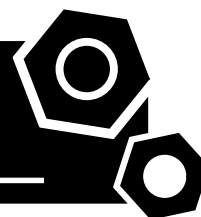


Generator set

Containerized type

WPS1500S

SPECIFICATIONS



SE series

WPS1500S

50 Hz @ 1500rpm,3-phase/4-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (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.

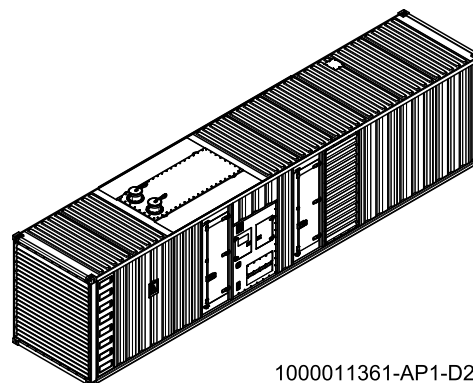
2 General Features

- Perkins engine 4012-46TAG2A
- Close coupled to a Leroy Somer alternator LSA50.2L8
- Microprocessor control module PLC-7320
- ABB main circuit breaker: 3-Phase 2500A
- Rotate speed governor: Electronic fuel injection governor
- Excitation system: AREP
- A.V.R model: R448
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 4x12V sealed for life maintenance free battery
- Lockable battery isolator switch

- Powder coated canopy
- 50°C radiator
- Fire extinguisher
- Oil pump on the engine
- Steel base frame with forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Fuel tank for 6 hours running
- Drain points for fuel tank
- Fuel inlet pump and it's control box for the fuel tank
- Added fuel-water separator for fuel tank
- Operation Manual / Parts List / Specifications

3 Equipment Specification

General technical data



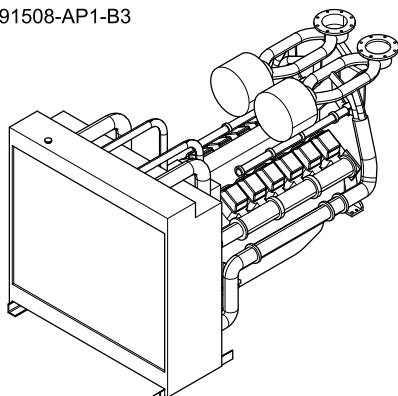
1000011361-AP1-D2

Model..... WPS1500S
Structure type C
Tank capacity.....2000L
Dry weight.....20545kg
Noise level @7m 75.6dBA
Dimensions L×W×H.....12192×2438×3150mm
Standby Power 1575kVA/1260kW
Prime Power 1500kVA/1200kW

Voltage	380V	400V	415V	440V	
Ampere	2279.1A	2165.1A	2086.9A	1968.3A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	162.0	237.0	301.0	335.0

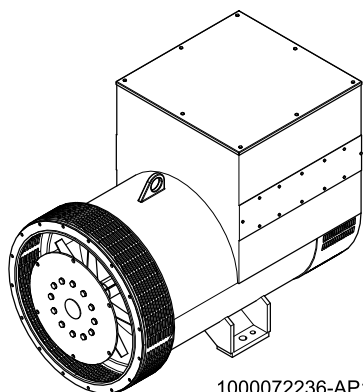
Diesel Engine

1000091508-AP1-B3



Engine Manufacturer/Brand.....	Perkins
Engine Model.....	4012-46TAG2A
Dimensions L×W×H.....	3971×2192×2260mm
Dry Weigh (approx.)	6000kg
Number of Cylinders.....	12
Bore.....	160mm
Stroke	190mm
Displacement.....	45.84L
Compression Ratio.....	13
Type of Injection	Direct injection
Intake System.....	Turbocharged
Intake Resistance.....	≤0.4kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel.....	BS2869 1998 Class A2 or BS EN590
Type of Oil	API CH4 15W/40
Oil Capacity	177L
Type of Coolant	Glycol mixture
Coolant capacity.....	210L
Back Pressure	≤0.5kPa
Standby Power	1459kW
Prime Power	1331kW
Fuel Consumption(100%load).....	201g/kW.H

