

# 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	

ALIENNATON SI LEITIGATION		
Alternator Make	Leroy Somer 1 Stamford	
Alternator Model	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.





Office 204, Al Owais Building, Port Saeed, Plot No. 388-0, Dubai, UAE Call Us: +971 4 547 1703 Email: info@aqtgenerators.com

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