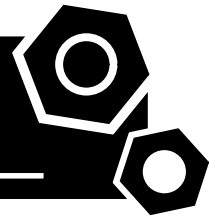


**Generator set**  
**Sound-proof type**  
**WPS80S**

# **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 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.

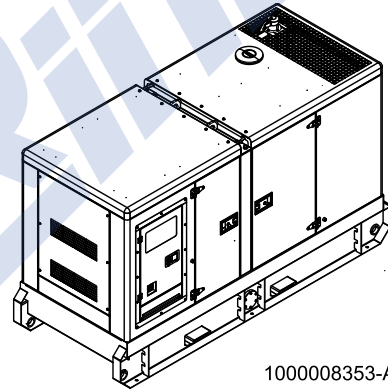
## 2 General Features

- Perkins engine 1104A-44TG2
- Close coupled to a Leroy Somer alternator LSA43.2L8
- Microprocessor control module PLC-702
- NADER main circuit breaker: 125A
- 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
- 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 forkslots
- 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



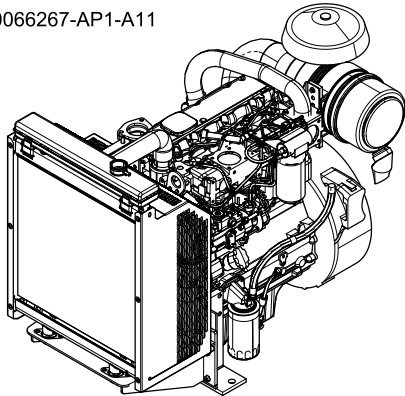
1000008353-AP1-F4

Model..... WPS80S  
 Structure type ..... R  
 Tank capacity..... 180L  
 Dry weight..... 1705kg  
 Noise level @7m ..... 68.1dBA  
 Dimensions L×W×H..... 2788x1130x1700mm  
 Standby Power ..... 83.75kVA/67kW  
 Prime Power ..... 80kVA/64kW

Voltage	380V	400V	415V	440V	
Ampere	121.6A	115.5A	111.3A	104.9A	
<b>Genset Fuel Consumption</b>					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	5.2	9.7	14.0	18.7	20.5

## Diesel Engine

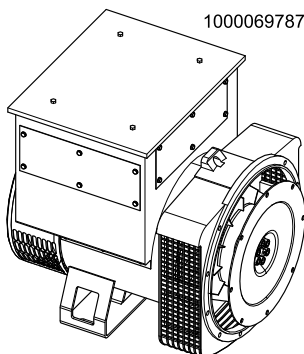
1000066267-AP1-A11



Engine Manufacturer/Brand.....	Perkins
Engine Model.....	1104A-44TG2
Dimensions L×W×H.....	1241×629×951mm
Dry Weigh (approx.).....	463kg
Number of Cylinders.....	4
Bore.....	105mm
Stroke.....	127mm
Displacement.....	4.4L
Compression Ratio.....	17.25
Type of Injection.....	Direct
Intake System.....	Turbocharged
Intake Resistance.....	≤8.0kPa
Cooling System.....	Water cooled
Fan.....	Pusher
Battery Voltage.....	12V
Type of Fuel.....	Part 2 1998 Class A2 or DIN EN 590
Type of Oil.....	API-CG4/ CH4
Oil Capacity.....	8.0L
Type of Coolant.....	Glycol mixture
Coolant Capacity.....	13L
Back Pressure.....	≤10kPa
Standby Powe.....	80.7kW
Prime Power.....	73.4kW
Fuel Consumption(100%load).....	18.7L/h

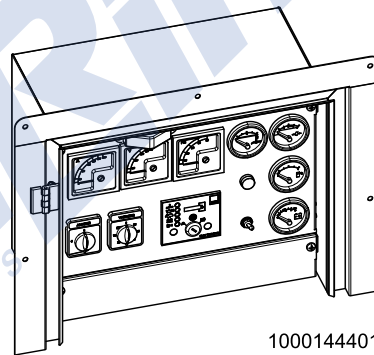
## Alternator

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Alternator Manufacturer/Brand.....	Leroy Somer
Alternator Model.....	LSA43.2L8
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.....	0.27m³/s(50Hz),0.32m³/s(60Hz)
Voltage Regulation.....	±0.5%
Total harmonic TGH / THC at no load < 2 % - on load < 2%	
Telephone Interference.....	THF<2%;TIF<50

