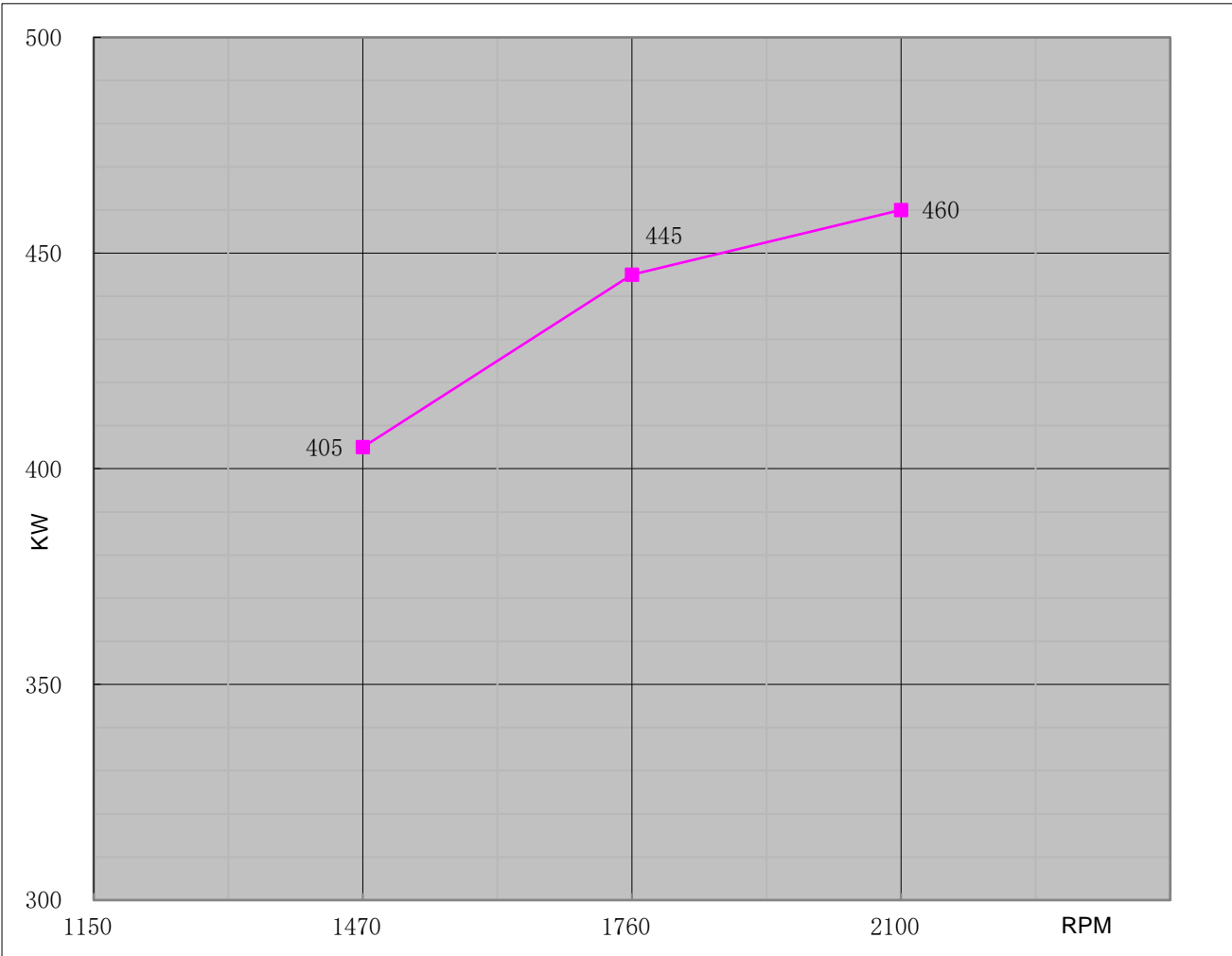




DIESEL ENGINE

Engine Model		CH10-128-E		Curve No.		C10128F	Date	2021/3/19
Displacement	18.27	L	Aspiration	Turbocharged+Water cooled		Power Standard		UL/FM
Bore	128	mm	Cylinder Qty.	10,V-Type		460	KW @ 2100	r/min
Stroke	142	mm	Fuel System	Mechanical		617	HP @ 2100	r/min



