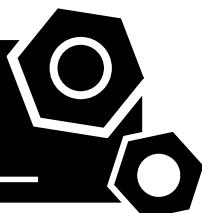


**Generator set  
Containerized type  
WPS1500S**

## **SPECIFICATIONS**



## 1 Standards & Conditions

### Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (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.

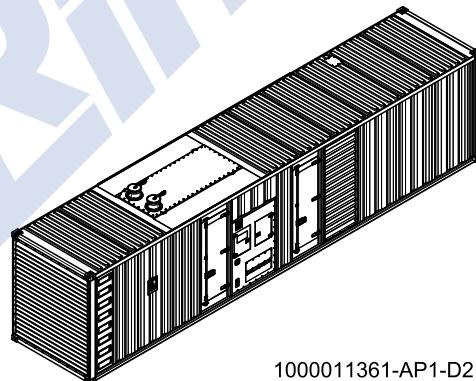
## 2 General Features

- Perkins engine 4012-46TAG2A
- Close coupled to a Leroy Somer alternator LSA50.2L8
- Microprocessor control module PLC-7320
- ABB main circuit breaker: 3-Phase 2500A
- Rotate speed governor: Electronic fuel injection governor
- Excitation system: AREP
- A.V.R model: R448
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 4x12V sealed for life maintenance free battery
- Lockable battery isolator switch

- Powder coated canopy
- 50°C radiator
- Fire extinguisher
- Oil pump on the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Fuel tank for 6 hours running
- Drain points for fuel tank
- Fuel inlet pump and it's control box for the fuel tank
- Added fuel-water separator for fuel tank
- Operation Manual / Parts List / Specifications

## 3 Equipment Specification

### General technical data



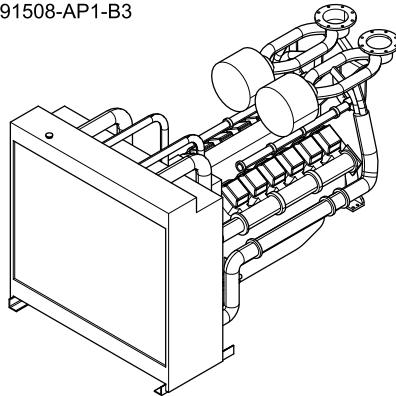
1000011361-AP1-D2

|                       |                   |
|-----------------------|-------------------|
| Model.....            | WPS1500S          |
| Structure type .....  | C                 |
| Tank capacity.....    | 2000L             |
| Dry weight.....       | 20545kg           |
| Noise level @7m ..... | 75.6dBA           |
| Dimensions L×W×H..... | 12192×2438×3150mm |
| Standby Power .....   | 1575kVA/1260kW    |
| Prime Power .....     | 1500kVA/1200kW    |

| Voltage                        | 380V    | 400V    | 415V    | 440V    |
|--------------------------------|---------|---------|---------|---------|
| Ampere                         | 2279.1A | 2165.1A | 2086.9A | 1968.3A |
| <b>Genset Fuel Consumption</b> |         |         |         |         |
| Frequency/Load                 | 25%     | 50%     | 75%     | 100%    |
| 50Hz (L/h)                     | N/A     | 162.0   | 237.0   | 301.0   |
|                                |         |         |         | 335.0   |

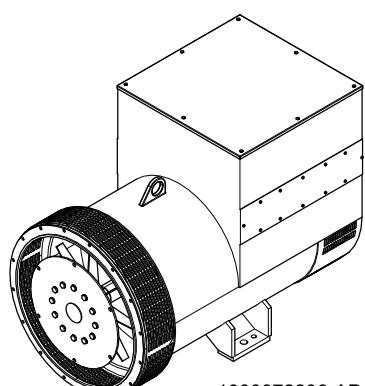
## Diesel Engine

1000091508-AP1-B3



|                                 |                                  |
|---------------------------------|----------------------------------|
| Engine Manufacturer/Brand.....  | Perkins                          |
| Engine Model.....               | 4012-46TAG2A                     |
| Dimensions L×W×H.....           | 3971×2192×2260mm                 |
| Dry Weigh (approx.) .....       | 6000kg                           |
| Number of Cylinders.....        | 12                               |
| Bore .....                      | 160mm                            |
| Stroke.....                     | 190mm                            |
| Displacement.....               | 45.84L                           |
| Compression Ratio.....          | 13                               |
| Type of Injection .....         | Direct injection                 |
| Intake System.....              | Turbocharged                     |
| Intake Resistance.....          | ≤0.4kPa                          |
| Cooling System .....            | Water cooled                     |
| Fan .....                       | Pusher                           |
| Battery Voltage .....           | 24V                              |
| Type of Fuel.....               | BS2869 1998 Class A2 or BS EN590 |
| Type of Oil .....               | API CH4 15W/40                   |
| Oil Capacity .....              | 177L                             |
| Type of Coolant .....           | Glycol mixture                   |
| Coolant capacity .....          | 210L                             |
| Back Pressure .....             | ≤0.5kPa                          |
| Standby Power .....             | 1459kW                           |
| Prime Power .....               | 1331kW                           |
| Fuel Consumption(100%load)..... | 201g/kW.H                        |

