

SC15G500D2

O 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 **© FUEL CONSUMPTION** • Engine Model SC15G500D2 • Power lit/hr • Engine Type In-line,4 strokes, water-cooled 25% 21.9 Turbo charged 50% 41.1 75% 59.8 air-to-air intercooled Combustion type Direct injection 100% 81.2 90.3 O Cylinder Type Wet liner 110% Number of cylinders ○ Bore × stroke $135(5.32) \times 165(6.5)$ mm(in.) • Displacement 14.16(864) lit.(in3) Compression ratio 15.55:1 • Firing order 1-5-3-6-2-4 **© FUEL SYSTEM** • Injection timing 14.5°BTDC Injection pump Yijie in-line "P" type ○ Governor Ory weight Approx.1296kg (2857.2 lb) Electric type O Dimension 1704×1063×1540 mm • Feed pump Mechanical type $(L\times W\times H)$ (67.1×41.9×60.7 in.) ○ Injection nozzle Multi hole type • Rotation Counter clockwise viewed from Opening pressure 240kg/cm2 (3414 psi) Flywheel • Fuel filter Full flow, cartridge type SAE NO.1 Used fuel Diesel fuel oil • Fly wheel housing • 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.)

Oil pump

• Angularity limit

O Lub. Method

UBRICATION SYSTEM

Oil filter	Full flow, cartridge type
 Oil pan capacity 	High level 41 liters (10.82 gal.)
	Low level 33 liters (8.71 gal.)

Fully forced pressure feed type

Gear type driven by crankshaft

Front down 25 deg.

O VALVE TIMING

	Opening	Close		Front up 35 deg.
 Intake valve 	20 deg. BTDC	48 deg. ABDC		Side to side 35 deg.
 Exhaust valve 	48 deg. BBDC	20 deg. ATDC	 Lub. Oil 	Refer to Operation Manual

© 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

• Heat rejection to CAC 20.7 kcal/sec @1,500 rpm (engine only) • Pressure system Max. 0.5 kg/cm2 (7.11 psi) ○ Air flow 19.5 m3/min @1,500 rpm O Water pump Centrifugal type driven by belt • Exhaust gas flow 50.3 m3/min @1,500 rpm O Water pump Capacity 450 liters (118.8 gal.)/min • Exhaust gas temp. 600 °C @1,500 rpm at 1,500 rpm (engine) O Max. permissible ○ Thermostat Wax-pellet type restrictions Opening temp. 77°C 3 kPa initial Intake system Full open temp. 90°C 6 kPa final O Cooling fan Blower type,iron Exhaust system 6 kPa max. 2,000 m 920 mm diameter, 6 blades • Max. permissible altitude

© ELECTRICAL SYSTEM

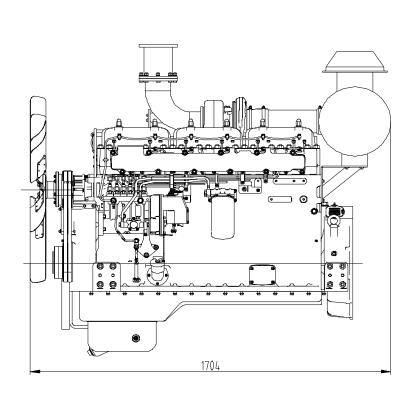
O Battery Capacity

28V×55A $in. = mm \times 0.0394$ $lb/ft = N.m \times 0.737 \,$ O Charging generator O Voltage regulator $PS = kW \times 1.3596$ U.S. gal = lit. \times 0.264 Built-in type IC regulator ○ Starting motor 24V×7.5kW $psi = kg/cm2 \times 14.2233$ kW = 0.2388 kcal/sO Battery Voltage 24V $in^3 = lit. \times 61.02$ $lb/PS.h = g/kW.h \times 0.00162$

 $hp = PS \times 0.98635$ $lb = kg \times 2.20462$

CONVERSION TABLE

 $cfm = m3/min \times 35.336$



180 AH

