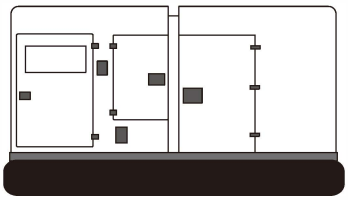
POWERINK
Power Systems



Generator set

Sound-proof type

GMS130CS-AU

SPECIFICATIONS

EC series
GMS130CS-AU
50 Hz @ 1500rpm,3-phase/5-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25℃ to 50℃. The coolant heater is needed when the temperature is below 5℃
- 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

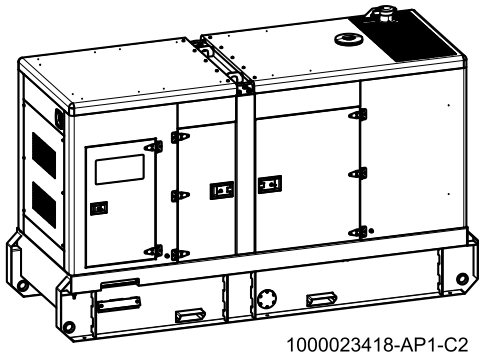
- Painting process and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Cummins engine 6BTAA5.9-G2
- Close coupled to a Stamford alternator UCI274E
- Microprocessor control module PLC-7320
- ABB main circuit breaker: 200A
- Rotate speed governor: Electrical governor S6700E
- Excitation System: Self excited,Shunt
- A.V.R.Model: SX460
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector
- 2x12V/72AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50℃ radiator
- Oil pump on the engine
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air
- Base fuel tank for 20 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation's Manual /

3 Equipment Specification

General technical data



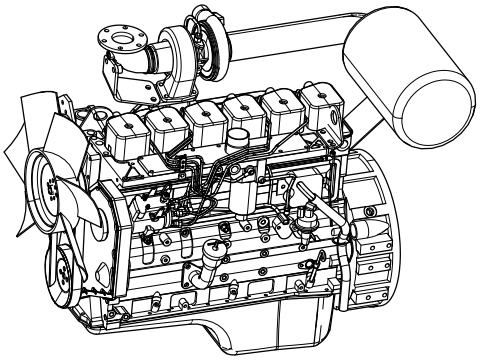
1000023418-AP1-C2

Model..... GMS130CS-AU
Structure type ..... R
Tank capacity.....620L
Dry weight.....2293kg
Noise level @7m 71.5dBA
Dimensions L×W×H..... 3312x1172x1977mm
Standby Power 143kVA/114kW
Prime Power 130kVA/104kW
Voltage/Ampere 415V/181A

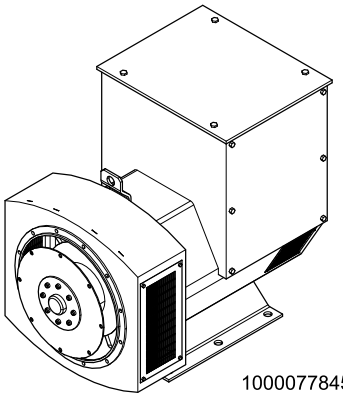
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	9.0	16.0	23.0	30.0	34.0

