

AQT-15

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:

PRIME:		STANDBY:	
50 Hz—1500 Rpm	400 V, 3ph		
13 kVA	10.4 kW	15 kVA	12 kW

ENGINE SPECIFICATIONS	
Engine Make	PERKINS
Engine Model	403A(D)-15G1
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	22:5:1
Displacement	1.496 L
Bore/Stroke	84 x 90 mm
Dynamic Charging Alternator	15AMP, 12V

ALTERNATOR SPECIFICATION	S
Alternator Make	AQT I Leroy Somer STAMFORD
Alternator Model	AQT I TAL-A40-C S0L1P1
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	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	<u>+</u> 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 68 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	2152	1004	1342	169	765
CLOSED	1635	750	1260	92	495

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)	6.0 L		
Cooling Fan Air Flow	36.6 m3/ min		
Radiator Fan Load	0.2 kW		
Heat Radiation to Room (PRP)	3.2 kW		
Heat Radiation to Room (ESP)	3.5 kW		
LUBRICATION SYSTEM			
Oil Filter Type	Spin-On Full Flow		
Total Oil Capacity	6.0 L		
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)	2.70/2.90 m3/ min		
Exhaust Gas Temperature	< 490 C		
FUEL SYSTEM			
Recommended Fuel	Class A2 Diesel		
Fuel Consumption Standby	4.1 L/hr		
Fuel Consumption 100% PRP	3.7 L/hr		
Fuel Consumption 75% PRP	2.8 L/hr		
Fuel Consumption 50% PRP	2.0 L/hr		
AIR SYSTEM			
Air Filter Type	Dry Element		
Combustion Air Flow (PRP)	1.10 m3/min		
Combustion Air Flow (ESP)	1.10 m3/min		
Max Air Filter Intake Restriction	6.4 kPA		

Ontional configurations.

Opt	ional configurations.
Eng	gine accessories: Heavy-duty air filter Coolant heater Lubricant oil heater Fuel and Water Separator Lube oil rotary pump
Alt	ernator And Accessories: Leroy somer/stamford Anti condensation heater PMG + AVR Double bearing alternator High voltagekV RTDs for Bearing and winding
Co	oling System: 55 degree Radiator Remote Radiator
Cor	AMF Parallel Practical type in low temperature environment Control Screen Heater Remote Annunciators Other (ComP, DEIF)
Circ	cuit Breaker: 3/4 poles Fixed/handcart type Electric mechanism
A u	tomatic Transfer Switch (ATS): ATS cabinet Contractor type ATS Motorized changeover type ATS
	rt Battery: Nickel-cadmium battery Maintenance-free battery Battery charger and selector switch Charging current meter ernal Fuel Tank: Single /double wall fuel tank (500-5000 L) Fuel Transfer pump
	naust Muffler: Residential grade Critical grade Hospital grade ailable for voltages:
□ De	400/230V, 480/277V, 380/220V, 440/254V, 416/240V,220/127V, 208/120V -rating may apply.
	0 '-'1 -'1-1-'1'





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

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











