

5820 NW 84th Avenue • Miami Florida 33166 Tel 305 592 9745 • FAX 305 592 7461 Filters Pump Sets Power Units Generator Sets Automatic Engine Controls

City Of Fort Lauderdale 4250 N.W. 10th Ave Fort Lauderdale, FL 33309 Mr. Richard Wentworth 954-828-7857 rwentworth@fortlauderdal.gov

TO:

Quotation # TPJC23956R April 13 2017

We are pleased to offer this Quotation as detailed below

Amount	Description	Each	Extended
2	Model TP150 Base Awarded Mobile Tradewinds Generator Set under FSA contract No. FSA16-VEH14.0, Spec # 71.	58,850	117,700
	150 KW (187.5 KVA) Standby, 135 KW (168.75 KVA) Prime Power 120/208 Volts [reconnectable], 60 Hz, Three Phase, 0.8 Power Factor Amp Load Capacity: 521 Load Bank tested. 120/240 Volts [reconnectable], 60 Hz, Three Phase, 0.8 Power Factor Amp Load Capacity: 451; Load Bank tested. 277/480 Volts [reconnectable], 60 Hz, Three Phase, 0.8 Power Factor Amp Load Capacity: 225; Load Bank tested. 111 KW (138 KVA) Standby, 100 KW (125 KVA) Prime Power 120/240 Volts [reconnectable], 60 Hz, Single Phase, 1.0 Power Factor Amp Load Capacity: 462 Load Bank tested.		
	Perkins Diesel engine, Model 1106D.E70TAG3 TIER 3 @ 1800 RPM complete With 12 Volt Electrics, Radiator & Guard , EPA compliant under FLEX program		
	Brushless Single Bearing Alternator with a three phase sensing Automatic Voltage Regulator & Vibration Isolation Mounts With PMG & DVR2000 Regulator		
	Tradewinds NFPA 110 Digital Instrument/Control Panel with Safety Shutdowns Complete with DC Voltmeter, Hour meter, Oil and Temperature Gauges Frequency Meter, Ammeter & Voltmeter with Phase Selector Switch, Engine Cool Down Timer, Remote "E" Stop Contacts, Remote Auto Start Control, Low Fuel Level Alarm, Breakers for A/C and D/C, and a Emergency Stop Push Button.		
	Equipment included in above pricing:		
	Wet Battery, Battery Rack, and Battery Cables. Duplex electrical outlet mounted inside in a NEMA 3r box with a GFI Duplex Electrical Outlet and wired to the external of the enclosure with a Plug for connection to standard 120vac, 1ph, 20amp service. Critical Exhaust muffler and rain cap all mounted and Installed into turn hood of enclosure. .125, Marine Grade Aluminum Sound Enclosure with vertical discharge air, stainless steel hardware, Keyed alike and removable doors, and Finished		
	Powder Coat Finish white . Enclosure is rated for 175MPH wind load Estimated 75 dba at 21'. Three position voltage change over switch mounted in the generator can with one 600amp UL rated generator circuit breaker. This breaker is equipped		
	with a 12vdc shunt trip that is driven from the generator control panel to trip on over load depending upon what position the switch is located in. The load side of the breaker is prewired to one 5 point (cam lock) connection box Cleary identifying voltage connection points. Two four hundred amp connectors per phase 12,000lb D.O.T. Approved, Dual Torque Spring Axel Street legal Trailer with		
	Hydraulic surge Brakes, Fenders, optional storage box mounted on tong of trailer Running lights with reverse lights, 3" military hitch, safety chains, and a 300 gallon Dual wall steel fuel tank. Fuel cell with a mechanical and electronic fuel Level gauge, tank drain, Tank fill, Suction and return lines, and I bean frame. Full load factory test of complete system		
	One complete operation and maintenance manual Distribution panel to include two (2) Duplex Receptacle with GFI Trips and breakers, Two (2) non-GFI Duplex Receptacle with Breakers, One (1) 120vac, 1ph, 30amp, receptacle, 120/240vac, 1ph, 30amp receptacle, and One (1) 50amp, 120/240vac, 1ph receptacle.		

