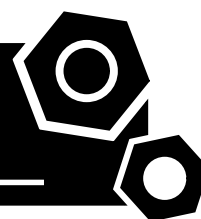


**Generator set**  
**Sound-proof type**  
**WPS300S**

# **SPECIFICATIONS**

---



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-5:2005
- AS 3000-2018 AS 3010.1-2017

### 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.

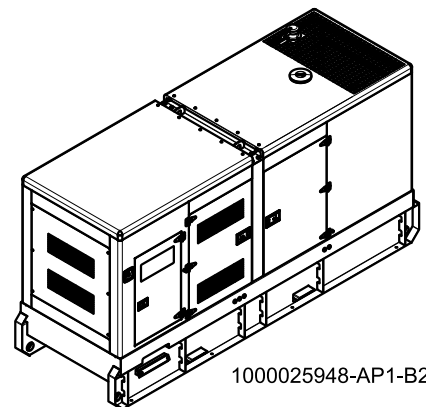
## 2 General Features

- Perkins engine 1506A-E88TAG5
- Close coupled to a Leroy Somer alternator LSA46.3L10
- Microprocessor control module PLC-7420
- ABB main circuit breaker 500A
- Rotate speed governor: Electronic fuel injection governor
- Excitation system: Self excited, SHUNT
- A.V.R model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle

- 2x12V/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 forklift slots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 25 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

## 3 Equipment Specification

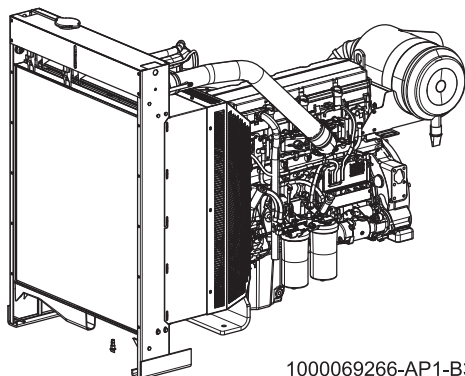
### General technical data



Model.....WPS300S-AU  
 Structure type ..... R  
 Tank capacity.....1650L  
 Dry weight.....3738kg  
 Noise level @7m .....N/A  
 Dimensions L×W×H.....3970x1362x2334 mm  
 Standby Power ..... 330kVA/264kW  
 Prime Power ..... 300kVA/240kW

Voltage	380V	400V	415V	440V	
Ampere	455.8A	433A	417.3A	393.6A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	33	48	65	73

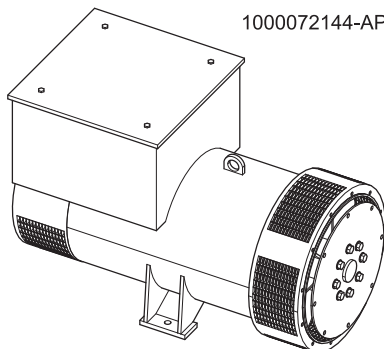
## Diesel Engine



1000069266-AP1-B3

Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1506A-E88TAG5
Dimensions L×W×H.....	2032x1090x1320mm
Dry Weight (approx.) .....	1183kg
Number of Cylinders.....	6
Bore.....	112
Stroke .....	149
Displacement.....	8.8
Compression Ratio.....	16.1
Type of injection.....	Direct injection
Intake System.....	Turbocharged, after cooled
Intake Resistance.....	≤ 6.2kPa
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	24V
Type of Fuel.....	BS 2869 1998 CLASS A1, CLASS A2 or BSEN590
Type of Oil .....	API-CH-4, API-CG-4 or ACEA E3
Oil Capacity .....	41L
Type of Coolant .....	Glycol mixture
Coolant capacity.....	40L
Back Pressure .....	≤10.0kPa
Standby Power .....	264kW
Prime Power.....	240kW
Fuel Consumption(100%load).....	65L/h

