

Widely applied in Telecom, Industry, Rental,  
Outdoor Projects, Mining, Military, etc.



# EP Series WPS1000S

— Generator Set Specification



NO: DT12220027S- 02

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**Super Quiet, Superior Life!**





### 3-Phase, 50Hz @1500RPM

	Voltage	kW	kVA	Amps
<b>Prime Power</b>	380	800	1000	1519.4
	400	800	1000	1443.4
	415	800	1000	1391.2
	440	800	1000	1312.2
<b>Standby Power</b>	380	888.9	1111.1	1688.2
	400	888.9	1111.1	1603.8
	415	888.9	1111.1	1545.8
	440	888.9	1111.1	1458.0
<b>Noise Level at 7 meters (dBA)</b>			74	

#### 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>I With all the advantages of soundproofed generators.</li> <li>I Optimal unit protection with minimum size.</li> <li>I Fluid containment design for greater environmental protection.</li> <li>I Sound attenuated to minimize impact on local environment.</li> <li>I Keeps all spillages contained inside enclosure avoiding external site.</li> </ul>	<ul style="list-style-type: none"> <li>I Easy to transport.</li> <li>I Ease of operation.</li> <li>I No need of installation.</li> <li>I 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> <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>	
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		

Engine Specification		Alternator Specification	
<b>Brand</b>	<b>Perkins (UK)</b>	<b>Brand</b>	<b>Leroy Somer</b>
<b>Model</b>	<b>4008TAG2A</b>	<b>Model</b>	<b>LSA50.2S4</b>
No. of Cylinders and Cycle	8L, 4 Stroke	Rated Output (kVA)	1025
Induction System	TCA	Rated current (A)	1443.4
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)	872	Connection Type	Star Connection
Speed (rev/min)	1500	Insulation Class	H
Cooling Air Flow (L/min)	10	Winding Pitch	2/3
Air Intake Flow (m³/min)	75	Amortisseur Winding	Full
Exhaust Gas Flow (m³/min)	200	A.V.R. Model	R448V50
Exhaust Temp (°C)	438	Voltage Regulation (no load- full load)	± 0.5%
Starting System	Electronic	Underspeed Protection	Standard
Battery Voltage/Capacity	24VDC/1600A/1600	Protection	IP23
Fuel Consumption (L/h)	100% load	Phase Sequence	A(U), B(V), C(W)
	75% load	TIF (NEMA MG 1-22)	<50
	50% load	Excitation System	Self-excited, PMG optional
	25% load	AmbientTemp (°C)	40
Governor Type	E	Stator Rated Temp (°C)	125

Cooling System		Fuel System	
<b>Total coolant capacity</b>		Type of Injection	Indirect Injection
Electrounit(engine only) (L)	48	Fuel Injection Pump	Combined unit injector
ElectropaK(tropical) (L)	149	Fuel Injector	Combined unit injector
ElectropaK(temperate) (L)	143	Nozzle Opening Pressure (bar)	234
Pressure cap setting (kPa)	69	<b>Fuel Lift Pump</b>	
Diameter(tropical) (mm)	1400	Flow/hour (L/h)	660
Diameter(temperate) (mm)	1214	Pressure (kPa)	300
Cooling water capacity	165.6	<b>Lubricating System</b>	
Coolant pump speed and method of drive	1.4 x e rev/min gear driven	<b>Lubricating Oil Capacity</b>	
Maximum static pressure head on pump above engine crank centre line (m)	7	Total System (L)	153
Maximum external permissible restriction to coolant pump flow (kPa)	20	Minimum (L)	127
Thermostat operating range (°C)	71-85	<b>Lubricating Oil Pressure</b>	
Shutdown switch setting (°C)	101 °C rising	Relief Valve Opens (MPa)	0.34
		Normal Oil Temp (°C)	105

Exhaust System		Electrical System	
Max. Back Pressure (kPa)	816	Alternator (A/V)	40/24 (or 28)
Exhaust Outlet Size (mm)	2 X 152	Starting Motor (kW/V)	8.2/24

## 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



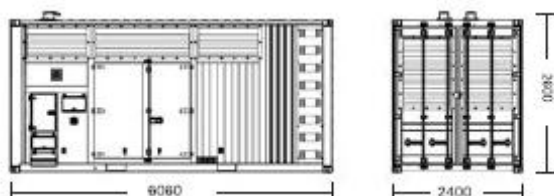
### PLC-5220

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
- I 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



### WPS1000S

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

## 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>



Air Switch



Paralleling Control System



ATS



Mobile Trailer

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