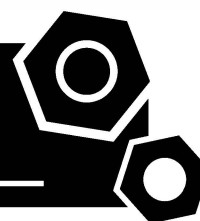


Generator set
Sound-proof type
WPS10D6S-EPA

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- ISO8528
- GB/T2820
- YD/502-2007
- JB/T20136-2006

Electrical devices have obtained the certification of:

- CSA
- UL

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.

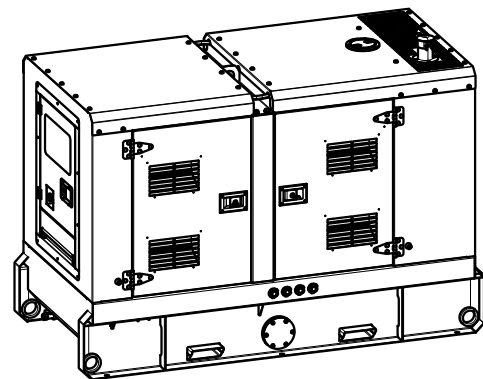
2 General Features

- Perkins engine 403D-11G
- Close coupled to Stamford alternator S0L1-L
- Microprocessor control module PLC-7420
- ABB main circuit breaker: 32A
- Rotate speed governor: Mechanical governor
- Excitation System: Self-Excited
- A.V.R. model: AS540
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/72AH 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 forklifts
- Vibration isolators between the engine/alternator and base frame
- Dry type air
- Base fuel tank for 33 hours running
- Drain points for fuel tank
- Operation Manual /

3 Equipment Specification

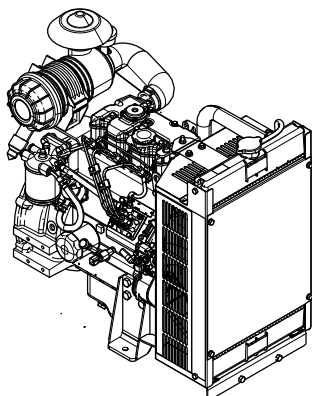
General technical data



Model.....WPS10D6S-EPA
Structure typeRS
Tank capacity.....100L
Dry weight.....636.6kg
Noise level @7m66.7dBA
Dimensions L×W×H.....1832x830x1308mm
Standby Power12kVA/10kW
Prime Power11kVA/9kW

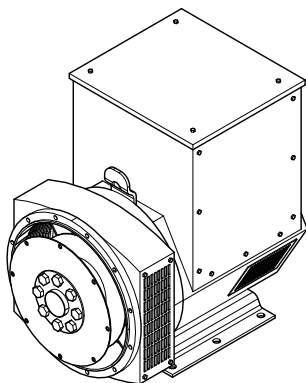
Voltage	208V	220V	230V	240V	
Ampere	31A	29A	28A	26A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
60Hz (L/h)	N/A	1.7	2.3	3.0	3.6

Diesel engine



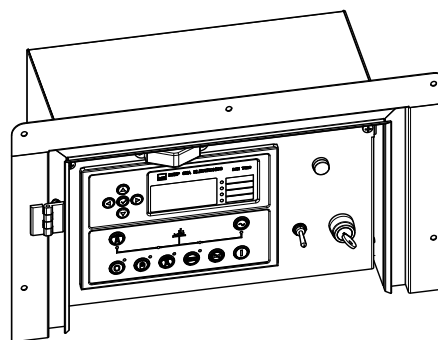
Engine Manufacturer/Brand.....	Perkins
Engine Model.....	403D-11G
Dimensions L×W×H.....	776×449×700mm
Dry Weigh (approx.)	129.2kg
Number of Cylinders.....	3
Bore.....	77mm
Stroke	81mm
Displacement.....	1.13L
Compression Ratio.....	23
Type of Injection	Indirect injection
Intake System.....	Natural aspirated
Intake Resistance.....	≤6.4kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	EPA2D 89.330-96/CEC RF-06-99
Type of Oil	API-CH-4/ ACEA E5
Oil Capacity	4.9L
Type of Coolant	Glycol mixture
Coolant Capacity	5.2L
Back Pressure	≤10.2kPa
Standby Power	11.8kW
Fuel Consumption(100%load).....	248g/kWh

Alternator



Alternator Manufacturer/Brand	Stamford
Alternator Model	S0L1-L
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.....	0.06m³/s(50HZ),0.072m³/s(60HZ)
Voltage Regulation	±1.0%
Total harmonic TGH / THC at no load < 3 % - on load < 2%	
Telephone Interference.....	THF<2%;TIF<50

