

Generator set
Sound-proof type
WPS29D6S-EPA

SPECIFICATIONS





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°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.

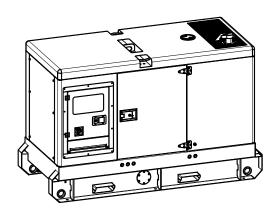
2 General Features

- Perkins engine 404D-22TG
- Close coupled to Leroy-somer alternator LSA 42.3 VS2
- Microprocessor control module PLC-920
- ABB main circuit breaker: 100A
- Rotate speed governor: Mechanical governor
- · Excitation System: Self Excited SHUNT
- A.V.R.Model: R220
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- 1x12V/70AH 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 forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 25 hours running
- · Drain points for fuel tank
- Operation Manual / Specifications

3 Equipment Specification

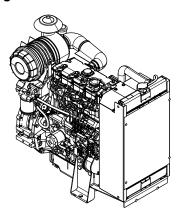
General technical data



Model	
Structure type	R
Tank capacity	180L
Dry weight	1194kg
Noise level @7m	68.3dBA
Dimensions L×W×H	2338x1180x1453mm
Standby Power	36kVA/29kW

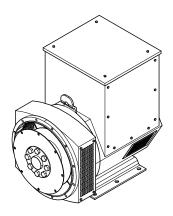
Voltage	208V			220V	23	230V		240V	
Ampere	80.5A			76.1A	72	72.8A		69.8A	
Genset Fuel Consumption									
Frequency/Load		25%	ó	50%	75%		100	%	110%
60Hz (L/h)		N/A		3.6	5.0		7.1		7.8

Diesel engine



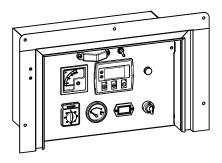
Engine Manufacturer/Brand.	Perkins
Engine Model	404D-22TG
Dimensions L×W×H	915×520×840mm
Dry Weigh (approx.)	310kg
Number of Cylinders	4
Bore	84mm
Stroke	100mm
Displacement	2.216L
Compression Ratio	23.3
Type of injection	Indirect injection
Intake System	Turbocharged
Intake Resistance	<u>≦</u> 6.4kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel EP	A2D 89.330-96/CEC RF-06-99
Type of Oil	API-CH-4/ ACEA E5
Oil Capacity	10.6L
Type of Coolant	Glycol mixture
Coolant Capacity	7.0L
Back Pressure	≦10.2kPa
Standby Power	31.6kW
Fuel Consumption(100%load	d)241g/kWh

Alternator



Alternator Manufacturer/Brand	Lerov-somer
Alternator Model	-
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 loa	ad < 3 % - on load < 2%
Telephone Interference	THF<2%;TIF<50

PLC-920 Control System

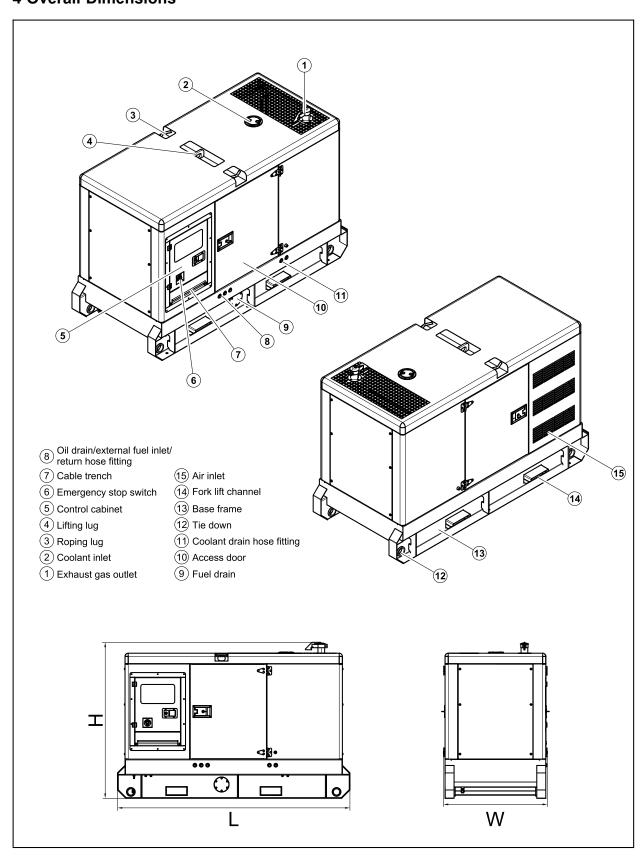


PLC-920 is an advanced control module based on microprocessor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

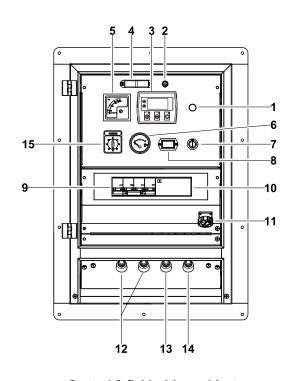
Standard Control Function

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning

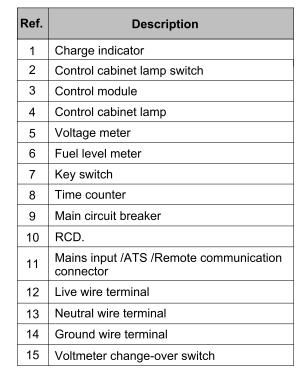
4 Overall Dimensions

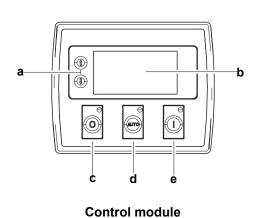


6 Control System



Control & field wiring cabinet





Ref.	Description
а	Navigation button£» Accept (Configuration mode only)
b	Main status display
С	Stop/reset button£» Next page (Configuration mode only)
d	Auto start button£» Decrease value/next item (Configuration mode only)
е	Start button£» Increase value/next item (Configuration mode only)

1000033150-A2-E

11.2022