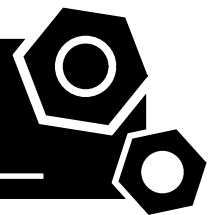


Generator set

Sound-proof type

GMS650CS

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

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.

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.

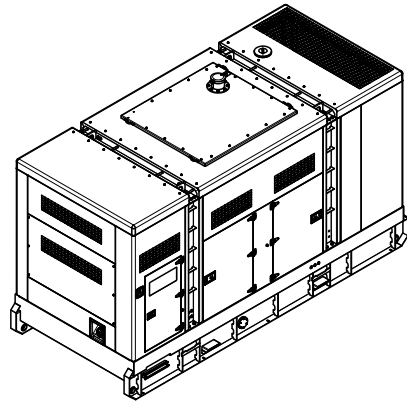
2 General Features

- Cummins engine KTA19-G8
- Close coupled to LSA alternator LSA47.3L10
- Microprocessor control module PLC-7420
- Main circuit breaker: 1000A
- Rotate speed governor: EFC
- Excitation System: Self excited, SHUNT
- A.V.R. Model: R250
- 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 6 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

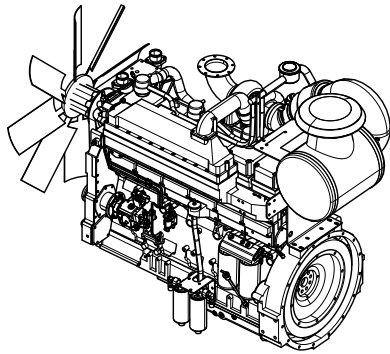
General technical data



Model.....GMS650CS
 Structure typeR
 Tank capacity.....945L
 Dry weigh.....6810kg
 Noise level @7m77.9dBA
 Dimensions L×W×H.....4592x2017x2661mm
 Standby Power 650kVA/520kW
 Prime Power..... N/A

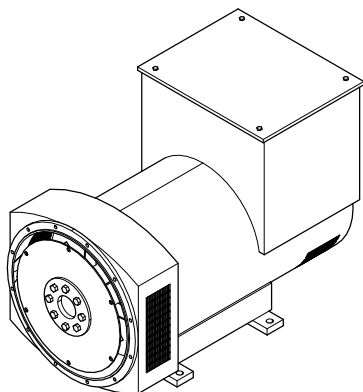
Voltage	380V	400V	415V	440V	
Ampere	988A	938A	904A	853A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	35	68	101	137	N/A

Diesel engine



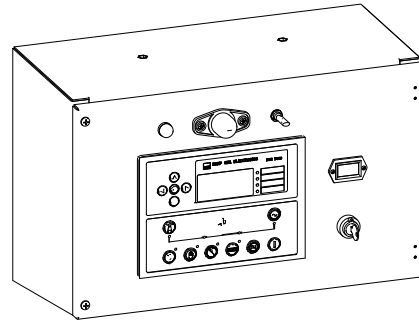
Engine Manufacturer/Brand.....	Cummins
Engine Model.....	KTA19G8
Dimensions L×W×H.....	2141.9×879.8×1733.5mm
Dry Weigh (approx.).....	1690kg
Number of Cylinders.....	6
Bore.....	159mm
Stroke.....	159mm
Displacement.....	19L
Compression Ratio.....	13.9
Type of Injection.....	Direct
Intake System.....	Turbocharged aftercooled
Intake Resistance.....	≤6.23kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	24V
Type of Fuel.....	NO.2 or ASTM D2
Type of Oil.....	API CD/SE or CCMCD4
Oil Capacity.....	50L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	30.3L
Back Pressure.....	≤10kPa
Standby Power.....	575kW
Prime Power.....	460kW
Fuel Consumption(100%load).....	N/A

Alternator



Alternator Manufacturer/Brand.....	LSA
Alternator Model.....	LSA47.3L10
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.....	1.035 m³/s(50Hz), 1.312 m³/s(60Hz)
Voltage Regulation.....	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

