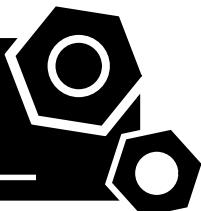


**Generator set**  
**Sound-proof type**  
**WPS450S-AU**

## **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- China Compulsory Certification (CCC)
- TLC Quality Certification (TLC)
- ISO8528-1995
- GB/T2820-1997
- AS 3000-1997
- AS 3010.1-1988

### 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 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.

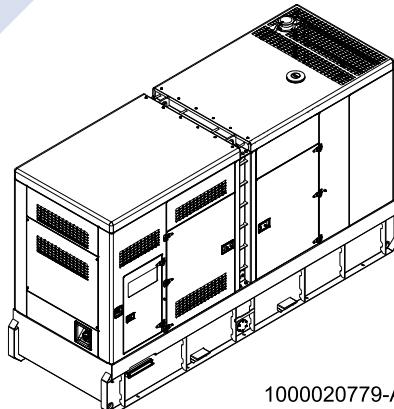
## 2 General Features

- Perkins engine 2506C-E15TAG1
- Close coupled to a Leroy Somer alternator LSA47.2S5
- Microprocessor control module PLC-7320
- NADER main circuit breaker: 3-Phase 700A
- 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
- 2x12V 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 14 hours running
- Drain points for fuel tank
- Breather valve for fuel tank
- Operation Manual / Parts List / Specifications

## 3 Equipment Specification

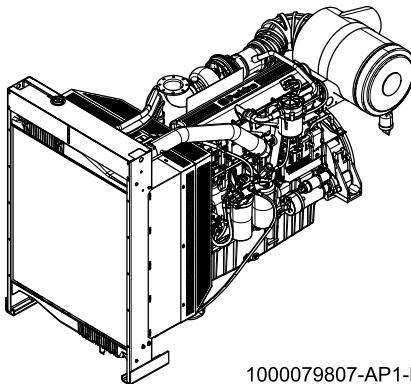
### General technical data



1000020779-AP1-C2

Model.....	WPS450S-AU
Structure type .....	R
Tank capacity.....	1600L
Dry weight.....	5268.6kg
Noise level @7m .....	69.4dBA
Dimensions L×W×H.....	4512x1500x2539mm
Standby Power .....	495kVA/396kW
Prime Power .....	450kVA/360kW
Voltage/Ampere .....	415V/626A

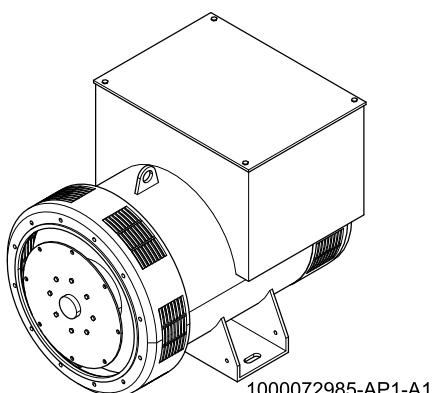
## Diesel Engine



1000079807-AP1-B3

Engine Manufacturer/Brand.....	Perkins
Engine Model.....	2506C-E15TAG1
Dimensions L×W×H.....	2657×1120×1718mm
Dry Weigh (approx.) .....	1633kg
Number of Cylinders.....	6
Bore .....	137mm
Stroke .....	171mm
Displacement.....	15.2L
Compression Ratio.....	16
Type of Injection .....	MEUI
Intake System.....	Turbocharged, air-to-air charge cooled
Intake Resistance.....	$\leq 6.2\text{kPa}$
Cooling System .....	Water cooled
Fan .....	Pusher
Battery Voltage .....	24V
Type of Fuel.....	BS2869 class A2 or BS EN590
Type of Oil .....	API CI4 or ACEA E5
Oil Capacity .....	.62L
Type of Coolant .....	Glycol Mixture
Coolant capacity .....	.58L
Back Pressure .....	$\leq 6.8\text{kPa}$
Standby Power .....	.451kW
Continuous Power .....	.412kW
Fuel Consumption(100%load).....	216g/kW.h

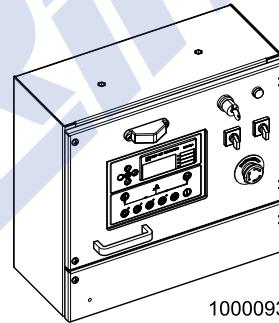
## Alternator



1000072985-AP1-A1

Alternator Manufacturer/Brand .....	Leroy Somer
Alternator Model .....	LSA47.2S5
Exciter.....	Brushless
Cooling Fan .....	Cast alloy aluminum
Windings.....	100% copper
Insulation Class .....	H
Winding Pitch.....	.2/3
Terminals .....	12
Drip Proof .....	IP23
Altitude.....	$\leq 1000\text{m}$
Overspeed .....	.2250rpm
Air Flow.....	.0.9m³/s(50Hz),1.1m³/s(60Hz)
Voltage Regulation .....	$\pm 0.5\%$
Total harmonic TGH / THCat no load < 1,5 % - on load < 2 %	
Telephone Interference.....	THF<2%;TIF<50

