

Generating Set

TECHNICAL DATA SHEET

AQC220

Prime Power*	Standby Power**	Voltage/Ph	Hz/rpm***	PF
200kVA/160 kWe	220 kVA/176 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 QSB7-G5		
Alternator Make / Model	Stamford UCI274H		
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	550		
Battery	Maintenance free Lead Acid		

Dimensions	Length (mm)	Widt	h (mm)	Height (m	ım)	Weight (KG)
Close Type	3893	1	355	2209		2150
Open Type	2500	1	100	1751		2000
ENGINE SPECIFICATIONS		LUBRICATION SYSTEM				
Engine Make Model	Cummins QSB7-G5	5	Oil Filter	Туре	Spin	on full flow filter
No. of Cylinders	6 vertical in-line 4 Stroke		Tabal Oil a	· ·	10.0	
Cycle			rotal Oil	Capacity 18.9		L
Aspiration Turbocharged and Air to Air aftercooled		Oil Pan	il Pan 17.4		łL	
		Oil Type	Гуре АРІС		H4/CI4; SAE15W40	
Cooling Method	Water cooled		AIR SYSTEM			
Governing Type	Electronic		Air Filter	r Type		Dry Element
Governing Class	G2 - ISO 8528 Part 1 17.2:1		Combusti	ion Air Flow (I	PRP) :	12.30 m³/min
Compression Ratio			Combusti	ion Air Flow (I	-SP) '	12.72 m³/min
Displacement	6.69L / 408 in ³ (107/124)/(4.21/4.88)		Radiator	•	- 1	318 m³/min
Bore/Stroke (mm / in)			Radiator	All Flow		219 111./111111
Dynamic Charging Alternator	100AMP, 12V					

COOLING SYSTEM	
Total Coolant Capacity (L)	10.2L
Water Pump Type	Centrifugal Eng- Driven
Radiator Fan Load	6.9kW
Heat Radiation to Room (ESP)	19kW
Heat Radiation to Room (PRP)	21kW

EXHAUST SYSTEM	
Muffler Type	Industrial Grade
Max. Back Pressure	10.2kPA
Exhaust Gas flow (PRP/ESP)	34.14 / 35.82m³/min
Exhaust Gas Temperature (PRP/ESP)	544/561°C

9001:2015

Comply with Standards

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

Powered By:









<u>Silent / Closed Type</u> Image for illustration purposes only.

1. Features & Benefits:

- AQ 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 Gen set is powered by Stamford alternator, the Global number 1 in Alternators, with over 99 years of Experience
- AQ 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.)



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TECHNICAL DATA SHEET

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Cummins QSB7



Stamford UCI274H



DSE6120 MKII
AUTO START & AUTO MAINS
FAILURE CONTROL



AQ ENCLOSURE/ CANOPY

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Engine Fuel System		
Recommended Fuel	Class A2 Diesel	
Fuel Consumption Standby	51 L/hr	
Fuel Consumption 100% PRP	45 L/hr	
Fuel Consumption 75% PRP	36 L/hr	
Fuel Consumption 50% PRP	26 L/hr	

ALTERNATOR SPECIFICATIONS			
Alternator Make / Model	Stamford UCI274H		
AVR Model	SX440		
Number of Poles	4		
Number of Winding Leads	6		
Type of Bearing	Single Bearing		
Insulation Class - Temp Rise	н/н		
Efficiency	93%		
Ingress Protection Rating	IP 23		
Excitation System	Self Excited		
Voltage Regulation	+/- 1%		
Harmonic Coefficient THF	< 2%		
Overspeed	2500 r.p.m		
Cooling air flow	0.514m³/sec		

Controller Make & Model		DeepSea 6120	
Operation Mode		AMF	
Dichlay		aphic Back-lit LCD 28x64) pixles	
Ingress Protection Rating		IP65	
Binary Inputs/Outputs		6 / 4	
Analog Inputs		3	
Measurement		Vac, A, Hz, kVA, kW, Vdc	
Event Log		Alarms log, Hrs log	
Communication		USB	

Please refer to Controller Data Sheet for more details.

ENCLSOURE SPECIFICATIONS			
Enclosure Type	Acoustic & Weather Proof		
Anticorrosive Protection Polyester Powder Coate	··		
Ingress Protection	IP 23		
	ISO Standard Lifting		
	External Emergency Push Button		
Canopy RAL Color	RAL 2000		
Base frame RAL Color	RAL 9011		
Noise Pressure level @	75.2db(A) @ 7 mt		

Distributed & Serviced by:





Open Type
Image for illustration purposes only.

2. WARRANTY POLICY:

- AL Qabandi Generator technology 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.
- 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