CUMMINS ENGINE DATASHEET



ENGINE MODEL: 6BT5.9-G1

PERFORMANCE CURVE: FR 91589

Curtinins	ENOINE DATACHEET, for O dates		ENGINE MODEL 6BT5.9-G1		FREFORMANCE CURVE FR 91589	
Co	ENGINE DATASHEET—for G-drive			ENGINE FAMILY	CPL	2005/12
			D40 1189-0		2003/12	
Displacement	5.9 L	Air intake way	turbo-charged			
Cylinder bore	102 mm	Cylinder quantity	6	kW	(BHP)	@RPM
Stroke	120 mm			86	(115)	1500
Fuel system	A pump _ I	RSV Mechanical/ WeiF	u WuXi	Spee	d-droop	5%
Engine testing with fuel system, water pump and oil pump, without air compressor, alternator, fan, other options and driving accessory.						

Engine	Standby	y Power	Base Out	out Power	Continuo	us Power
Speed-RPM	kW	HP	kW	HP	kW	HP

86

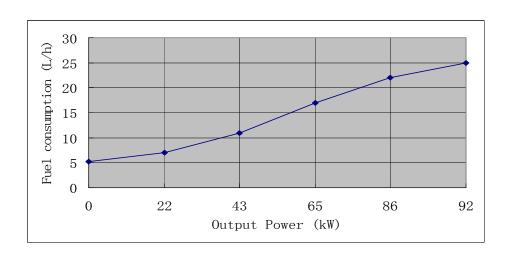
115

Output Power			Fuel consumption			
%	kW	HP	g/kW.h	L/h		
Standby Powe	Standby Power					
100	92	123	221	25		
Base Output Power						
100	86	115	214	22		
75	65	87	216	17		
50	43	58	217	11		
25	22	29	248	7		
Continuous Power						
N/A	N/A	N/A	N/A	N/A		

92

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

123



N/A

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1500

N/A

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		ENGINE FAMILY	CPL	2005/12	
		D40	1189-02	2005/12	
Typical engine of	Hata				
Net weight			kg	411	
•	ntaneous inertia _ without flywheel		kg.m2	0.25	
•	n gravity center and rear surface of cylinder block		mm	544	
Distance betwee	n gravity center and center line above of crankshaft		mm	155	
Engine installat	ion				
	e permitted—rear surface of cylinder block		N.m	1356	
Static bent torque	e permitted—front surface of cylinder block		N.m	435	
Static bent torque permitted—flank surface of cylinder block			N.m	365	
Exhaust system) 1				
Max. back pressi	ure		mmHg	7 6	
Diameter of exha	aust pipe recommended		mm	75	
Air intake syste	m				
Max. air intake re					
Dirty filter			mmH2O	635	
Normal air clean	er and clean filter		mmH2O	254	
Heavy duty clear	ner and clean filter		mmH2O	381	
Diameter of intak	e pipe recommended		mm	100	

Lubrication system

Normal oil pressure range

Low idle	kPa	207		
Rated speed	kPa	345		
Max. oil temperature permitted in oil pan	$^{\circ}$	121		
Oil pan capacity (Max _ Min)	L	14.2_12.3		
Lubrication system Min. capacity (oil pan + oil filter)	-	14.2_12.3		
Usage inclining degree permitted (any direction)	L •	40		
Osage inclining degree permitted (any direction)		40		
Fuel system				
Fuel injection pump model	WeiFu A pump with RSV Mechanical 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				
Cooling system Coolant capacity-engine only	1	9.9		
	kPa	28		
Max. coolant cycling resistance exterior engine	kPa ℃			
Thermostat adjusting temperature (range)		82_95		
Min. opening pressure of radiator cap	kPa	69		
Max. coolant temperature permitted _ Standby Power/Base output Power	${\mathbb C}$	104/100		
Electric system				
Starter	12V	24V		
Battery charging system	63A	40A		
Max. starting circuit resistance	0.00075Ω	0.002Ω		
Min. battery capacity12℃ (CCA: Cold Cranking Ampere)	800CCA	400CCA		
mini battery capacity_ 12 c (cont. cold chainting range of	0000011	10000/1		
Technical data _ under standard fuel delivery rate FR 91589	Base output Power	Standby Power		
Engine speed _ RPM	1500	1500		
Output Power _ kW	86	92		

Torque _ Nm	548	586
Low idle _ RPM	950-1050	950-1050
Friction energy output _ kW	12.7	12.7
Piston speed _ m/s	6.0	6.0
Engine coolant flow _ L/sec	2.0	2.0
Air intake flow _ L/sec	100	108
Exhaust flow _ L/sec	250	280
Exhaust temperature _ °C	526	565
Environment energy output _ kW	N/A	N/A
Coolant energy output _ kW	49	55
Fuel energy output _ kW	N/A	N/A

All data's error within ±5%.

All specifications are approximate. Specifications are subject to change without notice.