GASEOUS Generator Set

Model: HNG 265 T6

Specification & Application Data

PSI HD Gaseous Series



60Hz Standby Power Ratings kW & kVA

\/altaga \/AC	Dhaca	DE	LPG		NG	
Voltage VAC	Phase	PF -	kW	kVA	kW	kVA
120/240	1	1.0	N.A.	N.A.	N.A.	N.A.
120/208	3	0.8	159	199	262	328
120/240 Delta	3	0.8	159	199	262	328
277/480	3	0.8	160	200	263	329
347/600**	3	0.8	160	200	263	329

Rating Definitions: (N.A. = Not available for model designated)
Standby - All Industrial Sets are Standby Rated, applicable for a varying emergency load for the duration of a utility power outage with no overload capability. Alternator winding temperature rise is 150°C. (125°C prime rated)
Prime - Prime rating is applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. (Max. load factor = 80%) A 10% overload capacity is available for 1 out of every 12 hours.
** 600 Volt configuration not available as UL2200 certified generator set.

Drawing depicts a typical model but may not include some optional accessories.

Overview of the HIPOWER® PSI-HD series of Gaseous Fueled Generator Sets:

HIPOWER[®] Industrial generators are factory-built in facilities that utilize the latest technology in sheet metal fabrication, mechanical and electrical component assembly, production and testing.

Each model is the result of computer aided design and modeling backed up by exhaustive prototype-testing. Our development technology results in a unique range of inovative designs for highly reliable generator sets backed-up by a limited warranty covering all components.

Standard Configuration of Industrial Sets:

- PSI-HD Engine: Long-life, heavy-duty, 4-cycle, EPA certified, spark-ignited, gaseous engine from a world renowned manufacturer for maximum reliability and durability. Set capable of full load acceptance in one step. All sets are prototype built and torsionally tested.
- Cooling: Radiator with belt driven pusher fan.
- Filtration: Heavy duty replaceable element air-cleaner
- Alternator: Single bearing, 4-pole, rotating field, self-excited, self-ventilated, 60Hz brushless, Class H insulation. AVR for close voltage regulation. Winding temperature rise of 130°C at standby rating.

- Certification: Generator set meets ISO 8528-5.
- Arrangement: Open skid with engine and alternator units closed coupled together and with resilent anti-vibration isolators mounted between the assembly and a heavy-duty steel base. The sturdy base frame has openings allowing for winching, slinging and forklift pockets for ease of handling
- Auto Start Control Panel: Digital auto-start microprocessor based control panel with remote start capability.
- Starting System: 24 volt starter motor, battery cables, battery and belt driven charging alternator.

Standard Features of Industrial Sets:

- HIPOWER[®] is a single source for all the generator system
- Generators are produced in a facility dedicated to generator set manufacture
- The generator set can accept rated load in one step
- 2 years or 1000 hours year limited warranty given as standard.
 Extended warranties offered as options to the standard
- Base set meets NFPA 110, Level 1, when accessorized with the required equipment and installed per NFPA standards
- Test certificates available for the fully factory tested industrial generator sets

- HIPOWER[®] generator sets are designed to fit a full range of options for complying with many diverse applications
- Full range of safety features to ensure full protection of the generator system. (See back-page for details).
- MasterTrak Remote Monitoring An asset management tool that communicates directly with the engine and any other critical equipment data points. Providing a means to monitor faults and alerts in real-time, proactively resolving engine and equipment problems and reducing costly unexpected failures.

Packaged in the US



Application & Specification Data

LPG/NG Generator Set Model: HNG 265 T6 PSI Heavy Duty Series

Gaseous Generator Set Specification:

Governor regulation class	ISO 8528 Part 1 Class G3
Voltage regulation, no load to full load	plus or minus 1%
Frequency regulation	Ischronous
Radio frequency emissions compliance	Meets requirements of most industrial and commercial applications
skVA at 480 volts with 30% voltage dip	940
Main Line Circuit breaker – amps capacity	1200A (208V) - 800A (240V) - 400A (480V / 600V)

ENGINE

LNGINL	
Manufacturer	PSI Heavy Duty
Model	14.6L
EPA certified	Yes
Crankshaft speed	1,800 rpm
Туре	LPG/NG fueled, 4-stroke
Ignition	Spark Plug
Aspiration	Turbo Charge Air Cooled
Number of Cylinders	8
Cylinder arrangement	V-type
Displacement CID (liters)	892 (14.6)
Bore and Stroke ins (mm)	5.04 X 5.59 (128 x 142)
Nominal power	LPG 253 hp NG 402 hp
Cooling	Liquid
Governor	Electronic
Starting motor & alternator	24 volt
Compression ratio	10.5:1
Air cleaner type	Dry, replacable cartridge
Exhaust gas flow at full output lb/hr (kg/hr)	2625 (848)
Exhaust temperature at full load - dry exhaust °F (°C)	1350 (1077)
Maximum permitted back pressure - in. HG (kPa)	5.0 (1.24)

Cooling System:

Radiator- cooled cooling air flow - cu. ft./min. (cu. m/min.)	30000 (849)
Alternator cooling flow - cu. ft./min. (cu. m/min.)	2098 (59.4)
Combustion air - cu. ft./min. (cu. m/min.)	603 (17)
Total cooling air flow (engine + alternator + combustion)	32701 (925)
Radiator system capacity, including engine - gallons (L)	28.0 (127)
1 1 1 41	

Lubrication system:

