

### Features:

- Rotate speed governor: Electrical governor FP801
- Excitation system: Self excited, SHUNT
- A.V.R model: MX321
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy (Only for Soundproofed sets)
- 50°C radiator
- Oil pump on the engine
- Steel base frame with fork holes
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for daily running
- Drain points for fuel tank
- Operation Manual / Specifications
- PMG



### Output Ratings

Generating Set Model	Prime Power	Standby Power
<b>GMS800C</b>	800kVA/640kW	825kVA/660kW
<b>GMS800CS</b>	800kVA/640kW	825kVA/660kW

Ratings at 0.8 power factor

### Dimensions and Weights

Model	Length (L) mm	Width (W) mm	Height (H) mm	Dry Weight kg
<b>GMS800C</b>	4500	1750	2700	7079
<b>GMS800CS</b>	6058	2438	2730	12100

#### Notes:

##### \*Prime Power

Continuous duty operation, under variable load 24/24h-10% over load permissible 1 hour/12 hours;

##### \*\*Standby Power

Standby duty, operation under variable load, without over load;

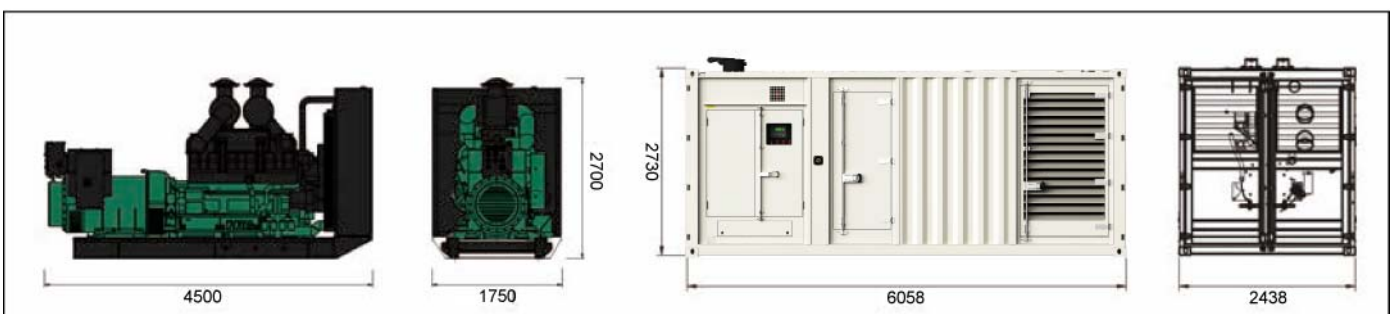
##### Standard Reference Conditions

Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m(328 ft) A.S.L. 30% relative humidity.

Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.

### Ratings and Performance Data

<b>Engine Make &amp; Model:</b>	Cummins KTA38-G2B
<b>Alternator Brand:</b>	Stamford
<b>Alternator Model:</b>	LVI634C
<b>Control System:</b>	Auto Gen / AMF
<b>Circuit Breaker Type:</b>	3 Pole MCCB
<b>Frequency &amp; Phase:</b>	50Hz & 3PH
<b>Engine Speed: RPM</b>	1500
<b>Fuel Tank Capacity: L</b> <b>GMS800C</b> <b>GMS800CS</b>	1300 2000
<b>Fuel Consumption: L (100% Load)</b> <b>- Prime Power</b> <b>- Standby Power</b>	44.2 48.5



### Engine model: KTA38-G2B

Engine Technical Data	
No. of Cylinders / Alignment:	12 / In Line
Cycle:	4 Stroke
Bore / Stroke: mm	159X159
Induction:	Turbocharged
Cooling Method:	Water
Governing Type:	Electrical
Governing Class:	ISO 8528 G2
Compression Ratio:	14.5:1
Displacement: L	37.5
Moment of Inertia:kg.m <sup>2</sup>	10.4 (248)
Engine Electrical System:	
- Voltage / Ground	24/Negative
- Battery Charger	35
Weight: kg	
- Dry	3723
- Wet	3950

Cooling System	
Cooling System Capacity: L	118
Maximum coolant Friction Head External to Engine: kPa	48
Maximum Static Head of Coolant Above Engine Crank Centerline : m	18.3
Standard Thermostat (Modulating) Range: °C	82-94
Minimum Pressure Cap: kPa	69
Maximum Top Tank Temperature for Standby / prime Power: °C	104/100

Designed to operate in ambient conditions up to 50°C (122°F). Contact your local Multiphase Power Dealer for power ratings at specific site conditions

Performance	
Engine Speed: RPM	1500
Gross Engine Power: kWm	
-Prime	664 (890)
- Standby	731 (980)
BMEP: kPa	
- Prime	1407 (204)
- Standby	1551 (225)

Fuel System				
Injection System Type: Direct Injection Cummins PT				
Recommended Fuel Type: Diesel Fuel No.2-D(ASTMD975)				
Fuel Consumption: l/hr				
Prime	110% Load	100% Load	75% Load	50% Load
GMS800C	48.5	44.2	33.7	23.8
GMS800CS	48.5	44.2	33.7	23.8

