



# HSG 20 StandBy Commercial / Light Industrial Gaseous Generator Set

## Generator Set rating

Three Phase	60hz	KW
	LP	NG
Standby Output	20	18
Prime Output	18	16
Voltages	120/208/240	
Current	120/69/60	

## Single Phase, KW, 60hz

(120/240)

Standby Output	19	17
Prime Output	17	15
Sound Level	71 dBA	
@ 23 ft. Unloaded		

## AC Generation Equipment

is our business at GENMAC. Our AC power systems offer a first-rate solution to requirements for Reliable, High Quality Electrical Power for the Residential owner.

All units are:

- 100% full load tested
- Performance supported by prototype testing
- 12 lead Reconnectable AC synchronous Generators
- Solid State Automatic Voltage regulators



## Product Features

### System Reliability and Longevity

begin with design experience and integrity. GENMAC has been producing Generator Sets for over 20 years. The company is situated in the area world renowned for automotive and electromechanical manufacturing. This has allowed us to assemble a staff of design and manufacturing personnel who are second to none. The

knowledge and experience in designing and manufacturing with state-of-the art power generation equipment is built into our complete line of generator sets.

### Single Source Responsibility:

Product service, support and parts are available through the GENMAC network of distributors.

### Accessories and Flexibility

are designed into GENMAC's generator sets at the factory level to meet residential application needs.

### The GENMAC mission

To provide the world with safe, reliable, high quality power generation equipment to allow anyone in the world to realize their full potential.



# HSG 20 Commercial Light Industrial Gaseous Generator Set

---

---

## Standard Equipment

- 4 Cycle Liquid cooled engine
- Thermostatically controlled Block Heater
- 12VDC engine electrical systems
- Battery Charging alternator
- Solid State Automatic Voltage Regulator
- 12 wire reconnectable generator end
- Tropical Treated Alternator
- Dual electronic protection: for Overspeed, oil pressure and coolant temperature
- Single stage dry type air cleaner
- Electronic speed control
- Dirty Air filter switch
- Under Base stub up area for hidden wiring access
- Electronic Fuel Shut off Valve
- Sound attenuated Outdoor Enclosure
- Steel base with vibration isolators between engine, generator and the base.
- Integral Muffler with rain cap
- Integral Control Box behind a locked door
- Circuit breakers located in the lockable Control Box
- Single connection area for main AC terminals and all control wiring
- On board Utility powered AC battery charger
- Utility Present Light
- In Base fuel inlet.
- In Base Oil drain
- In Base Coolant drain
- All steel parts are powder paint coated and tropical treated
- Corrosion resistant hardware
- Interior light
- Microprocessor based, fully programmable auto start control panel with metering and security
  - Integral programmable ATS control logic built into System controller
  - Exercise with or without load capability
  - Digital read out control system with the following accessible standard displays:
    - Utility Voltage L-L (3)
    - Generator
    - Voltage L-L (3)
    - Amperage (3)
    - Frequency
    - Power Factor (3 and total)
    - VARS
    - Power instantaneous or KWH
    - Battery Voltage
    - Operating hours
  - Additional information available on the controller display are:
    - ATS switch position
    - Engine run / on
    - Oil pressure
    - Coolant temperature
    - Generator run / on
    - Alarm description
    - Help button for troubleshooting assistance
    - Test, Manual, Automatic and Reset buttons
    - Remote manual switching of ATS from the Control Panel
  - Alarms shut down and prealarm- programmable
    - High engine temp
    - Low oil Pressure
    - High voltage generator
    - Low voltage generator
    - Under frequency
  - Alarm -programmable
    - Over speed
    - Cranking Failure
  - Warning: Programmable
    - High Battery Voltage
    - Low Battery Voltage
    - Dirty Air Filter
  - Event History time marked 32 events
  - Common alarm relay output
  - Exceed programmable Maintenance hours warning error code
  - Single button Automatic test function with load
  - Event History time marked 32 events

### Options:

Complete remote control and operation by:

- Direct PC interface able with cable and software
- Modem capable for remote control over dedicated phone line
- Wireless hook up to RS232 port Capable
- Remote Alarm Annunciator
- Automatic transfers switches for any application
- External Emergency Stop
- Will operate with Standard 2 wire ATS
- Capable of operating more than one ATS
- Capable of external start / Stop operation
- Spare Programmable Digital input and output relay
- Project engineering help available for "Specials"



