GMS750C/S

EC Series

Features:

- Rotate speed governor: Electrical governor FP801
- Excitation system: Self excited
- 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℃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
GMS750C	750kVA/600kW	775kVA/620kW
GMS750CS	750kVA/600kW	775kVA/620kW

Ratings at 0.8 power factor

Dimensions and Weights

Model	Length (L) mm	Width (W) mm	Height (H) mm	Dry Weight kg
GMS750C	4500	1750	2700	7079
GMS750CS	6058	2438	2730	12100

Notes:

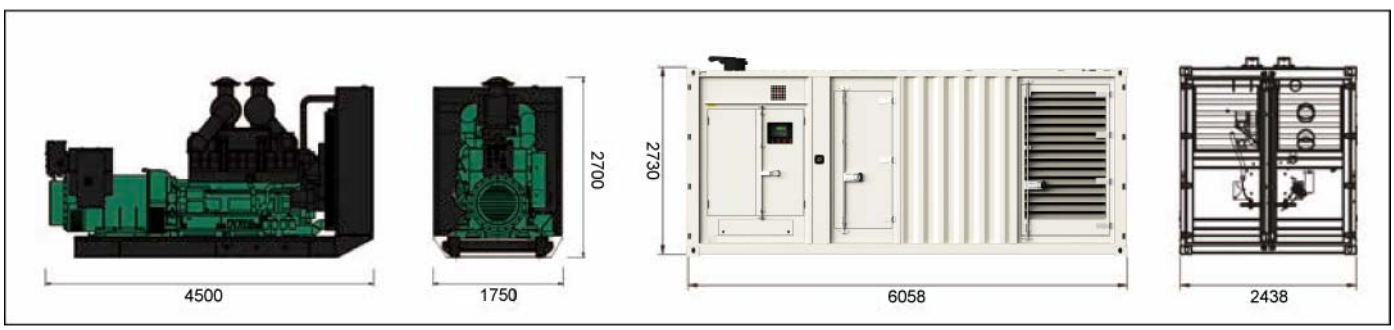
***Prime Power**
Continuous duty operation, under variable load 24/24h-10% over load permissible 1 hour/12 hours;

****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

Engine Make & Model:	Cummins KTA38-G2
Alternator Brand:	Stamford
Alternator Model:	LVI634B
Control System:	Auto Gen / AMF
Circuit Breaker Type:	3 Pole MCCB
Frequency & Phase:	50Hz & 3PH
Engine Speed: RPM	1500
Fuel Tank Capacity: L **GMS750C** **GMS750CS**	 1300 2000
Fuel Consumption: L (100% Load) **- Prime Power** **-Standby Power**	 44.2 48.5



GMS750C/S

EC Series

Engine model: KTA38-G2

Engine Technical Data

No. of Cylinders / Alignment:	12 / In Line
Cycle:	4 Stroke
Bore / Stroke: mm	159(6.25)/159 (6.25)
Induction:	Turbocharged
Cooling Method:	Water
Governing Type:	Electrical
Governing Class:	ISO 8528 G2
Compression Ratio:	14.5:1
Displacement: L	37.8 (2300)
Moment of Inertia:kg.m²	10.4 (248)
Engine Electrical System: **- Voltage / Ground** **- Battery Charger**	 24/Negative 35
Weight: kg **- Dry** **- Wet**	3723 (8200) 3954 (8710)

Performance

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

Lubrication System

Oil Pressure @ Idle Speed kPa **@ Rated Speed** kPa	138 310-448
Maximum Oil Temperature: °C	121
Total Oil Capacity: L	135(35.7)
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	76
Exhaust Gas Flow: l/s **- Prime** **- Standby**	 2398 (5080) 2634(5580)
Exhaust Gas Temperature: °C **- Prime** **- Standby**	 541 (1005) 552 (1025)

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	82-93
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

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
GMS750C	48.5	44.2	33.7	23.8
GMS750CS	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)

Air Systems

Air Filter Type:	Dry type replaceable Element
Intake Air Flow: l/s **- Prime** **- Standby**	 850 920
Max. Air Intake Restriction:mmH_2O **-With Dirty Filter Element** **-With Normal Duty and Clean Filter Element** **-With Heavy Duty and Clean Filter Element**	 635 254 381

The weights are approximate and without fuel.

GMS750C/S

EC Series

Alternator model: LVI634B

Alternator Physical Data	
Manufactured by:	Stamford
Model:	LVI634B
No. of Bearings:	Single
Insulation Class:	H
Winding Pitch Code:	2/3
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	Self excited
AVR Model:	MX321

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

Alternator Performance Data:	GMS750C	GMS750CS
Time constants/400V:Ms		
T'd	106	106
T''d	13	13
T'do	2910	2910
Ta	35	35
Short Circuit Capacity %**	1/Xd	1/Xd
Reactances: Per Unit		
Xd	2.6	2.6
X'd	0.16	0.16
X"d	0.12	0.12

Voltage Technical Data GMS750C

Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
380/220	710	568	730	584
400/230	750	600	775	620
415/240	750	600	775	620

Voltage Technical Data GMS750CS

Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
380/220	710	568	730	584
400/230	750	600	775	620
415/240	750	600	775	620

