

Generator set
Sound-proof type
WPS300S-AU

# **SPECIFICATIONS**





#### 1 Standards & Conditions

## **Design Standards**

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

# **Environmental Operating Conditions**

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25℃ to 50℃. The coolant heater is needed when the temperature is below 5℃
- 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.

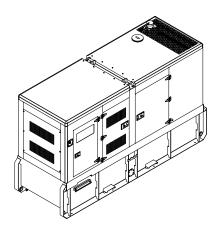
#### 2 General Features

- Perkins engine 1506A-E88TAG5
- Close coupled to Leroy Somer alternator LSA46.3L10
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 500A
- · Rotate speed governor: Electrical governor
- · Excitation System: Self Excited, SHUNT
- A.V.R.Model: R250
- Key switch
- · Emergency stop switch
- · ATS (automatic transfer switch) receptacle
- · Remote run connector
- 2x12V/120AH sealed for life maintenance free battery

- Remote run connector
- · 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 for 25 hours running
- · Drain points for fuel tank
- · Breather valve for fuel tank
- Operation Manual / Specifications

# 3 Equipment Specification

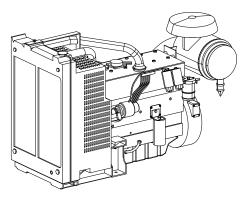
#### General technical data



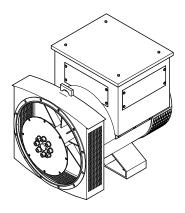
Model	WPS300S-AU
Structure type	R
Tank capacity	1650L
Dry weight	3738kg
Noise level @7m	75.4dBA
Dimensions L×W×H	3970x1362x2334mm
Standby Power	330kVA/264kW
Prime Power	300kVA/240kW

Voltage	380V	40	0V	415V		440V	
Ampere	455.8A	43	3A	417.3A			417.4A
	Genset	Fuel Co	nsum	ption	,		
Frequency/Load	25%	50%	75	5%	100%		110%
50Hz (L/h)	N/A	33	48	3.2	64.9		73.1

## Dck Yf 'GnghYa



Engine Manufacturer/Bra	ndPerkins
Engine Model	1506A-E88TAG5
Dimensions L×W×H	2032×1091×1320mm
Dry Weight (approx.)	1183kg
Number of Cylinders	6
Bore	112mm
Stroke	149mm
Displacement	8.8L
Compression Ratio	16.1
Type of Injection	Direct injection
Intake SystemTu	irbocharged and air charge cooled
Intake Resistance	<u>≦</u> 8kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel	ASTM D975, Class 1D & Class 2D
Type of Oil	API-CH4/ACEA E5
Oil Capacity	41.0L
Type of Coolant	Glycol mixture
Coolant Capacity	33.2L
Back Pressure	6.0kPa
Standby Power	307kW
Prime Power	281kW
Fuel Consumption(100%)	load)64.9L/h



Alternator Manufacturer/Bran	ndLeroy 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 Flow0	.37m³/s(50Hz),0.44m³/s(60Hz)
Voltage Regulation	±0.5%
Total harmonic TGH / THC a	nt no load < 2 % - on load < 2%
Telephone Interference	THF<2%;TIF<50

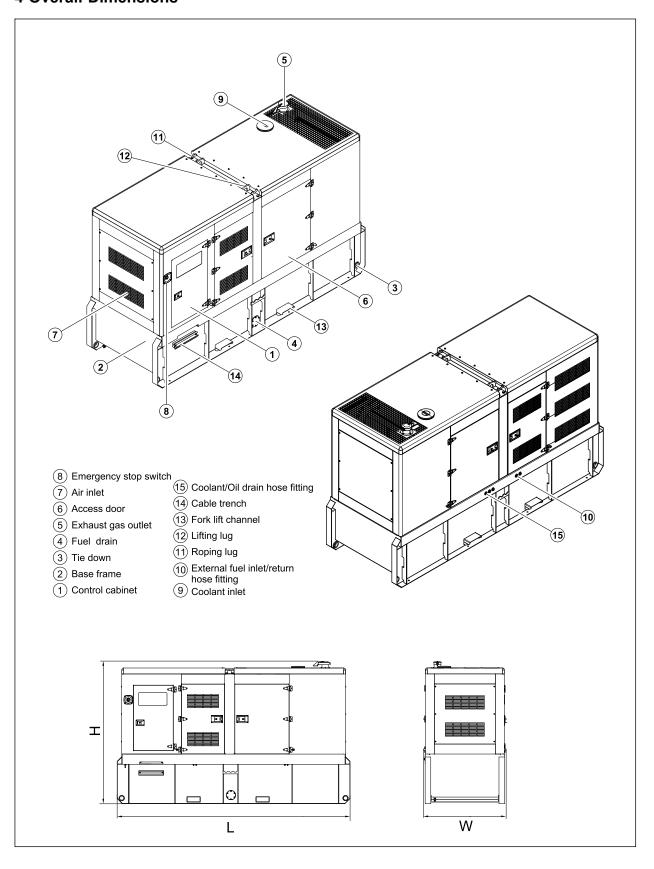
# PLC-7420 Control System



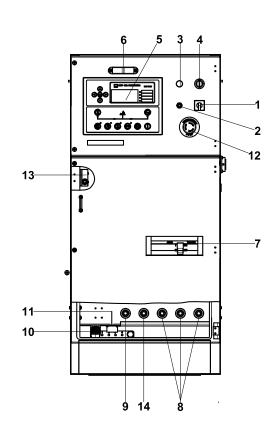
PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

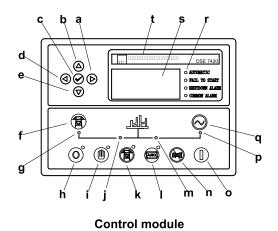
# **4 Overall Dimensions**



# 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)
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)
- 1	Auto button (Auto mode)
m	Genset on load LED
n	Mute/Lamp test button
О	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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