## PLC-702 Control System



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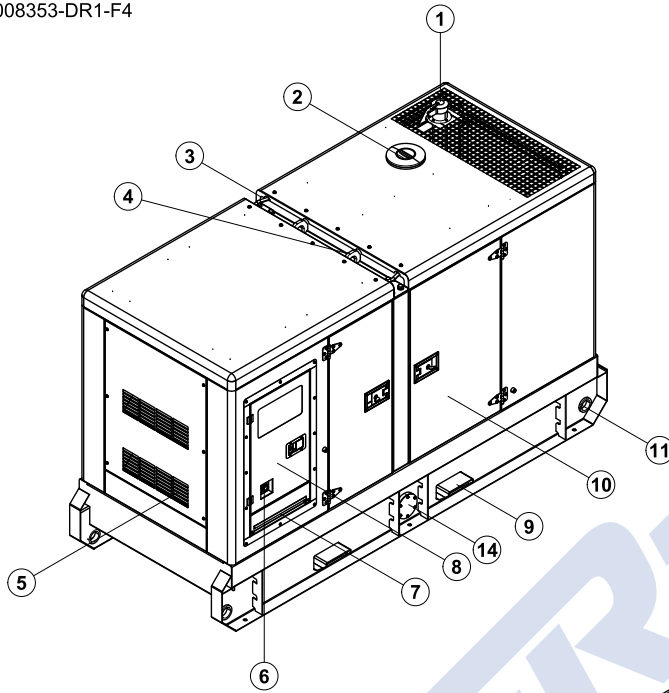
PLC-702 key manual start module is a manual engine control module designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

### Standard Control Function

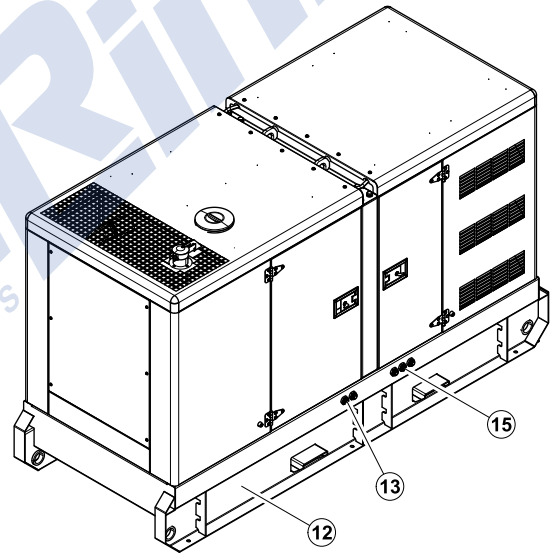
- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