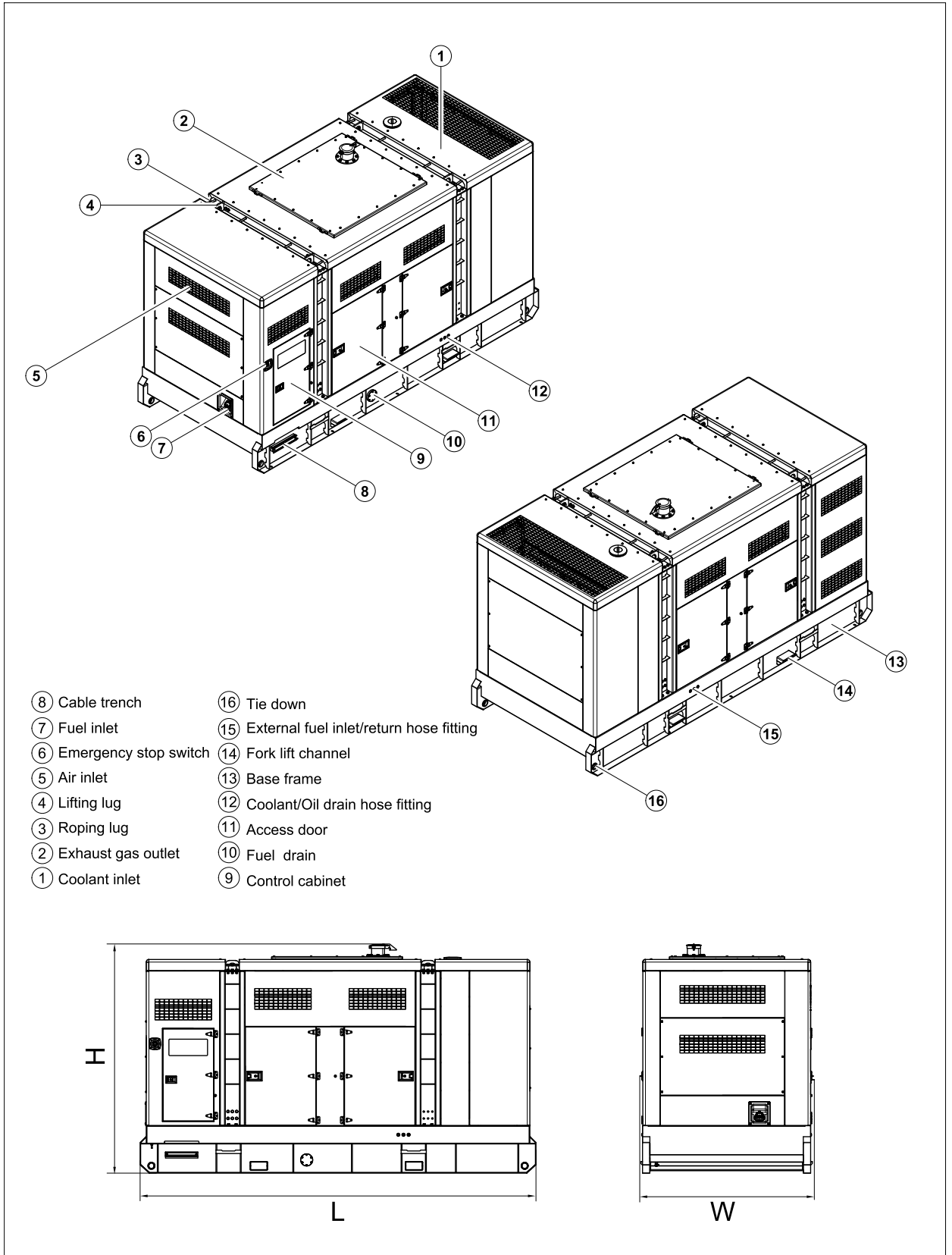
PLC-7420 Control System



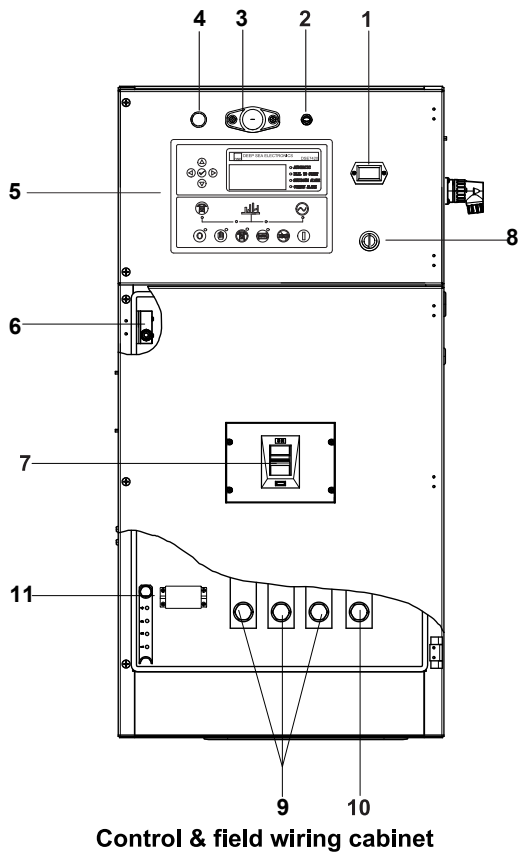
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

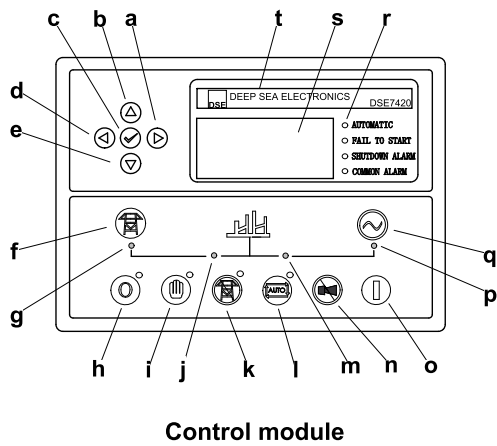
4 Overall Dimensions



) 'Control' System



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



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

1000029662-A2-E

10.2023

<http://www.powerlinkworld.com>

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