

## Engine Specification Sheet



Model	Ratings HP (kW) @ Rated speed rpm
	2900
CH6-110-ED(UL)	268 (200)
CH6-110-ED(FM)	239 (178)

ENGINE SPECIFICATIONS		
Type	4 Cycle; In-line; water cooled; 6 Cylinder	
Aspiration	Turbocharged +Water Cooled	
Bore and Stroke	mm×mm	110x125
Displacement	L	7.127
Compression Ratio	16.8 : 1	
Combustion System	Direct Injection	
Rotation Viewed from flywheel	Counter Clockwise	
Dry Weight Approx.	kg	1070
Dimension Approx. (L*W*H)	mm	1685*1080*1520
Crankshaft Centerline Height	mm	400
Oil Capacity	L	26
Coolant Capacity - Engine + Heat Exchanger	L	26



# MODEL CH6-110-ED

Engine Equipment	Standard	Optional	
Air Cleaner	Drip proof	N/A	
Alternator	24V-DC, 70 Amps with Belt Guard	N/A	
Coupling	Bare Flywheel	N/A	
Engine Heater	220V-AC	110V-AC	
Exhaust Flex Connection	DN80	N/A	
Exhaust Protection	Metal Guard	N/A	
Flywheel Housing	SAE 2	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, 6 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;			



## Engine Data Sheet

Engine Model	CH6-110-ED	Date	2018/12/6	
Drawing No.	CH6-110-ED.00	Performance Curve No.	C06110D	
Rated Power	268 HP @ 2900 RPM	Reference No.	14DS001E	
	200 KW @ 2900 RPM	Version	A	
GENERAL ENGINE DATA				
Type		4 Cycle; In-line; water cooled; 6 Cylinder		
Aspiration		Turbocharged +Water Cooled		
Bore and Stroke		mmxmm	110x125	
Cylinder Liner Type		<input checked="" type="checkbox"/> Wet <input type="checkbox"/> Dry		
Displacement		L	7.127	
Compression Ratio		16.8 : 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 (inch)	0.3	
	Exhaust	mm (inch)	0.35	
Ignition Type		Compression(Diesel)		
Charge Air Cooling Type		Raw Water		
Weight (Fuel Pump Configuration)		kg	1070	
Dimension (L*W*H)(Fuel Pump Configuration)		mm	1685*1080*1520	
Flywheel/ Flywheel House Dimension		11.5"/ SAE 2		
Torque at rated RPM		N.m	659	
EXHAUST SYSTEM				
Exhaust Gas Temp. at max. rating/power		°C	540	
Exhaust Gas Flow at Max. output		kg/h	1342	
Max. Allowable Back Pressure		kpa	10	
Minimum Exhaust Pipe Diameter		DN	80	
AIR INTAKE SYSTEM				
Air Cleaner Type		Dry Type, Disposable		
Air Flow		kg/h	1290	
Air Inlet Restriction Dirty		kpa	6	
Air Inlet Restriction Clean		kpa	3	
LUBRICATION SYSTEM				
Oil Capacity		L	26	
Max. Sump Oil Temp.		°C	120	
Normal Operating Oil Pressure Range		bars	3.4~5.0	
Oil Pressure at Idle		bar	>0.98	
COOLING SYSTEM				
Coolant Capacity - Engine + Heat Exchanger		L	26	
Thermostat Range	Start Open	°C	76	
	Full Open	°C	86	
Coolant Pressure Cap		bar	0.9	
Max. Engine Coolant Temp.		°C	98	
Engine Coolant Flow at Full Load		m³/h	14	
Raw Water Cooling Capacity		m³/h	9	



