

AQT-165

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			
150 kVA	120 kW	165 kVA	132 kW
60 Hz—1800 Rpm	1 480 V, 3ph		
169 kVA	135 kW	188 kVA	150 kW

ENGINE SPECIFICATIONS		
Engine Make	PERKINS	
Engine Model	1106A-70TAG2	
No. of Cylinders	6 vertical in-line	
Cycle	4 Strokes	
Aspiration	Turbocharged aftercooled	
Cooling Method	Water cooled	
Governing Type	Electronic	
Governing Class	G2 - ISO 8528 Part 1	
Compression Ratio	16:1	
Displacement	7.01 L	
Bore/Stroke	105 x 135 mm	
Dynamic Charging Alternator	65AMP, 12V	

ALTERNATOR SPECIFICATIONS	5	
Alternator Make	Leroy Somer Stamford	
Alternator Model	TAL044J UCI274F	
Number of Poles	4	
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	<u>+</u> 1%	
Harmonic Coefficient THF	< 2%	
Tel. influence TIF	< 50	
Cooling air flow	0.25 m3/ Sec	

Powered By:





LEROY-SOMER





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	n 70db(A) @ 7mt

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



DSE4520 MKII

AUTO START & AUTO MAINS FAILURE CONTROL

Dimensions:

Туре	Length (mm)	Width (mm)	Height (mm)	Fuel Tank (L)	Weight (KG)
OPEN	2500	775	1425	400	1325
CLOSED	3200	1100	1790	400	1975









Engine:

COOLING SYSTEM

Total Coolant Capacity (L) 21 L



Perkins heavy duty high performance industrial type diesel engine.

Cooling Fan Air Flow 282 m3/ min Radiator Fan Load 5 kW Heat Radiation to Room (PRP) 11 kW Heat Radiation to Room (ESP) 12.2 kW LUBRICATION SYSTEM Oil Filter Type Spin-On Full Flow **Total Oil Capacity** 16.5 L Oil Type API-CH-4 or ACEA E5 **EXHAUST SYSTEM** Muffler Type Industrial Grade Max. Back Pressure Exhaust Gas Flow (PRP/ESP) 23.7/25.5 m3/ min **Exhaust Gas Temperature** < 4840C FUEL SYSTEM Recommended Fuel Class A2 Diesel **Fuel Consumption Standby** 36.1 L/hr Fuel Consumption 100% PRP 33. L/hr Fuel Consumption 75% PRP 24.7 L/hr Fuel Consumption 50% PRP 16.1 L/hr AIR SYSTEM Air Filter Type Dry Element

10.2m3/min

0. m3/min

5 kPa

Optional configurations:

•	o o
Fng	gine accessories:
	Heavy-duty air filter
й	Coolant heater
ă	Lubricant oil heater
ă	
	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
ŏ	RTDs for Bearing and winding
	KIDS for Bearing and winding
Co	oling System:
	55 degree Radiator
	Remote Radiator
Cor	ntrol System:
	AMF
П	Parallel
	Practical type in low temperature environment
	Control Screen Heater
	Remote Annunciators
П	Other (ComP, DEIF)
П	Canal (Comm) 2211 /
_	cuit Breaker:
Ш	3/4 poles
	Fixed/handcart type
	Electric mechanism
Διι ί	comatic Transfer Switch (ATS):
	ATS cabinet
	Contractor type ATS
	Motorized changeover type ATS
Sta	rt Battery:
	Nickel-cadmium battery
	Maintenance-free battery
П	Battery charger and selector switch
	Charging current meter
Ext	ernal Fuel Tank:
	Single /double wall fuel tank (500-5000 L)
	Fuel Transfer pump
Exh	aust Muffler:
П	Residential grade
ŏ	Critical grade
й	Hospital grade
_	Hospital grade
_	ailable for voltages :
П	400/230V, 480/277V, 380/220V, 440/254V,
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Combustion Air Flow (PRP)

Combustion Air Flow (ESP)

Max Air Filter Intake Restriction

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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