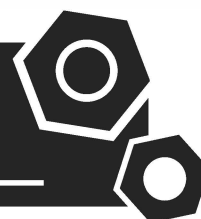


Generator set
Sound-proof type
GMS30CS

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-1995
- GB/T2820-1997

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 above sea Level.

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 4B3.9-G1
- Close coupled to a Stamford alternator S0L2-P1
- Microprocessor control module PLC-920
- Main circuit breaker: 3-Phase 63A
- Rotate speed governor: Electrical governor
- Excitation system: Self excited
- Key switch
- Emergency stop switch

- ATS (automatic transfer switch) receptacle
- 2x12V 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 forklots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 34 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment

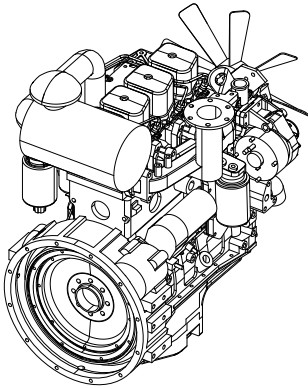
General technical data



Model.....GMS30CS
 Structure type R
 Tank capacity.....240L
 Dry weigh..... 1226kg
 Noise level @7m 63.8dBA
 Dimensions L×W×H.....2338×1050×1560mm
 Standby Power 33kVA/26kW
 Prime Power..... 30kVA/24kW

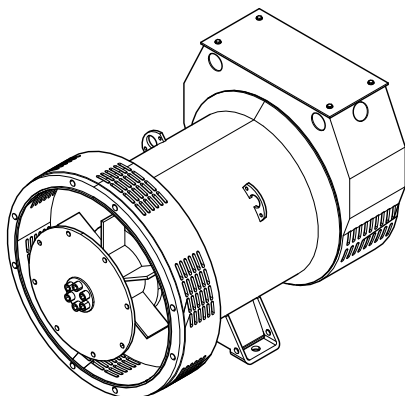
Voltage	380V	400V	415V	440V
Ampere	46A	43A	42A	39A

Diesel engine



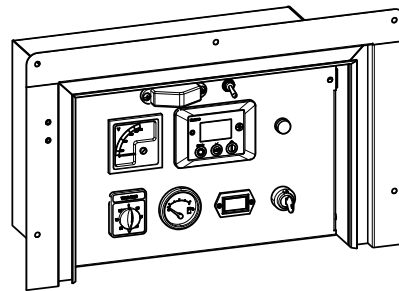
Engine Manufacturer/Brand	Cummins
Engine Model	4B3.9G1
Dimensions L×W×H.....	765×582×908mm
Dry Weigh (approx.)	308kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke	120mm
Displacement.....	3.9L
Compression Ratio	16.5
Type of injection.....	Direct injection
Intake System.....	Natural aspirated
Intake Resistance	≤4.98kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12/24V
Type of Fuel.....	0# or ASTM2
Type of Oil	API-CG4/CH4 or ACEA-E3/E5
Oil Capacity	9.5L
Type of Coolant	Glycol mixture
Coolant Capacity	19.6L
Back Pressure	≤ 10.1kPa
Standby Power	31kW
Continuous Power	28kW
Fuel Consumption(100%load).....	240g/kW.h

Alternator



Alternator Manufacturer/Brand	Stamford
Alternator Model	S0L2-P1
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	2250rpm
Air Flow.....	0.100 m³/sec(50Hz),0.122 m³/sec(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

