

AQT-CU1110 GENERATING SET

(TECHNICAL DATA SHEET)

Standard Specifications:

1- Prime Rating:

Unlimited hours usage, with an average load factor of 80% over each 24 hour period. 10% overload is available for 1 hour in every 12 hours operation. 0 overload is permitted on standby power.

2- Standby Rating:

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.

3- Engine:

Cummins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.

4- Alternator Type: brushless AC alternator

5- Radiator: 50°C, fan protective shroud

Powered By:







"We deliver power, service and solutions in exactly the way you want."

Output Rating:

| PRIME: | | STANDBY: | |
|----------------|------------|----------|--------|
| 50 Hz—1500 Rpm | 400 V, 3ph | | |
| 1015 kVA | 812 kW | 1110 kVA | 888 kW |

| ENGINE SPECIFICATIONS | |
|----------------------------------|--|
| Engine Make | CUMMINS |
| Engine Model | KTA38-G14 |
| Туре | 4 cycle, 60-degree Vee, turbocharged, aftercooled, 12-cylinder |
| Bore mm | 159 mm (6.25 in.) |
| Stroke Model | 159 mm (6.25 in.) |
| Displacement | 37.8 litre (2300 in.3) |
| Flywheel Dimensions | SAE 0 |
| Battery Charging Alternator | 35 amps |
| Starting Voltage | 24 volt |
| Fuel System | Direct Injection Cummins PT |
| Fuel Filter | Dual spin-on paper element fuel filters with water separator |
| Lube Oil Filter and Capacity (L) | Spin on full flow filter - 135 Litres |
| ALTERNATOR SPECIFICATIONS | |

| Alternator Make | AQT I Leroy Somer 1 Stamford | |
|------------------------------|------------------------------|--|
| Alternator Model | AQT I TAL-049– E S6L1D-E41 | |
| Number of Poles | 4 | |
| Winding Pitch | 2/3 | |
| Insulation Class - Temp Rise | Н | |
| Ingress Protection Rating | IP 23 | |
| Excitation System | Self Excited | |
| AVR Model | R150 | |
| | | |

COMPLY WITH STANDARDS

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

| ALTERNATOR OPERATING DATA | | |
|---------------------------|-------------|--|
| Over speed | 2250 rpm | |
| Voltage Regulation | ±1% | |
| Harmonic Coefficient THF | < 3.5% | |
| Tel. influence TIF | < 50 | |
| Cooling air flow | 1.0 m3/ Sec | |



Standard Specifications:

6- Fuel Tank:

Capacity of fuel tank is for 8-10 hours running Built in fuel tank up to 800 kVA

7- Circuit Breaker:

ACB -schneider

8- Control system alarms:

- Over and Under Speed •
- Low and High Battery Volt.
- Start and Stop Failure •
- **Over Current**
- Under / Over Generator Voltage
- Low Oil Pressure •
- Emergency stop •
- High engine temperature •

9- Warranty policy:

- AQT GENERATOR products has a warranty for 12 Months or 1000 hours whichever occurs first against any manufacturing defects
- Wearing parts (filters), incorrect • man made operation, maintenance failures are excluded from the warranty policy

Acoustic Enclosure Specifications:

| Enclosure Type | Acoustic & Weather Proof | |
|---------------------------|--|--|
| Drainage Provision | Fuel and Water Drainage | |
| Transportation | Tested Single Point Lifting Facility & Forklift Pockets | |
| Ingress Protection Rating | IP 23 | |
| Lifting | ISO Standard Lifting | |
| Canopy RAL Color | TAL 9010 | |
| Base frame RAL Color | RAL 9011 | |
| | | |

Noise Pressure level @ 7m 66db(A) @ 7mt

Control System:

- Large back-lit text display
- Multiple display languages
- DSENET expansion compatible
- Data logging facility
- Fully configurable via PC using USB communication
- Front panel configuration
- Efficient power save mode
- 3 phase generator sensing

Accumulated power monitoring (kWh, kVA h, kVA h)



Γ

| Dimensions: | | | | | |
|-------------|----------------|---------------|----------------|------------------|----------------|
| Туре | Length (mm) | Width (mm) | Height (mm) | Fuel Tank (L) | Weight (KG) |
| OPEN | 4300 | 1750 | 2200 | 1170 | 6300 |
| CLOSED | 6000 | 2440 | 2590 | 1170 | 9300 |

DSE 6120

FAILURE CONTROL



OT GENERATOR

Breaker contol via fascia buttons Fuel and start outputs, configurable using can

Generator/load current monitoring and protection (kW)

- 4 configurable DC outputs
- 4 configurable analogue/digital inputs
- Automatically transfers between mains (utility) and generator
- Increased input and output expansion capability via dsenet IP65 rating (with optional gasket) offers increased resistance to water ingress
- Digital inputs; Analogue Inputs

AUTO START & AUTO MAINS



Engine:



COOLPAC PERFORMANCE DATA

| Cooling System Design | 1 pump / 1 loop |
|--------------------------------|--|
| Coolant Ratio | 50% ethylene gylcol; 50% water |
| Coolant Capacity (L) | 210 |
| Limiting Ambient Temp. | 50 Degree Celsius |
| Fan Power Kw | 24 |
| Cooling System Air Flow (m3/s) | 13.97 |
| Air Cleaner Type | Dry replaceable element with restriction |
| | indicator |

| FUEL CONSUMPTION 1500 (50 HZ) | | |
|-------------------------------|-----|--|
| Fuel Consumption @ 110% | 228 | |
| Fuel Consumption @ 100% | 209 | |
| Fuel Consumption @ 75% | 161 | |
| Fuel Consumption @ 50% | 113 | |
| Fuel Consumption @ 25% | 65 | |

Optional configurations:

Engine accessories:

- Heavy-duty air filter Coolant heater
- Lubricant oil heater
- Fuel and Water Separator
- Lube oil rotary pump

- **Alternator And Accessories:**
- Leroy somer/stamford
- Anti condensation heater
- PMG + AVR 🛇 Double bearing alternator High voltage _____kV
- RTDs for Bearing and winding

Cooling System:

- 55 degree Radiator
- Remote Radiator П

Control System:

- AMF
- Parallel
- Practical type in low temperature environment
- Control Screen Heater
- **Remote Annunciators**
- Other (ComP, DEIF)

Circuit Breaker:

- 3/4 poles
- Fixed/handcart type П
- Ō Electric mechanism

Automatic Transfer Switch (ATS):

- ATS cabinet
- Contractor type ATS
- Motorized changeover type ATS

Start Battery:

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

External Fuel Tank:

- Single /double wall fuel tank (500-5000 L)
- Fuel Transfer pump

Exhaust Muffler:

- Residential grade
- Critical grade
- Hospital grade

Available for voltages :

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



Our Success

We owe our success to our hardworking, highly skilled and committed employees. Our core focus lies in providing customized integrated products and services with well-established infrastructure, equipment and manpower to support and provide the turn key solutions for various industries. We provide the latest in power generator technology equipment, allowing us to give our customers the best product and the best possible service.

Objectives

Our objective is to serve customers to the utmost by providing them with the best-in-class electric generators, reliable door to door delivery, and after sales service at competitive market prices.

"We continue to build our solid reputation for excellence and response, while delivering reliable and tailored solutions to meet the customer's requirements".



At AQT Generators, we take pride in being a dynamic force in the realm of diesel generator sets, offering an extensive range of international brands renowned for their reliability and performance. Our commitment to excellence is reflected in our partnerships with world-famous engine manufacturers such as Perkins and Cummins, coupled with top-notch alternators from Stamford and Leroy Somer.





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