

VP-350

ACCURATE POWER INDUSTRIAL GENERAL TRADING LLC



VOLVO PENTA

STAMFORD

GENERATING SET MODEL WVS 350

Output Ratings	Prime	Standby
400 V,3 ph,50 Hz,1500 rpm	352 kVA	387 kVA
	282 kW	310 kW
480 V,3 ph,60 Hz,1800 rpm	401 kVA	438 kVA
	321 kW	351 kW

Power Factor: 0.8

ENGINE / TECHNICAL DATA

Engine Make	Volvo Penta	
Engine Model	TAD1342GE	
Governing Type	Electronic	
Number of Cylinders	6	
Cylinder Arrangement	Vertical In Line	
Bore and Stroke mm	131x158	
Displacement / Cubic Capacity Itrs	12.78	
Aspiration	Turbocharged	
Cycle	4 stroke	
Combustion System	Direct Injection	
Compression Ratio	18.1:1	

STANDARD SPECIFICATIONS

Volvo four stroke heavy duty high performance industrial type diesel engine

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(con- sult your dealer for deration factors)

4. EXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level 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.

72 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.

8.2 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.









Frequency and Engine Speed	50Hz & 1500rpm			60Hz & 1800rpm
	Pri	me		Prime
Gross Engine Power kWm	303			345
Fuel Consumption @50%load I/hr	36.25			42.5
@75%load l/hr	52.21			61.6
@100%load l/hr	68.89			82.55
Oil Consumption (I/hr)	0.04			0.05
Oil Sump Capacity, I	30	0		30
Heat Rejection at Exhaust (Standby) kW	21	3		287
Exhaust Temperature °C Standby	40	8		481
Radiator Cooling Air Flow: m³/s	6.7	7		8.2
Combustion Air Flow (Standby) : m³/min	25.9			28.7
Exhaust Gas Flow (Standby) : m³/min	57			69.5
Dimension (mm) & Weight (Kg) Length	Width	Height	Weight	
Open 3800	1130	2155	3470	
Soundproof 4400	1710	2570	4887	STANDARD SPECIFICATIONS

ALTERNATOR DATA

Make	Stamford		
Model	HCI444E		
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°6)		
AVR Model	R120 / SX440		
Overspeed	2250 mn ⁻ 1		
Voltage Regulation	±1%		
Short Circuit Capacity	-		
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

9. FACTORY TESTS

• 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 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 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











