# **AQT-400**

**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 I	Rpm 400 V, 3ph			
350 kVA	280 kW	400 kVA	320 kW	
60 Hz—1800 I	Rpm 480 V, 3ph			
400 kVA	320 kW	438 kVA	350 kW	

ENGINE SPECIFICATIONS	
Engine Make	PERKINS
Engine Model	2206A-E13TAG2
No. of Cylinders	6 vertical in-line
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	16.3:1
Displacement	12.5 L
Bore/Stroke	130 x 157 mm
Dynamic Charging Alternator	45AMP, 24V

AQT I Leroy Somer   STAMFORD
AQT I TAL-046-H   HC444E
4
6
Single Bearing
Cont. H - 125/40 Č
IP 23
Self Excited
R150

#### **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	< 2.5%	
Tel. influence TIF	< 50	
Cooling air flow	0.48 m3/ Sec	

#### Powered By:



Diesel Generator









### **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 73db(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



#### DSE6110 MKII

**AUTO START & AUTO MAINS** FAILURE CONTROL

## **Dimensions:**

Туре	Length (mm)	Width (mm)	Height (mm)	Fuel Tank (L)	Weight (KG)
OPEN	3400	1200	1700	670	3180
CLOSED	4420	1600	2260	670	4480









# Engine:



Perkins heavy duty high performance industrial type diesel engine.

COOLING SYSTEM	
Total Coolant Capacity (L)	51.4 L
Cooling Fan Air Flow	654 m3/ min
Radiator Fan Load	14 kW
Heat Radiation to Room (PRP)	36.8 kW
Heat Radiation to Room (ESP)	37.6 kW
LUBRICATION SYSTEM	
Oil Filter Type	Spin-On Full Flow
Total Oil Capacity	40 L
Oil Type	API-CH-4 or ACEA E5
EXHAUST SYSTEM	
Muffler Type	Industrial Grade
Max. Back Pressure	10 kPa
Exhaust Gas Flow (PRP/ESP)	56.6 /64.8 m3/ min
Exhaust Gas Temperature	< 630 0C
FUEL SYSTEM	
Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	80 L/hr
Fuel Consumption 100% PRP	77 L/hr
Fuel Consumption 75% PRP	71 L/hr
Fuel Consumption 50% PRP	54 L/hr
AIR SYSTEM	
Air Filter Type	Paper Element
Combustion Air Flow (PRP)	25.2 m3/min
Combustion Air Flow (ESP)	26.2 m3/min
Max Air Filter Intake Restriction	6.4 kPA

# Ontional configurations:

Opt	nonai comigaracions.
En	gine accessories:
П	Heavy-duty air filter
П	Coolant heater
Ō	Lubricant oil heater
	Fuel and Water Separator
	Lube oil rotary pump
Alt	ernator And Accessories:
	Leroy somer/stamford
	Anti condensation heater
	PMG + AVR $\diamondsuit$ Double bearing
	Alternator High voltagekV
	RTDs for Bearing and winding
Co	oling System:
П	55 degree Radiator
П	Remote Radiator
П	Nemote nadator
Co	ntrol System:
П	AMF
П	Parallel
	Practical type in low temperature environment
ă	Control Screen Heater
ă	Remote Annunciators
Ō	Other (Comp, DEIF)
Cir	cuit Breaker:
_	3/4 poles Fixed/handcart type
П	Electric mechanism
П	Liecti te methanism
Au	tomatic Transfer Switch (ATS):
	ATS cabinet
П	Contractor type ATS
Н	Motorized changeover type ATS
П	
Sta	art Battery:
	Nickel-cadmium battery
П	Maintenance-free battery
Н	Battery charger and selector switch
й	Charging current meter
_	kternal Fuel Tank:
П	Single /double wall fuel tank (500-5000 L)
П	Fuel Transfer pump
	ruei fransier pump
Ex	haust Muffler:
	Residential grade
	Critical grade
	Hospital grade
Av	railable for voltages :
П	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.





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