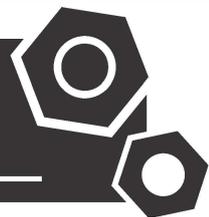


**Generator set**  
**Sound-proof type**  
**WPS80S**

# **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance European (CE)
- China Compulsory Certification (CCC)
- ISO8528-5:2005
- GB/T2820.5-2009

### 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 1104A-44TG2
- Close coupled to a Leroy Somer alternator LSA44.3S3
- Microprocessor control module PLC-920
- Main circuit breaker: 125A
- 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/120AH 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 forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 9 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

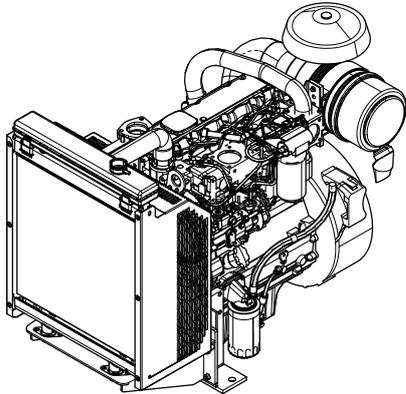
### General technical data



Model..... WPS80S  
 Structure type ..... R  
 Tank capacity..... 180L  
 Dry weight..... 1705kg  
 Noise level @7m ..... 68.1dBA  
 Dimensions L×W×H..... 2788x1130x1700mm  
 Standby Power ..... 83.75kVA/67kW  
 Prime Power ..... 80kVA/64kW

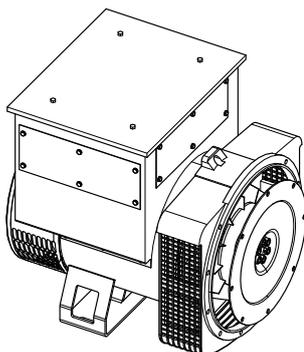
Voltage	380V	400V	415V	440V	
Ampere	121.6A	115.5A	111.3A	104.9A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	5.2	9.7	14.0	18.7	20.5

## Diesel Engine



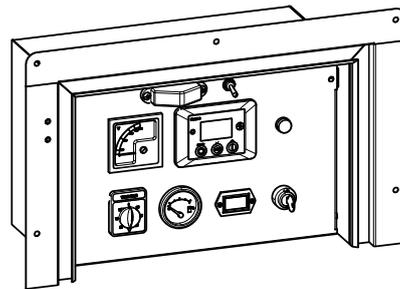
Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1104A-44TG2
Dimensions L×W×H.....	1241×629×951mm
Dry Weigh (approx.) .....	463kg
Number of Cylinders.....	4
Bore.....	105mm
Stroke.....	127mm
Displacement.....	4.4L
Compression Ratio.....	17.25
Type of Injection .....	Direct
Intake System.....	Turbocharged
Intake Resistance.....	≤8.0kPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	12V
Type of Fuel.....	Part 2 1998 Class A2 or DIN EN 590
Type of Oil .....	API-CG4/ CH4
Oil Capacity .....	8.0L
Type of Coolant .....	Glycol mixture
Coolant Capacity.....	13L
Back Pressure .....	≤10kPa
Standby Powe .....	80.7kW
Prime Power .....	73.4kW
Fuel Consumption(100%load).....	18.7L/h

## Alternator



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 .....	2250rpm
Air Flow.....	0.27m³/s(50Hz),0.32m³/s(60Hz)
Voltage Regulation .....	±0.5%
Total harmonic TGH / THC at no load < 2 % - on load < 2%	
Telephone Interference.....	THF<2%;TIF<50