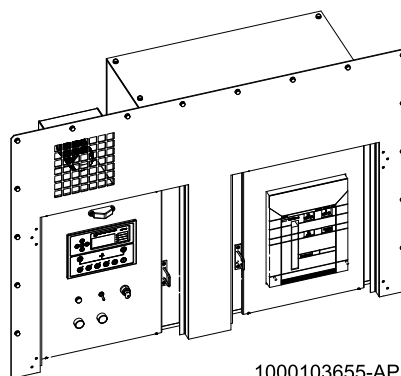
Alternator



1000072236-AP1-A1

Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA50.2L8
Exciter.....	Brushless
Cooling Fan	Cast alloy aluminum
Windings.....	100% copper
Insulation Class	H
Winding Pitch.....	2/3
Terminals	6
Drip Proof	IP23
Altitude.....	≤1000m
Overspeed	2250rpm
Air Flow.....	1.8m³/s(50Hz),2.2m³/s(60Hz)
Voltage Regulation	±0.5%
Total harmonic TGH / THC	< 3.5%
Telephone Interference.....	THF<2%;TIF<50

PLC-7320 Control System



1000103655-AP1-C4

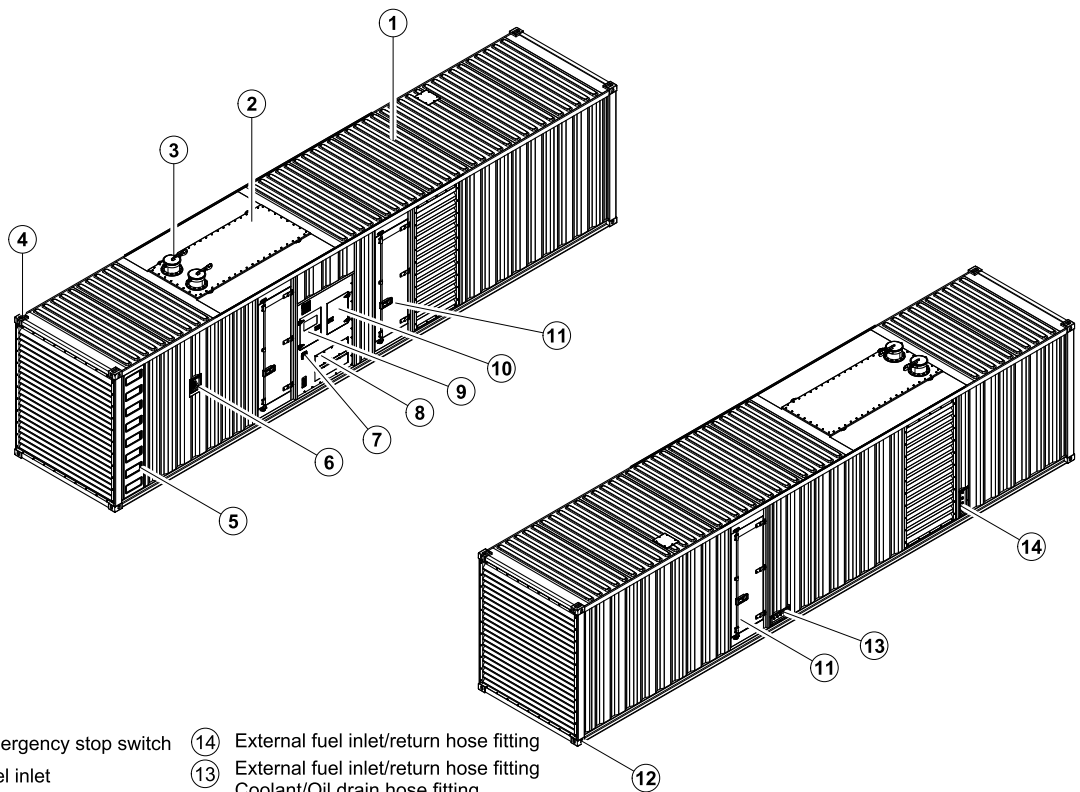
PLC-7320 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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

