

Generator set
Sound-proof type
WPS150BS-AU

# 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
- AS 3000-1997
- AS 3010.1-1988

#### **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 90%.
- Altitude: Below one thousand (1000) meters above sea level

#### **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

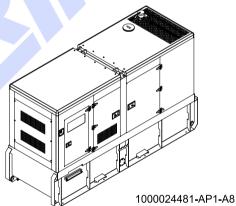
- Perkins engine 1106A-70TAG2
- Close coupled to a Leroy Somer alternator LSA44.3L10
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 250A
- Rotate speed governor: Mechanical governor
- Excitation System: Self Excited, SHUNT
- A.V.R.Model: R250
- · Key switch
- · Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector

- 1x12V/120AH sealed for life maintenance free battery
- · Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- · Oil pump on the engine
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- · Dry type air filter
- · Base fuel tank with 24 hours running
- Drain points for fuel tank
- · Breather valve for fuel tank
- Operation Manual / Specifications



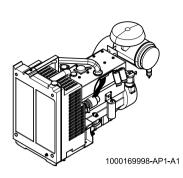
# 3 Equipment Specification

#### General technical data

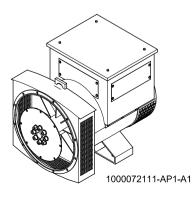


Model	WPS150BS-AU
Structure type	R
Tank capacity	1087L
Dry weight	2822kg
Sound pressure level @1m/7m	N/A
Sound power level acc. 2000/14/EC	N/A
Dimensions L×W×H	3518x1222x2153mm
Standby Power	165kVA/132kW
Prime Power	150kVA/120kW
Voltage/Ampere	415V/208 6A

Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	23.7	34.2	43.5	46.9



Perkins
1106A-70TAG2
1763×756×1142mm
788kg
6
105mm
135mm
7.01L
17
Direct injection
d and air charge cooled
≦8kPa
Water cooled
Pusher
101/
12V
12V 5, Class 1D & Class 2D
5, Class 1D & Class 2D
5, Class 1D & Class 2D API-CH4/ACEA E5
5, Class 1D & Class 2D API-CH4/ACEA E5 16.5L
5, Class 1D & Class 2D API-CH4/ACEA E5 16.5L Glycol mixture
5, Class 1D & Class 2D API-CH4/ACEA E5
5, Class 1D & Class 2D API-CH4/ACEA E5
5, Class 1D & Class 2D API-CH4/ACEA E5 16.5L Glycol mixture 21L . 109kW(6104BTU/min) 60kW(3360BTU/min) N/A
5, Class 1D & Class 2D API-CH4/ACEA E5



Alternator Manufacturer/Brand	Leroy Some
Alternator Model	LSA44.3L10
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	н
Winding Pitch	2/3
Terminals	12
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250rpm
Air Flow 0.37m³/s	(50Hz),0.44m³/s(60Hz)
Voltage Regulation	±0.5%
Total harmonic TGH / THCat no load	d < 2 % - on load < 2%
Telephone Interference	THF<2%;TIF<50

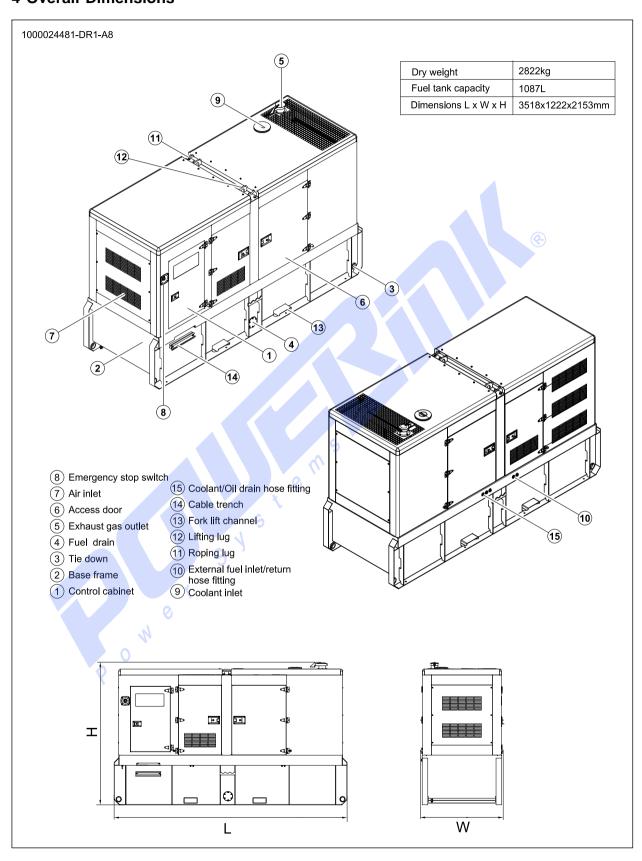
## PLC-7420 Control System



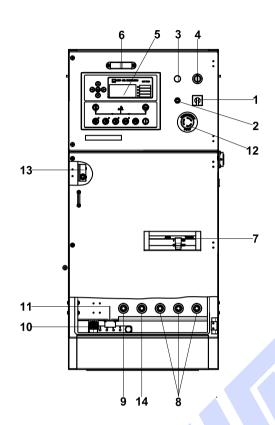
PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

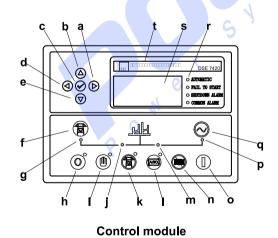
# **4 Overall Dimensions**



# **5 Control System**



Control & Field wiring cabinet



Ref.	Description
1	Mains input changeover switch
2	Control cabinet lamp switch
3	Charge indicator
4	Key switch
5	Control module
6	Control cabinet lamp
7	Main circuit breaker
8	Live wire terminals
9	Neutral wire terminal
10	Mains input/Remote control communication connector
11	Mains input/Remote control/ ATS communication connector
12	Emergency stop switch
13	Limit switch
14	Ground wire terminal

а	Button (next page)
b	Button (increase value / previous item)
С	Button (accept)
d	Button (previous page)
Φ	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)
ı	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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