

Generating Set

TECHNICAL DATA SHEET

AOC550

| Prime Power* | Standby Power** | Voltage/Ph | Hz/rpm*** | PF |
|----------------|-----------------|------------|-----------|-----|
| 500kVA/400 kWe | 550kVA/440 kWe | 400/3Ph | 50/1500 | 0.8 |

Prime power*

Unlimited hours usage with an average load factor of 80% of the published Prime power over each 24 hours period. A 10% overload is available for 1 hour in every 12 hours operation.

Standby power**

Limited to 500 hours annual usage with an average load factor of 80% of the published Standby power rating over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on Standby power. Available in 60HZ for all voltage ratings.***

Standard Reference Conditions

Note: Standard reference conditions 40°C (104°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity.

| Diesel Generator Set | |
|----------------------------------|--|
| Engine Make /Model | Cummins QSX15-G8 |
| Alternator Make /Model | Stamford HCI544D/S5L1D-C4 |
| Control Panel | DSE 6120 |
| Base Frame / Silent Canopy | Robust Structure/ Corrosion Resistant |
| Circuit Breaker Type | 3 Pole MCCB (4P Available as optional) |
| Built in Base Fuel Tank Capacity | 1225L |
| Battery | Maintenance free Lead Acid |

| Dimensions | Length (mm) | Width (mm) | Height (mm) | Weight (KG) |
|------------|-------------|------------|-------------|-------------|
| Close Type | 5205 | 1824 | 2805 | 5300 |
| Open Type | 3505 | 1500 | 2133 | 4350 |

LUBRICATION SYSTEM

Oil Filter Type

Oil Type

AIR SYTEM

Total Oil Capacity

| ENGINE SPECIFICATIONS | | |
|-----------------------------|------------------------------|--|
| Engine Make Model | Cummins QSX15-G8 | |
| No. of Cylinders | 6 vertical in-line | |
| Cycle | 4 Stroke | |
| Aspiration | Turbocharged | |
| Cooling Method | Water cooled | |
| Governing Type | Electronic | |
| Governing Class | G2 - ISO 8528 Part 1 | |
| Compression Ratio | 17.0 : 1.0 | |
| Displacement | 15.0 L / 912 in ³ | |
| Bore/Stroke | (137/169) / (5.39/6.65) | |
| Dynamic Charging Alternator | 24V, Starter Motor | |

| Air Filter type | Dry Element |
|---------------------------|-------------|
| Combustion Air Flow (PRP) | 32.4m³/min |
| Combustion Air Flow (PRP) | 35.7m³/min |
| Raditor Air Flow | 708m³/min |
| | |
| EXHAUST SYTEM | |

Spin-On Full Flow

API-CH-4 or ACEA E5

911

| COOLING SYSTEM | |
|------------------------------|------------------------|
| Total Coolant Capacity (L) | 24L |
| Water Pump Type | Centrifugal eng-driven |
| Radiator Fan Load | 16kW |
| Heat Radiation to Room (PRP) | 40kW |
| Heat Radiation to Room (ESP) | 44kW |

| EXHAUST SYTEM | |
|-----------------------------------|------------------|
| Muffler type | Industrial Grade |
| Max. Back Pressure | 10.13kPa |
| Exhaust Gas Flow (PRP/ESP) | 81.0/91.8m³/min |
| Exhaust Gas Temperature (PRP/ESP) | 488/51 |

Comply with Standards

ISO 3046, BS 5514, DIN 6271, NEMA-MGI, DIN EN, BS 5000, IEC 60034,IEC 60947-2

Powered By:









Silent / Closed Type

Image for illustration purposes only.

1. Features & Benefits:

- AQ Power Gen set is powered by Cummins Engine, the world leader having over 85 years of innovation and excellence, with customers support in 182 countries from 3500 outlets.
- AQ Power Gen set is powered by Alternator, the Global number 1 in Alternators, with over 99 years of Experience, Having 120+ active patents, in over 40 countries and over 80 service centers.
- AQP Gen set is equipped with DSE controller, one of the world's top manufacturers in UK, having over 40 years of excellence, the most advanced and user friendly controller
- Low fuel consumption, saving on fuel spend
- Compact and rugged design, saving on transport and storage cost
- Designed to occupy less space considering critical applications and cities where space is at a premium.
- Low noise and vibration, considering critical applications where noise level matters
- Easy maintenance and long service intervals, saving on maintenance cost
- Subject to rigorous tests including load acceptance, cooling, vibration and noise level prior shipment to customer.
- Simple to operate and environment friendly in worst ambient conditions
- Equipped with built-in fuel tank sufficient for 8 to 10 hours of operations.
- Fully Engineering wide range of optional accessories available.