## 4 Overall Dimensions

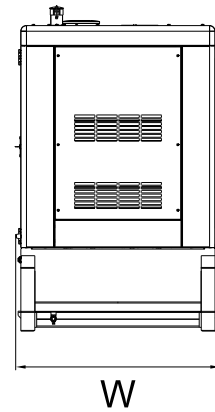
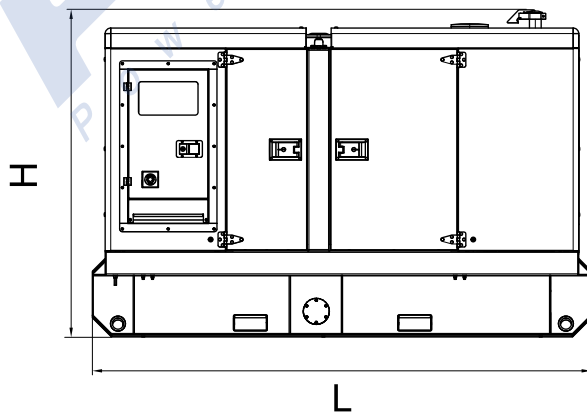
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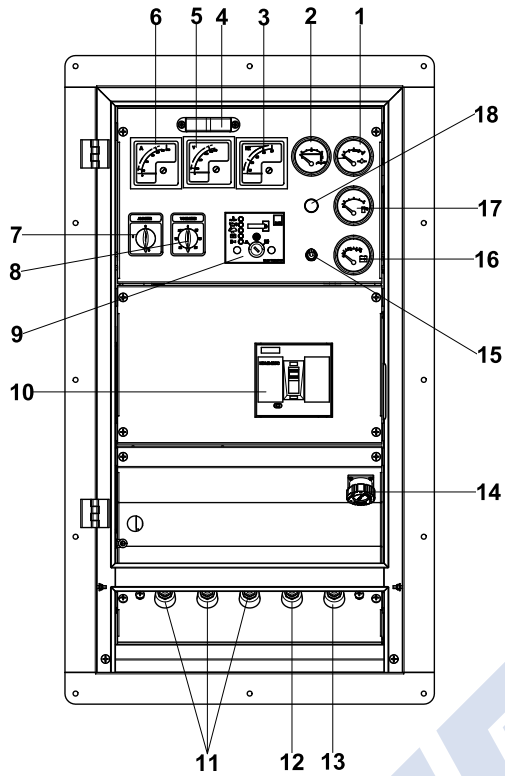
Dry weight	1705kg
Fuel tank capacity	180L
Dimensions L x W x H	2788x1130x1700mm



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

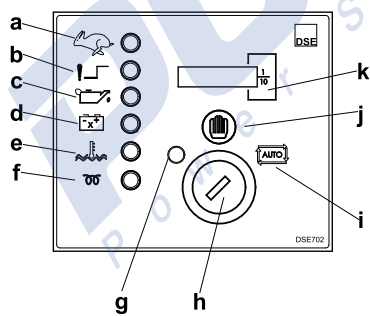


## 5 Control System



Ref.	Description
1	Oil pressure meter
2	Water temperature meter
3	Frequency meter
4	Control panel lamp
5	Voltage meter
6	Current meter
7	Ammeter change-over switch
8	Voltmeter change-over switch
