



MODEL
CH6-105-EB

Engine Specification Sheet



Model	Ratings HP (kW) @ Rated speed rpm		
	1470	1760	2100
CH6-105-EB	188 (140)	204 (152)	208 (155)

ENGINE SPECIFICATIONS		
Type	4 Cycle; In-line; water cooled; 6 Cylinder	
Aspiration	Turbocharged +Water Cooled	
Bore and Stroke	mm×mm	105×124
Displacement	L	6.44
Compression Ratio	16:1	
Combustion System	Direct Injection	
Rotation Viewed from flywheel	Counter Clockwise	
Dry Weight Approx.	kg	825
Dimension Approx. (L*W*H)	mm	1450*955*1458
Crankshaft Centerline Height	mm	400
Oil Capacity	L	18
Coolant Capacity - Engine + Heat Exchanger	L	22



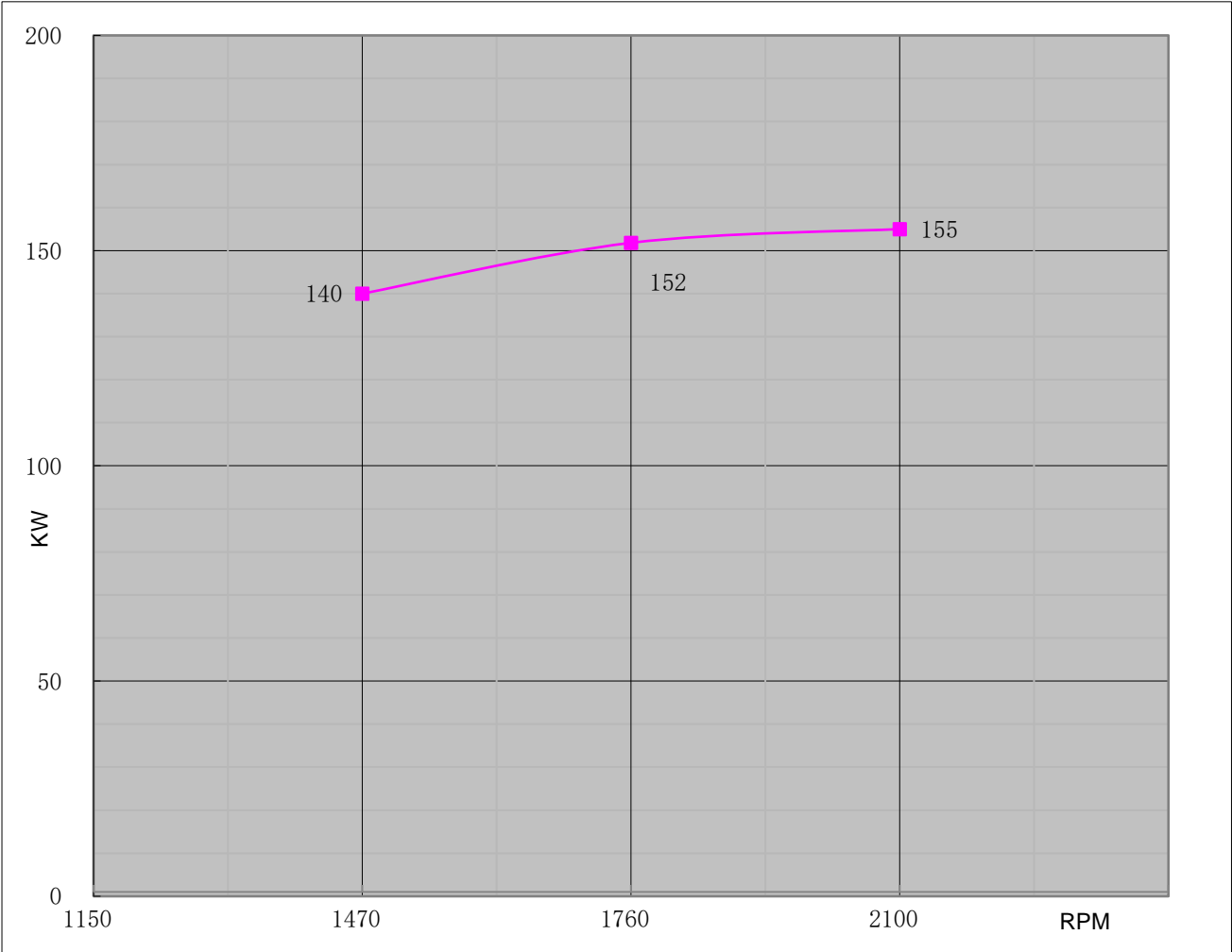
MODEL
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Engine Equipment	Standard	Optional	
Air Cleaner	Drip proof	N/A	
Alternator	24V-DC, 35 Amps with Belt Guard	N/A	
Coupling	Bare Flywheel	N/A	
Engine Heater	220V-AC	110V-AC	
Exhaust Flex Connection	DN100	N/A	
Exhaust Protection	Metal Guard	N/A	
Flywheel Housing	SAE 3	N/A	
Flywheel Power Take Off	SAE 11.5	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, 5.5 KW	N/A	
Throttle Control	Adjustable speed control	N/A	
Water Pump	Centrifugal Type, Gear Driven	N/A	
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;			



