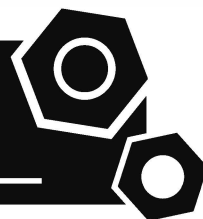


**Generator set  
Sound-proof type**

**A80JS**

# **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

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.

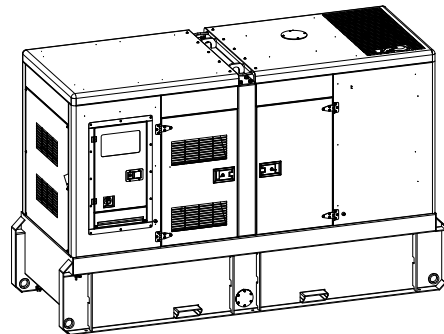
## 2 General Features

- Johndeere engine 4045HFG04
- Close coupled to S&W alternator LSA44.3S3
- Q&A control module PLC-7420
- ABB main circuit breaker: 250A
- 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 24 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment

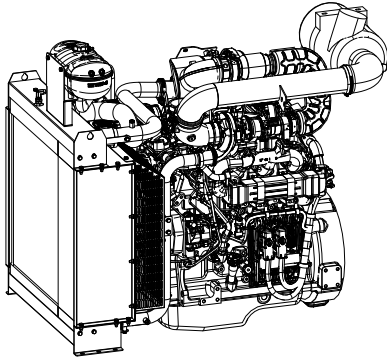
### General technical data



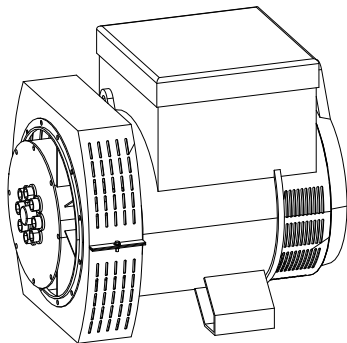
Model.....	A80JS
Structure type .....	R
Tank capacity.....	430L
Dry weight.....	2250kg
Sound pressure level @7m .....	65dBA
Dimensions L×W×H.....	3160x1172x1800mm
Prime Power .....	80kVA/64kW
Standby Power .....	88kVA/70kW

Voltage	208V	220V	230V	240V	
Ampere	222.1A	210.0A	200.8A	192.5A	
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
60Hz (L/h)	5.3	7.3	10.0	13.0	14.2

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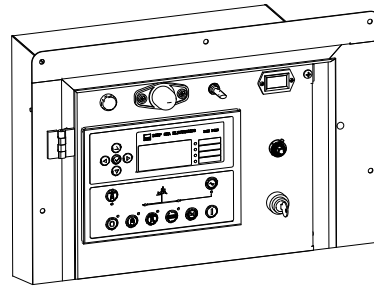


Engine Manufacturer/Brand.....	Johndeere
Engine Model.....	4045HFG04
Dimensions L×W×H.....	870×650×1050mm
Dry Weigh (approx.).....	550Kg
Number of Cylinders.....	4
Bore.....	106mm
Stroke.....	127mm
Displacement.....	4.5L
Compression Ratio.....	17.0
Type of injection.....	High pressure common rail
Intake System.....	Turbocharged
Intake Resistance.....	≤3kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12V
Type of Fuel.....	Ultra Low Sulfur Fuel Only
Type of Oil.....	Class 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.....	67kW
Prime Power.....	61kW
Fuel Consumption(100%load).....	13.0L/h



Alternator Manufacturer/Brand.....	Leroy Somer
Alternator Model.....	LSA44.3S3
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.....	0.514m³/s(50HZ),0.617m³/s(60HZ)
Voltage Regulation.....	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