9	PLC-702 control module
10	Main circuit breaker
11	Live wire terminals
12	Neutral wire terminal
13	Ground wire terminal
14	Mains input/remote communication connector
15	Control panel lamp switch
16	Battery voltage meter
17	Fuel level meter
18	Charge indicator

Control & field wiring cabinet



Control panel

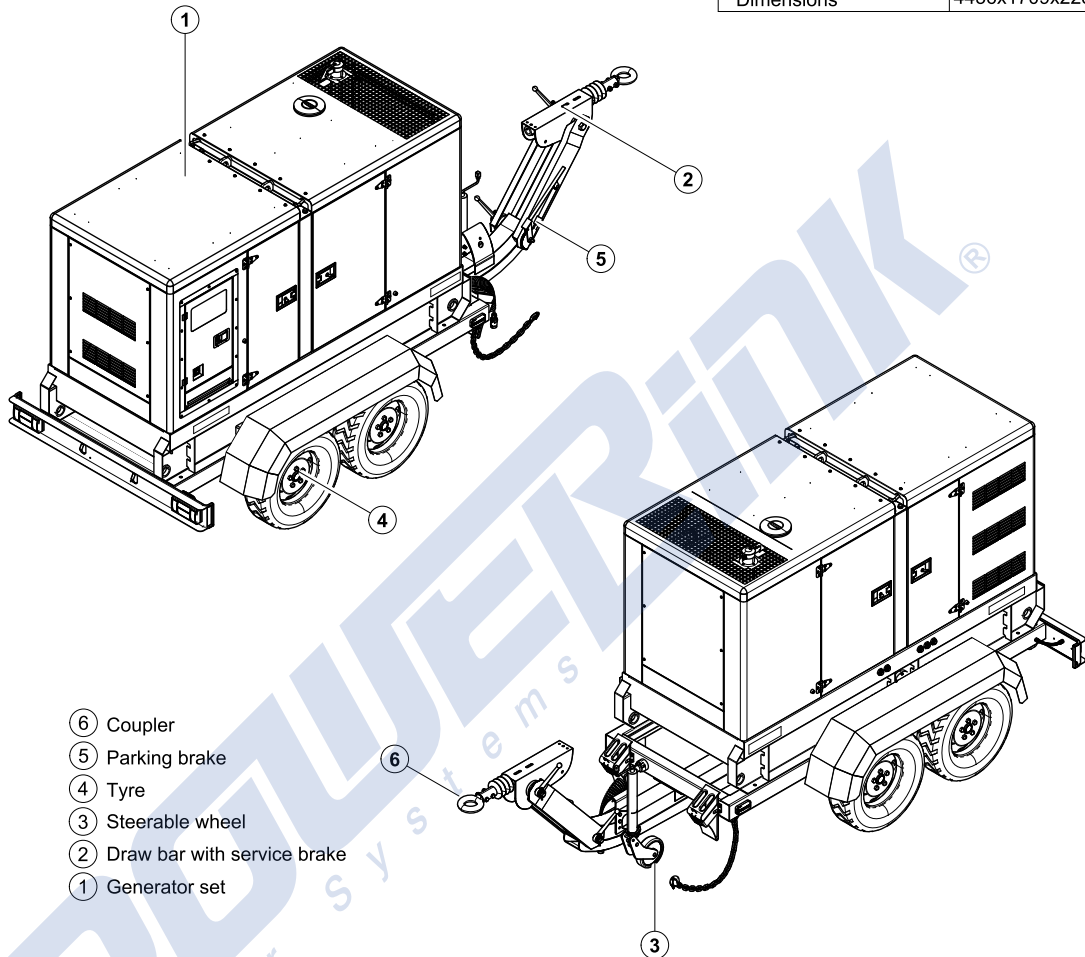
a	Over speed protection LED
b	Alarm LED
c	Low oil pressure protection LED
d	Charge failure warning LED
e	High engine temperature protection LED
f	Pre-heat LED
g	Stop model position
h	Control module key switch
i	Auto start position
j	Manual start button
k	Time counter

