



Model:SC7H230D2

◎ POWER RATING

Engine Speed	Type of	Gross Engine Output	Net Engine Output
rpm	Operation	kW	kW
1500	Prime Power	154	147
	Standby Power	170	163

- The engine performance is as per GB/T2820.

- Ratings are based on GB/T1147.1.

---Prime power is available for an unlimited number of hours per year in a variable load application. The permissible average power output over 24 hours of operation shall not exceed 80% of the prime power rating.

---Standby power is available in the event of a utility power outage or under test conditions for up to 200 hours of operation per year.

The permissible average power output over 24 hours of operation shall not exceed 80% of the standby power rating.

◎ SPECIFICATIONS

○ Engine Model

SC7H230D2

○ Power

lit/hr

○ Engine Type

In-line,4 strokes, water-cooled

25%

9.5

4 valves, Turbo charged

50%

17.8

air-to-air intercooled

75%

26.8

○ Combustion type

Direct injection

100%

36.0

○ Cylinder Type

Dry liner

110%

39.9

○ Number of cylinders

6

○ Bore × stroke

105(4.14) × 124(4.89) mm(in.)

○ Displacement

6.44(393) lit.(in3)

○ Compression ratio

16 : 1

○ Firing order

1-5-3-6-2-4

◎ FUEL SYSTEM

○ Injection timing

12°BTDC

○ Injection pump

Longkou in-line "P" type

○ Dry weight

Approx. 580 kg (1278.7 lb)

○ Governor

Electric type

○ Dimension

1343×741×1267 mm

○ Feed pump

Mechanical type

(L×W×H)

(52.9×29.2×49.9 in.)

○ Injection nozzle

Multi hole type

○ Rotation

Counter clockwise viewed from

○ Opening pressure

250 kg/cm² (3556 psi)



○ Fly wheel housing	Flywheel SAE NO.3	○ Fuel filter	Full flow, cartridge type
○ Fly wheel	SAE NO.11.5	○ Used fuel	Diesel fuel oil
◎ MECHANISM			◎ LUBRICATION SYSTEM
○ Type	Over head valve	○ Lub. Method	Fully forced pressure feed type
○ Number of valve	Intake 2, exhaust 2 per cylinder	○ Oil pump	Gear type driven by crankshaft
○ Valve lashes at cold	Intake 0.25mm (0.0099 in.) Exhaust 0.50mm (0.0197 in.)	○ Oil filter	Full flow, cartridge type
◎ VALVE TIMING			○ Oil pan capacity
	Opening Close		High level 17.5 liters (4.62 gal.) Low level 15 liters (3.96 gal.)
○ Intake valve	20.9° BTDC 44.9° ABDC	○ Angularity limit	Front down 25 deg. Front up 35 deg.
○ Exhaust valve	51.7° BBDC 11.7° ATDC	○ Lub. Oil	Side to side 35 deg. Refer to Operation Manual
◎ COOLING SYSTEM			◎ ENGINEERING DATA
○ Cooling method	Fresh water forced circulation	○ Water flow	170 liters/min @ 1,500 rpm
○ Water capacity	9.6 liters (2.5 gal.) (engine only)	○ Heat rejection to coolant	15.5 kcal/sec @ 1,500 rpm
○ Pressure system	Max. 0.5 kg/cm ² (7.11 psi)	○ Heat rejection to CAC	9.7 kcal/sec @ 1,500 rpm
○ Water pump	Centrifugal type driven by belt	○ Engine waste heat	4.8 kcal/sec @ 1,500 rpm
○ Water pump Capacity	170liters (44.9 gal.)/min at 1,500 rpm (engine)	○ Air flow	12.2 m ³ /min @ 1,500 rpm
○ Thermostat	Wax-pellet type Opening temp. 82°C Full open temp. 95°C	○ Exhaust gas flow	27.2 m ³ /min @ 1,500 rpm
		○ Exhaust gas temp.	600 °C @ 1,500 rpm
		○ Max. permissible restrictions	
		Intake system	3 kPa initial



○ Cooling fan	Blower type, plastic 660 mm diameter, 10 blades	Exhaust system	6 kPa final 6 kPa max.
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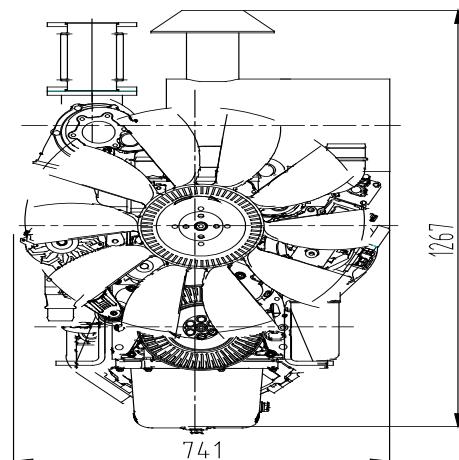
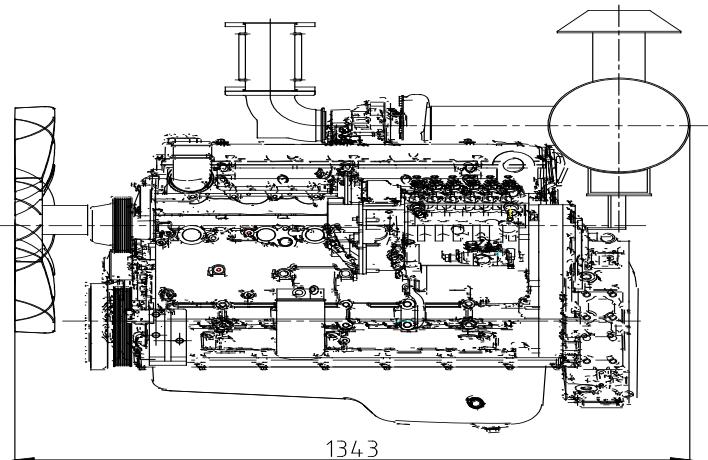
○ Cooling air flow	4.53 m ³ /s	○ Max. permissible altitude	2,000 m
		○ Fan power	6 kW

◎ ELECTRICAL SYSTEM

○ Charging generator	28V×55A	in. = mm × 0.0394	lb/ft = N.m × 0.737
○ Voltage regulator	Built-in type IC regulator	PS = kW × 1.3596	U.S. gal = lit. × 0.264
○ Starting motor	24V×6kW	psi = kg/cm ² × 14.2233	kW = 0.2388 kcal/s
○ Battery Voltage	24V	in ³ = lit. × 61.02	lb/PS.h = g/kW.h × 0.00162
○ Battery Capacity	150 AH	hp = PS × 0.98635	cfm = m ³ /min × 35.336

lb = kg × 2.20462

◆ CONVERSION TABLE



Engine speed	Initial load acceptance when engine reaches rated speed (15 seconds maximum after engine starts to crank)				2nd load application Immediately after engine has recovered to rated speed (5 seconds after initial load application)			
	Prime power %	Load kWm (kWe) Nett	Transient Frequency deviation %	Frequency recovery time seconds	Prime power %	Load kWm (kWe) Nett	Transient Frequency deviation %	Frequency recovery time seconds
1500 rev/min	45	69	≤7	3	25	38	≤7	3