## PLC-7320 Control System



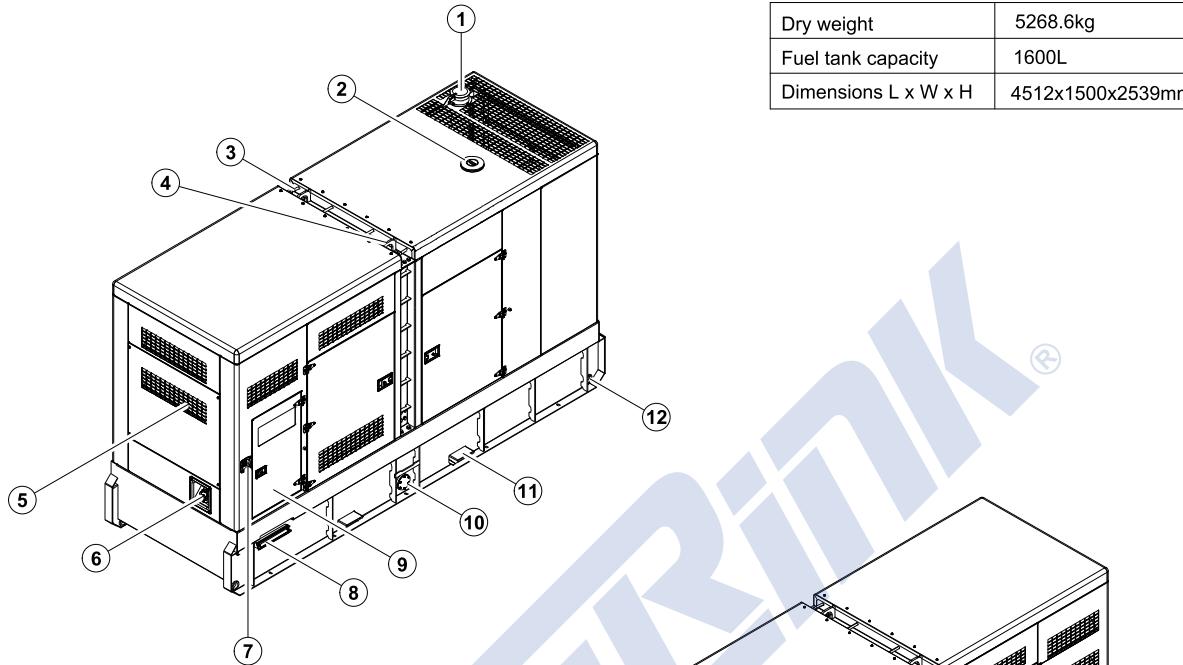
1000093775-AP1-A1

PLC-7320 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.

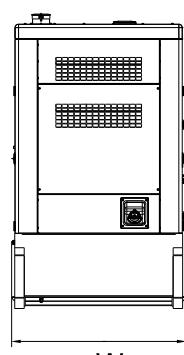
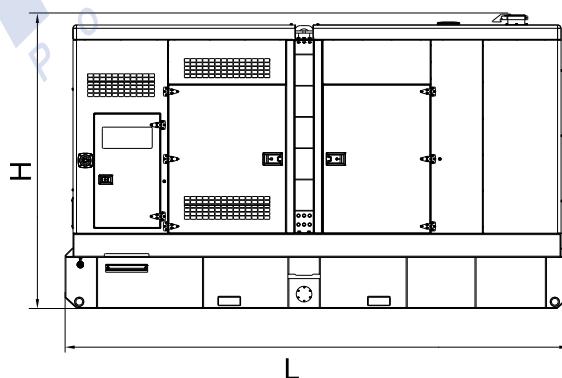
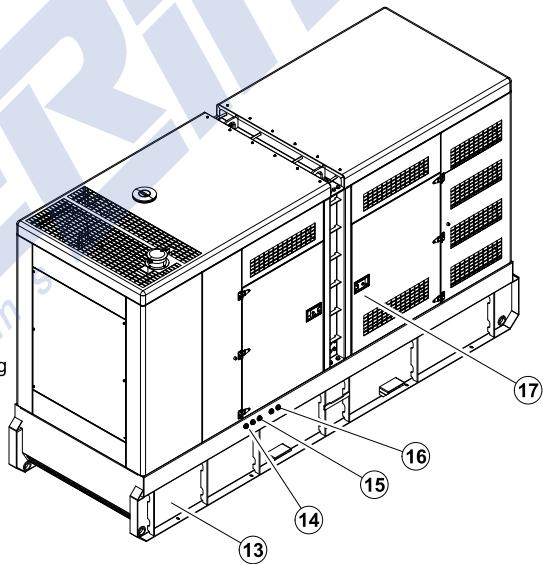
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, 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

