

SPECIFICATION



MODEL VR30PX VR SERIES (FOR 50Hz DIESEL GENSET)

Revision: B7 (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

- Remote run connector
- 1x12V/60AH sealed for life maintenance free battery
- Lockable battery isolator switch
- 50°C radiator
- Steel base frame
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 18 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

Environmental Operating Conditions

- Installation place: Outdoors or 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 90%.
- 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

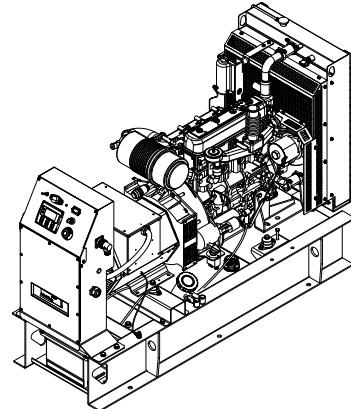
- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- PowerLink engine VR4-3.2G1
- Close coupled to PowerLink alternator PL1G
- Microprocessor control module PLC-920
- Main circuit breaker: 50A
- Rotate speed governor: Mechanical governor
- Excitation system: Self excited,SHUNT
- A.V.R model: SX440
- Key switch
- Emergency stop switch
- ATS(automatic transfer switch)receptacle

3 Equipment

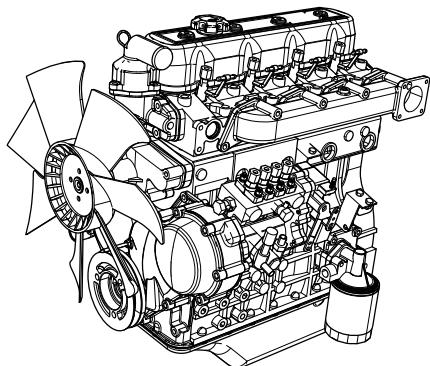
General technical data



Model.....	VR30PX
Structure type	D
Tank capacity.....	140L
Dry weight.....	482kg
Sound pressure level @ 7m	N/A
Dimensions L×W×H.....	1753x624x1262mm
Standby Power	33kVA/26.4kW
Prime Power	30kVA/24kW

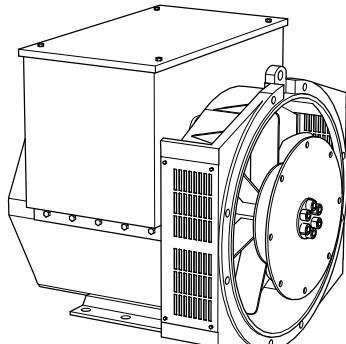
Voltage	380V	400V	415V	
Ampere	45.6A	43.3A	41.7A	
Genset Fuel Consumption				
Frequency/Load	25%	50%	75%	100%
50Hz (L/h)	2.8	4.0	5.6	7.6
				9.3

Dck Yf GnghYa



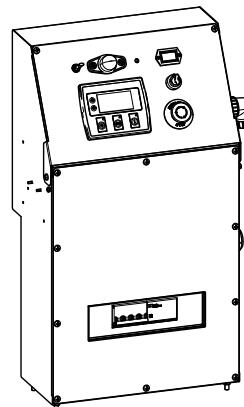
Engine Manufacturer/Brand.....	PowerLink
Engine Model.....	VR4-3.2G1
Dimensions L×W×H.....	750x600x765mm
Dry Weigh (approx.)	265Kg
Number of Cylinders.....	4
Bore	98mm
Stroke	105mm
Displacement.....	3.2L
Compression Ratio.....	18.5
Type of injection.....	Direct injection
Intake System.....	Natural aspirated
Intake Resistance.....	$\leq 5\text{kPa}$
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	No.2 or ASTM D975
Type of Oil	API CF/SE or CCMCF4
Oil Capacity	6.5L
Type of Coolant	Glycol mixture
Coolant Capacity	5.0L
Back Pressure	$\leq 10.1\text{kPa}$
Standby Power	34kW
Prime Power	31kW

Alternator



Alternator Manufacturer/Brand	PowerLink
Alternator Model	PL1G
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

