

Generator set
Sound-proof type
GMS60CS

SPECIFICATIONS





1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 45°C. The coolant heater is needed when the temperature is below 5°C
- · Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters.

Factory Inspection

- Inspection items.
- · Protection devices working test.
- · Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

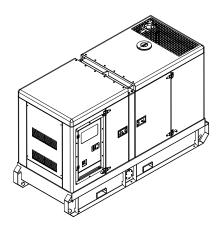
2 General Features

- Cummins engine 4BTA3.9G2
- Close coupled to LSA alternator LSA42.3L9
- Microprocessor control module PLC-920
- Main circuit breaker: 100ARotate speed governor: EFC
- · Excitation system: Self excited
- A.V.R model: R220
- Key switch
- · Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V/70AH sealed for life maintenance free battery

- · Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- · Oil pump on the engine
- · Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- · Dry type air filter
- Base fuel tank for 27hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment

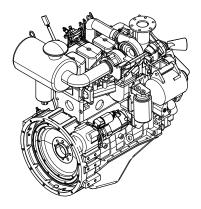
General technical data



Model	GMS60CS
Structure type	R
Tank capacity	360L
Dry weight	1441kg
Noise level @7m	68.2dBA
Dimensions L×W×H	2688x1114x1759mm
Standby Power	66kVA/53kW
Prime Power	60kVA/48kW

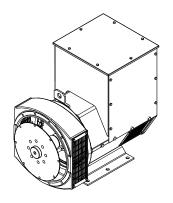
Voltage	380V		400V		415V		440V	
Ampere	91.2A		86.6A		83.5A		78.7A	
Genset Fuel Consumption								
Frequency/Load 2		25	5%	50%	75%	10	0%	110%
50Hz (L/h)		4.	.2	7.0	10.0	12	2.9	14.1

Diesel Engine



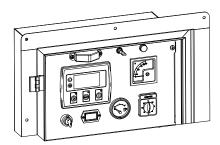
Engine Manufacturer/Brand	Cummins
Engine Model	4BTA3.9G2
Dimensions L×W×H	884.9*748.4*985.6
Dry Weigh (approx.)	350kg
Number of Cylinders	4
Bore	102mm
Stroke	120mm
Displacement	3.9L
Compression Ratio	17.3
Type of injection	Direct injection
Intake System	Turbochanger& Aftercooler
Intake Resistance	≦ 6.28kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12/24V
Type of Fuel	Diesel
Type of Oil	15W40-CF4
Oil Capacity	10.9L
Type of Coolant	Glycol mixture
Coolant Capacity(Engine Only)8.3L
Back Pressure	≦10.1kPa
Standby Power	55kW
Prime Power	50kW
Fuel Consumption(100%load)	213g/kW.h

Alternator



Alternator Manufacturer/Brand	LSA
Alternator Model	LSA42.3L9
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	H
Winding Pitch	2/3
Terminals	12
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250 rpm
Air Flow 0.216m ³ /s(50	0HZ),0.281m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic TGH / THCat no load	< 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<50

PLC-920 Control System

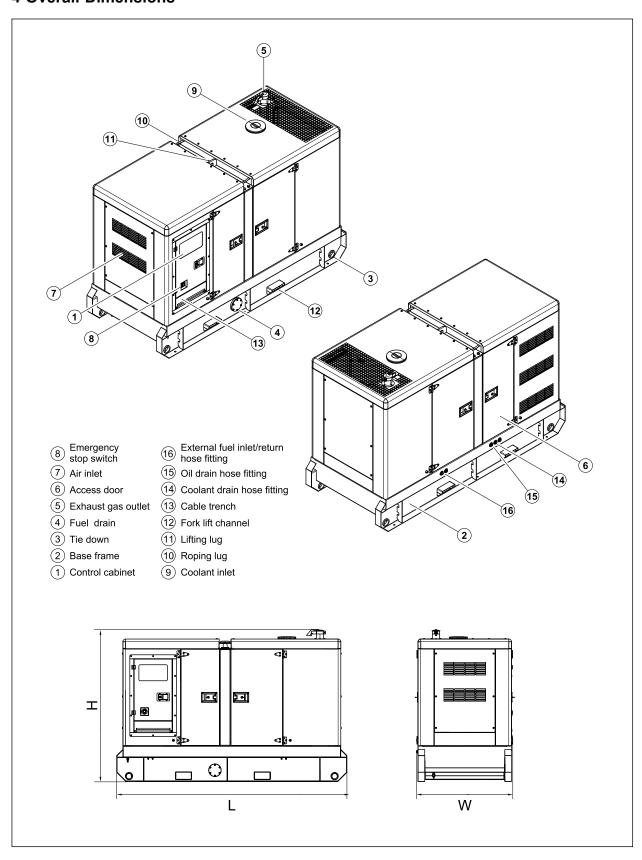


PLC-920 is an advanced control module based on microprocessor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true up fault condition of an engine failure.

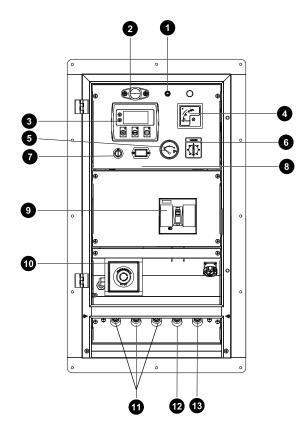
Standard Control Function

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

4 Overall Dimensions

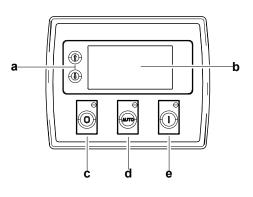


5 Control System



Ref.	Description
1	Control cabinet lamp switch
2	Control cabinet lamp
3	Control module
4	Voltage meter
5	Fuel level meter
6	Voltmeter change-over switch
7	Key switch
8	Time counter
9	Main circuit breaker
10	Emergency stop button
11	Live wire terminals
12	Neutral wire terminal
13	Ground wire terminal
14	Charge indicator

Control & field wiring cabinet



Control module

Ref.	Description
а	Navigation button£» Accept (Configuration mode only)
b	Main status display
С	Stop/reset button£» Next page (Configuration mode only)
d	Auto start button£» Decrease value/next item (Configuration mode only)
е	Start button£» Increase value/next item (Configuration mode only)

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