



WILDCAT POWER GEN

ENVIRONMENTALLY-SAFE
ENGINE SOLUTIONS™

FREEDOM DIESEL: 10KW-15KW

The Freedom generator is a single phase, sound attenuated enclosed genset designed to run for extended periods of time with prime rated liquid cooled engine platforms.



Durable Industrial Engine

• Usually reserved for industrial applications, the Freedom's power plant is a premier industrial fixed speed (1,800 RPM) engine built to provide strong, reliable power without giving up quiet operation and engine longevity.

Quality Clean Power

• Voltage regulation ensures that electronics are safely powered with less 5% total harmonic distortion (THD) at no load.

NFPA-110

• Wildcat designed the Freedom to exceed NFPA-110, Level 2 Emergency Power Supply Systems (EPSS) by providing prime power (PP) to meet EPSS Class 168 Type 10.

Digital Controls

• Designed for single genset applications, the Freedom's digital controls monitor the genset's voltage, current, power, frequency, engine speed, oil pressure and coolant temperature on a back-lit LCD display for ease of use.

Industrial Class Alternator

• Protected with Class H insulation and standard 40°C nominal rating, the Freedom's standard 12-wire winding and 2/3 pitch meet all key international standards and regulations including UL 1446.

Easy to Service

• Preventative maintenance and in-field repairs are made easier with our simplified engineering and non-proprietary parts.

GENERATOR SET RATING

Model	Voltage	Power Factor	Phase	Hz	Circuit Breaker Amps	kW / kVA	BMEP (Bar)	BSFC (g/kW*h)	Emission Compliance	Controller
Freedom Diesel 10KW	120/240	1.0	1	60	42	11.5/14	7.2	168	Tier 4F	DeepSea
Freedom Diesel 15KW	120/240	1.0	1	60	63	15.3/19	7.2	175	Tier 4F	DeepSea



ENGINE SPECIFICATIONS

Engine

Manufacturer	KOEL
Type	R550 Series Industrial Powertrain 4 Cycle, Naturally Aspirated
Speed (RPM)	1800
Cylinder Arrangement	Inline 2 / Inline 3
Displacement (L)	1.1L / 1.6L
Bore & Stroke (in / mm)	3.385" x 3.7" / 86 x 94
Compression Ratio	19.7:1
Governor Type	Electronic
Frequency Regulation Steady State	+/-0.5%
Frequency Regulation No-load to Full-load	Isochronous, Constant Speed
Air Filter Type	Dry
Limited Warranty	3 Years, 5,000 Hours

Lubrication System

Type	Full Pressure
Oil Capacity (qt / L)	3.1 / 2.9
Oil Filter (Quantity / Type)	1/Spin-On

Cooling System

Radiator Type	Horizontal Copper Alloy
Fan Type	Pusher

Sound Rating at 7 Meters, Lowest Side

No Load	72 dB(A)
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Engine Crankcase Vent System

Engine Crankcase Vent System	Closed Crankcase Vent
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Electrical System

Ignition System	Coil On Plug
Battery Quantity	1
Battery Voltage (VDC)	12
Battery CCA (A)	625
Battery Charging Alternator	
Ground (Negative/Positive)	Negative
Voltage (VDC)	12
Amperage (A)	70
Starter Motor Voltage (VDC)	12

Exhaust System

Exhaust Manifold Type	Dry
Exhaust Flow at Rated Load (Kg/Hr)	65
Exhaust Temperature at Rated Load (°F / °C)	1,202 / 650
Maximum Allowable Back Pressure (in Hg / kPa)	3.3±1.0

Fuel System

Fuel Type	Ultra-Low Sulfur Diesel
Fuel Injection Pump	Mechanical Fuel Injection Pump
Fuel Filter	0.6 liter Single bowl Spin-on

Fuel Consumption

	Full Load	1/2 Load	No Load
2R550	0.70 GAL / HR	0.39 GAL / HR	0.19 GAL / HR
3R550	1.09 GAL / HR	0.61 GAL / HR	0.31 GAL / HR

STANDARD CONTROLLER



WILDCAT POWER GEN Controller for Single-Phase

- User-friendly control panel for troubleshooting
- Conveniently monitors diagnostic conditions, displays system fault codes and sets weekly exercise cycle
- Easy-to-read alpha-numeric scrolling display
- Single-Phase generator application
- UL recognized

Engine Output Deratings

Rated Temperature (°F / °C)	185 / 85
Rated Altitude	1500 ft (457 m) Above Sea Level
Temperature Derate	1.5% for Each 10°F (5.6°C) Above Rated Temperature
Altitude Derate	2.5% for Each 1000 ft (305 m) Above Rated Altitude



ALTERNATOR SPECIFICATIONS

	1-Phase	1-Phase
Model	Freedom 10KW	Freedom 15KW
Alternator Model	TAL042E	TAL042F
Manufacturer	Leroy Somer	Leroy Somer
Type	Brushless, 12-Lead	Brushless, 12-Lead
Frequency (Hz)	60	60
Phase	1	1
Alternator Configuration	Double Delta	Double Delta
Exciter Type	Shunt	Shunt
Number of Poles	4	4
Voltage Regulator	R120	R120
Insulation Rating	Class H	Class H
Designed Temperature Rise Limit	125 °C	125 °C
Bearing (Quantity / Type)	1/Sealed	1/Sealed
Coupling	Flexible Disk	Flexible Disk
Amortisseur Windings	Full	Full
Voltage Regulation, NL to FL	+/- 1.0%	+/- 1.0%
One Step Load Acceptance	100% of Rating	100% of Rating
Total Harmonic Distortion (THD), NL to FL	<3.5%	<3.5%
<ul style="list-style-type: none"> • Complete winding protection for non-harsh environment with relative humidity ≤95%. IP23 Protection 	<ul style="list-style-type: none"> • Manufactured according to the following standards: IEC 60034, NEMA MG 1.32-33, ISO 8528-3, CSA C22.2 n°100-14 and UL 1446. 	

Weight & Dimensions

Assembled Weight (lbs / kg)	10KW: 850 LBS / 385 KG	15KW: 1,000 LBS / 455 KG
Overall Dimensions (in)	10KW: 68" L x 27.5" W x 41.5" H	15KW: 71.75" L x 30.75" W x 41.25" H

Need help? Visit wildcatpowergen.com

Complete the web form and a local dealer will contact you to answer questions on our generators and accessories.

620-500-5111

**Never Lose Power Again
With Wildcat Power Gen**