


CUMMINS ENGINE DATASHEET



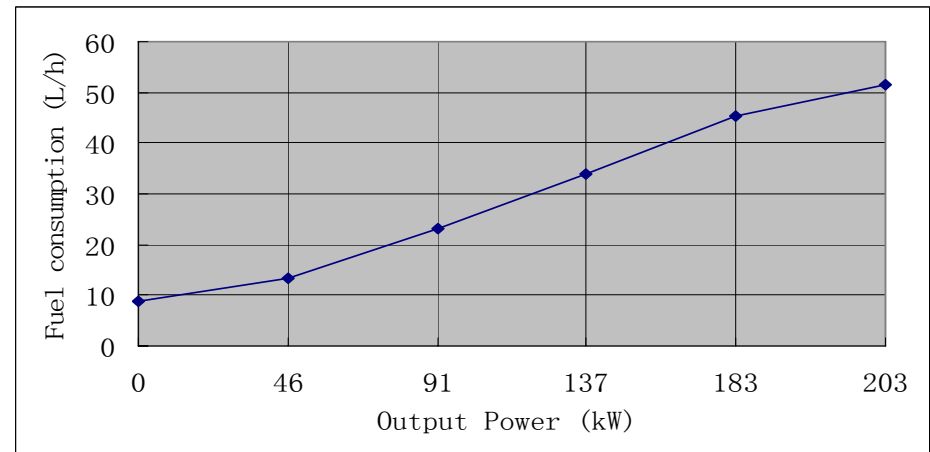
ENGINE MODEL: 6CTAA8.3-G2


PERFORMANCE CURVE: FR92110

	ENGINE DATASHEET—for G-drive		ENGINE MODEL 6CTAA8.3-G2		PERFORMANCE CURVE FR92110
			ENGINE FAMILY D41	CPL 1783	2006/06
Displacement	8.3 L	Air intake way	Air-air after-cooled, turbo-charged		
Cylinder bore	114 mm	Cylinder quantity	6	kW(BHP)	@RPM
Stroke	135 mm			183(245)	1500
Fuel system	P7100 pump _ GAC governor / BYC ASIMCO			Speed-droop	5%
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.					

Engine Speed-RPM	Standby Power		Base Output 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
Base Output Power				
100	183	245	205	45.4
75	137	184	206	34
50	91	123	211	23.3
25	46	61	241	13.5
Continuous Power				
100	149	200	205	37



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Typical engine data

Net weight	kg	684
Rotate part instantaneous inertia _ without flywheel	kg.m ²	0.37
Distance between gravity center and rear surface of cylinder block	mm	541
Distance between gravity center and center line above of crankshaft	mm	163

Engine installation

Static bent torque permitted—rear surface of cylinder block	Nm	1356
Static bent torque permitted—front surface of cylinder block	Nm	495
Static bent torque permitted—flank surface of flywheel-house	Nm	250

Exhaust system

Max. back pressure	mmHg	76
Diameter of exhaust pipe recommended	mm	100

Air intake system

Max. air intake resistance		
Dirty filter	mmH ₂ O	635
Normal air cleaner and clean filter	mmH ₂ O	254
Heavy duty cleaner and clean filter	mmH ₂ O	381
Diameter of intake pipe recommended	mm	125

Lubrication system

Normal oil pressure range		
Low idle	kPa	207

Rated speed	kPa	276_414
Max. oil temperature permitted in oil pan	°C	121
Oil pan capacity (Max _ Min)	L	18.9_15.1
Lubrication system Min. capacity (oil pan + oil filter)	L	23.8
Usage inclining degree permitted (any direction)	°	45

Fuel system

Fuel injection pump model	BYC P7100 pump with 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	208

Cooling system

Coolant capacity-engine only	L	12.3
Max. coolant cycling resistance exterior engine	kPa	28
Thermostat adjusting temperature (range)	°C	83_95
Min. opening pressure of radiator cap	kPa	69
Max. coolant temperature permitted _ Standby Power/Base output Power	°C	104/100

Electric system

Starter	12V	24V
Battery charging system	63A	40A
Max. starting circuit resistance	0.00075Ω	0.002Ω
Min. battery capacity_ -12°C (CCA: Cold Cranking Ampere)	950CCA	475CCA

Technical data _ under standard fuel delivery rate FR92110

	Base output Power	Standby Power
Engine speed _ RPM	1500	1500
Output Power _ kW	183	203

Torque _ Nm	1758	1950
Low idle _ RPM	700-950	700-950
Friction energy output _ kW	17	17
Piston speed _ m/s	6.8	6.8
Engine coolant flow _ L/sec	3.3	3.3
Air intake flow _ L/sec	180	187
Exhaust flow _ L/sec	442	485
Exhaust temperature _ °C	500	545
Environment energy output _ kW	N/A	N/A
Coolant energy output _ kW	83	95
Fuel energy output _ kW	N/A	N/A

All data's error within $\pm 5\%$.

Excuse for none notice anymore in case of data changed