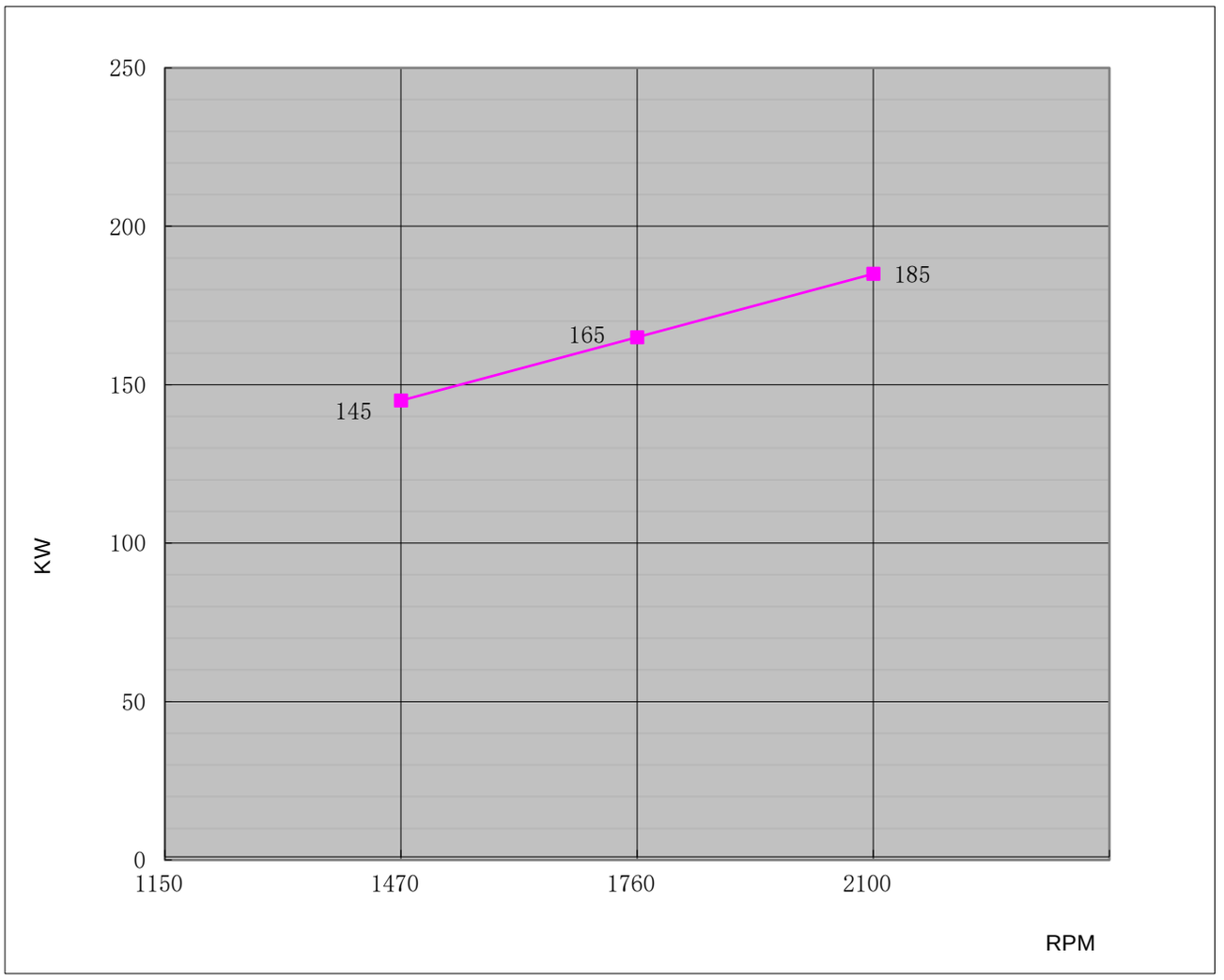
Performance Curve

Engine Model	CH6-114-EC	Curve No.	C06114CF	Date	2021/10/29

Displacement	8.27 L	Aspiration	Turbocharged +Water Cooled	Power Standard	UL/FM
Bore	114 mm	Cylinder Qty.	6, In-Line	185 KW @ 2100 r/min	
Stroke	135 mm	Fuel System	Mechanical	248 HP @ 2100 r/min	