Oil pan capacity - quarts (L)	32.75 (31.0)	
Oil pan capacity with filter - quarts (L)	40.25 (38.1)	
Oil filter - quantity and type	1, Replaceable Spin-On	
Recommended lubricating oil grade - above 0 ° F (below 0 ° F)	SAE 15W-40 Low Ash (.25 - 5% by wt)	
Oil consumption at full load	N.A.	
Oil pressure – psi (bars)	94.5 (6.5)	

Engine Electrical System:

Starting motor voltage	24 volt
Battery - AH	200
Maximum battery charge alternator output - amps	45
Cold Cranking Amps - minimum	1000

Fuel System: Fuel type LPG or Natural Gas, vapor withdrawal Fuel supply line - inlet 2" NFPT Natural gas and LPG fuel supply pressure - in. H2O (kPa) 7 to 11 ins. (1.7 - 2.7) Fuel Consumption: LPG - cu. ft./hour (kg/hour) at 100% standby rating Natural Gas - cu. ft./hour (kg/hour) at 100% standby rating PG - cu. ft./hour (cu. m/hour) at 75% standby rating N.A

N.A

N.A

N.A

Alternator Specification:

Natural Gas - cu. ft./hour (cu. m/hour) at 75% standby rating

Natural Gas - cu. ft./hour (cu. m/hour) at 50% standby rating

LPG - cu. ft./hour (cu. m/hour) at 50% standby rating

Alternator Specification:				
Alternator make		Stamford		
Alternator model, winding & AVR model	127/208; 277/480 volts	HCI 434 E N.G.		
	600 volts	HCI 434 D N.G.		
Voltages		120/208; 277/480; 347/600		
Alternator Type		Four pole, rotating field		
Excitation System		Brushless. self-exciting		
Power factor		0.8		
Number of leads		12 leads, reconnectable		
Stator Pitch		2/3		
Insulation		Class H		
Windings – Temperature Rise		150° C		
Enclosure (IEC-34-S)		IP23		
Bearing		Single, sealed		
Coupling		Flexible disc		
Amortisseur windings		Full		
Voltage regulation – no load to full load - solid state		1%		
TIF		<50		
Line harmonics		5% maximum		

Standard Features: (see back-page for control panel details)

Radiator with pusher fan	Secondary fuel regulator		
Dry air cleaner	All rotating components (i.e. fan) protected with metal guards		
Heavy-duty engine start batteries in rack with cables	All hot components (i.e. exhaust) protected with metal guards		
Emergency stop switch	Ground connection prepared for ground spike (not supplied)		
Control Panel DSE7310 (See over for details)	Main line wired ABB UL listed circuit breaker for overload protection		
Two dry contacts for auto-start	Operation and installation literature		
Steel base for mounting on firm surface such as concrete	CSA certified		

Available Options:

☐ Level 1 Carbon steel 11 gauge housing, with full weather protection and above average sound attenuation.				
☐ Residential silencer (for open skid only) ☐ Radiator for dirty environments				
☐ Natural Gas or Propane ☐ Critical grade silencer (supplied loose) for Open Sets				
☐ Battery Charger - float type, with ammeter	ery Charger - float type, with ammeter ☐ Hospital grade silencer in lieu of critical, on Level 2 models			
☐ Engine block heater ☐ Control panel heater				
PMG alternator for single & 3-phase models				
☐ Remote annunicator	☐ Oil field heavy duty rental skid			
Auto Transfer Switch (ATS) Options:	☐ Open transition ATS	☐ Closed transition ATS		
	☐ Delayed transition ATS	☐ Service entrance ATS		

HIPOWER DSE 7310 Control Panel: HIPOWER's auto-start control panel DSE 7310 is supplied by Deep Sea Electronics with a manual or auto start selection switch with push button reset. Displays with indication of: phase to neutral voltage, voltage between phases, current (amps) per phase, frequency, power factor, kW and kVA outputs, fuel level, engine speed, hours run, battery voltage and battery charge voltage.

Engine and generator alarms for: battery charge failure, emergency stop activated, over-speed, under-speed, low oil pressure, high coolant temperature, low coolant level, low fuel level, overload, unbalanced voltage, over and under voltage, over frequency, short circuit, inverse power and incorrect phase sequence. All protections are programmable to: Warning alarm without engine shutdown or alarm with engine shutdown, with or without cooling

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period. Warning alarms for: low fuel level, battery voltage failure and battery charging alternator failure

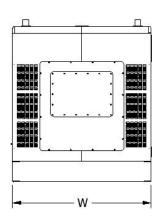
Alternator alarms included: Overload, unbalanced voltage, over voltage, under voltage, over frequency, under frequency, short circuit, reverse power, and incorrect phase sequence.

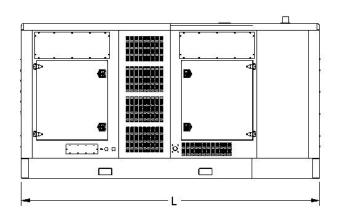


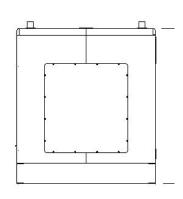
Pictures of Control Panel RH and Distribution Panel LH may include optional equipment and/or accessories

Model HNG 265 T6

key dimensions and sound levels







Generator Data (L, W & H dimensions in inches)						
Configuration L =Length W = Width H = Height Net Weight lbs dBA						
Open 178" 83" 90" 9105 TBA					TBA	
Enclosed 178" 83" 93" 10139 72						

* All measurements are approximate and for estimation purposes only. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.

Codes and Standards Compliances used where applicable









NFPA 99 ISO 8528-5 ISO 1708A.5 ISO 3046 NEMA ICS 1 DIN6271 SAE J1349 BS5514 IEE C62.41 TESTING



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