



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 (L×W×H)	2878×1515×1889 mm (113.3×59.7×74.4 in.)
○ Rotation	Counter clockwise viewed from Flywheel
○ Fly wheel housing	SAE NO.0
○ Fly wheel	SAE NO.18

◎ 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 “P9” 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
○ Used fuel	Diesel fuel oil

◎ 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

◎ 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.)

◎ ENGINEERING DATA

○ Water flow	1150L/min @1,500 rpm
○ Heat rejection to coolant	33.8kcal/sec @1,500 rpm

(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

◎ **ELECTRICAL SYSTEM**

- Charging generator 28V×55A
- Voltage regulator Built-in type IC regulator
- Starting motor 24V×11kW
- Battery Voltage 24V
- Battery Capacity 200 AH

- 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

◆ **CONVERSION TABLE**

- in. = mm × 0.0394
- PS = kW × 1.3596
- psi = kg/cm2 × 14.2233
- in³ = lit. × 61.02
- hp = PS × 0.98635
- lb = kg × 2.20462
- lb/ft = N.m × 0.737
- U.S. gal = lit. × 0.264
- kW = 0.2388 kcal/s
- lb/PS.h = g/kW.h × 0.00162
- cfm = m3/min × 35.336

