HGCM313

Main configuration and features

- Highly efficient gas engine
- AC synchronous alternator
- Gas safety train and gas protection device against leakage
- High efficient water-air intercooler
- High efficient turbocharger
- Wet exhaust manifold
- USA ALTRONIC ignition system, including: ignition module, ignition lead, ignition coil, spark plug, ignition sensor
- Ignition high energy signal panel
- Switherland Speed control system, including: actuator, speed governor, throttle valve, speed sensor
- Mixer
- Unattached switch cabinet and electric control cabinet
- Multi-functional control system with simple operation
- Monitoring battery voltage and charging automatically
- Industrial silencer with silencing ability of 12-20dB(A)
- Reducer valve (optional)
- Gas leakage detector (optional)
- Auto refilling oil system(optional)
- Communication module (optional)

Power and efficiency @50Hz

Electric power -kW	250	Electric efficiency	34%

Soundproof canopy and control cabinet

Structure type	Open or Soundproof
Canopy painting	High-class powder coating
Electrical control cabinet	Integrated into unit,IP54
Noise level@7m, dB(A)	75
Size	5500x2200x2500

Dimension and weight open type

Dimension(LxWxH), mm	4150x1620x2120
Weight, kg	4100

Fuel Request

Fuel type	Natural gas
Fuel component	≥90% CH4
Methane no.	MN> 70
Fuel consumption @100% load, m3/h	73.6(±5%)
H2S content	≤100ppm
NH3 content	≤5ppm
Silicon content	≤5mg/Nm3
Impurities content	≤30mg/Nm3
Water content	no free water
Supply gas pressure range, kPa	10~20

Special statement

1 The technical data are based on a gas mixture of 80% methane and 20% carbondioxid with a calorific value of 35.8 MJ/Nm3 and a methane no. > 70

2 The technical data is measured in standard conditions:
Absolute atmospheric pressure:100kPa
Ambient temperature:25℃
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 Dimension and weight 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 us before ordering as final.

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HONNY POWER

Gen-set performance data and manufacturing technology

Gen-set model	HGCM313
Electric output power(kW)	250
Output Type	3 Phases 4 wires
Voltage output	400/230 V
Power factor cosfi	0.8 lagging
Frequency (Hz)	50
Rated speed (RPM)	1500
Voltage Stabilized regulation	≤±1.5%
Voltage Instantaneous regulation	≤±20%
Voltage Recovery time (s)	≤1
Voltage Fluctuation ratio	≤1%
Voltage Wave aberration ratio	≤5%
Frequency Stabilized regulation	≤1%(adjustable)
Frequency Instantaneous regulation	-10%～12%
Frequency Recovery time (s)	≤7
Frequency Fluctuation ratio	≤1%

Power and efficiency

Load	100%	75%	50%
Electric power (kW)	250	188	125
Electric efficiency	34%	33%	32.5%

Manufacturing technology

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

Standards and certificate

- ISO3046,ISO8528,GB2820
- BS5000PT99,AS1359,IEC34
- ISO9001:2015 quality system certification

AC alternator performance data

Alternator brand	Faraday
Alternator model	FD4LS
Rated output power (kW)	280
Power factor	0.8
Rated current @ 100% load (A)	451
Excitation system	Brushless
THD	＜2%
Bearing number	1
Winding material	100% copper
Wiring connection	Star
Rotor insulation class	H
Winding pitch	2/3
AVR model	SX440
Voltage fluctuation(no load to full load)	±0.5%
Housing protection	IP23
TIF (NEMA)	＜50
Excitation method	Shunt
Rated ambient temperature(℃)	40
Rated stator temperature rise(℃)	125

Voltage	Power
380V	280kW
400V	280kW
415V	280kW

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HONNY POWER

Efficient gas engine HNKT19

Model	HNKT19
Brand	HONNY-CUMMINS
Type	4 stroke, water-cooled, wet cylinder liner, electronic-control ignition system, pre-mixed perfect mixed burning
Engine output(kWm)	330
Cylinders& Arrangement	6 in line
BoreXStroke(mm)	159*159
Displacement(L)	18.9
Compression ratio	11:1
Speed(RPM)	1500
Rotation direction	Anti-clockwise viewed on flywheel
Ignition timing	°BTDC 20
Aspiration	Intercooled and Turbocharged
Cooling Method	Water cooled by fan radiator
Gas mixer	IMPOC
Gas valves	Intake 2 & exhaust 2 per cylinder
Ignition timing	1-5-3-6-2-4
Ignition controller	ECU
Starting method	Electric, 24 V motor
Idling speed(r/min)	700
Oil recommended	Gas engine special oil, SAE 15W-40 CF4 or above
Oil consumption	≤0.5g/kW.h
Oil pressure alarm /Stop	1.4/1.0 Bar
Exhaust temperature (after turbocharger)	600℃
Engine coolant capacity (Only engine)	30L
Lubrication oil capacity (Total)	50L
Max permit coolant temperature	100℃
Electrical efficiency	34%
Heat efficiency	51.6%
Starting motor	DC24V
Battery	2x12V , 200Ah

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DSE6120

The DSE6120 MKIII is an Auto Start Control Module suitable for a wide variety of single, diesel or gas, genset applications.

Monitoring an extensive number of engine parameters, the module will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs and remote PC.

The module includes USB connection and dedicated DSENet® terminals for system expansion.

The module is compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offers an extensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.

The extensive list of features includes enhanced event and performance monitoring, remote communications & PLC functionality. The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.

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Standard configuration

Engine	Alternator	Canopy(optional) and base	Electrical cabinet
Gas engine Ignition system Electronic governing system Water to air intercooler Electrical start motor Battery system	AC alternator H class insulation IP23 protection AVR voltage regulator	Steel monocoque base frame Engine bracket Vibration isolators Alternator base Soundproof canopy	Air circuit breaker Gen-set controller
Gas supply system	**Lubrication system**	**Standard voltage**	**Induction/ exhaust system**
Gas safety train Air/fuel mixer	Oil filter(on the engine) Oil pump(on the engine)	380/220V 416/240V 440/254V 480/277V	Air filter Exhaust silencer Exhaust bellows Ventilation fan
Heat exchange system（optional）	**Service and documents**		
Exhaust heat exchanger Jacket water heat exchanger Mixture circulation pump Jacket water heater(optional) Expansion tank, Shut-off valve Three-way auto proportional valve Emergency 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	Exhaust system
Heavy duty air filter Auto A/F ratio controller	Space heater AVR Treatments against humidity and corrosion	Guard shield from touch Residential silencer Three-way catalytic converter
Canopy and base	**Lubrication system**	**Voltage**
SECC base frame Lightning protection	Automatic oil filling switch Auxiliary oil tank	208V 220V 240V
Service and documents	**Gas supply system**	
Service tools Maintenance and service parts	Gas flow gauge Gas pressure reducer valve Gas blower	Emergency relief flare Free water separator Gas purification plant