



6ETAA12.8-G310

◎ POWER RATING

Engine Speed r/min	Type of Operation	Engine	Genset	
		kW	kW	kVA
1500	Prime Power	450	400	500
	Standby Power	495	440	550

-. 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 6ETAA12.8-G310
- 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 130× 161 mm
- Displacement 12.8 L
- Compression ratio 16 : 1
- Firing order 1-5-3-6-2-4
- Injection timing Electric type
- Dry weight 1164kg
- Dimension(L×W×H) 1787×1000×1287 mm
- Rotation CCW viewed from flywheel
- Fly wheel housing SAE NO.1
- Fly wheel SAE NO.14

◎ FUEL CONSUMPTION

- Power L/h
- 25% 30.7
- 50% 54.3
- 75% 78.7
- 100% 107.5
- 110% 119.5

◎ FUEL SYSTEM

- Injection pump BOSCH
- Governor Electric type
- Feed pump Electric type
- Injection nozzle Multi hole type
- Opening pressure Electric type
- Fuel filter Full flow, cartridge type
- Used fuel Diesel fuel oil

◎ 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 600 L/min at 1500r/min
- Thermostat Wax-pellet type
Opening temp. 85°C
Full open temp. 95°C
- Cooling fan Blower type, plastic
1000 mm diameter, 8 blades
- Max. coolant temperature at standby / prime power
104/100°C

◎ 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 36L/31L
- Angularity limit Front down 25°
Front up 35°
Side to side 35°
- Lub. Oil Refer to Operation Manual

◎ ENGINEERING DATA

- Heat rejection to coolant 51.5 kcal/sec (1500r/min)
- Heat rejection to CAC 30.3 kcal/sec (1500r/min)
- Engine waste heat 33.6 m³/min (1500r/min)
- Exhaust gas flow 75.3 m³/min (1500r/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