

Engine Specification Sheet



Model	Ratings HP (kW) @ Rated speed rpm	
	1470	1760
CH6-135-E	340 (254)	375 (280)

ENGINE SPECIFICATIONS		
Type	4 Cycle; In-line; water cooled; 6 Cylinder	
Aspiration	Turbocharged +Water Cooled	
Bore and Stroke	mm×mm	135x150
Displacement	L	12.88
Compression Ratio	15.75:1	
Combustion System	Direct Injection	
Rotation Viewed from flywheel	Counter Clockwise	
Dry Weight Approx.	kg	1480
Dimension Approx. (L×W×H)	mm	1835×1085×1529
Crankshaft Centerline Height	mm	440
Oil Capacity	L	32
Coolant Capacity - Engine + Heat Exchanger	L	48

Engine Equipment	Standard	Optional
Air Cleaner	Drip proof	N/A
Alternator	24V-DC, 55Amps with BeltGuard	N/A
Coupling	Bare Flywheel	N/A
Engine Heater	220V-AC	110V-AC
Exhaust Flex Connection	DN100	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 (All 316 SS)
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, Gear Driven	N/A
<p>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.</p>		
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%	
<p>Remark:</p> <p>1.All data certified within 5%;</p> <p>2.TBD - To Be Determined;</p> <p>3.N/A - Not Applicable;</p>		



Engine Data Sheet

Engine Model	CH6-135-E	Date	2020/2/21
Drawing No.	CH6-135-E.00	Performance Curve No.	C06135
Rated Power	375 HP @ 1760 RPM	Reference No.	14DS001E
	280 KW @ 1760 RPM	Version	A

GENERAL ENGINE DATA

Type	4 Cycle; In-line; water cooled; 6 Cylinder		
Aspiration	Turbocharged +Water Cooled		
Bore and Stroke	mmxmm	135x150	
Cylinder Liner Type	<input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry		
Displacement	L	12.88	
Compression Ratio	15.75:1		
Firing Order	1-5-3-6-2-4		
Combustion System	Direct Injection		
Rotation Viewed from front of engine	CW		
Valves Per Cylinder	Intake:1 Exhaust :1		
Valves lashes at cold	Intake	mm	0.325
	Exhaust	mm	0.375
Ignition Type	Compression(Diesel)		
Charge Air Cooling Type	Raw Water		
Dry Weight Approx.	kg	1480	
Dimension Approx. (L*W*H)	mm	1835*1085*1529	
Flywheel/ Flywheel House Dimension	14"/ SAE 1		
Torque at rated RPM	N.m	1519	

EXHAUST SYSTEM

Exhaust Gas Temp. at max. rating/power	°C	600
Exhaust Gas Flow at Max. output	m ³ /h	3618
Max. Allowable Back Pressure	kpa	10
Minimum Exhaust Pipe Diameter	DN	100

AIR INTAKE SYSTEM

Air Cleaner Type	Dry Type	
Air Flow at Max. output	m ³ /h	1536
Air Inlet Restriction Dirty	kpa	6
Air Inlet Restriction Clean	kpa	3

LUBRICATION SYSTEM

Oil Capacity	L	32
Max. Sump Oil Temp.	°C	115
Normal Operating Oil Pressure Range	bars	4~6.0
Oil Pressure at Idle	bar	>0.15

COOLING SYSTEM

Coolant Capacity - Engine + Heat Exchanger	L	48	
Thermostat Range	Start Open	°C	77
	Full Open	°C	90
Coolant Pressure Cap	bar	0.9	
Max. Engine Coolant Temp.	°C	98	
Engine Coolant Flow at Full Load	m ³ /h	27	
Raw Water Cooling Capacity	m ³ /h	20	



