

# TECHNICAL DATA

DIESEL GENERATING SET

MPMC POWERTECH CORP.

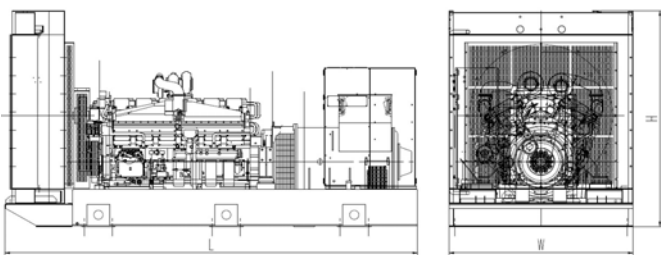
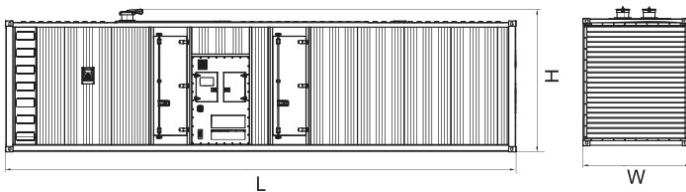
50HZ

## MPS1250S-1 / MPS1250-1

### Features

- Compact structure high-strength chassis
- Easy operation and maintenance, Low cost
- Good performance damping system
- Compliance with international electrical safety standards of electrical system
- 8 hours base tank
- High-performance maintenance-free batteries with isolation switch
- 50°C Radiator
- Top lifting, Forklift bottom hole design, easy to transport
- Industrial type muffler
- Noise reduction structure , Low overall noise
- Convenient power output interface and ATS Interface
- IP56 (control system)
- Customized design for user
- Structure optional: Open (MPS1250-1)  
Sound-proof (MPS1250S-1)

Reference images, the actual shall prevail



### Genset Technical Data

Output frequency	50 HZ
Rated speed	1500 rpm
Prime power	1250 KVA
Standby power	1375 KVA
Rated voltage	400 V
Phase	3
Noise dB(A) @7m	70
Engine model	4012-46TWG2A
Alternator model	LVI 634G
Fuel consumption of 100% load	259 Litres/h
Fuel consumption of 75% load	196 Litres/h
Voltage regulation rate	≤±1%
Random voltage variation	≤±1%
Frequency regulation rate	≤±5%
Random frequency variation	≤±0.5%

### Dimension and Weight

Generating set model	MPS1250S-1	MPS1250-1
Length(L) (mm)	40'HP Container	4700
Width(W) (mm)	40'HP Container	2080
Height(H) (mm)	40'HP Container	2435
Dry weight (k g)	12900	9000
Tank capacity ( L )	N.A.	N.A.

<b>Engine Specifications</b>			
Engine model	4012-46TWG2A		
Engine manufacturer	PERKINS		
Number of cylinders	12		
Cylinder arrangement	60° Vee		
Cycle	Four stroke		
Aspiration	Turbocharged, air-water charge cooled		
Bore Stroke (mm mm)	160 x 190		
Displacement (Liter)	45.842		
Compression Ratio	13.6:1		
Prime power/speed	1055KW / 1500rpm		
Standby power/speed	1166KW / 1500rpm		
Speed governor	Electrical		
Cooling system	Forced Water Cooling Cycle		
Steady speed droop (%)	≤1%		
Total lubrication system capacity (L)	177		
Coolant capacity (L)	201		
Fuel consumption at 100% load(g/kWh)	212(at 1500RPM)		
Starter motor	DC 24V		
Alternator	DC 24V		
<b>Alternator Specifications</b>			
Alternator model	LVI 634G		
Rated output prime power	1250 kVA		
Efficiency (%)	94.9%		
Rated speed	1500 RPM		
Rated frequency	50 Hz		
Phase	3		
Rated voltage	400 V		
Exciter type	excited by P.M.G, Brushless		
Power factor	0.8		
Voltage adjust range	≥5%		
Voltage regulation NL-FL	≤±1%		
Insulation grade	H		
Protection grade	IP23		
Xd DIR. AXIS SYNCHRONOUS	2.05		
X'd DIR. AXIS TRANSIENT	0.11		
X''d DIR. AXIS SUBTRANSIENT	0.08		
Xq QUAD. AXIS REACTANCE	1.70		
X''q QUAD. AXIS SUBTRANSIENT	0.20		
<b>Optional</b>			
Optional Alternator brand	Leroy Somer	MECC	MPMC
Optional Alternator model	LSA 50.2 M6	ECO43-2LN/4	LYG 404G
Rated output prime power	1250KVA	1300KVA	1250KVA

## Control System

### NA1-2500-7320 (Optional)

NSM-100-7320 is an advanced control module based on micro-processor, It is an Auto Mains (Utility) Failure Control Module(AMF), have been designed to start and stop generating sets that include electronic And non-electronic engines. Include the additional capability of being able to monitor a mains (utility) supply. when main is not available, It can automatically start the engine and close generating sets breaker automatically, Accurately measure various operational parameters and display all values and alarms information on the LCD. In additional, it can automatically open breaker, and shutdown the engine after the main supply recovers.

