GRS30S-LPG

LPG Genset

Main Features

- Highly efficientgas engine
- AC synchronous alternator
- Gas safety trainand gas protection device against leakage
- Cooling system suitable for ambient temperature up to 50℃
- Advanced engine ECU control system, including: ignition system,speed control system , air/fuel ratio control system
- Strict shop test for all gensets
- Able to be used directly outdoors with endurable and firm characteristics and design against rain and dust
- Industrial silencer reduces the noise by 12-20dB(A)
- Integrated the control& switch cabinet
- Multi-functional control system with easy operation
- Data communication interfaces integrated into control system
- Monitoring battery voltage and chargingfrom mains
- Bus interface for connecting to higher level control unit

Structure and control cabinet

Structure Type	Soundproof
Spraying Process	High quality powder coating
Electrical control cabinet	Integrated, IP54
Noise level@1m, dB(A)	75.9
@7m, dB(A)	63.2
@10m, dB(A)	61.3

Dimension and weight

Dimension（LxWxH）, mm	2080x1000x1365
Weight, kg	950

Electric data @50Hz

Voltage-V	Power-kW	Efficiency-%	Current-A
380	30	35	57
400	30	35	54
415	30	35	52
440	30	35	49

Fuel and emission

Fuel type	Liquefied petroleum gas
Fuel composition	
Propane, % by volume	≥85
Propene, % by volume	≤5
C4 and higher, % by volume	≤2.5
Fuel consumption @100% load, m^3/h	3.7
Supply gas pressure range (gage pressure), kPa	10~20
Emission without catalytic converter	
NO，ppm	<310
CO，ppm	<400
CO_2，ppm	<88000

Special statement：

1、The technical data are based on LPG with a calorific value of 84.2 MJ/Nm^3.

2、The technical data is measured in standard conditions:
Absolute atmospheric pressure：100kPa
Ambient temperature：25°C
Relative air humidity：30%

3、Rating adaptation at ambient conditions acc to DIN ISO 3046/1. The tolerance for the specific fuel consumption is + 5 % at rated output.

4、Technical data above are just for standard product ,and may be subject to change. As this document is used only for presale reference, take the specification supplied by PowerLink before ordering as final.

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Genset performance data and manufacturing technology			
Genset model	GRS30S-LPG	Telephone interference factor(TIF)	≤50
Frequency(Hz)	50	Telephone harmonious factor(THF)	≤2% ，as per BS4999
Electrical output power (kW)	30		
Genset electrical efficiency	35%		
Overload runtime at 1.1xSe(hour)	1		
Steady-state voltage deviation	≤±1%		
Transient-state voltage deviation	-15%~20%		
Voltage recovery time(s)	≤4		
Voltage unbalance degree	1%		
Steady-state frequency regulation	±0.5%		
Transient -state frequency regulation	±5%		
Frequency recovery time(s)	≤3		
Steady-state frequency band	0.5%		
Recovery time response(s)	0.5		

Manufacturing technology

- Special welded base frame, inner vibration isolators and design for whole lifting
- With high quality paint, endurable brightness as well resistance against abrasion and defacing
- Installation manual, operation and maintenance manual circuit diagram

Standards and certificate

- ISO3046，ISO8528，GB2820
- BS5000PT99，AS1359，IEC34
- ISO9001:2008 quality system certification

Gas engine		AC alternator	
Brand	PowerLink	Brand	PowerLink
Model	GR3.0 LE01L	Model	PL2B
NO. of cylinders	4	Rated output power @400V (kW)	40
Cylinders arrangement	In line	Power factor	0.8
Bore x Stroke (mm)	95x105	Rated current @400V (A)	72
Displacement (L)	2.98	Excitation system	Self excited,SHUNT
Cooling system	Water cooled	THF (BS EN60034- 1)	<2%
Rated speed (rpm)	1500	TIF (NEMA MG 1-22)	<50
Rated output power (kW)	34	Winding material	100% copper
Excess air factor	1.5	Wiring connection	Star
Intake system	Turbocharged	Rotor insulation class	H
Lube oil consumption（kg/h)	0.009	Winding pitch	2/3
Combustion type	Lean burn	A.V.R. model	SX460
Battery voltage	12V	Voltage fluctuation(no load to full load)	± 0.5%
Coolant type	Glycol mixture	Drip proof	IP23
Gas consumption(m^3/h)@ 100%load	3.7	Excitation method	Brushless
75%load	2.7	Rated ambient temperature(℃)	40
50%load	1.8	Rated stator temperature rise(℃)	125

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GCC92 control system

Features

- Auto start and stop
- Voltage and PF control
- Engine monitor：speed, oil pressure, coolant temperature, battery voltage, running time and so forth
- Alternator data：U, I, Hz, kW, kVA, kVAr, PF, kWh, kVAh
- Grid data：voltage, frequency
- USB port
- Remote control with internet
- Data logging & trending and PLC functionality
- Manual, auto and remote control mode optional
- CAN and modbus communication

Advantages

- Accordant with consumer requirement
- Complete control solution
- Convenient remote monitor and service
- Simplified engine start/stop control
- Enhanced stability and safety

Standard protection functions	Standard control functions	
Alternator protection - Overload - Overcurrent - Overvoltage - Undervoltage - Over/underfrequency - Unbalanced current	**Powercontrol** - RPM control	**Voltage control** - Voltage control(island)
	Valve control - Cooling system	**Pump control** - Cooling system
Busbar/grid protection - voltage - Frequency	**Engine protection** - Various routine and customized protectionfunctions - Monitoring	**Lubrication control** - Auto refilling - Warning and monitoring

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Standard configuration

Engine	Alternator	Canopy and base	Electrical cabinet
Gas engine Ignition system Lambda controller Speed control system Electrical start motor Battery system Lockable isolator switch	AC alternator H class insulation IP23 protection AVR voltage regulator	Steel monocoque base frame Engine bracket Vibration isolators Alternator base	GCC92 control system LCD screen Main circuit breaker Electrical switch cabinet Communication interfaces Mains float charger
Gas supply system	**Lubrication system**	**Standard voltage**	**Intake/ exhaust system**
Gas safety train Air/fuel mixer Throttle valve	Oil filter	380/220V 400/230V 415/240V 440/254V	Air filter Exhaust silencer Exhaust bellows
Cooling system	**Service and documents**		
Jacket water radiator	Tools package Installation and operation manual Maintenance manual Software manual Parts manual	Engine operation and maintenance manual Gas quality specification Control system manual After service guide Standard package	

Optional configuration

Engine	Alternator	Lubrication system
Jacket water heater	Space heater Treatments against humidity and corrosion	Oil tank Auto refilling oil system
Electrical system	**Gas supply system**	**Service and documents**
ATS control cabinet Electric power gauge	Gas flow gauge	Service tools Maintenance and service parts
Voltage	**Exhaust system**	
220V 230V 240V	Three-way catalytic converter	

Web: www.powerlinkworld.com

Data is subject to change without prior notice as new products are always developed.
Please contact PowerLink or local agent with any doubts or for more information