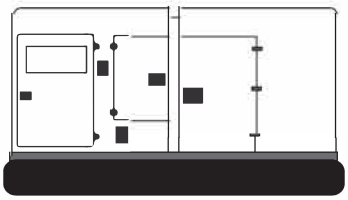
POWERLINK
Power Systems



Generator set

Sound-proof type

WPS600S

SPECIFICATIONS

EP series
WPS600S
50 Hz @ 1500rpm,3-phase/4-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO9001:2015

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25℃ to 50℃. The coolant heater is needed when the temperature is below 5℃
- 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

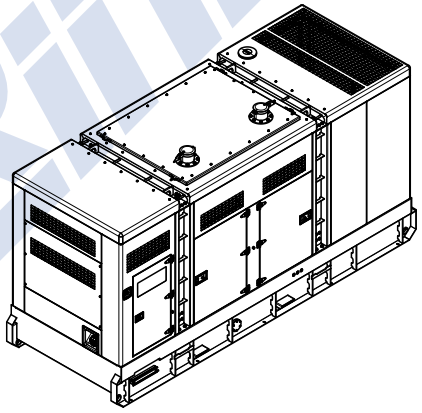
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Perkins engine 2806A-E18TAG1A
- Close coupled to a Leroy Somer alternator LSA47.2L9
- Microprocessor control module PLC-7420
- Main circuit breaker: 1000A
- Rotate speed governor: Electronic governor
- Excitation System: SHUNT
- A.V.R.Model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 2*12V sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50℃ 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 13 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data



Model.....WPS600S

Structure type .....R

Tank capacity.....1650L

Dry weight.....6433kg

Sound pressure level @7m .....77.7dB(A)

Dimensions L×W×H.....4692x1763x2516mm

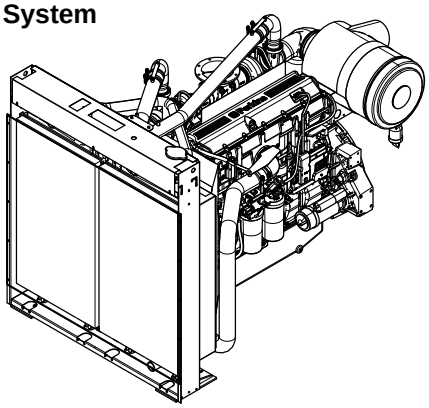
Standby Power 660kVA/528kW

Prime Power.....600kVA/480kW

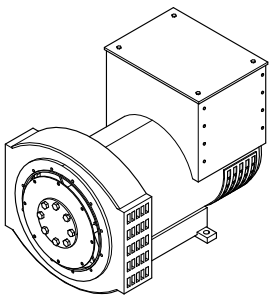
Voltage	380V	400V	415V	440V
Ampere	917A	866A	835A	787A

Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	61	90	123	134

Power System

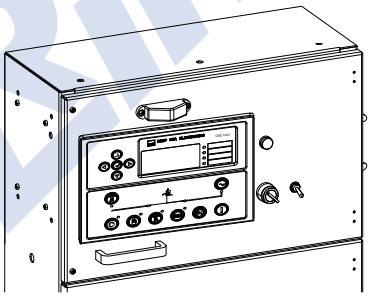


Engine Manufacturer/Brand.....Perkins
Engine Model..... 2806A-E18TAG1
Dimensions L×W×H.....2545×1536×1807mm
Dry Weight (approx.) 2050kg
Number of Cylinders.....6
Bore 145mm
Stroke 183mm
Displacement.....15.2L
Compression Ratio 14.5
Type of injection..... Direct injection
Intake System..... Turbocharged,air-to-air charge cooled
Cooling System .....Water cooled
Fan ..... Pusher
Battery Voltage 24V
Type of Fuel..... BS2869 class A2 or BS EN590
Type of Oil ..... API CG4/ APEA E5
Oil Capacity 62.0L
Type of Coolant .....Glycol mixture
Coolant Capacity 61.0L
Standby Power 593.0kW
Prime Power.....540.0kW
Fuel Consumption(100%load).....123.0L/h



