



**Millennium Power Manufacturing Corp.**  
*<http://www.mpmc-china.com>*

**MLPS12-2B(LPW3)**  
**Generating set Technical Data Sheet**



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**ISO9001:2000**  
MPMC GENERATING SETS



## STANDARD SPECIFICATION

### General features:

- Composed of Lister Petter diesel engine and Stamford or MPMC alternator
- 12V DC start motor and storage battery
- Brushless, Self-excited, IP23, insulation class H alternator
- 52°C radiator as standard
- Key start panel control system as standard, digital auto-start panel is optional
- 8-hour operation base tank
- Optional open type or silent type
- All generating sets are gone through rigorous testing before being released to the market place, including 50% load, 75% load, 100% load , 110% load and all protection function (overspeed stop, high water temperature, low oil pressure, battery charging fail, emergency stop)



### Genset Main Technical Data

**3-PH, 60Hz@1800RPM, 480/277V** (Also Can Be Made According To Customers' Special Requirements)

Genset Model	Genset Specification					Engine Specification				Alternator Model
	kW		Cons. 100% (L/H)	dB(A) @7m	Tank (L)	Model	Cyl.	Gov.	Asp.	
	ESP	PRP								
MLPS12-2B	12	10.9	3.4	N/A	40	LPW3	3	M	NA	BCI 164B
MLPS12S-2B	12	10.9	3.4	70	50	LPW3	3	M	NA	BCI 164B
MLPM12-2B	12	10.9	3.4	N/A	40	LPW3	3	M	NA	MPA 164C
MLPM12S-2B	12	10.9	3.4	70	50	LPW3	3	M	NA	MPA 164C

- 1) Available in various voltages
- 2) To show MPMC Generating Sets Model  
For example: MCM38-1A, it is the open generation set.  
MCM38S-1A, it is the silent generating set.
- 3) ESP=Standby power standby duty, operation under variable load, without overload  
PRP=Prime power continuous duty operation, under variable load, 10% overload permissible 1/12hr
- 4) E=Electronic speed governor;  
M=Mechanical speed governor
- 5) Asp=Aspiration;  
NA=Naturally Asp;  
TC=Turbocharged;  
TW=Turbocharged water-cooled;  
TCA= Turbocharged air-air cooled
- 6) Technical data is subject to work test conditions

## Reliable Performance

### Voltage regulation

Voltage regulation maintained within  $\pm 0.5\%$  as follow:

- Power factor Between 0.8~1.0 lag
- From no load to full load, any steady load
- Speed droop variation under 5%

### Frequency/Speed undulation

- Change load from 0-100%, Frequency/Speed Droop Ratio within 5%
- Load from 25-100%, any steady load Frequency/Speed undulation within 0.25%

### Effect factor of telecom

- TIF( MA MG1-22) better than 50
- THF( BS EN60034) better than 2%

## Criterion

- ISO8528, GB/T2820
- EN12601:2001, EN60034-22:1997, EN60204-1:2006
- ISO9001:2000 Quality Control System

## Dimension and Weight



### Open Type

Overall size (L\*W\*H)  
1100×500×900

**Weight: 380kg**



### Silent Type

Overall size (L\*W\*H)  
1600×700×1100

**Weight: 520kg**

## ENGINE SPECIFICATION

### Lister Petter Diesel Engine

#### Technical Data

Engine Model	LPW3
Emissions statement	EU STAGE 3A
Number of Cylinders	3
Cylinder arrangement	Vertical in-line
Cycle	4 stroke
Aspiration	Natural Aspiration
Bore×Stroke (mm×mm)	86x 80
Displacement (Liter)	1.395
Compression Ratio	18.5:1
Prime Power/Speed (kW/rpm)	13.9/1800
Standby Power/Speed (kW/rpm)	15.3/1800
Speed Governor	Mechanical
Cooling System	Water-cooled
Fuel Consumption at 100% Load (g/kWh)	208 (at 1800RPM)
Starter Motor	12 V
Alternator	12 V

## Alternator SPECIFICATION

### Stamford Alternator (Standard)

### MPMC Alternator (Option)

#### Technical Data

Alternator Model	BCI XXXX (Stamford) MPA XXXX(MPMC) Please Refer To The “ Genset Main Technical Data”
Exciter type	Brushless, Self-excited
Power factor	0.8
Voltage Adjust range	≥5%
Voltage Regulation NL-FL	≤±1%
Insulation Grade	H
Protection Grade	IP23

## Control System

### 1. 标准: MP170HC 钥匙启动

标准功能如下:

(可根据客户特殊要求另外选配其它功能)

- \* 启动/停止
- \* 电流表
- \* 电压表和转换开关
- \* 频率表/ 水温表 /机油压力表/ 小时计/蓄电池直流电压表
- \* 紧急停止开关
- \* 报警系统: 超速、高水温、低油压、蓄电池充电失败。
- \* 保护系统: 超速、高水温、低油压、紧急停止及其他预先设置的保护功能。

### 2. 可选: 众智 HGM6110 数显自启动

### 3. 可选: 众智 HGM6120 数显自启动 (可选配 ATS)

### 4. 可选: 深海 DSE5210 数显自启动

### 5. 可选: 深海 DSE5220 数显自启动 (可选配 ATS)

数显自动控制用于柴油发电机组自动化及监控系统, 实现发电机组的自动开机 / 停机、数据测量、报警保护功能, 配备 ATS 可用于与外部电网连接, 实现外部电网与发电机组负载之间的自动切换 (AMF)。

功能:

- \* 自动开机/停机
- \* 3次自动连续启动, 并在3次连续启动失败后停机
- \* LCD参数显示 (电压/电流/频率/运行时间)
- \* 发动机运行监控和保护
- \* 蓄电池自动充电并在发生失败后报警
- \* 记录运行时间
- \* 内部参数可通过面板上的按钮进行调整设置。

### 6. 可选: BGC-L

(主要应用于发电机组并联同步控制)



(1)



(2)



(3)



(4)



(5)



(6)