(Based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869,Class A2)

Lubrication System	
Oil Pressure @ Idle Speed kPa	138
@ Rated Speed kPa	296-483
Maximum Oil Temperature: °C	121
Total Oil Capacity: L	35.7(135)
Oil Type:	API CH4 / 15W-40

Exhaust System	
Silencer Type	Industrial
Silencer Quantity:	1
Silencer Noise Reduction Level:	15-20dBA
Maximum Allowable Back Pressure: mmhg	10
Exhaust Gas Flow: l/s	
- Prime	2398 (5080)
- Standby	2634(5580)
Exhaust Gas Temperature: °C	
- Prime	541 (1005)
- Standby	552 (1025)

Air Systems	
Air Filter Type:	Dry type replaceable Element
Intake Air Flow: l/s	
- Prime	926
- Standby	982
Max. Air Intake Restriction:mmH <sub>2</sub> O	
-With Dirty Filter Element	635
-With Normal Duty and Clean Filter Element	254
-With Heavy Duty and Clean Filter Element	381

The weights are approximate and without fuel.

### Alternator model: LVI634C

Alternator Physical Data	
Manufactured by:	Stamford
Model:	LVI634C
No. of Bearings:	Single
Insulation Class:	H
Winding Pitch Code:	2/3
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	Self excited, SHUNT
AVR Model:	MX321

Alternator Operating Data	
Overspeed: rpm	2250rpm
Voltage Regulation: (Steady state)	±0.5%
Wave Form NEMA = TIF:	< 50
Wave Form IEC = THF:	< 2%
Air Flow: m <sup>3</sup> /s	2.18
Altitude: m	≤1000

Alternator Performance Data:	GMS800C	GMS800CS
<b>Time constants/400V:Ms</b>		
T'd	99	99
T'd	13	13
T'do	2950	2950
Ta	34	34
<b>Short Circuit Capacity** %</b>	1/Xd	1/Xd
<b>Reactances: Per Unit</b>		
Xd	2.56	2.56
X'd	0.14	0.14
X''d	0.10	0.10

Voltage Technical Data GMS800C				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
380/220	760	608	785	628
400/230	800	640	825	660
415/240	800	640	825	660

Voltage Technical Data GMS800CS				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
380/220	760	608	785	628
400/230	800	640	825	660
415/240	800	640	825	660

# ControlSystem

## PLC-7420

### FEATURES

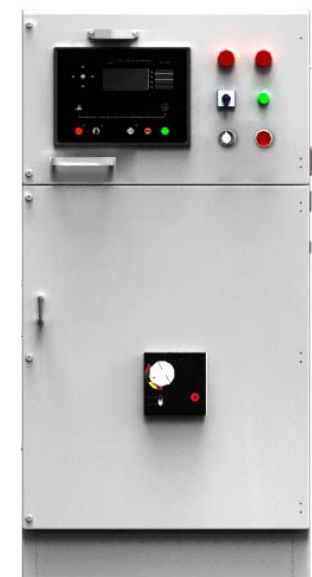
- Microprocessor control, with high stability and credibility .
- Mains supply and generator operation monitoring.
- Indicating operation status and fault conditions.
- Multiple protections; multiple parameters display, such as pressure, temperature.
- Manual and automatic work mode selectable.
- Real time clock for time and date display, overall runtime display, 99 log entries
- Overall power output display.
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed.
- Communication with PC via RS485 or RS232 interface, using MODBUS protocol.
- Engine ECU is available.
- Common USB cable is usable for parameter configuration.
- Multi-language is available.



## PLC-8610 (Optional)

### FEATURES

- By using inbuilt device with synchronization, power matching and paralleling functions, the controller can be synchronized with the mains, uninterruptedly returning when reaching the peak;
- Can parallel up to 16 generator sets;
- Multiple languages display;
- Root mean square value voltage measurement;
- Optional power measurement device;
- Optional communication ability function, automatic synchronization indication function;
- Inbuilt or expansion relay outputs.



