



# DIESEL GENERATOR DATA SHEET

**Power By SDEC** 

Model: ASC110



• Engine include air, fuel, oil filters, starting

• Brushless AC alternator, single bearing,

• Radiator with engine driven fan mounted

**Standard Configuration** 

motor and charge alternator etc.

flange connection, w/AVR

 Anti-vibration pads between engine/alternator and base frame • Circuit breaker 3P as standard, 4P

on skid

optional

## Output Ratings

| Generator set | Voltage | Hz | Phase | P.F. | Prime | Power | Standb | y Power |
|---------------|---------|----|-------|------|-------|-------|--------|---------|
| model         | (V)     |    |       |      | KVA   | KW    | KVA    | KW      |
| ASC110        | 400/230 | 50 | 3     | 0.8  | 100   | 80    | 110    | 88      |

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

## Dimension & weight

| Generator set model | Туре | L*W*H(mm)     | Weight(kg) |
|---------------------|------|---------------|------------|
| ASC110              | Open | 1900*750*1300 | 1150       |
| ASCIIU              |      |               |            |

#### Other datas

| Circuit Breaker capacity(A) | 160   |
|-----------------------------|-------|
| 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.

## • Channel steel base frame, <550KW base 8hrs mounted fuel tank as standard

| model  | Type | L*W*H(mm)     | Weight(kg) |  |
|--------|------|---------------|------------|--|
| ASC110 | Open | 1900*750*1300 | 1150       |  |
| ASCIIU |      |               |            |  |

## silencer etc. • Standard tools kit

• Auto control panel

floating battery charger

• Electric drawing, test report ,operation & maintaince manual of generator etc.

• Start battery w/ connecting cable and

• Flexbile pipe, exhaust elbow, industrial

•Optional soundproof/Container canopy, ATS cabinet, remote control panel, synchronization panel, movable trailers, heat exchanger, remote horizontal water tank system, external fuel tank, etc

## 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.



Manufacturer reserves the right to make changes in model, technical specifications, color, equipment and accessories without prior notice.

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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(kW    | m)          |                                                                  |
| St                  | andby Power | 105                                                              |
| P                   | 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         | S274G80B1                        |
| 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              | 100/80                           |
| Standby-27°C             | 110/88                           |
| 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.

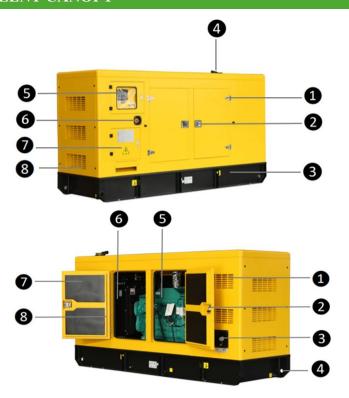
#### **Protection function:**

- •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