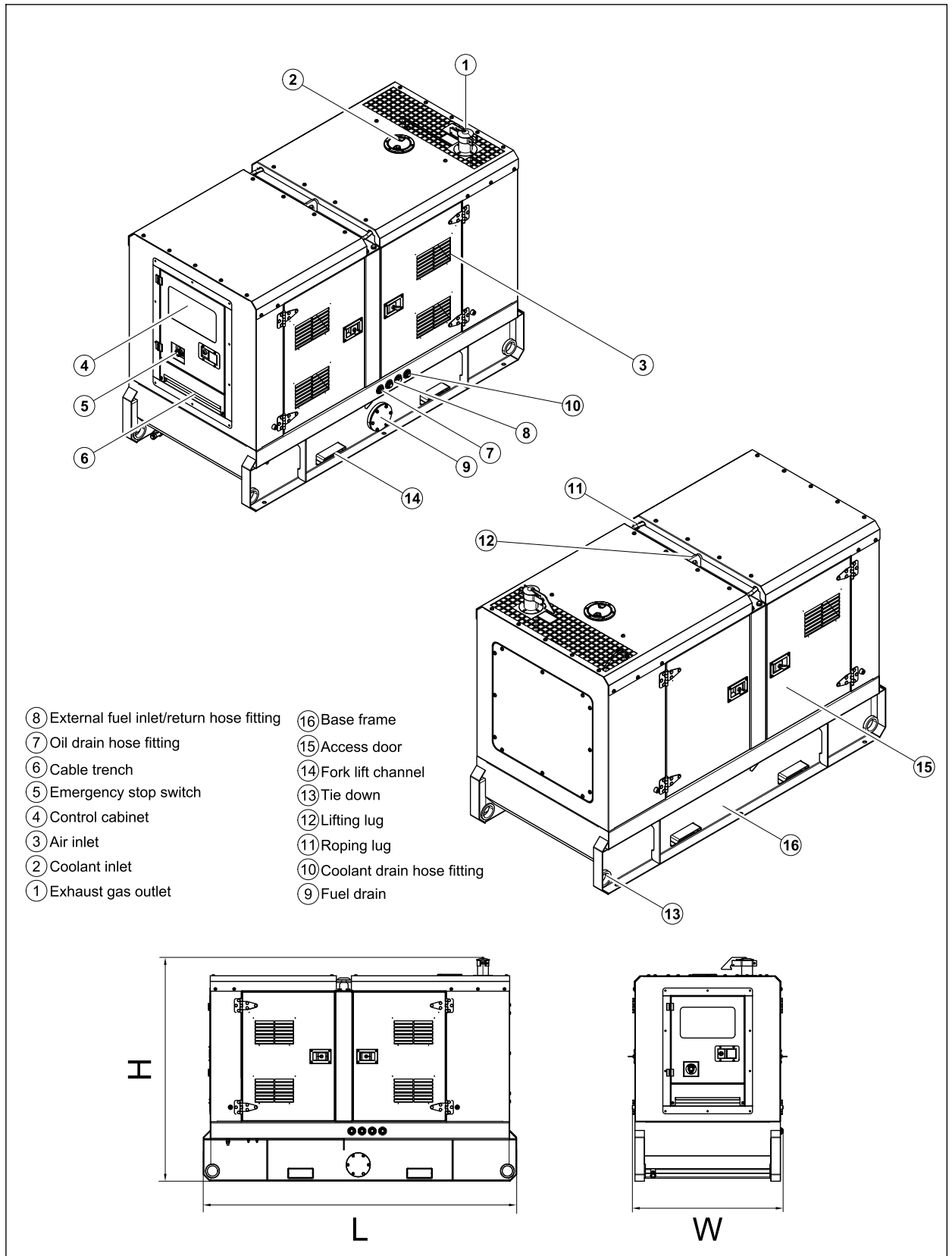
PLC-7420 Control System



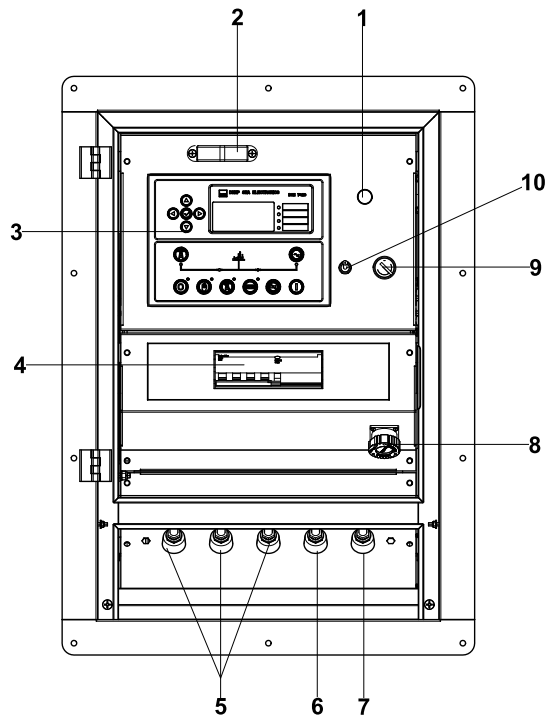
PLC-7420 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and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

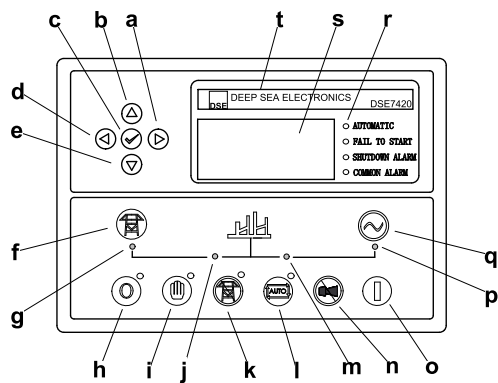
4 Overall Dimensions



5 Control System



Control & field wiring cabinet



Control module

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	Mains input/remote/AMF communication connector
9	Key switch
10	Control cabinet lamp switch

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

1000022646–A1–E
03.2023