



DIESEL GENERATOR DATA SHEET

Power By Yuchai

Model: AYC1856



Output Ratings

Generator set model	Voltage	Hz	Phase	P.F.	Prime Power		Standby Power	
	(V)				KVA	KW	KVA	KW
AYC1856	400/230	50	3	0.8	1688	1350	1856	1485

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

Dimension & weight

Generator set model	Type	L*W*H(mm)	Weight(kg)
AYC1856	Open	5900*2600*2900	14000
	Silent	12192*2438*2896	23000

Other datas

Circuit Breaker capacity(A)	3200
Battery Brand	Varta
Daily Fuel Tank Capacity(L)	3232

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
- 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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Engine

GENERAL ENGINE DATA

Engine manufacture		Guangxi Yuchai Machinery Co., Ltd.	
Engine brand		YUCHAI	
Engine model		YC12VC2270L-D20	
Engine speed (rpm)		1500	
Engine output(kWm)			
	Standby Power	1670	
	Prime Power	1520	
Engine Type		4-Cycle, 12V-Cylinder Diesel, water cooled	
Induction system		Turbocharged & intercooled	
Bore x Stroke (mm)		200*210	
Type of combustion chamber		Direct-injection reentrant ω combustion chamber	
Number of valve per cylinder.		4	
Displacment (litre)		79.17L	
Compression Ratio		13.5:1	
Cylinder type		Wet-type cylinder sleeve	
Working sequence		left1—right6-left5—right2-left3—right4-left6—right1-left2—right5-left4-right3	
Lubrication mode		Combination of pressure and splashing	
Starting mode		Electronic	
Engine oil capacity		280L (dry-type engine)	
Engine oil and fuel consumption ratio		≤0.15g/（kW·h）	
Rotation		Anticlockwise (facing the power delivery end)	
Minimum no-load speed		(600～650)r/min	
Speed-regulation grade		ISO 8528 G3	
Speed recovery time		≤3s	
Electrical device		24V electrical system	
Max. intake air restriction		5kPa	
Total dry weight			
Engine		8380kg	
max.allowable exhaust back pressure		10kPa	

FUEL SYSTEM

fuel pump system	Mechanical pump + electronic governor		
Governor	Electronic		
Fuel Consumption (litre/hour)			
	standby power	410	
	prime power	404.5	
	75% power	300	
	50% power	200	

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ALTERNATOR

Alternator manufacturer	Fujian Kwise Generator Co., Ltd.
Alternator brand	Kwise
Alternator model	S454G1350C3
Control system	PMG
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	6
Frequency (Hz)	50
Voltage (V)	400
Phase	3
Output ratings (kVA/kW)	
-----Cont.H-40°C	1688/1350
-----Standby-27°C	1931/1544
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:

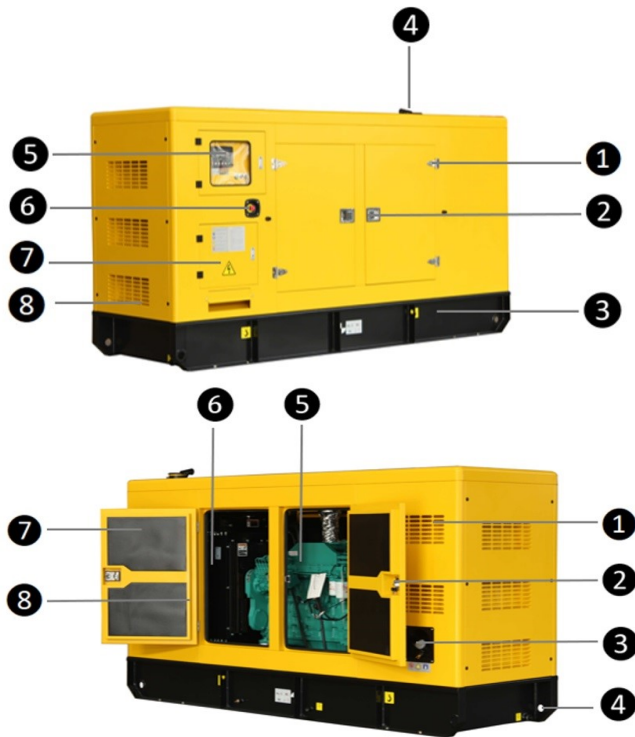
- Multiple display languages
- Data logging facility
- Fully configurable via PC using USB communication
- Front panel configuration
- 3 phase generator sensing
- 3 phase mains (utility) sensing
- Generator/load power monitoring (kW, kV A, kV Ar, pf)
- Accumulated power monitoring (kW h, kVA h, kVAr 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

