

Engine Specification Sheet



Model	Ratings HP (kW) @ Rated speed rpm	
		2900
CH6-110-EE	192 (143)	

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-EE

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
<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%	
Remark:		
<p>1.All data certified within 5%; 2.TBD - To Be Determined; 3.N/A - Not Applicable;</p>		



Engine Data Sheet

Engine Model	CH6-110-EE	Date	2021/12/30
Drawing No.	CH6-110-ED.00	Performance Curve No.	C06110E
Rated Power	192 HP @ 2900 RPM	Reference No.	14DS001E
	143 KW @ 2900 RPM	Version	A

GENERAL ENGINE DATA

Type	4 Cycle; In-line; water cooled; 6 Cylinder		
Aspiration	Turbocharged +Water Cooled		
Bore and Stroke	mm×mm	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	0.3
	Exhaust	mm	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	470	

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	m ³ /h	14	
Raw Water Cooling Capacity	m ³ /h	9	



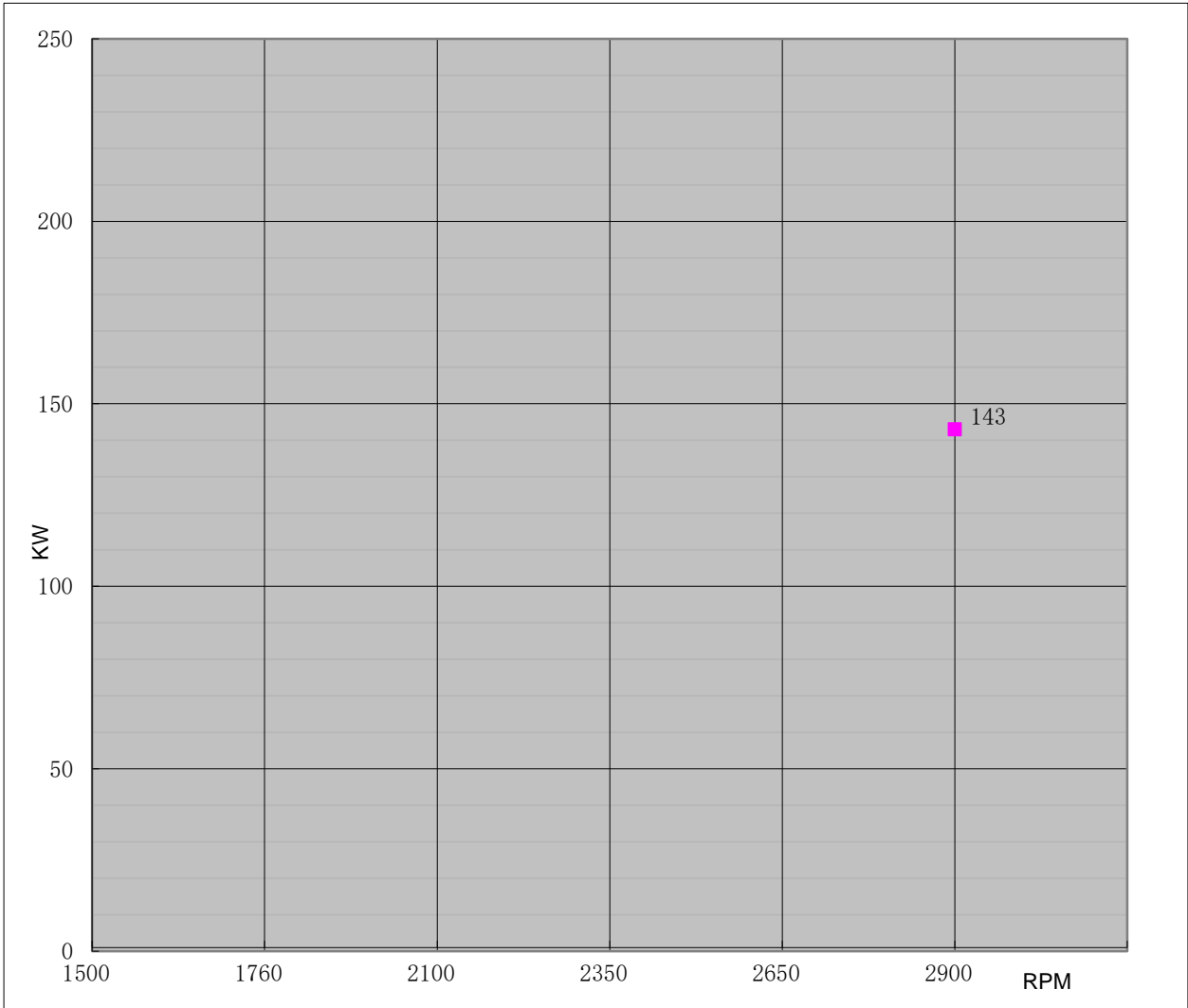
Engine Data Sheet

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	3000
Voltage AC	V	220
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	235
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 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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Performance Curve

Engine Model		CH6-110-EE		Curve No.		C06110E	Date	2021/12/30
Displacement	7.13	L	Aspiration		Turbocharged+Water cooled		Power Standard	UL/FM
Bore	110	mm	Cylinder Qty.		6, In-Line		143	KW @ 2900 r/min
Stroke	125	mm	Fuel System		Mechanical		192	HP @ 2900 r/min



Torque		
Speed	Torque	
RPM	N-m	lb-ft.
1500		
1760		
2100		
2350		
2650		
2900	470	347

Output Power		
Speed	Output Power	
RPM	KW	HP
1500		
1760		
2100		
2350		
2650		
2900	143	192

Fuel Consumption		
Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1500		
1760		
2100		
2350		
2650		
2900	235	0.386

REV: A