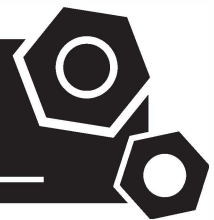


**Generator set**  
**Sound-proof type**  
**GMS650CS**

# **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-1995
- GB/T2820-1997

### 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 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.

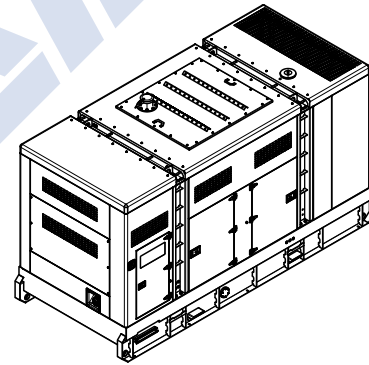
## 2 General Features

- Cummins engine QSK19-G4
- Close coupled to a Stamford alternator S5L1D-F4
- Microprocessor control module DSE8610
- Main circuit breaker: 3-Phase 1000A
- Rotate speed governor: Electronic fuel injection gover-nor
- Excitation System: Self excited
- A.V.R.Model: AS440
- 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 forklots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 7 hours running
- Drain points for fuel tank
- Operation Manual/ Specifications

## 3 Equipment Specification

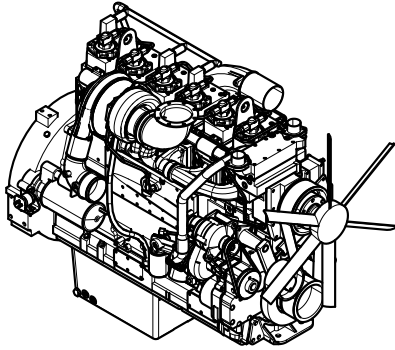
### General technical data



Model.....	GMS650CS
Structure type .....	R
Tank capacity.....	1020L
Dry weigh.....	7228kg
Noise level @7m .....	N/A
Dimensions L×W×H.....	4842×2010×2686mm
Standby Power .....	710kVA/568kW
Prime Power .....	650kVA/520kW

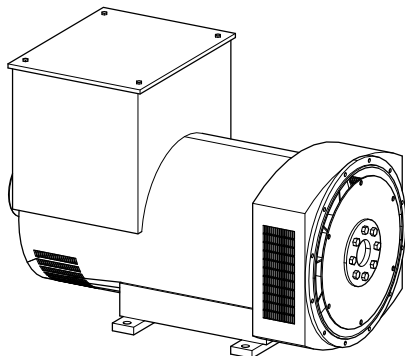
Voltage	380V	400V	415V	440V
Ampere	988A	938A	904A	853A

## Diesel engine



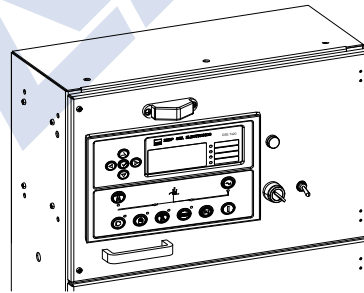
Engine Manufacturer/Brand .....	Cummins
Engine Model .....	QSK19-G4
Dimensions L×W×H.....	1695×985×1723mm
Dry Weigh (approx.) .....	1900kg
Number of Cylinders.....	6
Bore.....	159mm
Stroke .....	159mm
Displacement.....	19L
Compression Ratio .....	15
Type of injection.....	Cummins MCRS
Intake System.....	Turbocharged, air-to-air charged cooled
Intake Resistance .....	≤6.22KPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	24V
Type of Fuel.....	No.2 or ASTM D975
Type of Oil .....	API CD/SE or CCMCD4
Oil Capacity .....	84.4L
Type of Coolant .....	Glycol mixture
Coolant Capacity .....	41.6L(only engine)
Back Pressure .....	≤7.8KPa
Standby Power .....	634kW
Prime Power .....	574kW
Fuel Consumption(100%load).....	147L/h

## Alternator



Alternator Manufacturer/Brand .....	Stamford
Alternator Model .....	S5L1D-F4
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.....	1.035m³/s(50HZ), 1.312m³/s(60HZ)
Voltage Regulation .....	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