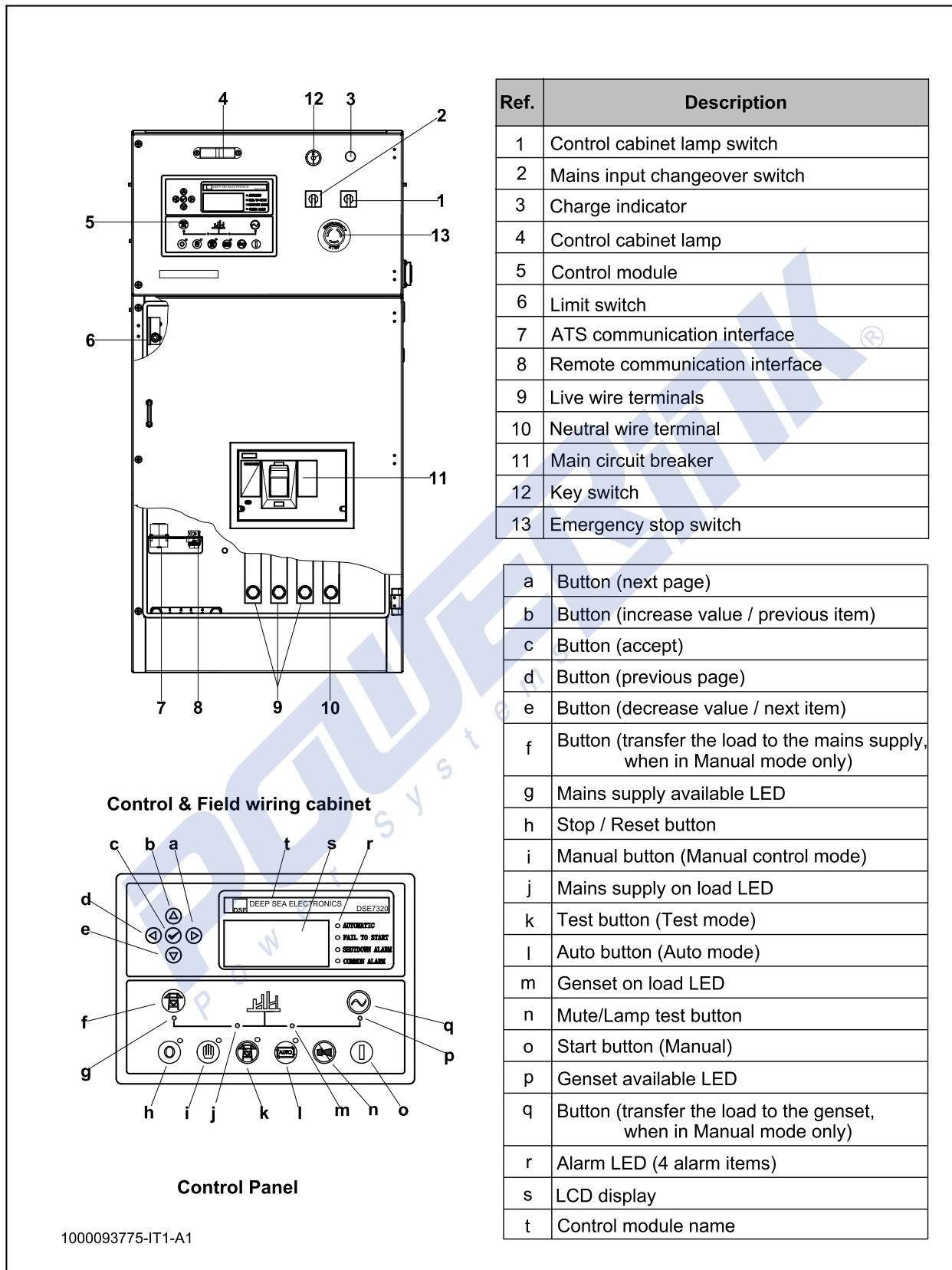
1000020779-DR1-C2



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



## 5 Control System



1000020779-C2-E

04.2011



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