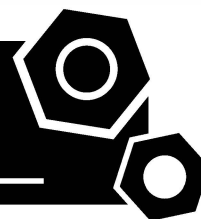


**Generator set**  
**Sound-proof type**  
**GMS135CS**

# **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 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 6BTAA5.9G2
- Close coupled to a Leroy somer alternator LSA44.3M8
- Microprocessor control module PLC-920
- Main circuit breaker: 250A
- Rotate speed governor: Electrical governor
- Excitation system: Self excited
- A.V.R model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2x12V/72AH 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 21 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

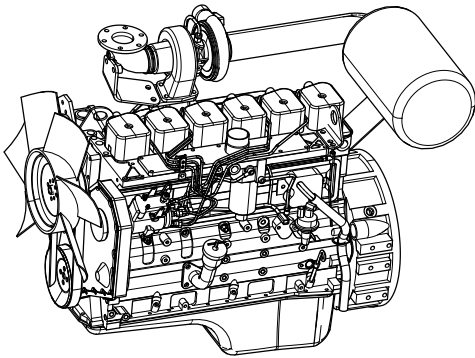
### General technical data



Model.....GMS135CS  
 Structure type ..... R  
 Tank capacity.....620L  
 Dry weigh..... 2248kg  
 Noise level @7m ..... 68.5dBA  
 Dimensions L×W×H..... 3312x1205x1967mm  
 Standby Power ..... 145kVA/116kW  
 Prime Power ..... 135kVA/108kW

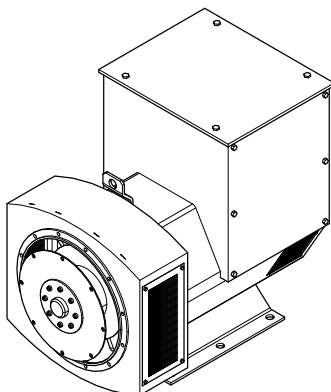
Voltage	380V	400V	415V		
Ampere	205.1A	194.9A	187.8A		
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	9	16	23	30	33

## Diesel Engine



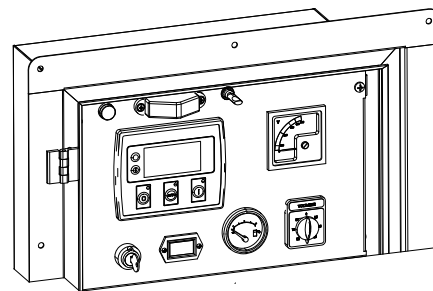
Engine Manufacturer/Brand .....	Cummins
Engine Model .....	6BTAA5.9G2
Dimensions L×W×H.....	1184.7*655.7*981.3
Dry Weigh (approx.) .....	411kg
Number of Cylinders.....	6
Bore.....	102mm
Stroke .....	120mm
Displacement.....	5.9L
Compression Ratio .....	16.8
Type of injection.....	Direct injection
Intake System.....	Turbocharged, air-to-air charge cooled
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 .....	14.2L
Type of Coolant .....	Glycol mixture
Coolant Capacity .....	34L
Back Pressure .....	≤10.1kPa
Standby Power .....	130kW
Prime Power .....	120kW
Fuel Consumption(100%load).....	208g/kW.h

## Alternator



Alternator Manufacturer/Brand .....	Leroy somer
Alternator Model .....	LSA44.3M8
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

