



Output Ratings

Generator set	Voltage	Hz	Phase	P.F.	Prime	Power	Standby	y Power
model	(V)				KVA	KW	KVA	KW
AP220	230/400	50	3	0.8	200	160	220	176
•220/380V 240/415V 254/440V is available								

'. 240/415V. 254/440V is avaliable

Dimension & weight

Generator set model	Туре	L*W*H(mm)	Weight(kg)
AP220	Open	2400*760*1600	1800
AF 220	Silent	3500*1120*1800	2550

Other datas

Circuit Breaker capacity (A)	400
Battery brand	Varta
Base Fuel Tank Capacity(L)	360

Notes:

• Standby power: Continuous running at variable load for duration of an emergency. No overload is permitted on these ratings. In accordance with ISO 3046.

• Prime power: Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period. In accordance with ISO 8528, ISO 3046.

•Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity.

Warranty

•The standard warranty period: One year after ex-work or 1000 operation hours whichever come first shall apply.

•Consumable parts(air filter, fuel filter, lube oil filter), All failures and damages due to the mal-operation, neglect of maintenance and operation not according to the operation manual, are out of the scope of warranty.

DIESEL GENERATOR DATA SHEET

Power By Perkins

Model:AP220



Standard Configuration

- Engine include air, fuel, oil filters, starting motor and charge alternator etc.
- Brushless AC alternator, single bearing, flange connection, w/AVR
- Radiator with engine driven fan mounted on skid
- Channel steel base frame, <550KW base 8hrs mounted fuel tank as standard
- · Anti-vibration pads between
- engine/alternator and base frame
- Circuit breaker 3P as standard, 4P optional
- Auto control panel
- Start battery w/ connecting cable and floating battery charger
- Flexbile pipe, exhaust elbow, industrial silencer etc.
- Standard tools kit
- Electric drawing, test report ,operation & maintaince manual of generator etc. •Optional soundproof/Container canopy, ATS cabinet, remote control panel, synchronization panel, movable trailers, heat exchanger, remote horizontal water tank system, external fuel tank, etc



Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.

GENERAL ENGINE DATA

Engine manufacture	Perkins Engines Comp	Perkins Engines Company Limited		
Engine brand	Perkins			
Engine model	1106A-70TAG4			
Engine speed (rpm)	1500			
	Prime power	Standby power		
Gross engine power (kWb)	179	196		
Typical Genset electrical output 0.8pf 25°C (100 kPa) (KW)	160	176		
Cylinders	6-cylinder, vertical in line			
Cycle	4 stroke			
Induction system	Turbocharged, air cha	Turbocharged, air charge cooled		
ICombustion system	Direcct injection			
Compression ratio	16.1:1			
Bore * Stroke (mm)	105*135			
Cubic capacity (Litre)	7.01	7.01		

FUEL SYSTEM

Injector		Mechanical
Fuel pump		DP210G
Fuel Consumption (litre/hour)		
	110%	49.4
	100%	45.8

COOLING SYSTEM

Total system capacity(litre)	21
Engine capacity(litre)	9.5
Max. top tank temperature (°C)	110
Thermostat operating range (°C)	82-93
Shutdown switch setting(°C)	118

LUBRICATION SYSTEM

Max. total system oil capacity(litre)	16.5
Min. oil capacity in sump(litre)	12.4
Max. oil capacity in sump(litre)	14.9
Oil temperature (in sump) normal continuous operation(°C)	125
Pressure at max. speed(kPa)	340
Oil consumption at full load(% of fuel)	<0.1

INDUCTION SYSTEM

Maximum air intake restriction of engine (kPa)	
Clean filter	5
Dirty filter	8
Combustion air flow(standby/prime power) (m ³ /min)	13.2/12.6

EXHAUST SYSTEM

Back pressure for total system (kPa)	15
Exhaust gas temp. after turbo(standby/prime power)(°C)	580
Exhaust gas flow (standby/prime power) (m ³ /min)	36.8/34.9

ELECTRICAL SYSTEM

Alternator voltage (volts)	12
Alternator output (amps)	85
Stater motor type (volts)	12
Starter motor power (kw)	4.2

