



**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
 Bore: 114mm
 Stroke: 135mm
 Fuel System: Beiyou P7100 Pump, GAC Electrical Governor
 Cylinders: 6 Cylinders, in Line

Advertised Power: 183kW@1500 rpm
 245HP@1500 rpm
 Aspiration: Turbocharged & Inter-cooled
 Rating Type: Continuous

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

Output Power			Fuel Consumption	
%	KW	HP	g/kw.h	L/h
Standby Power				
100	203	272	209	51.4
Rated Power				
100	183	245	205	45.4
75	137	184	206	34.0
50	91	123	211	23.3
25	46	61	241	13.5
Continuous Power				
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.m ²
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
--	----------

Exhaust System

Maximum Back Pressure.....	75 mmHg
----------------------------	---------

Air Intake System

Maximum Intake Air Restriction:

— with Dirty Filter Element.....	635 mmH ₂ O
— with Normal Clean Air Filter and Clean Filter Element.....	254 mmH ₂ O
—with Heavy-duty Clean Air Filter and Clean Filter Element.....	381 mmH ₂ O

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.