



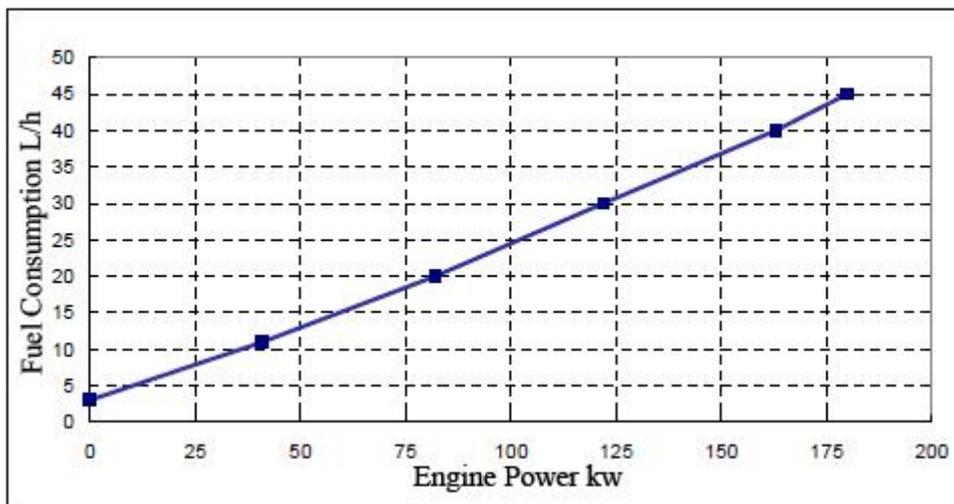
**DONGFENG CUMMINS ENGINE  
PERFORMANCE CURVE**

Engine Model <b>6CTA8.3-G2</b>	Curve No. <b>FR91961</b>	
Engine Family <b>D41</b>	CPL Code <b>1786</b>	Date <b>08-2006</b>

Displacement: 8.3L	Advertised Power: 163kW@1500 rpm
Bore: 114mm	219HP@1500 rpm
Stroke: 135mm	
Fuel System: Beiyou PB 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	180	241	163	219	133	178

Output Power			Fuel Consumption	
%	KW	HP	g/kw.h	L/h
<b>Standby Power</b>				
100	180	241	212	45
<b>Rated Power</b>				
100	163	219	210	40
75	122	164	207	30
50	82	110	210	20
25	41	55	229	11
<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.....	702kg
Instantaneous inertia at Rotating: (without Flywheel).....	0.37kg.m <sup>2</sup>
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.....	76 mmHg
----------------------------	---------

### Air Intake System

Maximum Intake Air Restriction:

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

### Lubrication System

Normal Operating Oil Pressure Range:

— at Idle Speed.....	207 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 PB Direct 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:**

	Rated Power	Standby Power
Engine Speed.....rpm	1500	1500rpm
Output Power.....kw	163	180
Torque.....N.m	1040	1145
Idle Speed.....rpm	750-950	750-950
Frictional Loss Power.....kw	17	17
Piston Speed.....m/s	6.8	6.8
Coolant Flow.....l/s	3.3	3.3
Air Intake Flow..... l/s	192	206
Air Exhaust Flow..... l/s	519	578
Exhaust Temperature..... °C	536	563
Heat Loss in The Environment.....kw	N/A	N/A
Coolant Heat Loss.....kw	83	95
Fuel Heat Loss.....kw	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.*