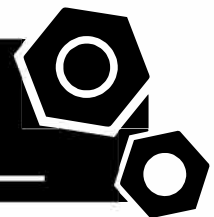


Generator set

Sound-proof type

GMS42CS

SPECIFICATIONS



SC series
GMS42CS
 50 Hz @ 1500rpm,3-phase/5-wiring

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.

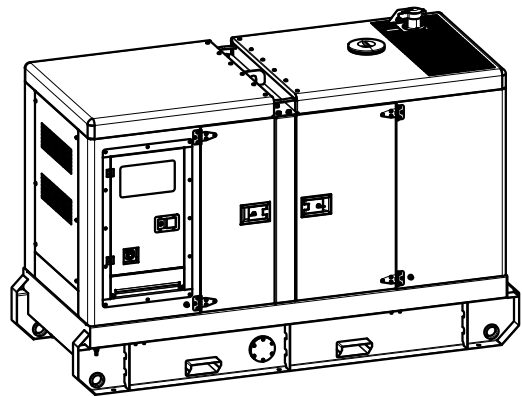
2 General Features

- Cummins engine 4BT3.9-G1
- Close coupled to LSA alternator LSA42.3M7
- Microprocessor control module PLC-920
- Main circuit breaker: 80A
- Rotate speed governor: Mechanical governor
- 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 13 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment

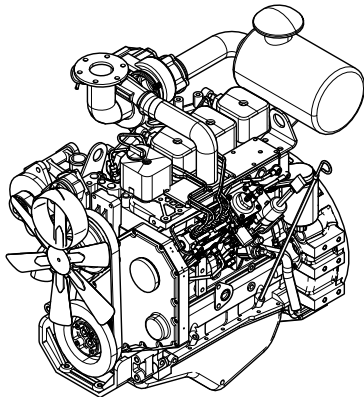
General technical data



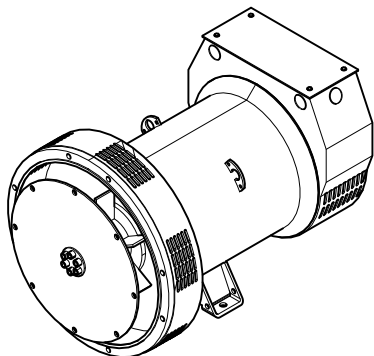
Model.....GMS42CS
 Structure type R
 Tank capacity.....180L
 Dry weight..... 1404kg
 Noise level @7m67.7dBA
 Dimensions L×W×H..... 2508x1081x1709mm
 Standby Power 47kVA/37kW
 Prime Power 43kVA/34kW

Voltage	380V	400V	415V	440V	
Ampere	66A	62A	60A	57A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	5.0	7.5	10.0	13.0	14.0

Power System

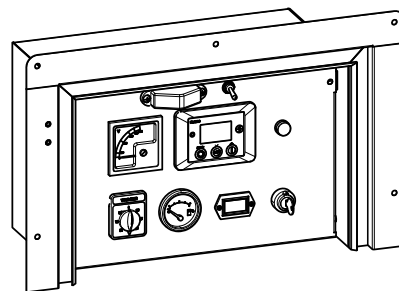


Engine Manufacturer/Brand.....	Cummins
Engine Model.....	4BT3.9G1
Dimensions L×W×H.....	N/A
Dry Weigh (approx.).....	321kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke.....	120mm
Displacement.....	3.9L
Compression Ratio.....	N/A
Type of injection.....	Direct injection
Intake System.....	Turbo charged
Intake Resistance.....	6.2kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12/24V
Type of Fuel.....	No.2 or ASTM D2
Type of Oil.....	API CD/SE or CCMCD4
Oil Capacity.....	10.9L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	20.8L
Back Pressure.....	≤10.1kPa
Standby Power.....	40kW
Prime Power.....	36kW
Fuel Consumption(100%load).....	214g/kW.h



Alternator Manufacturer/Brand.....	LSA
Alternator Model.....	LSA42.3M7
Exciter.....	Brushless
Cooling Fan.....	Plastic
Windings.....	100% copper
Insulation Class.....	H
Winding Pitch.....	2/3
Terminals.....	12
Drip Proof.....	IP23
Altitude.....	≤1000m
Overspeed.....	2250rpm
Air Flow.....	0.135m³/s(50HZ),0.165m³/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

