

### **Features**

- High quality, reliable and complete generating sets.
- Every generating set carries a comprehensive test program which includes 25%, 50%, 75%, 100%, 110% loading test and series protecting function (example: Low oil pressure, High coolant temperature, over current/load etc.) check.
- Easy for operation and maintenance
- Compact structure & high-strength chassis.
- Base frame design incorporates an intergrade fuel tank for at least 8 hours running (up to 650KVA).
- The canopy body painting adopts the HenKel pretreatment process and the base frame painting adopts sandblasting +AkzoNobel powder, the paint warranty period can be 3 years.
- High-performance free-maintenance batteries with isolation switch.
- Anti- vibration pads are mounted between the engine/alternator feet and the base frame.
- Top lifting point and steel base frame with forklift holes, easy for transportation.
- Compliance with international electrical safety standards.
- Complete protection functions and safety labels.
- A large number of matching optional to meet the needs of various customers.









Generating Set Technical Data				
Prime power(Output)	500 kVA/400kW			
Standby power(Output)	550kVA/440kW			
Rated frequency	50 Hz			
Rated speed	1500 rpm			
Rated voltage	415 /240V			
Phase	3			
Power factor	0.8			
Noise level @7m dB(A)(only for silent type)	80			
Engine model	2506C-E15TAG2			
Alternator model	LSA47.2M7			
Fuel consumption of 75% load	81 Litres/h			
Fuel consumption of 100% load	106 Litres/h			

#### Also available in the following voltages:

415/240V, 380/220V, 220/127V, 200/115V (According to customer requirements).

#### Rated Power/prime Power(PRP):

Continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hour period, in accordance with ISO8528.

## Standby Power/Emergency Standby Power (ESP):

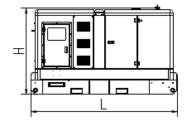
The maximum power available during a variable electrical power sequence, no overload on these ratings, in accordance with ISO 8528.



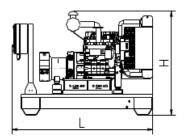
Photos are for reference only

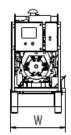
Dimension, Weight, Fuel Tank Capacity				
Generating set model	HPLS500S-1	HPLS500S-1		
Length(L) (mm)	20GP	3850		
Width(W) (mm)	20GP	1250		
Height(H) (mm)	20GP	2030		
Dry weight (kg)	5000	3750		
Tank capacity(L)	970	760		
The loading capacity (40'HC)	2 Sets	3 Sets		

This data sheet is for reference only, Please contact the salesman before ordering.















Engine Specifications				
Engine model & manufa	cturer	2506C-E15TAG2 ( Perkins)		
<b>Emission Certification</b>		Stage II		
Number of cylinders		6		
Cylinder arrangement		In-line In-line		
Cycle		Four stroke		
Aspiration		Turbocharged and air-to-air charge cooled		
Bore x Stroke		137 x 171 mm		
Displacement		15.2 Liter		
Compression ration		16:1		
Prime power/speed		435 kW/1500 rpm		
Standby power/speed		478 kW/1500 rpm		
Speed governor		ECM		
Cooling system		Forced Water Cooling Cycle		
Frequency droop		≤1%		
Total lubrication system	capacity	62 Liter		
Coolant capacity		58 Liter		
Fuel consumption	100% load	211 g/kW.h (at 1500 rpm)		
Starter motor		DC24V		
Charge alternator		DC24V		
Heavy duty Perkins of	diesel engine	<ul> <li>Cooling radiator and fan</li> </ul>		
• Four stroke, water co	ooled, naturally aspirated	<ul> <li>Starter battery(with lead acid) including</li> </ul>		
• Direct injection fuel	system	Flexible fuel connection hoses		
<ul> <li>Mechanical governo</li> </ul>	r system	<ul> <li>Industrial capacity exhaust silencer and steel bellows</li> </ul>		

