

# SPECIFICATION SHEET

Power Ratings	Standby		Prime			
Gaseous Fuel	kW	kVA	kW	kVA		
Natural Gas (NG)	200.0 250.0		180.0	225.0		
VPG	141.0	176.3	150.0	158.6		
Ampage 0.8 PF 208V	69	95	625			
12-wire voltages: 1P = 120/240, 3P = 120/208, 120/240, 480/277						

#### Rating Definitions: Rated for 1800 rpm.

Standby ratings are applicable for the duration of any power outage. No overload is available at these ratings. Prime ratings are continuous per BS 5514, DIN 6271, ISO3046 & IEC 34-1. Overload capacity on prime-power ratings is 10% for one hour in each twelve hours of operation. All single phase ratings are based on a 1.0 power factor, three (3) phase ratings based on a 0.8 power factor. Ratings are established based on 85°F (29°C) and an elevation of 1,000 feet (305 meters).

#### STANDARD FEATURES:

Tradewinds Power Corp (TPC) Gaseous ZENITH generator packages complete with mounted auto control panel, gas connections, air cleaners, exhaust silencers, and other accessories mounted in a weather protective enclosure. All TPC systems and components are prototyped, assembled and tested within a purpose built packaging, manufacturing, and test facility.

### Engine:

- · ZENITH ZPP TA 690 gaseous engine
- · Full ECU engine control with coil-on-plug variable timing ignition
- · Integrated knock sensing and control
- · Heavy duty rated for standby and continuous prime power operation
- · Cooling system capable of operation at 120°F ambient
- ZENITH 4-cycle gaseous-fueled engine is constructed for long-life, and heavy-duty operation, is EPA certified, spark-ignited, and designed for maximum reliability and durability.
- · Water-cooled and stoichiometric with replaceable dry cylinder liners
- Cast iron block and heads with overhead valve configuration
- · Thermostatically controlled jacket water heater

### Alternator:

- · Marathon 4-pole, 12-wire brushless generator, single bearing
- Alternators are oversized with volts per hertz tracking with PMG for enhanced motor starting for engineers to standard on one package
- Superior voltage waveform achieved by a 2/3 pitch and skewed rotor.
- Vacuum-impregnated windings with fungus-resistant epoxy for dependability and long-life
- Sustained short-circuit capability enabling down-line circuit breakers to trip without collapsing the generator field

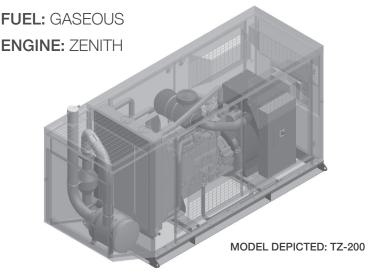
## Starting System:

- 24-VDC Starter
- Engine mounted Battery Charging Alternator
- · Battery Cables and Rack along with Grounding Strap

## Enclosure and Arrangement of Complete Assembly:

- · Engine and generator close coupled mounted on vibration isolators
- Weather Protective Enclosure constructed of Marine Grade Aluminum 0.125 thickness, SS Hardware, white powder coat paint finish on both sides, sound Insulation resistant to high temperatures, fuel and oil, hinged / removable / keved alike doors
- · Residential rated interior mounted exhaust silencer kit
- · Vertical radiator and exhaust discharge
- · Oil & Coolant Drain Lines with Brass Ball Check Valves
- · 175mph wind load rating

# UL2200 GASEOUS GENERATOR SET



### **AUTOMATIC ENGINE CONTROLLER DGC2020:**

- · Automatic engine controller with analog display of all functions
- · Microprocessor Based, Navigation key with large LCD display
- · SAE J1939 CANBUS Communication
- · Event Recording
- · Transfer Switch Control (main failures)
- · Alternator Protection: under/over voltage, under/over frequency
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Sender Unit failure, Fuel Failure sensor, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms
- Metering (ample range): Volts, Current, Hz, Watts, VA, Pf, Oil Pressure, Coolant Temperature, RPM, DC Volts, Fuel pressure, Engine running time
- · Engine Control with Timers
- · External remote start input (on or off load)
- 16 programmable contact inputs 7 Contact outputs

# SCADA interface points:

- No fuel
- · Low battery charging voltage
- Engine running
- Common engine alarm
- · Switch in Emergency Position



DGC-2020 DIGITAL CONTROLLER

### **OPTIONAL EQUIPMENT:**

- · Low coolant level switch
- · Water separator fuel filter
- · Space heater
- · Generator drip covers
- · 17-light remote annunciator panel

### WARRANTY:

- Engine covered under the original equipment manufacturer's warranty
  consult Tradewinds Power Corp for details
- · Complete package supplied with 2-year limited warranty

The manufacture reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.