(Contd.)



Generating Set

TECHNICAL DATA SHEET

A0C550



Cummins Engine QSX15-G8



Stamford HCI544D



DSE6120 MKII AUTO START & AUTO MAINS



AOGT ENCLOSURE / CANOPY

| Engine Fuel System | |
|---------------------------|-----------------|
| Recommended Fuel | Class A2 Diesel |
| Fuel Consumption Standby | 123 L/hr |
| Fuel Consumption 100% PRP | 103 L/hr |
| Fuel Consumption 75% PRP | 78.7 L/hr |
| Fuel Consumption 50% PRP | 54.7 L/hr |

| ALTERNATOR SPECIFICATION | ONS |
|------------------------------|--------------------------|
| Alternator Make /Model | Stamford HCI544D/S5L1DC4 |
| AVR Model | AS440 |
| Number of Poles | 4 |
| Number of Winding Leads | 12 |
| Type of Bearing | Single Bearing |
| Insulation Class - Temp Rise | н/н |
| Efficiency | 94.0% |
| Ingress Protection Rating | IP 23 |
| Excitation System | Self Excited |
| Voltage Regulation | +/- 1% |
| Cooling air flow | 1.035 m³/ Sec |
| | |

| Controller Make & Model | Deep! | Sea 6120 |
|---------------------------|---------------------------------|--------------|
| Operation Mode | AMF | |
| Display | Graphic Back- 132x64) pixles | |
| Ingress Protection Rating | IP65 | |
| Binary Inputs/Outputs | 9/8 | |
| Analog Inputs | 4 | |
| Measurement | Vac, A, Hz, | kVA, kW, Vdc |
| Event Log | Alarms log, | Hrs log |
| Communication | USB | |
| | | |

Please refer to Controller Data Sheet for more details.

| ENCLOSURE SPECIFICATIONS | | |
|---|--------------------------|--|
| Enclosure Type | Acoustic & Weatherproof | |
| Anticorrosive Protection Polyester Powder Coated Galvanized Sheet | | |
| Ingress Protection | IP 23 | |
| Lifting | ISO Standard Lifting | |
| Canopy RAL Color | RAL 2000 | |
| Base frame RAL Color | RAL 9011 - Powder coated | |
| Noise Pressure level @ | 86.2db(A) @ 7 mt | |

Distributed & Serviced by:





Open Type
Image for illustration purposes only.

2. WARRANTY POLICY:

- Al Qabandi products has a warranty for all prime equipment, limited to 2000 running hours or 12 months warranty & For Standby equipment, Limited to 500 running hours or 12 months warranty whichever occur first against manufacturing defect.
- Wearing parts (filters), incorrect manmade operation, Back up Genset maintenance failures are excluded from the warranty policy

3. DOCUMENTAION

Operation and Maintenance Manual, GAD, Wiring Diagram & FAT Report are Accompanied with Genset.

4. OPTIONAL FEATURES

A. Engine

- Heavy-Duty Air Filter
- Coolant Heater
- Lubricant Oil Heater
- Fuel and Water Separator
- Lube Oil Rotary Pump

B. Alternator

- Anti Condensation Heater
- PMG + AVR
- Double Bearing Alternator
- RTDs For Bearing and Winding

C. Cooling System:

- 55 degree Radiator
- Remote Radiator

D. Control System:

- AMF / Parallel
- Remote Annunciators
- 4 p manual/Motorized Circuit breaker

E. Automatic Transfer Switch (ATS):

- Contractor or Breaker type ATS
- Motorized changeover type ATS

F. Start Battery:

- Nickel-cadmium battery
- Maintenance-free battery
- Battery charger and selector switch
- Charging current meter

G. Exhaust Muffler:

- Residential grade
- Critical grade
- Hospital grade

H. Available for voltages:

400/230V,480/277V,380/220V,440/254V, 416/240V,220/127V, 208/120V

Due to continuous research & product development, we reserve the right to change specification with out notice