SC27G900D2

◎ POWER RATING

Engine Speed	Type of	Engine Power	
rpm	Operation	kW	Ps
1500	Prime Power	602	819
	Standby Power	662	900

-. 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 — SC27G900D2

○ 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) × 155(6.1) mm(in.)

○ Displacement — 26.6(1623) lit.(in3)

○ Compression ratio — 16 : 1

○ Firing order — 1-12-5-8-3-10-6-7-2-11-4-9

○ Injection timing — 13±0.5°BTDC

○ Dry weight — Approx. 2080kg (4586 lb)

○ Dimension — 1930×1686×1872mm

(L×W×H) — (76×66.4×73.8 in.)

○ Rotation — Counter clockwise viewed from

Flywheel

◎ FUEL CONSUMPTION

Power	lit/hr
25%	39.9
50%	73.1
75%	108.4
100%	145.6
110%	162.4

◎ 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.0
- Fly wheel　　SAE NO.18

◉ MECHANISM

- Type　　Over head valve
- Number of valve　　Intake 1, exhaust 1 per cylinder
- Valve lashes at cold　　Intake　0.325mm (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　　48L (12.7 gal.)

 (engine only)

- Pressure system　　Max. 0.5 kg/cm2 (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

　　1220 mm diameter, 6 blades

- Cooling air flow　　18.024 m³ /s

◉ 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 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　　60.5kcal/sec /1500 rpm
- Heat rejection to CAC　　37.8kcal/sec /1500 rpm
- Air flow　　2×25.5m3/min /1500 rpm
- Exhaust gas flow　　2×62.2m3/min /1500 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　　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

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