

Generator set
Sound-proof type
GMS320CS

# **SPECIFICATIONS**





#### 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°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.

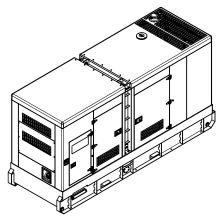
#### 2 General Features

- · Cummins engine 6LTAA9.5-G1
- Close coupled to LSA alternator LSA46.3 L10
- Microprocessor control module PLC-920
- Main circuit breaker: 500ARotate speed governor: EFC
- Excitation System: Self excited, SHUNT
- 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 lug
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- · Base fuel tank for 11 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

#### 3 Equipment Specification

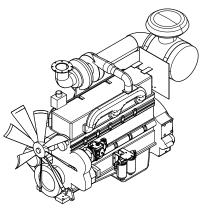
#### General technical data



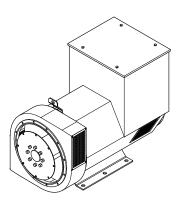
Model	GMS320CS
Structure type	R
Tank capacity	800L
Dry weight	4559kg
Sound pressure level @7m	74.7dBA
Dimensions L×W×H	3662×1322×1958mm
Standby Power	352kVA/282kW
Prime Power	320kVA/256kW

Voltage	380	<b>√</b> 4		00V	415V		440V	
Ampere	486.2	2A	461.9A		445.2A		419.0A	
Genset Fuel Consumption								
Frequency/Load 2		25	5%	50%	75%	10	0%	110%
50Hz (L/h) 1		8	35	52	7	0	78	

## **Power System**

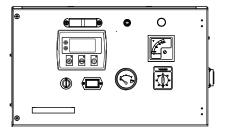


Engine Manufacturer/Brand	Cummins
Engine Model	6LTAA9.5-G1
Dry Weigh (approx.)	791Kg
Number of Cylinders	6
Bore	116.5mm
Stroke	148mm
Displacement	9.5L
Type of injection	Direct injection
Intake System	Turbocharged
Intake Resistance	≤6.22kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel	No.2-D per ASTM D975.
Type of Oil	API CD/SE or CCMCD4
Oil Capacity	32.4L
Type of Coolant	Glycol mixture
Coolant Capacity	11.1L
Back Pressure	≤10kPa
Standby Power	320kW
Prime Power	290kW



Alternator Manufacturer/Bra	indLSA
Alternator Model	LSA46.3 L10
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	2250rpm
Air Flow	0.58m³/s(50Hz),0.69m³/s(60Hz)
Voltage Regulation	±1.0%
Total Harmonic TGH / THC	at no load < 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<50

## PLC-920 Control System

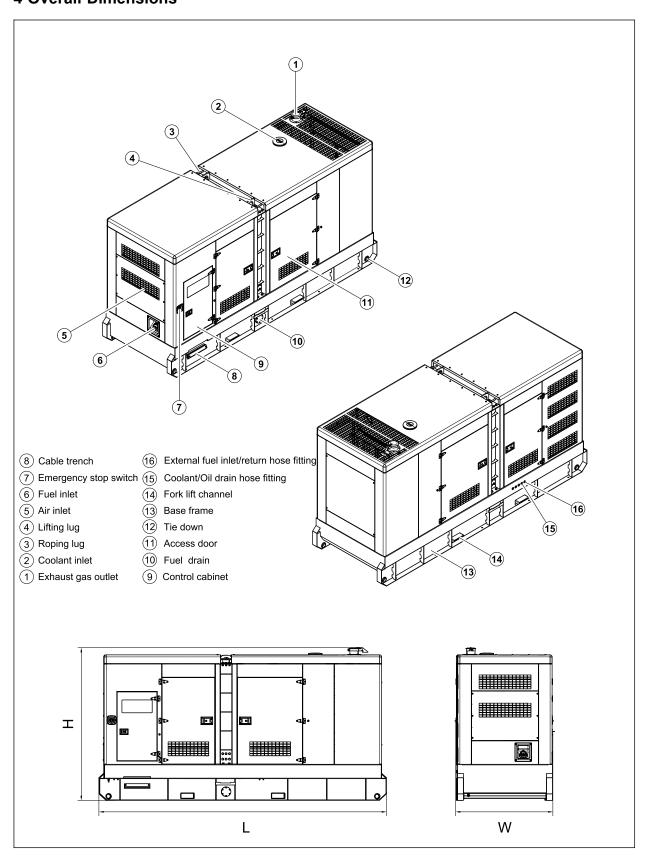


PLC-920 is an advanced control module based on microprocessor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

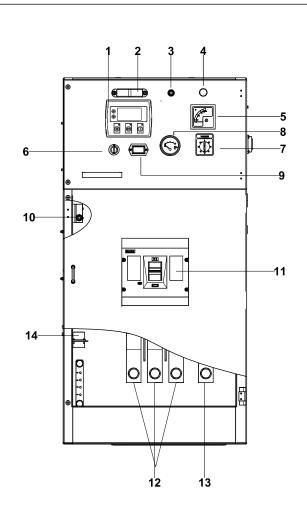
#### **Standard Control Function**

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

# **4 Overall Dimensions**

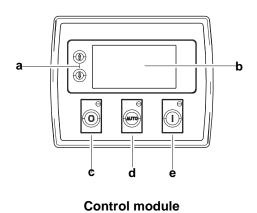


# 5 Control System



Ref.	Description
1	PLC-920 control module
2	Control cabinet lamp
3	Control cabinet lamp switch
4	Charge indicator
5	Voltage meter
6	Key switch
7	Voltage changer-over switch
8	Fuel level meter
9	Time counter
10	Limit switch
11	Main circuit breaker
12	Live wire terminal
13	Neutral wire terminal
14	Mains input/Remote control/ ATS communication connector

Control & field wiring cabinet



Ref.	Description
а	Navigation button£» Accept (Configuration mode only)
b	Main status display
С	Stop/reset button£» Next page (Configuration mode only)
d	Auto start button£» Decrease value/next item (Configuration mode only)
е	Start button£» Increase value/next item (Configuration mode only)

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