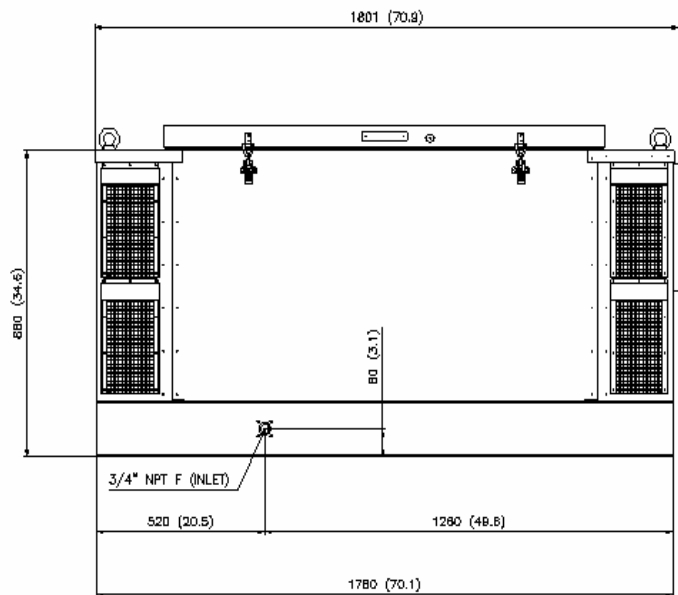
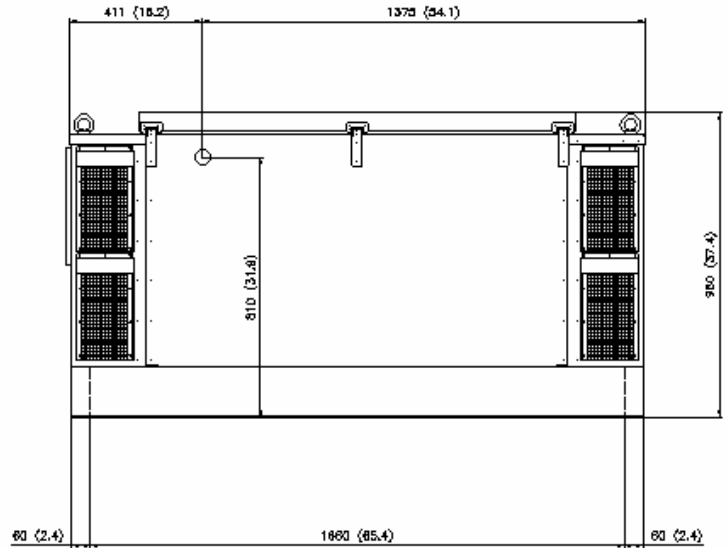
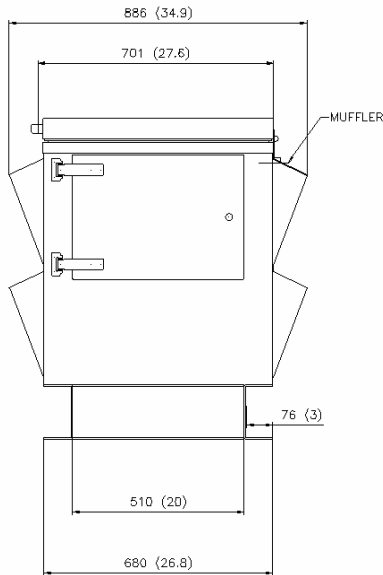
# HSG 20 Commercial Light Industrial Gaseous Generator Set

## Technical Specifications Model HSG 20

Engine:		Generator	
Manufacturer	Tofas	Generator MFG.	Mecc Alte
Model	SOHC 1600cc	Type	ECO 28 2L/2
Aspiration	Natural	Model	27kVA (240V – 60Hz)
Cylinders	4	Leads	12 re-connectable
Displacement	1600cc	Speed	3600 RPM
Bore and Stroke	86.4 X 67.4mm	Rated Voltage	120/208 60Hz
Compression ratio	9.0:1	Rated Power	27.0 kVA
HP NG	34HP @ 2400rpm	Voltage Accuracy	Approx. +/-1.5%
HP LP	38HP @ 2400rpm	Motor Starting kVA	
Valves	Single Overhead Cam	(At 35% Dip,	
Governor	GAC Electronic System	100% voltage recovery)	48.6 SkVA
Cooling system	Pressurized, Closed recovery	AVR	S.R.7/2
Lubrication System	Pressurized oil	Over speed	4500 RPM
Oil Capacity w/ Filter	4.4 Quarts	THD	Approximately 5%
Cooling System Cap.	2.3 gal.	Protection	IP 33
		Cooling flow	11 Cubic Meters / min
		<b>Insulation Class</b>	
		Stator	H
		Rotor	H
		Exciter	H
<b>Fuel Pressure requirements</b>			
Natural Gas and LPG			
8 to 11 inches water column			
<b>Fuel Consumption at 100% load</b>			
Natural Gas	311 /Cubic feet per Hour		
Propane	3.7 /Gallons per Hour		
<b>Generator Set</b>			
<b>Frequency Regulation</b>			
Steady state	0.25%		
<b>Voltage Regulation</b>			
Steady State	1.5%		
<b>Nominal Sound Level</b>			
@ 23FT No Load	71dBA		
<b>Derating Factors:</b>			
For every 328 ft above Sea Level	2.0%		
For every 10 Deg. F above 77 Deg F	1.0%		
Dry Weight:	1,100 lbs.		
Basic footprint:	71 x 35 x 37.5inches		



# HSG 20 Commercial Light Industrial Gaseous Generator Set



Wiring access is from anywhere  
under the base inside the frame

## Mechanical Layout



12355 S.W. 129 Court # 1

MIAMI, FL 33186

Tel: (305) 254-4545

Fax: (305) 254-4558

Toll free (877) 254-4541

Email: [genmacusa@genmac-group.com](mailto:genmacusa@genmac-group.com)

[www.genmac-group.com](http://www.genmac-group.com)

All Specifications are subject to change with out notice.  
Made in Italy

## Distributed By