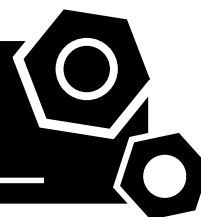


**Generator set**  
**Sound-proof type**  
**GMS250CLS-AU**

# **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Europeenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-5:2005
- GB/T2820.5-2009
- AS 3000-1997
- AS 3010.1-1988

### 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 90%.
- 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.

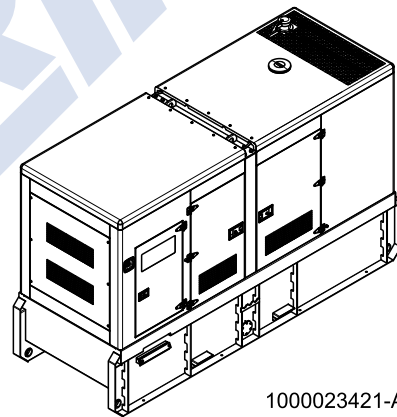
## 2 General Features

- Cummins engine 6LTAA8.9-G2
- Close coupled to a Stamford alternator UCIDI274K
- Microprocessor control module PLC-7420
- NADER main circuit breaker: 400A
- Rotate speed governor: Electrical governor S6700E
- Excitation System: Self Excited, SHUNT
- A.V.R. Model: AS440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector

- 2x12V/120AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 25 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation Manual/ Specifications

## 3 Equipment Specification

### General technical data

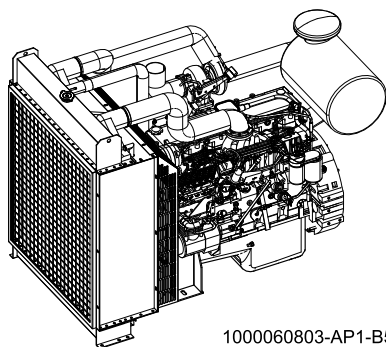


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Model.....	GMS250CLS-AU
Structure type .....	R
Tank capacity.....	1300L
Dry weight.....	6035kg
Noise level @7m .....	80.4dB(A)
Sound power level acc. 2000/14/EC .....	108.3dB(A)
Dimensions L×W×H.....	3662x1322x2260mm
Standby Power .....	275kVA/220kW
Prime Power .....	250kVA/200kW
Voltage/Ampere .....	415V/348A

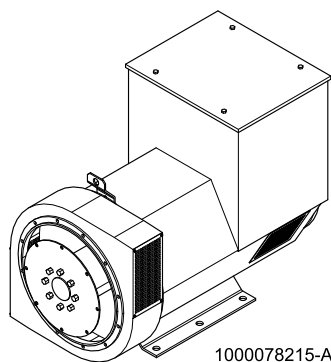
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	14.2	25.6	37	50.3	55.1

## Dck Yf GrghYa



1000060803-AP1-B5

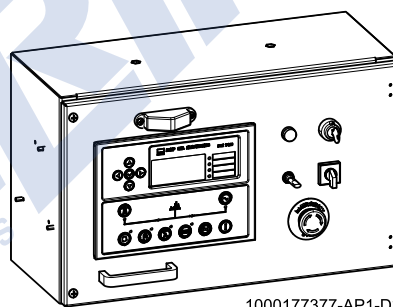
Engine Manufacturer/Brand.....	Cummins
Engine Model.....	6LTAA8.9G2
Dimensions L×W×H.....	1497.4*936.4*1228.7
Dry Weigh (approx.) .....	650kg
Number of Cylinders.....	6
Bore.....	114mm
Stroke.....	145mm
Displacement.....	8.9L
Compression Ratio.....	N/A
Type of injection.....	Direct injection
Intake System.....	Turbocharged, air-to-air charge cooled
Intake Resistance.....	≤6.2kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12/24V
Type of Fuel.....	Diesel
Type of Oil.....	ACEA E2, API CF, CF-4, CG-4
Oil Capacity.....	27.6L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	50.3L
Back Pressure.....	≤10.1kPa
Standby Power.....	240kW
Prime Power.....	220kW
Fuel Consumption(100%load).....	197g/kW.h



