



ACCURATE POWER INDUSTRIAL GENERAL TRADING LLC



GENERATING SET MODEL WVS 100

Output Ratings	Prime	Standby
400 V,3 ph,50 Hz,1500 rpm	100 kVA	109 kVA
	80 kW	87 kW
480 V,3 ph,60 Hz,1800 rpm	105 kVA	115 kVA
	84 kW	92 kW
		Power Factor : 0.8

ENGINE / TECHNICAL DATA

Engine Make	Volvo Penta		
Engine Model	TAD531GE		
Governing Type	Mechanical		
Number of Cylinders	4		
Cylinder Arrangement	Vertical In Line		
Bore and Stroke mm	108x130		
Displacement / Cubic Capacity Itrs	4.76		
Aspiration	Turbocharged		
Cycle	4 stroke		
Combustion System	Direct Injection		
Compression Ratio	18:1		

Powered by:



STAMFORD

STANDARD SPECIFICATIONS

Volvo four stroke heavy duty high performance industrial type

2. ENGINE FILTRATION SYSTEM

- Cartridge type dry air filter
- Two cartridge type fuel filters
- Full flow lube oil filter

All filters have replacable elements

3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures(consult your dealer for deration factors)

4 FXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level 14 (dB) Maximum allowable back pressure 10.0(kPa)

5. CIRCUIT BREAKER TYPE

ABB 3 pole MCCB.(4 pole is optional)

6. FUEL SYSTEM

On Generating sets upto 700kVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at full load. The tank is supplied complete with fill cap breather, fuel speed and return lines to the engine and drain plug.

7. ALTERNATOR

7.1 INSULATION SYSTEM • Insulation : Class H

• All windings are impregnated in either a triple dip thermosetting liquid,oil and acid resisting polyester varnish or vaccum pressure impregnated with a special polyester resin.

 Heavy coat of antitracking varnish additional protection against moisture or condenasation.

7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed AVR maintains the voltage regulation at ±0.5%. Nominal adjustment by means of a trim pot incorporated on the AVR.

7.3 MOTOR STARTING

An overload capacity equivalent to 300% of the full load impedance at zero power factor can be sustained for 10 sec.,when AREP or PMG option is fitted.

8. MOUNTING ARRANGEMENT

8.1 BASE FRAME

The complete generating set is mounted as a whole on a heavy duty fabricated steel baseframe.

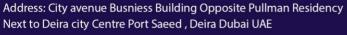
82 COUPLING

The engine and alternator are directly coupled by means of an SAE flange. The engine flywheel is flexibly coupled to the alternator rotor.

8.3 ANTI-VIBRATION MOUNTING PADS

Anti-vibration pads are affixed between the engine / alternator feet and the baseframe thus ensuring complete vibration isolation of the rotating assembly.











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Frequency and Engine Speed		50Hz & 1500rpm		60Hz & 1800rpm	
		Prir	ne		Prime
Gross Engine Power kWm		87.6			90.7
Fuel Consumption @50%load I	/hr	11.78			12.7
@75%load l	/hr	17.13			18.15
@100%load	l l/hr	22.83			23.88
Oil Consumption (I/hr)	il Consumption (I/hr)		0.08		0.08
Oil Sump Capacity, I		11			11
Heat Rejection at Exhaust (Stand	by) kW	88			92
Exhaust Temperature °C Standby		557			516
Radiator Cooling Air Flow : m³/s		1.5			1.9
Combustion Air Flow (Standby) :	m³/min	6.09			7.75
Exhaust Gas Flow (Standby) : m³/	min	18.4			22.1
Dimension (mm) & Weight (Kg)	Length	Width	Height	Weight	STANDARD SPECIFICATIONS
Open	1980	900	1350	1150	
Soundproof	2800	1110	1770	1690	

ALTERNATOR DATA

Make	Stamford		
Model	UCI274C		
No. of bearings	1		
Insulation Class	Н		
Total Harmonic Content	on load < 5%		
Wires	6 / 12		
Ingress Protection	IP23		
Excitation System	Shunt / Self Excited		
Winding Pitch	2/3(n°3)		
AVR Model	R120 / SX460		
Overspeed	2250 mn ⁻¹		
Voltage Regulation	±1% / ±1.5%		
AREP & PMG Excitation System Available as optional			

8.4 SAFETY GUARDS

The fan and fan drive along with the battery charging alternator are safety guard protected for personnel protection.

• The generating set is load tested before dispatch. All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

10. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

11. DOCUMENTATIONS

Operation and Maintenance manual, circuit wiring diagrams and commissioning/fault finding instruction leaflets are accompanied with the generator.

CONTROL PANEL

Make Model Deep Sea

DSE4510 The DSE4510 is an Auto Start Control Module for single genset

applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the DSE configuration suitr PC software.

Metering and AlarmIndications:

- · Generator Frequency
- · Underspeed, Overspeed
- Generator volts(L-L,L-N)Generator Current
- Engine Oil Pressure
- Engine Coolant Temperature
- Fuel Level
- Hours Run Counter
- Battery Volts
- Fail to start/stop
- Emergency Stop
- Failed to reach loading voltage/frequency
 • Charge fail
- Loss of magnetic pick-up signal-Optional
- Low DC Voltage
- CAN diagnostics and CAN fail/error