SC15G500D2

◎ POWER RATING

Engine Speed	Type of	Engine Power	
rpm	Operation	kW	Ps
1500	Prime Power	330	449
	Standby Power	363	494

-. 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	SC15G500D2
○ Engine Type	In-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	135(5.32) × 165(6.5) mm(in.)
○ Displacement	14.16(864) lit.(in3)
○ Compression ratio	15.55 : 1
○ Firing order	1-5-3-6-2-4
○ Injection timing	14.5°BTDC
○ Dry weight	Approx.1296kg (2857.2 lb)
○ Dimension (L×W×H)	1704×1063×1540 mm (67.1×41.9×60.7 in.)
○ Rotation	Counter clockwise viewed from Flywheel
○ Fly wheel housing	SAE NO.1
○ Fly wheel	SAE NO.14

◎ FUEL CONSUMPTION

○ Power	lit/hr
25%	21.9
50%	41.1
75%	59.8
100%	81.2
110%	90.3

◎ FUEL SYSTEM

○ Injection pump	Yijie in-line “P” type
○ Governor	Electric type
○ Feed pump	Mechanical type
○ Injection nozzle	Multi hole type
○ Opening pressure	240kg/cm2 (3414 psi)
○ Fuel filter	Full flow, cartridge type
○ Used fuel	Diesel fuel oil

◎ MECHANISM

○ Type	Over head valve
○ Number of valve	Intake 1, exhaust 1 per cylinder
○ Valve lashes at cold	Intake 0.325mm (0.0128 in.) Exhaust 0.375mm (0.0148 in.)

◎ 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 41 liters (10.82 gal.) Low level 33 liters (8.71 gal.)
○ Angularity limit	Front down 25 deg. Front up 35 deg. Side to side 35 deg.
○ Lub. Oil	Refer to Operation Manual

◎ VALVE TIMING

	Opening	Close
○ Intake valve	20 deg. BTDC	48 deg. ABDC
○ Exhaust valve	48 deg. BBDC	20 deg. ATDC

◎ COOLING SYSTEM

○ Cooling method	Fresh water forced circulation
○ Water capacity	25.5 liters (6.73 gal.)

◎ ENGINEERING DATA

○ Water flow	450 liters/min @1,500 rpm
○ Heat rejection to coolant	33.8 kcal/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	450 liters (118.8 gal.)/min at 1,500 rpm (engine)
○ Thermostat	Wax–pellet type
	Opening temp. 77°C
	Full open temp. 90°C
○ Cooling fan	Blower type,iron
	920 mm diameter, 6 blades

○ Heat rejection to CAC	20.7 kcal/sec @1,500 rpm
○ Air flow	19.5 m3/min @1,500 rpm
○ Exhaust gas flow	50.3 m3/min @1,500 rpm
○ Exhaust gas temp.	600 °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

◎ ELECTRICAL SYSTEM

○ Charging generator	28V×55A
○ Voltage regulator	Built-in type IC regulator
○ Starting motor	24V×7.5kW
○ Battery Voltage	24V
○ Battery Capacity	180 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	



