

## 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

### Generating Set Technical Data

Prime power(Output)	23 kVA/18kW
Standby power(Output)	26.25 kVA/20kW
Rated frequency	60 Hz
Rated speed	1800 rpm
Rated voltage	440 /254V
Phase	3
Power factor	0.8
Noise level @7m dB(A)(only for silent type)	70
Engine model	404D-22G
Alternator model	SOL2-M1
Fuel consumption of 75% load	4.8 Litres/h
Fuel consumption of 100% load	6.2 Litres/h

#### Also available in the following voltages:

220/127V, 415/240V, 480/277V, 440/254V (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.

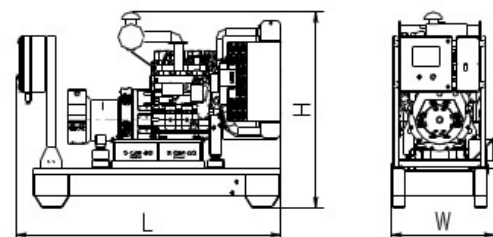
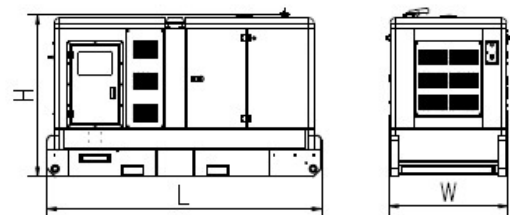
#### Standby Power/Emergency Standby Power (ESP):

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

### Dimension, Weight, Fuel Tank Capacity

Generating set model	MPS21S-2	MPS21-2
Length(L) (mm)	2100	1610
Width(W) (mm)	770	650
Height(H) (mm)	1136	1300
Dry weight (kg)	811	550
Tank capacity(L)	52	90
The loading capacity (40'HC)	30Sets	21 Sets

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



### Engine Specifications

Engine model & manufacturer	404D-22G (Perkins)
Emission Certification	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 ratio	23.3:1
Prime power/speed	21.6 kW/1800 rpm
Standby power/speed	23.9 kW/1800 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 233g/kW.h (at 1800 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 rack and cables
- ✓ Flexible fuel connection hoses
- ✓ Industrial capacity exhaust silencer and steel bellows
- ✓ Operation manuals and circuit diagram documents

### Alternator Specifications

Alternator model	S0L2-M1
Alternator manufacturer	Stamford
Rated frequency /Rated speed	60 Hz /1800 rpm
Rated output prime power	28KVA
Rated voltage	440 V
Phase	3
Power factor	0.8
Efficiency (%)	88.5%
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	Leroy Somer	Mecc alte	MPMC
Optional alternator model	TAL-A40-G	ECP28 M4A	LYG 184E
Exciter type	Self-excited	Self-excited	Self-excited
Rated output prime power	27kVA	23KVA	30 kVA

**Control System**

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

**NANO3 (ComAp)**



Suitable for  $\leq 250$ kVA Gen-sets

**DSE4520 (Deepsea)**



Suitable for  $>250$ kVA 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	✗	✓	✓	
<b>Protecting Functions</b>				
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
<input type="checkbox"/> Water Jacket Preheater <input type="checkbox"/> Oil Preheater <input type="checkbox"/> Oil manual pump	<input type="checkbox"/> PMG excitation <input type="checkbox"/> Space heater <input type="checkbox"/> Winding temperature measuring	<input type="checkbox"/> 12 / 24 hour base tank <input type="checkbox"/> Dual wall base fuel tank <input type="checkbox"/> Outside fuel tank <input type="checkbox"/> Automatic fuel feeding <input type="checkbox"/> Switch between external tank and base tank (three-way valve)	<input type="checkbox"/> Tools with the machine <input type="checkbox"/> Trailer