

# **AQT-2500**

# **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:**

1	0		
PRIME:		STANDBY:	
50 Hz—1500 Rp	m 400 V, 3ph		
2250 kVA	1800 kW	2500 kVA	2000 kW

Engine Make	PERKINS
Engine Model	4016-61TRG3
No. of Cylinders	16 60º Vee form
Cycle	4 Stroke
Aspiration	Quad turbocharged air to water charge cooled
Cooling Method	Water cooled
Governing Type	Electronic
Governing Class	G2 - ISO 8528 Part 1
Compression Ratio	13:1
Displacement	61.123 litres
Bore/Stroke	160 x 190 mm
Dynamic Charging Alternator	55 AMP, 24V

#### ALTERNATOR SPECIFICATIONS

Alternator Make	AQT I Leroy Somer   STAMFORD
Alternator Model	AQT   LSA52.3 L9   S7L1D-H41
Number of Poles	4
Number of Winding Leads	6\12
Type of Bearing	Single Bearing
Insulation Class - Temp Rise	Cont. H - 125/40 Č
Ingress Protection Rating	IP 23
Excitation System	AREP + PMI
AVR Model	D 510C

#### 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> 0.5%	
Harmonic Coefficient THF	< 2%	
Tel. influence TIF	< 50	
Cooling air flow	2.5 m3/ Sec	

#### Powered By:



Diesel Generator ,







#### **Standard Specifications:**

#### 6- Circuit Breaker:

3 pole LS MCCB

#### 7-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

#### 8- 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 90 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, kVArh)

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



#### DSE6110 MKII

**AUTO START & AUTO MAINS FAILURE CONTROL** 

### **Dimensions:**

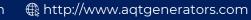
Туре	Length (mm)	Width (mm)	Height (mm)	Fuel Tank (L)	Weight (KG)
OPEN	6050	2900	3700	NA*	14500
CLOSED	12m Cust	omized Con	tainer	NA*	19870

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)	492 L
Cooling Fan Air Flow	2430 m3/ min
Radiator Fan Load	100 kW
Heat Radiation to Room (PRP)	105 Kw
Heat Radiation to Room (ESP)	109 kW
LUBRICATION SYSTEM	
Oil Filter Type	Spin-On Full Flow
Total Oil Capacity	213 L
Oil Type	API-CH-4 or ACEA E5
EXHAUST SYSTEM	
Muffler Type	Industrial Grade
Max. Back Pressure	3.0 kPa
Exhaust Gas Flow (PRP/ESP)	387 m3/ min
Exhaust Gas Temperature	< 493 0C
FUEL SYSTEM	
Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	529 L/hr
Fuel Consumption 100% PRP	470 L/hr
Fuel Consumption 75% PRP	344 L/hr
Fuel Consumption 50% PRP	234 L/hr
AIR SYSTEM	
Air Filter Type	Cylindrical paper pleat
Combustion Air Flow (PRP)	132 m3/min
Combustion Air Flow (ESP)	145 m3/min
Max Air Filter Intake Restriction	3.7 kPA

# Optional configurations:

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Engi	ne accessories:
	Heavy-duty air filter
	Coolant heater
	Lubricant oil heater
П	Fuel and Water Separator
П	Lube oil rotary pump
Alte	rnator And Accessories:
	Leroy somer/stamford
	Anti condensation heater
	PMG + AVR \Q Double bearing
	Alternator High voltagekV
Ш	RTDs for Bearing and winding
Coo	ling System:
П	55 degree Radiator
Ō	Remote Radiator
_	trol System:
	AMF
	Parallel
	Practical type in low temperature environment Control Screen Heater
	Remote Annunciators
П	Other (Comp, DEIF)
_	
Circ	uit Breaker:
_	3/4 poles
H	Fixed/handcart type Electric mechanism
Ш	Licettic medianism
Auto	omatic Transfer Switch (ATS):
	ATS cabinet
П	Contractor type ATS
ŏ	Motorized changeover type ATS
_	t Battery:
	Nickel-cadmium battery
	Maintenance-free battery
	Battery charger and selector switch
	Charging current meter
Exte	rnal Fuel Tank:
	Single /double wall fuel tank (500-5000 L)
	Fuel Transfer pump
Exha	aust Muffler:
П	Residential grade
ă	Critical grade
Ō	Hospital grade
Δνα	ilable for voltages :
_	
Ц	400/230V, 480/277V, 380/220V, 440/254V, 416/240V,220/127V, 208/120V
De-	rating 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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