

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.



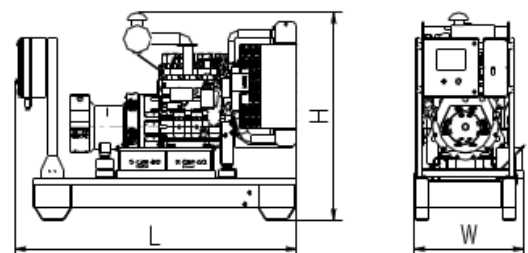
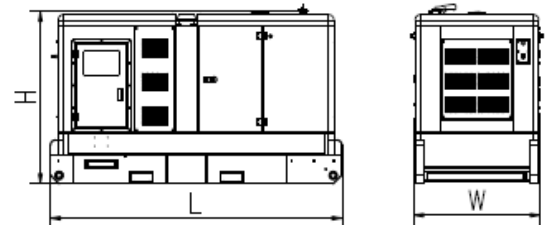
Photos are for reference only



Dimension, Weight, Fuel Tank Capacity

Generating set model	HPLS20S-1	HPLS20S-1
Length(L) (mm)	1950	1435
Width(W) (mm)	770	500
Height(H) (mm)	1136	1150
Dry weight (kg)	755	415
Tank capacity(L)	65	58
The loading capacity (40'HC)	36 Sets	30 Sets

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



Generating Set Technical Data	
Prime power(Output)	20 kVA/16kW
Standby power(Output)	22kVA/17.6kW
Rated frequency	50 Hz
Rated speed	1500 rpm
Rated voltage	400 /230V
Phase	3
Power factor	0.8
Noise level @7m dB(A)(only for silent type)	65
Engine model	404D-22G
Alternator model	TAL-A40-F
Fuel consumption of 75% load	4.0Litres/h
Fuel consumption of 100% load	5.3Litres/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.

Engine Specifications

Engine model & manufacturer	404D-22G (Perkins)
Emission Certification	Stage II / Tier 4
Number of cylinders	4
Cylinder arrangement	In-line
Cycle	Four stroke
Aspiration	Naturally aspirated
Bore x Stroke	84 x 100 mm
Displacement	2.216 Liter
Compression ration	23.3:1
Prime power/speed	18.7 kW/1500 rpm
Standby power/speed	20.6 kW/1500 rpm
Speed governor	Mechanical
Cooling system	Forced Water Cooling Cycle
Frequency droop	≤5%
Total lubrication system capacity	10.6 Liter
Coolant capacity (engine only)	3.6 Liter
Fuel consumption	100% load 233 g/kW.h (at 1500 rpm)
Starter motor	DC12V
Charge alternator	DC12V

- Heavy duty Perkins diesel engine
- Four stroke, water cooled, naturally aspirated
- Direct injection fuel system
- Mechanical governor system
- 12V DC starter and charge alternator
- Replaceable fuel filter and dry element air filter
- Cooling radiator and fan
- Starter battery(with lead acid) including
- Flexible fuel connection hoses
- Industrial capacity exhaust silencer and steel bellows
- Operation manuals and circuit diagram documents

Alternator Specifications

Alternator model	TAL-A40-F
Alternator manufacturer	LEROY SOMER
Rated frequency /Rated speed	50 Hz /1500 rpm
Rated output prime power	20KVA
Rated voltage	400 V
Phase	3
Power factor	0.8
Efficiency (%)	85.3%
Exciter type	Self excited, Brushless
Voltage adjust range	≥5.0%
Voltage regulation	≤±1.0%
Insulation grade	H
Protection grade	IP23

Alternator Optional

Optional alternator brand	STAMFORDS	Mecc alte	MPMC
Optional alternator model	SOL2-G1	ECP28 M4A	LYG 184E
Exciter type	Self-excited	Self-excited	Self-excited
Rated output prime power	20kVA	20KVA	22.5 kVA

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)	√	√	√	IL-NT-AMF25(ComAp)
Voltage between neutral and phase(L-N)	×	√	√	IC-NT-MINT(ComAp)
Frequency	√	√	√	IntelliCompact [®] ComAp
3 Phase current	√	√	√	DSE8610(Deepsea)
Real power(kW) and apparent power(kVA)	√	√	√	HGM6120(SmartGen)
Power factor	√	√	√	
Engine speed	√	√	√	
Running hours	√	√	√	
Coolant temperature	√	√	√	
Oil pressure	√	√	√	
Battery voltage	√	√	√	
LCD alarm indication	√	√	√	
3 Phase mains (utility) sensing	×	√	√	
Protecting Functions				
Emergency stop button	√	√	√	
High coolant temperature	√	√	√	
Low oil pressure	√	√	√	
Over current/load	√	√	√	
under/over speed, frequency & voltage	√	√	√	
Low/High battery voltage	√	√	√	
Low coolant level	Optional	Optional	Optional	

Optional:

Engine	Alternator	Fuel System	Generating Set
<ul style="list-style-type: none"> Water Jacket Preheater Oil Preheater Oil manual pump 	<ul style="list-style-type: none"> PMG excitation Space heater Winding temperature measuring 	<ul style="list-style-type: none"> 12 / 24 hour base tank Dual wall base fuel tank Outside fuel tank Automatic fuel feeding Switch between external tank and base tank (three-way valve) 	<ul style="list-style-type: none"> Tools with the machine Trailer

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	
Canopy	Pure white: RAL9010 RGB : 250/255/255		Cream: RAL9001 RGB: 255/252/240	
	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:

SR2 Type Generating Set	Trailer Generating Set	ATS Cabinet

Our other related products:

Mobile Lighting Tower	Hybrid Energy Generator Station

Contact Us

Hyperteck Electrical Services Ltd.
P. O. Box 15537-00100 Nairobi, Kenya,
Hyperteck Centre, Thika Super Highway, Exit 7
(Between Crescent Petrol Station & A-Plus Motors, Near Safari Park Hotel)
Tel: +254-716-200200, +254-717-200200
Email: info@hyperteckelectrical.com
Website: www.hyperteckelectrical.com