

SPECIFICATION



MODEL VR250PX

VR SERIES

(FOR 50Hz DIESEL GENSET)

Revision: C2 (11/21)

To inquire the latest revision of
document, visit our website at:
www.powerlinkworld.co.uk



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: Indoors (well ventilated).
- Ambient temperature: -25°C to 50°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters above sea level.

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.

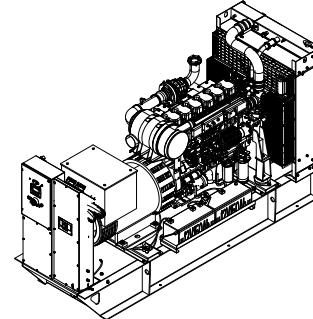
2 General Features

- PowerLink engine VR6-10TAG1
- Close coupled to PowerLink alternator PL3H
- Microprocessor control module PLC-920
- Main circuit breaker: 400A
- Rotate speed governor: Electric fuel control
- Excitation System: Self Excited,SHUNT
- A.V.R.Model: SX440
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector

- 2x12V/120AH sealed for life maintenance free battery
- Lockable battery isolator switch
- 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 with 17 hours running
- Drain points for fuel tank
- Operator's Manual / Specifications

3 Equipment Specification

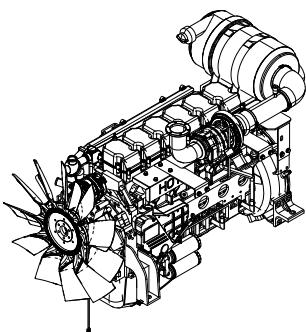
General technical data



Model.....	VR250PX
Structure type	A
Tank capacity.....	760L
Dry weigh.....	2711kg
Noise level @7m	N/A
Dimensions L×W×H.....	3288x1287x1898mm
Standby Power	275kVA/220kW
Prime Power	250kVA/200kW

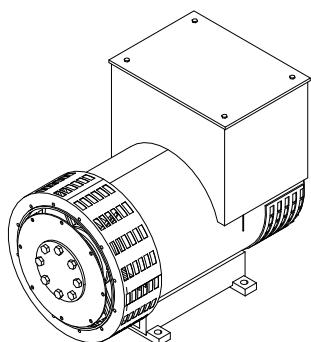
Voltage	380V	400V	415V		
Ampere	379.8A	360.9A	347.8A		
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	15	28	40	54	60

Diesel engine



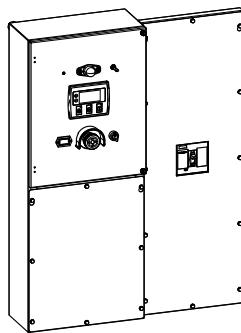
Engine Manufacturer/Brand.....	PowerLink
Engine Model.....	VR6-10TAG1
Dimensions L×W×H.....	1796×767×1275mm
Dry Weigh (approx.)	1000kg
Number of Cylinders.....	6
Bore	126mm
Stroke	130mm
Displacement.....	10.0L
Compression Ratio.....	17.0
Type of injection.....	Direct injection
Intake System.....	Turbocharged and charge air cooled
Intake Resistance.....	$\leq 5\text{kPa}$
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel.....	No.2 or ASTM D975
Type of Oil	API CF/SE or CCMCF4
Oil Capacity	23.0L
Type of Coolant	Glycol mixture
Coolant Capacity	25.0L
Back Pressure	$\leq 10.1\text{kPa}$
Standby Power	253kW
Prime Power	230kW

Alternator



Alternator Manufacturer/Brand	PowerLink
Alternator Model	PL3H
Exciter.....	Brushless
Cooling Fan	Cast alloy aluminum
Windings.....	100% copper
Insulation Class	H
Winding Pitch.....	.2/3
Terminals	12
Drip Proof	IP23
Altitude.....	$\leq 1000\text{m}$
Overspeed2250rpm
Air Flow.....	N/A
Voltage Regulation	$\pm 1.0\%$
Total Harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<50

