

Engine Specification Sheet



Model	Ratings HP (kW) @ Rated speed rpm	
	1470	1760
CH6-150-EB (UL)	780 (582)	858 (640)
CH6-150-EB (FM)	786 (586)	850 (634)

ENGINE SPECIFICATIONS		
Type	4 Cycle; In-line; water cooled; 6 Cylinder	
Aspiration	Turbocharged +Water Cooled	
Bore and Stroke	mm×mm	150×185
Displacement	L	19.6
Compression Ratio	15:1	
Combustion System	Direct Injection	
Rotation Viewed from flywheel	Counter Clockwise	
Dry Weight Approx.	kg	2650
Dimension Approx. (L*W*H)	mm	2385*1300*1845
Crankshaft Centerline Height	mm	650
Oil Capacity Approx.	L	61
Coolant Capacity - Engine + Heat Exchanger Approx.	L	100



MODEL
CH6-150-EB

Engine Equipment	Standard	Optional	
Air Cleaner	Drip proof	N/A	
Alternator	24V-DC, 55Amps with Belt Guard	N/A	
Coupling	Bare Flywheel	N/A	
Engine Heater	220V-AC	110V-AC	
Exhaust Flex Connection	DN200	N/A	
Exhaust Protection	Metal Guard	N/A	
Flywheel Housing	SAE 1	N/A	
Flywheel Power Take Off	SAE 14	N/A	
Fuel Connections	Flexible hoses according ISO 15540	N/A	
Fuel Filter	Full flow, cartridge type	N/A	
Governor, Speed	Constant speed, mechanical	N/A	
Heat Exchanger	Shell and Tube Type	N/A	
Instrument Panel	Build on Engine	N/A	
Junction Box	Integrated in control panel	N/A	
Lube Oil Cooler	Jacket Water Cooled	N/A	
Lube Oil Filter	Full flow, cartridge type	N/A	
Lube Oil Pump	Gear Driven, Gear Type	N/A	
Manual Start Control	Dual Manual Start Contactors	N/A	
Overspeed Control	Electronic instrument panel, test on instrument panel	N/A	
Raw Water Cooling Loop w/ Alarms	Galvanized	Seawater (SS316 or Bronze)	
Raw Water Solenoid Operation	Automatic from Fire Pump Controller and from Engine Instrument Panel (for Horizontal Fire Pump Applications)	N/A	
Run - Stop Control	On Instrument Panel with Control Position Warning Light	N/A	
Starters	24V-DC,8.5KW	N/A	
Throttle Control	Adjustable speed control	N/A	
Water Pump	Centrifugal Type, Belt Driven	N/A	
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;			



Engine Data Sheet

Engine Model	CH6-150-EB	Date	2023/12/23	
Drawing No.	CH6-150-E.00	Performance Curve No.	C06150B	
Rated Power	858 HP @ 1760 RPM	Reference No.	14DS001E	
	640KW @ 1760 RPM	Version	A	
GENERAL ENGINE DATA				
Type			4 Cycle;In-line; water cooled; 6 Cylinder	
Aspiration			Turbocharged +Water Cooled	
Bore and Stroke			mm×mm	150×185
Cylinder Liner Type			<input checked="" type="checkbox"/> Wet	<input type="checkbox"/> Dry
Displacement			L	19.6
Compression Ratio			15:01	
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	0.3	
Ignition Type			Compression(Diesel)	
Charge Air Cooling Type			Raw Water	
Dry Weight Approx.			kg	2650
Dimension Approx. (L*W*H)			mm	2385*1300*1845
Flywheel/ Flywheel House Dimension			14"/ SAE 1	
EXHAUST SYSTEM				
Exhaust Gas Temp. at max. rating/power			°C	550
Exhaust Gas Flow at Max. output			kg/h	4164
Max. Allowable Back Pressure			kpa	7.5
Minimum Exhaust Pipe Diameter			DN	200
AIR INTAKE SYSTEM				
Air Cleaner Type			Dry Type	
Air Flow at Max. output			kg/h	4011
Air Inlet Restriction Dirty			kpa	6
Air Inlet Restriction Clean			kpa	3
LUBRICATION SYSTEM				
Oil Capacity			L	61
Max. Sump Oil Temp.			°C	105
Normal Operating Oil Pressure Range			bars	4~6.5
Oil Pressure at Idle			bar	>2
COOLING SYSTEM				
Coolant Capacity - Engine + Heat Exchanger			L	100
Thermostat Range	Start Open	°C	80	
	Full Open	°C	92	
Coolant Pressure Cap			bar	0.9
Max. Engine Coolant Temp.			°C	96
Engine Coolant Flow at Full Load			m³/h	38.3
Raw Water Cooling Capacity			m³/h	20
Raw Water Pressure			bar	2
Min. Raw Water Temp.			°C	15.6