ALTERNATOR

Alternator manufacturer	Cummins Generator Technologies(China) Co. Ltd	
Alternator brand	Stamford	
Alternator model	UCI274H	
Control system	SELF EXCITED	
A.V.R.	Included	
Voltage regulation	±1.0%	
Insulation system	Class H	
Protection	IP23	
Rated power factor	0.8	
Winding pitch	Two thirds	
Winding leads	12	
Frequency (Hz)	50	
Voltage (V)	400	
Phase	3	
Output ratings (kVA/kW)		
Cont.H-40°C	200/160	
Standby-27°C	220/176	
THF	<2%	
TIF	<50	
Max. overspeed (Rev/Min)	2250	
Bearing	Single	

CONTROL SYSTEM

Ai Power adopts ComAp AMF9 or Deepsea DSE6120 as the standard controller for single gen-set applications.. AMF25 or DSE7320 for option.







Deepsea DSE6120

Protection function:

- •Low oil Pressure
- •High water temperature
- •High voltage and low voltage
- •Over current
- •Over speed
- Emergency stop
- •Low fuel alarm and shutdown
- •Fail to start

Features

•Single-genset controller for stand-by and prime power applications

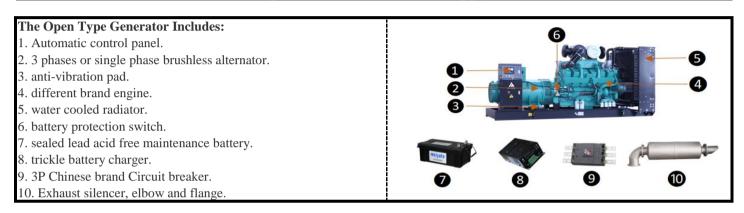
- •3 phase AMF function•3 phase generator protections
- over/under frequency, over/under voltage, over current
- •True RMS voltage measurement
- •True RMS current measurement
- •Event and performance log
 - Gen-set ext alarm, Engine hours history, ECU Text alarm,
- Test Run scheduler
- •Power Measurements
- •User interface
- •Inputs and outputs
- Configurable analogue/digital, binary
- •Direct communication with EFI engines
- •Engine Protections
- Oil pressure, Coolant temperature, Fuel level
- •Breaker control via fasica buttons
- •Fuel Pump control
- •Optional Active Calls(SMS alarm/event)
- •Miscellaneous features
- •Communication interface
- USB plug-in, Optional RS232, RS485, GSM
- •Multiple display languages
- •Start on low battery
- •Real-time clock
- •Zero power mode
- •LCD and LED alarm indication
- •Configuration Suite PC Software.
- •IP65 protection class
- •Remote monitoring

Open and Silent Generator

Ai Power silent generator is widely used in residential area which require quiet environment, its reasonable and elegant design not only reduce the noise to applicable to the environment protection, but also a good view on the road. Our 10kva to 650kva generator adopts normal silent canopy, from 650kva to 1500kva adopts 20ft container canopy, the higher power adopts 40HQ container canopy.



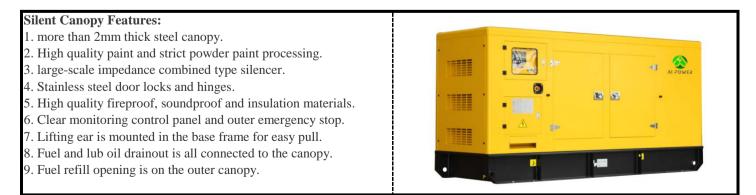
Open Generator Standard Supply



Silent Generator Standard Supply

Silent Generator Standard Supply: 1. AMF automatic control system 2. Fresh air inlet cooling system 3. Emerency stop 4. 3P Chinese brand Cricuit Breaker 5. Cable output placement 6. 8hrs strong base fuel tank 7. stainless steel hings 8. maintenance door

Silent Canopy Features



Xiamen AI Power Technology Co., Ltd. Tel: +86-592-6031835 | Email: sales@aipowergen.com | www.aipowergen.com