

Dongfeng Cummins Technical Operations



ENGINE MODEL: 4B3.9-G2
CURVE & DATASHEET: FR92539



Generator Engine Performance Data

DONGFENG CUMMINS ENGINE Co.,LTD

Xiangfan, Hubei Province, China
<http://www.dcec.com.cn>

Basic Engine Model:

4B3.9-G2

FR92539

FR92539 @ 1500 RPM

Configuration

D381004GX02

CPL Code

CPL: 3114

Revision

2009-4-15

Compression Ratio: **17.3:1**

Bore: **102 mm**

Stroke: **120 mm**

Governor Regulation: **≤5%**

Aspiration: **Naturally Aspirated**

Displacement: **3.9 L**

No. of Cylinders: **4**

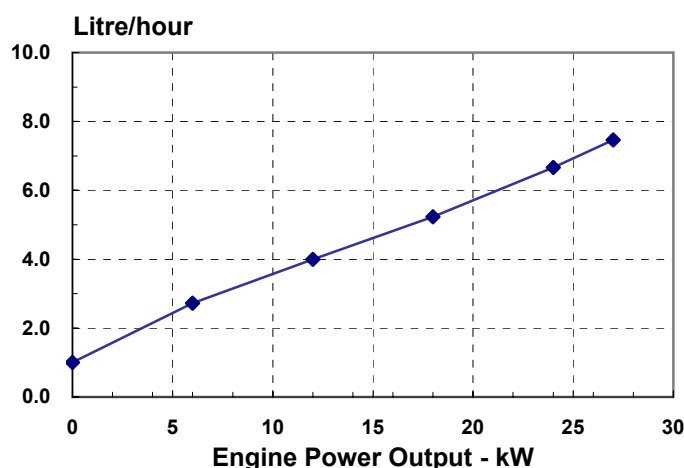
Fuel System: **BYC A/GAC 24V**

All data is based on the engine operating with fuel system, water pump, and 10 in H₂O (2.488 kPa) inlet air restriction with 5.98 in (152mm) inner diameter, and with 2.01 in Hg (7 kPa) exhaust restriction with 4.02 in (102 mm) inner diameter; not included are alternator, fan, optional equipment and driven components. Coolant flows and heat rejection data based on coolants as 50% ethylene glycol/50% water. All data is subject to change without notice.

Engine Speed	Standby Power		Prime Power		Continuous Power	
RPM	kW	HP	kW	HP	kW	HP
1500	27	36	24	32	TBD	TBD

Engine Performance Data @ 1500 RPM

OUTPUT POWER			FUEL CONSUMPTION	
%	kW	HP	g/kW.h	L/h
STANDBY POWER				
100	27	36	228	7.5
PRIME POWER				
100	24	32	229	6.7
75	18	24	240	5.2
50	12	16	275	4.0
25	6	8	374	2.7
CONTINUOUS POWER				
TBD	TBD	TBD	TBD	TBD



Engine Performance Data @ 1800 RPM

Not Available at 1800 RPM

Not Available at 1800 RPM

Curves shown above represent gross engine performance capabilities obtained and corrected in accordance with GB/T18297 conditions of 100kPa (29.61 in. Hg) barometric pressure [80 m (263 ft.) altitude], 25°C (77°F) inlet air temperature, and 1 kPa (0.30 in. Hg) water vapor pressure with No.0 diesel fuel. The engine may be operated without changing the fuel setting up to 2200 m (7218ft.) altitude.

ELECTRICAL SYSTEM

Cranking Motor (Heavy Duty, Positive Engagement).....	-volt	12V	24V
Battery Charging System, Negative Ground.....	-ampere	63	40
Maximum Allowable Resistance of Cranking Circuit.....	-ohm	0.00075	0.002
Minimum Recommended Battery Capacity			
• Cold Soak @ 10 °F (-12 °C) and Above.....	-0°F CCA	625	(312)

Fuel Rating Option used for these Data: **FR92539**

Governed Engine Speed.....	-rpm
Engine Idle Speed.....	-rpm
Gross Engine Power Output.....	-kW
Piston Speed.....	-m/s
Friction Horsepower.....	-kW
Engine Water Flow to Engine:.....	-litre/sec.
Intake Air Flow.....	-litre/sec.
Exhaust Gas Temperature.....	-°C
Exhaust Gas Flow.....	-litre/sec.
Radiated Heat to Ambient.....	-kW
Heat Rejection to Coolant.....	-kW
Heat Rejection to Exhaust.....	-kW

STANDBY POWER		PRIME POWER	
1800	1500	1800	1500
N/A	950 - 1050	N/A	950 - 1050
	27		24
	6		6
	8.2		8.2
	2.2		2.2
	33		33
	410		380
	71		68
	TBD		TBD
	29		25.9
	TBD		TBD

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.

Dongfeng Cummins Engine Co., Ltd.