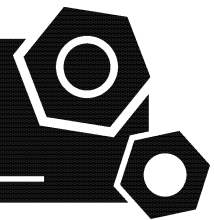


**Gas generator set**  
**Sound-proof type**  
**GR30S-NG**

**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/Nm<sup>3</sup> or 10.0kW/Nm<sup>3</sup>

### 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.

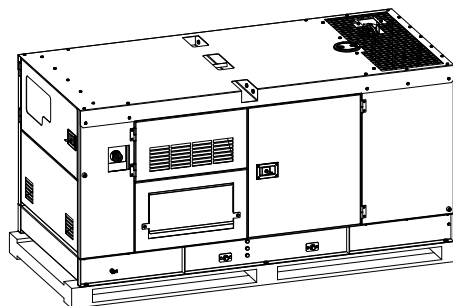
## 2 General Features

- POWERLINK engine GR3.8E01N
- Close coupled to PowerLink alternator PL2B
- Microprocessor control module GCC92
- Main circuit breaker: 63A
- 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

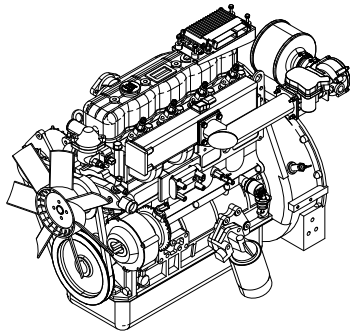
### General technical data



|                          |                 |
|--------------------------|-----------------|
| Model.....               | GR30S-NG        |
| Structure type .....     | R               |
| Dry weight.....          | 1024kg          |
| Noise level @7m .....    | 50dBA           |
| Dimensions L×W×H.....    | 2250x970x1136mm |
| Prime Power.....         | 37.5kVA/30kW    |
| Electric efficiency..... | 29.8%           |

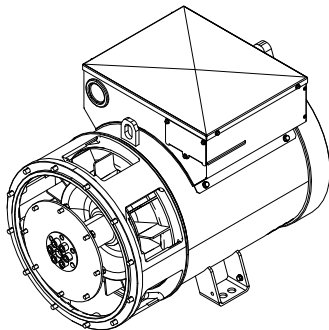
| Voltage                  | 380V | 400V  | 415V  |      |
|--------------------------|------|-------|-------|------|
| Ampere                   | 57A  | 54.1A | 52.2A |      |
| Natural Gas Consumption  |      |       |       |      |
| Frequency/Load           | 25%  | 50%   | 75%   | 100% |
| 50Hz (m <sup>3</sup> /h) | 2.6  | 5.1   | 7.5   | 10.0 |

## Gas engine



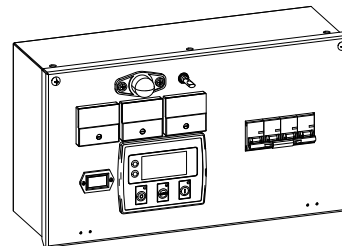
|                                |                    |
|--------------------------------|--------------------|
| Engine Manufacturer/Brand..... | POWERLINK          |
| Engine Model.....              | GR3.8E01N          |
| Dry Weigh (approx.) .....      | 318Kg              |
| Number of Cylinders.....       | 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 .....                                    | PL2B   |
| Exciter.....  | Brushless  |
| Cooling Fan .....   | Cast alloy aluminum  |
| Windings.....   | 100% copper  |
| Insulation Class .....                                    | H  |
| Winding Pitch.....  | 2/3  |
| Terminals .....   | 12   |
| Drip Proof .....  | IP21   |
| Altitude.....   | ≤1000m   |
| Overspeed .....   | 2250rpm  |
| Air Flow.....   | 11.8m <sup>3</sup> /min(50Hz), 14.5m <sup>3</sup> /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

