



6ETAA11.8-G31

◎ Power

Engine Speed r/min	Type of Operation	Engine Power	Generator Power	
		kW	kW	kVA
1500	Prime Power	340	300	375
	Standby Power	380	330	412.5
1800	Prime Power	340	300	375
	Standby Power	380	330	412.5

- 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 running1hours 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 than200 hours. Among them the standby power point should be no more than 25 hours a year. °

◎ SPECIFICATIONS

○ Engine Model	6ETAA11.8-G31
○ Engine Type	In-line,4strokes,4valves,water-cooled, Turbo charged with aftercooler
○ Combustion type	Direct injection
○ Cylinder Type	Wet liner
○ Number of cylinders	6
○ Bore ×stroke	128 × 153mm
○ Displacement	11.8 L
○ Compression ratio	17 : 1
○ Firing order	1-5-3-6-2-4
○ Injection timing	Electronic control
○ Dry weight	Approx. 1164kg
○ Dimension(L×W×H)	1787×918×1287 mm
○ Rotation	Anti-clockwise(face to flywheel)
○ Fly wheel housing	SAE NO.1 SAE NO.14(tooth number of gear:133)

◎ MECHANISM

○ Type	
○ Number of valve	Intake 2, exhaust 2 per cylinder
○ Valve lashes at cold	Intake 0.40mm Exhaust 0.65mm

◎ VALVE TIMING

○ Intake valve	15° BTDC	30° ABDC
○ Exhaust valve	45° BBDC	13° ATDC

◎ FUEL CONSUMPTION

○ Power	L/h (1500r/min)	L/h (1800r/min)
25%	19.8	19.9
50%	39.7	39.9
75%	59.1	59.3
100%	79.3	79.5
110%	89.9	90.2

◎ FUEL SYSTEM

○ Injection pump	BOSH
○ Governor	Electronic
○ Feed pump	Electronic
○ Injection nozzle	Multi hole type
○ Opening pressure	Electronic
○ Fuel filter	Full flow, cartridge type
○ Used fuel	Diesel fuel oil

◎ LUBRICATION SYSTEM

Overhead valve	
○ 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 41liters Low level 33liters

Opening

○ Lub. Oil

Close

Front down 25 deg.
Front up 35 deg.
Side to side 35 deg.

Refer to Operation Manual

◎ **COOLING SYSTEM** ◎ **ENGINEERING DATA**

- Cooling method
- Water capacity 23.2 liters
(engine only)
- Lid Min. pressure 70kPa
- Water pump Centrifugal type driven by belt
- Water pump Capacity 515L/min (1500r/min)
618L/min (1800r/min)
- Thermostat Wax-pellet type
Opening temp. 85 °C
Full open temp. 95 °C
- Cooling fan Blower type, plastic

843 mm diameter, 8blades
Power 8kw
- The maximum temp. of
coolant in prime/ Standby 104/100
power

◎ **ELECTRICAL SYSTEM**

- Charging generator 28V×70A
- Voltage regulator Built-in type IC regulator
- Starting motor 24V×5.5kW
- Battery Voltage 24V
- Battery Capacity 180 AH

Fresh water forced circulation

- Heat rejection to coolant 34.2 kcal/sec (1500r/min)
34.2 kcal/sec (1800r/min)
- Heat rejection to intercooler 21.4 m³/min (1500r/min)
21.4 m³/min (1800r/min)
- Intake flow 24.3m³/min (1500r/min)
29.2m³/min (1800r/min)
- Exhaust flow 57.5m³/min (1500r/min)
61.8m³/min (1800r/min)
- Exhaust gas temp. 600 °C
- Max. permissible restrictions
Intake system 3 kPa initial
6 kPa final (need charge
filter element)
Exhaust system 10 kPa max.
- Max. permissible altitude 2000 m
- intercooler permissible
restrictions 10 kPa

