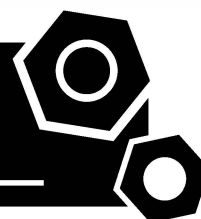


**Generator set**  
**Sound-proof type**  
**GMS150CS-AU**

# **SPECIFICATIONS**



# EC series` GMS150CS-AU

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
- AS 3000-2018
- AS 3010-2017

### 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.

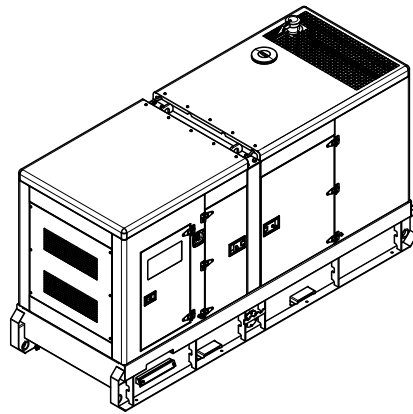
## 2 General Features

- Cummins engine 6BTAA5.9-G12
- Close coupled to LSA alternator LSA44.3L10
- Microprocessor control module PLC-7420
- Main circuit breaker: 250A
- Rotate speed governor: Electrical governor
- Excitation system: AREP
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- 2x12V/120AH Sealed for life maintenance free battery
- Lockable battery isolator switch
- 50°C radiator
- Oil pump on the engine
- Steel base frame with lifting lugs
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 18 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

### General technical data

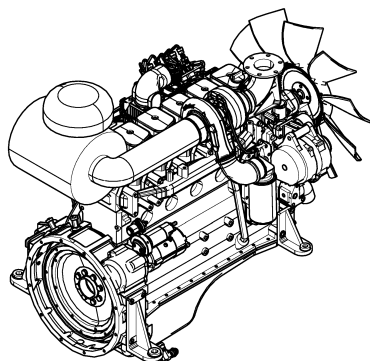


Model.....GMS150CS-AU  
Structure type .....R  
Tank capacity.....620L  
Dry weight.....2257kg  
Sound pressure level @7m ..... 71.6dB(A)  
Dimensions L×W×H.....3312x1172x1974mm  
Standby Power ..... 165kVA/132kW  
Prime Power ..... 150kVA/120kW  
Voltage/Ampere ..... 415V/209A

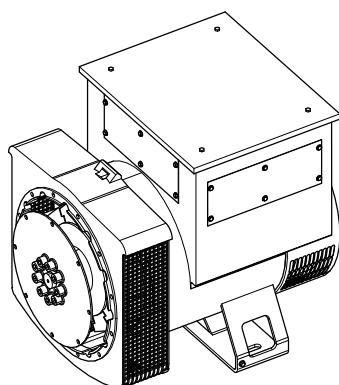
#### Genset Fuel Consumption

Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	10	17	26	34	38

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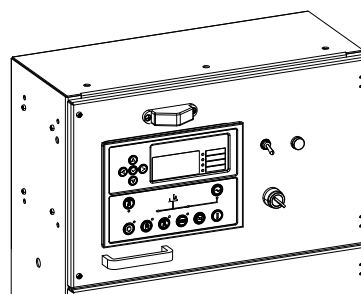


Engine Manufacturer/Brand .....	Cummins
Engine Model .....	6BTAA5.9-G12
Dimensions L×W×H.....	1215.8*730.5*1153.6
Dry Weigh (approx.) .....	653kg
Number of Cylinders .....	6
Bore .....	102mm
Stroke .....	120mm
Displacement.....	5.9L
Compression Ratio .....	17.3
Type of injection.....	Direct injection
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 .....	ACEA E2, API CF, CF-4, CG-4
Oil Capacity .....	16.4L
Type of Coolant .....	Glycol mixture
Coolant Capacity .....	10.0L
Back Pressure .....	≤10.1kPa
Standby Power .....	140kW
Prime Power .....	155kW
Fuel Consumption(100%load).....	203g/kW.h



Alternator Manufacturer/Brand .....	Leroy Somer
Alternator Model .....	LSA44.3L10
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

