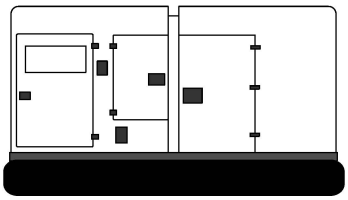
POWERLINK
Power Systems



Generator set

Sound-proof type

WPS56D6S-EPA

SPECIFICATIONS

T3 series
WPS56D6S-EPA
60 Hz @ 1800rpm,3-phase/5-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

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

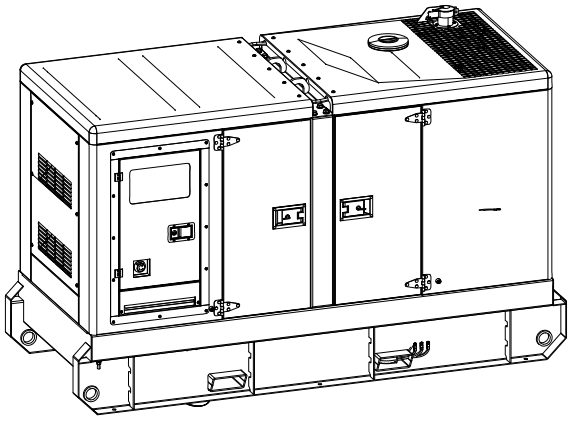
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- Perkins engine 1104D-44TG1
- Close coupled to Leroy Somer alternator LSA42.3L9
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 250A
- Rotate speed governor: ECU
- Excitation system: Self excited , SHUNT
- A.V.R model: R220
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/120AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Power 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 8 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

General technical data



Model..... WPS56D6S-EPA

Structure type ..... R

Tank capacity.....180L

Dry weight..... 1616kg

Noise level @7m 69.7dBA

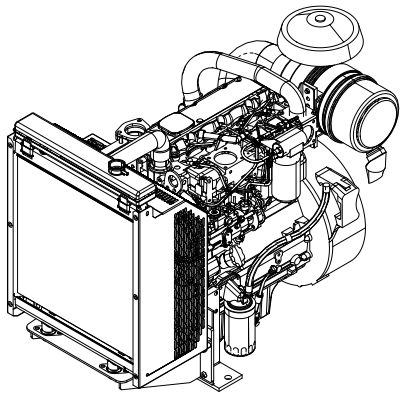
Dimensions L×W×H..... 2600x1113x1617mm

Standby Power 71kVA/57kW

Voltage	208V	220V	230V	240V
Ampere	155.5A	147.0A	140.6A	134.7A

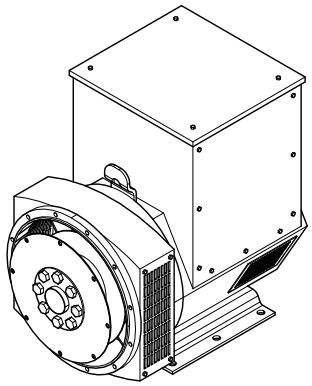
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
60Hz (L/h)	5.6	11.2	16.9	22.3	24.5

Diesel engine



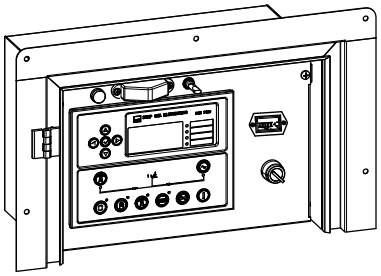
Engine Manufacturer/Brand.....Perkins
Engine Model..... 1104D-44TG1
Dimensions L×W×H.....1238×967×637mm
Dry Weigh (approx.) .....N/A
Number of Cylinders.....4
Bore 105mm
Stroke 127mm
Displacement.....4.41L
Compression Ratio.....18.2
Type of Injection ..... Direct
Intake System..... Turbocharged
Intake Resistance .....N/A
Cooling System .....Water cooled
Fan ..... Pusher
Battery Voltage 12V
Type of Fuel.....BS 2869 Class 2 or ASTM D975 D2
Type of Oil .....API CH4/ACEA E5
Oil Capacity 8.4L
Type of Coolant .....Glycol mixture
Coolant Capacity 13.2L
Back Pressure .....N/A
Standby Power 64kW
Prime Power 58kW
Fuel Consumption(100%load).....16.6L/h

Alternator



Alternator Manufacturer/Brand .....Leroy Somer
Alternator Model LSA42.3L9
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.....0.216 m³/sec(50Hz),0.281 m³/sec(60Hz)
Voltage Regulation .....±1.0%
Total Harmonic TGH / THCat no load < 1.5 % - on load < 5%
Telephone Interference..... THF<2%;TIF<50

