Millennium Power Manufacturing Corp.

http://www.mpmc-china.com

MCS20/25-1B（4B3.9-G2）

Generating set Technical Data Sheet

NO:CDT200906002-01

ISO9001:2000

MPMC GENERATING SETS

STANDARD SPECIFICATION

General features:

- Composed of Cummins diesel engine and Stamford or MPMC alternator
- 24V DC start motor and storage battery
- Brushless, Self-excited, IP23, insulation class H alternator
- 40℃ radiator as standard, 50℃ is optional
- 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 generator 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, 50Hz@1500RPM, 400/230V (Also Can Be Made According To Customers' Special Requirements)

Genset Model	Genset Specification					Engine Specification				Alternator Model
	kVA		Cons. 100% (L/H)	dB(A) @7m	Tank (L)	Model	Cyl.	Gov.	Asp.	
	ESP	PRP								
MCS20-1B	22	20	4.3	N/A	80	4B3.9-G2	4	E	NA	BCI 184E
MCS20S-1B	22	20	4.3	68	100	4B3.9-G2	4	E	NA	BCI 184E
MCS25-1B	27	25	5.4	N/A	80	4B3.9-G2	4	E	NA	BCI 184F
MCS25S-1B	27	25	5.4	68	100	4B3.9-G2	4	E	NA	BCI 184F
MCM20-1B	22	20	4.3	N/A	80	4B3.9-G2	4	E	NA	MPA 184E
MCM20S-1B	22	20	4.3	68	100	4B3.9-G2	4	E	NA	MPA 184E
MCM25-1B	27	25	5.4	N/A	80	4B3.9-G2	4	E	NA	MPA 184F
MCM25S-1B	27	25	5.4	68	100	4B3.9-G2	4	E	NA	MPA 184F

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 after cooled;
   TCA= Turbocharged air-air after cooled
6) Technical data is subject to work test conditions

Reliable Performance

Voltage regulation

Voltage regulation maintained within ±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 4.5%

Frequency/Speed undulation

- Change load from 0-100%, Frequency/Speed Droop Ratio within 1.0% (electric speed governor), within 5% (mechanical speed governor)
- Load from 25-100%, any steady load Frequency/Speed undulation within 0.25%

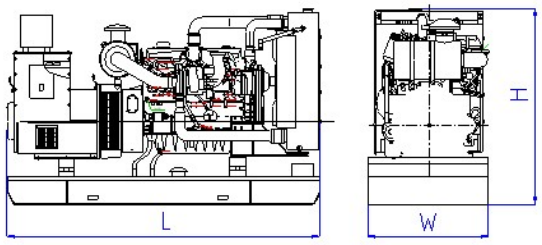
Effect factor of telecom

- 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

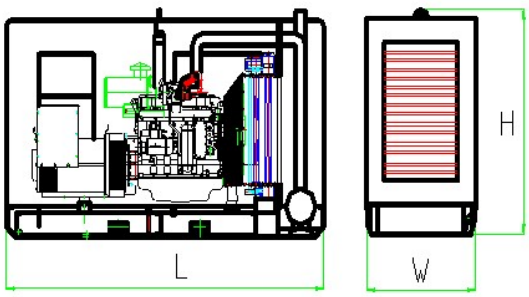


Open Type

Overall size (L*W*H)

1800×750×1420

Weight: 750kg



Silent Type

Overall size (L*W*H)

2500×1060×1650

Weight: 1000kg

ENGINE SPECIFICATION

Cummins Diesel Engine

Technical Data

Engine Model	4B3.9-G2
Number of Cylinders	4
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Aspiration	Natural Aspiration
Bore×Stroke (mm×mm)	102 x 120
Displacement (Liter)	3.9
Compression Ratio	16.5:1
Prime Power/Speed (kW/rpm)	24/1500
Standby Power/Speed (kW/rpm)	26/1500
Speed Governor	electrical
Cooling System	Water-cooled , 40℃ Radiator As Standard, 50℃ Is Optional.
Speed Stability (%)	≤5%
Total lubrication system capacity (L)	11
Coolant capacity (without radiator) （L）	7.2
Fuel Consumption at 100% Load (g/kWh)	229 (at 1500RPM)
Starter Motor	DC24V,
Alternator	AC24V

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	≤±0.5%
Insulation Grade	H
Protection Grade	IP23