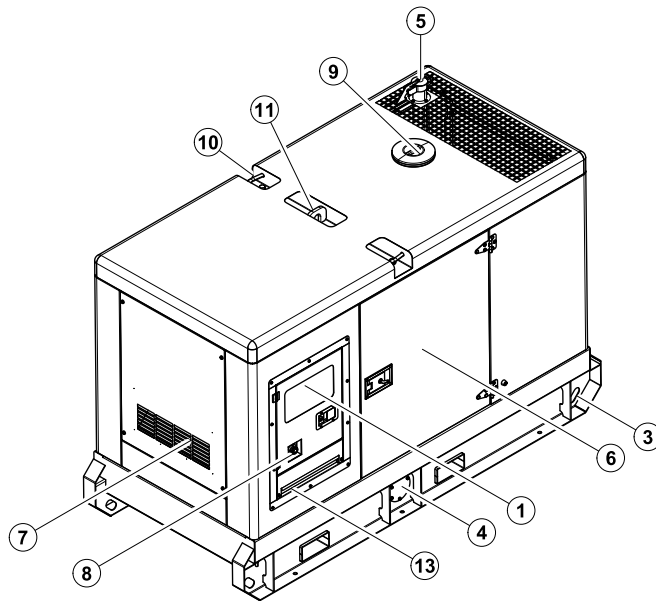


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

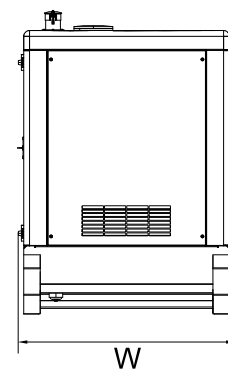
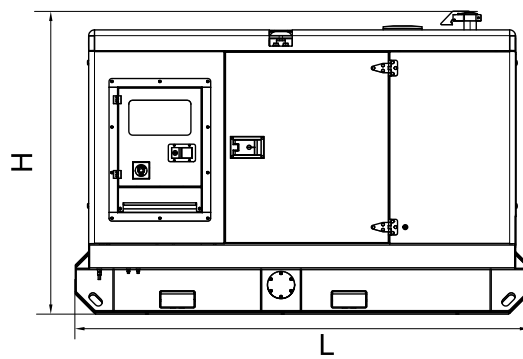
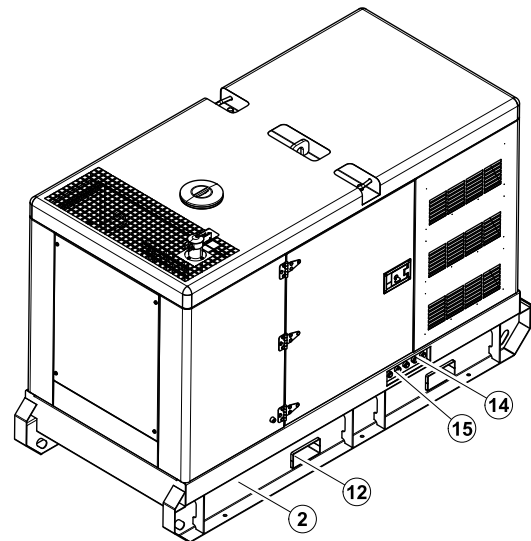
Standard Control Function

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

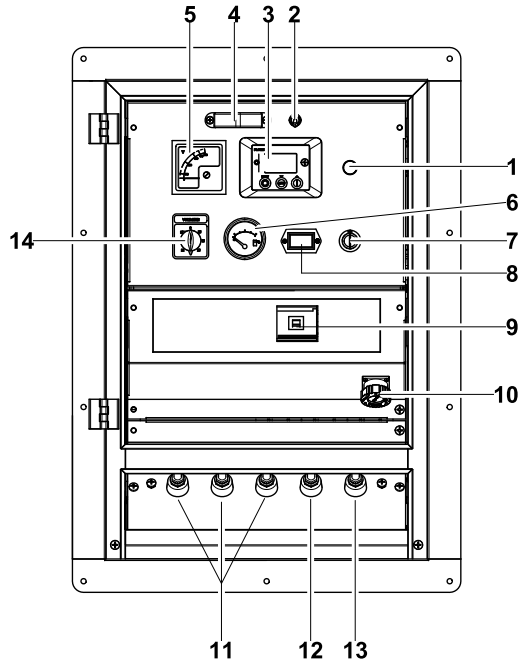
4 Overall Dimensions



- | | |
|-------------------------|---|
| ⑧ Emergency stop switch | ⑮ External fuel inlet/return hose fitting |
| ⑦ Air inlet | ⑭ Coolant/Oil drain hose fitting |
| ⑥ Access door | ⑬ Cable trench |
| ⑤ Exhaust gas outlet | ⑫ Fork lift channel |
| ④ Fuel drain | ⑪ Lifting lug |
| ③ Tie down | ⑩ Roping lug |
| ② Base frame | ⑨ Coolant inlet |
| ① Control cabinet | |

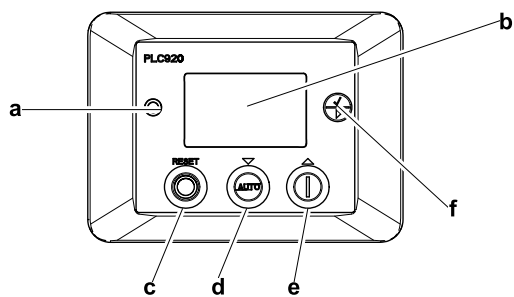


7 Control System



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)

GMC30CS

02.2023
