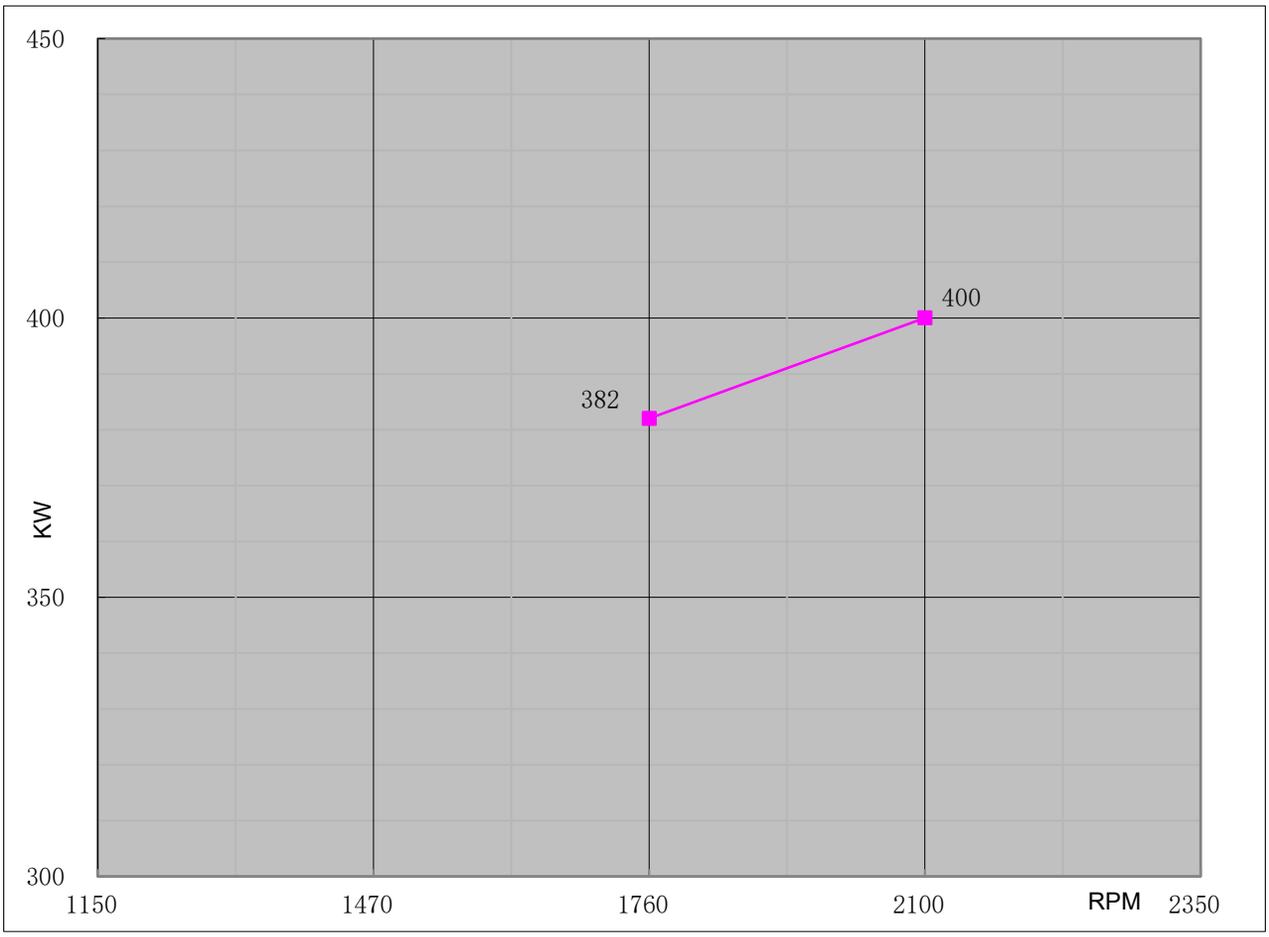
Performance Curve

Engine Model	CH6-127-EB	Curve No.	C06127B	Date	2023/12/1

Displacement	12.54 L	Aspiration	Turbocharged+Water cooled	Power Standard	UL/FM
Bore	127 mm	Cylinder Qty.	6，In-Line	400 KW @ 2100 r/min	
Stroke	165 mm	Fuel System	Mechanical	536 HP @ 2100 r/min	



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1150		
1470		
1760	2072	1528
2100	1819	1341

Output Power		
Speed	Output Power	
RPM	KW	HP
1150		
1470		
1760	382	512
2100	400	536

Fuel Consumption		
Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1150		
1470		
1760	200	0.329
2100	220	0.362

REV: A

Engine Data Sheet

Engine Model	**CH6-127-EB**	**Date**	**2024/5/14**
Drawing No.	CH6-127-EB.00	**Document No.**	**DS06127BF**
Rated Power	**536 HP @ 2100 RPM**	**Performance Curve No.**	**C06127B**
	400KW @ 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	127×165
Cylinder Liner Type			☐ Wet	☑ Dry
Displacement			L	12.54
Compression Ratio			16:01	
Firing Order			1-5-3-6-2-4	
Combustion System			Direct Injection	
Rotation Viewed from flywheel			Counter Clockwise	
Valves Per Cylinder			Intake :2 Exhuast :2	
Valves lashes at cold		Intake	mm	0.4
		Exhaust	mm	0.6
Charge Air Cooling Type			Raw Water	
Dry Weight Approx.			kg	1600
Dimension Approx. (L*W*H)			mm	2130*1170*1620
Flywheel/ Flywheel House Dimension			14"/ SAE 1	
EXHAUST SYSTEM				
Exhaust Gas Temp.			℃	550 @ 2100rpm
Exhaust Gas Flow			kg/h	1979 @ 2100rpm
Max. Allowable Back Pressure			kpa	8.5 @2100rpm
Minimum Exhaust Pipe Diameter			DN	150
Minimum exhaust pipe diameter is based on 6 meter of pipe, one elbow, and a silencer. Pressure drop no greater than one half the max. allowable back pressure				
AIR INTAKE SYSTEM				
Air Cleaner Type			Dry Type	
Air Flow			kg/h	1899 @2100rpm
Max. Allowable Air Inlet Restriction			kpa	5 @2100rpm
LUBRICATION SYSTEM				
Oil Capacity			L	36
Engine Normal Operating Sump Oil Temp.			℃	80-105
Normal Operating Oil Pressure Range			bars	3.5~5.5
Oil Pressure at Idle			bar	>1
COOLING SYSTEM				
Coolant Capacity - Engine + Heat Exchanger			L	55
Thermostat Range		Start Open	℃	76
		Full Open	℃	88
Coolant Pressure Cap			bar	0.9
Raw Water Working Pressure Range at Heat Exchanger			bar	5
Engine Normal Operating Coolant Temp.			℃	76-98
Engine Coolant Flow at Full Load			m^3/h	24.9
Minimum Raw Water Flow @ Engine Speed (rpm)			1760	2100
	Raw Water Temperatures to 16 ℃ (m^3/h)		15	16
	Raw Water Temperatures to 38 ℃ (m^3/h)		17.3	18.2

Engine Data Sheet

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	8.5
Recommended Battery Capacity		AH	180
Cold Cranking Amperes @ -18℃ (0°F)		CCA	900
Charging Alternator Output		Amps	70
FUEL SYSTEM			
Injection Pump			
Injection Advance Angle		°	18
Minimum Supply line Size		mm	12
Minimum Return line Size		mm	12
Fuel Management Control		Mechanical	
Idle Speed		rpm	600±50
Governed Speed Rate		%	<10
Engine Performance Data			
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;