



# 6KTAA25-G31

## ◎ Power

Engine Speed r/min	Type of Operation	Engine Power		Generator Power	
		kW	Ps	kW	kVA
1500	Prime Power	728	990	660	825
	Standby Power	170	1088	726	908

-. 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 1hours 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	6KTAA25-G31
○ Engine Type	In-line, 4 strokes, water-cooled, Turbo charged with aftercooler
○ Combustion type	Direct injection
○ Cylinder Type	Wet liner
○ Number of cylinders	6
○ Bore × stroke	170 × 185 mm
○ Displacement	25.18L
○ Compression ratio	14.5 : 1
○ Firing order	1-5-3-6-2-4
○ Injection timing	Electronic control
○ Dry weight	Approx. 2700kg
○ Dimension (L×W×H)	2055×1241×1936mm
○ Rotation	SAE NO.0
○ Fly wheel housing	SAE NO.18(tooth number of gear: 143)

## ◎ MECHANISM

○ Type	Overhead valve
○ Number of valve	Intake 2, exhaust 2 per cylinder
○ Valve lashes at cold	Intake 0.35mm Exhaust 0.60mm

## ◎ VALVE TIMING

	Opening	Close
○ Intake valve	25° BTDC	57° ABDC
○ Exhaust valve	66° BBDC	16° ATDC

## ◎ COOLING SYSTEM

○ Cooling method	Fresh water forced circulation
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## ◎ FUEL CONSUMPTION

○ Power	L/h (1500r/min)
25%	47
50%	84
75%	124
100%	163
110%	178

## ◎ FUEL SYSTEM

○ Injection pump	Liebherr
○ Governor	Liebherr
○ Feed pump	Electronic Control
○ Injection nozzle	Multi hole type
○ 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 75 liters Low level 45 liters
○ Angularity limit	Front down 12deg. Front up 15 deg. Side to side 35 deg.
○ Lub. Oil	Refer to Operation Manual

## ◎ ENGINEERING DATA

- Water capacity (engine only) 55 liters
- Water pump Centrifugal type driven by belt
- Water pump Capacity 880L/min (1500r/min)
- Thermostat Wax-pellet type
  - Opening temp. 77 °C
  - Full open temp. 90 °C
- Cooling fan Blower type, plastic
  - 1220 mm diameter, 8blades
  - Power consumption 22kw
- Air flow 3210m3/min (1500r/min)
- Exhaust gas flow 8330m3/min (1500r/min)
- Exhaust gas temp. 500 °C
- Max. permissible restrictions
  - 2.5 kPa initial
  - 6.2 kPa final (need charge filter element)
- Intake system
- Exhaust system 10 kPa max.
- Max. permissible altitude 2000 m
- intercooler permissible restrictions 10 kPa

◎ ELECTRICAL SYSTEM

- Charging generator 28V×55A
- Voltage regulator Built-in type IC regulator
- Starting motor 24V×9kW
- Battery Voltage 24V
- Battery Capacity 200 AH

◆ 换算表

in. = mm × 0.0394

PS = kW × 1.3596

psi = kg/cm<sup>2</sup> × 14.2233

in<sup>3</sup> = L × 61.02

hp = PS × 0.98635

lb = kg × 2.20462

lb/ft = N.m × 0.737

U.S. gal = L × 0.264

kW = 0.2388 kcal/s

lb/PS.h = g/kW.h × 0.00162

cfm = m<sup>3</sup>/min × 35.336