Diesel Generator Sets 6-2250 kVA			
	MODEL	PLC-7420	PLC-8610
General Accessory	AIR	●	●
	Electronic Governing	×	●
	Glow plug control	●	●
	Cycle Cranking	●	●
	(MODBUS) Networking	●	●
Operate Interface	Fault History	●	●
	Manual start/stop	●	●
	Auto/remote start	●	●
	Regular Test	●	●
	Auto operation LED	●	●
	Manual operation LED	●	●
	Common Shutdown LED	●	●
	Common warning LED	●	●
	Fail to start LED	●	●
	Emergency stop/local	●	●
Measurement and Instrumentation	Alphanumeric screen	●	●
	Remote start input active LED	●	●
	Alarm reset	●	●
	Engine		
	Oil pressure	●	●
	Water Temperature	●	●
	Engine Speed	●	●
	Hours Run	●	●
	Number of Starts	●	●
	Battery Voltage	●	●
Shutdown Protection and Indication	Coolant Temperature	●	●
	3Phase-L Voltage&Frequency	●	●
	3phase Current	●	●
	Frequency	●	●
	kWh	●	●
	Apparent Power	●	●
	Active Power and Reactive Power	●	●
	Power Factor	●	●
	Per Phase kV, kW	●	●
	Per Phase kVA	●	●
Phase Voltage	●	●	
Threshold Warning/Indication	Output Power	●	●
	Grid Line Voltage	●	●
	Grid Phase Voltage	●	●
	Grid Frequency	●	●
	Mains Expression	●	●
	Altimeter		
	Low Fuel Level	●	●
	High Fuel Level	○	○
	Low Oil Pressure	●	●
	High Water Temperature	●	●
Paralleling Capability	Failure to Stop	●	●
	Failure to Start	●	●
	Controllable start circles/times	●	●
	Overspeed	●	●
	Under/Over Voltage	●	●
	Under/Over Frequency	●	●
	Overcurrent	●	●
	Earth Leakage	○	○
	Reverse Power	×	×
	Reverse kW	×	×
Power Transfer Function	Low Oil Pressure	○	○
	Low Water Temperature	○	○
	High Water Temperature	●	●
	Low Water Level	●	●
	Low/High Battery Voltage	●	●
	Failure to Charge	●	●
	Overcurrent	●	●
	Overload	●	●
	Genset Under/Over Voltage	●	●
	Genset Under/Over Frequency	●	●
Monitoring Function	under/over Speed	●	●
	High Engine temperature	●	●
	Earth Leakage	●	●
	Synchronopar(Independent Bus)	×	×
	Active and Reactive Power Control	×	×
	Synchronopar(Shared Bus)	×	×
	Synchronization Detector	×	×
	Peak Lapping	×	○
	Automatic Transfer	●	●
	Hard Closed Transition	●	●
Environment	Soft Closed Transition	×	×
	Gen/Mains Breaker	●	×
	Gen/Mains Breaker Status Protection	●	×
	Speed/Voltage Control	×	●
	Power Indication	●	●
	Flt&Solenoid Valve Control	●	●
	Stator Control	●	●
	Preheating	○	○
	Mains Transfer Switch (Standard)	●	●
	Mains Transfer Switch (Emergency)	●	●
Monitoring Function	Operating Temperature (-40℃~70℃)	●	●
	Ambient Temperature (-25℃~45℃)	●	●
	Humidity ≤80%	●	●
	Grid Over/Under Voltage Control	●	●
	Grid Over/Under Frequency Control	●	●
	Remote Start Output(Load/No-load)	●	●
	Optional Relay Output	●	●
	Remote Telecom Control with All Functions	●	●
	Engine Instrument Monitoring	●	●
	Alternator Output Instrument Monitoring	●	●
3 Users Input Connection Point	●	●	
Connection Point with All-around Setting For 6 Users	●	●	
LCD Light Control of Low Light Operation Environment	●	●	
Safe PIN Code	●	●	
RS232/485 Interface	●	●	
Language Selection	●	●	
Multi-Language Function	●	●	

● Standard ○ Optional × Impossible

# Optional

Engine	Alternator	Generator Set	Fuel System	Canopy
<ul style="list-style-type: none"> <li>● Water Jacket Preheater</li> <li>● Oil Preheater</li> </ul>	<ul style="list-style-type: none"> <li>● Winding Temperature</li> <li>● Measuring Instrument</li> <li>● Alternator Preheater</li> <li>● PMG</li> <li>● Anti-damp and anti-corrosion treatment</li> <li>● Anti-condensation heater</li> </ul>	<ul style="list-style-type: none"> <li>● Tools with the machine</li> </ul>	<ul style="list-style-type: none"> <li>● Low fuel level alarm</li> <li>● Automatic fuel feedingsystem</li> <li>● Fuel T-valves</li> </ul>	<ul style="list-style-type: none"> <li>● Weatherproof Canopy</li> </ul>
Lubricating System	Exhaust System	Cooling System	Control System	Voltages
<ul style="list-style-type: none"> <li>● Oil with the machine</li> </ul>	<ul style="list-style-type: none"> <li>● Protection board from hotness</li> </ul>	<ul style="list-style-type: none"> <li>● Front heat protection</li> <li>● Coolant (-30°C)</li> </ul>	<ul style="list-style-type: none"> <li>● Remote control panel</li> <li>● PLC-8610</li> <li>● ATS</li> </ul>	<ul style="list-style-type: none"> <li>● 415/240V</li> <li>● 400/230V</li> <li>● 380/220</li> <li>● 220/127V</li> <li>● 200-115V</li> </ul>



If you have any question or inquiry, please contact Multiphase Power sales organization.

*Specification may change without prior notice.  
For more info, please contact Multiphase Power or your local distributors.*