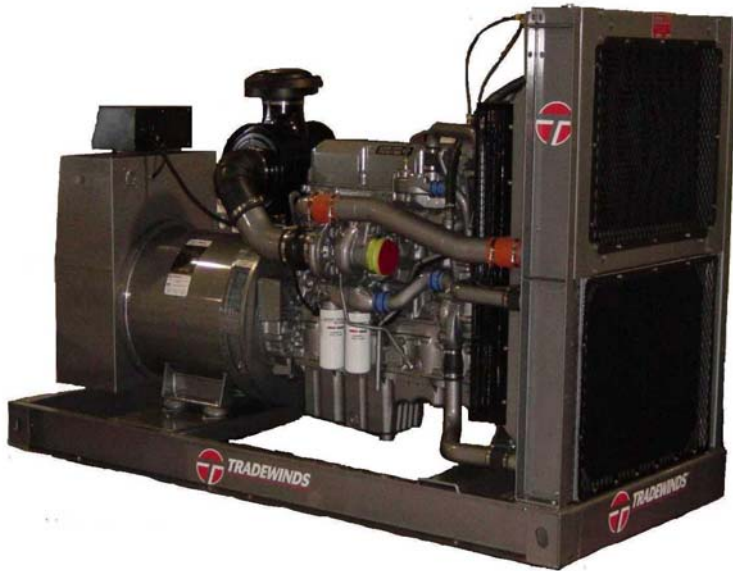


Power When You Need It



Standard Enclosed Generator Set Features

- Detroit Diesel Series 60, Tier II
- Single Bearing Direct Coupled Alternator With Class 'H' insulation, Sized for 150° Temperature Rise.
- Engine Mounted NFPA/ UL Generator Control Panel with Auto Start/Stop, J1939 Interface.
- Weather Protective Sound Attenuated Enclosure constructed of Marine Grade Aluminum with White Powder Coat Paint Finish & Stainless Steel Hardware. Enclosure includes:
 - Critical Rated Interior Mounted Exhaust Silencer & Stainless Steel Flex Connection
 - Oil & Coolant Drain Lines w/ Ball Valves
 - Hinged / Removable / Keyed Alike Doors
- Control Panel (NFPA/UL Approved) Mounted to Enclosure with access door to allow exterior viewing w/J-1939 Interface
- Sub-base Fuel Tank (Steel) with Flexible Fuel Supply and Return Lines Suction, Tank Drain, Mechanical Fuel Gauge, 2" Filler Neck w/Lockable Cap, Lifting Eyes on each corner, Electrical Stub-up Area, Four (4) Corner Lifting Eyes, and Four (4) Vibration Isolators.
- Radiator sized for 125° Ambient Clearance & Jacket Water Heater.
- Dry Type Air Cleaner.
- 12-Volt Starter, Engine Mounted Battery Charging Alternator, Battery Cables, and Rack along with Grounding Strap.
- Full Load Factory Test with Safety Shutdown.
- One Complete Operation and Maintenance Manual.

Generator Set Ratings - Stand-by

Voltage	PH	Hz	Standby Output kW	Prime Output kW	Max Alt SkVA	Standby Max Amp	# of Wires
120/208	3	60	475	425	1216	1647	12
120/240	3	60	475	425	1216	1428	12
277/480	3	60	475	425	1216	714	12

RATINGS: Stand-by ratings are continuous for the duration of any power outage. No overload capacity is specified at this rating. Prime ratings are continuous per BS 5514, DIN 6271, ISO-3046 and IEC 34-1 with 10% overload capacity one hour in twelve hours. All single phase units are rated at 1.0 power factor. All 3-phase units are rated at 0.8 power factor. Specification and design are subject to change without notice and without any obligation or liability whatsoever. DERATION: Maximum altitude before generator set deration, ft. (m): 500(152). Altitude deration factor, % per 1000 ft. (305 m): 4.0. Maximum intake air temperature before generator set deration, F (°C): 85 (29). Temperature deration factor, % per 10°F (5.5°C): 1.0.

Standard Open Generator Set Features

- Detroit Diesel Series 60, Tier II
- Single Bearing Direct Coupled Alternator With Class 'H' insulation, Sized for 150° Temperature Rise
- Vertical Industrial Exhaust Muffler with Rain Cap, (Loose)
- Sub-base Fuel Tank (Steel) Sized for 8 Hours Operation with Flexible Fuel Supply and Return Lines, Tank Drain, Mechanical Fuel Gauge, 2" Filler Neck w/Lockable Cap, Electrical Stub-up Area, Four (4) Corner Lifting Eyes, and four (4) Vibration Isolators
- Radiator sized for 125° Ambient Clearance with Front Guard
- Control Panel (NFPA/UL Approved) Mounted to Alternator with Auto Start/Stop. J-1939 Interface.
- Dry Type Air cleaner
- 12-Volt Starter, Engine Mounted Battery Charging Alternator, Battery Cables, and Rack
- Full Load Factory Run Test With Safety Shutdown.
- One Complete Operation and Maintenance Manual.