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	800 amp cam lock connection box. 2- 400amp connectors per phase plus		
	2- neutral and 1 ground		
2	Remote start-stop contacts and emergency stop located at cam-lock connectors	480	960
2	TILT-3-FS Optional Equipment. Two Internally mounted LED 12v lights with timer Aluminum cover for power connectors. Gas spring lid with snap action limit switch to shut down	480	960
	generator when open. Lockable cover.		
2	ALU-48-FS Optional Equipment	762	1,524
_	Aluminum storage box with key lock and shock lift assists	702	1,024
2	TILT-4-FS Optional Equipment	1,476	2,952
	Perimeter Service flood lights, Halogen 55w, 12vdc, Kit of 4 with 60 min shut off timer.	, -	,
	one to each side of generator and prewired to load center with breaker.		
2	T200PLUG-FS Upgrade = 200amp Power Connector with 30 feet of SO Cable	4,950	9,900
2	TTRAIL-AUL-FS Optional equipment = Upgrade Steel Trailer to Aluminum Trailer.	6,480	12,960
	Sub Total, FOB our warehouse, Miami, Florida	72998	145,996
	Onsite Start-up and Training	Inc.	Inc.
	Delivery to Fort Lauderdale, Fl.	Inc.	Inc.
	Total	,	\$145,996.00
	State & Local Tax as Applicable		
	Estimated Shipping date from receipt of order: 12 weeks		
	dity: 45 days; 15% Cancellation Charge for Restocking.		
Letter of C	Credit: Irrevocable, confirmed on any U.S. bank with payment at sight in U.S. dollars. All banking charges for account of applicant.		
Wire-Tran	sfer: Tradewinds Power Corp Division of Southeast Diesel Corp	J	
	F/B/O Wells Fargo Bank		
	Acct# 4945741023 ABA# 121000248 John Carey		2 OF 2







Generator shows some optional equipment



Generator Ratings* @ 1800 RPM									
Voltage	Ph	Hz	Standby Output kW (kVA)	Prime Output kW (kVA)	Standby Max Amp Output	Number of Wires			
120/240	1	60	111 (111)	101 (101)	462.5	12			
120/208	3	60	150 (187.5)	135 (168.75)	520.46	12			
120/240	3	60	150 (187.5)	135 (168.75)	451.06	12			
277/480	3	60	150 (187.5)	135 (168.75)	225.53	12			

Generator Features

TP150 Tradewinds' generator set, powered by Perkins diesel engine, four stroke, water cooled.

Radiator sized for 120°F ambient clearance. 12VDC Electric start and engine battery charging alternator, battery cables and grounding strap. Dry type air cleaner.

AC Alternator, Synchronous ,single bearing, direct coupled ,Alternator NEMA class "H" insulation, 150°F temperature rise, 40°C ambient, 12 o 4 leads, 0.8 or 1.0 power factor lagging, externally voltage regulated. Built in vibration isolators, corner lifting eyes

Full Load Factory Test with Safety Shutdowns for High water Temperature and Low Oil Pressure.

One Complete Operation and Maintenance Manual 1500 hours Warranty

Optional Features

- Analog or Digital Control panel
- Permanent Magnet Generators (PMG) with Voltage Regulator upgrade PM300 or DVR2000
- Mainline Circuit Breaker
- Shunt Trip for Circuit Breakers
- Voltage Selector Switch