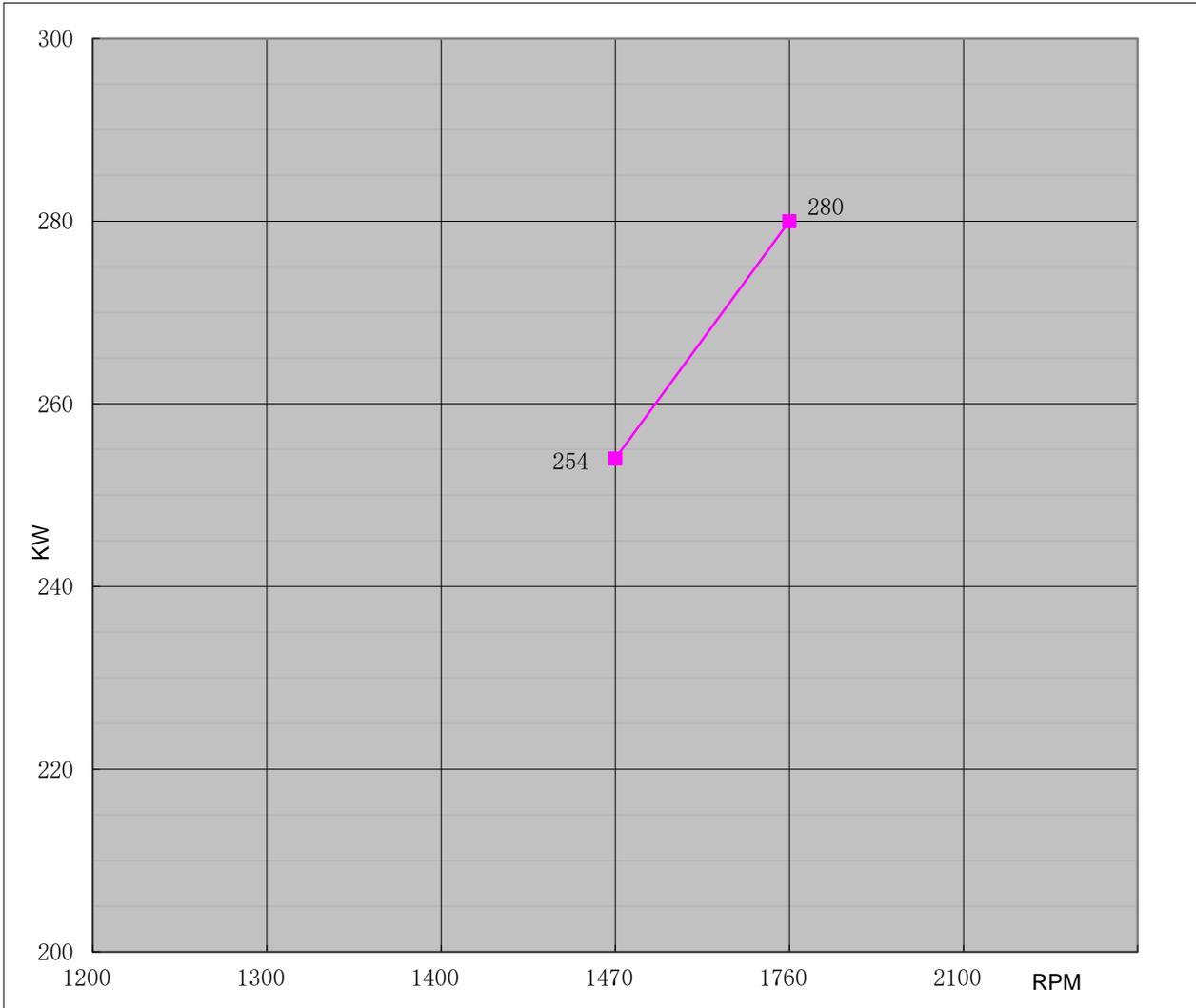
Engine Data Sheet

Raw Water Pressure	bar	2
Min. Raw Water Temp.	°C	15.6
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	180
Cold Cranking Amperes @ -18°C (0°F)	CCA	900
Reserve Capacity (RC)	Min	360
Charging Alternator Output	Amps	55
Max. Starter Cranking Amps @4.5°C (0°F)	Amps	430
Min. Cranking Speed Required for Unaided Cold Start	rpm	210
FUEL SYSTEM		
Injection Pump		
Injection Advance Angle	°	14.5
Minimum Supply line Size	mm	12
Minimum Return line Size	mm	12
Fuel Management Control	Mechanical	
Max. Fuel Consumption	g/kw,h	240
Idle Speed	rpm	750
Max. Governed Speed	rpm	1980
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	108
<p>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.</p>		
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DIESEL ENGINE

Engine Model		CH6-135-E		Curve No.		C06135		Date		2020/4/29	
Displacement		12.88 L		Aspiration		Turbocharged+Water cooled		Power Standard		UL/FM	
Bore		135 mm		Cylinder Qty.		6		280 KW @ 1760 r/min			
Stroke		150 mm		Fuel System		In-line; Mechanical		375 HP @ 1760 r/min			



Torque		
Speed RPM	Torque	
	N-m	lb-ft.
1200		
1300		
1400		
1470	1654	1220
1760	1519	1120
2100		

Output Power		
Speed RPM	Output Power	
	KW	HP
1200		
1300		
1400		
1470	254	340
1760	280	375
2100		

Fuel Consumption		
Speed RPM	Consumption	
	g/KW-HR	lb/BHP-HR
1200		
1300		
1400		
1470	205	0.337
1760	225	0.370
2100		

REV: A