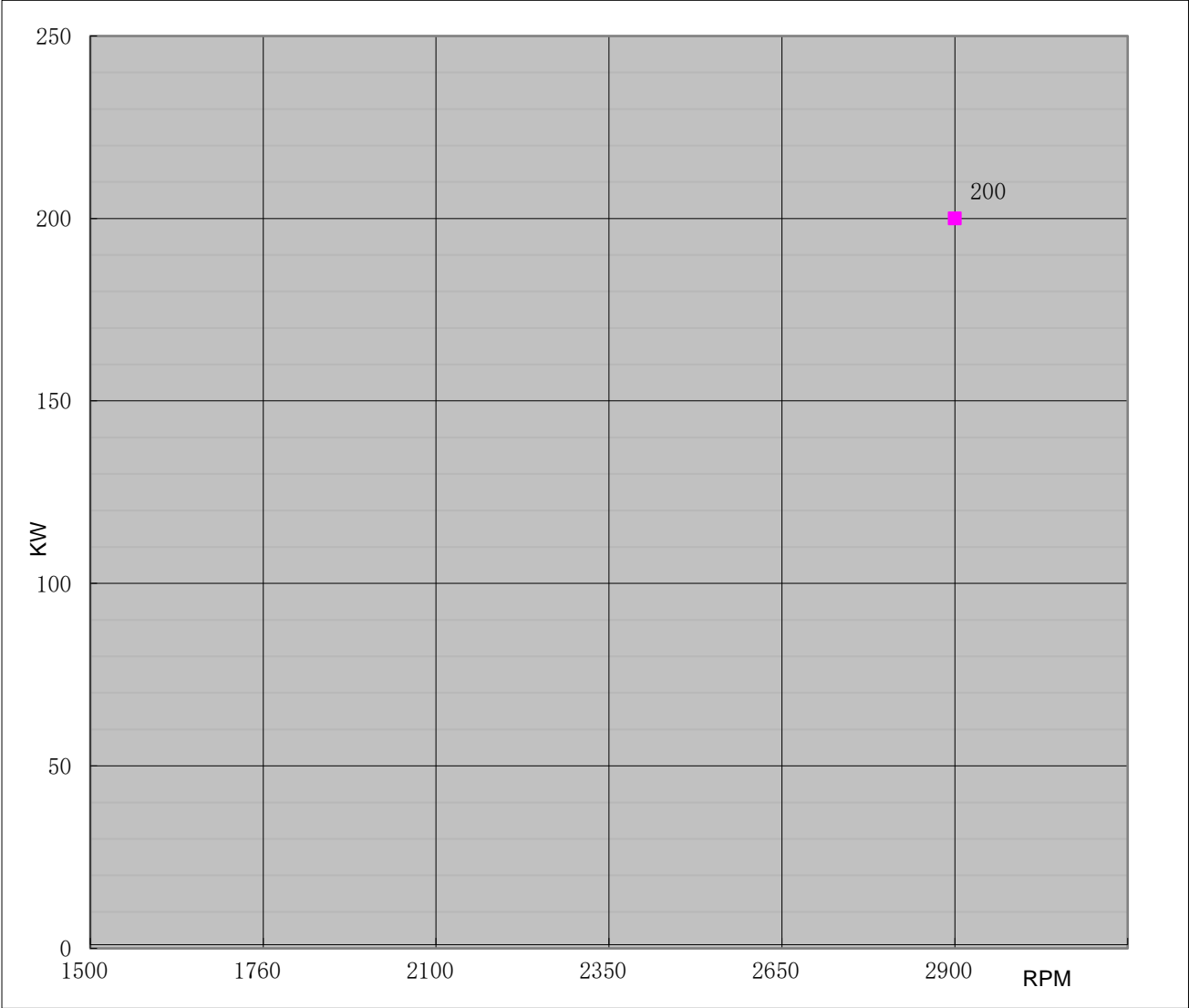
## Engine Data Sheet

Raw Water Pressure		bar	2
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	2200
Voltage AC		V	240
ELECTRICAL SYSTEM-DC			
System Voltage(Nominal)		V	24
Starter motor		Kw	6
Recommended Battery Capacity		AH	150
Cold Cranking Amperes @ -18°C (0°F)		CCA	800
Reserve Capacity (RC)		Min	290
Charging Alternator Output		Amps	70
Max. Starter Cranking Amps @4.5°C (0°F)		Amps	330
Min. Cranking Speed Required for Unaided Cold Start		rpm	240
FUEL SYSTEM			
Injection Pump			
Injection Advance Angle		°	24
Minimum Supply line Size		mm	10
Minimum Return line Size		mm	10
Fuel Management Control		Mechanical	
Max. Fuel Consumption		g/kw,h	240
Idle Speed		rpm	750
Max. Governed Speed		rpm	3190
Maximum allowable fuel height above fuel pump		m	3
Governed Speed Rate		%	<10
Engine Performance Data			
Estimated free field soud 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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DIESEL ENGINE

Engine Model		CH6-110-ED		Curve No.		C06110D	Date	2018/12/6
Displacement	7.13	L	Aspiration	Turbocharged+Water cooled		Power Standard		UL/FM
Bore	110	mm	Cylinder Qty.	6		200 KW @ 2900 r/min		
Stroke	125	mm	Fuel System	In-Line; Mechanical		268 HP @ 2900 r/min		



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1500		
1760		
2100		
2350		
2650		
2900	659	486

Output Power		
Speed	Output Power	
RPM	KW	HP
1500		
1760		
2100		
2350		
2650		
2900	200	268

Fuel Consumption		
Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1500		
1760		
2100		
2350		
2650		
2900	240	0.395