



Engine Data Sheet

Engine Model	CH6-114-ED	Date	2024/7/30	
Drawing No.	CH6-114-ED.00	Performance Curve No.	C06114D	
Rated Power	331HP @ 2100 RPM	Reference No.	14DS001E	
	247KW @ 2100 RPM	Version	A	
GENERAL ENGINE DATA				
Type			4 Cycle;In-line; water cooled; 6 Cylinder	
Aspiration			Turbocharged +Water Cooled	
Bore and Stroke			mm×mm	114×144
Cylinder Liner Type			☒ Wet	☐ Dry
Displacement			L	8.82
Compression Ratio			16.5:1	
Firing Order			1-5-3-6-2-4	
Combustion System			Direct Injection	
Rotation Viewed from front of engine			CW	
Valves Per Cylinder			Intake :2 Exhaust :2	
Valves lashes at cold	Intake	mm	0.3	
	Exhaust	mm	0.55	
Ignition Type			Compression(Diesel)	
Charge Air Cooling Type			Raw Water	
Dry Weight Approx.			kg	1190
Dimension Approx. (L*W*H)			mm	1495*1240*1420
Flywheel/ Flywheel House Dimension			14"/ SAE 1	
EXHAUST SYSTEM				
Exhaust Gas Temp. at max. rating/power			°C	550
Exhaust Gas Flow at Max. output			m³/h	3150
Max. Allowable Back Pressure			kpa	6
Minimum Exhaust Pipe Diameter			DN	150
AIR INTAKE SYSTEM				
Air Cleaner Type			Dry Type	
Air Flow at Max. output			m³/h	1542
Air Inlet Restriction Dirty			kpa	6
Air Inlet Restriction Clean			kpa	3
LUBRICATION SYSTEM				
Oil Capacity			L	25
Max. Sump Oil Temp.			°C	120
Normal Operating Oil Pressure Range			bars	2~5
Oil Pressure at Idle			bar	>0.7
COOLING SYSTEM				
Coolant Capacity - Engine + Heat Exchanger			L	28
Thermostat Range	Start Open	°C	82	
	Full Open	°C	93	
Coolant Pressure Cap			bar	0.5
Max. Engine Coolant Temp.			°C	96
Engine Coolant Flow at Full Load			m³/h	21
Raw Water Cooling Capacity			m³/h	15
Raw Water Pressure			bar	2
Min. Raw Water Temp.			°C	15.6



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	Raw Water Pipe Size	Raw Water Inlet	G1 1/2"	
		Raw Water Outlet	G2"	
HEATER SYSTEM				
	Wattage		W	3000
	Voltage AC		V	220
ELECTRICAL SYSTEM-DC				
	System Voltage(Nominal)		V	24
	Starter motor		Kw	9
	Recommended Battery Capacity		AH	180
	Cold Cranking Amperes @ -18°C (0°F)		CCA	900
	Reserve Capacity (RC)		Min	360
	Battery Cable	Minimum Size	mm ²	50
		Maximum Cable Length Not to Exceed	m	3
	Charging Alternator Output		Amps	55
	Max. Starter Cranking Amps @4.5°C (0°F)		Amps	230
	Min. Cranking Speed Required for Unaided Cold Start		rpm	220
FUEL SYSTEM				
	Injection Pump			
	Injection Advance Angle		°	10.5
	Minimum Supply line Size		mm	12
	Minimum Return line Size		mm	12
	Fuel Management Control		Mechanical	
	Max. Fuel Consumption		g/kw,h	220
	Idle Speed		rpm	650
	Max. Governed Speed		rpm	2310
	Maximum allowable fuel height above fuel pump		m	3
	Governed Speed Rate		%	<10
Engine Performance Data				
	Estimated free field sound pressure level at 1 meter with full-load governed speed(Includes Noise from: exhaust; Cooling System and Driven Components)		dBa	≤113
	All data is based on the engine operating with fuel system, lubricating oil pump, air cleaner, and alternator; not included are compressor, fan, optional equipment, and driven components.;Data is based on operation at SAE standard J1394 conditions of 300ft (91.4m) altitude, 29.61 in.(752mm) Hg dry barometer, and 77°F (25°C) intake air temperature, using 0# diesel fuel follow the standard GB 252-2011.			
	Altitude above which output should be Limited		m (ft.)	91 (300)
	Correction Factor per 305m.(1,000ft.) above Altitude Limit		3%	
	Temperature above which output should be Limited		°C (°F)	25 (77)
	Correction Factor per 5.6°C (10°F) above Temperature Limit		1%	

