

# AQT-33 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:

Perkins, 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:		
PRIME:		STANDDT.		
50 Hz—1500 Rpm	400 V, 3ph			
30 kVA	24 kW	33 kVA	26 kW	
60 Hz—1800 Rpm	480 V, 3ph			
35 kVA	28 kW	38.2 kVA	30.6 kW	
ENGINE SPECIFICATIONS				
Engine Make		PERKINS		
Engine Model		1103A-33G		
No. of Cylinders		3 vertical in-line		
Cycle		4 Strokes		
Aspiration		Naturally Aspirated		
Cooling Method		Water cooled		
Governing Type		Mechanical		
Governing Class		G2 - ISO 8528 Part 1		
Compression Ratio		19.25:1		
Displacement		3.3 L		
Bore/Stroke		105 x 127 mm		
Dynamic Charging Alternator		65AMP, 12V		

ALT	ERI	NATOR SPECIFICATIONS	

Alternator Make	AQT I Leroy Somer   Stamford
Alternator Model	AQT I TAL-042-C   SOL2P1
Number of Poles	4
Number of Winding Leads	6
Type of Bearing	Single Bearing
Insulation Class - Temp Rise	Cont. H - 125/40 Č
Ingress Protection Rating	IP 23
Excitation System	Self Excited
AVR Model	B120

# **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	<u>+</u> 1%	
Harmonic Coefficient THF	< 2%	
Tel. influence TIF	< 50	
Cooling air flow	0.10 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:

3 pole LS MCCB

### 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 rh)



Generator/load current monitoring and protection (kW)

- Breaker contol via fascia buttons
- Fuel and start outputs, configurable using can
- 4 configurable DC outputs
- 4 configurable analogue/digital inputs

Automatically transfers between mains (utility) and generator

AQT GENERATOR

Increased input and output expansion capability via dsenet IP65 rating (with optional gasket) offers increased resistance to water ingress

Digital inputs; Analogue Inputs

# DSE4520 MKII

AUTO START & AUTO MAINS FAILURE CONTROL

# **Dimensions:**

Туре	Length (mm)	Width (mm)	Height (mm)	Fuel Tank (L)	Weight (KG)
OPEN	1650	775	1175	100	800
CLOSED	2000	950	1495	100	1300



# **Engine**:



Perkins heavy duty high performance industrial type diesel engine.

COOLING SYSTEM	
Total Coolant Capacity (L)	10.2 L
Cooling Fan Air Flow	53 m3/ min
Radiator Fan Load	0.4 kW
Heat Radiation to Room (PRP)	5.0kW
Heat Radiation to Room (ESP)	6.0 kW
LUBRICATION SYSTEM	
Oil Filter Type	Spin-On Full Flow
Total Oil Capacity	8.3L
Oil Type	API-CH-4 or ACEA E5
EXHAUST SYSTEM	
Muffler Type	Industrial Grade
Max. Back Pressure	8 kPa
Exhaust Gas Flow (PRP/ESP)	5.7/5.8 m3/ min
Exhaust Gas Temperature	< 5200C
FUEL SYSTEM	
Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	8.1 L/hr
Fuel Consumption 100% PRP	7.2 L/hr
Fuel Consumption 75% PRP	5.6 L/hr
Fuel Consumption 50% PRP	4.0 L/hr
AIR SYSTEM	
Air Filter Type	Dry Element
Combustion Air Flow (PRP)	2.15 m3/min
Combustion Air Flow (ESP)	2.16 m3/min
Max Air Filter Intake Restriction	3kPA

# **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**

### **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
- 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 Ō
  - Critical grade
- Hospital grade

#### Available for voltages :

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

QT GENERATOR

## **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

# FOLLOW US ON OUR SOCIAL MEDIA ACCOUNTS