- Weather Enclosure, Marine grade Aluminum 0.125 White Powder Coat paint finish on both sides. Sound Insulation, resistant to high temperatures, fuel and oil. All Stainless Steel Hardware, removable Doors, for easy maintenance, hinged and keyed alike Residential Grade Exhaust kit, inside mounted Oil and coolant drain lines. Air intake and discharge ducts.
- · Sound attenuation up grade
- Cam lock Connection Box
- Standard Load Center Mounted in NEMA 3R Enclosures with receptacles
- ISO Container "Mipco Type Plugs"
- Emergency Stop Push Button
- Thermostatically controlled Jacket Water Heaters
- Starting Batteries
- Automatic Battery Chargers 5-10 amps
- Steel sub base
- Steel sub base tanks Single Wall or UL142 listed
- Street Legal Trailers (Steel or Aluminum) with or without fuel tank incorporated
- Tool Box
- Spare Tire
- 1500watts External Lights w/ extendable poles
- Custom Color option

*Stand by 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). Please consult your **Tradewinds** representative for information concerning derates for temperature, altitude & humidity.

Engine Specifications

Model: Perkins 1106D.E44TAG3 T3

Max. Power: 217 bhp / 162 kWm @ 1800 RPM

Cubic Capacity: 402.6 in³ / 6.6 L

Bore & Stroke: 4.13" x 5" (105mm x 127mm)

Turbocharged Air to Air charge cooled, 4 cylinder in-line.

Direct injected

Governor type - Electronic Perkins LCS

Frequency Regulation: Isochronous, Steady-State ± 0.5%

Fluids: Oil capacity Total system -17.43 quarts (16.5 liters)

Coolant capacity w/ Radiator - 4.35 Gallons (21 liters)

Fuel Consumption US gal. (Liters) /hr @ 1800 RPM

50% load - 6.51 (26.4) Prime

75% load - 9.13 (34.5)Prime

100% load - 11.46 (43.3)Prime 100% load - 5.19 (19.66)Standby

General: Oil Filter - Spin-on type Air Filter– Dry element type

Electrical system: 12v Starter, 65 amps Alternator DC output

Recommended Battery size: 640 CCA

Fuel Type: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2

Alternator Specifications

Marathon Electric:

Type: Brushless.

Pole: 4Pole Rotating Field,

Voltage regulation: + / - 1%, Volts/Hertz, Electronic, EMI filtered

Class Insulation: 'H' to NEMA MG-1-1.66

Rated Temp. Standby: 130 C° Rise / 40 C° Ambient Coupling: SAE Adapter, Flexible Disc, Direct. Load acceptance: One Step, 100% per NFPA 110

Features: Self ventilated drip-proof construction.

Superior voltage waveform achieved by a 2/3 pitch and skewed rotor. Vacuum-impregnated windings with fungus-resistant epoxy for

dependability and long-life.

Compliance with NEMA, IEEE and ANSI standards for temp. rise.

Sustained short-circuit capability enabling down-line circuit breakers

to trip without collapsing the generator field. No load to full-load regulation of +/- 2%.

Control Panel Specifications

DGC2020

Microprocessor Based, Navigation key with large LCD display

Event Recording

Transfer Switch Control (main failures) SAE J1939 CANBUS Communication

Multilingual Capability

Suitable for Rental application Remote Communication capability

(optional)

Operational features

- · Alternator Protection: under/over voltage, under/over frequency.
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Sender Unit failure, Fuel Leak / Fuel sender Failure, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms
- Operating Power: Nominal 12-24 Vdc

Consumption 14.2W run Mode

•Metering (ample range):

Volts, Current, Hz, Watts, VA, Pf Oil Pressure, Coolant Temperature, RPM, DC Volts, Fuel Level, Engine running

- · Engine Control with Timers
- External remote start input (on or off load)
- 16 programmable contact inputs.
- 7 Contact outputs

Agency Approvals: UL 508 R CSA C22.2 No 14 **NFPA 110**

CE Compliance: EC LVD-73/23/EEC EN 61000-6-4:2001 EMC EN 50178:1997 EMC- 89/336/EEC EN 610000 6-2:2001 EMC Immu-

nity

One complete set Owners/Operators, Engine, Alternator and Accessory manuals

Dimensional and Mounting Specifications

Specifications are subject to change without notice



Authorized	l Deal	er:
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