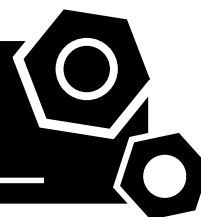


Generator set
Sound-proof type
WPS100S

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance European (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.

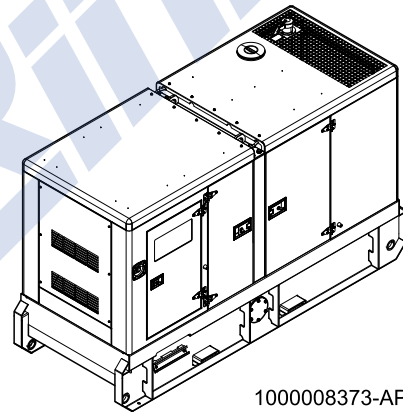
2 General Features

- Perkins engine 1104C-44TAG2
- Close coupled to a Leroy Somer alternator LSA44.2VS45
- Microprocessor control module PLC-7420
- NADER main circuit breaker: 160A
- Rotate speed governor: Electronic fuel injection 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 11 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data

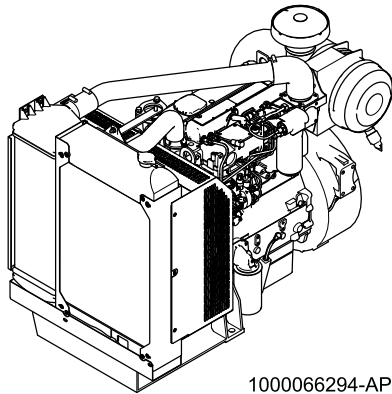


1000008373-AP1-H3

Model..... WPS100S
 Structure type R
 Tank capacity..... 240L
 Dry weigh..... 1852kg
 Noise level @7m 68.9dBA
 Dimensions L×W×H..... 2888x1130x1681mm
 Standby Power 110kVA/88kW
 Prime Power 100kVA/80kW

Voltage	380V	400V	415V	440V	
Ampere	151.9A	144.3A	139.1A	131.2A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	11.2	17.1	22.6	24.9

Diesel Engine

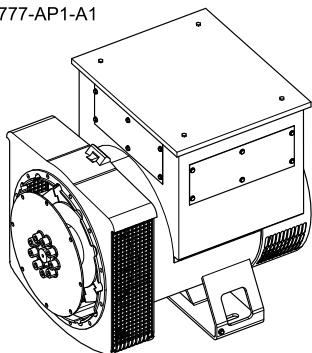


1000066294-AP1-A5

Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1104C-44TAG2
Dimensions L×W×H.....	1259×721×966mm
Dry Weigh (approx.).....	401kg
Number of Cylinders.....	4
Bore.....	105mm
Stroke.....	127mm
Displacement.....	4.4L
Compression Ratio.....	18.23
Type of Injection.....	Direct
Intake System.....	Turbocharged, air-to-air charge cooled
Intake Resistance.....	≤8.0kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12V
Type of Fuel.....	EPA2D 89.330-96
Type of Oil.....	API-CC/SE or CCMC-D1
Oil Capacity.....	8.0L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	17.0L
Back Pressure.....	≤18kPa
Standby Power.....	103kW
Prime Power.....	93.6kW
Fuel Consumption(100%load).....	22.6L/h

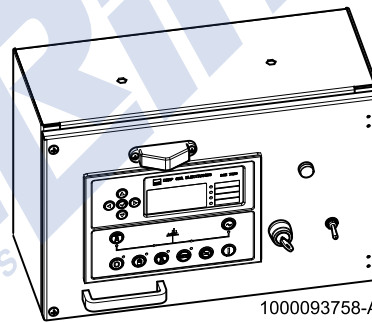
Alternator

1000069777-AP1-A1



Alternator Manufacturer/Brand.....	Leroy Somer
Alternator Model.....	LSA44.2VS45
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.....	0.37m³/s(50Hz), 0.44m³/s(60Hz)
Voltage Regulation.....	±0.5%
Total harmonic TGH / THC at no load < 2 % - on load < 2 %	
Telephone Interference.....	THF<2%;TIF<50

