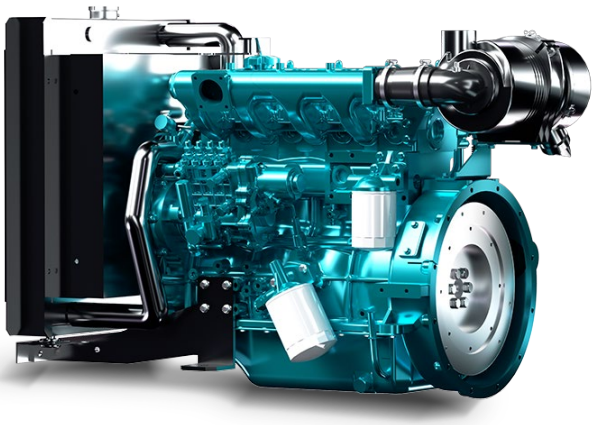
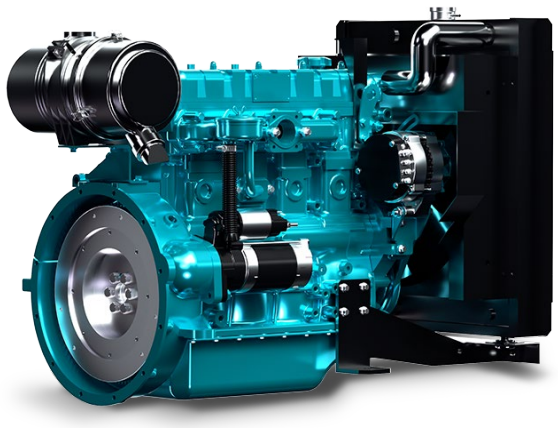
AS4300-H7193

105 kW@1500 rpm | 116 kW@1800 rpm

AGG Power Solutions





Engine Speed (r/min)	Type of Operation	Engine Power (kW)	Generator Power (kW)
1500	Prime Power	95	80
1500	Standby Power	105	88
1800	Prime Power	105	88
1800	Standby Power	116	96.8

· The engine per formance 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 80% 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	AS4300-H7193
Engine Type	In-line, 4strokes, 4valves,water-cooled, Turbo charged with aftercooler
Combustion type	Direct injection
Cylinder Type	Dry liner
Number of cylinders	4
Bore × stroke	105 × 124mm
Displacement	4.3 L
Compression ratio	16: 1
Firing order	1-3-4-2
Injection timing	10°BTDC
Dry weight	Approx. 450kg
Dimension (L×W×H)	1080×738×1078mm
Rotation	Counter clockwise viewed from Flywheel
Fly wheel housing	SAE NO.3#
Fly wheel	SAE NO.11.5# (tooth number 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

Fuel System

Injection pump	Longkou in-line "P" type
Governor	Electric 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

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%	6.5	7.8
50%	11.8	13.5
75%	17.1	19.5
100%	23.0	25.6
110%	25.9	28.7

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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° Front up 35° Side to side 35°

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)
Thermostat	Wax–pellet type Opening temp. 82°C Full open temp. 95°C
Cooling fan	Blower type, plastic 550 mm diameter, 9 blades
Cooling fan power consumption	3 kw/1500r/min 3.5 kw/1800r/min
The maximum temp. of coolant in prime / Standby power	104/100°C

Electrical System

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

Engineering Data

Heat rejection to coolant	9.6kcal/sec （1500r/min） 10.6kcal/sec （1800r/min）
Heat rejection to intercooler	6.0kcal/sec （1500r/min） 6.6kcal/sec （1800r/min）
Engine air flow	6.8 m ³/min（1500r/min） 9.4 m ³/min（1800r/min）
Exhaust gas flow	16.1 m ³/min（1500r/min） 22.2 m ³/min（1800r/min）
Exhaust gas temp	600 °C
Max. permissible restrictions	3kPa initial
Intake system	6kPa initial
Exhaust system	8 kPa max
Max. permissible altitude	N/A
intercooler permissible restrictions	5 kPa

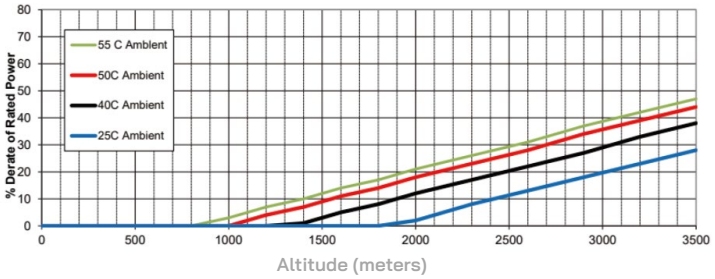
Power Derate

All data is based on the engine operating without air compressor,fan,generator, fan,optional equipment and driven components .

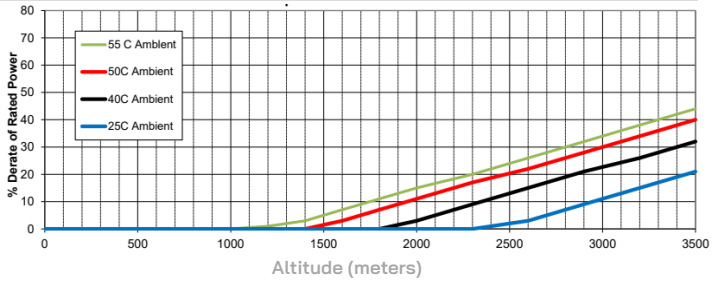
All data is based on the engine operating with 3.7 kPa inlet air restriction , 10 kPa exhaust restriction and with 13 kPa Inter-cooled implement differential pressure.

Curves shown above represent gross engine performance capabilities obtained and corrected in accordance with GB/T18297 of 99kPa baiometric press， 298K inlet air temperature， and 1kPa water vapor pressure .

1500rpm Altitude Derate Standby Power



1500rpm Altitude Derate Prime Power



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