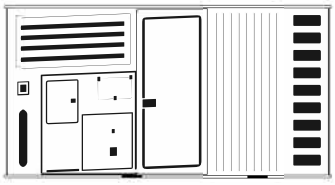
POWERINK
Power Systems



Generator set

Containerized type

GMS1250CS

SPECIFICATIONS

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EC series
GMS1250CS
50 Hz @ 1500rpm,3-phase/4-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

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 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

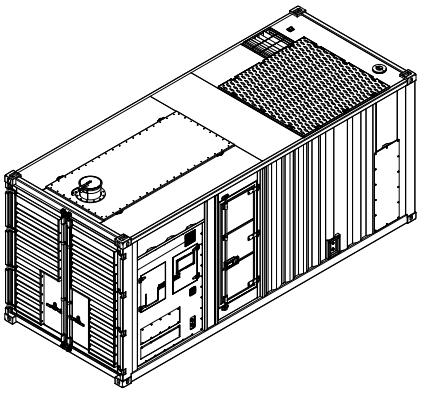
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Cummins engine KTA50–G3
- Close coupled to Stamford alternator S6L1D-G4
- Microprocessor control module PLC-7420
- Main circuit breaker: 2000A
- Rotate speed governor: EFC
- Excitation System: PMG
- A.V.R.Model: MX341
- 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℃ radiator
- Fire extinguisher
- Oil pump on the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Fuel tank for 5 hours running
- Drain points for fuel tank
- Fuel inlet pump and it's control box for the fuel tank
- Added fuel-water separator for fuel tank
- Operation Manual / Parts List / Specifications

3 Equipment Specification

General technical data



Model.....GMS1250CS

Structure type C

Tank capacity.....1500L

Dry weigh..... 15310kg

Noise level @7m 81.2dBA

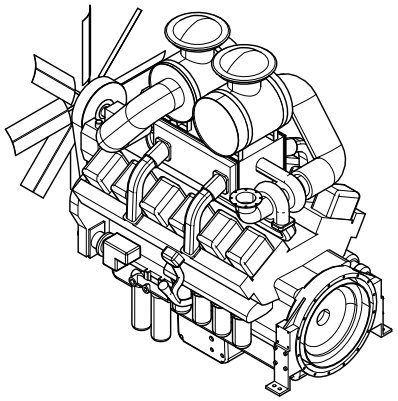
Dimensions L×W×H.....6058×2438×2795mm

Standby Power 1375kVA/1100kW

Prime Power 1250kVA/1000kW

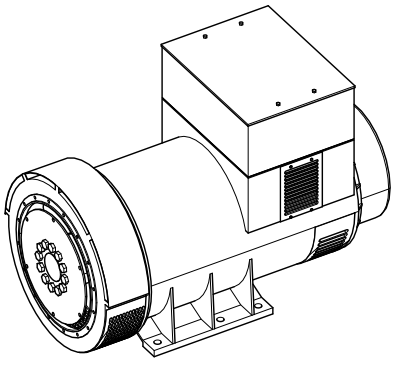
Voltage	380V		400V		415V
Ampere	1899A		1804A		1739A
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	76	139	199	261	293

Diesel engine



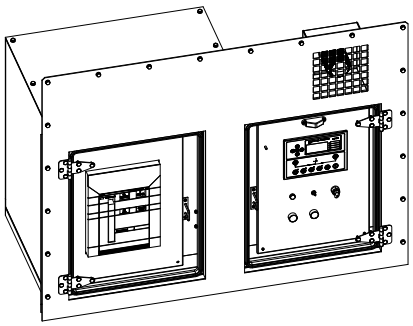
Engine Manufacturer/Brand.....Cummins
Engine Model.....KTA50-G3
Dimensions L×W×H.....N/A
Dry Weigh (approx.) 5360kg
Number of Cylinders.....16
Bore 159mm
Stroke 159mm
Displacement.....50.3L
Compression Ratio 13.9
Type of injection.....Direct injection
Intake System.....Turbocharged and aftercooled
Intake Resistance 6.23kPa
Cooling System .....Water cooled
Fan .....Push
Battery Voltage 24V
Type of Fuel.....NO.2 or ASTMD975
Type of Oil CF4/SG15W-40
Oil Capacity 177L
Type of Coolant .....Glycol mixture
Coolant Capacity (engine only).....161L
Back Pressure .....≦10kPa
Standby Power 1227kW
Prime Power 1097kW
Fuel Consumption(100%load).....261L/h

