



SC33W1150D2

◎ POWER RATING

Engine Speed	Type of Operation	Engine Power	
		kW	Ps
1500	Prime Power	782	1063
	Standby Power	860	1170

- 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

◎ FUEL CONSUMPTION

○ Engine Model	SC33W1150D2
○ 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

○ Power	lit/hr
25%	50.9
50%	92.6
75%	138.1
100%	186.4
110%	207.8
◎ 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	○ Used fuel	Diesel fuel oil
○ 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 (engine only)	56L (14.78 gal.)
○ Pressure system	Max. 0.5 kg/cm ² (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 m ³ /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	78.6kcal/sec @1,500 rpm
○ Heat rejection to CAC	49.1kcal/sec @1,500 rpm
○ Air flow	2×40.2m ³ /min @1,500 rpm
○ Exhaust gas flow	194.1m ³ /min @1,500 rpm
○ Exhaust gas temp.	690 °C @1,500 rpm
○ Max. permissible restrictions	
Intake system	3 kPa initial 6 kPa final
Exhaust system	11 kPa max.
○ Max. permissible altitude	2,000 m
○ Fan power	25 kW

◎ 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
- in³ = lit. × 61.02
- lb/PS.h = g/kW.h × 0.00162
- hp = PS × 0.98635
- cfm = m³/min × 35.336
- lb = kg × 2.20462

