

Generator set
Sound-proof type
WPS250S

SPECIFICATIONS





1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (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.

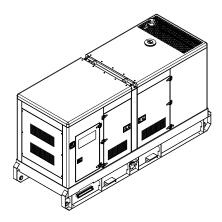
2 General Features

- Perkins engine 1506A-E88TAG3
- Close coupled to a Leroy Somer alternator LSA46.3S5
- Microprocessor control module PLC-7420
- Main circuit breaker: 400A
- Rotate speed governor: Electronic fuel injection gover-nor
- · 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 forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- · Base fuel tank with 9 hours running
- Drain points for fuel tank
- Operator's Manual / Specifications

3 Equipment Specification

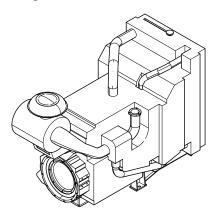
General technical data



Model	WPS250S
Structure type	R
Tank capacity	470L
Dry weigh	3491kg
Noise level @7m	70.6dBA
Dimensions L×W×H	3840×1353×2000mm
Standby Power	260kVA/208kW
Prime Power	250kVA/200kW

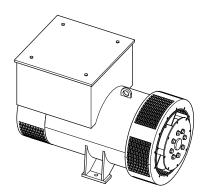
Voltage	380V		400V		415V		440V	
Ampere	379.8A		360.9A		347.8A		328.1A	
Genset Fuel Consumption								
Frequency	//Load	Load 25		50%	75%	100%		110%
50Hz (L/h)		N	/A	29.0	42.0	56	6.0	61.0

Diesel Engine



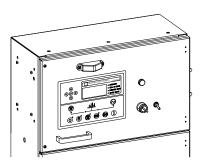
Engine Manufacturer/Bra	andPerkins
Engine Model	1506A-E88TAG3
Dimensions L×W×H	1941×1013×1366mm
Dry Weigh (approx.)	1136kg
Number of Cylinders	6
Bore	112mm
Stroke	149mm
Displacement	8.8L
Compression Ratio	16.1
Type of injection	Direct injection
Intake System Tur	bocharged,air-to-air charge cooled
Intake Resistance	≦ 6.22kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12/24V
Type of Fuel	EPA 2D 89.330-96
Type of Oil	. API-CH-4, API-CG-4 or ACEA E3
Oil Capacity	13-16L
Type of Coolant	Glycol mixture
Back Pressure	<u>≦</u> 10.7kPa
Standby Power	244.0kWm
Prime Power	222.0kWm
Fuel Consumption(100%	load)56.0L/h

Alternator



Alternator Manufacturer/Bran	ndLeroy Somer
Alternator Model	LSA46.3S5
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 Flow0	.43m³/s(50Hz),0.51m³/s(60Hz)
Voltage Regulation	±0.5%
Total harmonic TGH / THCne	o load < 2.5 % - on load < 2.5%
Telephone Interference	THF<2%;TIF<50

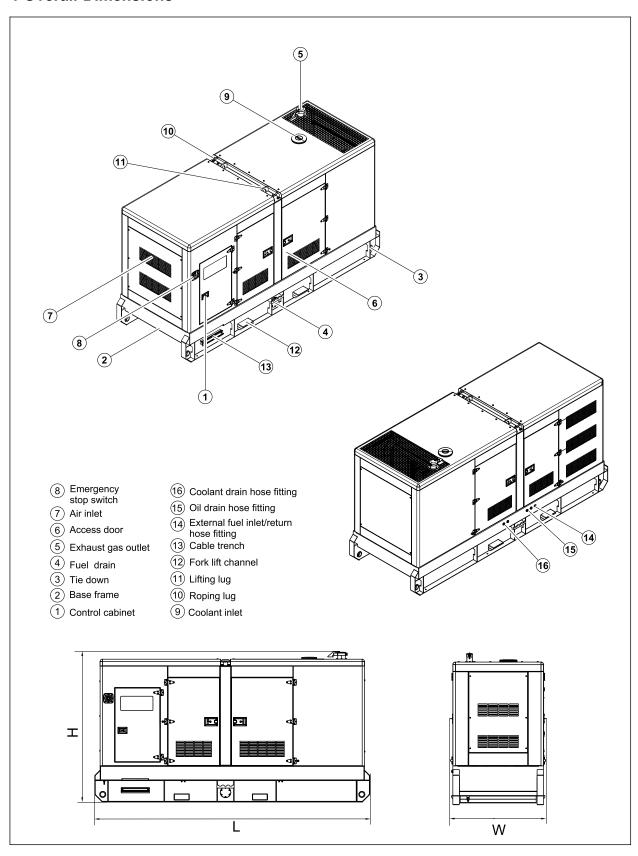
PLC-7420 Control System



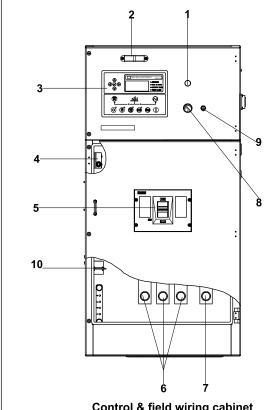
PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

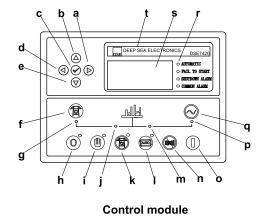
4 Overall Dimensions



5 Control System



Control & field wiring cabinet



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

а	Button (next page)
b	Button (increase value / previous item)
С	Button (accept)
d	Button (previous page)
е	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)
ļ	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
0	Start button (Manual)
р	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

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