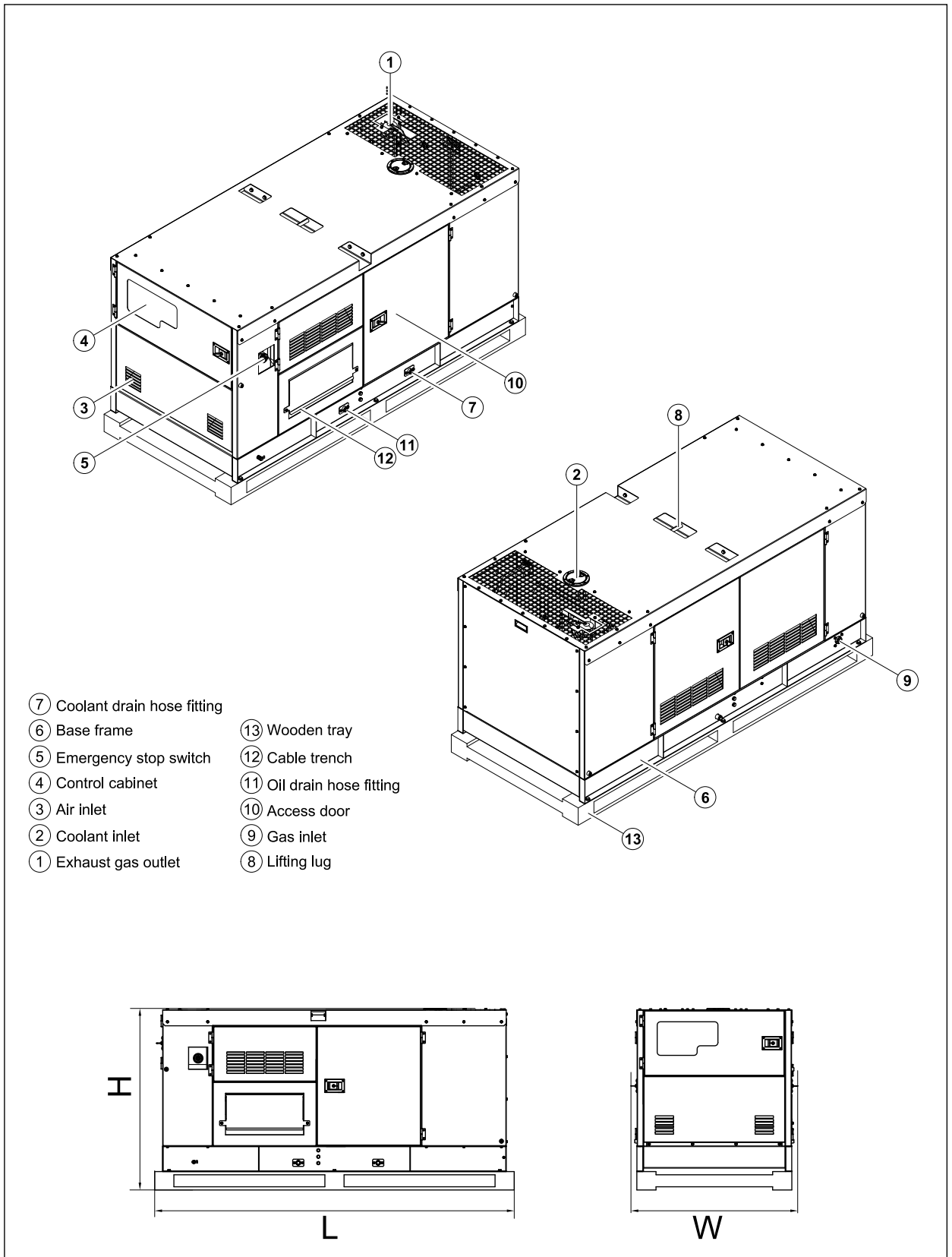


GCC92 is an advanced control module based on micro-processor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting down the engine and giving a true up fault condition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

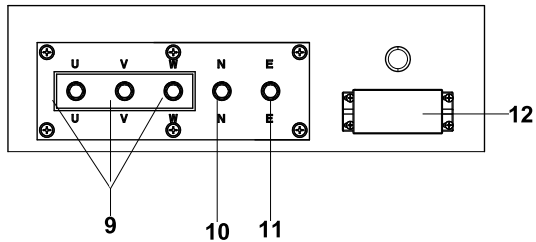
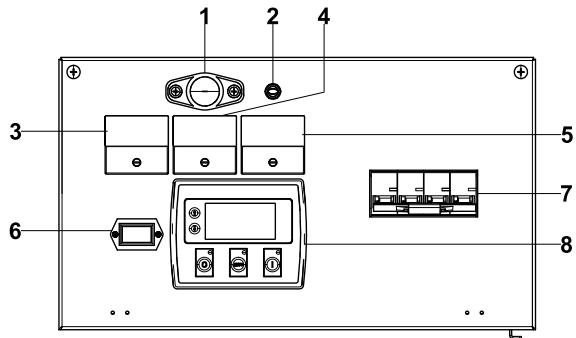
### Standard Control Function

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

## 4 Overall Dimensions

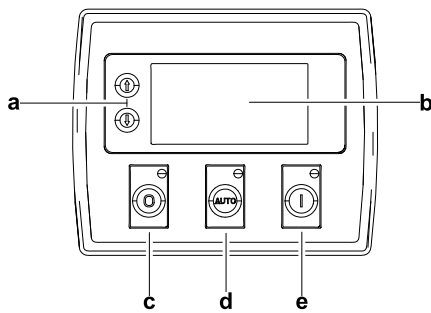


## 5 Control System



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    | Main circuit breaker        |
| 8    | Control module              |
| 9    | Live wire terminal          |
| 10   | Neutral wire terminal       |
| 11   | Ground wire terminal        |
| 12   | Remote control/Mains input  |



Control module

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

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| 09.2020 |
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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.*