

◎ **POWER RATING**

Engine Speed rpm	Type of Operation	Engine Power	
		kW	Ps
1500	Prime Power	405	551
	Standby Power	445	605

- 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 SC25G610D2
- Engine Type V-type,4 strokes, water-cooled  
Turbo charged  
air-to-air intercooled
- Combustion type Direct injection
- Cylinder Type Wet liner
- Number of cylinders 12
- Bore × stroke 135(5.32) × 150(5.9) mm(in.)
- Displacement 25.8(1574) lit.(in3)
- Compression ratio 16 : 1
- Firing order 1-12-5-8-3-10-6-7-2-11-4-9
- Injection timing 14.5°BTDC
- Dry weight Approx. 2080kg (4585 lb)
- Dimension (L×W×H) 1930×1686×1872mm  
(76×66.4×75.8 in.)
- Rotation Counter clockwise viewed from  
Flywheel

◎ **FUEL CONSUMPTION**

- Power lit/hr
- 25% 30.9
- 50% 53.6
- 75% 75.8
- 100% 100.4
- 110% 112.7

◎ **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. 1/2
- Fly wheel SAE NO.14
- 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.)

### ◎ 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 48 liters ( 12.7 gal.)  
(engine only)
- Pressure system Max. 0.5 kg/cm<sup>2</sup> ( 7.11 psi)
- Water pump Centrifugal type driven by belt
- Water pump Capacity 740 liters ( 195.36 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  
1100 mm diameter, 6 blades
- Cooling air flow 12.76 m<sup>3</sup> /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 65 liters ( 17.16 gal.)  
Low level 55 liters ( 14.52 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 740 liters/min @1,500 rpm
- Heat rejection to coolant 79 kcal/sec @1,500 rpm
- Heat rejection to CAC 38 kcal/sec @1,500 rpm
- Air flow 32 m<sup>3</sup>/min @1,500 rpm
- Exhaust gas flow 86 m<sup>3</sup>/min @1,500 rpm
- Exhaust gas temp. 650 °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 20 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/cm<sup>2</sup> × 14.2233
- kW = 0.2388 kcal/s
- in<sup>3</sup> = lit. × 61.02
- lb/PS.h = g/kW.h × 0.00162
- hp = PS × 0.98635
- cfm = m<sup>3</sup>/min × 35.336
- lb = kg × 2.20462

