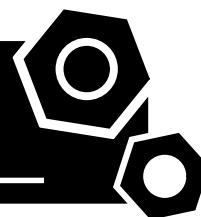


**Generator set**  
**Sound-proof type**  
**GMS100CS**

# **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

### Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 50°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.

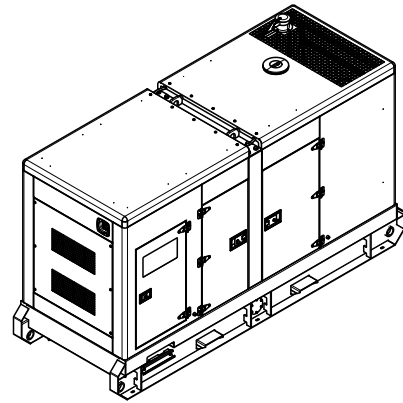
## 2 General Features

- Cummins engine 4BTAA3.9-G3
- Close coupled to LSA alternator LSA44.3S5
- Microprocessor control module PLC-920
- Main circuit breaker: 160A
- Rotate speed governor: EFC
- Excitation system: Self excited
- A.V.R model: R250
- 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 forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 9 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

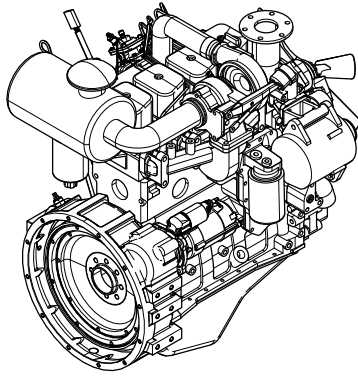
### General technical data



Model.....GMS100CS  
 Structure type ..... R  
 Tank capacity.....240L  
 Dry weight.....2064kg  
 Noise level @7m ..... 70.2dBA  
 Dimensions L×W×H.....3142×1212×1712mm  
 Standby Power ..... 110kVA/88kW  
 Prime Power ..... 100kVA/80kW

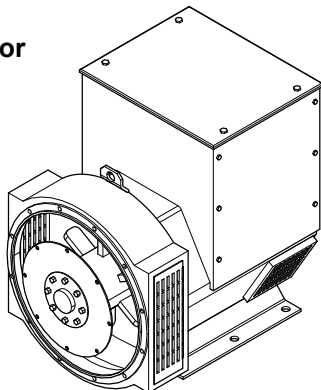
Voltage	380V	400V	415V	440V	
Ampere	151.9A	144.3A	139.1A	131.2A	
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	6.9	12.3	18.2	24.7	27.6

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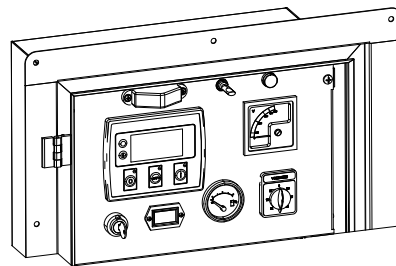
Engine Manufacturer/Brand.....	Cummins
Engine Model.....	4BTAA3.9-G3
Dimensions L×W×H.....	904.1x689.2x570.7mm
Dry Weigh (approx.).....	355kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke.....	120mm
Displacement.....	3.9L
Compression Ratio.....	18
Type of injection.....	Direct injection
Intake System.....	Turbo charged
Intake Resistance.....	≤6.28kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	24V
Type of Fuel.....	Diesel
Type of Oil.....	15W40-CF4
Oil Capacity.....	10.9L
Type of Coolant.....	Glycol mixture
Coolant Capacity(Engine Only).....	7.2L
Heat Rejected To Exhaust System.....	N/A
Heat Rejected To Water&Oil.....	49kW( 2744BTU/min)
Back Pressure.....	≤10.1kPa
Standby Power.....	106kW
Prime Power.....	96kW
Fuel Consumption(100%load).....	212g/kW.h

## Alternator



Alternator Manufacturer/Brand.....	LSA
Alternator Model.....	LSA44.3S5
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.....	0.514m³/s(50HZ),0.617m³/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

