



# **Output Ratings**

Generator set	Voltage	Hz	Phase	P.F.	Prime	Power	Standb	y Power
model	(V)				KVA	KW	KVA	KW
AP110	127/220	60	3	0.8	100	80	110	88
•220/380V 254/440V 277/480V is available								

80V, 254/440V, 277/480V, is avaliable

### **Dimension & weight**

Generator set model	Туре	L*W*H(mm)	Weight(kg)
AP110	Open	1810*750*1400	1250
AFII0	Silent	2750*1100*1550	1550

### Other datas

Circuit Breaker capacity (A)	315
Battery brand	Varta
Base Fuel Tank Capacity(L)	215

### 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: AP110



# **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 Com	pany Limited	
Engine brand	Perkins		
Engine model	1104C-44TAG2		
Engine speed (rpm)	1800		
	Prime power	Standby power	
Gross engine power (kWb)	106.8	117.5	
Typical Genset electrical output 0.8pf 25°C (100 kPa) (KW)	92	101.2	
Cylinders	4-cylinder, vertical in line		
Cycle	4 stroke		
Induction system	Turbocharged, air-to-air charge cooled		
ICombustion system	Direcct injection		
Compression ratio	18.23:1		
Bore * Stroke (mm)	105*127		
Cubic capacity (Litre)	4.4		

# FUEL SYSTEM

Type of injection	1	direct
Governor type		electronic
Fuel Consumption	on (litre/hour)	
	110%	29.7
	100%	26.9
	75%	20.2
	50%	14.1

### **COOLING SYSTEM**

Total system capacity(litre)		
	with radiator	12.6
	without radiator	7
Max. top tank temperature (°C)		110
Thermostat operating range (°C)		82-93

# LUBRICATION SYSTEM

Max. total system oil capacity(litre)	8
Min. oil capacity in sump(litre)	5.5
Max. oil capacity in sump(litre)	7
Normal oil temperature(°C)	100
Oil temperature (in sump) normal continuous operation(°C)	125
Oil consumption at full load(% of fuel)	0.15

### **INDUCTION SYSTEM**

Maximum air intake restriction of engine (kPa)	
Clean filter	5
Dirty filter	8
Combustion air flow(standby/prime power) (m <sup>3</sup> /min)	7.8/7.75

### EXHAUST SYSTEM

Back pressure for total system (kPa)	18
Exhaust gas temp. after turbo(standby/prime power)(°C)	574/517
Exhaust gas flow (standby/prime power) (m <sup>3</sup> /min)	20.4/18.4

### ELECTRICAL SYSTEM

Туре	Negative ground
Alternator voltage (volts)	12
Stater motor type (volts)	12
Starter motor power (kw)	3

# ALTERNATOR

Alternator manufacturer	Cummins Generator Technologies(China) Co. Ltd	
Alternator brand	Stamford	
Alternator model	UCI274C	
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)	60	
Voltage (V)	220	
Phase	3	
Output ratings (kVA/kW)		
Cont.H-40°C	100/80	
Standby-27°C	110/88	
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

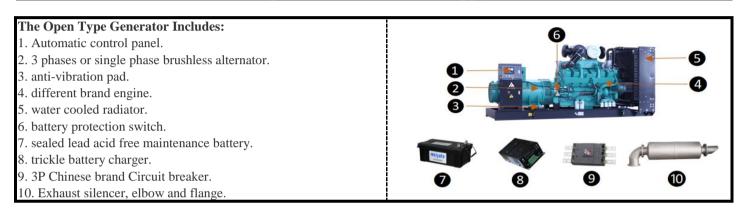
- •3 phase AMF function
- •3 phase generator protections
- over/under frequency, over/under voltage, over current
- •True RMS voltage measurement
- •True RMS current measurement
- •Event and performance log
  - Gen-set ext alarm, Engine hours history, ECU Text alarm,
- Test Run scheduler
- •Power Measurements
- •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.



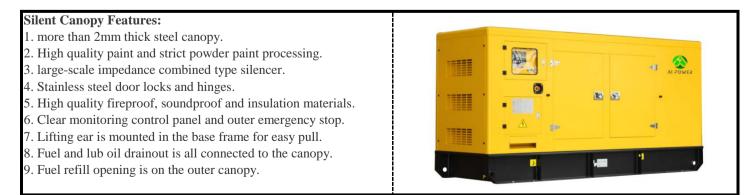
### **Open Generator Standard Supply**



### **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