Torque

Speed	Torque	
RPM	N-m	lb-ft.
1150		
1470	942	695
1760	895	660
2100	841	620

Output Power

Speed	Output Power	
RPM	KW	HP
1150		
1470	145	194
1760	165	221
2100	185	248

Fuel Consumption

Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1150		
1470	195	0.321
1760	200	0.329
2100	210	0.345

REV: A

Engine Data Sheet

Engine Model	CH6-114-EC	**Date**	**2021/10/29**
Drawing No.	CH6-114-EC.00	**Document No.**	**DS06114CF**
Rated Power	**248 HP @ 2100 RPM**	**Performance Curve No.**	**C06114CF**
	185 KW @ 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	114x135
Cylinder Liner Type			☑ Wet	☐ Dry
Displacement			L	8.27
Compression Ratio			18:01	
Firing Order			1-5-3-6-2-4	
Combustion System			Direct Injection	
Rotation Viewed from flywheel			Counter Clockwise	
Valves Per Cylinder			Intake :1 Exhuast :1	
Valves lashes at cold		Intake	mm	0.3
		Exhaust	mm	0.5
Charge Air Cooling Type			Raw Water	
Dry Weight Approx.			kg	1020
Dimension Approx. (L*W*H)			mm	1505*960*1570
Flywheel/ Flywheel House Dimension			11.5"/ SAE 2	
EXHAUST SYSTEM				
Exhaust Gas Temp.			℃	600 @ 2100rpm
Exhaust Gas Flow			m^3/h	1872 @ 2100rpm
Max. Allowable Back Pressure			kpa	9.5
Minimum Exhaust Pipe Diameter			DN	125
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			m^3/h	858 @2100rpm
Max. Allowable Air Inlet Restriction			kpa	5.5
LUBRICATION SYSTEM				
Oil Capacity			L	19
Engine Normal Operating Sump Oil Temp.			℃	80-120
Normal Operating Oil Pressure Range			bars	2~5.0
Oil Pressure at Idle			bar	>0.7
COOLING SYSTEM				
Coolant Capacity - Engine + Heat Exchanger			L	26
Thermostat Range		Start Open	℃	82
		Full Open	℃	93
Coolant Pressure Cap			bar	0.9
Raw Water Working Pressure Range at Heat Exchanger			bar	5
Engine Normal Operating Coolant Temp.			℃	76-95
Engine Coolant Flow at Full Load			m^3/h	14

Engine Data Sheet

Minimum Raw Water Flow @ Engine Speed (rpm)		1470	1760	2100
Raw Water Temperatures to 16 ℃ (m^3/h)		5	5.2	5.4
Raw Water Temperatures to 38 ℃ (m^3/h)		6.7	7.5	7.6
Raw Water Pipe Size	Raw Water Inlet	G1"		
	Raw Water Outlet	G1 1/4"		
HEATER SYSTEM				
Wattage		W	3000	
Voltage AC		V	220	
ELECTRICAL SYSTEM-DC				
System Voltage(Nominal)		V	24	
Starter motor		Kw	7.5	
Recommended Battery Capacity		AH	180	
Cold Cranking Amperes @ -18℃ (0°F)		CCA	900	
Charging Alternator Output		Amps	55	
FUEL SYSTEM				
Injection Pump				
Injection Advance Angle		°	6	
Minimum Supply line Size		mm	10	
Minimum Return line Size		mm	10	
Fuel Management Control		Mechanical		
Idle Speed		rpm	700	
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 daa certified within 5%;
2.TBD - To Be Determined;
3.N/A - Not Applicable;