

# QT-1856

**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:

o deput radiig.			
PRIME:		STANDBY:	
50 Hz—1500 Rpm 400 V, 3ph			
1688 kVA	1350 kW	1856 kVA	1485 kW
60 Hz-1800 Rpr	n 480 V, 3ph		
1710kVA	1368 kW	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

ALTERNATOR SPECIFICATIONS	
Alternator Make	Leroy Somer   STAMFORD
Alternator Model	LSA53.3 S5   PI734E
Number of Poles	4
Number of Winding Leads	12
Type of Bearing	Single Bearing
Insulation Class - Temp Rise	Cont. H - 125/40 C
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	n TBD

# **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)

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	5726	2000	3026	NA*	10800
CLOSED	12192	2438	2896	NA*	21580







# 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	I
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	
Air Filter Type	PowerCore
Combustion Air Flow (PRP)	100 m3/min
Combustion Air Flow (ESP)	118 m3/min
Max Air Filter Intake Restriction	4 kPA

# **Optional configurations:**

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Eng	ine accessories:
	Heavy-duty air filter
	Coolant heater
	Lubricant oil heater
	Fuel and Water Separator
	Lube oil rotary pump
Alte	ernator And Accessories:
	Leroy somer/stamford
	Anti condensation heater
	PMG + AVR $\diamondsuit$ Double bearing
	Alternator High voltagekV
	RTDs for Bearing and winding
Coo	oling System:
П	55 degree Radiator
Ō	Remote Radiator
Con	stral Systems
	AMF
	Parallel
П	Practical type in low temperature environment
П	Control Screen Heater
ă	Remote Annunciators
	Other (Comp, DEIF)
Circ	uit Breaker:
	3/4 poles
П	Fixed/handcart type
Ī	Electric mechanism
Aut	omatic Transfer Switch (ATS):
	ATS cabinet
	Contractor type ATS
П	Motorized changeover type ATS
Cha	nt Datham
_	rt Battery:
П	Nickel-cadmium battery
	Maintenance-free battery
	Battery charger and selector switch Charging current meter
Exte	ernal Fuel Tank:
П	Single /double wall fuel tank (500-5000 L)
	Fuel Transfer pump
Exh	aust Muffler:
	Residential grade
	Critical grade
	Hospital grade
_	ilable 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.





# **CONTACT US**

Office 409, Al Murjan, Al Nahda, Dubai, UAE

Call Us: +971 4 547 1703

Email: info@aqtgenerators.com

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