

**Generator set**  
**Sound-proof type**  
**PR13P-S-SAE**

## SPECIFICATIONS



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## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

### 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.

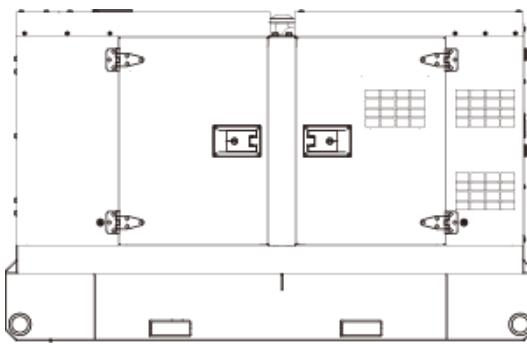
## 2 General Features

- Perkins engine 403A-15G2
- Close coupled to LSA alternator LSA42.3VS1
- Microprocessor control module PLC-920
- Main circuit breaker: 80A
- Rotate speed governor: Mechanical governor
- Excitation system: Self excited,SHUNT
- A.V.R model: R250
- Key switch
- ATS (automatic transfer switch) receptacle
- 1x12V/72AH 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 lifting lugs
- 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 Specification

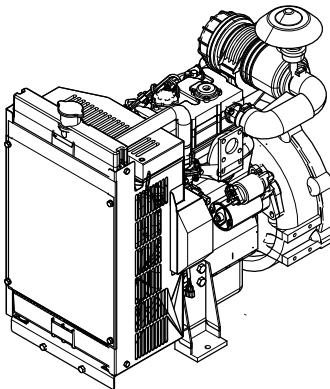
### General technical data



Model.....	PR13P-S-SAE
Structure type .....	RS
Tank capacity.....	100L
Dry weight.....	805kg
Noise level @7m .....	66.7dBA
Dimensions LxWxH.....	1932x878x1208mm
Standby Power .....	17kVA/13kW
Prime Power .....	15kVA/12kW

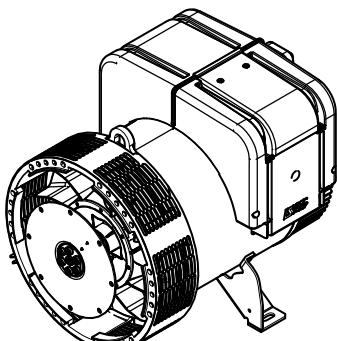
Voltage	220V	230V	240V		
Ampere	68.2A	65.2A	62.5A		
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	2.5	3.1	3.6	4.1	4.9

## Diesel engine



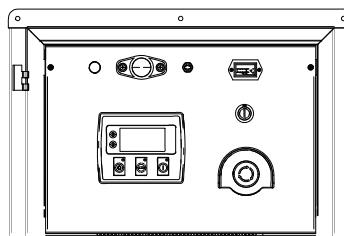
Engine Manufacturer/Brand.....	Perkins
Engine Model.....	403A-15G2
Dimensions L×W×H.....	820×469×793mm
Dry Weigh (approx.) .....	197kg
Number of Cylinders.....	3
Bore .....	84mm
Stroke.....	90mm
Displacement.....	1.496L
Compression Ratio.....	22.5
Type of Injection .....	Indirect injection
Intake System.....	Natural aspirated
Intake Resistance.....	$\leq 6.4\text{kPa}$
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	12V
Type of Fuel.....	EPA2D 89.330-96/CEC RF-06-99
Type of Oil .....	API-CH-4/ ACEA E5
Oil Capacity .....	6.0L
Type of Coolant .....	Glycol mixture
Coolant Capacity .....	6.0L
Back Pressure .....	$\leq 10.2\text{kPa}$
Standby Power .....	16kW
Prime Power .....	14kW
Fuel Consumption(100%load).....	4.1L/h

## Alternator



Alternator Manufacturer/Brand .....	Leroy Somer
Alternator Model .....	LSA42.3VS1
Exciter.....	Brushless
Cooling Fan .....	Cast alloy aluminum
Windings.....	100% copper
Insulation Class .....	H
Winding Pitch.....	.2/3
Terminals .....	12
Drip Proof .....	IP23
Altitude.....	$\leq 1000\text{m}$
Overspeed .....	2250rpm
Air Flow.....	5.3m <sup>3</sup> /min(50Hz),5.8m <sup>3</sup> /min(60Hz)
Voltage Regulation .....	$\pm 1.0\%$
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<45

