

SPECIFICATION



MODEL VR1000PX VR SERIES (FOR 50Hz DIESEL GENSET)

Revision: A2 (11/21)

VS series VR1000PX

50 Hz @ 1500rpm,3-phase/4-wiring

1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- AS 3000-2018
- AS 3010-2017

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.

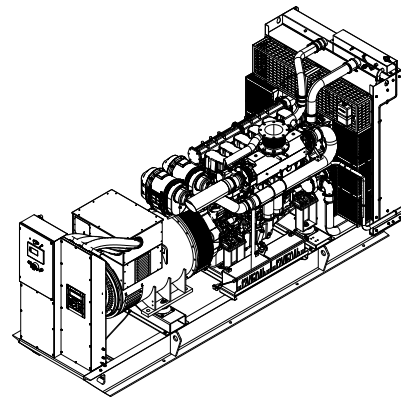
2 General Features

- PowerLink engine VR6-35TAG5
- Close coupled to PowerLink alternator PL6C
- Microprocessor control module XC762
- Main circuit breaker: 1600A
- Rotate speed governor: ECU
- Excitation system: PMG
- A.V.R model: MX321
- Key switch
- Emergency stop switch

- ATS(automatic transfer switch)receptacle
- Remote run connector
- 2x12V/150AH 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
- Operation Manual / Specifications

3 Equipment

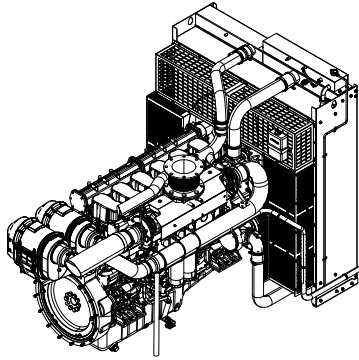
General technical data



Model.....VR1000PX
 Tank capacity..... N/A
 Dry weight..... 8326kg
 Sound pressure level @ 7m N/A
 Dimensions L×W×H.....4865x1832x2480mm
 Standby Power 1100kVA/880kW
 Prime Power 1000kVA/800kW

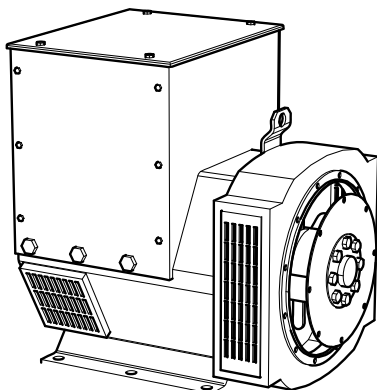
| Voltage | 380V | 400V | 415V | | |
|--------------------------------|---------|---------|---------|------|------|
| Ampere | 1519.4A | 1443.4A | 1391.2A | | |
| Genset Fuel Consumption | | | | | |
| Frequency/Load | 25% | 50% | 75% | 100% | 110% |
| 50Hz (L/h) | 62 | 123 | 183 | 245 | 270 |

Power System



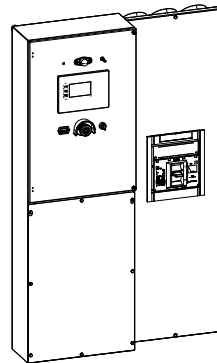
| | |
|---------------------------------|------------------------------------|
| Engine Manufacturer/Brand | PowerLink |
| Engine Model | VR6-35TAG5 |
| Dimensions L×W×H..... | 2429x1387x2146mm |
| Dry Weigh (approx.) | 4000kg |
| Number of Cylinders..... | 6 |
| Bore..... | 186mm |
| Stroke | 215mm |
| Displacement..... | 35.0L |
| Compression Ratio | 15.0 |
| Type of injection..... | High pressure common rail |
| Intake System..... | Turbocharged and charge air cooled |
| Intake Resistance | ≤5kPa |
| 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 | 80.0L |
| Type of Coolant | Glycol mixture |
| Coolant Capacity | 90.0L |
| Back Pressure | ≤10.1kPa |
| Standby Power | .968kW |
| Prime Power | .880kW |

Alternator



| | |
|---|---------------------|
| Alternator Manufacturer/Brand | PowerLink |
| Alternator Model | PL6C |
| 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..... | N/A |
| Voltage Regulation | ±1.0% |
| Total Harmonic TGH / THCat no load < 1.5 % - on load < 5% | |
| Telephone Interference..... | THF<2%;TIF<50 |

