



# DIESEL GENERATOR DATA SHEET

**Power By SDEC** 

Model: ASC138



#### **Output Ratings**

Generator set	Voltage	Hz	Phase	P.F.	Prime	Power	Standb	y Power
model	(V)				KVA	KW	KVA	KW
ASC138	400/230	50	3	0.8	125	100	138	110

<sup>•220/380</sup>V,240/415V,254/440V is avaliable

### Dimension & weight

Generator set model	Туре	L*W*H(mm)	Weight(kg)
ASC138	Open	1950*750*1400	1300
ASC136			

#### Other datas

Circuit Breaker capacity(A)	225
Battery Brand	Varta
Base Fuel Tank Capacity(L)	184

#### **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, 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.

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# Engine

#### GENERAL ENGINE DATA

Engine manufactur	e	Shanghai Diesel Engine Co., Ltd. (SDEC)
Engine brand		SDEC
Engine model		4HTAA4.3-G21
Engine speed (rpm		1500
Engine output(kWi	m)	
St	andby Power	105
Pı	rime Power	95
Engine Type		4-Cycle, In-line, 4-Cylinder Diesel, water cooled, Turbo charged
Bore x Stroke (mm		105*124
Displacment (litre)		4.3L
Compression Ratio		16:1

#### **FUEL SYSTEM**

Injection pump		Longkou in-line "P" type
Governor		RSV
Fuel Consumption (	litre/hour)	
	25% load	6.5
	50% load	11.8
	75% load	17.1
	100% load	23

#### **MECHANISM**

Туре	Over head valve
Number of valve	Intake 2, exhaust 2 per cylinder
Valve lashes at cold	Intake 0.25mm, Exhaust 0.50mm

# **ENGINEERING DATA**

Heat rejection to coolant	9.6kcal/sec
Air flow	6.8m3/min
Exhaust gas flow	16.1m3/min
Exhaust gas temp.	600

# **COOLING SYSTEM**

Cooling method	Fresh water forced circulation
Coolant capacity	6.8L
Water Temperature	
Maximum for standby and Prime (°C)	100/104
Before start of full load (°C)	40
Thermostat Type	Wax–pellet type

#### **LUBRICATION SYSTEM**

Lub. Method	Fully forced pressure feed type	
Oil pan capacity	Max. 13 liters, Min. 11 liters	
Oil pump	Gear type driven by crankshaft	
Oil filter	Full flow, cartridge type	
Lub. Oil	Refer to Operation Manual	

# **ELECTRICAL SYSTE**

Battery Charging Alternator	24V×55A alternator
Starting motor	24V×4.5kW
Battery Voltage	24V
Battery Capacity	120 Ah (recommended)

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#### **ALTERNATOR**

Alternator manufacturer	Fujian Kwise Generator Co., Ltd.
Alternator brand	Kwise
Alternator model	S274G100B3
Control system	SELF EXCITED
A.V.R.	Included
Voltage regulation	$\pm 1.0\%$
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	138/110
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.

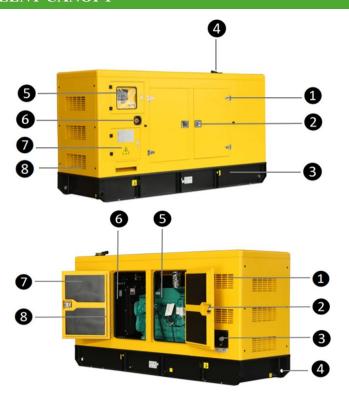
#### **Protection function:**

- •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

# **SILENT CANOPY**



- 1 Durable stainless steel hinges
- 2Durable 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
- 2stainless 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

