



#### **Output Ratings**

Generator set	Voltage	Hz	Phase	P.F.	Prime	Power	Standby	y Power
model	(V)				KVA	KW	KVA	KW
AYC50	400/230	50	3	0.8	45	36	50	40
•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)
AYC50	Open	1750*780*1280	950
	Silent	2400*1060*1750	1650

#### **Other datas**

Circuit Breaker capacity(A)	100
Battery Brand	Varta
Base Fuel Tank Capacity(L)	85.6

#### 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 Yuchai**

Model: AYC50



# **Standard Configuration**

• Engine include air, fuel, oil filters,

- starting motor and charge alternator etc.
- Brushless AC alternator, single bearing,
  - flange connection, with 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 with 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.

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# GENERAL ENGINE DATA

Engine manufacture		Guangxi Yuchai Machinery Co., Ltd.		
Engine brand		YUCHAI		
Engine model		YC4D60-D21		
Engine speed (rpm)		1500		
Engine output(kWm)				
Stan	dby Power	44		
Prin	ne Power	40		
Engine Type		4-Cycle, In-line, 4-Cylinder Diesel, water cooled		
Induction system		Natural aspirated		
Bore x Stroke (mm)		108*115		
Type of combustion c	chamber	Direct-injection reentrant $\omega$ combustion chamber		
Number of valve per cylinder.		2		
Displacment (litre)		4.21L		
Compression Ratio		17.5:1		
Cylinder type		Wet-type cylinder sleeve		
Working sequence		1-3-4-2		
Lubrication mode		Combination of pressure and splashing		
Starting mode		Electronic		
Engine oil capacity		11L (dry-type engine)		
Engine oil and fuel co	onsumption ratio	≤0.1%		
Rotation		Anticlockwise (facing the power delivery end)		
Minimum no-load speed		(700~750)r/min		
Speed-regulation grade		ISO 8528 G3		
Electrical device		12V/24V electrical system		
Flywheel and flywheel housing		SAE 11.5″ flywheel		
Total dry weight				
Engine		370kg		
Radiator		60kg		

#### FUEL SYSTEM

fuel pump syster	n	Mechanical pump + electronic governor
Governor		Electronic
Fuel Consumption	on (litre/hour)	
	standby power	12.3
	prime power	10.9
	75% power	8.2
	50% power	5.9

# ALTERNATOR

Alternator manufacturer	Fujian Kwise Generator Co., Ltd.		
Alternator brand	Kwise		
Alternator model	S224G40B3		
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	<5%		
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:**

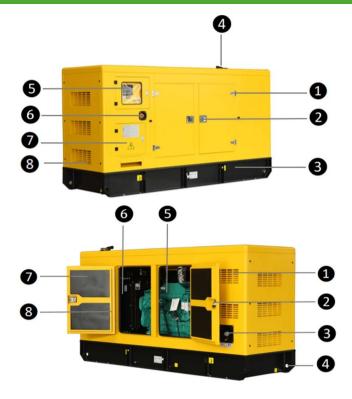
- •Low oil Pressure
- •High water temperature
- •High voltage and low voltage
- •Over current
- •Overspeed
- •Volt adjuster and frequency adjuster.
- •Emergency stop
- •Low fuel alarm and shutdown
- •Low coolant alarm and shutdown

## **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

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# **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
   Fresh air inlet cooling system
- 1 air inlet cooling system
  2 stainless door lock
  3 fuel cap lock
  4 tow holes
  5 engine
  6 radiator
  7 insluation and soundproof materials
  8 maintenance 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



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