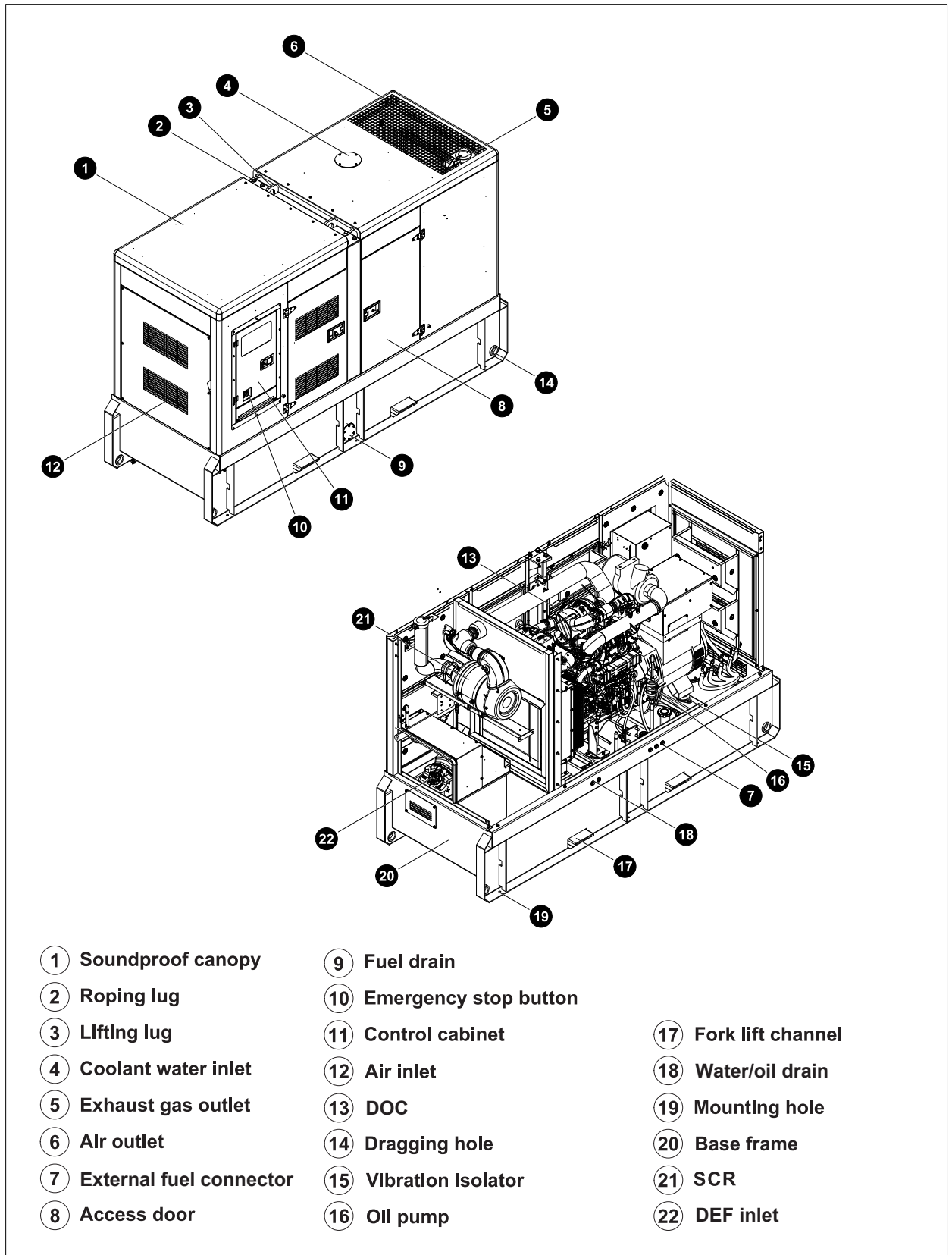
## PLC-7420 Control System



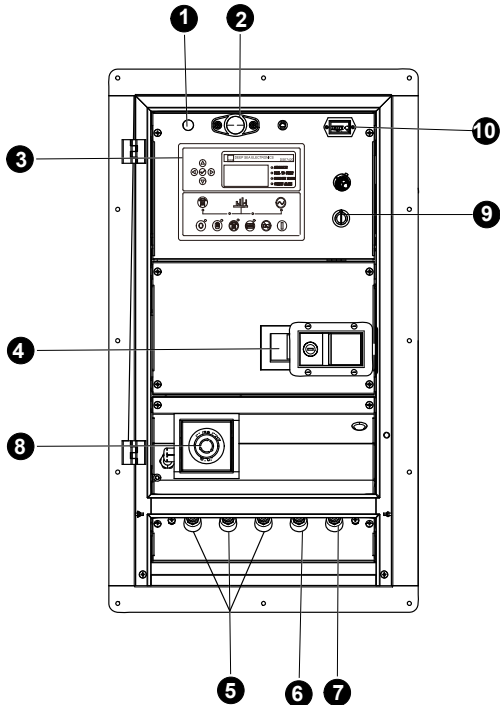
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

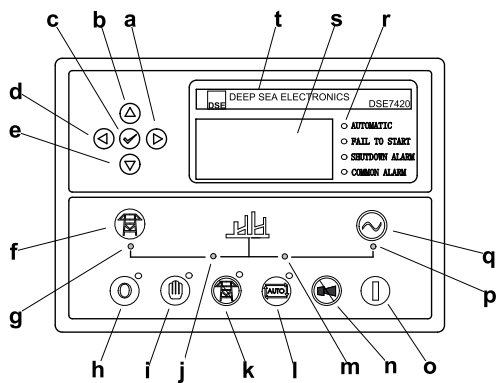
## 4 Overall Dimensions



## 5 Control System



**Control & field wiring cabinet**



**Control Panel**

Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control module
4	Main circuit breaker
5	Live wire terminals
6	Neutral wire terminal
7	Ground wire terminal
8	Emergency stop button
9	Key switch
10	Time counter

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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03.2023
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*Specification may change without prior notice. For more info.,  
contact Power Link or your local distributors please.*