



## DIESEL GENERATOR DATA SHEET

Power By Yuchai

Model: AYC138



### Output Ratings

Generator set model	Voltage	Hz	Phase	P.F.	Prime Power		Standby Power	
	(V)				KVA	KW	KVA	KW
AYC138	400/230	50	3	0.8	125	100	138	110

•220/380V, 240/415V, 254/440V is available

### Dimension & weight

Generator set model	Type	L*W*H(mm)	Weight(kg)
AYC138	Open	2300*850*1600	1800
	Silent	2950*1100*1900	2650

### Other datas

Circuit Breaker capacity(A)	225
Battery Brand	Varta
Base Fuel Tank Capacity(L)	228

### 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.

### 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
- Flexible 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.**

Add: No.12 East Haijing Road, Xiamen Area of Pilot Free Trade Zone of China.

Tel: +86-592-6031835 | Email: sales@aipowergen.com | www.aipowergen.com

## Engine

### GENERAL ENGINE DATA

Engine manufacture		Guangxi Yuchai Machinery Co., Ltd.
Engine brand		YUCHAI
Engine model		YC6B180L-D20
Engine speed (rpm)		1500
Engine output(kWm)		
	Standby Power	132
	Prime Power	120
Engine Type		4-Cycle, In-line, 6-Cylinder Diesel, water cooled
Induction system		Turbocharged & Intercooled
Bore x Stroke (mm)		108*125
Type of combustion chamber		Direct-injection reentrant $\omega$ combustion chamber
Number of valve per cylinder.		2
Displacement (litre)		6.817L
Compression Ratio		17.5:1
Cylinder type		Wet-type cylinder sleeve
Working sequence		1-5-3-6-2-4
Lubrication mode		Combination of pressure and splashing
Starting mode		Electronic
Engine oil capacity		20L (dry-type engine)
Engine oil and fuel consumption ratio		$\leq 0.1\%$
Rotation		Anticlockwise (facing the power delivery end)
Minimum no-load speed		(650~700 )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		700kg
Radiator		75kg

### FUEL SYSTEM

fuel pump system		Mechanical pump + electronic governor
Governor		Electronic
Fuel Consumption (litre/hour)		
	standby power	31.8
	prime power	28.5
	75% power	21.9
	50% power	15.2

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

Add: No.12 East Haijing Road, Xiamen Area of Pilot Free Trade Zone of China.

Tel: +86-592-6031835 | Email: sales@aipowergen.com | www.aipowergen.com

## ALTERNATOR

Alternator manufacturer	Fujian Kwise Generator Co., Ltd.
Alternator brand	Kwise
Alternator model	S274G100B3
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	125/100
-----Standby-27°C	143/114
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 to 10 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

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

Add: No.12 East Haijing Road, Xiamen Area of Pilot Free Trade Zone of China.

Tel: +86-592-6031835 | Email: sales@aipowergen.com | www.aipowergen.com

## SILENT CANOPY



- ① Durable stainless steel hinges
- ② Durable stainless steel hinges
- ③ Strong base fuel tank
- ④ High performance exhaust silencer
- ⑤ Deepsea control system
- ⑥ Emergency stop
- ⑦ High quality 3P Circuit breaker and terminal output
- ⑧ 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 insulation 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



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

Add: No.12 East Haijing Road, Xiamen Area of Pilot Free Trade Zone of China.

Tel: +86-592-6031835 | Email: [sales@aipowergen.com](mailto:sales@aipowergen.com) | [www.aipowergen.com](http://www.aipowergen.com)