

Model: AS4300

Engine code:H5699

78 kW@1500 rpm | 86 kW@1800 rpm

Engine Speed r/min	Type of Operation	Engine Power kW	Generator Power kva
1500	Prime Power	78	85
1500	Standby Power	86	94
1800	Prime Power	86	100
1800	Standby Power	95	110

- 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 1 hours 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 than80% 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	AS4300
Engine Type	In-line, 4 strokes, 4 valves, water-cooled , Turbo charged
Combustion type	Direct injection
Cylinder Type	Dry liner
Number of cylinders	4
Bore x stroke	105x 124mm
Displacement	4.3 L
Compression ratio	17.3 : 1
Firing order	1-3-4-2
Injection timing	10°BTDC
Dry weight	Approx. 430kg
Dimension (LxWxH)	1018 x716x989 mm
Rotation	SAE NO.3
Fly wheel housing	SAE NO.11.5 (tooth number of gear: 127)

Mechanism

Type	Over head valve
Number of valve	Intake 2, exhaust 2 per cylinder
Valve lashes at cold	Intake 0.25mm Exhaust 0.50mm

Valve Timing

	Opening	Close
Intake valve	20.9° BTDC	44.9° ABDC
Exhaust valve	51.7° BBDC	11.7° ATDC

Fuel Consumption

Power	L/h (1500r/min)	L/h (1800r/min)
25%	4.9	5.7
50%	8.1	9.1
75%	11.8	13.0
100%	15.1	17.0
110%	16.7	18.9

Fuel System

Injection pump	Beiyou in-line "AD" type
Governor	Electronic regulator
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

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 13 liters Low level 11 liters
Angularity limit	Front down 25 deg Front up 35 deg Side to side 35 deg
Lub. Oil	Refer to Operation Manual

Cooling System

Cooling method	Fresh water forced circulation
Water capacity (engine only)	6.8 liters
Lid Min. pressure	70kPa
Water pump	Centrifugal type driven by belt
Water pump Capacity	155L/min (1500r/min) 186L/min (1800r/min)
The maximum temp. of coolant in prime/ Standby power	104/100
Thermostat	Wax-pellet type Opening temp. 82°C Full open temp. 95°C
Cooling fan	Blower type, plastic 500 mm diameter, 7 blades Power consumption 2kw
Cooling air flow	2.3 m³ /s

Electrical System

Charging generator	24V×55A
Voltage regulator	Built-in type IC regulator
Starting motor	24V×4.5kW
Starting motor	24V
Battery Capacity	120 AH

Engineering Data

Heat rejection to coolant	6.2kcal/sec (1500r/min) 6.7kcal/sec (1800r/min)
Air flow	4.8m³/min (1500r/min) 6.2m³/min (1800r/min)
Exhaust gas flow	11.5m³/min (1500r/min) 14.7m³/min (1800r/min)
Exhaust gas temp	600 °C
Max. permissible restrictions	3 kPa initial
Intake system	6 kPa final (need charge filter element)
Exhaust system	6 kPa max
Max. permissible altitude	2000 m

Dimension