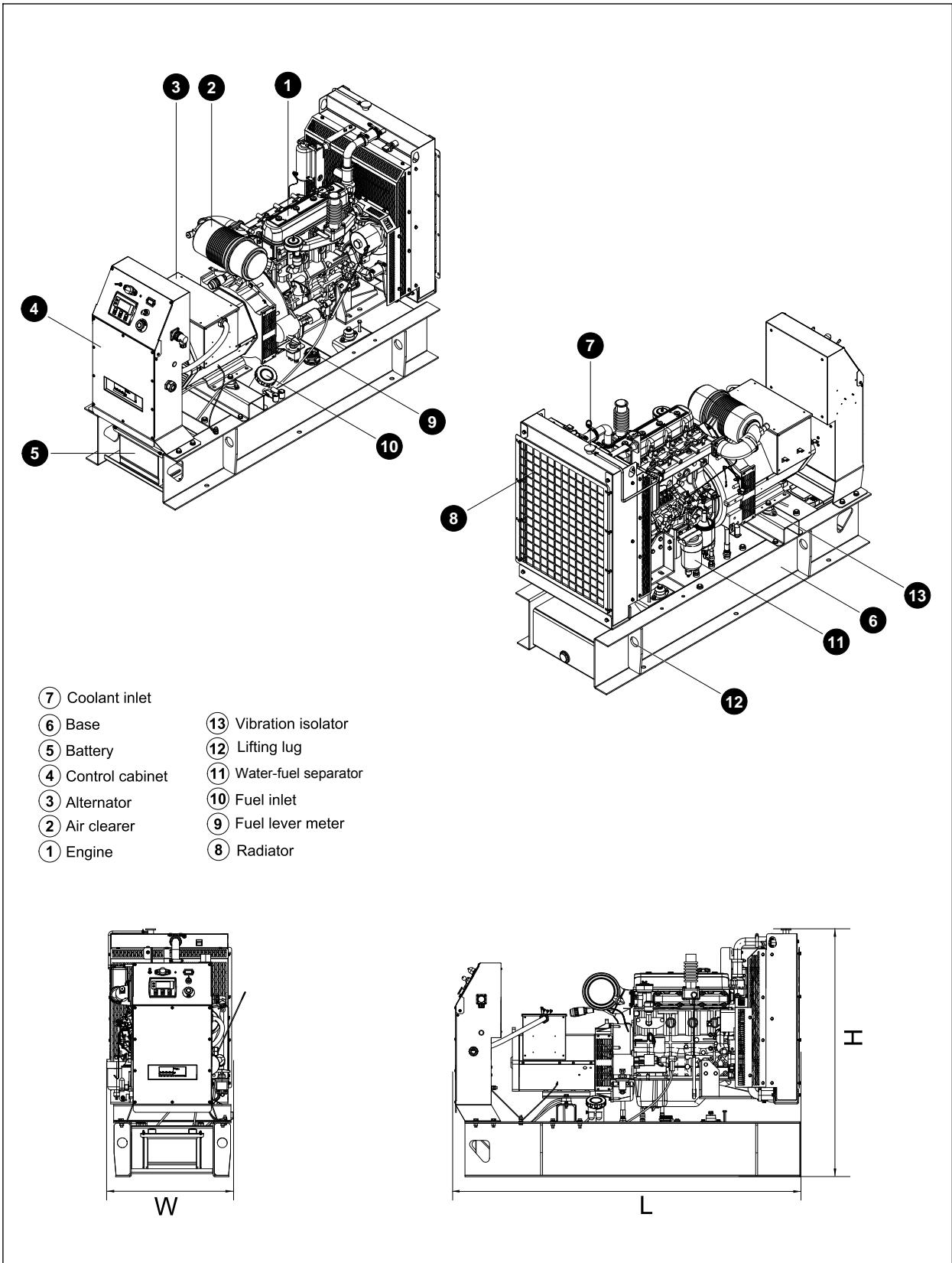


PLC-920 is an advanced control module based on microprocessor designed to control the engine via push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine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

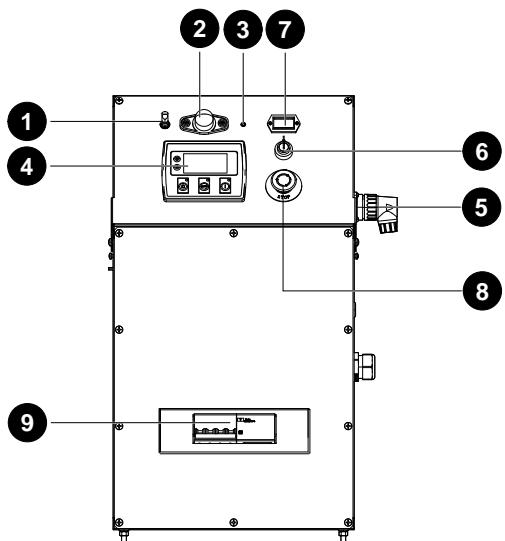
Standard Control Function

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

4 Overall Dimensions

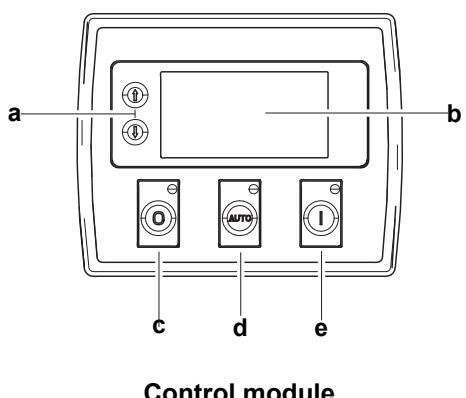


5 Control System



Ref.	Description
1	Charge indicator
2	Control cabinet lamp
3	Control cabinet lamp switch
4	Control module
5	Control cables connector
6	Key switch
7	Time counter
8	Emergency stop switch
9	Main circuit breaker

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

SPECIFICATION

VR SERIES DIESEL GENSET

VR30PX

Revision: B7 (11/21)

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