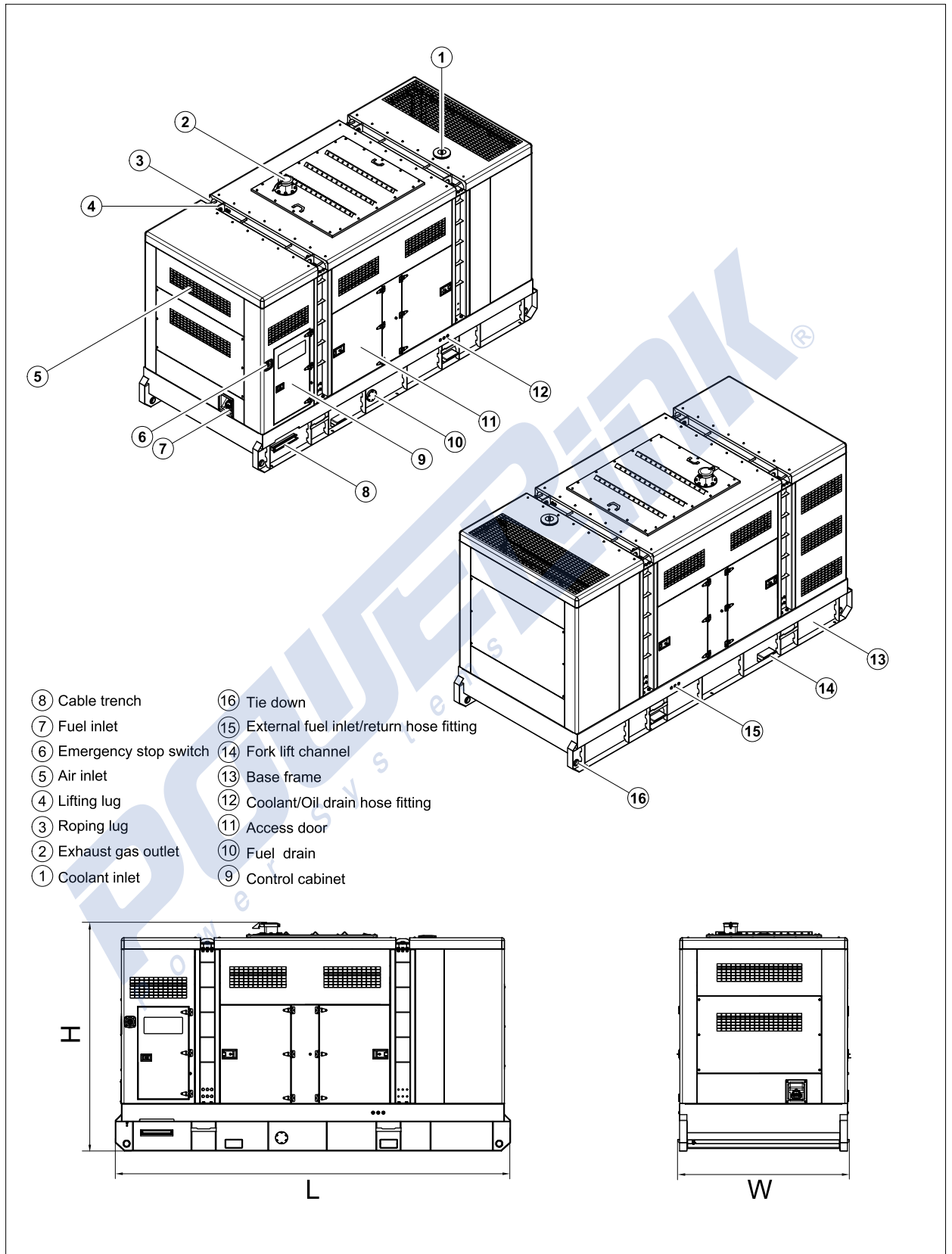
## PLC-8610 Control System



PLC-8610 is a microprocessor based control unit containing all necessary functions for protection of the genset and the breaker control. Furthermore, it contains all necessary three-phase measuring circuits and presents all values and alarms on the LCD display. The module has the function of load sharing which enables the module to share the active load (kW) equally when operating in parallel with other gensets. The load sharing is performed so each genset takes a portion of the load that is calculated in percent according to the nominal power.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the 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
- RS232 & RS485 can be used at the same time
- Real time clock for time and date display, overall runtime display, 250 log entries

## 4 Overall Dimensions



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<http://www.powerlinkworld.com>

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