GMS750C/S

EC Series

Diesel Generator Sets	6-2250 kVA		
	MODEL	PLC-7420	PLC-8610
General accessory	AVR	●	●
	Electronic Governing	×	●
	Glow plug control	●	●
	Cycle Cranking	●	●
	(MODBUS) Networking	●	●
	Fault History	●	●
Operator Interface	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)	●	●
	Alphanumeric screen	●	●
	Remote start input active LED	●	●
	Alarm reset	●	●
Measurement and Instrumentation	Engine: Oil pressure	●	●
	Engine: Water Temperture	●	●
	Engine: Engine Speed	●	●
	Engine: Hours Run	●	●
	Engine: Number of Starts	●	●
	Engine: Battery Voltage	●	●
	Engine: Coolant Temperature	●	●
	Alternator: 3Phase(L-L Voltage&Frequency	●	●
	Alternator: 3phase Current	●	●
	Alternator: Frequency	●	●
	Alternator: kWh	●	●
	Alternator: Apparent Power	●	●
	Alternator: Active Power and Reactive Power	●	●
	Alternator: Power Factor	●	●
	Alternator: Per Phase(W, kW)	●	●
	Alternator: Per Phase kVA	●	●
	Alternator: Phase Voltage	●	●
	Alternator: Output Power	●	●
	Mains Expression: Grid Line Voltage	●	●
	Mains Expression: Grid Phase Voltage	●	●
	Mains Expression: Grid Frequency	●	●
Shutdown Protection and Indication	Engine: Low Fuel Level	●	●
	Engine: High Fuel Level	○	○
	Engine: Low Oil Pressure	●	●
	Engine: High Water Temperature	●	●
	Engine: Failure to Stop	●	●
	Engine: Failure to Start	●	●
	Engine: Controlable start circles/times	●	●
	Engine: Overspeed	●	●
	Alternator: Under&Over Voltage	●	●
	Alternator: Under&Over Frequency	●	●
	Alternator: Overcurrent	●	●
	Alternator: Earth Leakage	○	○
	Alternator: Reverse Power	×	●
	Alternator: Reverse kW	×	●
Threshold Warning&Indication	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	●	●
	under/over Speed	●	●
	High Engine Temperature	●	●
	Earth Leakage	●	●
Paralleling Capability	Synchroscope(Independent Bus)	×	●
	Active and Reactive Power Control	×	●
	Synchroscope(Shared Bus)	×	●
	Synchronization Dector	×	●
	Peak Lopping	×	○
Power Transfer Function	Automatic Transfer	●	●
	Hard Closed Transition	●	●
	Soft Closed Transtion	×	●
	Gen/Mains Breaker	●	×
	Gen/Mains Breaker Status Protection	●	×
	Speed/Voltage Control	×	●
	Power Indication	●	●
	Fuel&solenoid Valve Control	●	●
	Startor Control	●	●
	Preheating	○	○
	Mains Transfer Switch (Standard)	●	●
	Mains Transfer Switch (Emergency)	●	●
Environment	Operating Temperature (-40℃-70℃)	●	●
	Ambient Temperature (-25℃-45℃)	●	●
	Humidity≤ 80%	●	●
Monitoring Function	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	●	●
	Connection Point with All-around Setting For 6 Users	●	●
	3 Users Input Connection Point	●	●
	LCD Light Control of Low Light Operation Environment	●	●
	Safe PIN Code	●	●
	RS232/485 Interface	●	●
	Language Selection	●	●
	Multi-Language Function	●	●

● Standard ○ Optional × Impossible

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.

GMS750C/S

EC Series

Optional

Engine	Alternator	Generator Set	Fuel System	Canopy
● Water Jacket Preheater ● Oil Preheater	● Winding Temperature ● Measuring Instrument ● Alternator Preheater ● PMG ● Anti-damp andanti-corrosion treatment ● Anti-condensationheater	● Tools with the machine	● Low fuel level alarm ● Automatic fuel feedingsystem ● Fuel T-valves	● Weatherproof Canopy

LubricatingSystem	Exhaust System	Cooling System	Control System	Voltages
● Oil with the machine	● Protection board fromhotness	● Front heat protection ● Coolant (-30°C)	● Remote control panel ● PLC-8610 ● ATS	● 415/240V ● 400/230V ● 380/220 ● 220/127V ● 200-115V

The following lists are optional by the needs of customers.

Minor Repair / 1000 hrs optional				
No.	Part Name	Part No.	Qty	Remark
1	CARTRIDGE,LUB	3889310=LF670	16	
2	ELEMENT,LUBOIL FILTER	3889311=LF777	8	
3	FILTER,FUEL	3313306=FF202	8	
4	CORROSION RESISTOR	3100308=WF2075	16	
5	CLEANER，AIR	3018042	8	
6	BELT,V, FAN	3003341	2	IMPORT
7	BELT,V, MULTI-SLOT	3031485	2	IMPORT
8	BEARING,CONNECTING	AR12250	1	
9	SET,MAIN BEARING	3047390	12	
10	NOZZLE,PISTION COOLING	3007517	6	
11	OIL PRESSURE SENSOR	3015237	1	
12	WATER TEMP, SENSOR	3015238	1	IMPORT
13	PICKUP ,MAGNETIC	3034572	1	
14	BUSHING	3043909	1	IMPORT
15	SWITCH,MAGNETIC	3050692	1	
16	SET,UPPER ENGINE GSK	3800730	1	IMPORT
17	SET,LOWER ENGINE GSK	3804301	1	IMPORT

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.

EC Series / 2017 1st Edition