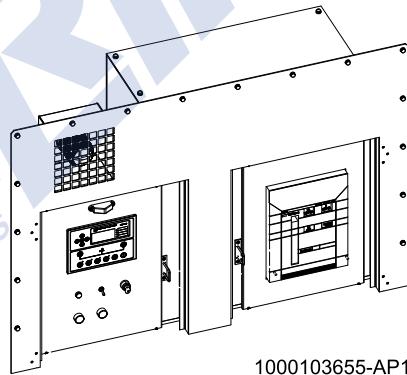
## Alternator



1000072236-AP1-A1

|                                     |                             |
|-------------------------------------|-----------------------------|
| Alternator Manufacturer/Brand ..... | Leroy Somer                 |
| Alternator Model .....              | LSA50.2L8                   |
| Exciter.....                        | Brushless                   |
| Cooling Fan .....                   | Cast alloy aluminum         |
| Windings .....                      | 100% copper                 |
| Insulation Class .....              | H                           |
| Winding Pitch.....                  | 2/3                         |
| Terminals .....                     | 6                           |
| Drip Proof .....                    | IP23                        |
| Altitude.....                       | ≤1000m                      |
| Overspeed .....                     | 2250rpm                     |
| Air Flow.....                       | 1.8m³/s(50Hz),2.2m³/s(60Hz) |
| Voltage Regulation .....            | ±0.5%                       |
| Total harmonic TGH / THC .....      | < 3.5%                      |
| Telephone Interference.....         | THF<2%;TIF<50               |

## PLC-7320 Control System



1000103655-AP1-C4

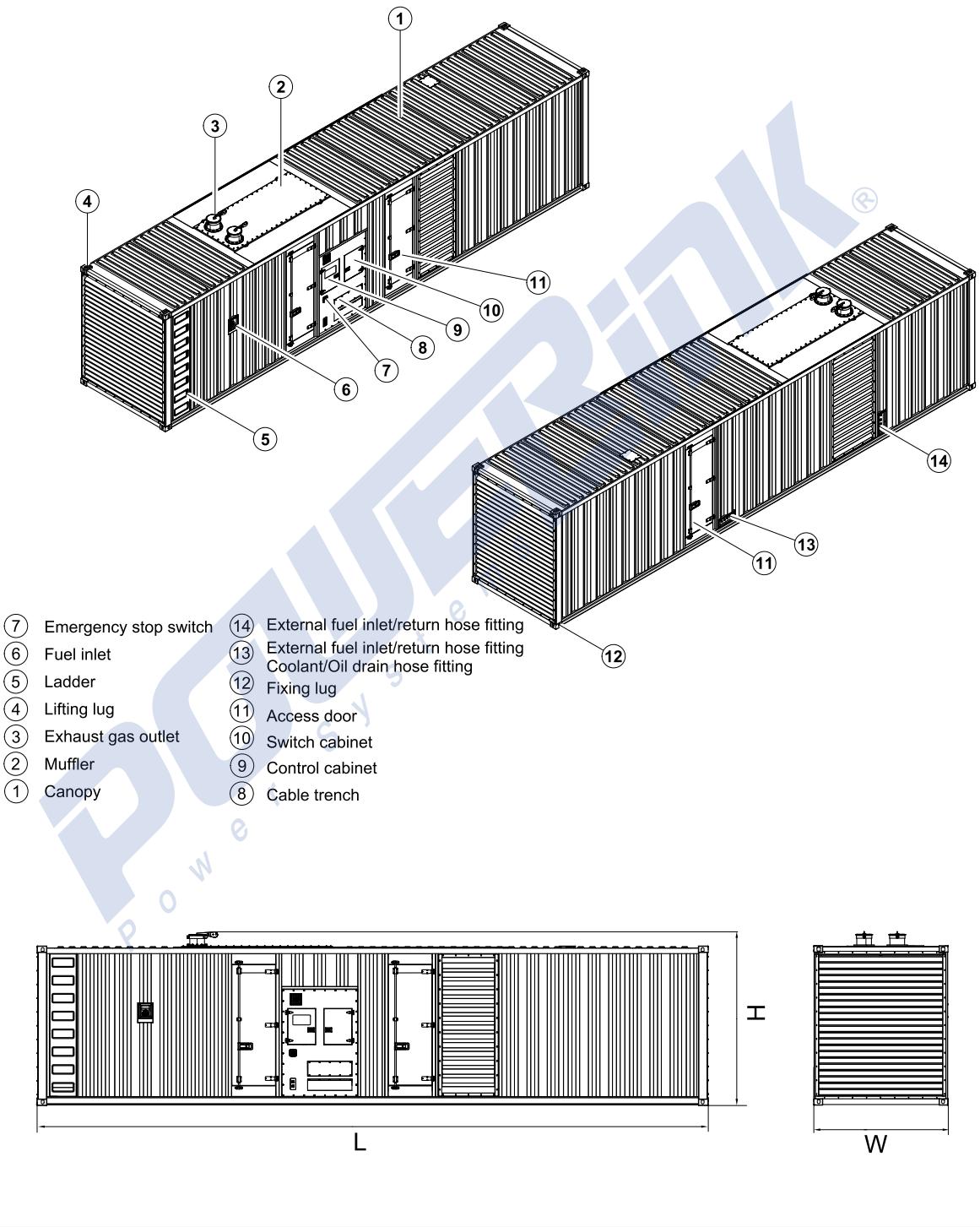
PLC-7320 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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

