

# **AQT-10**

**GENERATING SET** (TECHNICAL DATA SHEET)



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

#### **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

#### **Output Rating:**

		4-11-5-2	
PRIME:		STANDBY:	
50 Hz—1500 Rpm	400 V, 3ph		
9 kVA	7.2 kW	9.9 kVA	7.92 kW

ENGINE SPECIFICATIONS	
Engine Make	PERKINS
Engine Model	403A-11G1
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	23:1
Displacement	1.131 L
Bore/Stroke	77 x 81 mm
Dynamic Charging Alternator	15AMP, 12V

#### ALTERNATOR SPECIFICATIONS Alternator Make AQT I Leroy Somer | STAMFORD Alternator Model AQT I TAL-A40-B | PI044E Number of Poles **Number of Winding Leads** 6 Type of Bearing Single Bearing Insulation Class - Temp Rise Cont. H - 125/40 C **Ingress Protection Rating** IP 23 **Excitation System** Self Excited **AVR Model** R120

#### 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	0.06 m3/ Sec	

#### **Powered By:**











#### **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 @ 7r	m 67 dB(A)

### **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, kVAr h)

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)

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:**

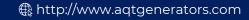
Туре	Length (mm)	Width (mm)	Height (mm)	Fuel Tank (L)	Weight (KG)
OPEN	1635	750	1260	92	495
CLOSED	2152	1004	1342	169	730

Note: The following dimensions are for preliminary guidance. For more detailed and accurate dimensions, please refer to the General Arrangement Drawing (GAD).









## Engine:



Perkins heavy duty high performance industrial type diesel engine.

COOLING SYSTEM		
Total Coolant Capacity (L)	5.2 L	
Cooling Fan Air Flow	40.2 m3/ min	
Radiator Fan Load	0.2 kW	
Heat Radiation to Room (PRP)	1.7kW	
Heat Radiation to Room (ESP)	2.5 kW	
LUBRICATION SYSTEM		
Oil Filter Type	Spin-On Full Flow	
Total Oil Capacity	4.9L	
Oil Type	API-CH-4 or ACEA E5	
EXHAUST SYSTEM		
Muffler Type	Industrial Grade	
Max. Back Pressure	10.2 kPa	
Exhaust Gas Flow (PRP/ESP)	1.66/1.8 m3/ min	
Exhaust Gas Temperature	< 4200C	
FUEL SYSTEM		
Recommended Fuel	Class A2 Diesel	
Fuel Consumption Standby	3.6 L/hr	
Fuel Consumption 100% PRP	3.0 L/hr	
Fuel Consumption 75% PRP	2.3 L/hr	
Fuel Consumption 50% PRP	1.7 L/hr	
AIR SYSTEM		
Air Filter Type	Dry Element	
Combustion Air Flow (PRP)	0.7 m3/min	
Combustion Air Flow (ESP)	0.7 m3/min	
Max Air Filter Intake Restriction	6.4kPA	

Optio	onal configurations:
	ne accessories: Heavy-duty air filter Coolant heater Lubricant oil heater Fuel and Water Separator Lube oil rotary pump
	rnator And Accessories: Leroy somer/Stamford  Anti condensation heater  PMG + AVR \rightarrow Double bearing  Alternator High voltagekV  RTDs for Bearing and winding
	<b>ling System:</b> 55 degree Radiator Remote Radiator
	rol System: AMF Parallel Practical type in low temperature environment Control Screen Heater Remote Annunciators Other (Comp, DEIF)
п	uit Breaker: 3/4 poles Fixed/handcart type Electric mechanism
	matic Transfer Switch (ATS):  ATS cabinet  Contractor type ATS  Motorized changeover type ATS
	t Battery:  Nickel-cadmium battery  Maintenance-free battery  Battery charger and selector switch  Charging current meter  rnal Fuel Tank:
	Single /double wall fuel tank (500-5000 L) Fuel Transfer pump
Exha	ust Muffler: Residential grade Critical grade Hospital grade
	lable for voltages: 400/230V, 480/277V, 380/220V, 440/254V, 416/240V,220/127V, 208/120V ating may apply.







#### **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 integration of world-famous engine manufacturers such as Perkins and Cummins, paired with premium alternators from Stamford and Leroy Somer.





#### **CONTACT US**

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