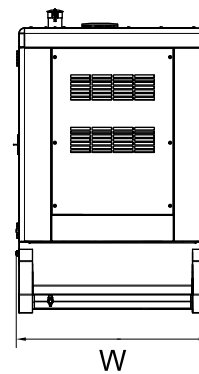
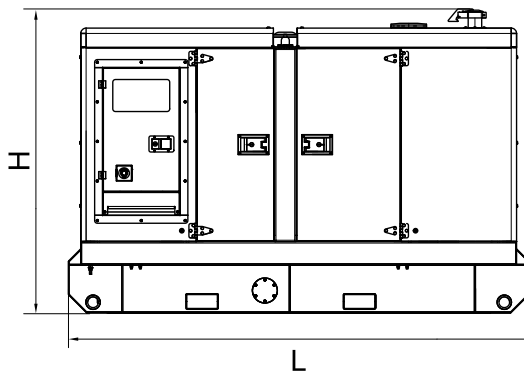
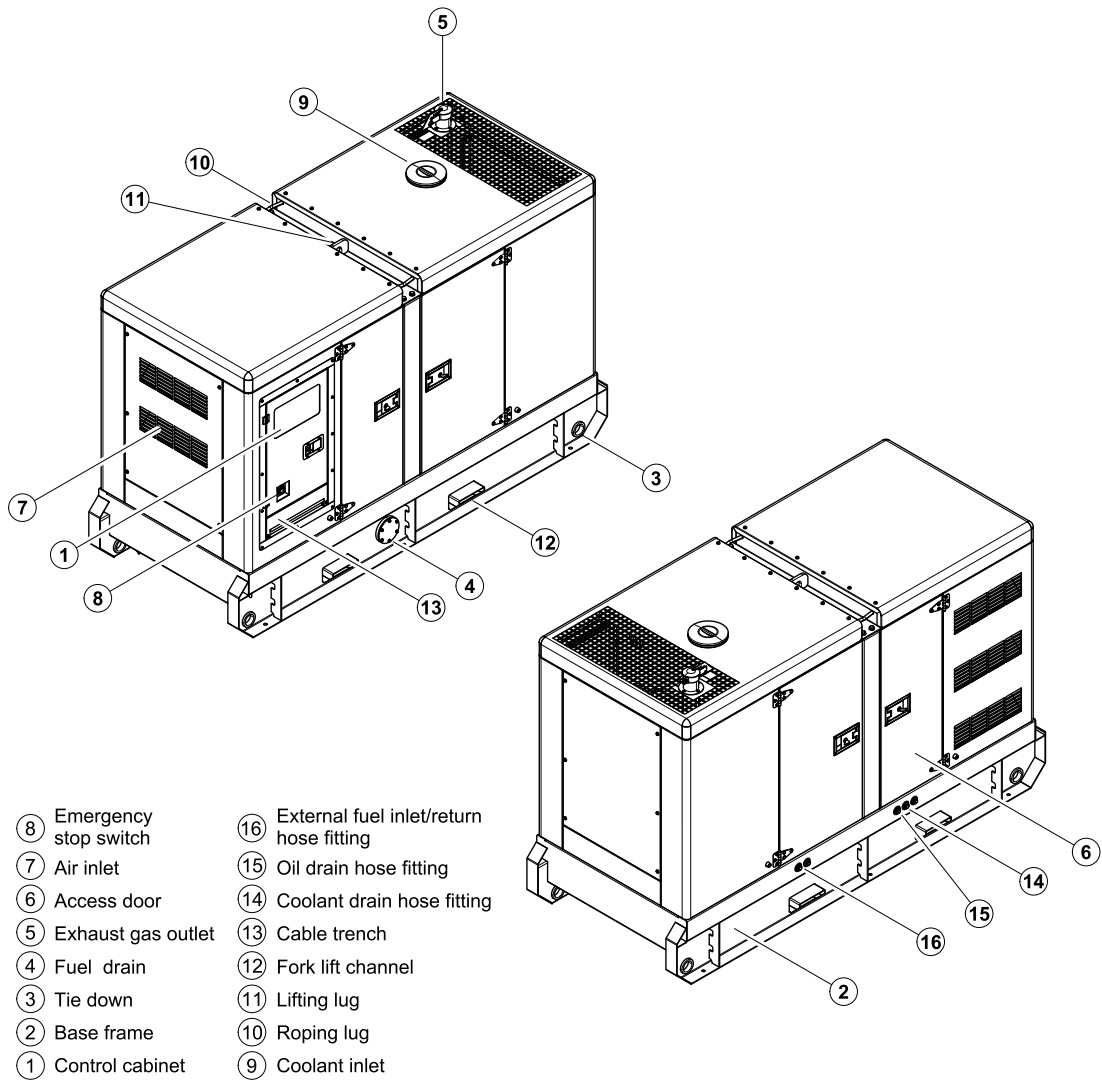


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

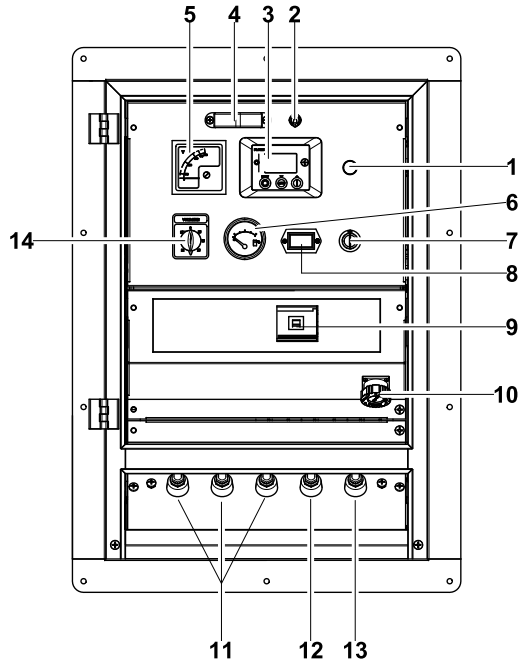
Standard Control Function

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

4 Overall Dimensions

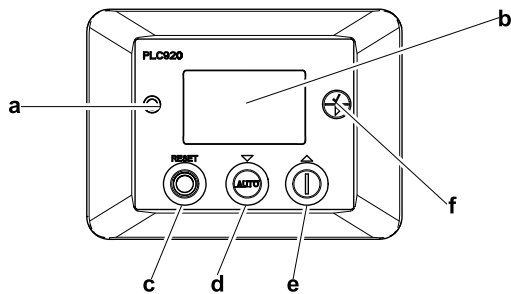


7 Control System



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)