6ETAA11.8-G21

◎ POWER RATING

Engine Speed	Type of Operation	Engine	Genset	
r/min		kW	kW	kVA
1500	Prime Power	307	280	350
	Standby Power	338	300	375
1800	Prime Power	307	280	350
	Standby Power	338	300	375

-. 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	6ETAA11.8-G21
○ Engine Type	In-line,4 strokes, water-cooled 4 valves, Turbo charged air-to-air intercooled
○ Combustion type	Direct injection
○ Cylinder Type	Dry 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	14.5°BTDC
○ Dry weight	1164kg
○ Dimension(L×W×H)	1787×918×1304 mm
○ Rotation	CCW viewed from flywheel
○ Fly wheel housing	SAE NO.1

◎ FUEL CONSUMPTION

○ Power	L/h（1500r/min）	L/h（1800r/min）
25%	21.0	21.1
50%	37.0	37.2
75%	53.7	54.0
100%	73.3	73.7
110%	81.6	82.4

◎ FUEL SYSTEM

○ Injection pump	Longkou in-line “P” type
○ Governor	Electric type
○ 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

○ Fly wheel	SAE NO.14

◎ MECHANISM

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

◎ VALVE TIMING

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

◎ COOLING SYSTEM

○ Cooling method	Fresh water forced circulation
○ Water capacity	23.2 L(engine only)
○ Pressure system	Max. 0.5 kg/cm2
○ Water pump	Centrifugal type driven by belt
○ Water pump Capacity	515 L/min at 1500r/min 618 L/min at 1800r/min
○ Thermostat	Wax–pellet type
	Opening temp. 85°C Full open temp. 95°C
○ Cooling fan	Blower type, plastic
	843 mm diameter, 8 blades

○ Max. coolant temperature at standby / prime power

104/100℃

◎ 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/ Low level 41L/33L
○ Angularity limit	Front down 25°
	Front up 35°
	Side to side 35°
○ Lub. Oil	Refer to Operation Manual

◎ ENGINEERING DATA

○ Heat rejection to coolant	30.9 kcal/sec（1500r/min） 31.8 kcal/sec（1800r/min）
○ Heat rejection to CAC	19.3 kcal/sec （1500r/min） 20.5 kcal/sec （1800r/min）
○ Engine waste heat	29 m3/min（1500r/min） 31.2 m3/min（1800r/min）
○ Exhaust gas flow	76 m3/min（1500r/min） 78.1 m3/min（1800r/min）
○ Exhaust gas temp.	600 °C
○ Max. permissible restrictions	
Intake system	3 kPa initial / 6 kPa final
Exhaust system	10 kPa max.
○ Intercooler resistance limit	10 kPa

◎ ELECTRICAL SYSTEM

○ Charging generator	28V×55A
○ Voltage regulator	Built-in type IC regulator
○ Starting motor	24V×7.5 kW
○ Battery Voltage	24V
○ Battery Capacity	180 AH