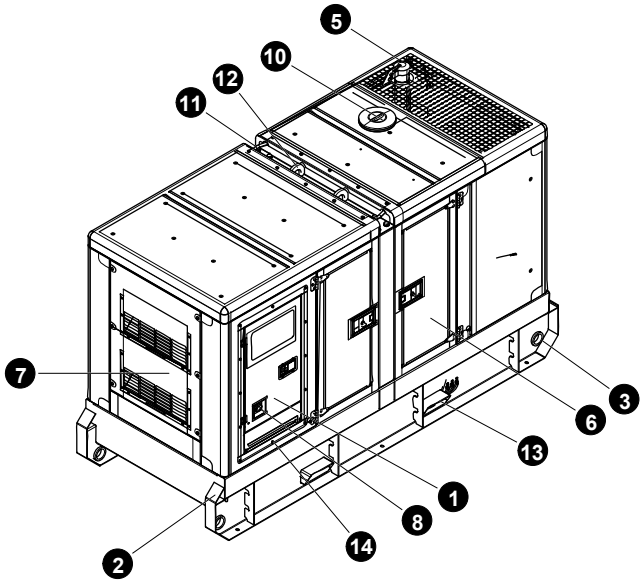
PLC-7420 Control System

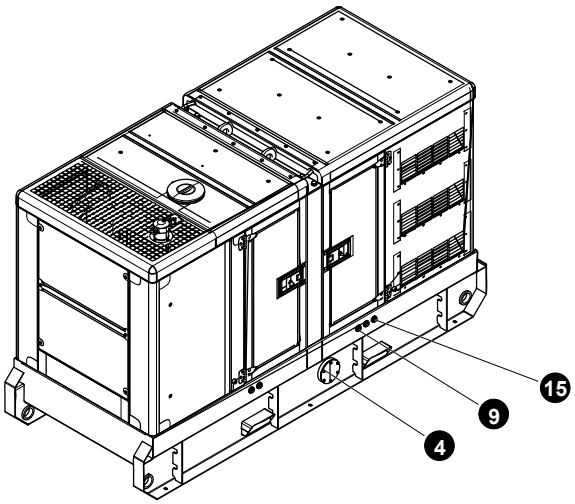


PLC-7420 is an advanced control module based on microprocessor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

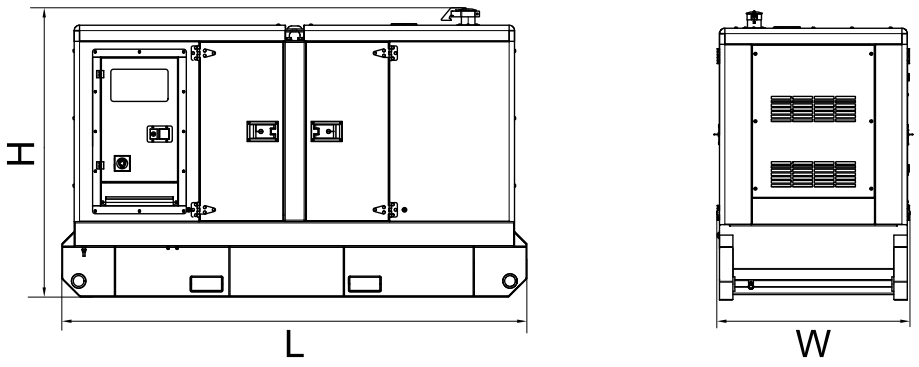
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual,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

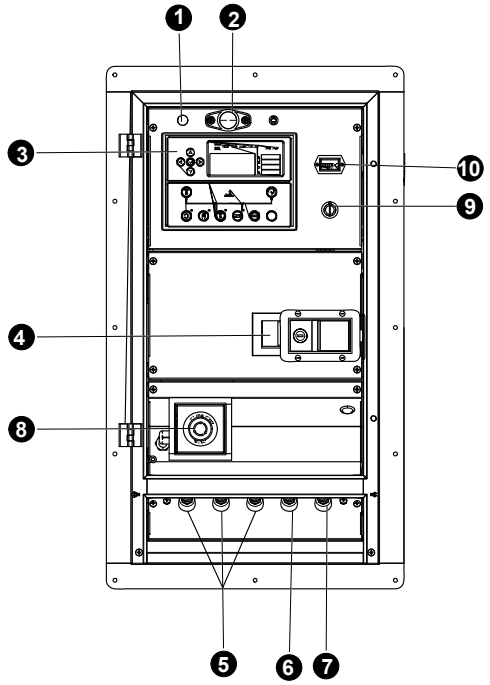




(8) Emergency stop switch
(7) Air inlet
(6) Access door
(5) Exhaust gas outlet
(4) Fuel drain
(3) Tie down
(2) Base frame
(1) Control cabinet
(15) External fuel inlet/return hose fitting
(14) Cable trench
(13) Fork lift channel
(12) Lifting lug
(11) Roping lug
(10) Coolant inlet
(9) Coolant/Oil drain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

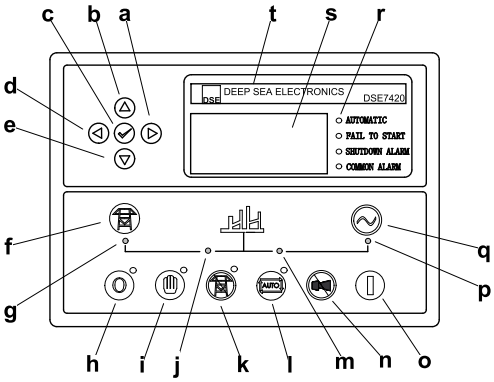


5 Control System



Control & field wiring cabinet

Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control module
4	Main circuit breaker
5	Live wire terminals
6	Neutral wire terminal
7	Ground wire terminal
8	Emergency stop button
9	Key switch
10	Time counter



Control module

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

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