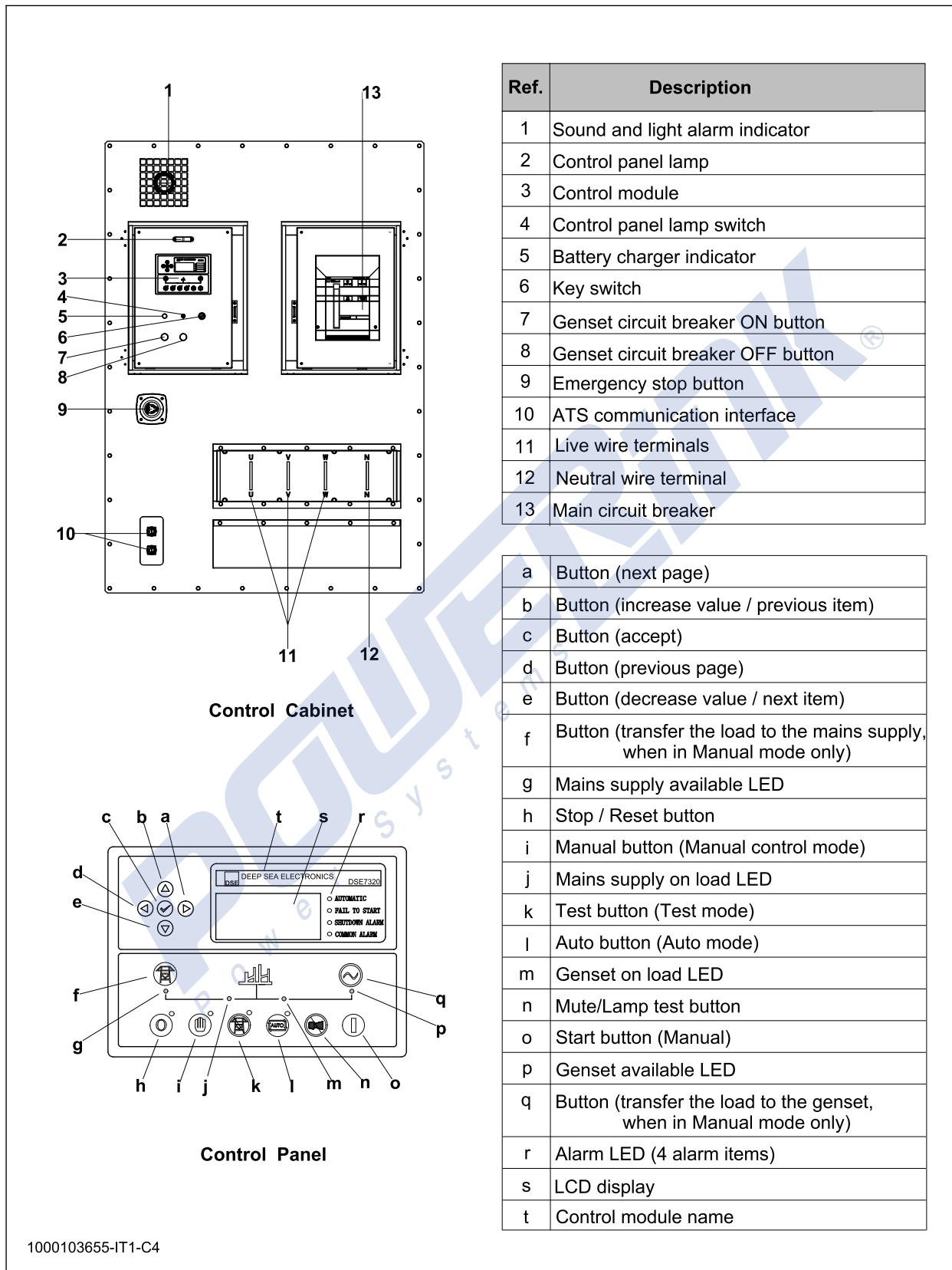
## 4 Overall Dimensions

1000011361-DR1-D2

|                      |                   |
|----------------------|-------------------|
| Dry weight           | 20545kg           |
| Fuel tank capacity   | 2000L             |
| Dimensions L x W x H | 12192x2438x3150mm |



## 5 Control System



1000011361-D2-E

07.2012



<http://www.powerlinkworld.com>

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

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