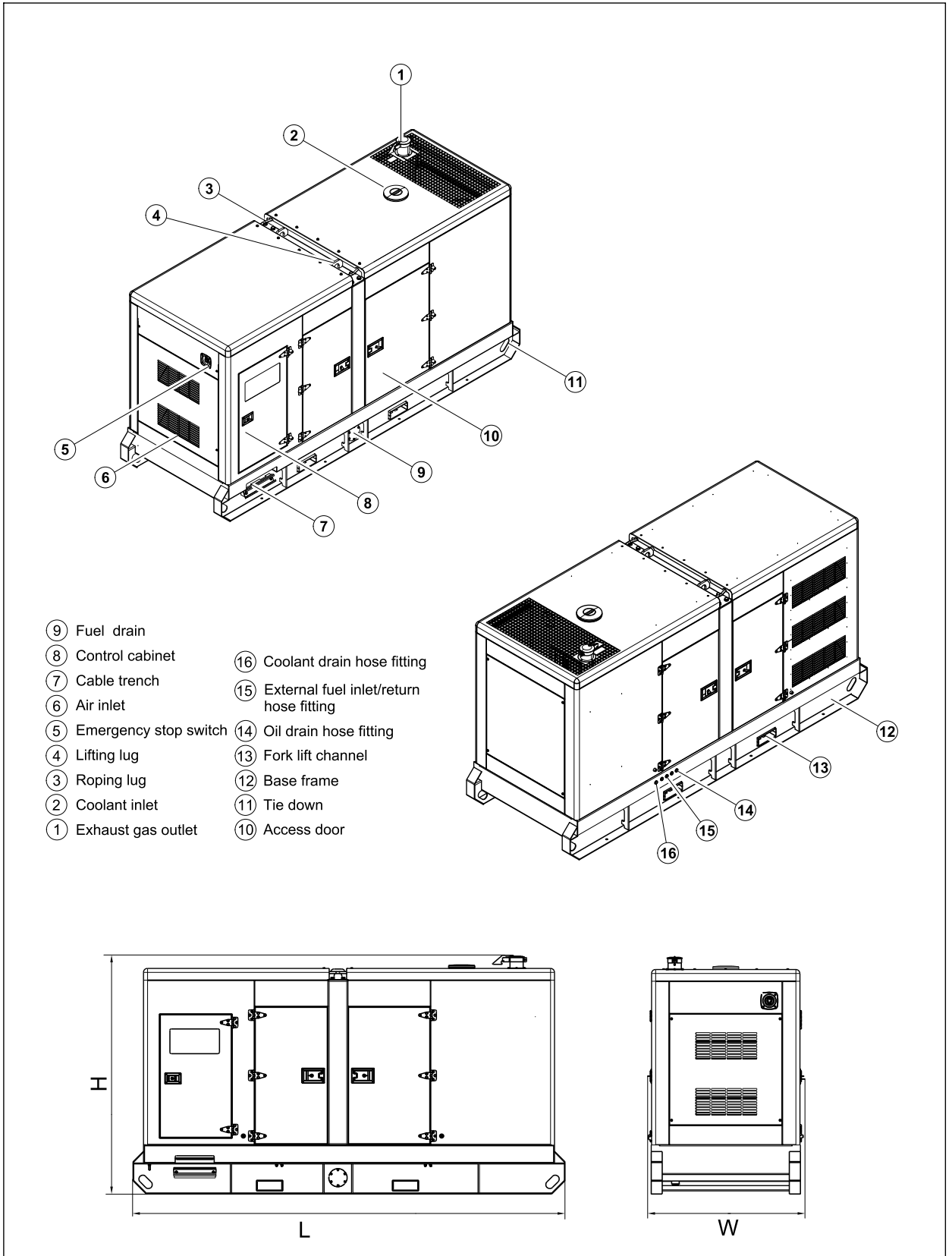


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

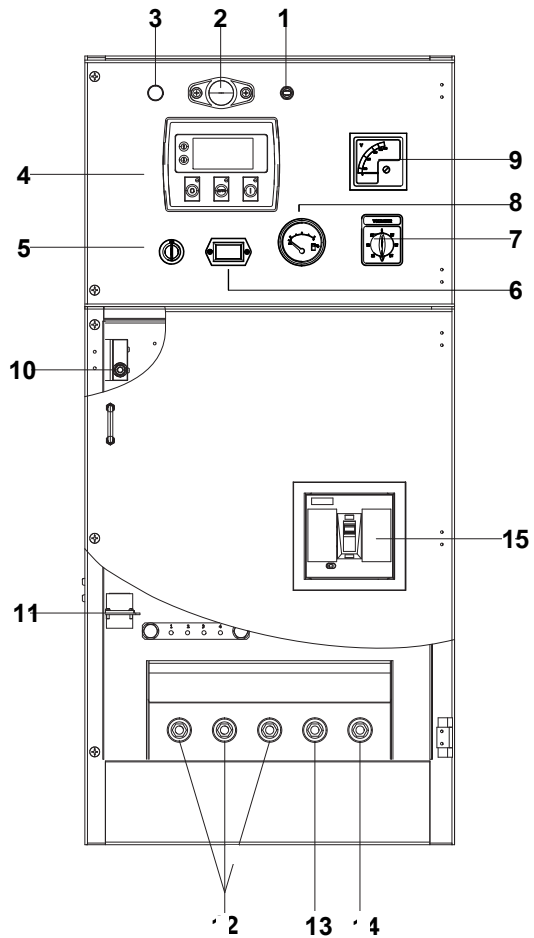
### Standard Control Function

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

## 4 Overall Dimensions

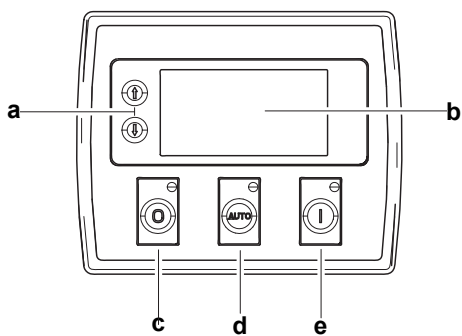


## 5 Control System



**Control & field wiring cabinet**

Ref.	Description
1	Control cabinet lamp switch
2	Control cabinet lamp
3	Charge indicator
4	Control module
5	Key switch
6	Time counter
7	Voltage changer-over switch
8	Fuel level meter
9	Voltage meter
10	Limit switch
11	Mains input/Remote control/ATS connector
12	Live wire terminal
13	Neutral wire terminal
14	Ground wire terminal
15	Main circuit breaker



**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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