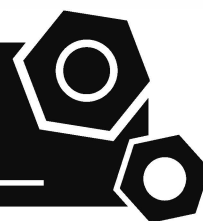


Generator set
Sound-proof type
WPS200D6S-EPA

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- ISO8528
- GB/T2820
- YD/502-2007
- JB/T20136-2006

Electrical devices have obtained the certification of:

- CSA
- UL

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 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.

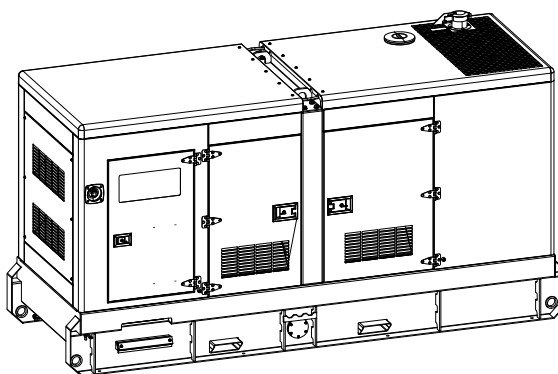
2 General Features

- Perkins engine 1106D-E70TAG5
- Close coupled to LSA alternator LSA46.3S4
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 800A
- Rotate speed governor: ECU
- 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 of aluminum plate
- 50°C radiator
- Stainless steel muffler
- Non-returning valve for fuel inlet hose of the engine
- Steel base frame with forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 7 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

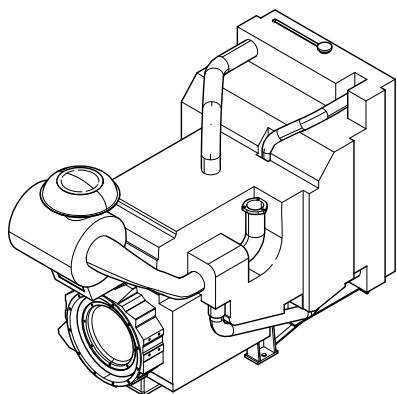
General technical data



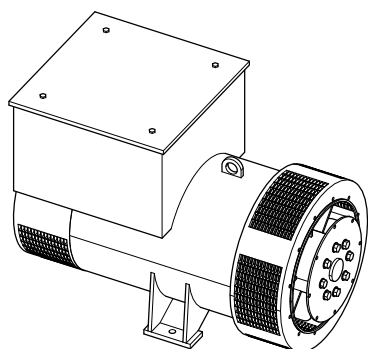
Model..... WPS200D6S-EPA
Structure type R
Tank capacity..... 420L
Dry weigh..... 2812kg
Sound pressure level @7m..... 75.4dB(A)
Dimensions L×W×H..... 3468x1221x1836mm
Standby Power 250kVA/200kW
Voltage/Ampere 208V/693A

Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
60Hz (L/h)	16.0	29.5	43.5	54.4	59.1

Diesel engine

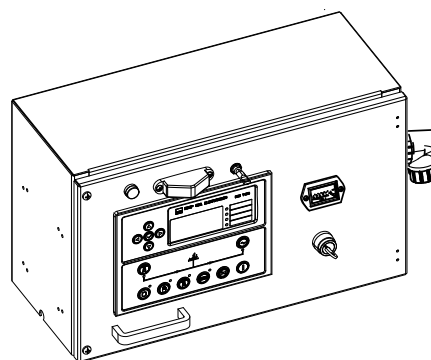


Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1106D-E70TAG5
Dimensions L×W×H.....	1763×788×1142mm
Dry Weight (approx.)	788kg
Number of Cylinders.....	6
Bore.....	105mm
Stroke	135mm
Displacement.....	7.0L
Compression Ratio.....	16.8
Type of injection.....	Direct injection
Intake System.....	Turbocharged, air-to-air charge cooled
Intake Resistance	≤ 8.0kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	BS 2869 1998 CLASS A2 or BSEN590
Type of Oil	0W-30
Oil Capacity	17.5L
Type of Coolant	Glycol mixture
Coolant Capacity	21L
Back Pressure	≤10kPa
Heat Rejected To Exhaust System. 180kW(10242BTU/min)	
Heat Rejected To Water&Oil.....	98kW(5576BTU/min)
Standby Power	235kW
Prime Power	218kW
Fuel Consumption(100%load)	54.4L/h



Alternator Manufacturer/Brand	LSA
Alternator Model	LSA46.3S4
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 / THCno load < 2.5 % - on load < 2.5%	
Telephone Interference.....	THF<2%; TIF<50