PLC-7420 Control System



1000093758-AP1-D3

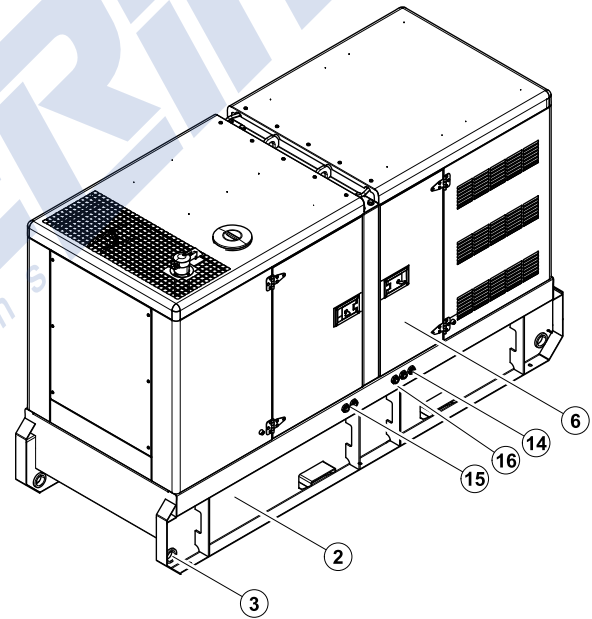
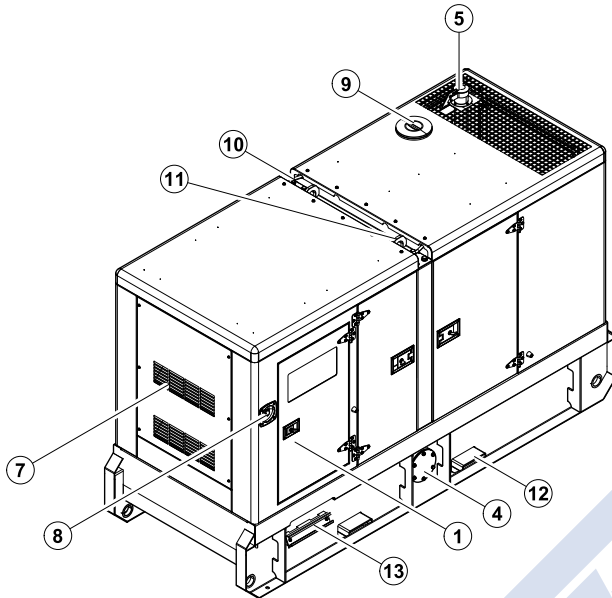
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

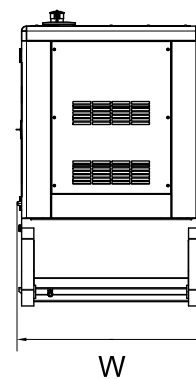
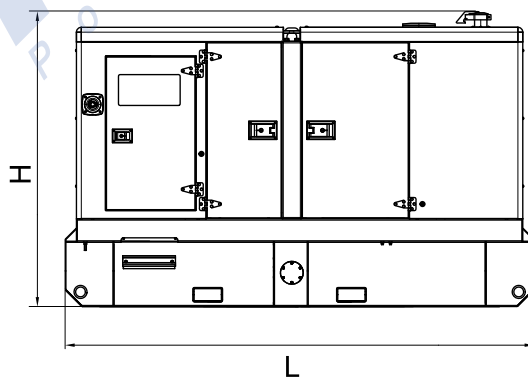
4 Overall Dimensions

1000008373-DR1-H3

Dry weight	1852kg
Fuel tank capacity	240L
Dimensions L x W x H	2888x1130x1681mm



- ⑧ Emergency stop switch
- ⑦ Air inlet
- ⑥ Access door
- ⑤ Exhaust gas outlet
- ④ Fuel drain
- ③ Tie down
- ② Base frame
- ① Control cabinet
- ⑬ Cable trench
- ⑫ Fork lift channel
- ⑪ Lifting lug
- ⑩ Roping lug
- ⑨ Coolant inlet
- ⑯ Oil drain hose fitting
- ⑮ Coolant drain hose fitting
- ⑭ External fuel inlet/return hose fitting

