







# DIESEL GENERATOR DATA SHEET

**Power By Perkins** 

Model: AP395



#### **Output Ratings**

Generator set	Voltage	Hz	Phase	P.F.	Prime	Power	Standb	y Power
model	(V)				KVA	KW	KVA	KW
AP395	220/127	60	3	0.8	356	285	395	316

<sup>•220/380</sup>V, 240/415V, 254/440V is avaliable

#### Dimension & weight

Generator set model	Туре	L*W*H(mm)	Weight(kg)
AP395	Open	2800*1010*1750	2200
AF 393	Silent	3600*1200*1900	2800

#### Other datas

Circuit Breaker capacity (A)	1250
Battery brand	Varta
Base Fuel Tank Capacity(L)	568

#### **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.

#### **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

# 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.



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

# Engine

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Engine manufacture	Perkins Engines Company Limited		
Engine brand	Perkins		
Engine model	1706A-E93TAG2		
Engine speed (rpm)	180	0	
	Prime power	Standby power	
Gross engine power (kWb)	358	393	
Typical Genset electrical output 0.8pf 25°C (100 kPa) (KW)	310	343	
Cylinders	6-cylinder, ver	tical in line	
Cycle	4 stroke		
Induction system	Turbocharged, air to air after cooled		
ICombustion system	Direcct injection		
Compression ratio	16.5:1		
Bore * Stroke (mm)	115*149		
Displacement	9.29		
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FUEL SYSTEM			
Injection system	Direct		
Governor type	electro	onic	
Fuel Consumption (litre/hour)	·	·	
Standby	82		
Prime	75	_	

#### **COOLING SYSTEM**

ElectropaK coolant capacity (with radiator)	35.8
Engine coolant capacity (without radiator)	20.3
Max. top tank temperature (°C)	107
Maximum static pressure head on pump	170kpa

39

## **LUBRICATION SYSTEM**

Maximum sump capacity (maximum dipstick mark).	30
Minimum sump capacity (minimum dipstick mark).	26
Maximum oil temperature (continuous operation).	110
Maximum oil temperature (intermittent operation)	115

# INDUCTION SYSTEM

Maximum air intake restriction of engine (kPa)	
Clean filter	4
Dirty filter	6.2
Combustion air flow(standby/prime power) (m <sup>3</sup> /min)	18.3/17

# EXHAUST SYSTEM

Exhaust outlet diameter	10
Minimum back pressure	2kpa
Maximum back pressure	10kpa

## **ELECTRICAL SYSTEM**

Alternator voltage (volts)	24
Alternator output (amps)	45
Stater motor type (volts)	24
Starter motor power (kw)	8

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75% output power 50% output power

## **ALTERNATOR**

Alternator manufacturer	Cummins Generator Technologies(China) Co. Ltd
Alternator brand	Stamford
Alternator model	S4L1D-D41
Control system	Self excited
A.V.R.	Included
Voltage regulation	±1%
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	360/288
Standby-27°C	395/316
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.



#### ComAP AMF9



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**

#### The Open Type Generator Includes:

- 1. Automatic control panel.
- 2. 3 phases or single phase brushless alternator.
- 3. anti-vibration pad.
- 4. different brand engine.
- 5. water cooled radiator.
- 6. battery protection switch.
- 7. sealed lead acid free maintenance battery.
- 8. trickle battery charger.
- 9. 3P Chinese brand Circuit breaker.
- 10. Exhaust silencer, elbow and flange.



# **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

## Silent Canopy Features:

- 1. more than 2mm thick steel canopy.
- 2. High quality paint and strict powder paint processing.
- 3. large-scale impedance combined type silencer.
- 4. Stainless steel door locks and hinges.
- 5. High quality fireproof, soundproof and insulation materials.
- 6. Clear monitoring control panel and outer emergency stop.
- 7. Lifting ear is mounted in the base frame for easy pull.
- 8. Fuel and lub oil drainout is all connected to the canopy.
- 9. Fuel refill opening is on the outer canopy.



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