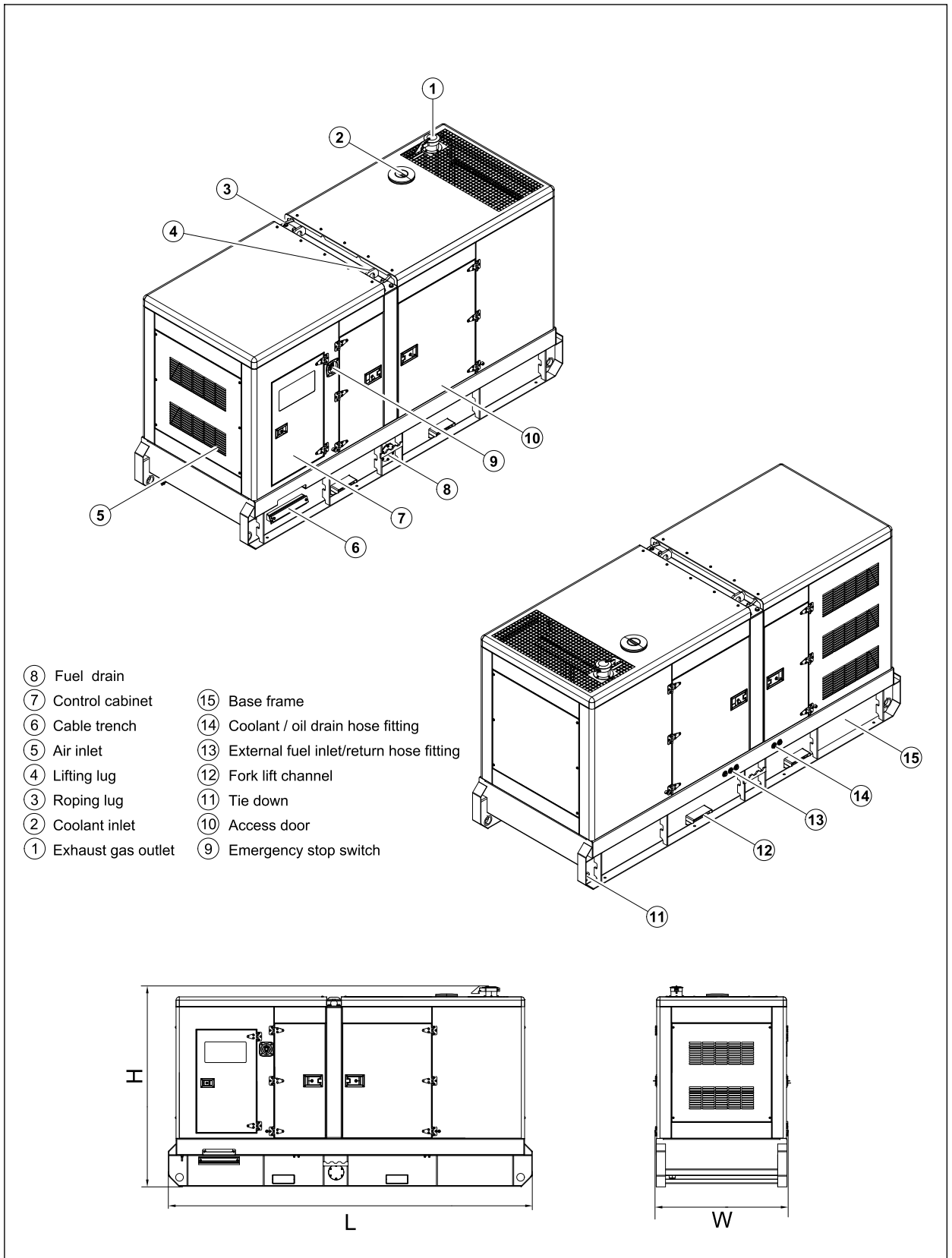
## PLC-7420 Control System



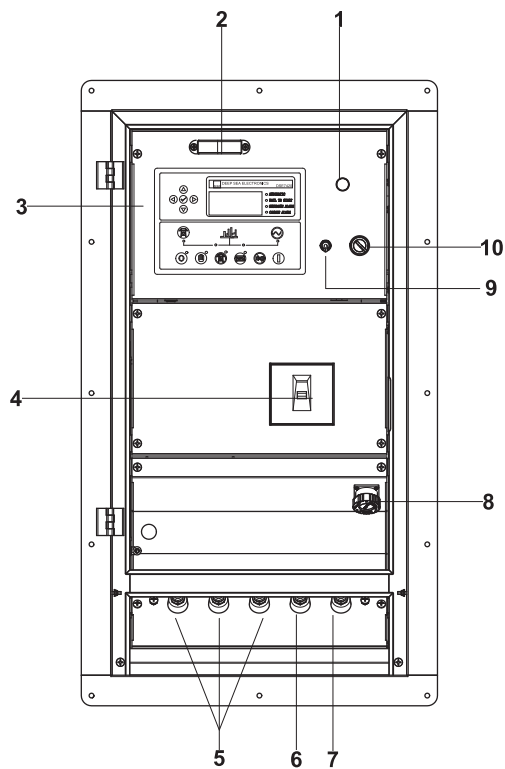
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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

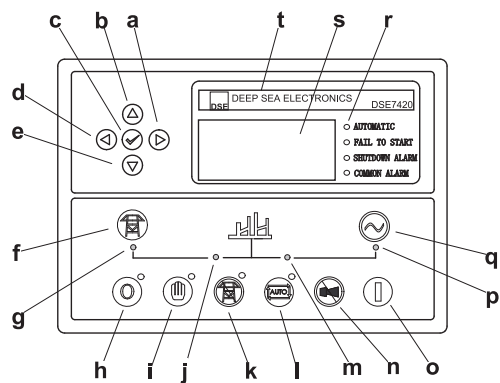
## 4 Overall Dimensions



## 5 Control System



**Control & field wiring cabinet**



**Control module**

Ref.	Description
1	Charge indicator
2	Control panel lamp
3	XC762 control module
4	Main circuit breaker
5	Live wire terminals
6	Neutral wire terminal
7	Ground wire terminal
8	Mains input/ remote/AMF communication connector
9	Control panel lamp switch
10	Key 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

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