Power System

1000067107-AP1-A17



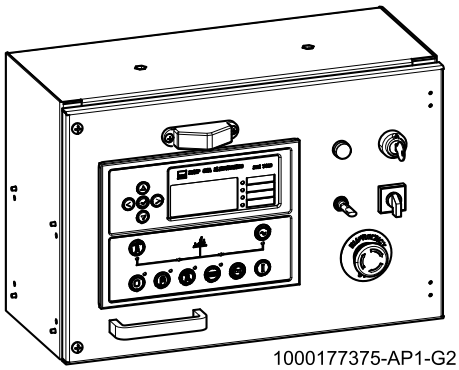
Engine Manufacturer/Brand.....Cummins
Engine Model.....6BTAA5.9G2
Dimensions L×W×H..... 1184.7*655.7*981.3
Dry Weigh (approx.) 411kg
Number of Cylinders.....6
Bore 102mm
Stroke 120mm
Displacement.....5.9L
Compression Ratio 16.8
Type of injection..... Direct injection
Intake System..... Turbocharged,air-to-air charge cooled
Intake Resistance .....≦6.28kPa
Cooling System .....Water cooled
Fan ..... Pusher
Battery Voltage 12/24V
Type of Fuel.....Diesel
Type of Oil 15W40-CF4
Oil Capacity 14.2L
Type of Coolant .....Glycol mixture
Coolant Capacity 34L
Back Pressure .....≦10.1kPa
Standby Power 130kW
Prime Power 120kW
Fuel Consumption(100%load).....208g/kW.h



1000077845-AP1-A1

Alternator Manufacturer/Brand ..... Stamford
Alternator Model UCI274E
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..... 0.514m³/s(50HZ),0.617m³/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



1000177375-AP1-G2

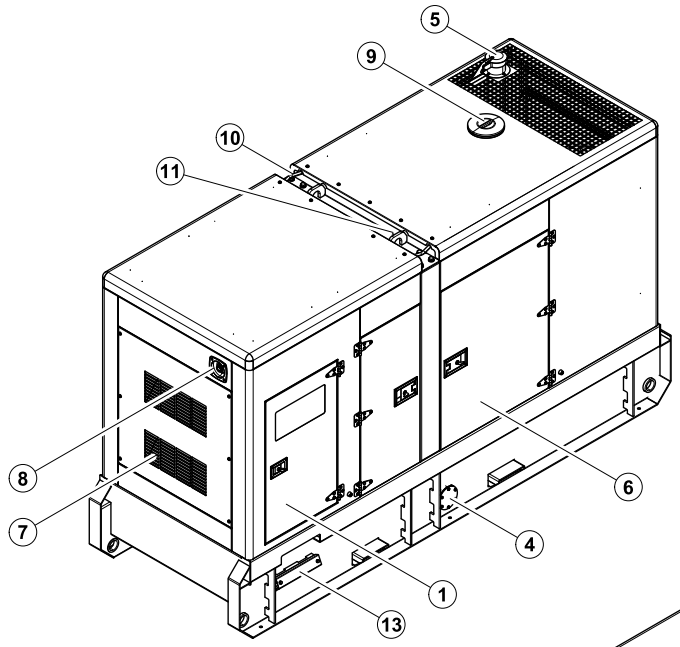
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

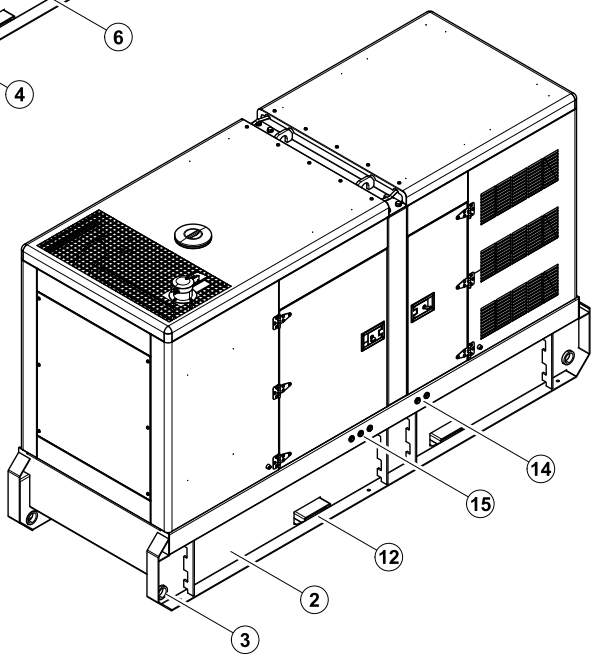
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, 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