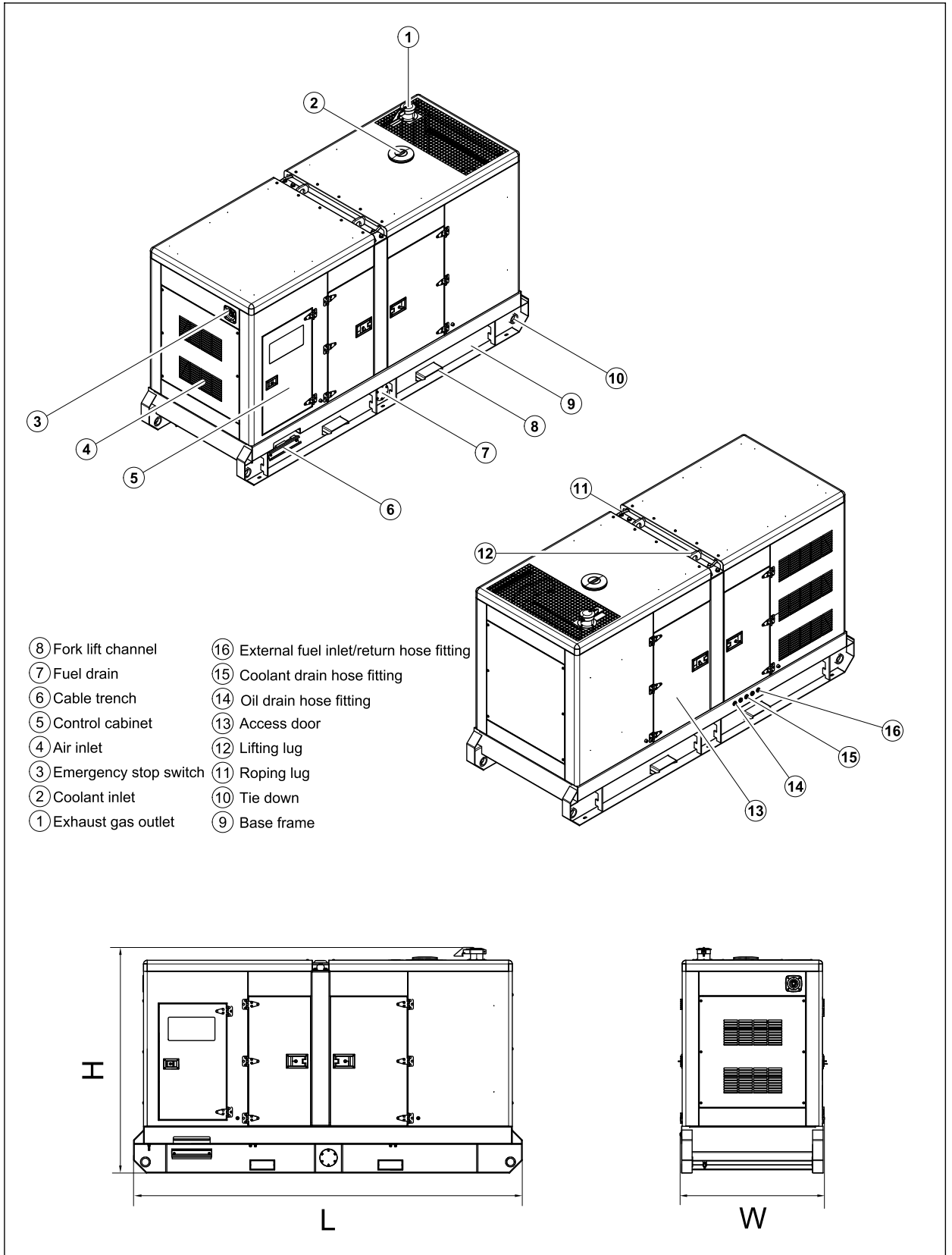


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true up fault condition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

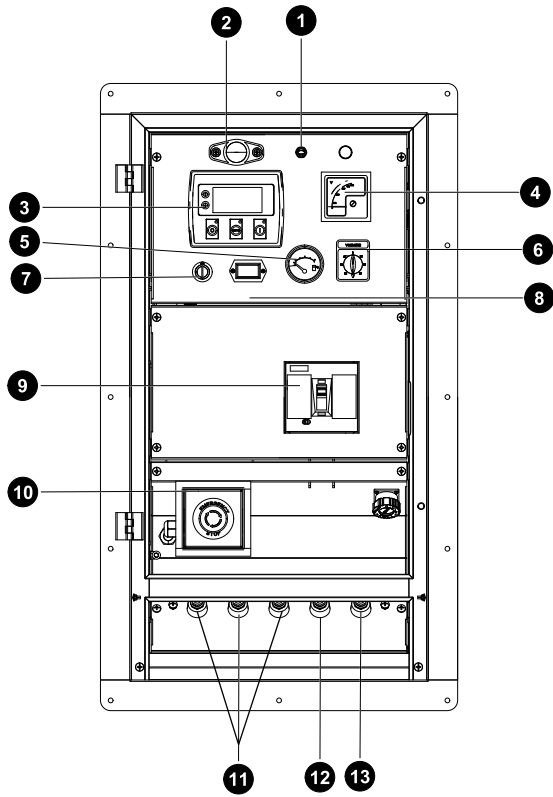
### Standard Control Function

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

## 4 Overall Dimensions

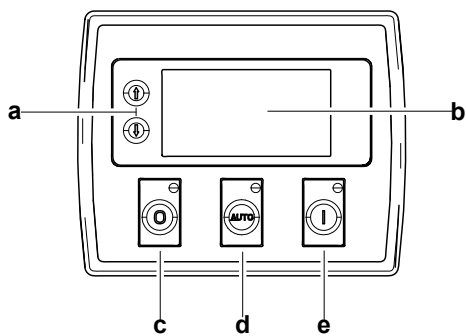


## 5 Control System



**Control & field wiring cabinet**

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 module**

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

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