Alternator Manufacturer/Brand ..... Leroy Somer
Alternator Model LSA47.2L9
Exciter..... Brushless
Cooling Fan ..... Cast alloy aluminum
Windings.....100% copper
Insulation Class ..... H
Winding Pitch.....2/3
Drip Proof IP23
Altitude.....≤1000m
Overspeed 2250rpm
Air Flow..... 0.8m³/s(50HZ),0.99m³/s(60HZ)
Voltage Regulation .....±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%
Telephone Interference..... THF<2%;TIF<50

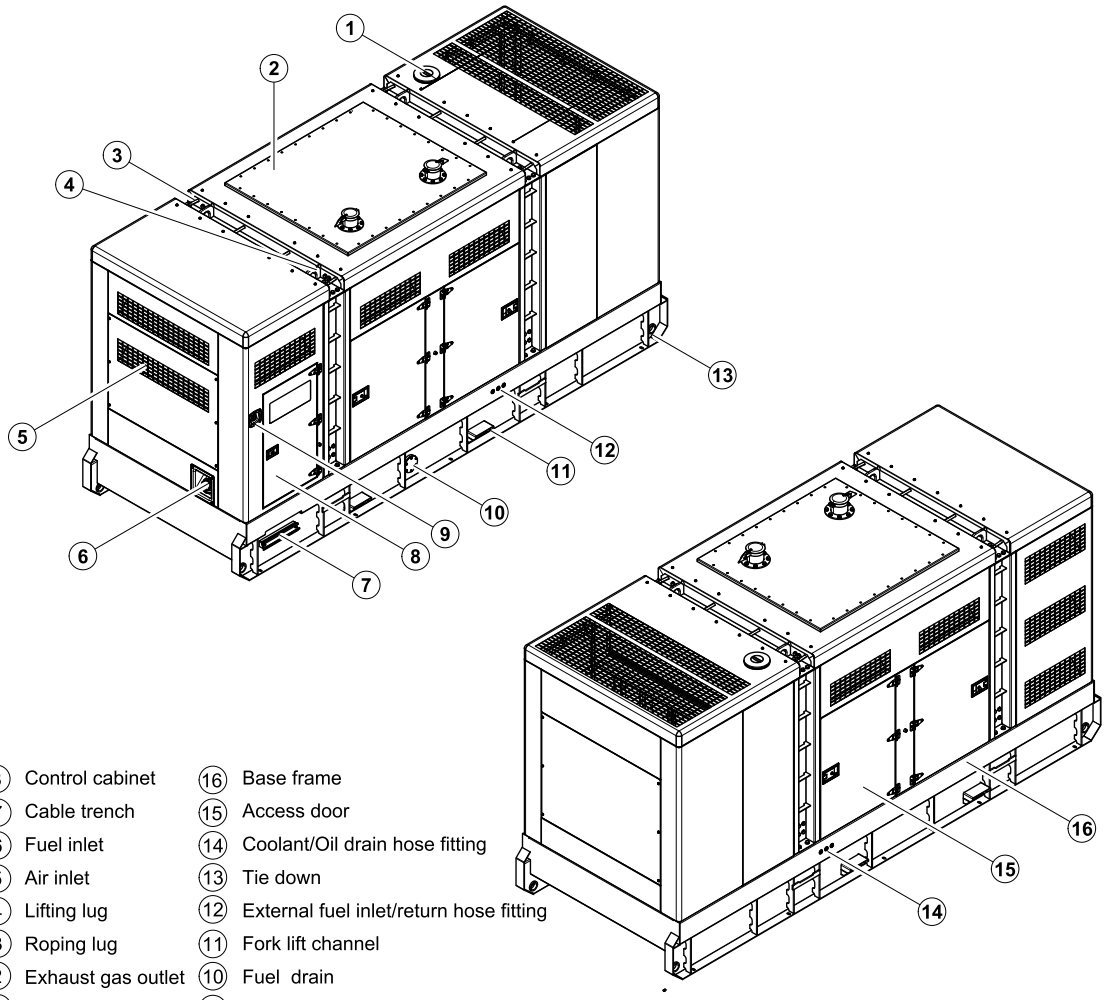
PLC-7420 Control System



