

SC15G500D2

Used for 373kVA generator



◎ **POWER RATING**

Engine Speed	Type of Operation	Engine Power	
		kW	Ps
1500	Prime Power	330	449
	Standby Power	373	507

- 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 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 13.5 ± 0.5° 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

- 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

- Fly wheel housing SAE NO.1
- Fly wheel SAE NO.14

⊗ **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.)

⊗ **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.)
(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
- Cooling air flow 10.71 m³ /s

⊗ **ELECTRICAL SYSTEM**

- 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 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

⊗ **ENGINEERING DATA**

- Water flow 450 liters/min @1,500 rpm
- Heat rejection to coolant 33.8 kcal/sec @1,500 rpm
- Heat rejection to CAC 20.7 kcal/sec @1,500 rpm
- Air flow 19.8m³/min @1,500 rpm
- Exhaust gas flow 50.5 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
- Fan power 10 kW

◆ **CONVERSION TABLE**

○ 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×7.5kW	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	180 AH	hp = PS × 0.98635	cfm = m ³ /min × 35.336
		lb = kg × 2.20462	

