

#### **TECHNICAL DATA SHEET**

# **AQC1400**





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 KTA50-G3	
Alternator Make /Model	Stamford PI734B/S6LD-H4	
Control Panel	DSE6120	
Base Frame / Silent Canopy	Robust Structure/ Corrosion Resistant	
Circuit Breaker Type	3 Pole MCCB (4P Available as optional)	
Built in Base Fuel Tank Capacity	N/A	
Battery	Maintenance free Lead Acid	

Dimensions	Length (mm)	Width (mm)	Height (mm)	Weight (KG)
Close Type	30 Feet Container		14680	
Open Type	5000	2000	2496	10180

ENGINE SPECIFICATION	ONS	
Engine Make Model	Cumm	ins KTA50-G3
No. of Cylinders	12 60º	Vee form
Cycle	4 Strol	(e
Aspiration	Turboo cooled	charged and After
Cooling Method	Water	cooled
Governing Type	Electro	onic
Governing Class	G2 - IS	O 8528 Part 1
Compression Ratio	13.9 :	1.0
Displacement	50.3L	litres
Bore/Stroke (mm / in)	(159/	159)/(6.25/6.25)
Battery and Charger Alternator	35AM	P, 24V
COOLING SYSTEM		
Total Coolant Capacity (L)		161 L
Water Pump Type		Centrifugal eng-driven
Radiator Fan Load		21 Kw
Heat Radiation to Room (PRP)		130kW
Heat Radiation to Room (ESP)		150kW

LUBRICATION SYSTEM		
Oil Filter Type	Spin-On Full Flow	
Total Oil Capacity	177 L	
Oil Type	API-CH-4 oo SAE15	
Oil Type	API-CH-4 oo SAE15	

AIR SYSTEM		
Air Filter Type	Dry Element	
Combustion Air Flow (PRP)	96.3m³/min	
Combustion Air Flow (ESP)	104.76m³/min	
Radiator Air Flow	1818m³/min	

EXHAUST SYSTEM		
Muffler Type	Industrial Grade	
Max Back Pressure	6.8kPa	
Exhaust Gas Flow (PRP/ESP)	223.68/240.66m³/min	
Exhaust Gas Temperature (PRP/ESP)	520/525°C	

#### **Comply with Standards**

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

#### Powered By:











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

#### Why AQ Power?

When you are running a business every competitive advantage counts, choosing a right Generator Set can make all the difference to bottom line.

#### 1. Features & Benefits:

- AQ Gen set is powered by Cummins En-gine , 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, Having 120+ active patents, in over 40 countries and over 80 service centers.
- 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

rigorous tests including load e, cooling, vibration and noise shipment to customer.

pperate and environment friendambient conditions

with built-in fuel tank sufficient hours of operations.

 Fully Engineering wide range of optional accessories available.



# **Generating Set**

TECHNICAL DATA SHEET

# **AQC1400**



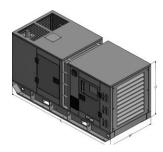
Cummins KTA50-G3



Stamford P1734B



DSE6120 MKII AUTO START & AUTO MAINS



AQGT ENCLOSURE/ CANOPY

<b>Engine Fuel System</b>	
Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	293 L/hr
Fuel Consumption 100% PRP	261 L/hr
Fuel Consumption 75% PRP	199 L/hr
Fuel Consumption 50% PRP	139 L/hr

ALTERNATOR SPECIFICATION	ONS
Alternator Make /Model	Stamford PI734B/S6L1D-H4
AVR Model	MX341 / MX231
Number of Poles	4
Number of Winding Leads	6
Type of Bearing	Single Bearing
Insulation Class - Temp Rise	н/н
Efficiency	94.8%
Ingress Protection Rating	IP 23
Excitation System	Separately Excited by P.M.G
Voltage Regulation	+/- 1%
Overspeed	2250R.P.M
Cooling air flow	2.69 m³/ Sec

Controller Make & Model	DeepSea 7320
Operation Mode	AMF
Display	Graphic Back-lit LCD (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 & Weather Proof	
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	
Noise Pressure level @ 7m	88dBA	

Distributed & Serviced by:





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#### 2. WARRANTY POLICY:

- AQ Generator technology prod- ucts has a warranty for all prime equip- ment, 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 man-made 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

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