

# EP Series WPS900S

— Generator Set Specification



**Super Quiet, Superior Life!**



# WPS900S



## 3-Phase, 50Hz@1500RPM

	Voltage	kW	kVA	Amps
<b>Prime Power</b>	380	720	900	1367.4
	400	720	900	1299.1
	415	720	900	1252.1
	440	720	900	1181.0
<b>Standby Power</b>	380	800	1000	1519.4
	400	800	1000	1443.4
	415	800	1000	1391.2
	440	800	1000	1312.2
<b>Noise Level at 7 meters (dBA)</b>			72.8	

### Notes:

- 1) Ambient reference conditions: 1,000 mbar, 27°C, 30% relative humidity;
- 2) 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
<ul style="list-style-type: none"> <li>  With all the advantages of the soundproof generators.</li> <li>  Optimal unit protection with minimum size.</li> <li>  Fluid containment design for greater environmental protection.</li> <li>  Sound attenuated to minimize impact on local environment.</li> <li>  Keeps all spillages contained inside enclosure avoiding external site.</li> </ul>	<ul style="list-style-type: none"> <li>  Easy to transport.</li> <li>  Ease of operation.</li> <li>  No need of installation.</li> <li>  Suitable for outdoor use.</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	<b>Craftwork</b> <ul style="list-style-type: none"> <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>	
2.0 time overload operation time (minute)	1		
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		
Frequency Fluctuation Ratio	0.5%		
Recovery Time	0.5 seconds	<b>Criterion</b> <ul style="list-style-type: none"> <li>● ISO3046, ISO8528, BS4999, BS5514,</li> <li>● BS5000PT99、AS1359, IEC34</li> <li>● UTE5100, VDE0530</li> <li>● ISO9001:2000</li> </ul>	

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Engine Specification			Alternator Specification	
Brand	Perkins (UK)		Brand	Leroy Somer
Model	4008TAG2A		Model	LSA49.1L10
No. of Cylinders and Cycle	8L, 4 Stroke		Rated Output (kVA)	910
Induction System	TCA		Rated current (A)	1299
Compression Ratio	13.6: 1		Exciter	Brushless
Displacement (L)	30.6		THF(BS EN60034- 1)	<2%
Bore x Stroke(mm)	160 x 190		Bearing number	Single
Ambient Temp (°C)	25		Windings	100% Copper
Continuous Rated Power kW)	719		Connection Type	Star Connection
Speed (rev/min)	1500		Insulation Class	Class H
Cooling Air Flow (L/min)	10		Winding Pitch	2/3
Air Intake Flow (m³/min)	69		Amortisseur Winding	Full
Exhaust Gas Flow (m³/min)	183		A.V.R. Model	R448
Fuel temperature (°C)	<98		Voltage Regulation (no load- full load)	± 0.5%
Exhaust Gas temperature Max.AfterTurbo (°C)	422		Underspeed Protection	Standard
Starting System	E		Protection	IP23
Fuel Consumption (L/h)	110% load		Phase Sequence	A(U), B(V), C(W)
	100% load	194	TIF (NEMA MG 1-22)	<50
	75% load	142	Excitation System	Self-excited, PMG optional
	50% load	97	AmbientTemp (°C)	40
Governor Type	E		Stator Rated Temp (°C)	125

Cooling System			Fuel System	
Total system capacity			Type of injectio006E	Direct
Electrounit(engine only) (L)	48		Fuel injector	Combined unit injector
Tropical / temperate	149/143		Injection pressure (bar)	234
Pressure cap setting (kPa)	69		<b>Fuel Lift Pump</b>	
Diameter (Tropical / temperate)	1400 / 1214		Flow/hour (L/h)	660
Coolant pump speed and method of drive	1.4 x e rev/min gear driven		Delivery Pressure (kPa)	300
Thermostat operating range (°C)	71-85		<b>Lubricati System</b>	
Diameter (mm)	1200		<b>Lubricating Oil Capacity</b>	
Drive Ratio	0.78 : 1		Total System (L)	153
Number of Blades	6-8		Minimum (L)	127
Material	Steel		<b>Lubricating Oil Pressure</b>	
Type	Engine mounted		-at 80°C temperature to bearing gallery (MPa)	0.34
Max. top temperature in crankcase (kPa)	98		Normal temperature (°C)	105
Max. static pressure head on pump (m)	7			
Shutdown switch setting (°C)	101 °C rising			

Exhaust System		Electrical System	
Max. Back Pressure (kPa)	949	Alternator (A/V)	40/24 or 28
Exhaust Outlet Size (mm)	2 X 152	Starting Motor (kW/V)	8.2/24

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## 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



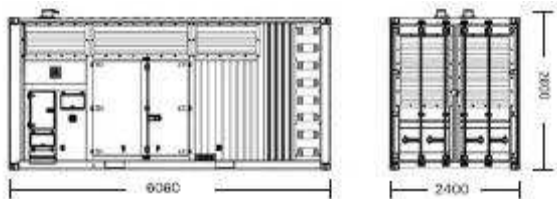
### PLC-5220

DSE-5220 control panel is applied

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



## Dimension and Weight



### WPS900S

Length × Width × Height, (mm)      Weight (kg)  
6060×2400×2600                      2300+

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## Optional

Engine	Alternator	Generator Set	Fuel System	Canopy
<ul style="list-style-type: none"> <li>• Coolant heater</li> </ul>	<ul style="list-style-type: none"> <li>• Space heater</li> <li>• AVR PMG with regulator</li> <li>• Anti-damp and anti-corrosion treatment</li> <li>• Anti-condensation heater</li> </ul>	<ul style="list-style-type: none"> <li>• Tools with the machine</li> </ul>	<ul style="list-style-type: none"> <li>• Low fuel level alarm</li> <li>• Automatic fuel feeding system</li> </ul>	<ul style="list-style-type: none"> <li>• Trailer</li> </ul>
Lubricating System	Exhaust System	Cooling System	Control Panel	Voltages
<ul style="list-style-type: none"> <li>• Oil with the machine</li> </ul>	<ul style="list-style-type: none"> <li>• Protection board from hotness</li> <li>• Low frequency silencer</li> </ul>	<ul style="list-style-type: none"> <li>• Front heat protection</li> <li>• 50°C radiator</li> <li>• Coolant (-30°C)</li> </ul>	<ul style="list-style-type: none"> <li>• Remote control panel</li> <li>• Automatic paralleling control panel</li> <li>• Automatic Transfer Switch (ATS)</li> </ul>	<ul style="list-style-type: none"> <li>• 415/240V</li> <li>• 400/230V</li> <li>• 380/220V</li> <li>• 220/127V</li> <li>• 200-115V</li> </ul>



Local Distributor