

Model: AS220D6

Powered by AGG



Generator Specification

Service	PRP ⁽¹⁾	ESP ⁽²⁾
Power (kVA)	200	220
Power (kW)	160	176
Rated speed (r.p.m)	1800	
Standard voltage (V)	220/127V	
Rated at power factor(cos phi)	0.8	



AGG Power gensets are compliant with ISO 9001 and CE standard, which include the following directives:

- 2006/42/EC Machinery safety.
- 2006/95/EC Low voltage
- EN 60204-1: 2006+A1: 2009, EN ISO 12100: 2010, EN ISO 13849-1: 2008, EN 12601 : 2010

(1) PRP (Prime Power):

According to ISO8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.

(2) ESP (Standby Power):

According to ISO 8528-1, It is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year (of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. No overload capability is available.

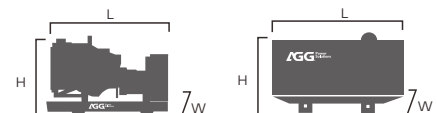
Powers Voltage (V)	ESP		PRP		Standby Amps
	KVA	KW	KVA	KW	
480/277	220	176	200	160	264.6
440/254	220	176	200	160	288.7
380/220	220	176	200	160	334.3
220/127	220	176	200	160	577.4

Performance Data

Model	AS220D6	
Engine brand	AGG	
Engine model	AS6500	
Speed control type	Electronic	
Phase	3	
Control system	Digital	
Starter motor voltage	24V	
Frequency	60HZ	
Engine speed (RPM)	1800	
Fuel Consumption (L/H)	100% standby power	48.4
	100% prime power	43.4
	75% prime power	32.0
	50% prime power	22.2

Standard reference Conditions

Note: Standard reference condition 25°C (77°F) air inlet temp, 100m(328ft) A.S.L 30% relative humidity. Fuel consumption dat with diesel fuel with specific gravity of 0.85 and conforming to BS 2869: 1998 , Class A2



Dimension and Weight

Dimension	Open	Silent
Length (L)	2400mm	3600mm
Width (W)	1025mm	1130mm
Height (H)	1535mm	1784mm
Net Weight	1270 KG	1752 KG
Fuel Tank (L)	280 L	200 L

Note: This parameters allows for some acceptable deviations.

■ Engine Specification - AS6500

Basic technical data	
No. of cyl / Arrangement	6L
Injection system	water-cooled , Turbo charged
Combustion type	Direct injection
Bore x stroke mm	105× 124mm
Displacement	6.5L
Compression ratio	16 : 1
Engine speed rpm	1800rpm
Firing order	1-5-3-6-2-4
Engine dry weight	Approx. 600kg
Dimensions	1330 x789x1079 mm

Cooling system	
Coolant capacity (engine only)	9.6 L
Lid Min. pressure	70 kPA
Water pump	Centrifugal type driven by belt
Water pump Capacity	155L/min
Max coolant temp in prime power	104°C
Max coolant temp in standby power	100°C
Thermostat	
-Wax – pellet type, Opening temp.	82 °C
-Full open temp.	95 °C
Cooling Fan	
-Type	Blower type, plastic
-Diameter and blades	660 mm / 10
Power consumption	6kw
Cooling air flow	4.5 m ³ /s

Electrical system	
Charging generator	28Vx55A
Voltage regulator	Built-in type IC regulator
Starting motor	24Vx6kW
Battery Voltage	24V
Battery Capacity	150 AH

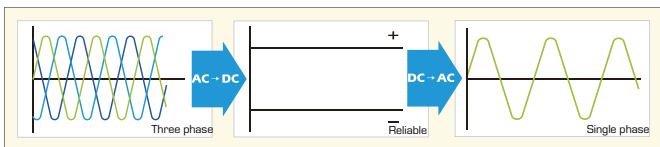
Fuel system	
Injection pump	Longkou in-line "P" type
Governor	RSV
Feed pump	Mechanical type
Injection nozzle	Multi hole type
Opening pressure	250 kg/cm ²
Fuel filter	Full flow, cartridge type
Used fuel	Diesel fuel oil

Lubrication system	
Lub. Method	-
Oil pump	Gear type driven by crankshaft
Oil filter	Full flow, cartridge type
Oil pan capacity	
-High level	17.5 L
-Low level	15 L
Angularity limit	
-Front down	25 deg.
-Front up	-
-Side to side	35 deg.