1000078215-AP1-C2

Alternator Manufacturer/Brand.....	Stamford
Alternator Model.....	UC21274K
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.....	0.58m³/s(50Hz),0.69m³/s(60Hz)
Voltage Regulation.....	±1.0%
Total Harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

## PLC-7420 Control System



1000177377-AP1-D3

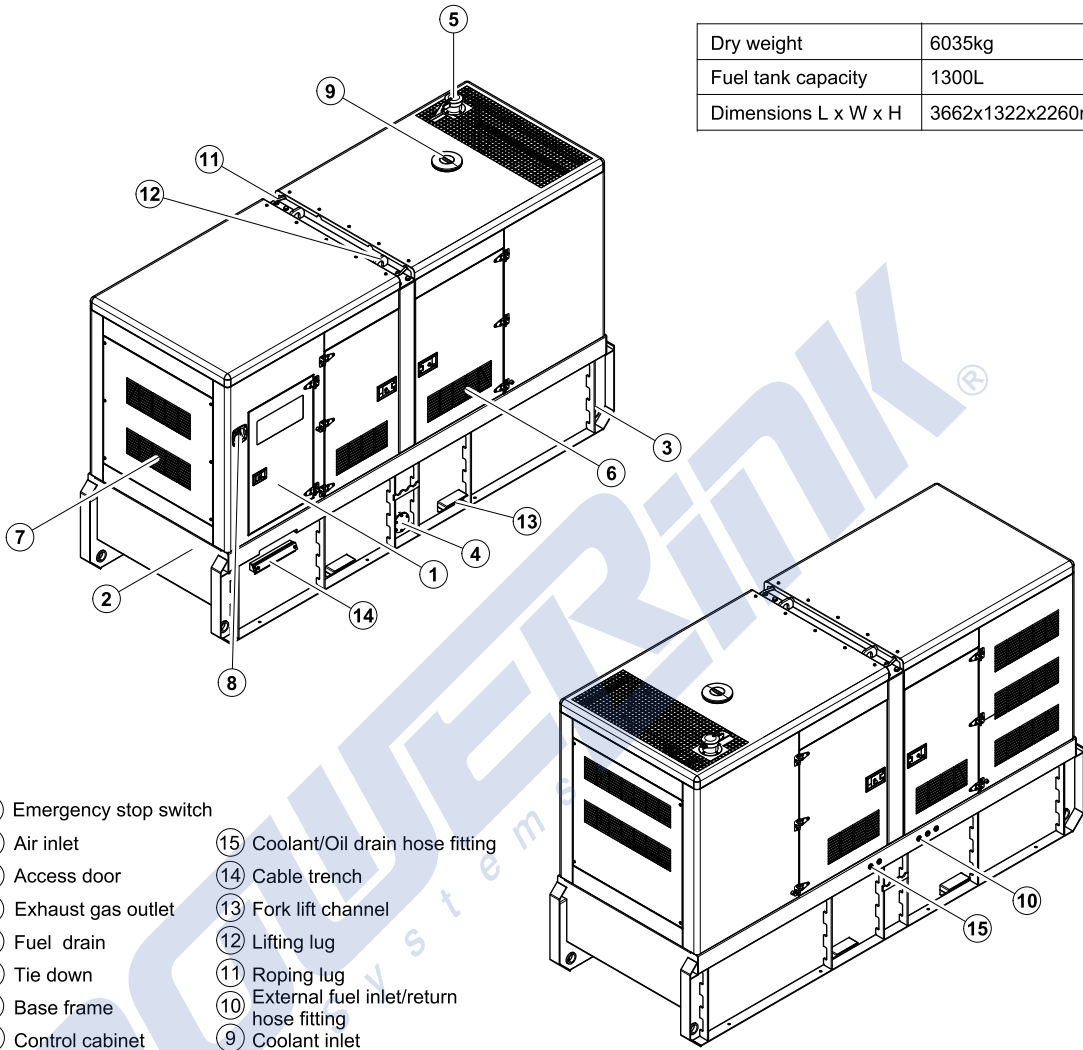
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 250 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