Engine Data Sheet

	Raw Water Pipe Size	Raw Water Inlet	G1 1/2"	
		Raw Water Outlet	G2"	
HEATER SYSTEM				
	Wattage	W	4500	
	Voltage AC	V	220	
ELECTRICAL SYSTEM-DC				
	System Voltage(Nominal)	V	24	
	Starter motor	Kw	8.5	
	Recommended Battery Capacity	AH	200	
	Cold Cranking Amperes @ -18°C (0°F)	CCA	1000	
	Reserve Capacity (RC)	Min	407	
	Charging Alternator Output	Amps	55	
	Max. Starter Cranking Amps @4.5°C (0°F)	Amps	260	
	Min. Cranking Speed Required for Unaided Cold Start	rpm	150	
FUEL SYSTEM				
	Injection Pump			
	Injection Advance Angle	°	20	
	Minimum Supply line Size	mm	12	
	Minimum Return line Size	mm	12	
	Fuel Management Control	Mechanical		
	Max. Fuel Consumption	g/kw,h	205	
	Idle Speed	rpm	700±50	
	Max. Governed Speed	rpm	1936	
	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	120	
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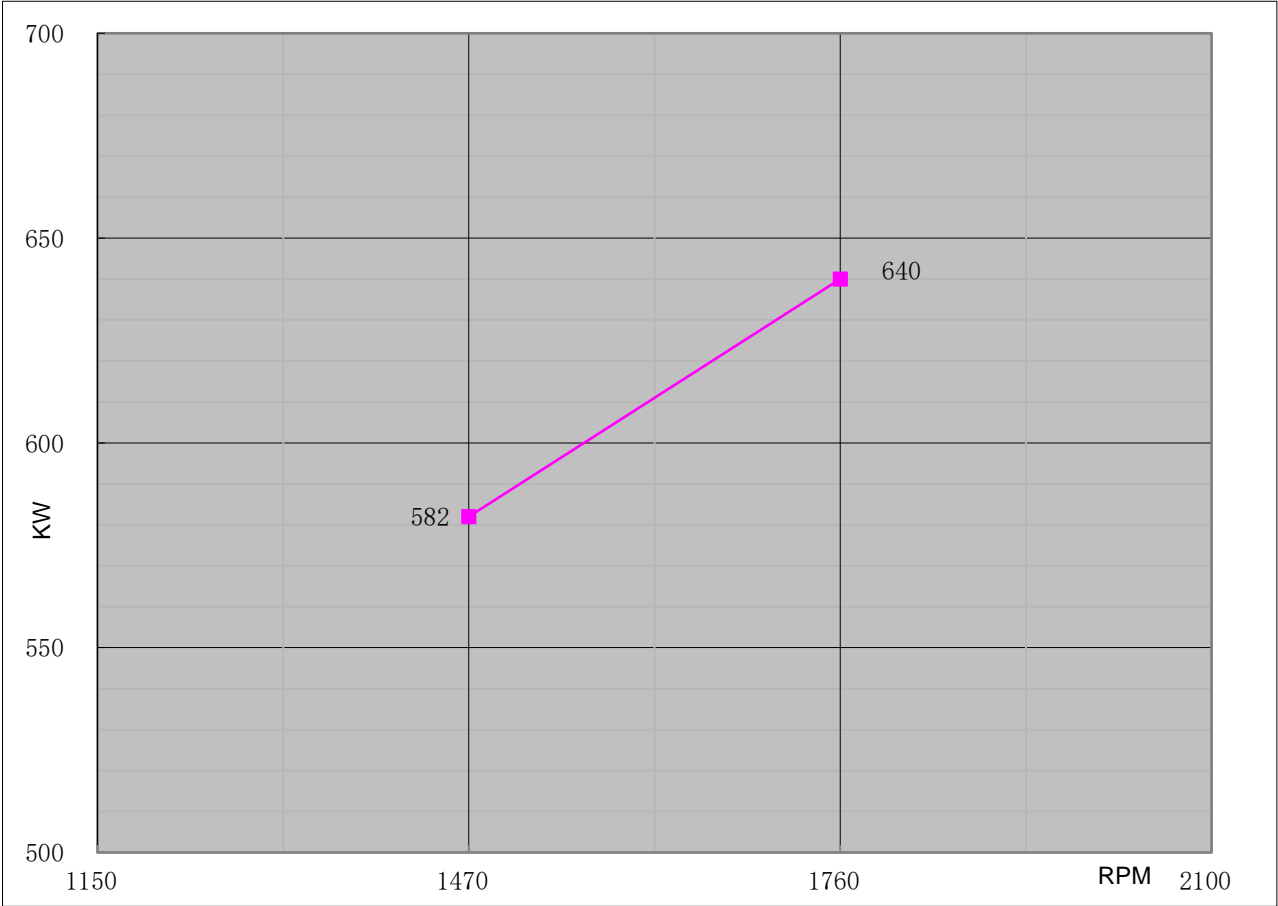
Remark:

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Performance Curve

Engine Model		CH6-150-EB		Curve No.		C06150B	Date	2023/12/23
Displacement	19.60	L	Aspiration	Turbocharged+Water cooled		Power Standard		UL/FM
Bore	150	mm	Cylinder Qty.	6, In-Line		640	KW @ 1760	r/min
Stroke	185	mm	Fuel System	Mechanical		858	HP @ 1760	r/min



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1150		
1470	3780	2787
1760	3473	2561
2100		

Output Power		
Speed	Output Power	
RPM	KW	HP
1150		
1470	582	780
1760	640	858
2100		

Fuel Consumption		
Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1150		
1470	195	0.321
1760	205	0.337
2100		

REV: A