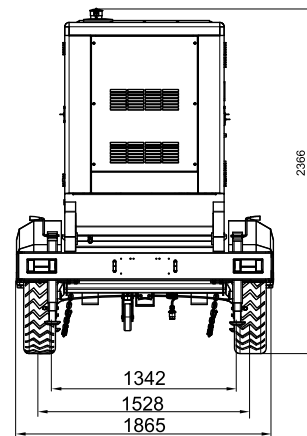
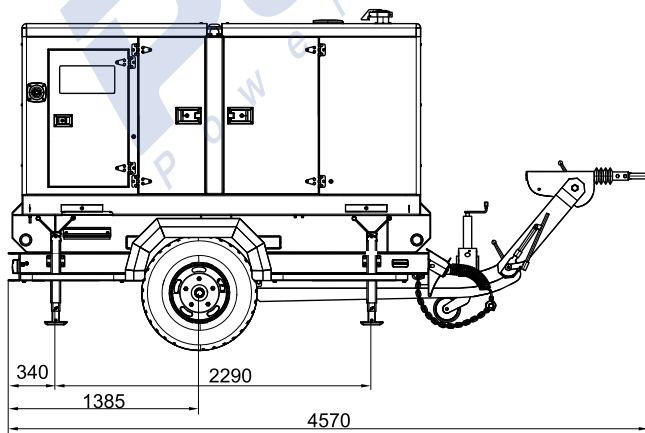
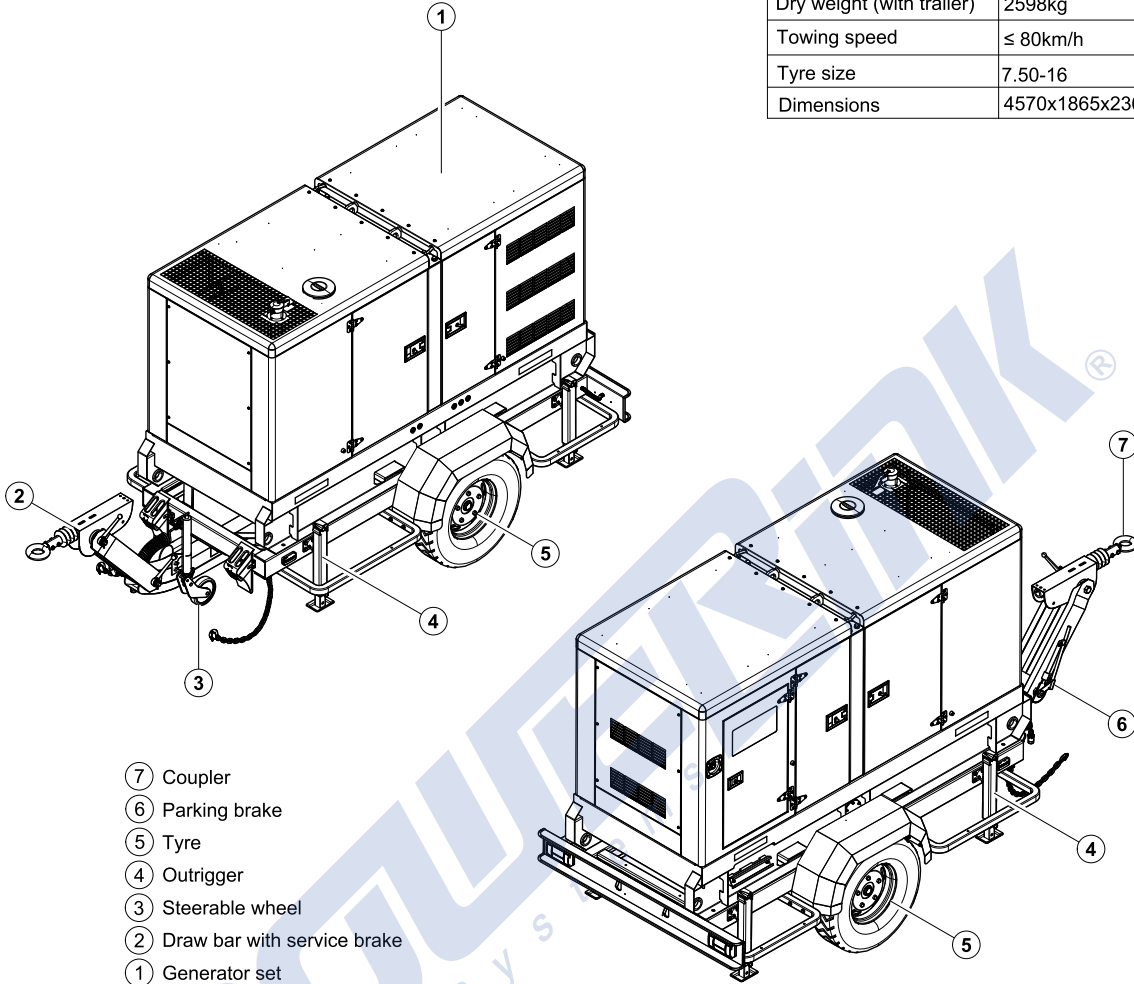


