

# EP Series WPS600S

— Generator Set Specification



NO: DT1222023S- 02 © 2010 Power Link Machine (Shanghai) Co., Ltd.

**Super Quiet, Superior Life!** 







3-Phase, 50Hz@1500RPM								
	Voltage kW kVA Amps							
	380	480	600	911.6				
Prime Power	400	480	600	866.1				
	415	480	600	834.7				
	440	480	600	787.3				
Standby Power	380	533.3	666.7	1012.9				
	400	533.3	666.7	962.3				
	415	533.3	666.7	927.5				
	440	533.3	666.7	874.8				
Noise Level at 7 meters (dBA) 72.6								

### Notes:

- 1) Ambient reference conditions: 1,000 mbar, 27  $^\circ\!\!\!\!\!\!\mathrm{C}$  , 30% relative humidity;
- Standby Power: the maximum power available under varying loads. Only for standby and emergency use. No overload is permissible. Prime Power: the maximum power available under varying loads for continuous operation. A 10% overload is permissible for 1 hour every 12 hours.

	Features	Benefits
1 1 1 1 1	Excellent cooling system, reliable operation under harshest conditions.  PLC-5220 control panel with AMF function.  With sound attenuated enclosures available with high protection against water and dust.  Designed with safety in mind earth leakage protection.  Leroy Somer Alternator, IP 23 class 'H' insulation.  Equipped with a ladder (for generators 300-500 kVA), exterior fueling point, water tank inlet.	<ul> <li>I Function stability credibility, service convenience.</li> <li>I Low operating cost results in optimal economy.</li> <li>I Gets the job done wherever you are.</li> <li>I Ease of installation, operation, and maintenance.</li> </ul>

Performance Specification and Craftwork					
Performance Specification		Telephone Interference, Electromagnetism			
Efficiency of Rated Power	96.3%	TIF ≤50			
Time needed from start-up to full load (inductive)	125 seconds	THF ≤2%			
Time needed from start-up to 50% load (inductive) allowed	8 seconds	Radio interference in compliance with BS800 and VED LEVELS G and N.			
1.1 times overload operation time (hour)	1	Craftwork			
2.0 time overload operation time (minute)	1	<ul> <li>Steel base frame with AV mounting</li> <li>standard 8h fuel tank with flexible rubber fuel tube, fuel level indicator and drainage</li> <li>Overall sprayed powder coating</li> <li>Whole set documents, including Installation Manual, Operation Manual, Spare Parts Catalog, Circuit Diagram</li> </ul> Criterion			
Voltage Regulation, steady state	≤±1%				
Voltage Regulation, transient state	20%-15%				
Voltage Settle Time	≤5 seconds				
Voltage Fluctuation Ratio	0.5%				
Frequency Regulation, steady state	±0.5% adjustable				
Frequency Regulation, transient state	±5%				
Frequency Settle Time	5 seconds	• ISO3046, ISO8528, BS4999, BS5514,			
Frequency Fluctuation Ratio	0.5%	<ul><li>BS5000PT99、AS1359, IEC34</li><li>UTE5100, VDE0530</li><li>ISO9001:2000</li></ul>			
Recovery Time	0.5 seconds				

