

Generator set
Sound-proof type
GMS80CS

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance European (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.

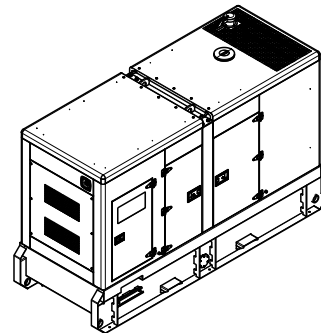
2 General Features

- Cummins engine 4BTA3.9-G11
- Close coupled to a Leroy Somer alternator LSA44.3S3
- Microprocessor control module PLC-920
- Main circuit breaker: 3-Phase 125A
- Rotate speed governor: Mechanical governor
- Excitation System: Self Excited, SHUNT
- A.V.R. Model: R220
- 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 forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 24 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

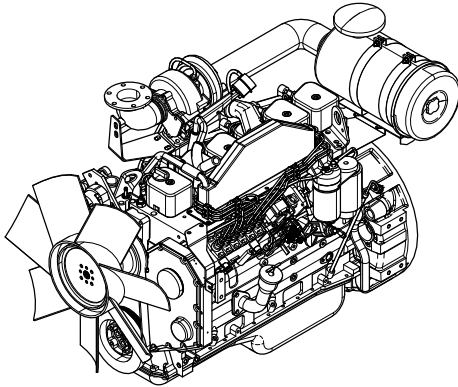
General technical data



Model.....	GMS80CS
Structure type	R
Tank capacity	530L
Dry weigh.....	2120.45kg
Noise level @7m	62.8dBA
Dimensions L×W×H.....	3162×1172×1971mm
Standby Power	88kVA/70kW
Prime Power	80kVA/64kW

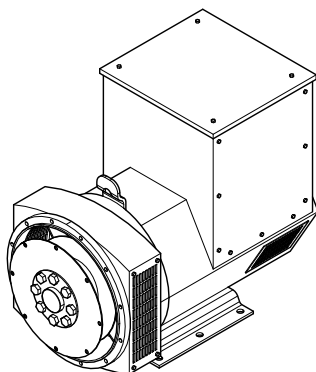
Voltage	380V	400V	415V
Ampere	122A	115A	111A

Diesel Engine



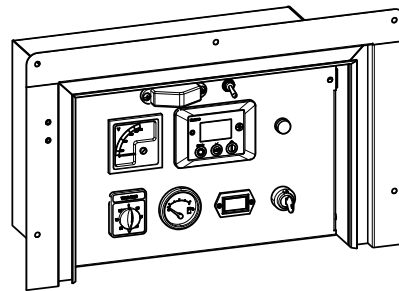
Engine Manufacturer/Brand.....	Cummins
Engine Model.....	4BTA3.9-G11
Dimensions L×W×H.....	N/A
Dry Weigh (approx.).....	N/A
Number of Cylinders.....	4
Bore.....	102mm
Stroke.....	120mm
Displacement.....	3.9L
Compression Ratio.....	17.3
Type of injection.....	Direct injection
Intake System.....	Turbo charged
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 (engine only).....	8.3L
Back Pressure.....	≤10.1kPa
Standby Power.....	92kW
Continuous Power.....	86kW
Fuel Consumption(100%load).....	206g/kW.h

Alternator



Alternator Manufacturer/Brand.....	Leroy Somer
Alternator Model.....	LSA44.3S3
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