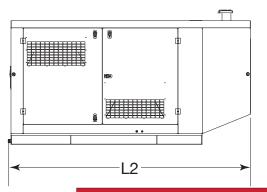
# Zenith UL2200 GASEOUS GENERATOR SET

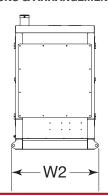
ENGINE SPECIFICATION			
Manufacturer	ZENITH		
Model	ZPP TA 690		
Emissions	EPA Tier 3		
Engine speed (rpm)	1800		
Max. Nominal Engine hp 1800rpm	VPG 202hp NG 287hp		
Cyclinder arrangement	Inline		
Combustion system	Spark Ignition		
Aspiration	Turbo-charged Aftercooled		
Engine type	Gaseous NG/VPG		
Gaseous Fuel	Air-valve Mixer based fueling		
Number of Cylinders	6		
Displacement in <sup>3</sup> (liters)	538.8 (8.8)		
Bore and Stroke inches (mm)	4.488 X 5.669 (114 x 144)		
Cooling	Water-cooled		
Governor	Electronic Throttle Body		
Starting aids	NA		
Compression ratio	10.5:1		
Air cleaner type	Medium duty dry type		
Exhaust After-treatment	Iline catalyst		
Fuel switch	Fuel Cut-off Valve		
COOLING SYSTEM FOR OPERATING AT 120° AMB	IENT:		
Cooling System	Water-cooled		
Engine Coolant Capacity quarts (Liters)	ТВА		
Fan	Belt driven pusher fan		
Radiator	Engine mounted		
Air flow - lb/hr NG (LPG)	1755 (1128)		
LUBRICATING SYSTEM:			
Total lubricating capacity quarts (Liter)	22.0 (20.8)		
Recommended lubricating oil grade	SAE 5W30		
Oil Pressure – psi (bars)	ТВА		
Maximum Allowable Oil Temperature F (C)	ТВА		

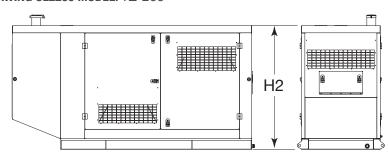
ENGINE ELECTRICAL SYSTEM:			
Starting motor voltage	24 volt		
Charger	65 A Alternator with DC output		
Wet Cell Battery	Lead Acid		
ALTERNATOR:			
Configuration	Brushless, 12-wire, 4-pole		
Frequency	60 Hz		
Voltage regulation	+ / - 1%, V/Hz, Electronic, EMI filtered		
No load to full load voltage regulation	+/- 0.5%.		
Coupling	SAE Adapter, Flexible Disc, Direct		
Bearing	Single		
Manufacturer	Marathon		
Model	431-6206		
Load acceptance	One Step, 100% per NFPA 110		
Compliance	NEMA, IEEE & ANSI for temp. rise		
Construction	Self ventilated drip-proof		
FUEL CONSUMPTION: LB/HR NG (LPG) STAND	BY RATING		
100%	107.0 (72.0)		
75%	TBA		
50%	TBA		
25%	TBA		
CONTROL PANEL SPECIFICATIONS:			
Model	DGC2020		
Microprocessor based	Navigation key & large LCD display		
Operating power	Nominal 12-24 VDC		
Consumption	14.2W run mode		
Remote communication capability	Optional		
<b>ENCLOSURE AND ARRANGEMENT OF COMPLE</b>	TE ASSEMBLY:		
Coupling	Close coupled to flywheel flange		
Enclosure	Aluminum for weather protection		
Base arrangement	Rigid steel base frame with AVMs		

# **DIMENSIONS & ARRANGEMENT DRAWING UL2200 MODEL:** TZ-200

Spill containment







For Oil and Coolant

KEY DIMENSIONS AND WEIGHT BASIC OPEN SET, SOUND ENCLOSURE AND MOUNTED ON DOT TRAILER ( $\star$ = Option Equipment)									
Description (inches)		Height	,	Width	1	Length	Dry weight lbs	Wet Weight lbs	Sound dBA
Open Set	H1	-	W1	-	L1	-	-	-	82
Enclosed Set *	H2	81	W2	44	L2	134	4985	-	68

TRADEWINDS POWER CORP • 5820 NW 84th Avenue • Miami • Florida 33166

Call: 800.223.3289 or email: info@tradewindspower.com