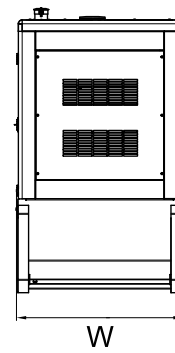
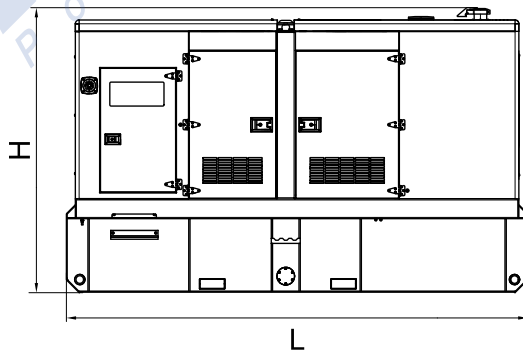
## 4 Overall Dimensions

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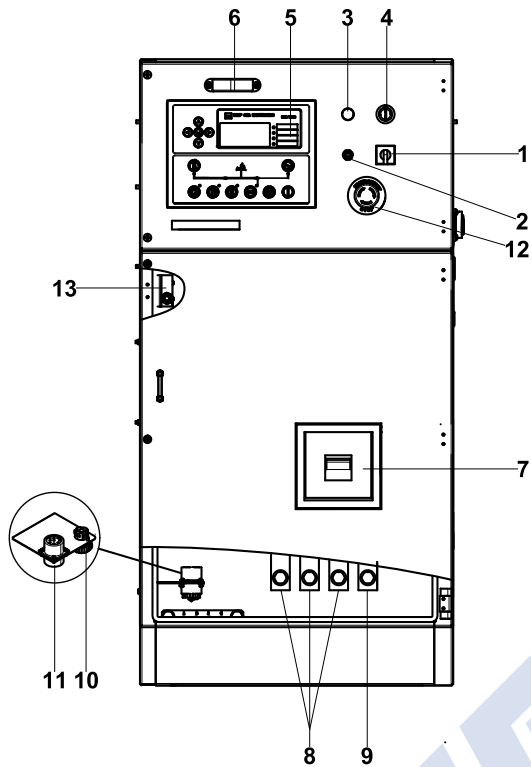
Dry weight	6035kg
Fuel tank capacity	1300L
Dimensions L x W x H	3662x1322x2260mm



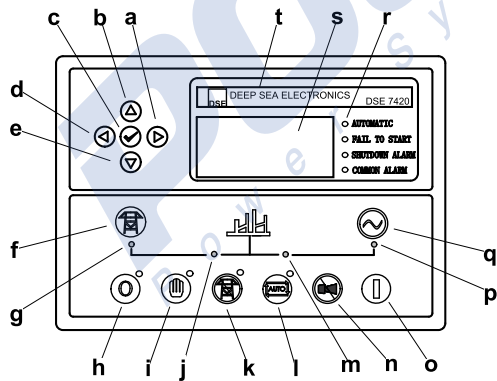
- ⑧ Emergency stop switch
- ⑦ Air inlet
- ⑥ Access door
- ⑤ Exhaust gas outlet
- ④ Fuel drain
- ③ Tie down
- ② Base frame
- ① Control cabinet
- ⑮ Coolant/Oil drain hose fitting
- ⑭ Cable trench
- ⑬ Fork lift channel
- ⑫ Lifting lug
- ⑪ Roping lug
- ⑩ External fuel inlet/return hose fitting
- ⑨ Coolant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



## 5 Control System



Control & Field wiring cabinet



Control module

Ref.	Description
1	Mains input changeover switch
2	Control cabinet lamp switch
3	Charge indicator
4	Key switch
5	Control module
6	Control cabinet lamp
7	Main circuit breaker
8	Live wire terminals
9	Neutral wire terminal
10	Mains input/Remote control communication connector
11	Mains input/Remote control/ATS communication connector
12	Emergency stop switch
13	Limit switch

a	Button (next page)
b	Button (increase value / previous item)
c	Button (accept)
d	Button (previous page)
e	Button (decrease value / next item)
f	Button (transfer the load to the mains supply, when in Manual mode only)
g	Mains supply available LED
h	Stop / Reset button
i	Manual button (Manual control mode)
j	Mains supply on load LED
k	Test button (Test mode)
l	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
o	Start button (Manual)
p	Genset available LED
q	Button (transfer the load to the genset, when in Manual mode only)
r	Alarm LED (4 alarm items)
s	LCD display
t	Control module name

100023421-B5-E
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04.2014
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