

Gas generator set
Sound-proof type
GR24S-NG

SPECIFICATIONS



1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (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.

Fuel Requirement

- Fuel type: Natural gas
- Supply gas pressure: 5kPa to 30kPa
- LHV: More than 36.0MJ/Nm³ or 10.0kW/Nm³

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.

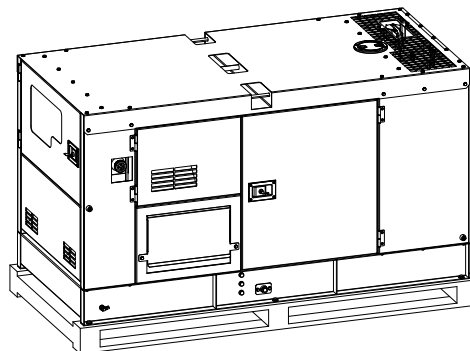
2 General Features

- POWERLINK engine GR3.8E01N
- Close coupled to PowerLink alternator PL1G
- Microprocessor control module GCC92
- Main circuit breaker: 50A
- Excitation system: Self excited
- A.V.R model: SX440

- Emergency stop switch
- Time counter
- 1x12V/72AH Sealed for life maintenance free battery
- Gas train
- Air-fuel ratio control system
- Speed control system
- Powder coated canopy
- Lockable battery isolator switch
- Oil filter
- 50°C radiator
- Steel base frame with lifting lugs
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Operator's Manual / Specifications

3 Equipment Specification

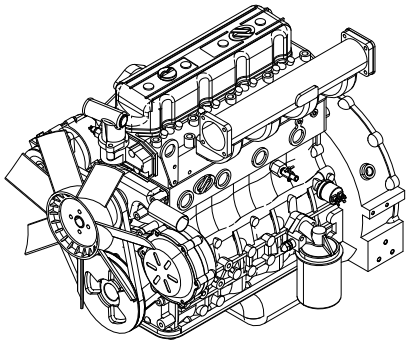
General technical data



Model.....	GR24S-NG
Structure type	R
Dry weight.....	945.54kg
Noise level @7m	50dBA
Dimensions L×W×H.....	2250x970x1136mm
Prime Power	30kVA/24kW
Electric efficiency.....	29.5%

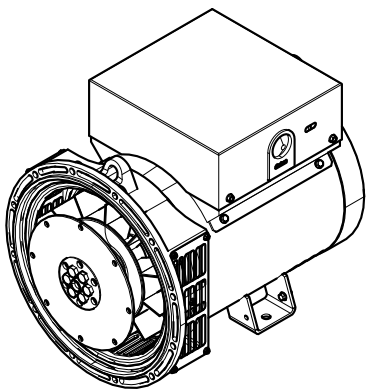
Voltage	380V	400V	415V	
Ampere	45.6A	43.3A	41.7A	
Natural Gas Consumption				
Frequency/Load	25%	50%	75%	100%
50Hz (m ³ /h)	2.1	4.1	6.0	8.1

Gas engine



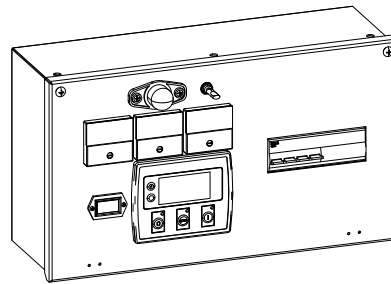
Engine Manufacturer/Brand.....	POWERLINK
Engine Model.....	GR3.8 E01N
Dry Weigh (approx.)	318Kg
Number of Cylinders.....	4
Bore.....	102mm
Stroke	118mm
Displacement.....	3.854L
Compression Ratio.....	10.5
Burn type	stoichiometric
Excess air factor.....	1.2
Intake System.....	Natural aspiration
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel.....	Natural gas
Type of Oil	SAE 40
Type of Coolant	Glycol mixture
Prime Power	33kW

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.....	≤1000m
Overspeed	2250rpm
Air Flow.....	5.3m³/min(50Hz),5.8m³/min(60Hz)
Voltage Regulation	±1.0%
Total harmonic TGH / THCat no load < 1.5 % - on load < 5%	
Telephone Interference.....	THF<2%;TIF<45