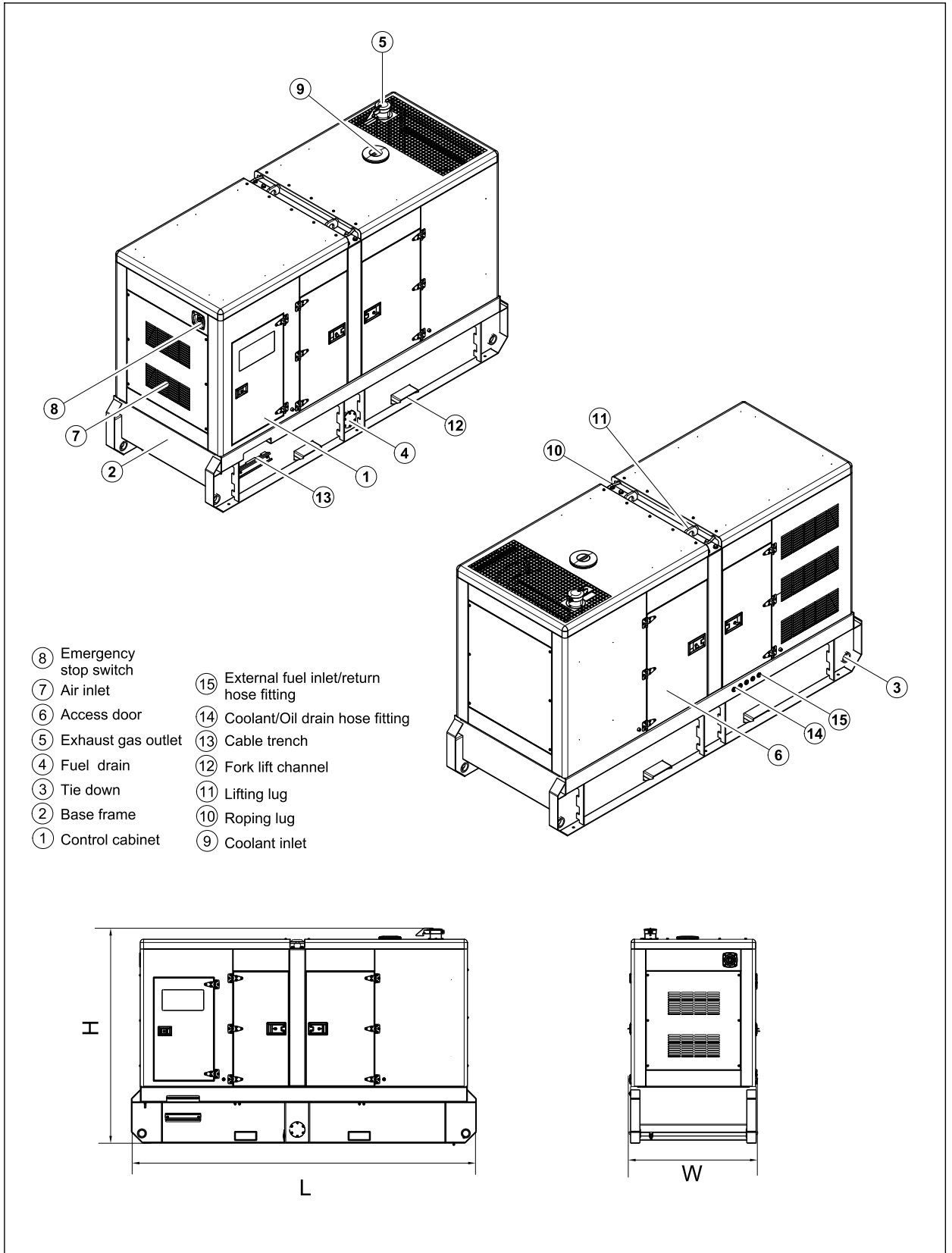


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

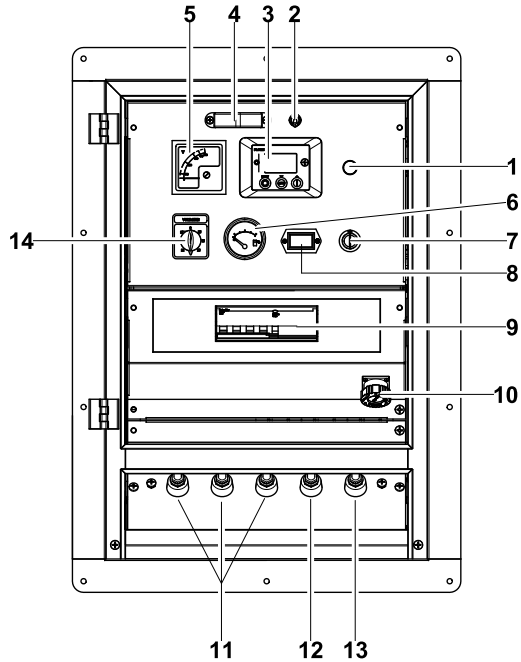
Standard Control Function

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

4 Overall Dimensions

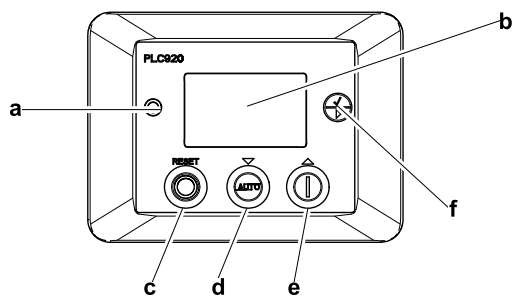


6 Control System



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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<http://www.powerlinkworld.com>

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