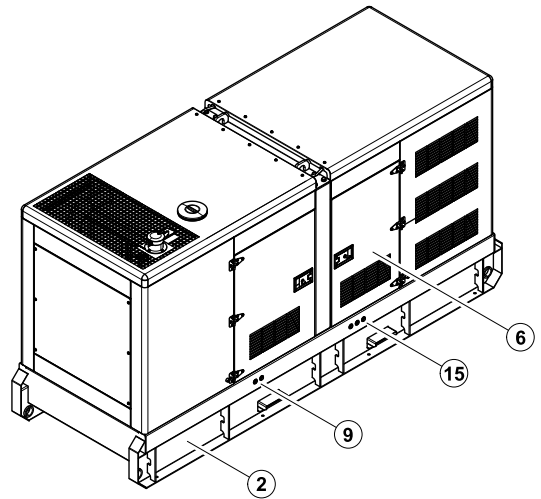
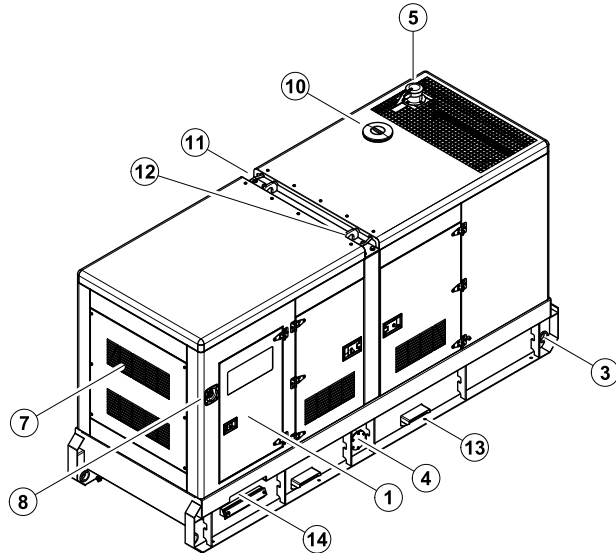
PLC-7420 Control System



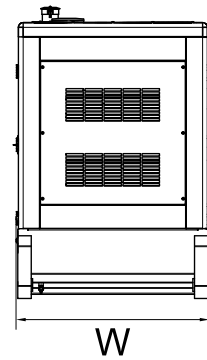
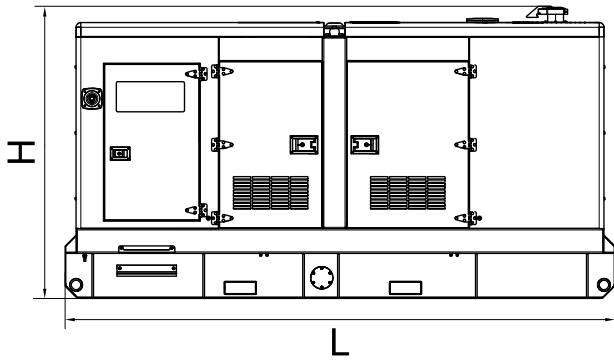
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

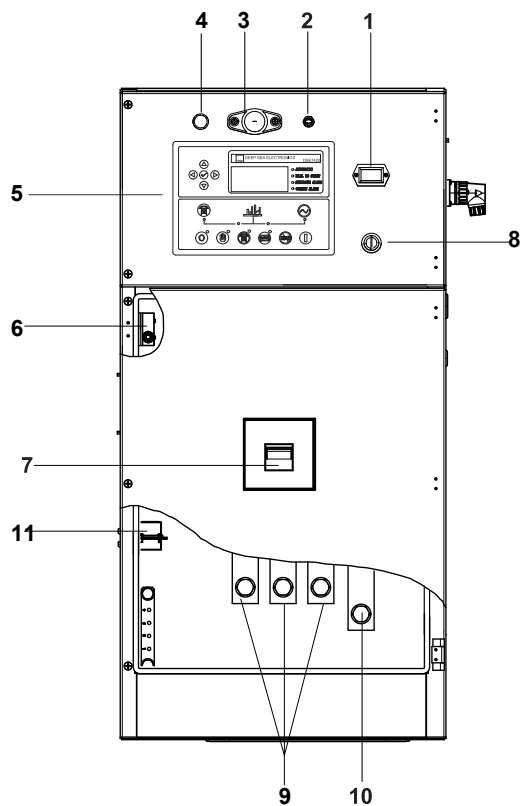
4 Overall Dimensions



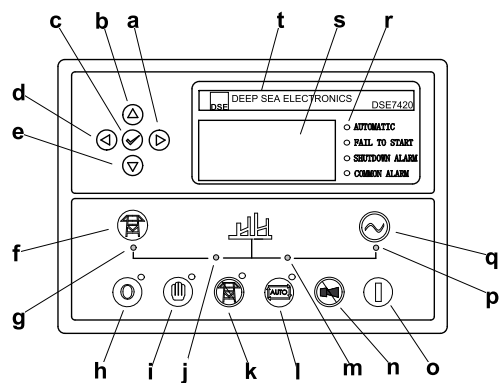
- | | |
|-------------------------|---|
| ⑧ Emergency stop switch | ⑮ External fuel inlet/return hose fitting |
| ⑦ Air inlet | ⑭ Cable trench |
| ⑥ Access door | ⑬ Fork lift channel |
| ⑤ Exhaust gas outlet | ⑫ Lifting lug |
| ④ Fuel drain | ⑪ Roping lug |
| ③ Tie down | ⑩ Coolant inlet |
| ② Base frame | ⑨ Coolant/Oil drain hose fitting |
| ① Control cabinet | |



5 Control System



Control & field wiring cabinet



Control module

Ref.	Description
1	Time counter
2	Control panel lamp switch
3	Control panel lamp
4	Charge indicator
5	Control module
6	Limit switch
7	Main circuit breaker
8	Key switch
9	Live wire terminals
10	Neutral wire terminal
11	Mains input/Remote control communication onnector

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

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