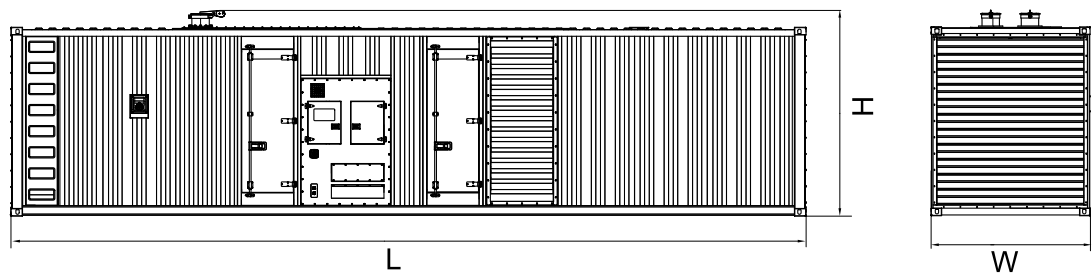
4 Overall Dimensions

1000011361-DR1-D2

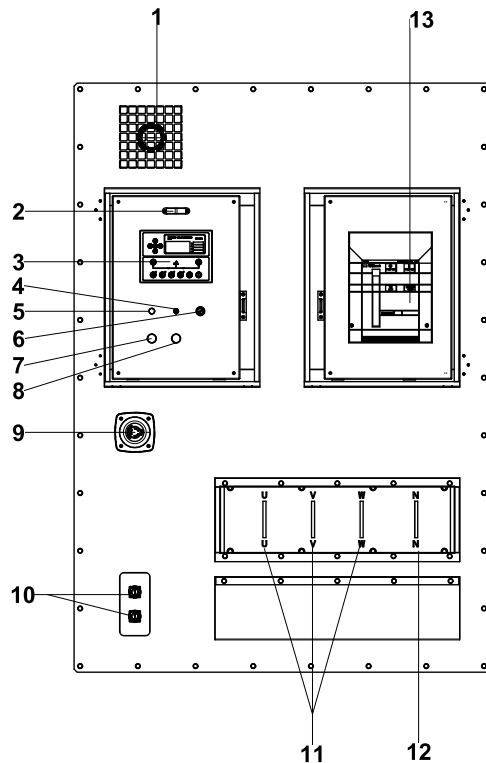
Dry weight	20545kg
Fuel tank capacity	2000L
Dimensions L x W x H	12192x2438x3150mm



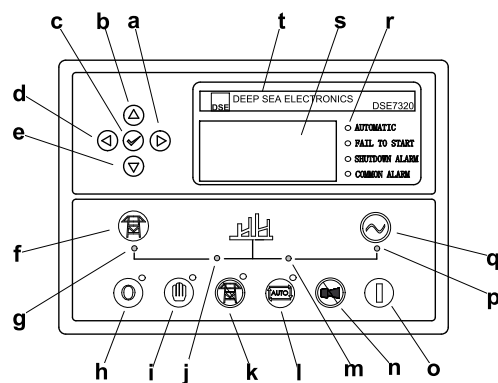
- ⑦ Emergency stop switch
- ⑥ Fuel inlet
- ⑤ Ladder
- ④ Lifting lug
- ③ Exhaust gas outlet
- ② Muffler
- ① Canopy
- ⑭ External fuel inlet/return hose fitting
- ⑬ External fuel inlet/return hose fitting
- ⑫ Fixing lug
- ⑪ Access door
- ⑩ Switch cabinet
- ⑨ Control cabinet
- ⑧ Cable trench



5 Control System



Control Cabinet



Control Panel

Ref.	Description
1	Sound and light alarm indicator
2	Control panel lamp
3	Control module
4	Control panel lamp switch
5	Battery charger indicator
6	Key switch
7	Genset circuit breaker ON button
8	Genset circuit breaker OFF button
9	Emergency stop button
10	ATS communication interface
11	Live wire terminals
12	Neutral wire terminal
13	Main circuit breaker

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