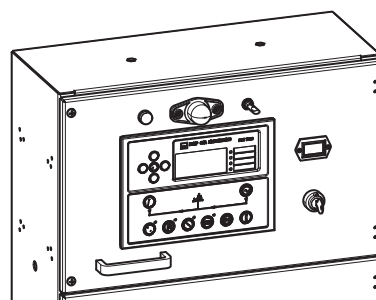
## Alternator



1000072144-AP1-A1

Alternator Manufacturer/Brand .....	Leroy Somer
Alternator Model .....	LSA46.3L10
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.....	0.48m³/s(50Hz), 0.58m³/s(60Hz)
Voltage Regulation .....	±0.5%
Total harmonic TGH / THC .....	at no load < 2.5 % - on load < 2.5%
Telephone Interference.....	THF<2%; TIF<50

## PLC-7420 Control System



1000094167-AP1-C2

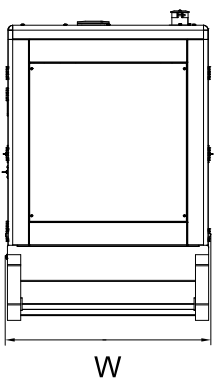
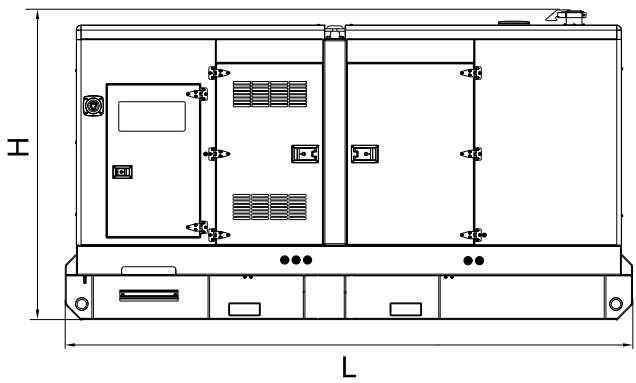
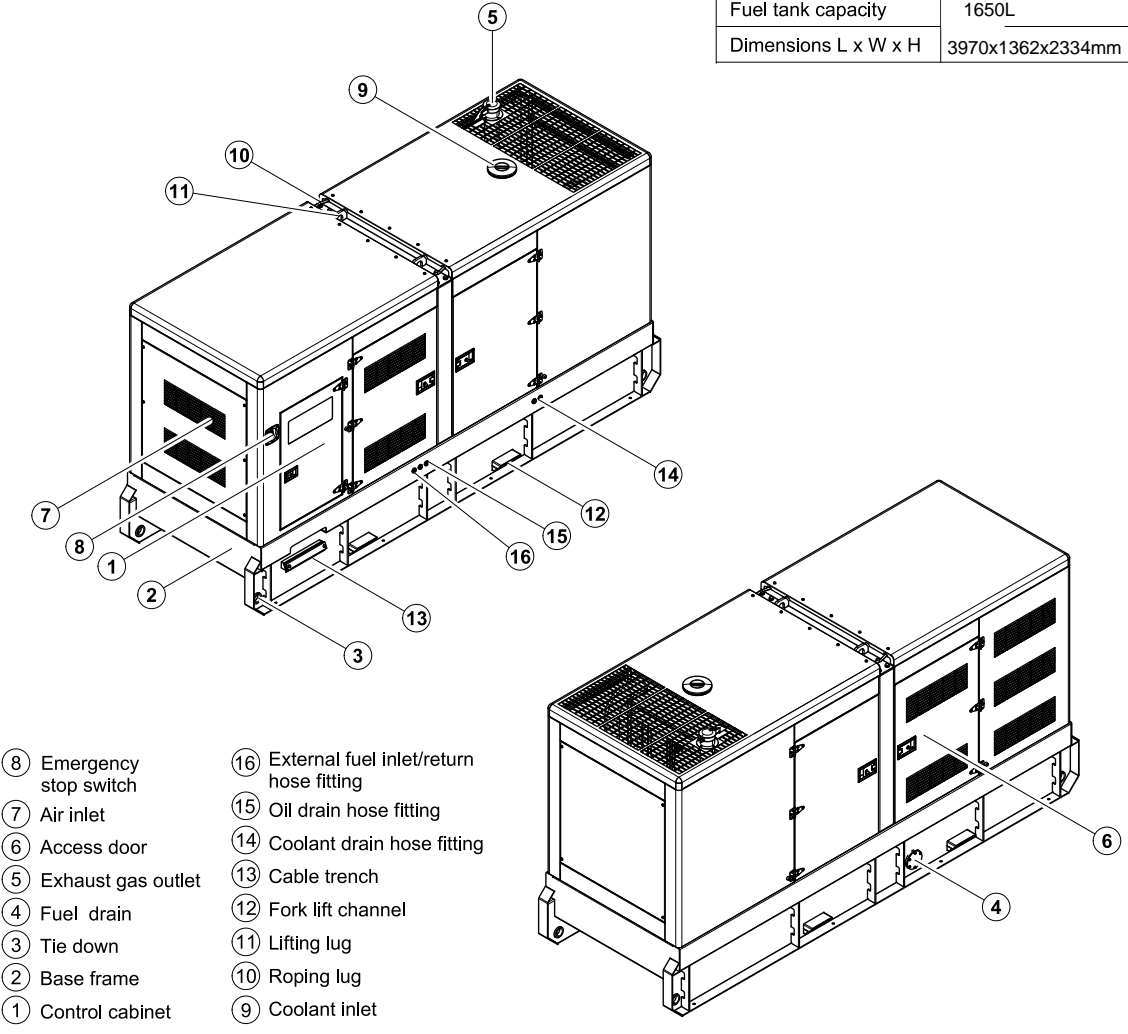
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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

