Charging System(Polarity Negative Ground).....	63amp	40amp
Maximum Resistance of Starting Circuit.....	0.00075Ω	0.002Ω

### Specification Data:

Engine Speed.....	rpm
Output Power.....	kw
Torque.....	N.m
Idle Speed.....	rpm
Frictional Loss Power.....	kw
Piston Speed.....	m/s
Coolant Flow.....	l/s
Air Intake Flow.....	l/s
Air Exhaust Flow.....	l/s
Exhaust Temperature.....	°C
Heat Loss in The Environment.....	kw
Coolant Heat Loss.....	kw
Fuel Heat Loss.....	kw

Rated Power	Standby Power
1500	1500rpm
183	203
1758	1950
700-900	700-900
17	17
6.8	6.8
3.3	3.3
180	187
442	485
500	545
N/A	N/A
83	95
N/A	N/A

*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.*