

## Engine Specification Sheet



Model	Ratings HP (kW) @ Rated speed rpm	
	1470	1760
CH6-150-E (UL)	719 (536)	771 (575)
CH6-150-E (FM)	716 (534)	

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-E**

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-E	Date	2023/12/1	
Drawing No.	CH6-150-E.00	Performance Curve No.	C06150	
Rated Power	771 HP @ 1760 RPM	Reference No.	14DS001E	
	575KW @ 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	3561	
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	3431	
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	290	
	Min. Cranking Speed Required for Unaided Cold Start	rpm	150	
FUEL SYSTEM				
	Injection Pump			
	Injection Advance Angle	°	23~24	
	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	118	
	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.			
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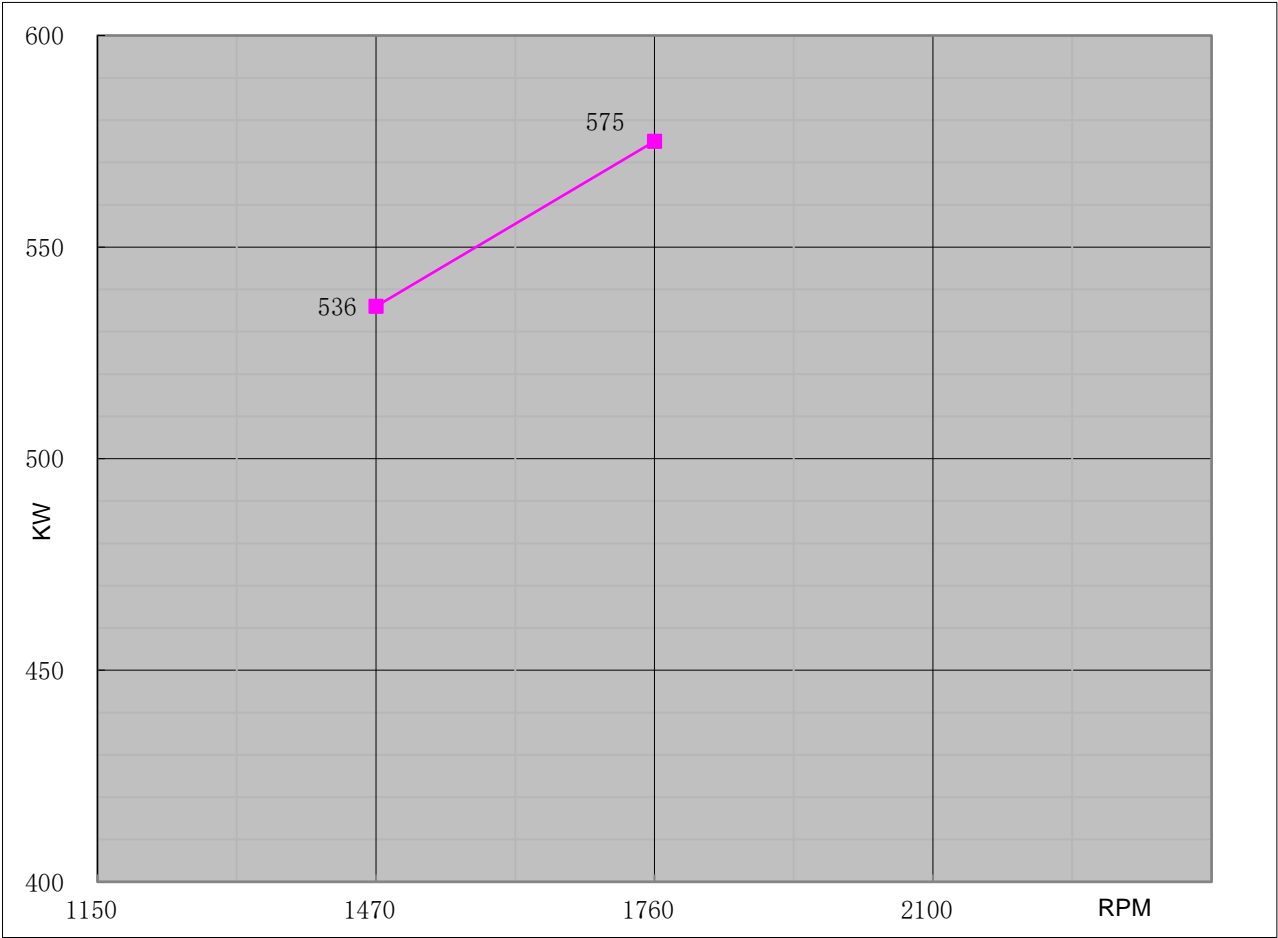
Remark:

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- 3.N/A - Not Applicable;



Performance Curve

Engine Model		CH6-150-E		Curve No.		C06150	Date	2023/12/1
Displacement	19.60	L	Aspiration	Turbocharged+Water cooled		Power Standard		UL/FM
Bore	150	mm	Cylinder Qty.	6, In-Line		575	KW @ 1760	r/min
Stroke	185	mm	Fuel System	Mechanical		771	HP @ 1760	r/min



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1150		
1470	3485	2570
1760	3122	2303
2100		

Output Power		
Speed	Output Power	
RPM	KW	HP
1150		
1470	536	719
1760	575	771
2100		

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

REV: A