GCC92 Control System

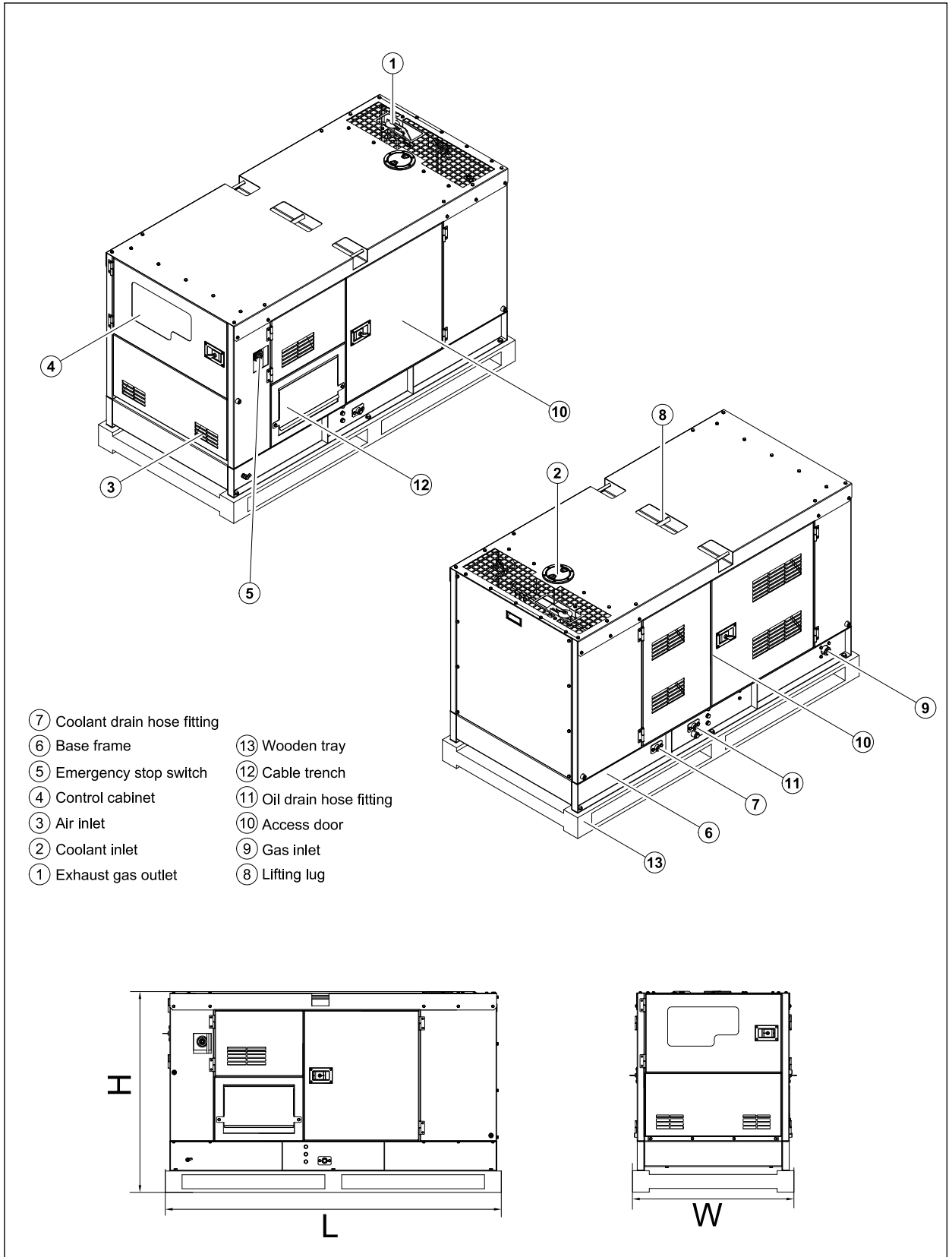


GCC92 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true first up fault condition of an engine failure.

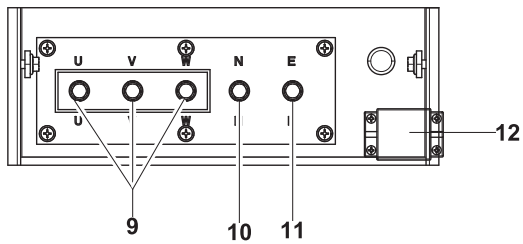
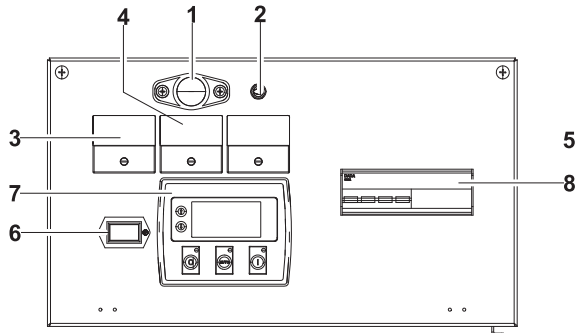
Standard Control Function

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

4 Overall Dimensions

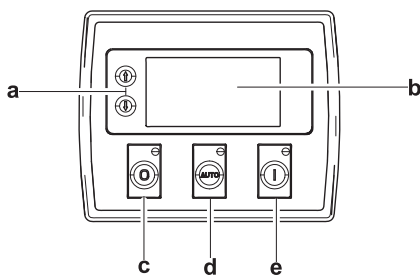


5 Control System



Control & field wiring cabinet

Ref.	Description
1	Control cabinet lamp
2	Control cabinet lamp switch
3	Voltage meter
4	Current meter
5	Frequency meter
6	Time counter
7	Control module
8	Main circuit breaker
9	Live wire terminal
10	Neutral wire terminal
11	Ground wire terminal
12	Remote control/Mains input



Control module

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)

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<http://www.powerlinkworld.com>

*Specification may change without prior notice. For more info.,
contact Power Link or your local distributors please.*