PLC-920 Control System

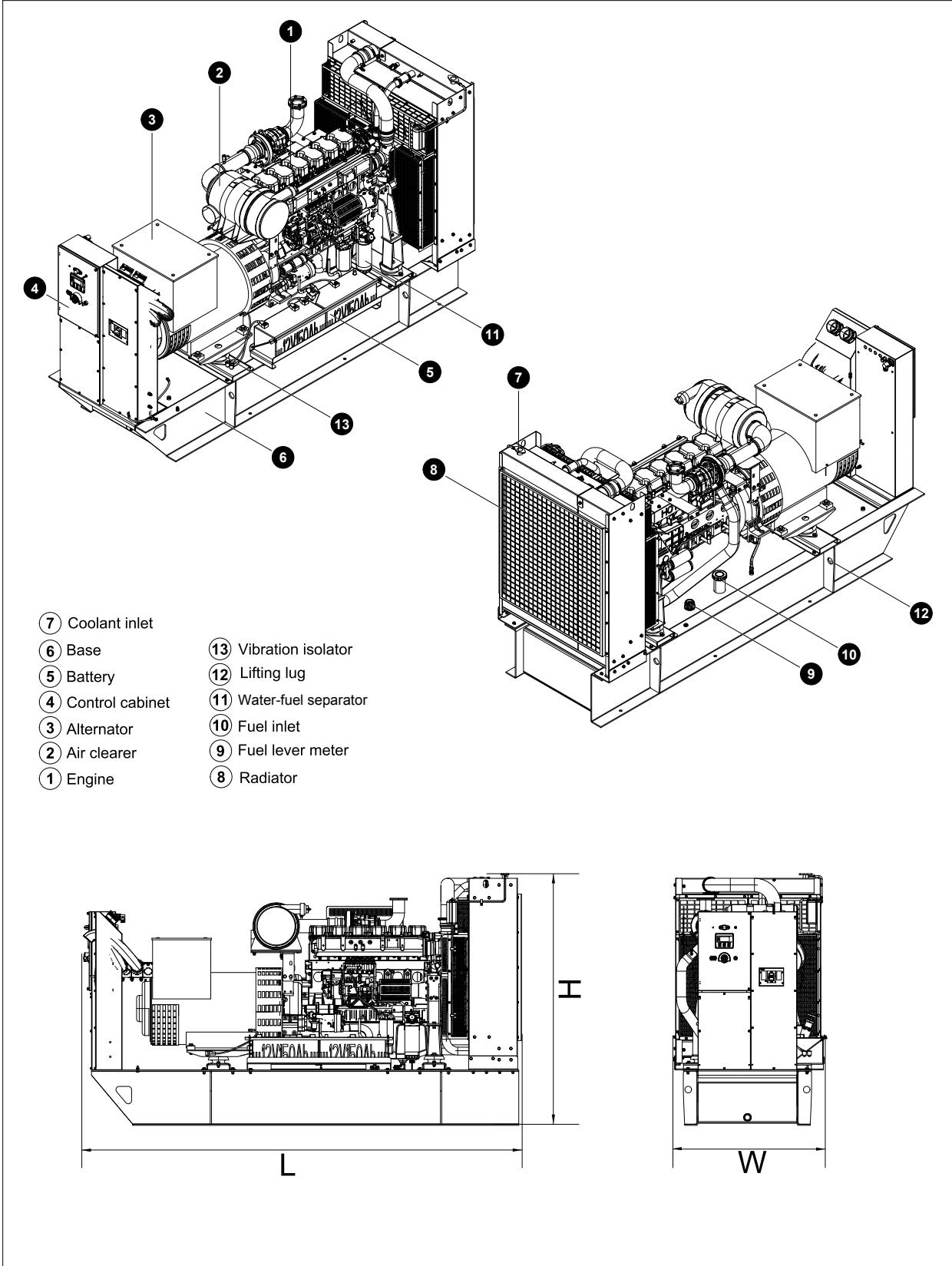


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true up fault condition of an engine failure.

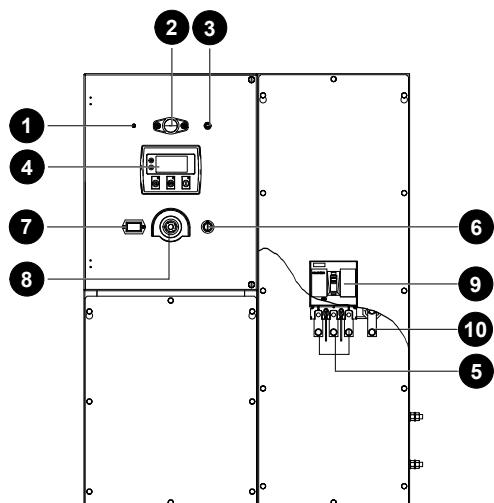
Standard Control Function

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

4 Overall Dimensions

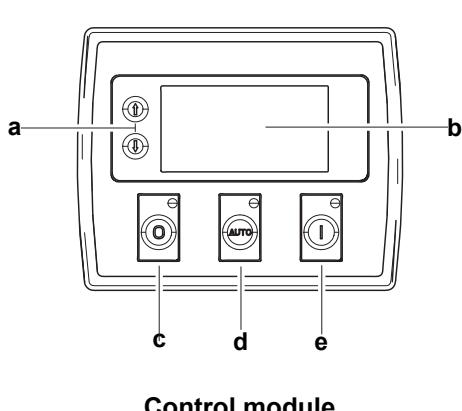


5 Control System



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

Control&Field wiring cabinet



Ref.	Description
a	Navigation button Accept (Configuration mode only)
b	Main status display
c	Stop/reset button Next page (Configuration mode only)
d	Auto start button Decrease value/next item (Configuration mode only)
e	Start button Increase value/next item (Configuration mode only)

Control module

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