5 Trailor(option)

1000008373-DR3-H3

 **HIGHWAY TYPE**

Dry weight (with trailer)	2598kg
Towing speed	≤ 80km/h
Tyre size	7.50-16
Dimensions	4570x1865x2366mm

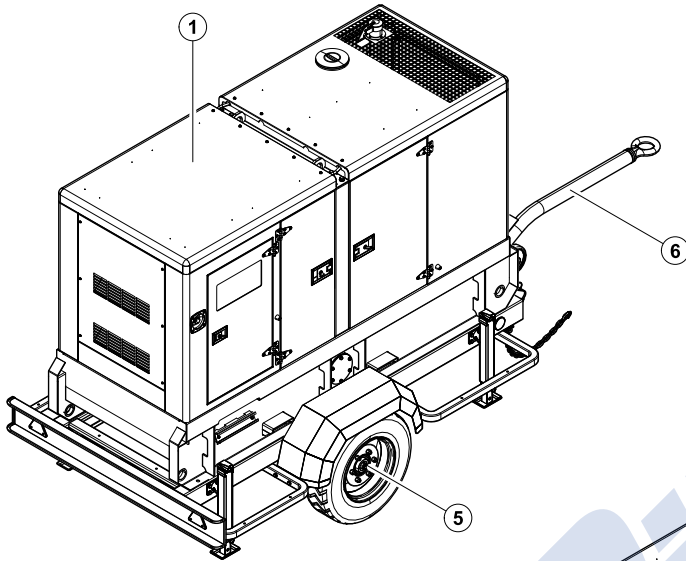


100008373-DR5-H3

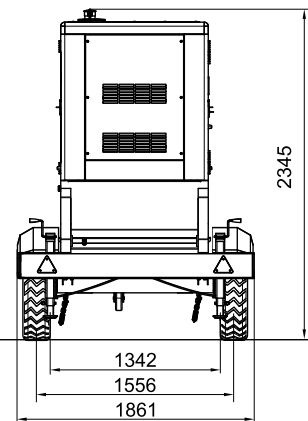
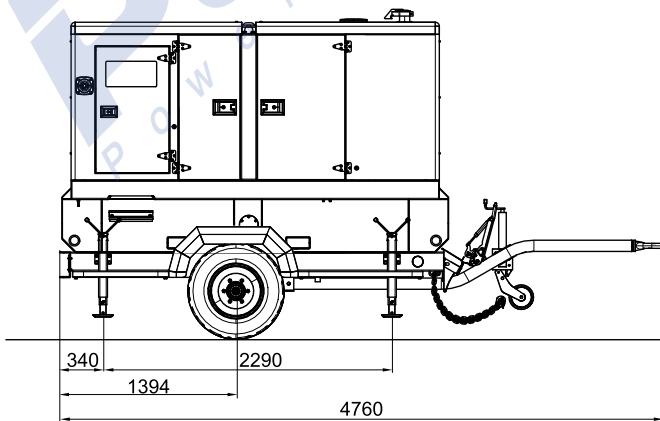
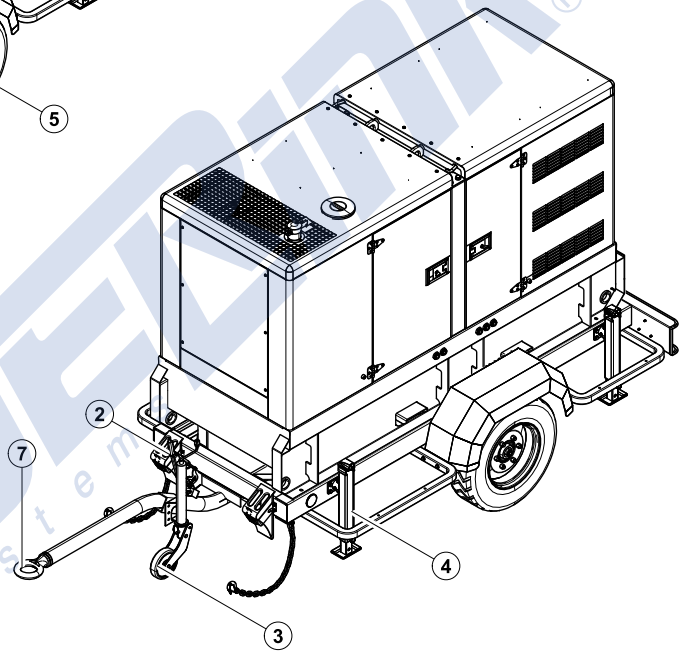