Optional Equipment

- Thermostatically Controlled Jacket Water Heaters
- UL 142 Double Wall Sub-base Fuel Tanks
- Round Skid Mounted Tanks
- Main Line Generator Circuit Breakers
- Industrial and Critical Rated Mufflers
- Oversized Generator Ends for Motor Starting
- PMG Generators and Special Voltage Regulators
- Special Paralleling packages to parallel on a "Dead Buss or on a "Live Buss".
- Remote Annunciators.
- Standard Load Centers Mounted in NEMA 3R Enclosures with Plugs.
- Special Insulation for Generators
- Generator Drip Covers
- ISO Container "Mipco Type Plugs"
- Day Tanks
- Street Legal Trailers
- Shunt Trip for Breakers
- Automatic Transfer Switches

Miami (Corp HQ)

5820 NW 84th Avenue Miami, FL 33166
Tel: 305-592-9745 • Fax: 305-592-7461
1-800-223-3289

Jacksonville

55 Industrial Loop N., Orange Park, FL 32073
Tel: 904-278-9919 • Fax: 904-278-0881
1-800-223-3225
www.tradewindspower.com

Sebring

600 State Road 66, Sebring, FL 33875
Tel: 863-382-2166 • Fax: 863-382-1206
1-800-206-2224

Engine Specifications - Tier II Compliant

Detroit Diesel: Series 60
 Max. Power: 685 hp / 511kW @ 1800 rpm
 Displacement: 855 cu. in. / 14 L
 Bore & Stroke: 5.24" x 6.61" (133 x 169 mm)
 Valves per cylinder: Two (2)
 Liner type: Wet
 Governor type: Detroit Diesel - ECU
 Freq. Regulation: Isochronuous, Steady-State
 Electrical system: Starter, 24-volt. Alternator 61 amp
 Recommended Battery size: 950 CCA
 Oil capacity: 23 qts. (21.5 L)
 Oil filter: Spin On
 Oil Cooler: Liquid cooled

Air Flow Requirements
 Combustion air: 1260 cfm (35.6 m³/min)
 Cooling air: 36,000 cfm (1019 M³/min)
 Max. Ambient Temp: 125° F (51.6° C)
 Coolant flow: 96 gpm (363 lpm)
 Heat rejection, Eng: 10,250 Btu/min (66 kW)
 Gen: 4780
 Max Top tank temp: 210° F (98.8° C)
 Max restriction of cooling air:
 5 In H₂O (38 In. Hg)

Exhaust Requirements:
 Exhaust flow at rated kW:
 3,591 Cfm (101 M³/min)
 Exhaust temp at rated kW
 984° F (528° C)
 Maximum back pressure:
 30 In Hg (48 kPa)
 Min. exhaust outlet diameter:
 6" (152 Mm)

Fuel Consumption		at Standby Rating	
US Gallons per Hour	25%:	TBA	50%: TBA
(Liters per hour)	75%:	TBA	100%: 32.5

Alternator Specifications

Marathon Electric Alternator: Brushless, 4-Pole Rotating Field, Self-ventilating drip-proof construction.
 Voltage Regulator: Solid State: Volts/Hertz
 Insulation: Class 'H' to NEMA MG-1-1.66
 Rated Temperature Rise: 150 C°, Standby
 Bearing Type / Number: Sealed / Single
 Coupling: Direct Coupled, Flexible Disc
 Voltage regulation: + / - 1%, Solid State
 Load acceptance: One Step, 100% per NFPA 110

Features:
 Superior voltage waveform achieved by a two-thirds 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%.

Panel Specifications and Functions

Digital Control with auto-start logic:
 J1939 Compatible
 Can bus RS485 & RS232 interface connections
 Graphic Icon based LCD lighted Display

Operational features:

- Alternator over/under voltage warning & shutdown
- Alternator over/under frequency warning & shutdown
- Engine over/under speed warning & shutdown
- Low oil pressure warning & shutdown
- High engine temperature warning & shutdown
- High/Low battery voltage warning
- Over-current warning/electrical trip/shutdown
- Built-in adjustable exercise scheduler
- Event logging of shutdown events
- External remote start input (on or off load)
- Magnetic pick-up or alternator monitoring
- 6 digital inputs—fully user configurable
- 3 configurable relay outputs

<u>Electromagnetic Compatibility</u>	<u>Temperature tested to:</u>	<u>Humidity tested to:</u>	<u>Vibration tested to:</u>	<u>Electromagnetic compatibility:</u>
BS EN 50081-2: 1992 and EN 6100-6-4: 2000 EMC EN 6100006-2:1999 EMC Immunity	Cold: BS EN 60068-2-1 Hot: BS EN 60068-2-2	BS EN 20011 part2.1 BS EN 60068-2-27	BS EN 60068-2-6	BS EN 50081-2, 1992 EN6100-6-4, 2000 EMC EN6100006-2, 1999 EMC
	<u>Electrical Safety tested to:</u>			
	BS EN 60950			

Dimensional and Mounting Specifications

Open Style Unit

L x W x H inches / (mm): 130" (3302) x 58" (1473) x 78.5" (1994)
 Overall Dry Weight lb. (kg): 7,500 (3,402)

Enclosed Style Unit

L x W x H inches / (mm): 188" (4775) x 64" (1626) x 98" (2489)
 Overall Dry Weight lb. (kg): 10,500 (4762)

Electrical Stub Location at Rear of Weather.
 Enclosure. Spacing from rear access cover to Sub-base fuel tank is 6 inches (152.4 mm).
 Note: This Dimension is for both UL rated fuel Tanks and Non-UL rated tanks.

Authorized Dealer: