

Generator set
Sound-proof type
WPS20S

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO9001:2015

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.

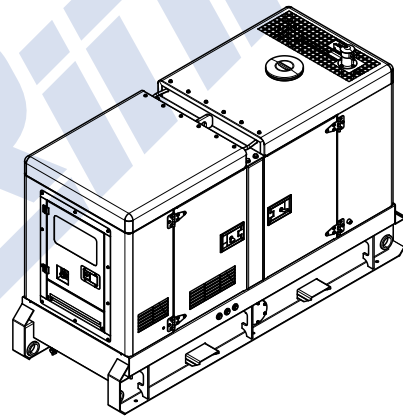
2 General Features

- Perkins engine 404A-22G1
- Close coupled to a Stamford alternator S0L2-G1
- Microprocessor control module PLC 920
- ABB main circuit breaker: 32A
- Rotate speed governor: Mechanical governor
- Excitation System: Self-excited
- A.V.R.Model: AS540
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 12V/70AH 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 forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 8 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

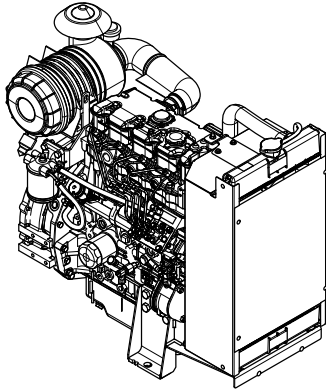
General technical data



Model.....	WPS20S
Structure type	R
Tank capacity.....	100L
Dry weight.....	961kg
Sound pressure level @7m	67.1dB(A)
Dimensions L×W×H.....	2300x863x1358mm
Standby Power	22kVA/18kW
Prime Power	20kVA/16kW

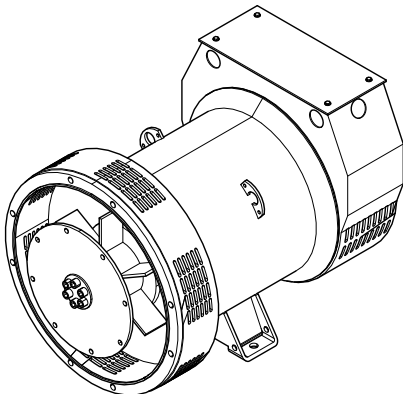
Voltage	380V	400V	415V	440V	
Ampere	30.4A	28.9A	27.8A	26.2A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	2.9	4.0	5.3	6.1

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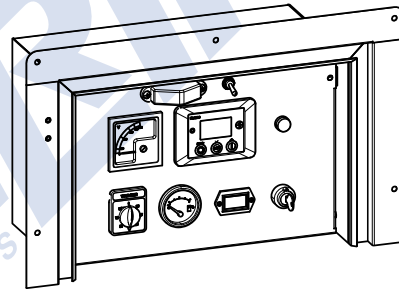
Engine Manufacturer/Brand.....	Perkins
Engine Model.....	404A-22G
Dimensions L×W×H.....	946×497×841mm
Dry Weight (approx.)	242kg
Number of Cylinders.....	4
Bore	84mm
Stroke	100mm
Displacement.....	2.2L
Compression Ratio.....	23.3
Type of injection.....	Indirect injection
Intake System.....	Natural aspirated
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
Standby Power	20.6kW
Prime Power	18.7kW
Fuel Consumption(100%load).....	5.3L/h

Alternator



Alternator Manufacturer/Brand	Stamford
Alternator Model	S0L2-G1
Exciter.....	Brushless
Cooling Fan	Cast alloy aluminum
Windings.....	100% copper
Insulation Class	H
Winding Pitch.....	2/3
Drip Proof	IP21
Altitude.....	≤1000m
Overspeed	2250rpm
Air Flow.....	0.8m³/s(50HZ),0.99m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-920 Control System

