SC33W990D2

◎ **POWER RATING**

Engine Speed	Type of	Engine Power	
rpm	Operation	kW	Ps
1500	Prime Power	660	897
	Standby Power	726	987

-. 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 — SC33W990D2

○ Engine Type — line, 4 strokes, water-cooled
Turbo charged
air-to-air intercooled

○ Combustion type — Direct injection

○ Cylinder Type — Wet liner

○ Number of cylinders — 6

○ Bore × stroke — 180(7.09) × 215(8.47) mm(in.)

○ Displacement — 32.8(2001) lit.(in3)

○ Compression ratio — 15 : 1

○ Firing order — 1-5-3-6-2-4

○ Injection timing — 22°BTDC

○ Dry weight — Approx. 3400kg (7495.7 lb)

○ Dimension — 2307×1371×1983 mm

(L×W×H) — (90.9×54.0×78.1 in.)

○ Rotation — Counter clockwise viewed from Flywheel

◎ **FUEL CONSUMPTION**

Power	lit/hr
25%	43.2
50%	73.8
75%	104.4
100%	142.2
110%	158.4

◎ **FUEL SYSTEM**

○ Injection pump — Longkou in-line "P11" type

○ Governor — Electric type

○ Feed pump — Mechanical type

○ Injection nozzle — Multi hole type

○ Opening pressure — 290kg/cm2 (4125 psi)

○ Fuel filter — Full flow, cartridge type

- Fly wheel housing — SAE NO.0
- Fly wheel — SAE NO.18

◎ MECHANISM

- Type — Over head valve
- Number of valve — Intake 1, exhaust 1 per cylinder
- Valve lashes at cold — Intake 0.4mm (0.0158 in.)

  Exhaust 0.45mm (0.0177 in.)

◎ VALVE TIMING

	Opening	Close
Intake valve	58° BTDC	48° ABDC
Exhaust valve	54° BBDC	48° ATDC

◎ COOLING SYSTEM

- Cooling method — Fresh water forced circulation
- Water capacity — 56L (14.78 gal.)

  (engine only)
- Pressure system — Max. 0.5 kg/cm2 (7.11 psi)
- Water pump — Centrifugal type driven by belt
- Water pump Capacity — 1150L(303.6gal.)/min

  at 1,500 rpm (engine)
- Thermostat — Wax–pellet type
  Opening temp. 77°C
  Full open temp. 90°C
- Cooling fan — Blower type,iron

  1371 mm diameter, 8 blades
- Cooling air flow — 20.82 m³ /s

◎ LUBRICATION SYSTEM

- Lub. Method — Fully forced pressure feed type
- Oil pump — Gear type driven by crankshaft
- Oil filter — Full flow, cartridge type
- Oil pan capacity — High level 75 L (19.8 gal.)
  Low level 50 L (13.2 gal.)
- Angularity limit — Front down 25 deg.
  Front up 35 deg.

  Side to side 35 deg.
- Lub. Oil — Refer to Operation Manual

◎ ENGINEERING DATA

- Water flow — 1150L/min @1,500 rpm
- Heat rejection to coolant — 33.8kcal/sec @1,500 rpm
- Heat rejection to CAC — 20.7kcal/sec @1,500 rpm
- Air flow — 62.9m3/min @1,500 rpm
- Exhaust gas flow — 152.6m3/min @1,500 rpm
- Exhaust gas temp. — 680 °C @1,500 rpm
- Max. permissible

  restrictions
  Intake system — 3 kPa initial
  6 kPa final

  Exhaust system — 6 kPa max.
- Max. permissible altitude — 2,000 m
- Fan power — 25 kW

Used fuel — Diesel fuel oil

◎ ELECTRICAL SYSTEM

○ Charging generator

28V×55A

○ Voltage regulator

Built-in type IC regulator

○ Starting motor

24V×11kW

○ Battery Voltage

24V

○ Battery Capacity

200 AH

◆ CONVERSION TABLE

in. = mm × 0.0394

lb/ft = N.m × 0.737

PS = kW × 1.3596

U.S. gal = lit. × 0.264

psi = kg/cm2 × 14.2233

kW = 0.2388 kcal/s

in^3 = lit. × 61.02

lb/PS.h = g/kW.h × 0.00162

hp = PS × 0.98635

cfm = m3/min × 35.336

lb = kg × 2.20462

2307

1983

1371