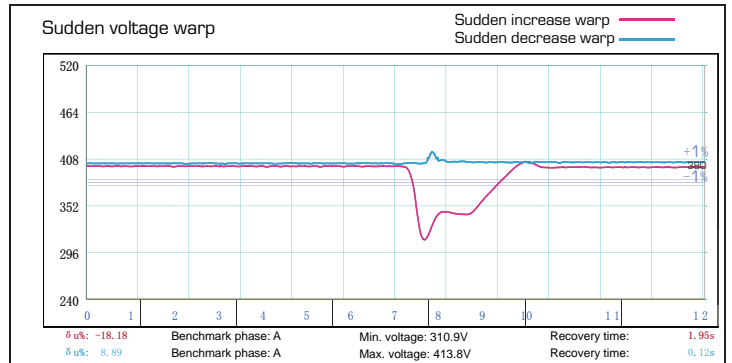
Engineering Data	
Heat rejection to coolant	18.1kcal/sec
Air flow	14.7m ³ /min
Exhaust gas flow	34.8m ³ /min
Exhaust gas temp.	600 °C
Max. permissible restrictions	3 kPa initial
Max. permissible altitude	2000m

■ Alternator Specification

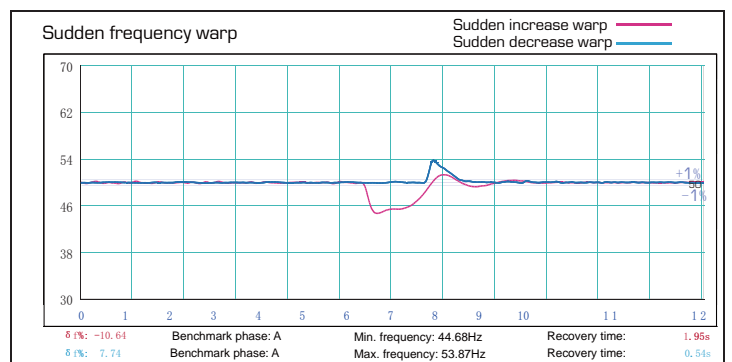
Alternator	
Number of phase	3
Power factor (Cos Phi)	0.8
Poles	4
Winding Connections (standard)	Star-serie
Terminals	12
Insulation type	H class
Winding Pitch	2/3
IP rating	IP23
Excitation system	Self-excited
Bearing	Single bearing
Coating	Vacuum impregnation
Voltage regulator	A.V.R
Couping	Flexible disc



Emergency voltage curve



Emergency frequency curve



■ Options

Engine	Alternator	Generator Sets	Fuel System
<ul style="list-style-type: none"> Water Jacket Pre-heater Fuel heater 	<ul style="list-style-type: none"> Winding Temp measuring Instrument Alternator Pre-heater PMG Anti-damp and anti-corrosion treatment Anti-condensation heater Winding and bearing RTD 	<ul style="list-style-type: none"> Tools with the machine Extended range fuel tank Bunded fuel tank 	<ul style="list-style-type: none"> Low fuel level alarm Automatic fuel feeding system Fuel T-valves
Canopy	Lub oil system	Cooling System	Control Panel
<ul style="list-style-type: none"> Rental type Canopy Trailer 	<ul style="list-style-type: none"> Oil Pre-heater Oil temp sensor 	<ul style="list-style-type: none"> Front heat protection 	<ul style="list-style-type: none"> Remote control panel ATS Synchronizing controller Adjustable earth leakage relay

■ Control Panel

Configuration

- Emergency stop button
- Protection MCB
- Battery charger
- Integrated aviation plug
- ATS connection
- Digital control module

Features

- 3 phase generator set monitoring
- Support of engines equipped with electronic control unit
- Comprehensive diagnostic message
- Automatic or manual start/stop of the gensets
- Push buttons for simple control, lamp test
- Graphic back-lit LCD display
- Parameters adjustable via keyboard or PC
- Mains measurements (50HZ/60HZ)
- Generator measurements (50HZ/60HZ)
- Comprehensive shutdown or warning on fault condition
- 3 phase Generator protections
 - Over-/under voltage
 - Over-/under frequency
 - Current/voltage asymmetry
 - Over current/overload
- 3 phase AMF function
 - Over-/under frequency
 - Over-/under voltage
 - Voltage asymmetry
- Configurable analog inputs
- Battery voltage, engine speed (pick-up) measurement
- Configurable programmable binary inputs and outputs
- Warm-up and cooling functions
- Generator C.B. and Mains C.B. control with feedback and return timer
- RS232 interface
- Modem communication support
- Hours counter
- Sealed to Ip65
- Event log

Benefits

- Less wiring and components
- Integrated solution
- Less engineering and programming
- User friendly set-up and button layout
- Module can be configured to suit individual applications
- PC software for simplified configuration
- Wide range of communication capabilities

Operation conditions

- Operation temp: -20 °C to + 70 °C
- Storage temp: -30 °C to + 80 °C
- Operating humidity: 95% w/o condensation
- Vibration : 5-25Hz, ±1.6 mm
5-100Hz, a=4g
- Shocks: a= 500m/s²

Options

- Ethernet interface (Remote monitoring and control)
- GSM modem/wireless internet (Remote monitoring and control)
- RS232-RS485 Dual port interface
- Synchronizing control panel
- Distribution board with sockets kit and power busbar
- Battery trickle charge ammeter
- Earth leakage protection
- Earth fault protection
- Low fuel level alarm
- Low fuel level shutdown
- High fuel level alarm
- Fuel transfer system control
- Low coolant level shutdown
- High lube oil temp shutdown
- Overload via alarm switch on breaker
- Engine coolant heater controls
- Control panel heater
- Speed adjust switch
- Oil temp displayed on LCD screen
- Additional 8 inputs and outputs