DIESEL ENGINE

Engine Model		CH6-105-EB		Curve No.		C06105B	Date	2021/6/18
Displacement	6.44	L	Aspiration	Turbocharged+Water cooled		Power Standard		UL/FM
Bore	105	mm	Cylinder Qty.	6, In-Line		155	KW @ 2100	r/min
Stroke	124	mm	Fuel System	Mechanical		208	HP @ 2100	r/min



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1150		
1470	910	671
1760	824	608
2100	705	520

Output Power		
Speed	Output Power	
RPM	KW	HP
1150		
1470	140	188
1760	152	204
2100	155	208

Fuel Consumption		
Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1150		
1470	205	0.337
1760	210	0.345
2100	220	0.362



Engine Data Sheet

Engine Model	CH6-105-EB	Date	2021/6/18
Drawing No.	CH6-105-EB.00	Performance Curve No.	C06105B
Rated Power	208 HP @ 2100 RPM	Reference No.	14DS001E
	155 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	105×124
Cylinder Liner Type		<input type="checkbox"/> Wet	<input checked="" type="checkbox"/> Dry
Displacement		L	6.44
Compression Ratio		16:01	
Firing Order		1-5-3-6-2-4	
Combustion System		Direct Injection	
Rotation Viewed from front of engine		CW	
Valves Per Cylinder		Intake :2 Exhaust :2	
Valves lashes at cold	Intake	mm	0.25
	Exhaust	mm	0.5
Ignition Type		Compression(Diesel)	
Charge Air Cooling Type		Raw Water	
Dry Weight Approx.		kg	825
Dimension Approx. (L*W*H)		mm	1450*955*1458
Flywheel/ Flywheel House Dimension		11.5"/ SAE 3	

EXHAUST SYSTEM

Exhaust Gas Temp. at max. rating/power	°C	600
Exhaust Gas Flow at Max. output	m³/h	1836
Max. Allowable Back Pressure	kpa	9
Minimum Exhaust Pipe Diameter	DN	125

AIR INTAKE SYSTEM

Air Cleaner Type	Dry Type	
Air Flow at Max. output	m³/h	852
Air Inlet Restriction Dirty	kpa	6
Air Inlet Restriction Clean	kpa	3

LUBRICATION SYSTEM

Oil Capacity	L	18
Max. Sump Oil Temp.	°C	110
Normal Operating Oil Pressure Range	bars	2~6
Oil Pressure at Idle	bar	>0.7

COOLING SYSTEM

Coolant Capacity - Engine + Heat Exchanger	L	22
Thermostat Range	Start Open	°C 82
	Full Open	°C 95
Coolant Pressure Cap	bar	0.9
Max. Engine Coolant Temp.	°C	96
Engine Coolant Flow at Full Load	m³/h	12
Raw Water Cooling Capacity	m³/h	8
Raw Water Pressure	bar	2



Engine Data Sheet

Min. Raw Water Temp.		°C	15.6
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	5.5
Recommended Battery Capacity		AH	150
Cold Cranking Amperes @ -18°C (0°F)		CCA	900
Reserve Capacity (RC)		Min	290
Charging Alternator Output		Amps	35
Max. Starter Cranking Amps @4.5°C (0°F)		Amps	325
Min. Cranking Speed Required for Unaided Cold Start		rpm	250
FUEL SYSTEM			
Injection Pump			
Injection Advance Angle		°	12±1
Minimum Supply line Size		mm	10
Minimum Return line Size		mm	10
Fuel Management Control		Mechanical	
Max. Fuel Consumption		g/kw,h	220
Idle Speed		rpm	700
Max. Governed Speed		rpm	2310
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
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