## **CUMMINS ENGINE DATASHEET**

**ENGINE MODEL: 4BT3.9-G2** 

PERFORMANCE CURVE: FR L003



		Tins	
	im		
A			

Fuel system

## **ENGINE DATASHEET—for G-drive**

ENGINE MO	ODEL	FREFORMANCE CURVE
4BT3.9-G2		FR L003
ENGINE FAMILY	CPL	2006/04
D38	PP L005	2006/04

Speed-droop

Displacement 3.9 L Air intake way turbo-charged

Cylinder bore 102 mm Cylinder quantity 4 kW(BHP) @RPM Stroke 120 mm 36(48) 1500

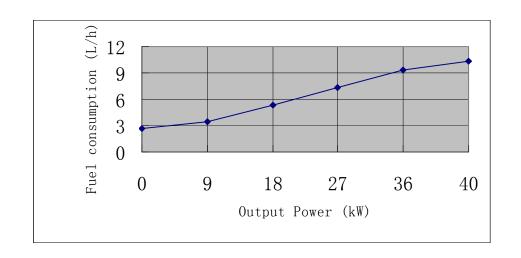
Engine testing with fuel system, water pump and oil pump, without air compressor, alternator, fan, other options and driving accessory.

Testing condition: air intake resistance 250 mmHg, exhaust back pressure 50 mmHg.

A pump GAC governor/ BYC ASIMCO

Engine	Standby Power		Base Out	Base Output Power		Continuous Power	
Speed-RPM	kW	HP	kW	HP	kW	HP	
1500	40	54	36	48	N/A	N/A	

Output Power		Fuel consumption			
%	kW	HP	g/kW.h	L/h	
Standby Power					
100	40	54	212	10.3	
Base Output Power					
100	36	48	214	9.3	
75	27	36	223	7.3	
50	18	24	244	5.3	
25	9	12	312	3.4	
Continuous Power					
N/A	N/A	N/A	N/A	N/A	



5%

ENGINE DATASHEET—for G-drive	ENGINE MG 4BT3.9-0	_	FREFORMANCE CURVE FR L003	
ENGINE DATASHEET—TOT G-GITVE	ENGINE FAMILY	CPL	2006/04	
	D38	PP L005	2000/04	
Typical engine data				
Net weight		kg	321	
Rotate part instantaneous inertia _ without flywheel		kg.m2	0.143	
Distance between gravity center and rear surface of cylinder block		mm	373	
Distance between gravity center and center line above of cranksha	ıft	mm	163	
Engine installation				
Static bent torque permitted—rear surface of cylinder block		N.m	1356	
Static bent torque permitted—front surface of cylinder block		N.m	435	
Static bent torque permitted—flank surface of cylinder block		N.m	365	
Exhaust system				
Max. back pressure		mmHg	<b>7</b> 6	
Diameter of exhaust pipe recommended		mm	75	
Air intake system				
Max. air intake resistance				
Dirty filter		mmH2O	635	
Normal air cleaner and clean filter		mmH2O	254	
Heavy duty cleaner and clean filter		mmH2O	381	
Diameter of intake pipe recommended		mm	75	

## **Lubrication system**

Normal oil pressure range

Low idle	kPa	207
Rated speed	kPa	345
Max. oil temperature permitted in oil pan	${}^{\mathbf{c}}$	121
Oil pan capacity (Max _ Min)	L	9.5_8.5
Lubrication system Min. capacity (oil pan + oil filter)	L	10.9
Usage inclining degree permitted (any direction)	0	40
Fuel system		
Fuel injection pump model	BYC A pump wit	h GAC governor
Max. fuel input resistance of transfer pump	mmHg	102
Max. overflow fuel resistance at overflow pipe of injector	mmHg	254
Total fuel overflow amount	L/h	30
Cooling system		
Coolant capacity-engine only	L	7.2
Max. coolant cycling resistance exterior engine	kPa	28
Thermostat adjusting temperature (range)	${\mathbb C}$	82_95
Min. opening pressure of radiator cap	kPa	69
Max. coolant temperature permitted _ Standby Power/Base output Power	$^{\circ}\!\mathrm{C}$	104/100
Electric system		
Starter	12V	24V
Battery charging system	63A	40A
Max. starting circuit resistance	$0.00075\Omega$	0.002Ω
Min. battery capacity12°C (CCA: Cold Cranking Ampere)	625CCA	312CCA
Technical data _ under standard fuel delivery rate FR L003	Base output Power	Standby Power
Engine speed _ RPM	1500	1500
Output Power _ kW	36	40

Torque _ Nm	229	255
Low idle _ RPM	950-1050	950-1050
Friction energy output _ kW	8.2	8.2
Piston speed _ m/s	6.0	6.0
Engine coolant flow _ L/sec	2.2	2.2
Air intake flow _ L/sec	43.6	44.9
Exhaust flow _ L/sec	101	108
Exhaust temperature _ °C	463	487
Environment energy output _ kW	N/A	N/A
Coolant energy output _ kW	25.9	29
Fuel energy output _ kW	N/A	N/A

All data's error within ±5%.

Excuse for none notice anymore in case of data changed