Alternator Specifications					
Alternator model LSA47.2M7					
Alternator manufacturer		LEROY S	OMER		
Rated frequency /Rated speed		50 Hz /1	500 rpm		
Rated output prime power		500KVA			
Rated voltage	ed voltage 415 V				
Phase	ase 3				
Power factor	3.0		0.8		
Efficiency (%)			94.5%		
Exciter type	Self excited, Brushless				
Voltage adjust range	≥5.0%				
Voltage regulation		≤±1.0%			
Insulation grade	Н		Н		
Protection grade		IP23			
Alternator Optional					
Optional alternator brand	STAMFORD		Mecc alte	MPMC	
Optional alternator model	HCI544C		ECO40 3S4B	LYG 354C	
Exciter type	Self-excited		Self-excited	Self-excited	
Rated output prime power	500kVA		500KVA	500kVA	

Operation manuals and circuit diagram documents





12V DC starter and charge alternator

Replaceable fuel filter and dry element air filter



## **Control System**

All Polkar generating sets have a control cabinet mounted on the gen-set base frame.

#### NANO3 (ComAp)



Suitable for ≤ 250kVA Gen-sets

### DSE4520 (Deepsea)



Suitable for >250kVA Gen-sets

### DSE7320 (Deepsea)



Suitable for all series Gen-sets

The Controller LCD Display	NANO3 control system	DSE4520 control system	DSE7320 control system	Controller Optional
Voltage between phases(L-L)	$\checkmark$	$\sqrt{}$	$\sqrt{}$	IL-NT-AMF25(ComAp)
Voltage between neutral and phase(L-N)	×	V	V	Control
Frequency	$\sqrt{}$	V	V	Intellitie
3 Phase current	$\sqrt{}$	V	√	100 110
Real power(kW) and apparent power(kVA)	$\sqrt{}$	V	V	and the sale of
Power factor	$\sqrt{}$	V	V	IC-NT-MINT(ComAp)
Engine speed	$\sqrt{}$	V	V	InteliCompact <sup>w</sup> ComAp
Running hours	$\sqrt{}$	V	V	000 mm
Coolant temperature	$\sqrt{}$	V	V	
Oil pressure	$\checkmark$	V	V	1/0
Battery voltage	$\checkmark$	V	V	DCE0C10(D)
LCD alarm indication	$\checkmark$	$\sqrt{}$	$\sqrt{}$	DSE8610(Deepsea)
3 Phase mains (utility) sensing	×	V	V	Construction Section 1
Protecting Functions				<u>a</u> @
Emergency stop button	$\checkmark$	$\sqrt{}$	$\checkmark$	<b>o o o o o</b>
High coolant temperature	$\checkmark$	$\sqrt{}$	$\sqrt{}$	HCMC120/CmartC
Low oil pressure	$\checkmark$	$\sqrt{}$	$\sqrt{}$	HGM6120(SmartGen)
Over current/load	$\checkmark$	$\sqrt{}$	√	Generic Controller
under/over speed, frequency & voltage	$\checkmark$	$\checkmark$	$\sqrt{}$	市也的学: 0.8位 ▼
Low/High battery voltage	$\sqrt{}$	V	V	
Low coolant level	Optional	Optional	Optional	

# **Optional:**

Engine	Alternator	Fuel System	Generating Set
<ul><li>Water Jacket</li><li>Preheater</li><li>Oil Preheater</li><li>Oil manual pump</li></ul>	<ul><li>PMG excitation</li><li>Space heater</li><li>Winding temperature measuring</li></ul>	<ul> <li>12 / 24 hour base tank</li> <li>Dual wall base fuel tank</li> <li>Outside fuel tank</li> <li>Automatic fuel feeding</li> <li>Switch between external tank and base tank (three-way valve)</li> </ul>	<ul><li>Tools with the machine</li><li>Trailer</li></ul>





**Generating Set Color:** 

Parts	Standard Color		Optional Color	
	RAL#	Reference	RAL#	Reference
Base frame	Jet black: RAL9005 RGB: 003/005/010		Blue grey: RAL7031 RGB: 003/005/010	
	Pure white: RAL9010 RGB: 250/255/255		Cream: RAL9001 RGB: 255/252/240	
Canopy	Traffic orange: RAL2009 RGB: 235/059/028		Traffic red: RAL3020 RGB: 199/023/018	
			Melon yellow: RAL1028 RGB: 255/140/026	

**Generating Set Type & Trailer Optional:** 



# Our other related products:



## **Contact Us**

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