NON-HIGHWAY TYPE

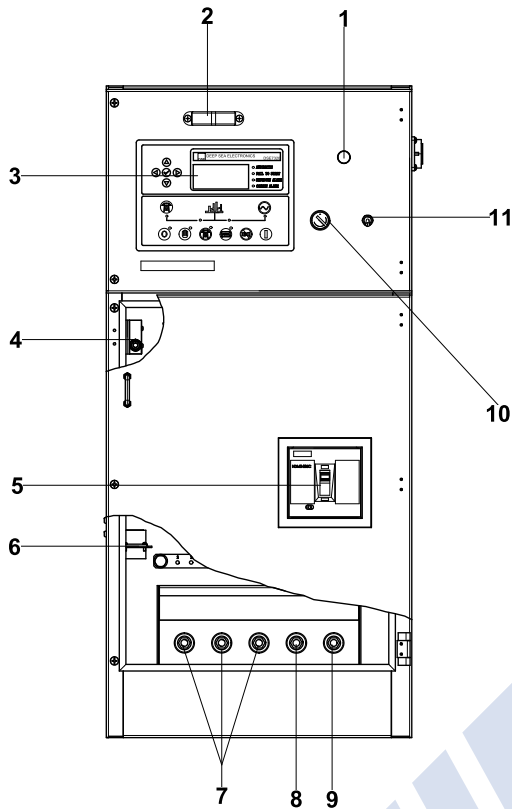
Dry weight (with trailer)	2383.7kg
Towing speed	≤ 20km/h
Tyre size	215/75 R17.5
Dimensions	4760x1861x2345mm



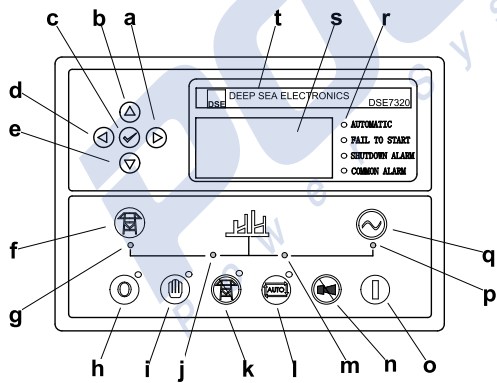
- ⑦ Coupler
- ⑥ Draw bar
- ⑤ Tyre
- ④ Outrigger
- ③ Steerable wheel
- ② Parking brake
- ① Generator set



6 Control System



Control & field wiring cabinet



Control module

Ref.	Description
1	Charge indicator
2	Control panel lamp
3	PLC-7320 Control module
4	Limit switch
5	Main circuit breaker
6	Mains input/ remote/ AMF communication connector
7	Live wire terminals
8	Neutral wire terminal
9	Ground wire terminal
10	Key switch
11	Control panel lamp switch

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

1000008373-H3-E

02.2013

POWERLINK[®]
Power Systems

<http://www.powerlinkworld.com>

*Specification may change without prior notice. For more info.,
contact Power Link or your local distributors please.*