## 6 Trailer (Option)

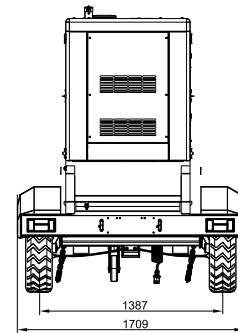
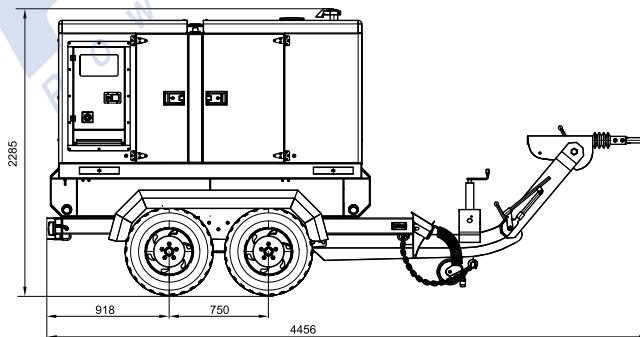
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 **HIGHWAY TYPE**

Dry weight (with trailer)	2273kg
Towing speed	≤ 80km/h
Tyre size	185R14LT
Dimensions	4456x1709x2285mm



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



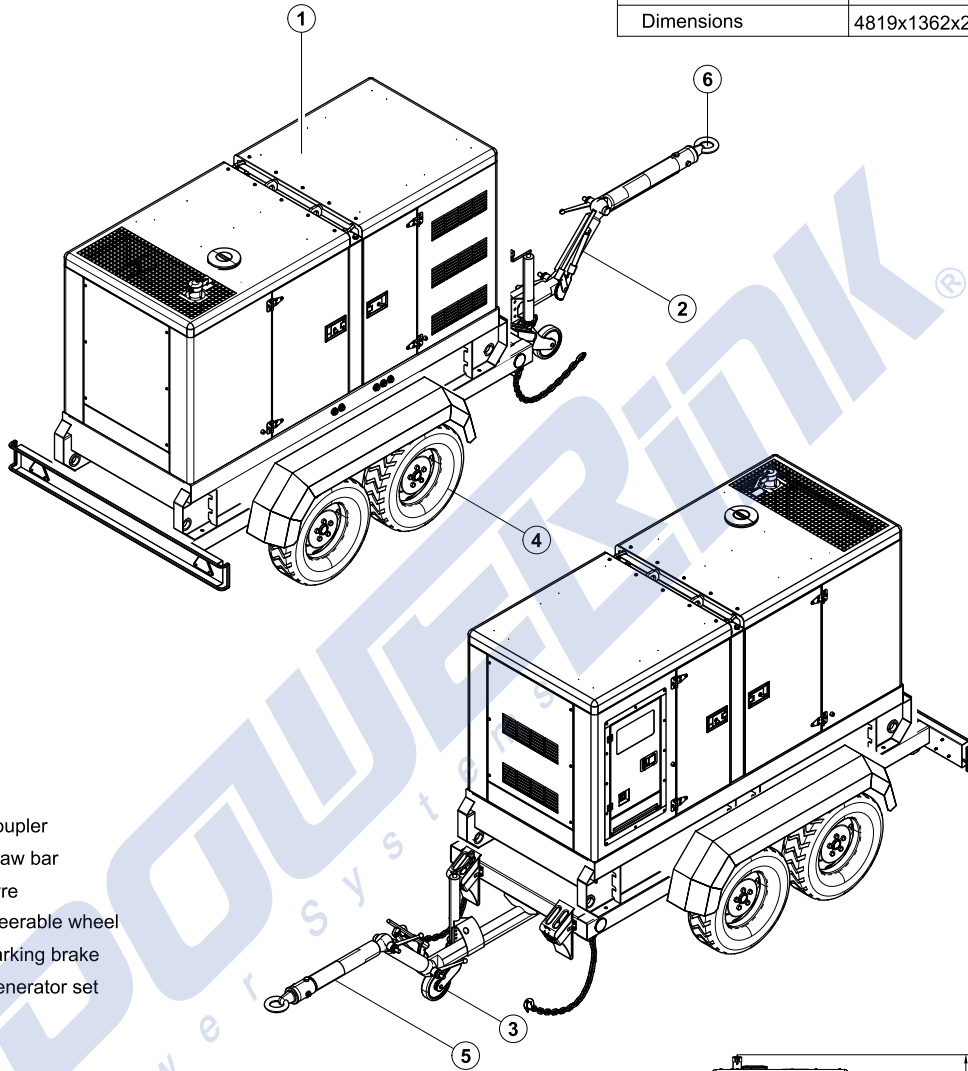
## 7 Trailer (Option)

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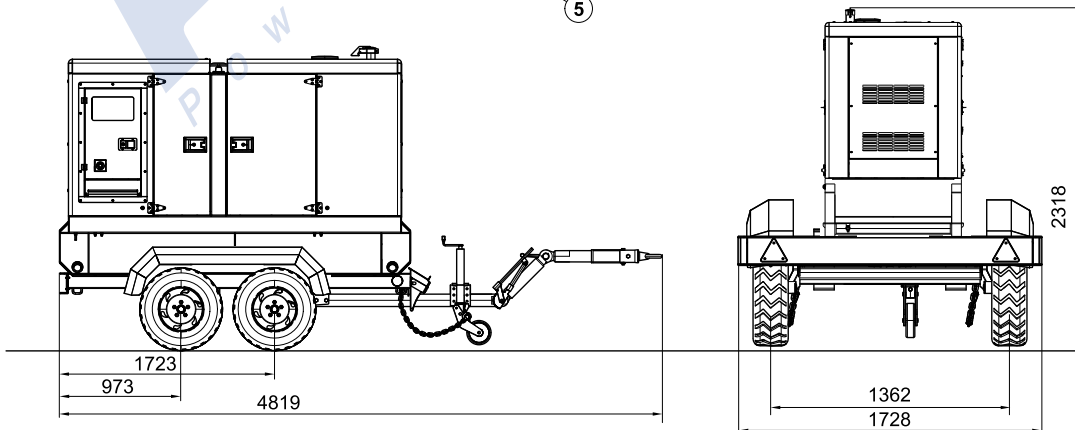


**NON-HIGHWAY TYPE**

Dry weight (with trailer)	2182kg
Towing speed	≤ 20km/h
Tyre size	185R14LT
Dimensions	4819x1362x2318mm



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



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02.2013
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