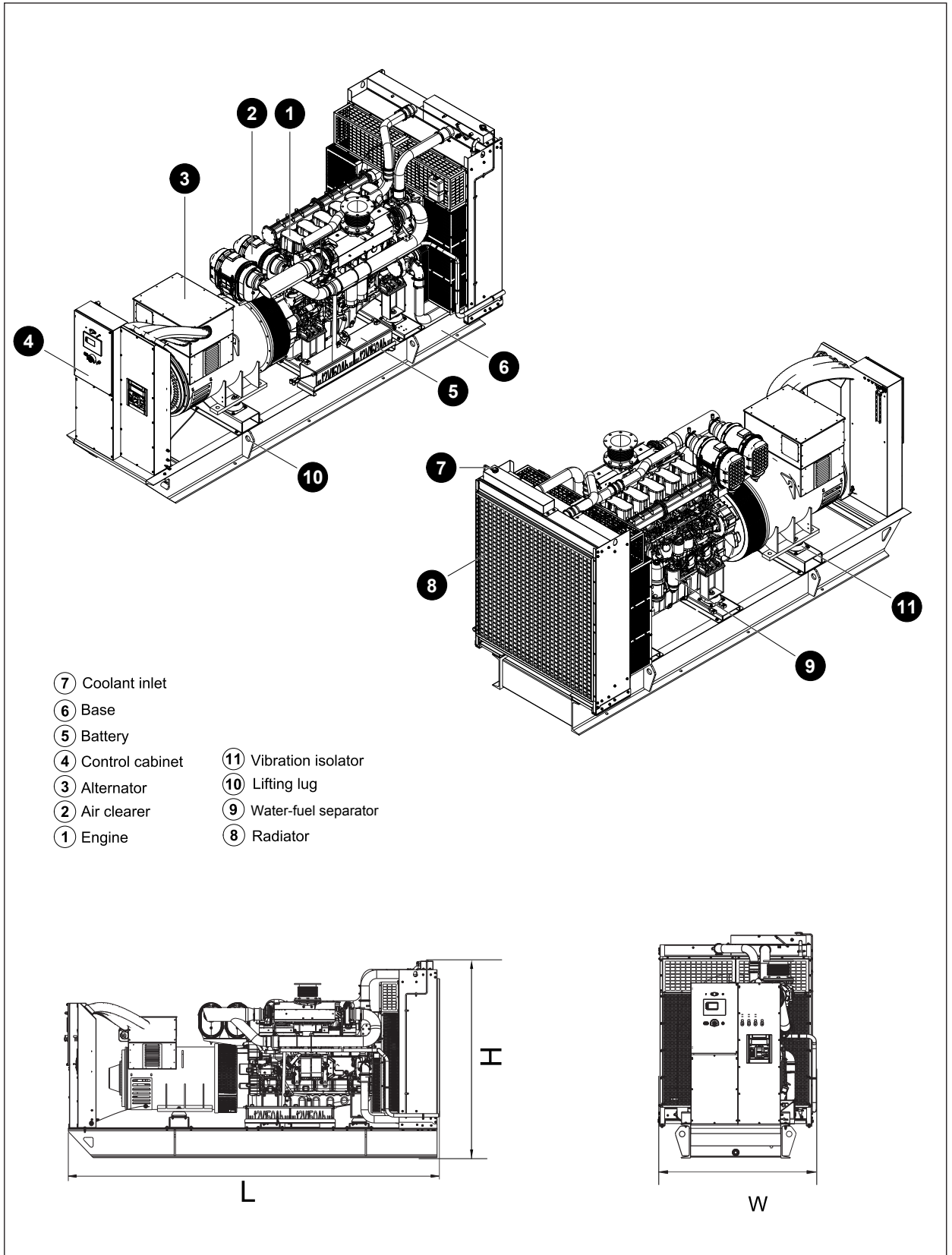
XC762 Control System



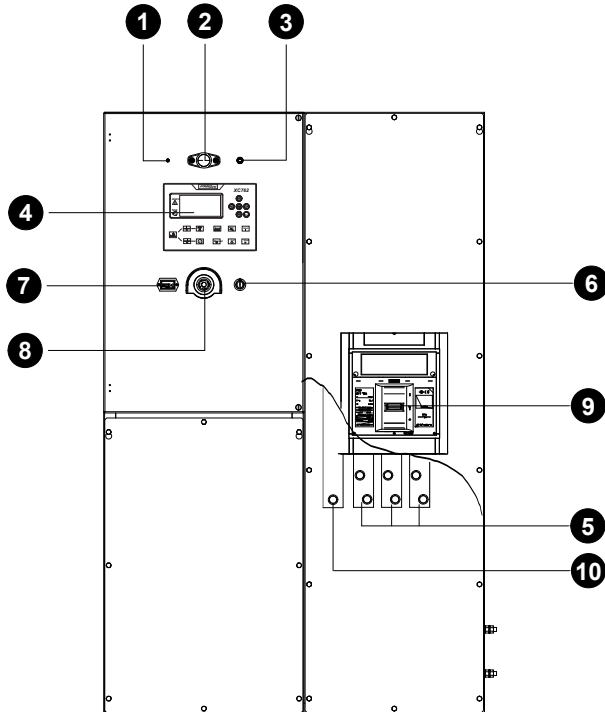
XC762 is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and 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

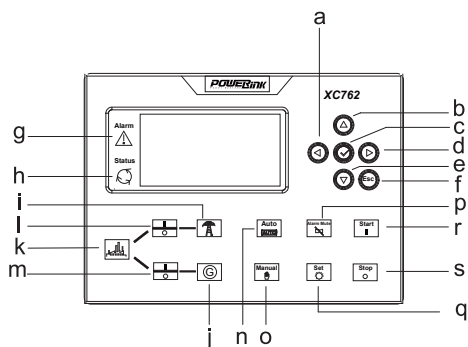


5 Control System



Control&Field wiring cabinet

| 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 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 (ESC) |
| g | Indicator (alarm) |
| h | Indicator (running) |
| i | Indicator (mains available) |
| j | Indicator (genset available) |
| k | Indicator (mains / genset ON) |
| l | Button (breaker ON / OFF) |
| m | Button (breaker ON / OFF) |
| n | Button (Auto mode) |
| o | Button (Manual mode) |
| p | Button (reset alarm) |
| q | Button (set parameters) |
| r | Button (start) |
| s | Button (stop) |