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1150		
1470	2628	1938
1760	2417	1783
2100	2092	1543

Output Power		
Speed	Output Power	
RPM	KW	HP
1150		
1470	405	543
1760	445	597
2100	460	617

Fuel Consumption		
Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1150		
1470	199	0.327
1760	205	0.337
2100	224	0.368



## Engine Data Sheet

<b>Engine Model</b>	CH10-128-E		<b>Date</b>	2021/3/19	
<b>Drawing No.</b>	CH10-128-E.00		<b>Document No.</b>	DS10128F	
<b>Rated Power</b>	617 HP @2100 RPM		<b>Performance Curve No.</b>	C10128F	
	460 KW @2100 RPM		<b>Version</b>	A	

GENERAL ENGINE DATA					
Type	4 Cycle; V-type; water cooled; 10 Cylinder				
Aspiration	Turbocharged +Water Cooled				
Bore and Stroke	mm×mm		128x142		
Cylinder Liner Type	<input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry				
Displacement	L		18.273		
Compression Ratio	14.6:1				
Firing Order	1-6-5-10-2-7-8-3-4-9				
Combustion System	Direct Injection				
Rotation Viewed from flywheel	Counter Clockwise				
Valves Per Cylinder	Intake :1 Exhaust :1				
Valves lashes at cold	Intake	mm	0.25		
	Exhaust	mm	0.35		
Charge Air Cooling Type	Raw Water				
Dry Weight Approx.	kg		1635		
Dimension Approx. (L*W*H)	mm		1710*1355*1830		
Flywheel/ Flywheel House Dimension	14"/ SAE 1				

EXHAUST SYSTEM			
Exhaust Gas Temp.	°C	539 @ 2100rpm	
Exhaust Gas Flow	m³/h	6084 @ 2100rpm	
Max. Allowable Back Pressure	kpa	10 @2100rpm 10 @1760rpm 9 @1470rpm	
Minimum Exhaust Pipe Diameter	DN	2x125	
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	m³/h	3624 @2100rpm	
Max. Allowable Air Inlet Restriction	kpa	6 @2100rpm 6 @1760rpm 4.5 @1470rpm	

LUBRICATION SYSTEM			
Oil Capacity	L	35	
Engine Normal Operating Sump Oil Temp.	°C	80-120	
Normal Operating Oil Pressure Range	bars	3-4	
Oil Pressure at Idle	bar	>1	

COOLING SYSTEM			
Coolant Capacity - Engine + Heat Exchanger	L	52	
Thermostat Range	Start Open	°C	71
	Full Open	°C	85
Coolant Pressure Cap	bar	0.9	



## Engine Data Sheet

Raw Water Working Pressure Range at Heat Exchanger		bar	5	
Engine Normal Operating Coolant Temp.		°C	71-98	
Engine Coolant Flow at Full Load		m³/h	42	
Minimum Raw Water Flow @ Engine Speed (rpm)		1470	1760	2100
Raw Water Temperatures to 16 °C (m³/h)		15	16	17
Raw Water Temperatures to 38 °C (m³/h)		18	19	20
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	7	
Recommended Battery Capacity		AH	200	
Cold Cranking Amperes @ -18°C (0°F)		CCA	1000	
Charging Alternator Output		Amps	45	
FUEL SYSTEM				
Injection Pump				
Injection Advance Angle		°	16	
Minimum Supply line Size		mm	12	
Minimum Return line Size		mm	12	
Fuel Management Control		Mechanical		
Idle Speed		rpm	750	
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;				