

www.aqtgenerators.com Diesel Power Generation

Control System & Power Solutions



AQT-1250

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.

o 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 pow-

3 Engine:

Perkins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.

4Alternator Type: brushless AC alternator

5 Radiator:

50°C, fan protective shroud

Powered By:





Diesel Generator LEROY-SOMER





Output Rating:

output Ruting.					
PRIME:		STANDBY:			
50 Hz—1500 F	Rpm 400 V, 3ph	·			
1125 kVA	900 kW	1250 kVA	1000 kW		
60 Hz-1800 F	Rpm 480 V, 3ph				
995 kVA	796 kW	1097 kVA	878 kW		
ENGINE SPECI	FICATIONS				
Engine Make		PERKINS	PERKINS		
Engine Model		4008-30TAG3	4008-30TAG3		
No. of Cylinders		8 vertical in-lin	8 vertical in-line		
Cycle		4 Stroke	4 Stroke		
Aspiration		Turbocharged	Turbocharged & air to air charged cooled		
Cooling Method		Water cooled			
Governing Type		Electronic	Electronic		
Governing Class		G2 - ISO 8528 Part 1			
Compression Ratio		13.6:1			
Displacement		30.561 L			
Bore/Stroke		160 x 190 mm			
Dynamic Charging Alternator		55AMP, 24V	55AMP, 24V		
ALTERNATOR SPECIFICATIONS					
Alternator Make		Leroy Somer	STAMFORD AQT		
Alternator Model		TAL-049-E			
Number of Poles		4			
Number of Winding Leads		6			
Type of Bearing		Single Bearing	<u> </u>		
Insulation Class - Temp Rise		•	Cont. H - 125/40 C		
Ingress Protection Rating		IP 23			
Excitation System		Self Excited	Self Excited		

Comply with Standards

AVR Model

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	1.0 m³/ Sec		

R150

Standard Specifications:

6-Fuel Tank:

Capacity of fuel tank is for 8 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:

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Enclosure Type	Acoustic & Weather Proof		
Drainage	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	78db(A) @ 7 mt		

Control System:

Large back-lit text display (4-Line back-lit LCD 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 (kW h, kVA h, kVAr h) Generator/load current monitoring and protection

Generator overload protection (kW)

Breaker control via fascia buttons

Fuel and start outputs, configurable when using CAN 8 configurable DC outputs 9configurable analogue/digital inputs Automatically transfers between mains (utility) and generator (DSE7320 MKII only) Increased input and output expansion capability via DSENet® IP65 rating (with optional gasket) offers increased resistance to water ingress DIGITAL INPUTS



DSE7320 MKII

ANALOGUE INPUT

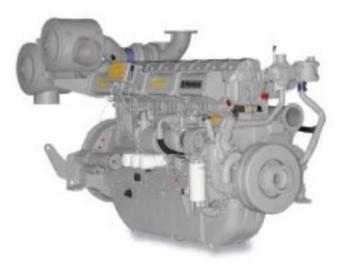
AUTO START & AUTO MAINS FAILURE CONTROL

Dimensions:

Туре	Length (mm)	Width (mm)	Height (mm)	Fuel Tank (L)	Weight (KG)
OPEN	4900	1870	2200	-	7550
CLOSED	6058	2438	2591	NA*	12611



Engine:



Perkins heavy duty high performance industrial type diesel engine.

COOLING SYSTEM		
Total Coolant Capacity (L)	149 L	
Cooling Fan Air Flow	1095 m³/ min	
Radiator Fan Load	27 kW	
Heat Radiation to Room (PRP)	80 Kw	
Heat Radiation to Room (ESP)	100 kW	
LUBRICATION SYSTEM		
Oil Filter Type	Spin-On Full Flow	
Total Oil Capacity	153 L	
Oil Type	API-CH-4 or ACEA E5	
EXHAUST SYSTEM		
Muffler Type	Industrial Grade	
Max. Back Pressure	8 kPa	
Exhaust Gas Flow (PRP/ESP)	200 m ³ / min	
Exhaust Gas Temperature	<465 °C	
FUEL SYSTEM		
Recommended Fuel	Class A2 Diesel	
Fuel Consumption Standby	215 L/hr	
Fuel Consumption 100% PRP	240 L/hr	
Fuel Consumption 75% PRP	163 L/hr	
Fuel Consumption 50% PRP	109 L/hr	
AIR SYSTEM		
Air Filter Type	Paper Element	
Combustion Air Flow (PRP)	75 m³/min	
Combustion Air Flow (ESP)	80.5 m ³ /min	
Max Air Filter Intake Restriction	3.7 kPA	

Optional configurations:

Engine accessories:

- Heavy-duty air filter
- Coolant heater
- Lubricant oil heater
- Fuel and Water Separator
- Lube oil rotary pump

Alternator And Accessories:

- Leroy somer/stamford
- Anti condensation heater
- PMG + AVR ◇Double bearing alternator
- High voltage____kV
- RTDs for Bearing and winding

Cooling System:

- 55 degree Radiator
- Remote Radiator

Control System:

- AMF
- Parallel
- Practical type in low temperature environment
- Control Screen Heater
- **Remote Annunciators**
- Other (Comp, DEIF)

Circuit Breaker:

- 3/4 poles
- Fixed/handcart type
- Electric mechanism

Automatic Transfer Switch (ATS):

- ATS cabinet
- Contractor type ATS
- Motorized changeover type ATS

Start Battery:

- Nickel-cadmium battery
- Maintenance-free battery
- Battery charger and selector switch
- Charging current meter

External Fuel Tank:

- Single /double wall fuel tank (500-5000 L)
- Fuel Transfer pump

Exhaust Muffler:

- Residential grade
- Critical grade
- Hospital grade

Available for voltages:

400/230V, 480/277V, 380/220V, 440/254V, 416/240V,220/127V, 208/120V