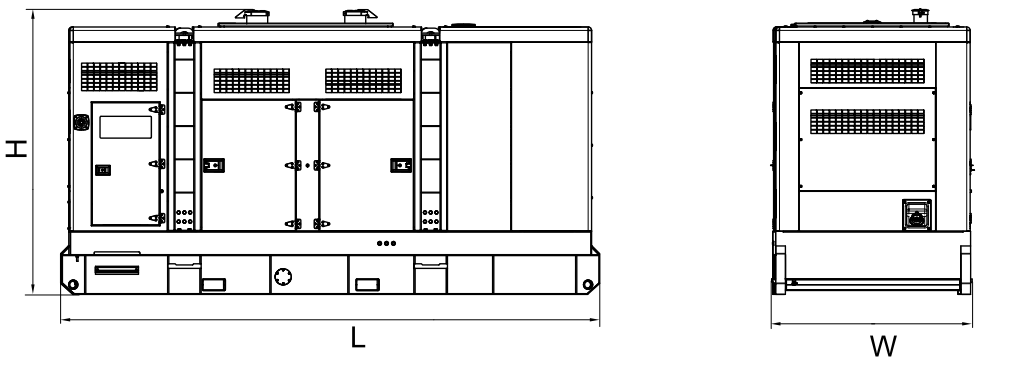
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

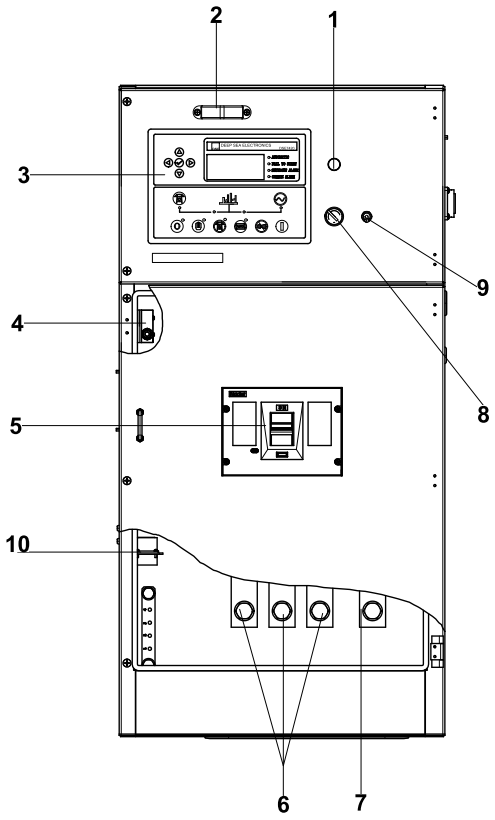
4 Overall Dimensions



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

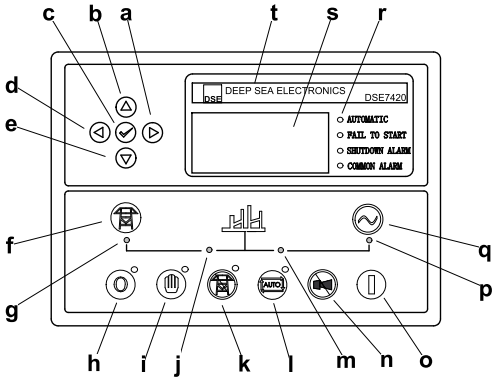


5 Control System



Control & field wiring cabinet

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



Control Panel

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

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