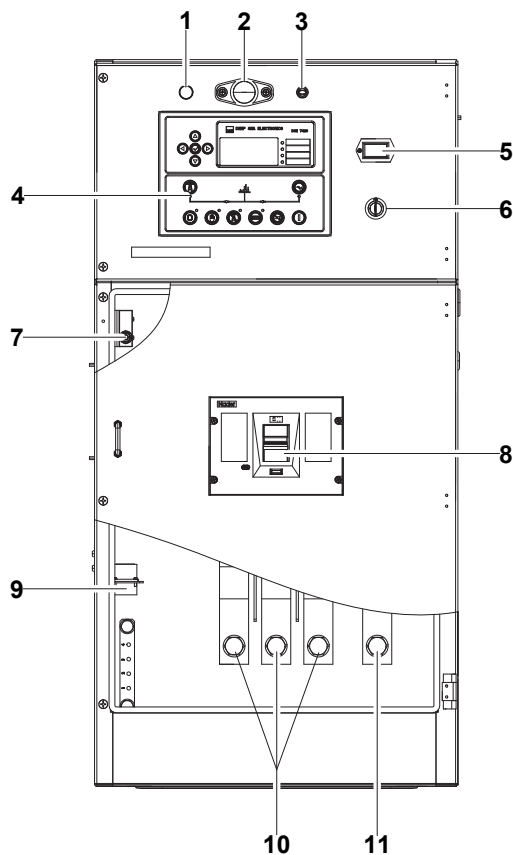
# 4 Overall Dimensions

1000025948-DR1-B2

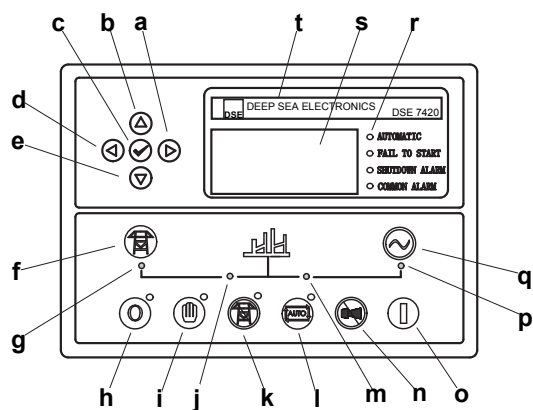
Dry weight	3738kg
Fuel tank capacity	1650L
Dimensions L x W x H	3970x1362x2334mm



## 5 Control System



**Control & field wiring cabinet**



**Control module**

Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control cabinet lamp switch
4	Control module
5	Time counter
6	Key switch
7	Limit switch
8	Main circuit breaker
9	ATS communication connector
10	Live wire terminals
11	Neutral wire terminal

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

1000025948-B2-E
03.2020