

Gas generator set Sound-proof type GR16S-LPG

SPECIFICATIONS





1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- China Compulsory Certification (CCC)
- ISO8528-5:2005
- GB/T2820.5-2009

Environmental Operating Conditions

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

Fuel Requirement

- Fuel type: LP Gas.
- · Supply gas pressure: 5kPa to 30kPa.
- LHV: More than 84.2MJ/Nm³ or 20110kcal/Nm³(vapor).

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.

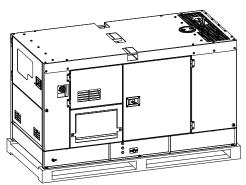
2 General Features

- POWERLINK engine GR2.5E01L
- Close coupled to a Mecc alte alternator ECP28–M/4
- Microprocessor control module PLC-920
- Main circuit breaker: 32A
- · Excitation system: Self excited
- · A.V.R model: DSR
- · Emergency stop switch

- Time counter
- 1x12V/72AH Sealed for life maintenance free battery
- Gas trair
- · 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

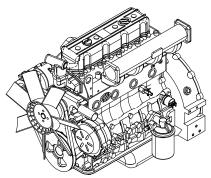


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Model	GR16S-LPG
Structure type	R
Dry weight	753kg
Noise level @7m	50dBA
Dimensions L×W×H	1800x865x1067mm
Prime Power	20kVA/16kW

Voltage	380V	400V		415V	
Ampere	30.4A	28.9A		27.8A	
LP Gas Consumption					
Load	25%	50%	75%		100%
m³/h	0.96	1.6	2.	4	3.04
kg/h	1.8	3.0	4.	.5	5.7

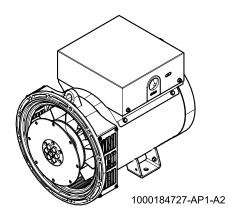
Gas engine



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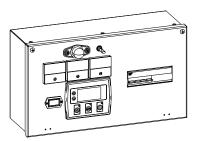
Engine Manufacturer/Brand	POWERLINK
Engine Model	GR2.5E01L
Dry Weigh (approx.)	156Kg
Number of Cylinders	4
Bore	90mm
Stroke	100mm
Displacement	2.545L
Compression Ratio	10.5
Burn type	stoichiometric
Excess air factor	1
Intake System	Natural aspiration
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12V
Type of Fuel	LPG
Type of Oil	CH4/15W-40
Type of Coolant	Glycol mixture
Prime Power	21kW

Alternator



Alternator Manufacturer/Brand	Mecc alte
Alternator Model	ECP28-M/4
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	d < 1.5 % - on load < 5%
Telephone Interference	THF<2%;TIF<45

PLC-920 Control System



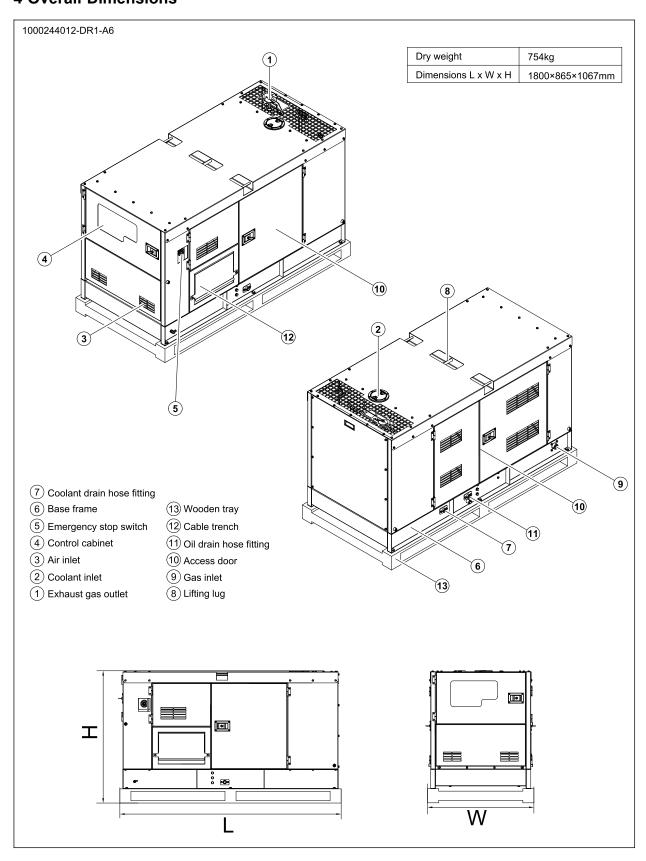
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PLC-920 is an advanced control module based on microprocessor designed to control the engine via a key switch and push buttons on the front panel. The module is used to start and stop the engine and indicate fault conditions, automatically shutting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

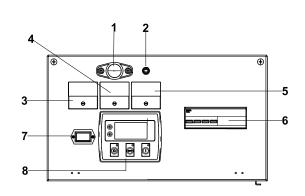
Standard Control Function

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

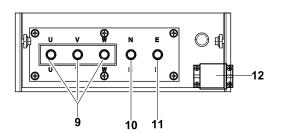
4 Overall Dimensions



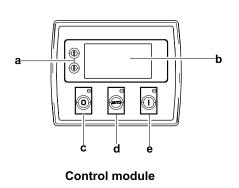
5 Control System



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



Control & field wiring cabinet



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

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