

Generator set
Sound-proof type
PR18P-S-SAE

# **SPECIFICATIONS**



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PR Power reserves the right to make changes in model, technical specification, color, configuration and accessories without prior notice. Please contact the sales team before ordering.

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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 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.

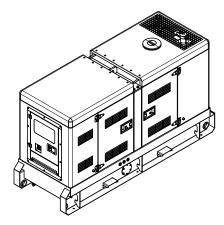
#### 2 General Features

- Perkins engine 404D-22G
- Close coupled to LSA alternator LSA42.3S4
- Microprocessor control module PLC-920
- Main circuit breaker: 100A
- Rotate speed governor: Mechanical governor
- · Excitation system: Self excited, SHUNT
- A.V.R model: R250
- · Key switch
- · Emergency stop 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 28 hours running
- · Drain points for fuel tank
- Operation Manual / Specifications

# 3 Equipment Specification

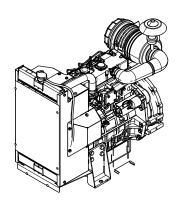
#### General technical data



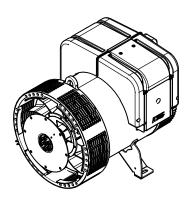
Model	PR18P-S-SAE
Structure type	RS
Tank capacity	140L
Dry weight	1028kg
Noise level @7m	67.0dBA
Dimensions L×W×H	2300x863x1358mm
Standby Power	22kVA/18kW
Prime Power	20kVA/16kW

Voltage	220V		230V		24	240V	
Ampere	90.9A		86.9A		83	83.3A	
Genset Fuel Consumption							
Frequency/Lo	ad	25%	5	0%	75%	100%	110%
50Hz (L/h)		N/A	2	2.7	3.8	5.0	5.7

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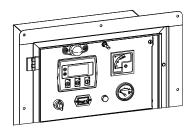


Engine Manufacturer/Bra	andPerkins
Engine Model	404D-22G
Dimensions L×W×H	915×477×840mm
Dry Weigh (approx.)	242kg
Number of Cylinders	4
Bore	84mm
Stroke	100mm
Displacement	2.216L
Compression Ratio	23.3
Type of injection	Indirect injection
Intake System	Natural aspirated
Intake Resistance	≦6.4kPa
Cooling 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	10.6L
Type of Coolant	Glycol mixture
Coolant Capacity	7.0L
Back Pressure	≦10.2kPa
Standby Power	20.6kW
Prime Power	18.7kW
Fuel Consumption(100%	bload)243g/kWh



Alternator Manufacturer/Brand       Leroy Somer         Alternator Model       LSA42.3S4         Exciter       Brushless         Cooling Fan       Plastic         Windings       100% copper         Insulation Class       H         Winding Pitch       2/3         Terminals       4         Drip Proof       IP23         Altitude       ≤1000m         Overspeed       2250rpm         Air Flow       0.135m³/s(50HZ),0.165m³/s(60HZ)         Voltage Regulation       ±1.0 %         Total harmonic TGH / THCat no load < 1.5 % - on load < 5%         Telephone Interference       THF<2%;TIF<50		
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# PLC-920 Control System

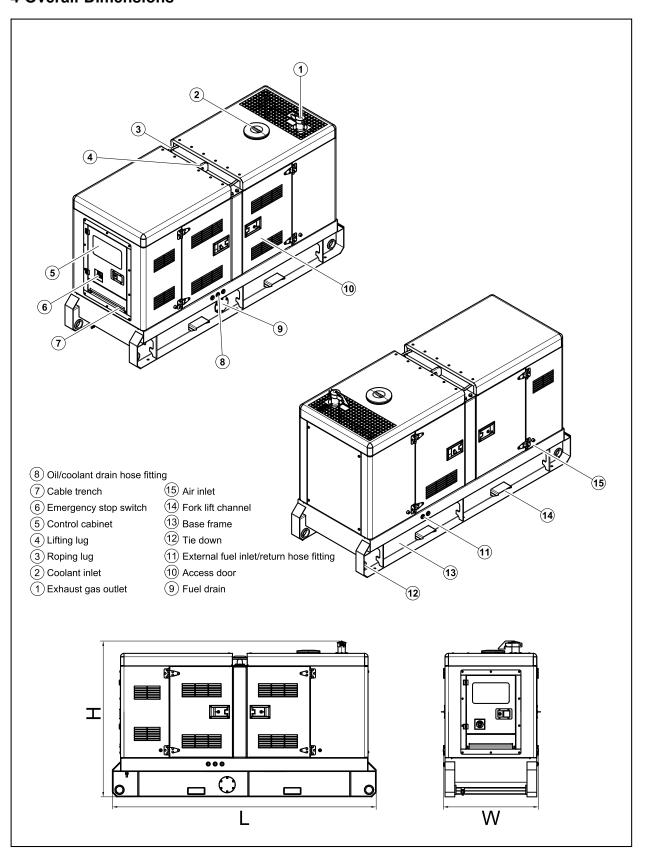


PLC-920 is an advanced control module based on microprocessor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

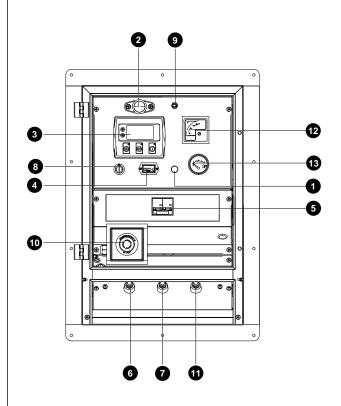
## **Standard Control Function**

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

# **4 Overall Dimensions**

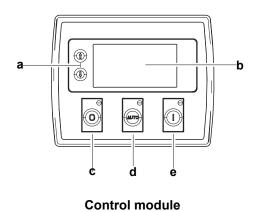


# 5 Control System



Ref.	Description
1	Indicator
2	Control cabinet lamp
3	Control module
4	Time counter
5	Main circuit breaker
6	Neutral wire terminal
7	Neutral wire terminal
8	Key switch
9	Control cabinet lamp switch
10	Emergency stop switch
11	Ground wire terminal
12	Voltmeter
13	Voltage change-over switch

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)