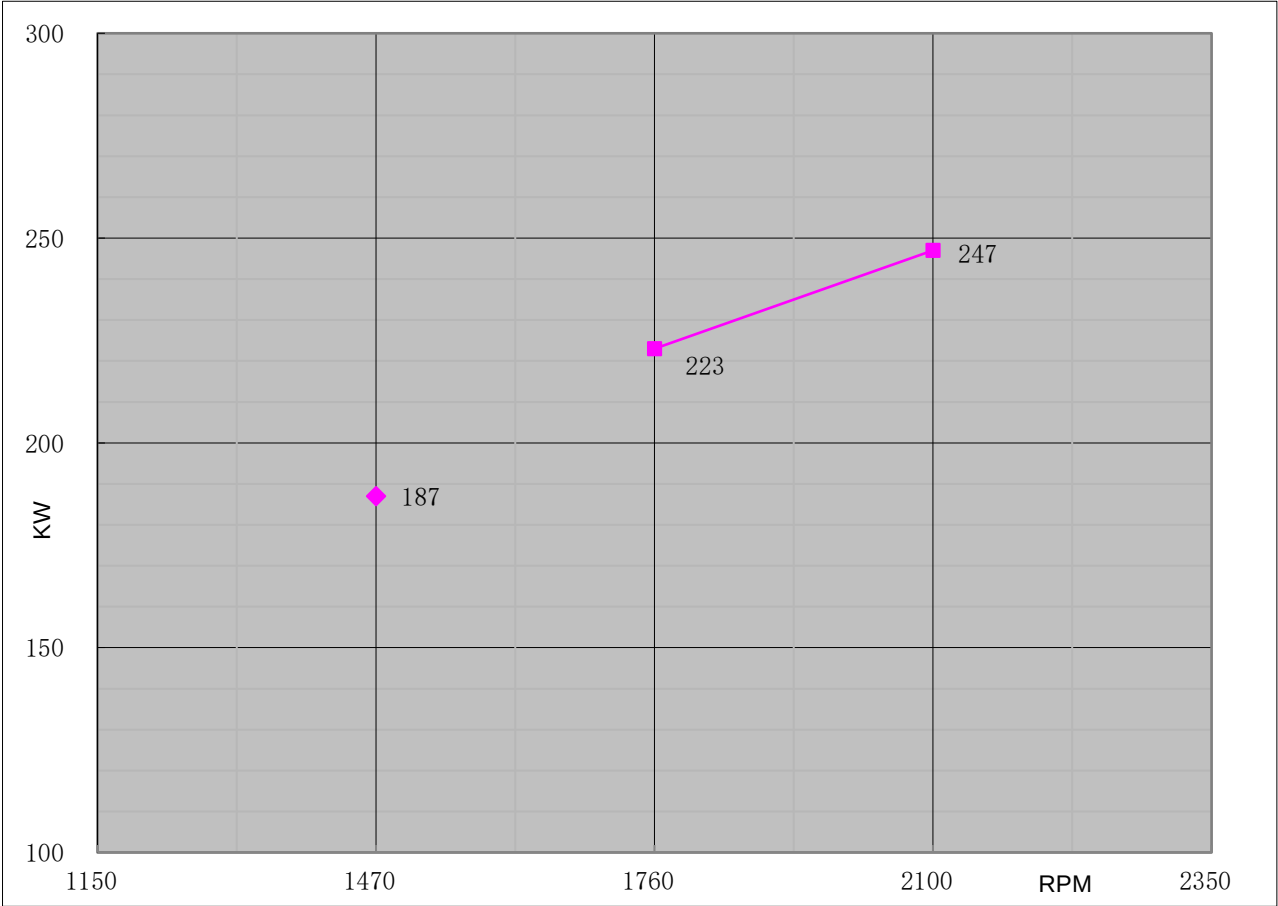
Remark:

- 1.All data certified within 5%;
- 2.TBD - To Be Determined;
- 3.N/A - Not Applicable;



Performance Curve

Engine Model		CH6-114-ED		Curve No.		C06114D	Date	2024/7/29
Displacement	8.82	L	Aspiration	Turbocharged+Water cooled		Power Standard		UL/FM
Bore	114	mm	Cylinder Qty.	6, In-Line		247	KW @ 2100	r/min
Stroke	144	mm	Fuel System	Mechanical		331	HP @ 2100	r/min



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1150		
1470	1217	897
1760	1213	895
2100	1125	829

Output Power		
Speed	Output Power	
RPM	KW	HP
1150		
1470	187	251
1760	223	299
2100	247	331

Fuel Consumption		
Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1150		
1470	205	0.337
1760	205	0.337
2100	220	0.362

REV: A