## PLC-920 Control System

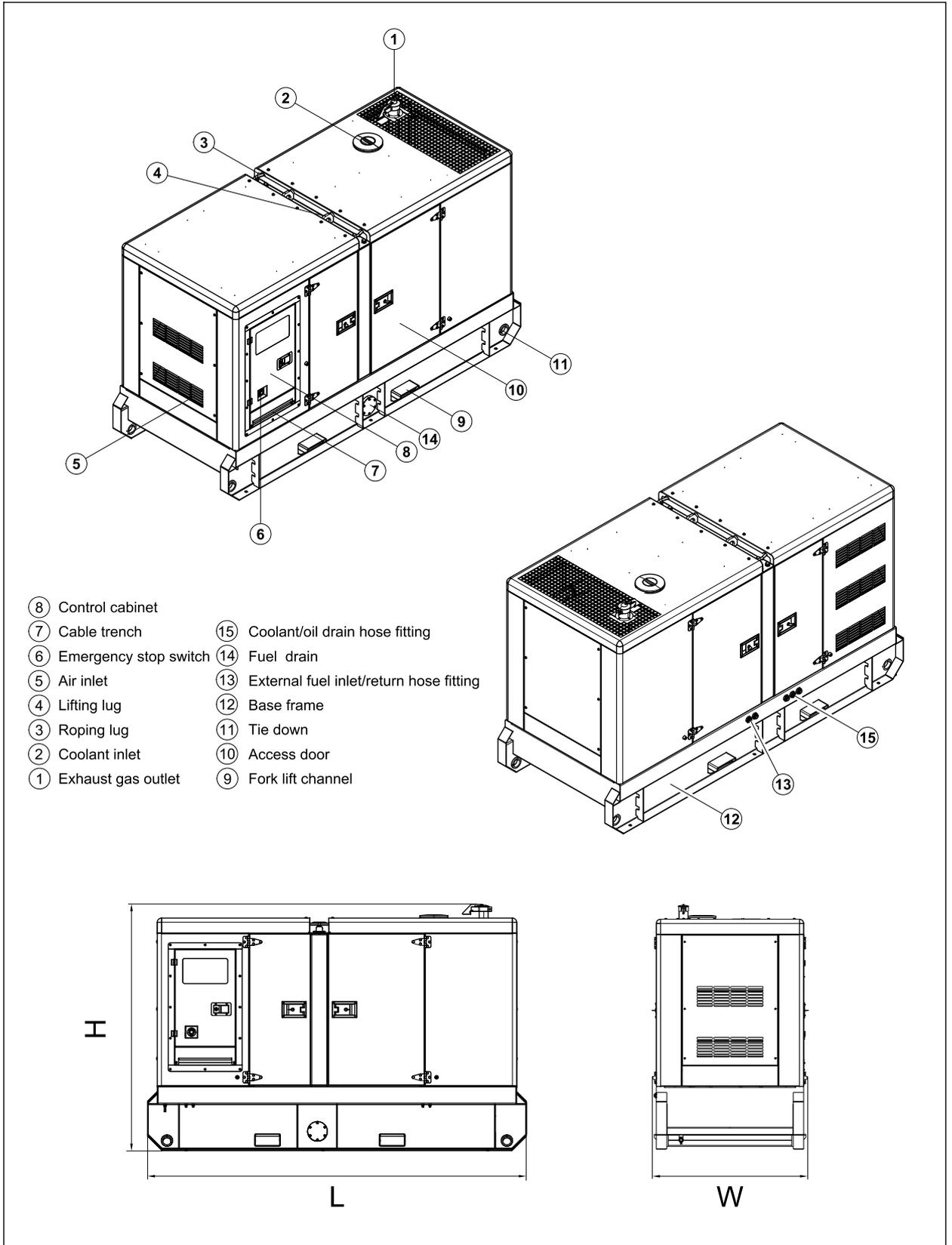


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

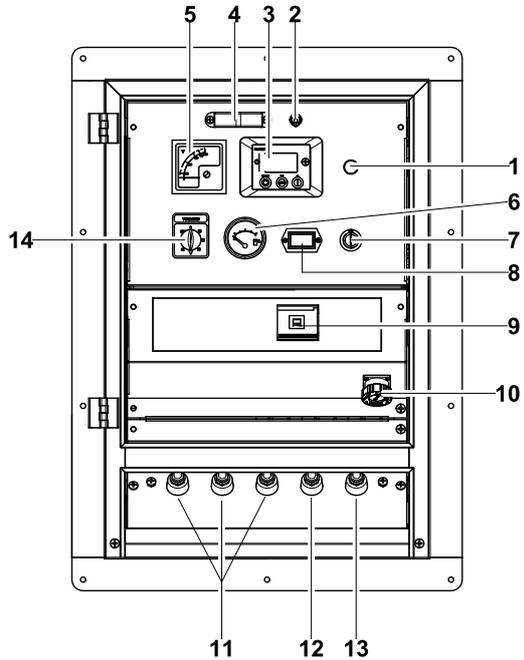
### Standard Control Function

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

## 4 Overall Dimensions

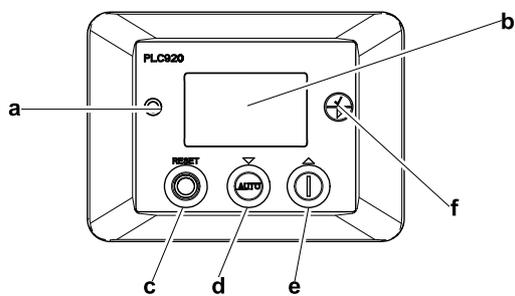


## 5 Control System



**Control & field wiring cabinet**

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



**Control module**

Ref.	Description
a	Alarm indicator
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)
f	Navigation button; Accept (Configuration mode only)

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