#### Key Features

- AMF and ATS and communication and expansion function
- Designed to work with electronic or non-electronic or gas engine simultaneously. (support many kinds of engines ECU).
- Manual, Automatic, Test and remote control mode selectable.
- Monitoring and measuring operational parameters of the mains supply and genset.
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections and multiple parameters display.
- Includes 12 inputs and eight outputs. 8 inputs are configurable and 4 outputs are configurable.
- Can be programmed using the front panel or by using the PC software.
- Support twelve languages. The language was edited by customer.
- Graded protection: pre-alarm, shutdown and electrical trip, flexible setting.
- The module can be pre-set for four operating modes and protecting parameters.
- Add DSE860 or DSE865 module, internet network monitoring can be realized.
- The firmware can be updated automatically, so customer can have the latest version.



#### The control module display

- Generator voltage
- Generator frequency
- Battery voltage
- Engine speed
- Load current
- Generator KVA, KW, PF
- Engine run-time Hours
- Engine oil pressure
- Engine coolant temperature
- Real time clock for time and date, overall runtime

## Control System

### NA1-2500-8610 (Synchronizing Auto Start Control Module)

The DSE8610 is an easy to use Synchronizing Auto Start Control Module suitable for use in a multi-generator load share system, designed to synchronize up to 32 generators including electronic and non-electronic engines.

The DSE8610 monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition.

System alarms are annunciated on the LCD screen (multiple language options available), illuminated LED and audible sounder.

#### Key Features

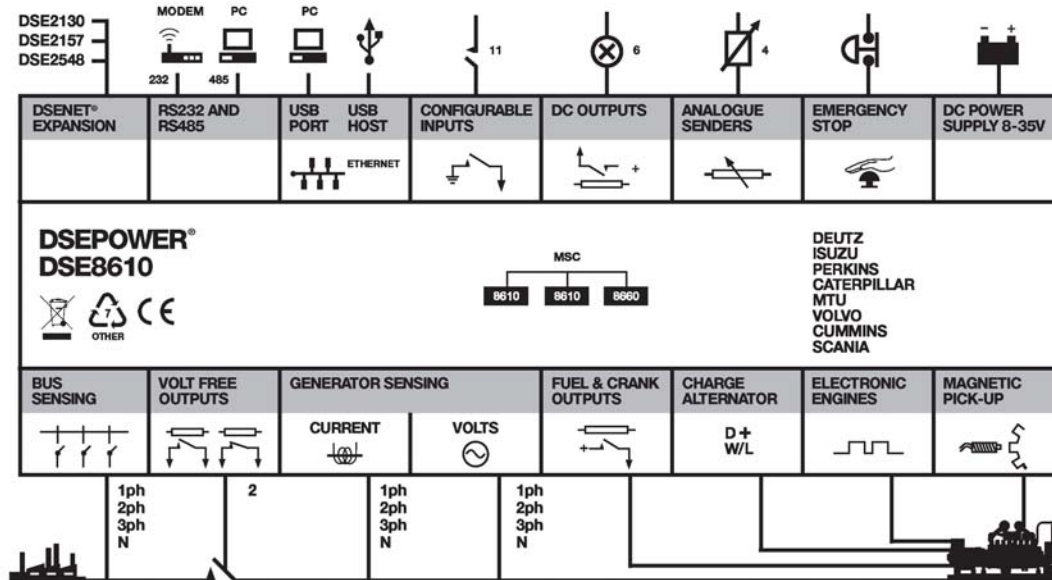
- Comprehensive synchronizing & load sharing capabilities
- Built-in governor and AVR control
- Base load (kW export) functionality
- Mains (utility) de-coupling protection
- Generator power (kW, kV Ar, kV A & pf) monitoring
- Overload (kW & kV Ar) protection
- Reverse power (kW & kV Ar) protection
- Unbalanced load protection
- Independent earth fault protection
- Advanced integral PLC editor
- 11 Configurable inputs
- 8 Configurable outputs
- User configurable RS232, RS485 and Ethernet communications
- MODBUS RTU & TCP support
- User configurable MODBUS pages
- Data logging and trending
- Tier 4 CAN engine support
- "Protections disabled" feature
- Front panel editing with PIN protection
- Fully configurable using DSE Configuration Suite PC software via USB
- LED and LCD alarm indication
- Configurable display languages
- Five key menu navigation
- 3 Configurable maintenance alarms
- Multiple date and time run scheduler
- Configurable event log (250)
- Backed up real time clock



#### KEY BENEFITS

- Compatible in load share systems containing DSE5500, DSE7500 and DSE8600 series. Contact DSE for further details
- 132 x 64 pixel ratio display for clarity
- Real-time clock provides accurate event logging
- Ethernet communication, provides built in advanced remote monitoring.
- Can be integrated into building management systems (BMS) and programmable logic control (PLC)
- Increased input and output expansion capability via DSENet®
- License-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- Advanced Internal PLC editor allows user configurable functions to meet specific application requirements.

# DSE8610 DIAGRAM.



## Optional

### Engine

- Water Jacket Preheater
- Fuel-water separator
- Oil pump
- Oil preheater
- Battery preheater

### Alternator

- PMG excitation
- Space heater
- Winding Temperature Measuring

### Generator Set

- Tools with the machine
- Coolant (-30°C)

### Control System

- AMF function
- ATS control cabinet
- Double-frequency and double voltage
- Single phase
- ABB MCCB

### Fuel System

- 12 / 24 hour base tank (single wall)
- Dual wall base fuel tank
- Outside fuel tank
- Automatic fuel feeding
- Fuel level indicate

### Canopy

- Hired type
- Economy Oil heater
- Trailer

## Contact Us

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ISO9001:2008  
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