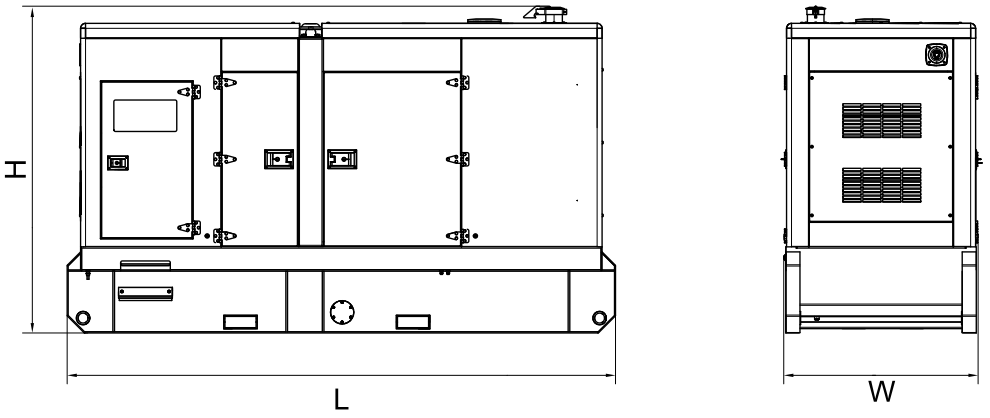
1000023418-DR1-C2

Dry weight	2259kg
Fuel tank capacity	620L
Dimensions L x W x H	3312x1174x1974mm

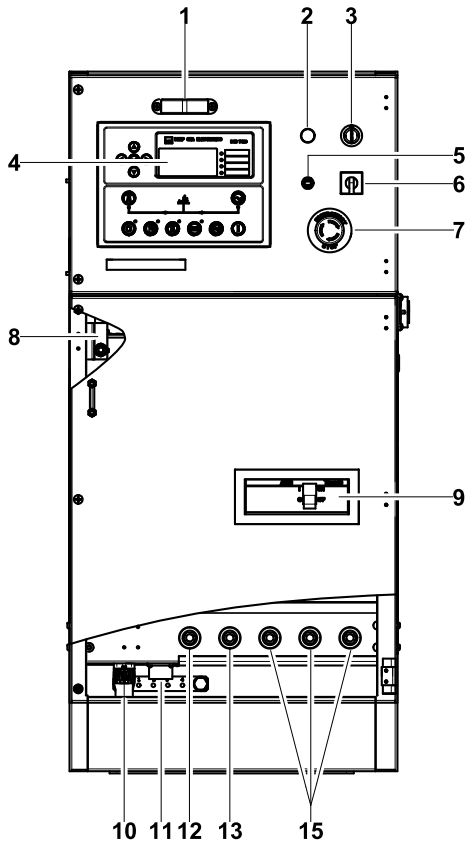




8 Emergency stop switch
7 Air inlet
6 Access door
5 Exhaust gas outlet
4 Fuel drain
3 Tie down
2 Base frame
1 Control cabinet
15 External fuel inlet/return hose fitting
14 Coolant/Oil drain hose fitting
13 Cable trench
12 Fork lift channel
11 Lifting lug
10 Roping lug
9 Coolant inlet

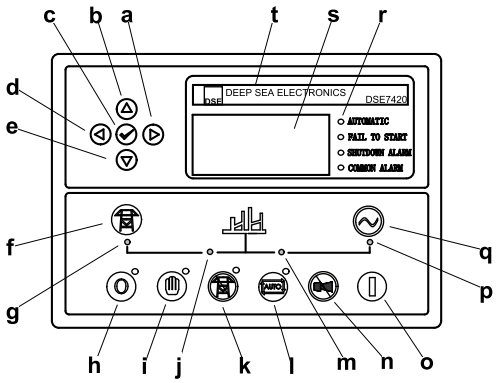


5 Control System



Control & Field wiring cabinet

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



Control module

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

1000023418-G2–E
10.2020

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

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