

# AQT-1880



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

# **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

#### Outnut Rating.

output nating.				
PRIME:		STANDBY:		
50 Hz—1500 Rpm 400 V, 3ph				
1710 kVA	1368KW	1880KVA	1504KW	

ENGINE SPECIFICATIONS	
Engine Make	PERKINS
Engine Model	4012-46TAG3A
No. of Cylinders	12 60º Vee form
Cycle	4 Stroke
Aspiration	Turbocharged & air to air charged cooled
Cooling Method	Water cooled
Governing Type	Electronic
Governing Class	G2 - ISO 8528 Part 1
Compression Ratio	13:1
Displacement	45.842 litres
Bore/Stroke	160 x 190 mm
Dynamic Charging Alternator	40AMP, 24V

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ALTERNATOR SPECIFICATIONS	
Alternator Make	AQT I Leroy Somer   STAMFORD
Alternator Model	AQT   LSA51.2 S5   S7L1D-E41
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:









generation

#### **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

# **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	5170	2275	2875	NA*	11500
CLOSED	9000	2350	3850	NA*	18500

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

#### **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 87 dB(A)		

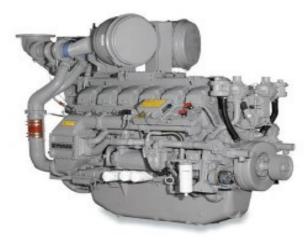








# Engine:



Perkins heavy duty high performance industrial type diesel engine.

COOLING SYSTEM	
Total Coolant Capacity (L)	210 L
Cooling Fan Air Flow	1920 m3/ min
Radiator Fan Load	64 kW
Heat Radiation to Room (PRP)	96 Kw
Heat Radiation to Room (ESP)	107 kW
LUBRICATION SYSTEM	
Oil Filter Type	Spin-On Full Flow
Total Oil Capacity	177 L
Oil Type	API-CH-4 or ACEA E5
EXHAUST SYSTEM	
Muffler Type	Industrial Grade
Max. Back Pressure	5 kPa
Exhaust Gas Flow (PRP/ESP)	320 m3/ min
Exhaust Gas Temperature	< 455 0C
FUEL SYSTEM	
Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	405 L/hr
Fuel Consumption 100% PRP	307 L/hr
Fuel Consumption 75% PRP	310 L/hr
Fuel Consumption 50% PRP	275 L/hr
AIR SYSTEM	275 27 111
	PowerCore
Air Filter Type	
Combustion Air Flow (PRP)	100 m3/min
Combustion Air Flow (ESP)	118 m3/min
Max Air Filter Intake Restriction	4 kPA

# Optional configurations:

Engine accessories:  Heavy-duty air filter Coolant heater Lubricant oil heater Fuel and Water Separa Lube oil rotary pump	tor
Alternator And Accessori  Leroy somer/stamford  Anti condensation heat  PMG + AVR ◇  Alternator High voltage  RTDs for Bearing and w	er Double bearing kV
Cooling System:  55 degree Radiator Remote Radiator	
Control System:  AMF Parallel Control Screen Heater Remote Annunciators Other (Comp, DEIF)	mperature environment
Circuit Breaker:  3/4 poles Fixed/handcart type Electric mechanism	
Automatic Transfer Switch  ATS cabinet Contractor type ATS Motorized changeover	
Start Battery:	
Nickel-cadmium batter  Maintenance-free batte  Battery charger and sel  Charging current meter	ery ector switch
External Fuel Tank:  Single /double wall fuel Fuel Transfer pump	tank (500-5000 L)
Exhaust Muffler:	
Residential grade Critical grade Hospital grade	
Available for voltages:  400/230V, 480/277V, 3 416/240V,220/127V, 20	
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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