## PLC-920 Control System

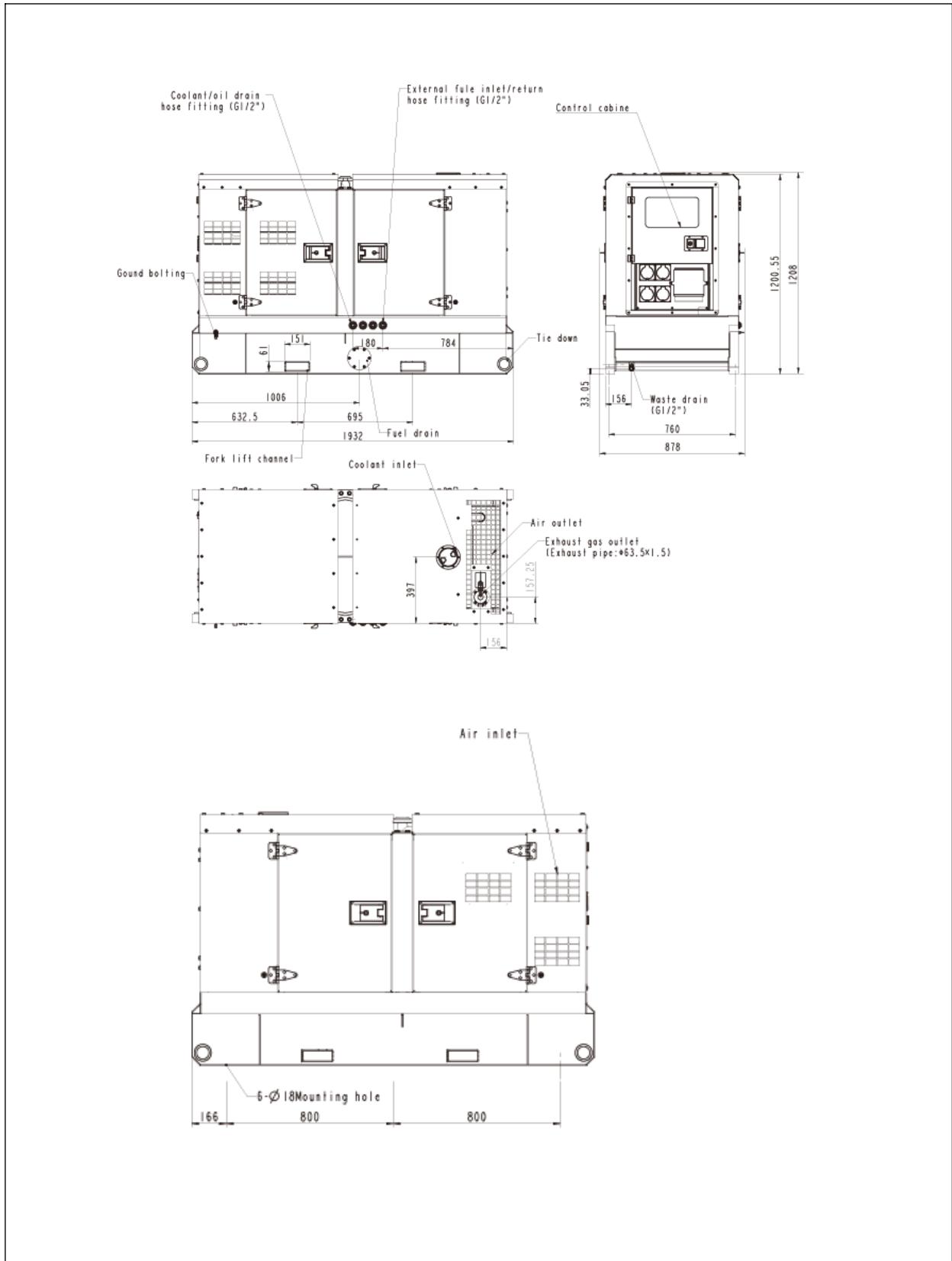


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

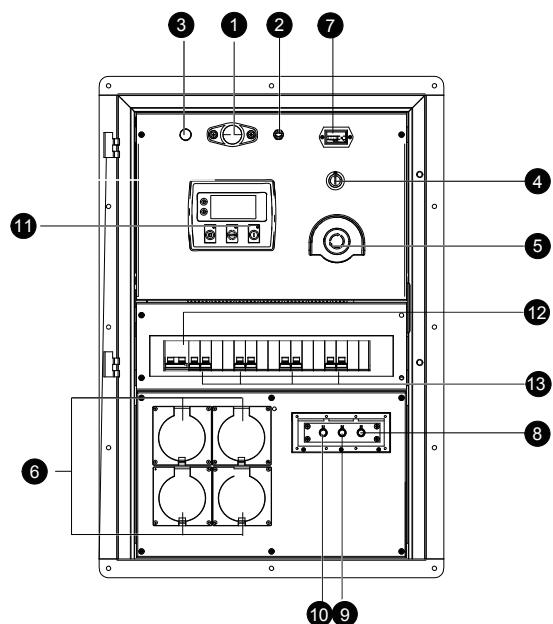
### Standard Control Function

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

## 4 Overall Dimensions

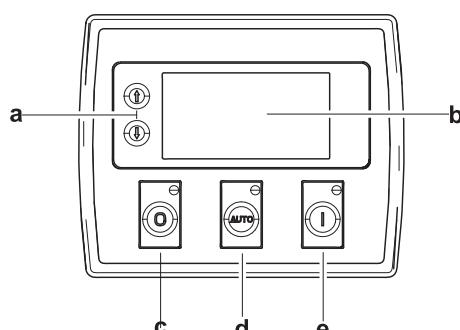


## 5 Control System



Ref.	Description
1	Control cabinet lamp
2	Control cabinet lamp switch
3	Charge indicator
4	Key switch
5	Emergency stop switch
6	4x single-phase convenience receptacle
7	Time counter
8	Ground wire terminal
9	Neutral wire terminal
10	Live wire terminal
11	Control module
12	Main circuit breaker
13	Circuit breakers of convenience receptacle

Control & field wiring cabinet



Control module

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