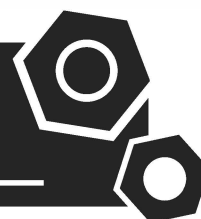


Generator set
Sound-proof type
GMS60CS

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance European (CE)
- China Compulsory Certification (CCC)
- 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 a Leroy Somer alternator LSA42.3L9
- Microprocessor control module PLC-920
- Main circuit breaker: 100A
- Rotate speed governor: Electrical governor S6700E
- 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 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

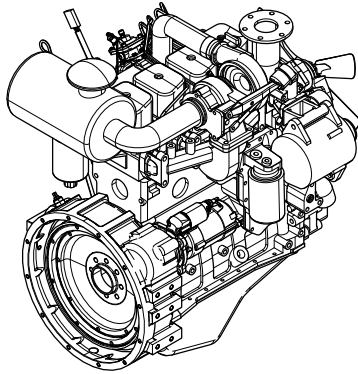
General technical data



Model.....	GMS60CS
Structure type	R
Tank capacity.....	280L
Dry weight.....	1548kg
Noise level @7m	68.5dBA
Dimensions L×W×H.....	2688x1112x1708mm
Standby Power	61kVA/48.8kW
Prime Power	60kVA/48kW

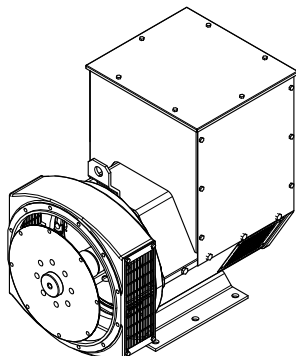
Voltage	380V	400V	415V	440V	
Ampere	91.2A	86.6A	83.5A	78.7A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	3.8	6.7	9.8	13.1	14.7

Diesel Engine



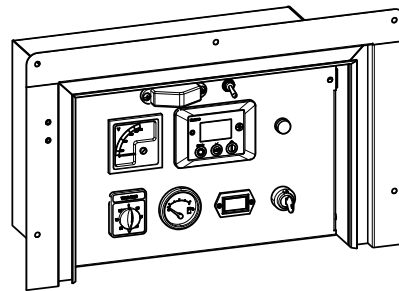
Engine Manufacturer/Brand	Cummins
Engine Model	4BTA3.9G2
Dimensions L×W×H.....	884.9*748.4*985.6
Dry Weigh (approx.)	350kg
Number of Cylinders	4
Bore	102mm
Stroke	120mm
Displacement.....	3.9L
Compression Ratio	16.5
Type of injection.....	Direct injection
Intake System.....	Turbocharged,water-to-air charge 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	9.5L
Type of Coolant	Glycol mixture
Coolant Capacity	20.8L
Back Pressure	≤10.1kPa
Standby Power	55kW
Prime Power	50kW
Fuel Consumption(100%load).....	216g/kW.h

Alternator



Alternator Manufacturer/Brand	Leroy Somer
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.....	0.216m³/s(50HZ),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