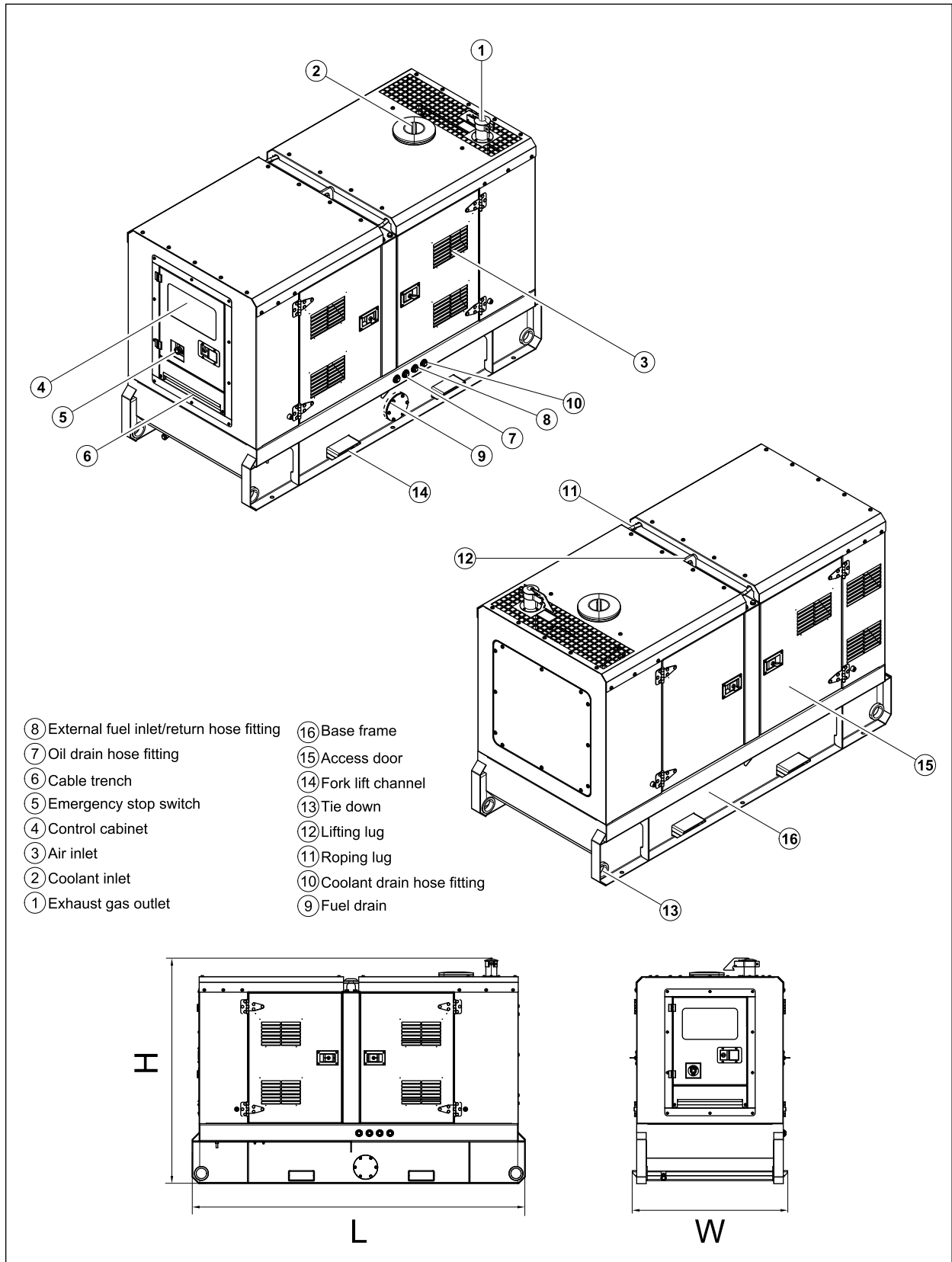


PLC-920 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition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

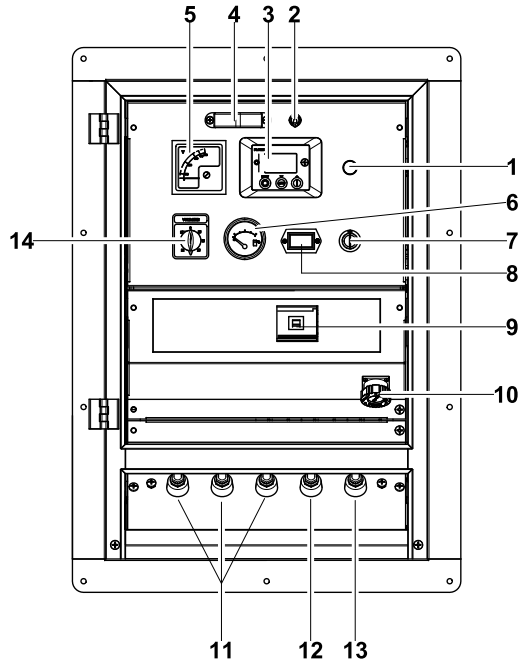
Standard Control Function

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

4 Overall Dimensions

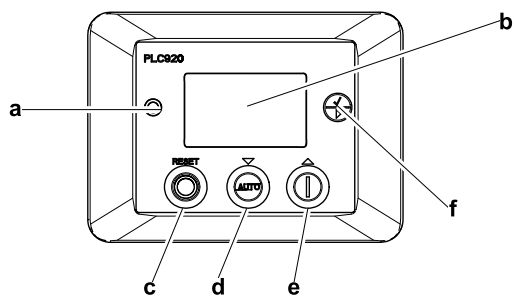


5 Control System



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.