



## **Output Ratings**

Ge	enerator set	Voltage	Hz	Phase	P.F.	Prime	Power	Standby	y Power
	model	(V)				KVA	KW	KVA	KW
	AC55	230/400	50	3	0.8	50	40	55	44
•220/380V 240/415V 254/440V is available									

,240/415V,254/440V is available

#### **Dimension & weight**

Generator set model	Туре	L*W*H(mm)	Weight(kg)	
AC55	Open	1700*730*1285	770	
AC55	Silent	2350*1000*1550	1200	

#### **Other datas**

Circuit Breaker capacity(A)	100
Battery Brand	Varta
Base Fuel Tank Capacity(L)	103.2

#### 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 Cummins**

# Model:AC55



## **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.

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

## GENERAL ENGINE DATA

Engine manufacturer	Dongfeng Cummins Engine Co. Ltd		
Engine brand	Cummins		
Engine model	4BTA3.9-G2		
Engine speed (rpm)	1500		
Engine output(kWm)			
Standby Power	55		
Prime Power	50		
Continuous Power	TBD		
No. of Cylinder	4		
Aspiration	Turbochanger& Aftercooler		
Borer * Stroke (mm)	102 * 120		
Displacment (litre)	3.9		
Compression Ratio	17.3:1		
Engine Idle Speed (rpm)	950-1050		

## FUEL SYSTEM

Type Injection System		BYC A/Electronic Governor		
Fuel Consumption (litre/hour)				
	100% prime power	12.9		
	75% prime power	10		
	50% prime power	7		
	25% prime power	4.2		

#### EXHAUST SYSTEM

Maximum Back Pressure (kPa)	10
Exhaust Gas Temperature (standby/prime power) (°C)	548/526
Exhaust Gas Flow(standby/prime power) (litre/sec.)	134/125

## 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) (litre/sec.)		52/49

## LUBRICATION SYSTEM

Oil Pressure (kPa)		
	Idle Speed	207
	Governed Speed	345
Maximum Oil Temperature (°C)		121
Min. required Lube system capacity-sump plus filters (liter)		10.9

## COOLING SYSTEM

Coolant Capacity — Engine Only (liter)	8.3
Standard Thermostat Modulating Range (°C)	83-95
Maxi. Top Tank Temp. for Standby/Prime Power (°C)	104 / 100

#### **ELECTRICAL SYSTEM**

Cranking Motor (Heavy Duty, Positive Engagement) (volt)	12	24
Battery Charging System, Negative Ground (ampere)	63	40
Minimum Recommended Battery Capacity		
Cold Soak @ -18 to 0-C (0°F CCA)	625	312

## Xiamen AI Power Technology Co., Ltd.

## ALTERNATOR

Alternator manufacturer	Cummins Generator Technologies(China) Co. Ltd		
Alternator brand	Stamford		
Alternator model	UCI224D		
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	50/40		
Standby-27°C	55/44		
THF	<2%		
TIF	<50		
Max. overspeed (Rev/Min)	2250		
Bearing	Single		

# CONTROL SYSTEM



The **DEEPSEA DSE 6120** is an Auto Mains (Utility) Failure Control Module developed to provide a wide range of operating and monitoring features for single diesel and gas gen-sets.

DSE7320, ComAp AMF25 etc. for option.

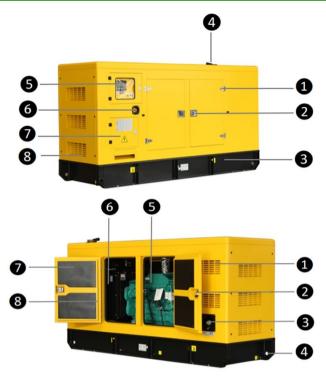
#### **Protection function:**

- •Low oil Pressure
- •High water temperature
- •High voltage and low voltage
- •Over current
- •Overspeed
- •Volt adjuster and frequency adjuster.
- •Emergency stop
- •Low fuel alarm and shutdown
- •Low coolant alarm and shutdown

## **Key Functions:**

- Multiple display languages
- Data logging facility
- Fully configurable via PC using USB communication
- Front panel configuration
- 3 phase generator sensing
- 3 phase mains (utility) sensing
- Generator/load power monitoring (kW, kV A, kV Ar, pf)
- Accumulated power monitoring (kW h, kVA h, kVAr h)
- · Generator/load current monitoring and protection
- Generator overload protection (kW)
- Breaker control via fascia buttons
- Fuel and start outputs, configurable when using CAN
- 4 configurable DC outputs
- 4 configurable analogue/digital inputs
- Support for 0 to10 V & 4 to 20 mA oil pressure sensors
- 6 configurable digital inputs
- Configurable staged loading outputs
- CAN, MPU and alternator speed sensing in one variant
- 3 engine maintenance alarms
- Engine hours counter
- Engine pre-heat
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel pump control
- Battery voltage monitoring
- Start on low battery voltage
- Configurable remote start input
- 1 alternative configuration
- Comprehensive warning, electrical trip or shutdown protection.
- LCD and LED alarm indication

## **SILENT CANOPY**



- Durable stainless steel hinges
   Durable stainless steel hinges
   Strong base fuel tank
   High performance exhaust silencer
   Deepsea control system
   Emergency stop
   High quality 3P Circuit breaker and terminal output
- 8 Fresh air inlet cooling system
- ①air inlet cooling system
  ②stainless door lock
  ③fuel cap lock
  ④tow holes
  ⑤engine
  ⑥radiator
  ⑦insluation and soundproof materials
  ⑧maintenance door

#### **Performance Features:**

- More than 2mm thick steel to make the canopy.
- High quality paint materials and strict powder paint processing.
- large-scale impedance combined type silencer effectively reduce noise of the generator.
- Stainless steel door locks and hinges and 180° revolvable and disassemble door for easy maintenance.
- High quality soundproof and insulation materials could efficiently reduce noise.
- Transparent viewing window make the control panel clear at a glance.
- Lifting earis mounted in the base frame for easy pull.
- From 10kva to 700kva we use normal silent canopy, more than 700kva we are using containerized canopy.
- ISO standard 20', 40' and 40HQ sea container canopy for options.
- Standard sea container canopy is easier for shipping.

## AI POWER COMPANY SHOW