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SILENT CANOPY



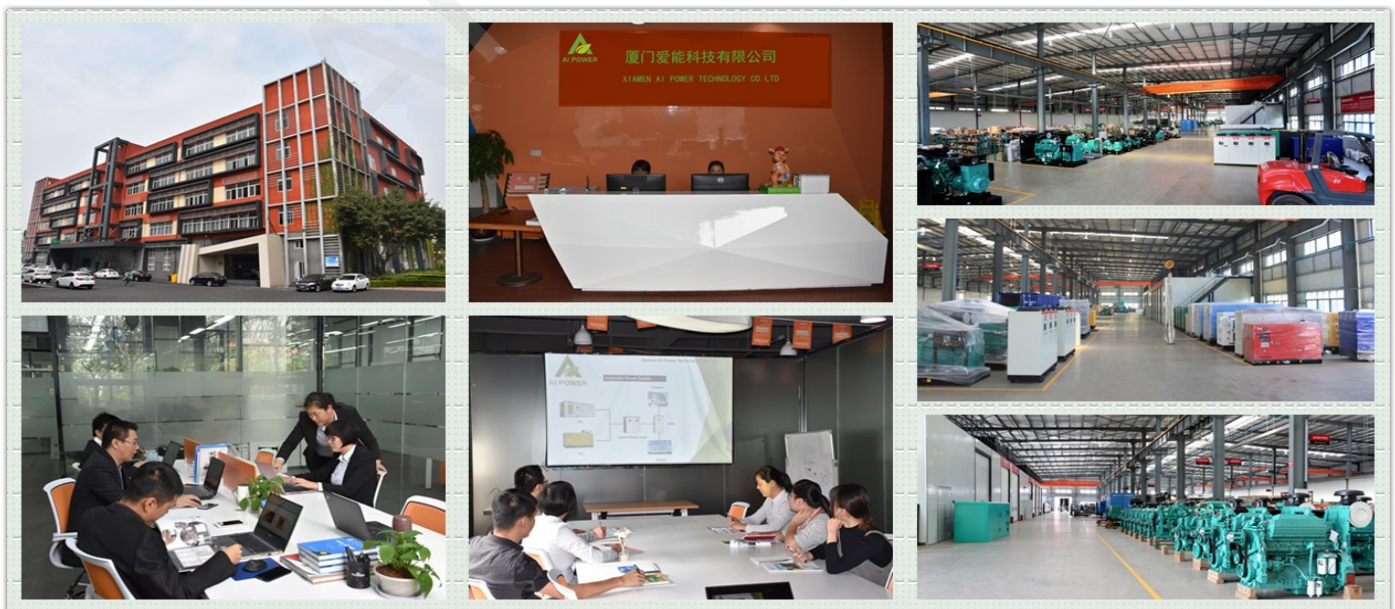
- ① Durable stainless steel hinges
- ② Durable stainless steel hinges
- ③ Strong base fuel tank
- ④ High performance exhaust silencer
- ⑤ Deepsea control system
- ⑥ Emergency stop
- ⑦ High quality 3P Circuit breaker and terminal output
- ⑧ Fresh air inlet cooling system

- 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



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