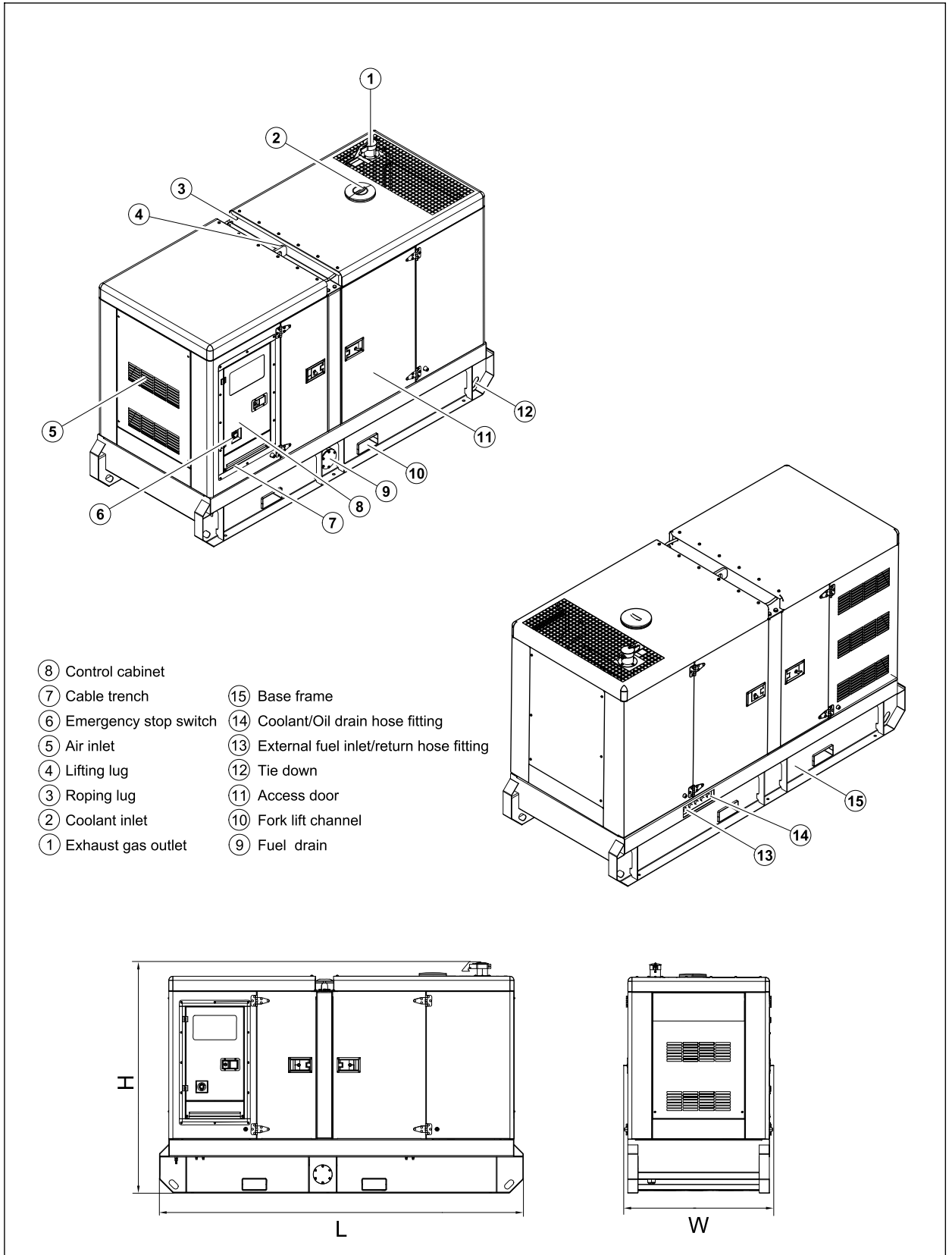


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

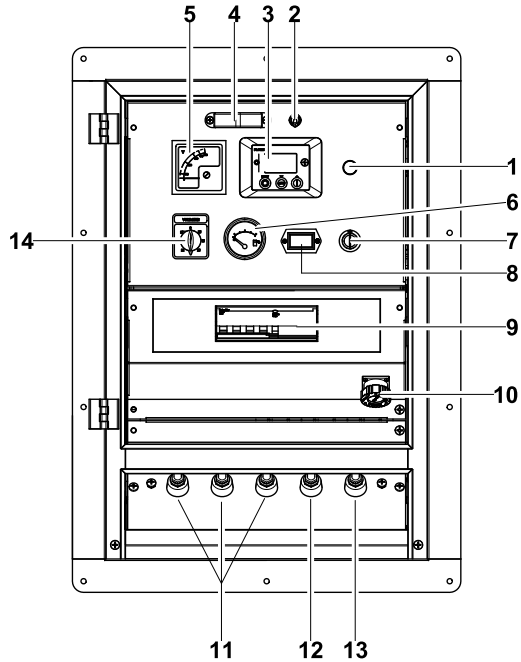
Standard Control Function

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

4 Overall Dimensions

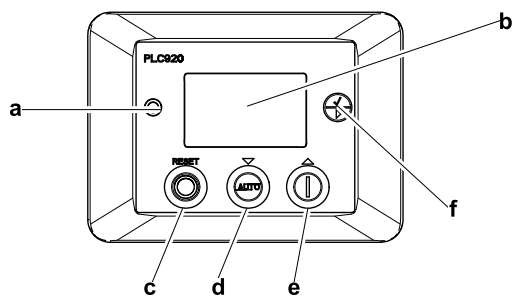


6 Control System



Control & field wiring cabinet

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



Control module

Ref.	Description
a	Alarm indicator
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)
f	Navigation button; Accept (Configuration mode only)

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