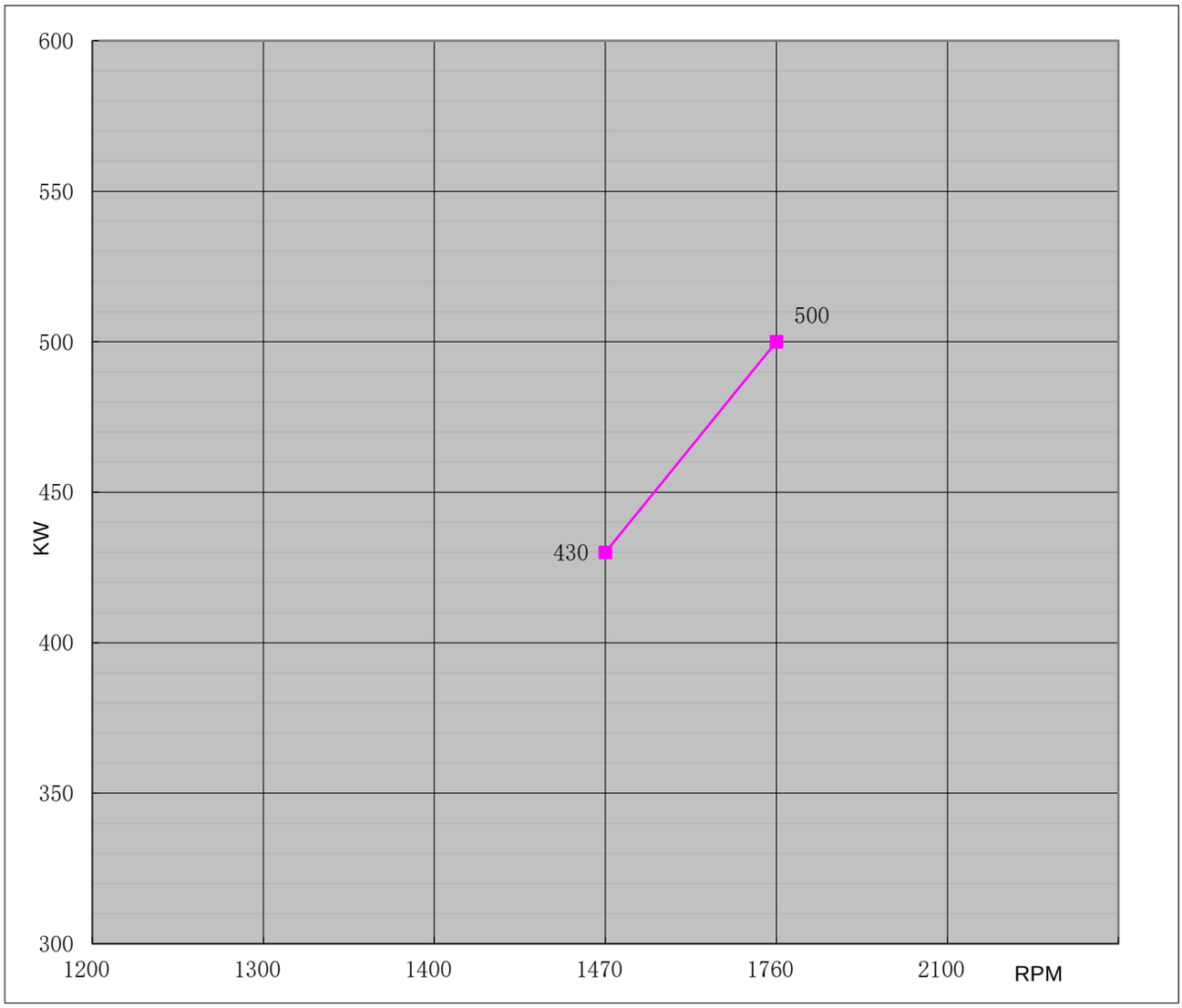
Performance Curve

Engine Model	CH6-159-E	Curve No.	C06159F	Date	2021/11/19

Displacement	18.90 L	Aspiration	Turbocharged+Coolant cooled	Power Standard	UL/FM
Bore	159 mm	Cylinder Qty.	6, In Line	500 KW @ 1760 r/min	
Stroke	159 mm	Fuel System	Mechanical	671 HP @ 1760 r/min	



Torque

Speed RPM	Torque N-m	lb-ft.
1200		
1300		
1400		
1470	2794	2060
1760	2713	2001
2100		

Output Power

Speed RPM	Output Power KW	HP
1200		
1300		
1400		
1470	430	577
1760	500	671
2100		

Fuel Consumption

Speed RPM	Consumption g/KW-HR	lb/BHP-HR
1200		
1300		
1400		
1470	205	0.337
1760	210	0.345
2100		

REV: A

Engine Data Sheet

Engine Model	**CH6-159-E**	**Date**	**2021/11/19**
Drawing No.	**CH6-159-E**	**Document No.**	**DS06159F**
Rated Power	**671 HP @1760 RPM**	**Performance Curve No.**	**C06159F**
	500 KW @ 1760 RPM	**Version**	**A**

GENERAL ENGINE DATA				
Type			4 Cycle;In-line; water cooled; 6 Cylinder	
Aspiration			Turbocharged +Coolant Cooled	
Bore and Stroke			mm×mm	159x159
Cylinder Liner Type			☑ Wet	☐ Dry
Displacement			L	18.9
Compression Ratio			13.9:1	
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	0.36
		Exhaust	mm	0.69
Charge Air Cooling Type			Raw Water	
Dry Weight Approx.			kg	2250
Dimension Approx. (L*W*H)			mm	2155*1195*1935
Flywheel/ Flywheel House Dimension			14"/ SAE 0	
EXHAUST SYSTEM				
Exhaust Gas Temp.			℃	513 @ 1760rpm
Exhaust Gas Flow			m^3/h	6703 @1760rpm
Max. Allowable Back Pressure			kpa	7.3
Minimum Exhaust Pipe Diameter			DN	200
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	2580 @1760rpm
Max. Allowable Air Inlet Restriction			kpa	5
LUBRICATION SYSTEM				
Oil Capacity			L	38
Engine Normal Operating Sump Oil Temp.			℃	80-120
Normal Operating Oil Pressure Range			bars	3.4~4.8
Oil Pressure at Idle			bar	1.38
COOLING SYSTEM				
Coolant Capacity - Engine + Heat Exchanger			L	60
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.			℃	71-95
Engine Coolant Flow at Full Load			m^3/h	45

Engine Data Sheet

Minimum Raw Water Flow @ Engine Speed (rpm)		1470	1760
Raw Water Temperatures to 16 ℃ (m^3/h)		16	16
Raw Water Temperatures to 38 ℃ (m^3/h)		19	19
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	9.5
Recommended Battery Capacity		AH	200
Cold Cranking Amperes @ -18℃ (0°F)		CCA	1000
Charging Alternator Output		Amps	70
FUEL SYSTEM			
Injection Pump			
Injection Advance Angle		°	IQ
Minimum Supply line Size		mm	19
Minimum Return line Size		mm	16
Fuel Management Control		Mechanical	
Idle Speed		rpm	675
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;