Alternator



Alternator Manufacturer/Brand .....Stamford
Alternator Model S6L1D-G4
Exciter.....Brushless
Cooling Fan ..... Cast alloy aluminum
Windings.....100% copper
Insulation Class .....H
Winding Pitch.....2/3
Terminals 6
Drip Proof IP23
Altitude.....≤1000m
Overspeed 2250rpm
Air Flow..... 1.95m³/s(50Hz),2.34m³/s(60Hz)
Voltage Regulation .....±1.0%
Total Harmonic TGH / THCat no load < 1.5 % - on load < 5%
Telephone Interference.....THF<2%;TIF<50

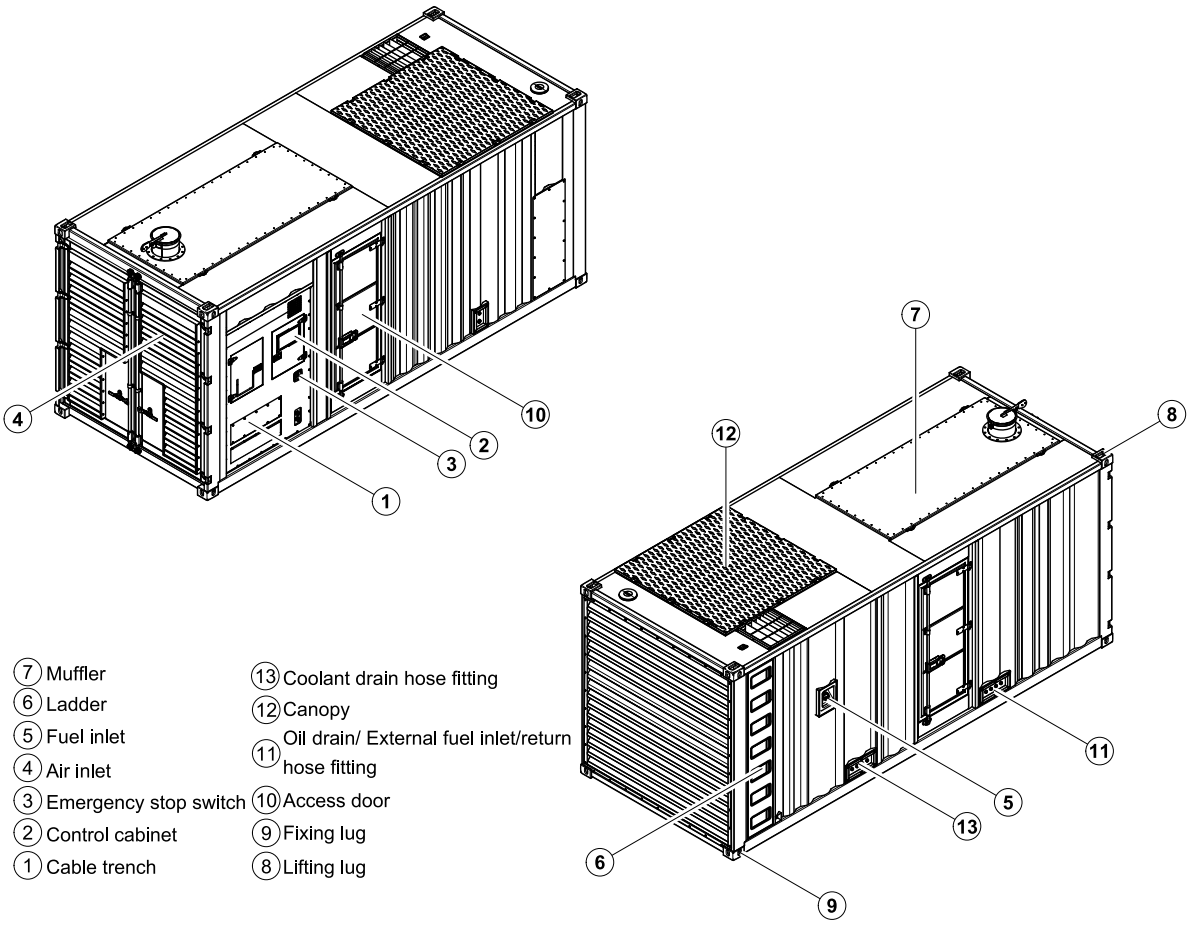
PLC-7420 Control System



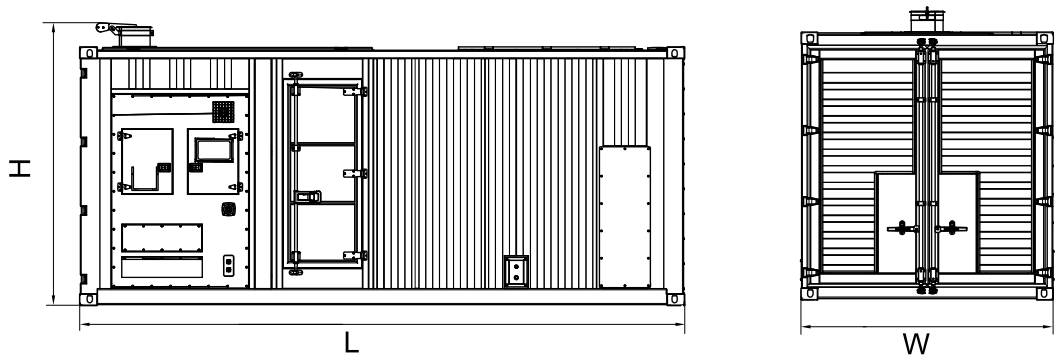
PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

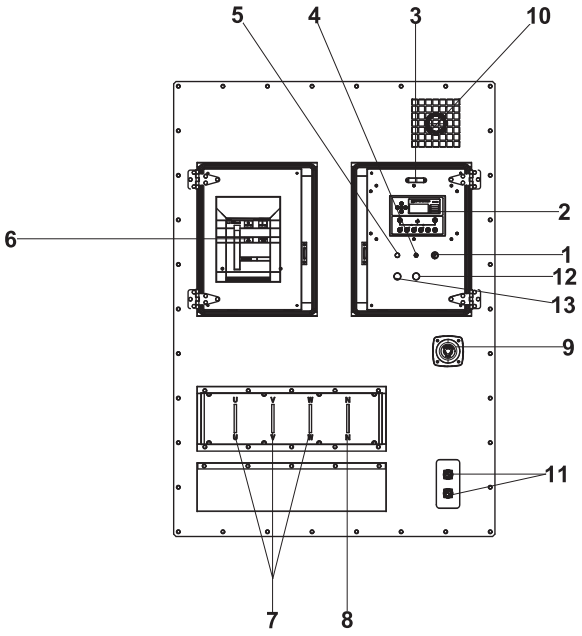
4 Overall Dimensions



⑦ Muffler
⑥ Ladder
