

4Z2.3-G11

O Power

Engine Speed	Type of	Engine Power	Generator Power	
rpm	Operation	kW	kW	kVA
1500	Prime Power	16	12	15
	Standby Power	18	13.2	16.5

- -. The engine performance is as per GB/T2820
- -. Ratings are based on GB/T1147.1.
- → **Prime Power:** Power output available with varying load for unlimited time. The permissible average power output over 24 hours of operation shall not exceed 80% of the prime power rating.
- → Standby Power: Power output available in the duration of an emergency outage or under test conditions, Maximum operation time is 200 hours per year. The permissible average power output over 24 hours of operation shall not exceed 80% of the standby power rating.

Overload operation is not allowed

© SPECIFICATIONS		© FUEL CONSUMPTION		
O Engine Model	4Z2.3-G11	o Power	L/h (1500r/min)	
O Engine Type	In-line,4strokes, water-cooled	25%	1.64	
		50%	2.6	
• Combustion type	Direct injection	75%	3.6	
O Cylinder Type	Wet liner	100%	4.68	
O Number of cylinders	4	110%	5.13	
O Bore × stroke	85× 100 mm			
O Displacement	2.3L			
O Compression ratio	18:1			
• Firing order	1-3-4-2	◎ FUEL SYSTEM		
O Injection timing	14-17°	O Injection pump	KangDa	
O Dry weight	260 kg	• Governor	Electric type	
O Dry weight	919×565×760mm	• Feed pump	Mechanical type	
$(L\times W\times H)$		O Injection nozzle	Multi hole type	
• Rotation	Counter clockwise viewed from Flywheel	Opening pressure	24MPa	

• Fly wheel housing	SAE 4#	• Fuel filter	Full flow, cartridge type
• Fly wheel	SAE 7.5# (tooth number 109)	O Used fuel	Diesel fuel oil
◎ MECHANISM		○ LUBRICATION SYSTI	EM
о Туре	Overhead valve	O Lub. Method	Fully forced pressure feed type
O Number of valve	Intake 1, exhaust 1 per cylinder	O Oil pump	Gear type driven by camshaft
O Valve lashes at cold	Intake 0.35mm	Oil filter	Full flow, cartridge type
	Exhaust 0.45mm	Oil pan capacity	High level 10 L
			Low level 8 L
○ VALVE TIMING		O Angularity limit	Front down 25°
	Opening Close		Front up 35°
O Intake valve	12° BTDC 38° ABDC		Side to side 35°
O Exhaust valve	50° BBDC 14° ATDC	O Lub. Oil	Refer to Operation Manual
© COOLING SYSTE	M	© ENGINEERING DATA	
O Water capacity	2.3L	O Heat rejection to coolant	8 kcal/sec(1500r/min)
(engine only)	2.31		
O Lid Min. pressure	70kPa	O Heat rejection to	
		intercooler	
O Water pump	Centrifugal type driven by belt		
O Water pump Capacity	25L/min (1500r/min)	O Air flow	1.7m3/min (1500r/min)
• Thermostat	Wax-pellet type	• Exhaust gas flow	7.2m3/min(1500r/min)
	Opening temp. 72°C		
	Full open temp. 82°C	O Exhaust gas temp.	480 °C
• Cooling fan	Blower type, plastic	• Max. permissible restrictions	3 kPa initial
	400 mm diameter, 7 blades	Intake system	4 kPa final
	Power concumption 3.5 kW	Exhaust system	10 kPa max
• The maximum temp.			
of coolant in prime/	104/100℃	O intercooler permissible	
Standby power		restrictions	

© ELECTRICAL SYSTEM

O Charging generator 12V×70A

O Voltage regulator Built-in type IC regulator

O Starting motor 12V×3.8kW

O Battery Voltage 12V

O Battery Capacity 110~120 AH

