

Generator set
Sound-proof type
A125JS

# **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

Electrical devices have obtained the certification of:

- CSA
- UL

## **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.

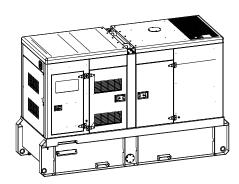
## 2 General Features

- Johndeere engine 4045HFG09
- Close coupled to Š^\[^ÂU[ { ^\ alternator LSA44.3M6
- Qe^||â ^} oÁcontrol module PLC-7420
- ABB main circuit breaker: 400A
- Rotate speed governor: ECU
- · Exhaust gas purification system with DOC, SCR
- · Excitation system: Self excited, SHUNT
- Key switch

- · Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/120AH battery and charger
- · Lockable battery isolator switch
- · Power coated canopy
- 50°C radiator
- · Oil pump on the engine
- · Steel base frame
- Vibration isolators between the engine/alternator and base frame
- · Dry type air filter
- · Base fuel tank for 34 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

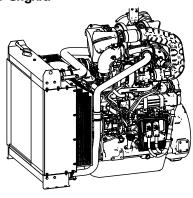
## General technical data



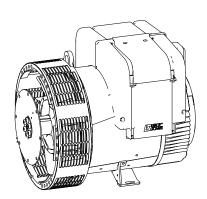
Model	A125JS
Structure type	R
Tank capacity	680L
Dry weight	2507.1kg
Sound pressure level @7m	66dBA
Dimensions L×W×H	3160x1172x1977mm
Prime Power	120kVA/96kW
Standby Power	132kVA/106kW

Voltage	208V			220V	230V		240V	
Ampere	347.0A		;	328.0A	313.8A		300.7A	
Genset Fuel Consumption								
Frequency/Load		25%	, D	50%	75%	100	%	110%
60Hz (L/h)		5		10	15.9	20	)	22

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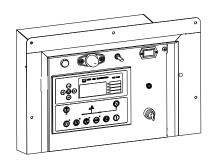


Engine Manufacturer/Brand	Johndeere
Engine Model	4045HFG09
Dimensions L×W×H	870×635×1130mm
Dry Weigh (approx.)	570Kg
Number of Cylinders	4
Bore	106mm
Stroke	127mm
Displacement	4.5L
Compression Ratio	17.2
Type of injection	Direct Injection
Intake SystemTurbocharg	ed and air to air aftercooled
Intake Resistance	≤3.0kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel	Ultra Low Sulfur Fuel Only
Type of OilClass CJ-4/CK-4	oil as per API classification
Oil Capacity	11.0L
Type of Coolant	Glycol mixture
Coolant Capacity	8.5L
Back Pressure	≤7.5kPa
Standby Power	124kW
Prime Power	113kW
Fuel Consumption(100%load)	20.0L/h



Alternator Manufacturer/Brand	Leroy Some
Alternator Model	LSA44.3M6
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% coppe
Insulation Class	H
Winding Pitch	2/3
Terminals	12
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250 rpm
Air Flow 0.514m³/s(5	50HZ),0.617m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic TGH / THCat no load	i < 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<50

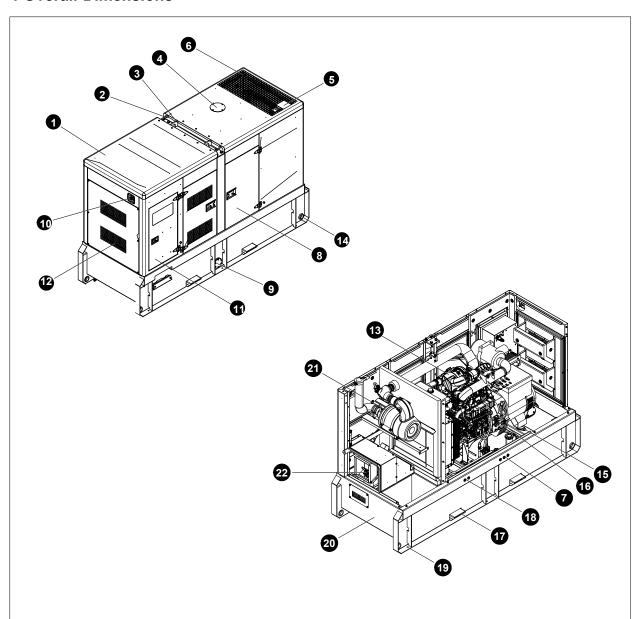
## PLC-7420 Control System



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**

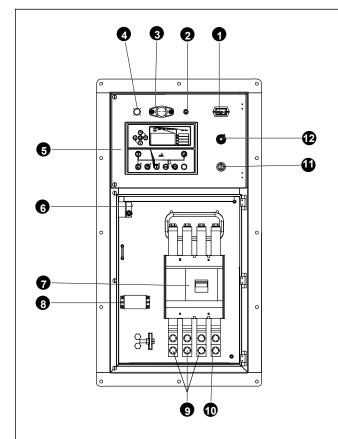


- 1 Soundproof canopy
- (2) Roping lug
- 3 Lifting lug
- (4) Coolant water inlet
- (5) Exhaust gas outlet
- (6) Air outlet
- 7 External fuel connector
- 8 Access door

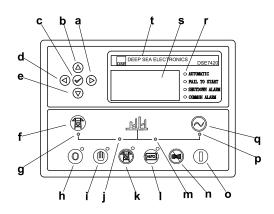
- 9 Fuel drain
- (10) Emergency stop button
- (11) Control cabinet
- 12 Air inlet
- (13) DOC
- (14) Dragging hole
- (15) Vibration Isolator
- (16) Oll pump

- (17) Fork lift channel
- (18) Water/oil drain
- (19) Mounting hole
- 20 Base frame
- (21) SCR
- 22 DEF inlet

## 5 Control System



Control & field wiring cabinet



**Control Panel** 

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	Mains input/ remote/AMF communication connector
9	Live wire terminals
10	Neutral wire terminal
11	Key switch
12	Voltage adjusting knob

а	Button (next page)
b	Button (increase value / previous item)
С	Button (accept)
d	Button (previous page)
е	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)
- 1	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
0	Start button (Manual)
р	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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