⑤ Fuel inlet
④ Air inlet
③ Emergency stop switch
② Control cabinet
① Cable trench
⑬ Coolant drain hose fitting
⑫ Canopy
⑪ Oil drain/ External fuel inlet/return hose fitting
⑩ Access door
⑨ Fixing lug
⑧ Lifting lug

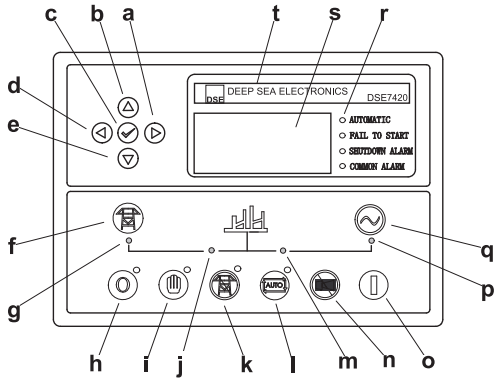


5 Control System



Control & Field wiring cabinet

Ref.	Description
1	Key switch
2	Control module
3	Control cabinet lamp
4	Control cabinet lamp switch
5	Charge indicator
6	Main circuit breaker
7	Live wire terminals
8	Neutral wire terminal
9	Emergency stop switch
10	Alarm indicator
11	ATS communication interface
12	Genset circuit breaker OFF button
13	Genset circuit breaker ON button



Control Panel

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