







# DIESEL GENERATOR DATA SHEET

## **Power By Cummins**

Model: AC600



## **Output Ratings**

| Generator set | Voltage | Hz | Phase | P.F. | Prime | Power | Standb | y Power |
|---------------|---------|----|-------|------|-------|-------|--------|---------|
| model         | (V)     |    |       |      | KVA   | KW    | KVA    | KW      |
| AC600         | 127/220 | 60 | 3     | 0.8  | 550   | 440   | 600    | 480     |

<sup>•220/380</sup>V,254/440V, 277/480V is avaliable

# **Dimension & weight**

| Generator set model | Type   | L*W*H(mm)      | Weight(kg) |
|---------------------|--------|----------------|------------|
| AC600               | Open   | 3100*1400*2100 | 3500       |
|                     | Silent | 3900*1700*2200 | 4300       |

## Other datas

| Circuit Breaker capacity(A) | 1600  |
|-----------------------------|-------|
| Battery Brand               | Varta |
| Base Fuel Tank Capacity(L)  | 968   |

#### **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 ISO8528, ISO3046.
- •Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity.

## Standard Features

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|--------------------------|---------|--------|------------|
| <ul><li>Engine</li></ul> | include | one si | et tilters |
| Linginic                 | merade  | OHC 5  | ct IIItcIS |

- •Brushless Alternator with AVR
- •Radiator with engine driven fan
- •Auto control system with LCD show
- •3P circuit breaker
- Battery charger and Start battery
- •Industrial silencer
- Anti-vibration pads
- •8hrs bottom fuel tank≤650KVA
- Standard tools kits
- •User manual & Wiring diagrams
- Standard tools kits

#### **Options**

- •Silent canopy (powder coated)
- •ATS
- •Remote Control panel
- •Synchronization system
- •Mobile trailer
- •Engine heater (water/oil)
- •Fuel and water seperator
- •Alternator space heater
- •PMG
- •ABB or 4P circuit breaker
- •Exernal fuel tank
- •Double wall base fuel tank
- •Residential exhaust silencer

#### 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

| CENEDAL | TORIGOTATES |  |
|---------|-------------|--|
|         |             |  |

| Engine manufacturer     | Dongfeng Cummins Engine Co. Ltd    |
|-------------------------|------------------------------------|
| Engine brand            | Cummins                            |
| Engine model            | QSZ13-G11                          |
| Engine speed (rpm)      | 1800                               |
| Engine output(kWm)      |                                    |
| Standby Power           | 562                                |
| Prime Power             | 512                                |
| Continuous Power        | N/A                                |
| No. of Cylinder         | 6                                  |
| Aspiration              | Turbocharged and Charge Air Cooled |
| Bore * Stroke (mm)      | 130*163                            |
| Displacment (litre)     | 13                                 |
| Compression Ratio       | 17:01                              |
| Engine Idle Speed (rpm) | 700                                |

## **FUEL SYSTEM**

| Type Injection System         |                  | HPCR |
|-------------------------------|------------------|------|
| Fuel Consumption (litre/hour) |                  |      |
|                               | 100% prime power | 121  |
|                               | 75% prime power  | 91   |
|                               | 50% prime power  | 61   |
|                               | 25% prime power  | 34   |

## **EXHAUST SYSTEM**

| Maximum Back Pressure (kPa)                        | 13        |
|--|-----------|
| Exhaust Gas Temperature (standby/prime power) (°C) | 544/499   |
| Exhaust Gas Flow(standby/prime power) (L/sec)      | 1838/1723 |

# AIR INDUCTION SYSTEM

| Maximum Intake Air Restriction (kPa)          |                           |         |
|---|---------------------------|---------|
|   | with Dirty Filter Element | 6.2     |
|   | with Clean Filter Element | 3.7     |
| Intake Air Flow (standby/prime power) (L/sec) |                           | 615/600 |

# **LUBRICATION SYSTEM**

| Oil Pressure (kPa)           |         |
|------------------------------|---------|
| Idle Speed                   | 83      |
| Governed Speed               | 207-286 |
| Maximum oil temperature (°C) | 125     |
| Total system capacity (L)    | 78      |

# COOLING SYSTEM

| Coolant Capacity — Engine Only (liter)            | 23.1    |
|---|---------|
| Standard Thermostat Modulating Range (°C)         | 82-94   |
| Maxi. Top Tank Temp. for Standby/Prime Power (°C) | 102/102 |

# **ELECTRICAL SYSTEM**

| Cranking Motor (Heavy Duty, Positive Engagement) (volt) | 24       |
|---|----------|
| Engine only cold cranking amperes                       | 1250 CCA |
| Max Current Draw of the System (Amp)                    | 2000     |

## ALTERNATOR

| Alternator manufacturer  | Cummins Generator Technologies(China) Co. Ltd |
|--------------------------|---|
| Alternator brand         | Stamford                                      |
| Alternator model         | S5L1S-C                                       |
| 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              | 550/440                                       |
| Standby-27°C             | 600/480                                       |
| 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

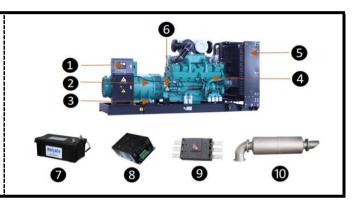
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# **Open Generator Standard Supply**

#### 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.



#### Xiamen Ai Power Technology Co., Ltd.