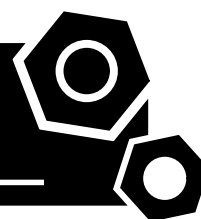


Generator set
Sound-proof type
WPS200BS

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
- GB/T2820.5-2009

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 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.

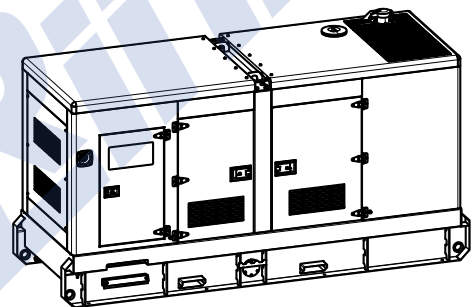
2 General Features

- Perkins engine 1106A-70TAG4
- Close coupled to a Leroy Stanford LSA46.2M5
- Microprocessor control module PLC-7420
- NADER main circuit breaker: 315A
- Rotate speed governor: Electronic governor
- Excitation system: Self excited , SHUNT
- A.V.R model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/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 forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 9 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data

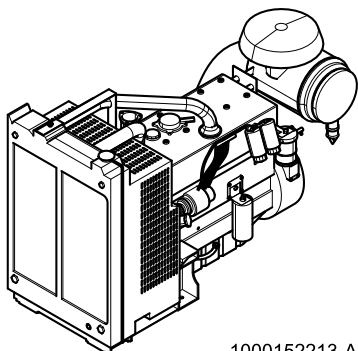


1000023137-AP1-B5

Model.....WPS200BS
 Structure type R
 Tank capacity.....420L
 Dry weight.....2742kg
 Sound pressure level @7mN/A
 Sound power level acc. 2000/14/ECN/A
 Dimensions L×W×H..... 3468x1222x1843mm
 Standby Power 220kVA/176kW
 Prime Power 200kVA/160kW

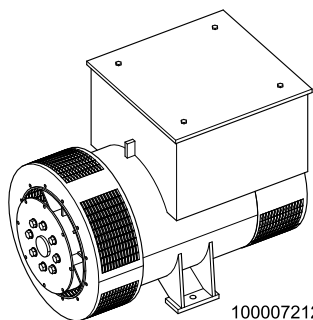
Voltage	380V	400V	415V	440V	
Ampere	303.8A	288.6A	278.2A	262.4A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	11.2	20.8	33.0	43.5	46.9

Power System



1000152213-AP1-A2

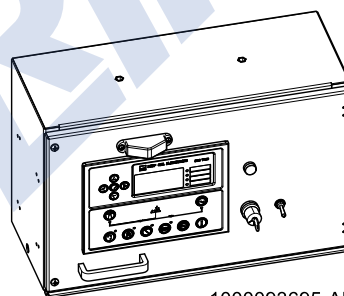
Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1106A-70TAG4
Dimensions L×W×H.....	1763×756×1142mm
Dry Weight (approx.)	788kg
Number of Cylinders.....	6
Bore.....	105mm
Stroke.....	135mm
Displacement.....	7.01L
Compression Ratio.....	16
Type of Injection	Direct injection
Intake System.....	Turbocharged and air charge cooled
Intake Resistance.....	≤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	16.5L
Type of Coolant	Glycol mixture
Coolant Capacity	21L
Back Pressure	15.0kPa
Standby Power	191kW
Prime Power	173kW
Fuel Consumption(100%load).....	45.8L/h



1000072129-AP1-A1

Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA46.2M5
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.....	0.43m³/s(50Hz),0.51m³/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



1000093695-AP1-D3

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

1000023137-DR1-B5

Dry weight	2742kg
Fuel tank capacity	420L
Dimensions L x W x H	3468x1222x1843mm

Isometric view of the generator set showing various components labeled with circled numbers 1 through 16. The unit is a large, rectangular metal enclosure with multiple doors and access points. Callouts include: 1 (Exhaust gas outlet), 2 (Coolant inlet), 3 (Roping lug), 4 (Lifting lug), 5 (Air inlet), 6 (Cable trench), 7 (Control cabinet), 8 (Fuel drain), 9 (Emergency stop switch), 10 (Access door), 11 (Tie down), 12 (Base frame), 13 (Fork lift channel), 14 (Coolant drain hose fitting), 15 (External fuel inlet/return hose fitting), and 16 (Oil drain hose fitting).

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

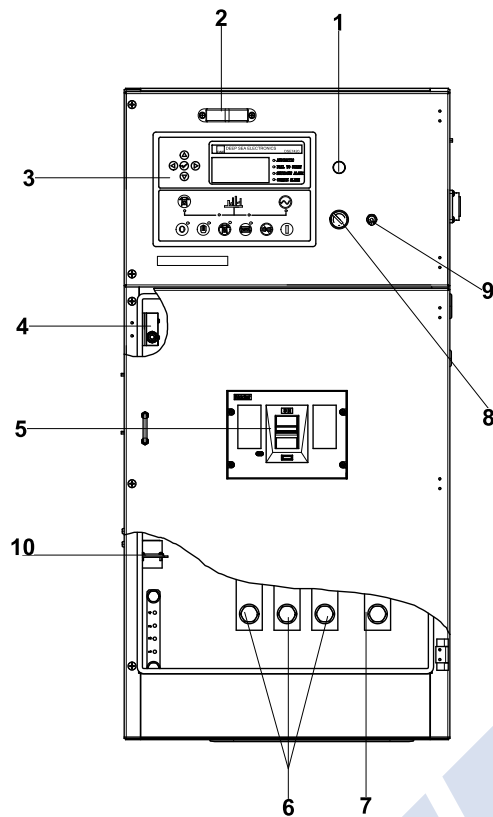
Isometric view of the generator set from a different angle, showing the side and rear. Callouts include: 11 (Tie down), 12 (Base frame), 13 (Fork lift channel), 14 (Coolant drain hose fitting), 15 (External fuel inlet/return hose fitting), and 16 (Oil drain hose fitting).

Front view of the generator set showing the main doors and ventilation grilles. Dimensions are indicated: L (Length) and H (Height).

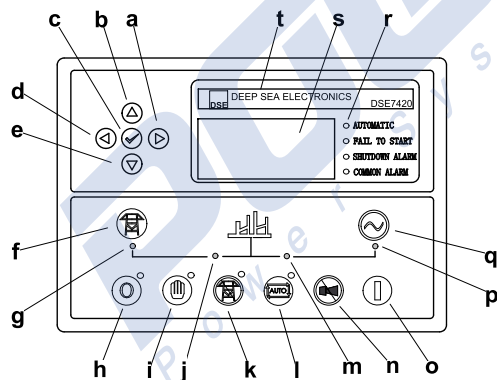
Side view of the generator set showing the profile and ventilation grilles. Dimension W (Width) is indicated.

Dry weight	2742kg
Fuel tank capacity	420L
Dimensions L x W x H	3468x1222x1843mm

5 Control System



Control & field wiring cabinet



Control Panel

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	Mains input/remote/AMF communication connector

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

1000023137-B5-E
03.2014