# **WPS600S**



	Engine Spe	cification	Alternato	r Specification	
Brand		Perkins (UK)	Brand	Leroy Somer	
Model		2806C-E18TAG1A	Model	LSA47.2L9	
No. of Cylinder	s and Cycle	6L, 4 Stroke	Rated Output (kVA)	880	
Induction Syste	em	TCA	Ratedcurrent (A)	793.9	
Compression F	Ratio	14.5: 1	Exciter	Brushless	
Displacement (L)		18.13	THF(BS EN60034- 1)	<2%	
Bore x Stroke(	mm)	145 x 183	Bearing number	Single	
Ambient Temp	(℃)	25	Windings	100% Copper	
Continuous Ra	ted Power kW)	591	Connection Type	Star Connection	
Speed	(rev/min)	1500	Insulation Class	Class H	
Cooling Air Flo	w (L/min)	6.1	Winding Pitch	2/3	
Air Intake Flow	(m³/min)	40	Amortisseur Winding	Full	
Exhaust Gas F	low (m³/min)	110	A.V.R. Model	R448	
Exhaust Gas (°C)	temperature	550	Voltage Regulation (no load-full load)	± 0.5%	
Fuel temperatu	ıre (°C)	40	Underspeed Protection	Standard	
Starting Syster	n	Е	Protection	IP23	
Fuel	110% load		Phase Sequence	A(U), B(V), C(W)	
	100% load	129	TIF (NEMA MG 1-22)	<50	
Consumption (L/h)	75% load	96	Excitation System	Self-excited, PMG optional	
(=/11)	50% load	63	AmbientTemp (°C)	40	
Governor Type	:	E	Stator Rated Temp (℃)	2) 125	

Cooling System		Fuel System		
Radiator			Injection system	MEUI
Face Area	(m <sup>2</sup> )	1.75	Injection pressure (MPa)	200
Rows and Materials		2 rows, aluminium		
Width of Matrix	(mm)	1260	Fuel Lift Pump	
Height of Matrix	(mm)	1390	Flow/hour (L/min)	413/457
Pressure Cap Setting	(kPa)	70	Delivery Pressure (kPa)	600
Fan		Lubricati System		
Diameter	(mm)	965	Lubricating Oil Capaci	ty
Drive Ratio		0.8 : 1	Total System (L)	62
Number of Blades		9	Minimum (L)	45
Material		Plastic	Lubricating Oil Pressure	
Туре		Pusher	Oil pressure at bearings (kPa) 610	
Coolant pump		Normal temperature (°C)	95-113	
Speed		1.08 x e rev/min		
Method of drive		Gear		

Exhaust S	Electrical System			
Max. Back Pressure (kPa)	6.9	Alternator	(A/V)	70/24
Exhaust Outlet Size (mm)	202	Starting Motor	(kW)	9



## **Control System**

### **PLC-702**

DSE-702 key manual start module is a manual engine control module designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

### **Standard Control Function**

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown

- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning



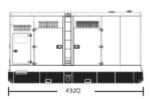
### **PLC-5220**

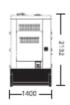
DSE-5220 control pannel is applied

- I Microprocessor control, with high stability and credibility
- I Mains supply and generator operation monitoring
- I Indicating operation status and fault conditions
- I Multiple protections; multiple parameters display, like pressure, temp.
- I Manual and automatic work mode selectable
- Real time clock for time and date display, overall runtime display, 99 log entries
- I Overall power output display
- I Integral speed/frequency detecting, telling status of start, rated operation, overspeed
- I Communication with PC via RS485 OR RS232 interface, using MODBUS protocol.



# **Dimension and Weight**





### **WPS600S**

Length × Width × Height, (mm) Weight (kg) 4320×1400×2132 5043

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# **Optional**

Engine	Alternator	Generator Set	Fuel System	Canopy
Coolant heater	<ul> <li>Space heater</li> <li>AVR PMG with regulator</li> <li>Anti-damp and anti-corrosion treatment</li> <li>Anti-condensation heater</li> </ul>	• Tools with the machine	Low fuel level alarm     Automatic fuel feeding system	• Trailer
Lubricating System	Exhaust System	Cooling System	Control Panel	Voltages
Oil with the machine	Protection board from hotness     Low frequency silencer	<ul> <li>Front heat protection</li> <li>50°C radiator</li> <li>Coolant (-30°C)</li> </ul>	<ul> <li>Remote control panel</li> <li>Automatic paralleling control panel</li> <li>Automatic Transfer Switch (ATS)</li> </ul>	<ul><li>415/240V</li><li>400/230V</li><li>380/220V</li><li>220/127V</li><li>200-115V</li></ul>



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Specification may change without prior notice. For more info., please contact Power Link or your local distributors. Local Distributor