



4HT4.3-G22

Power

Engine Speed	Type of Operation	Engine Power	Generator Power
r/min		kW	kVA
1500	Prime Power	62	60
	Standby Power	68	66
1800	Prime Power	67	67.5
	Standby Power	74	74

-. The engine performance is as per GB/T2820 -.

Ratings are based on GB/T1147.1.

→**Prime Power:** --- There is no time limit in the case of variable load operation. In any 250hours of continuous operation period, the

variable load of average work load less than 70%of the prime power. The operation time in the situation of 100% prime power no more than 500 hours. Permit 10%overload running 1 hours in any 12 hours of continuous operation period. The overload 10% power running time of every year no more than 25 hours..

→**Standby Power:** The annual total standby power load should be less than 80%and the average running time shall be less than 200 hours. Among them the standby power point should be no more than 25 hours a year. .

© SPECIFICATIONS

- Engine Model 4HT4.3-G22
- Engine Type In-line,4strokes,4valves,water-cooled, Turbo charged
- Combustion type Direct injection
- Cylinder Type Dry liner
- Number of cylinders 4
- Bore × stroke 105× 124mm
- Displacement 4.3 L
- Compression ratio 17.3 : 1
- Firing order 1-3-4-2
- Injection timing 10°BTDC
- Dry weight Approx. 430kg
- Dimension 1018×716×989 mm (L×W×H)
- Rotation SAE NO.3
- Fly wheel housing SAE NO.11.5(tooth number of gear:127)

© MECHANISM

- Type Overhead valve
- Number of valve Intake 2, exhaust 2 per cylinder
- Valve lashes at cold Intake 0.25mm
Exhaust 0.50mm

© FUEL CONSUMPTION

Power	L/h (1500r/min)	L/h (1800r/min)
25%	4.9	5.7
50%	8.1	9.1
75%	11.8	13.0
100%	15.1	17.0
110%	16.7	18.9

© FUEL SYSTEM

- Injection pump Beiyou in-line “AD” type
- Governor Electronic regulator
- Feed pump Mechanical type
- Injection nozzle Multi hole type
- Opening pressure 250 kg/cm²
- Fuel filter Full flow, cartridge type
- 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 13 liters

◎ VALVE TIMING

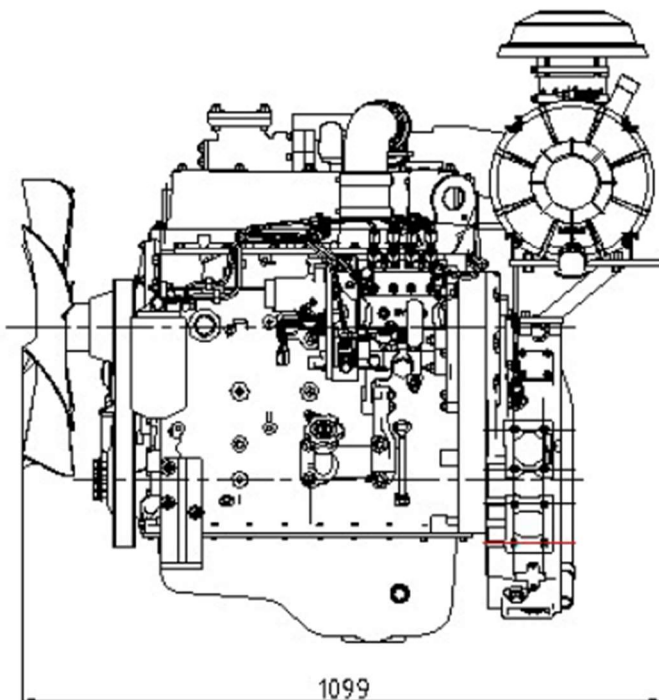
	Opening	Close
○ Intake valve	20.9° BTDC	44.9° ABDC
○ Exhaust valve	51.7° BBDC	11.7° ATDC

◎ COOLING SYSTEM

○ Cooling method	Fresh water forced circulation
○ Water capacity (engine only)	6.8 liters
○ Lid Min. pressure	70kPa
○ Water pump	Centrifugal type driven by belt
○ Water pump Capacity	155L/min (1500r/min) 186L/min (1800r/min)
○ The maximum temp. of coolant in prime/ Standby power	104/100
○ Thermostat	Wax-pellet type Opening temp. 82°C Full open temp. 95°C
○ Cooling fan	Blower type, plastic 500 mm diameter, 7blades Power consumption 2kw
○ Cooling air flow	2.3 m ³ /s

◎ ELECTRICAL SYSTEM

○ Charging generator	14V×80A
○ Voltage regulator	Built-in type IC regulator
○ Starting motor	12V×4.2kW
○ Battery Voltage	12V
○ Battery Capacity	120 AH



- Angularity limit
 - Low level 11 liters
 - Front down 25 deg.
 - Front up 35 deg.
 - Side to side 35 deg.
- Lub. Oil
 - Refer to Operation Manual

◎ ENGINEERING DATA

○ Heat rejection to coolant	6.2kcal/sec (1500r/min) 6.7kcal/sec (1800r/min)
○ Air flow	4.8m ³ /min (1500r/min) 6.2m ³ /min (1800r/min)
○ Exhaust gas flow	11.5m ³ /min (1500r/min) 14.7m ³ /min (1800r/min)
○ Exhaust gas temp.	600 °C
○ Max. permissible restrictions	3 kPa initial 6 kPa final (need charge filter element)
Intake system	
Exhaust system	6 kPa max.
○ Max. permissible altitude	2000 m

