WEBER

WPS600

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GENERATING SET MODEL WPS 600

Output Ratings	Prime	Standby
400 V,3 ph,50 Hz,1500 rpm	600 kVA	660 kVA
	480 kW	528 kW
480 V,3 ph,60 Hz,1800 rpm	625 kVA	687 kVA
	500 kW	550 kW
		Power Factor : 0.8

ENGINE / TECHNICAL DATA

Engine Make	Perkins
Engine Model	2806A-E18TAG1A
Governing Type	Electronic
Number of Cylinders	6
Cylinder Arrangement	Vertical In Line
Bore and Stroke mm	145 x 183
Displacement / Cubic Capacity ltrs	18.1
Induction System	Turbocharged
Cycle	4 stroke
Combustion System	Direct Injection
Compression Ratio	14.5:1
Rotation	Anti-clockwise
Cooling System	Water Cooled

STANDARD SPECIFICATIONS

1.
Perkins four stroke heavy duty high performance industrial type diesel engine

2. ENGINE FILTRATION SYSTEM
- Cartridge type dry airfilter
- Two cartridge type fuelfilters
- Full flow lube oilfilter

All filters have replacable elements

3. COOLINGRADIATOR
Radiator and cooling fan, complete with safety guards,de-signed to cool the engine at high ambient temperatures(con-sult your dealer for deration factors)

4. EXHAUSTSYSTEM
Heavy duty Industrial Exhaust Silencer

Silencer noisereductionlevel	14 (dB)
Maximum allowablebackpressure	6.8(kPa)

5. CIRCUIT BREAKERTYPE
ABB 3 pole MCCB.(4 pole is optional)

6. FUELSYSTEM
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 INSULATIONSYSTEM
- Insulation : ClassH
- All windings are impregnated in either a triple dip thermosettingliquid,oilandacidresistingpolyestervarnishor vaccumpressureimpregnatedwithaspecialpolyesterresin.
- Heavycoatofantitrackingvarnishadditionalprotection against moisture orcondenasation.

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 MOTORSTARTING
Anoverloadcapacityequivalentto300%ofthefullload impedanceatzeropowerfactorcanbesustainedfor10 sec.,when AREP or PMG option isfitted.

8. MOUNTINGARRANGEMENT
8.1 BASEFRAME
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.

Powered by :

ENGINE / TECHNICAL DATA (continued)

Frequency andEngineSpeed	50Hz & 1500rpm		60Hz & 1800rpm	
	Prime	Standby	Prime	Standby
Gross Engine Power kW(hp)	540(724)	593(795)	568(762)	623(835)
Fuel Consumption @50%load L/hr	61	-	66	-
@75%load L/hr	90	-	95	-
@100%load L/hr	123	134	127	141
Total Lubrication System Capacity ltrs	62	62	62	62
Total Coolant Capacity ltrs	61	61	61	61
Boost Pressure Ratio	2.81	3.07	2.97	3.18
Exhaust Temperature °C	568	571	481	489
Radiator Cooling Air Flow(Min):m³/sec	11.7	11.7	14.2	14.2
Combustion Air Flow:m³/min	34	36	43	45
Exhaust Gas Flow:m³/min	96	104	109	118
Fuel Tank Capacity: ltrs	985	985	985	985

Dimension (mm) &Weight(Kg)	Length	Width	Height	Weight
Open	3550	1600	2290	5760
Soundproof4335190032557000				

ALTERNATOR DATA

Make	Leroy Somer TAL / Stamford
Model	TAL 047E / HCI544E
No. of bearings	1
Insulation Class	H
Total Harmonic Content	On load <3.5% / <2%
Wires	6 / 12
Ingress Protection	IP23
Excitation System	Shunt / Self Excited
Winding Pitch	2/3(n˚6)
AVR Model	R150 / SX440
Overspeed	2250 mn^{-1}
Voltage Regulation	±1%
Short Circuit Capacity	-
AREP & PMG Excitation System Available as optional	

STANDARD SPECIFICATIONS

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

9. FACTORYTESTS
- The generating set is load tested beforedispatch.
- All protective devices control functions and site load conditionsaresimulated.Thegeneratorandit'ssystemsare checked beforedispatch.

10. EQUIPMENTFINISHING
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
Model	DSE4510

The DSE4510 is an Auto Start Control Module for single genset applications.ItincludesabacklitLCDdisplaywhichclearlyshows 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 PCsoftware.

Metering and AlarmIndications:

- GeneratorFrequency
- Underspeed,Overspeed
- Generatorvolts(L-L,L-N)
- GeneratorCurrent
- Engine OilPressure
- Engine CoolantTemperature
- FuelLevel
- Hours RunCounter
- BatteryVolts
- Fail tostart/stop
- EmergencyStop
- Failed to reachloading voltage/frequency
- Chargefail
- Loss of magneticpick-up signal-Optional
- Low DCVoltage
- CAN diagnostics and CAN fail/error

WEBER

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