## MOBILE DIESEL GENERATOR SET

EPA Emissions Certification: Final Tier 4



## MOBILE

Standby Power Rating 290 kW, 363 kVA, 60 Hz

Prime Power Rating 264 kW, 330 kVA, 60 Hz





**Codes and Standards** 

Generac Mobile products are designed to the following standards:



CSA CERTIFIED



NATM



TIER 4 FINAL EMISSIONS



ISO 8528-5



UN31A CERTIFIED



UL142, ULC-S601 CERTIFIED

## **Power When and Where You Need It**

Generac Mobile diesel generators are designed and engineered to power a variety of projects, in the most extreme environments. Gensets are configured to meet customer needs, including choice of containment, cold weather packages, trailer options, and more.

Generac Mobile diesel generators are manufactured to deliver reliable power, when and where you need it.

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### **STANDARD FEATURES**

#### **ENGINE SYSTEM**

- Perkins<sup>®</sup> 1706J-E93TAG2
- 6 Cylinder
- Turbocharged & Aftercooled
- 567 in<sup>3</sup> (9.3 L) Displacement
- Power @ 1,800 rpm hp (kW):
  - Prime: 412 (307)
  - Standby: 453 (338)
- Paper Element Air Filter
- Electronic Governing
- Variable Speed Fan
- Spin On Cartridge Oil Filter
- Oil Drain Extension
- Engine Fluid Containment
  - 110% Containment
  - Engine Fluid Detection
- Two 12 V, 950 CCA, Wet Cell Batteries

#### **COOLING SYSTEM**

- Capable of Operating at 110 °F (43 °C) Ambient (at Prime)
- 50/50 Coolant (50% Ethylene Glycol)
- Coolant Drain Extension

#### **FUEL SYSTEM**

- Single Wall Fuel Tank
   UN31A Certification
- Fuel Tank Capacity gal (L):
  - Total: 425 (1608)
  - Usable: 365 (1381)
- Maximum Run Time @ 75% load: 25.2 hr

#### **CONTROL SYSTEM**



#### **CONTROLLER AND DISPLAY**

- Controller: Deep Sea<sup>®</sup> Model DSE8610 MKII
- 4 Line Back Lit LCD Text Display
- -40 to 158 °F (-40 to 70 °C) Operating Temperature Range
- Multiple Language Options
- Configurable Timers and Alarms

- DEF Tank Capacity gal (L):
  - Total: 56.0 (214.0)
  - Usable: 49.0 (187.0)

#### **CONTROL SYSTEM**

- Deep Sea Electronics<sup>®</sup> 8610 MKII Controller (Non-Paralleling)
- 1,000 A Main Circuit Breaker, Manual
- Individual Convenience Receptacle Circuit Breakers
- Emergency Stop Switch
- Hour Meter
- Lockable Battery Disconnect
- 2-Position Linkboard with Switch

#### **ALTERNATOR SYSTEM**

- 60 Hz Engine-Driven Alternator
- Leroy Somer<sup>TM</sup> LSA 46.3 L10
  - Brushless
  - 4 Pole
  - 2/3 Pitch
  - Class H Insulation
  - Corrosion Protection
- Deep Sea Electronics<sup>®</sup> A109 Digital AVR
- Permanent Magnet Generator (PMG) Excitation System

#### **POWER DISTRIBUTION**

- Connection Lugs
- Convenience Receptacles
  - Two 120 V, 20 A, GFCI, Duplex Receptacles (NEMA 5-20R)
- Configurable Start/Stop Timers
- Configurable Maintenance Alarms
- Heated Display

#### PUSH BUTTONS FOR EASY OPERATION

- · Manual or Auto Start
- Engine Start
- Engine Stop/Reset
- User Friendly Setup and Button Layout
- Five Key Menu Navigation
- Hours Counter
- Multiple Parameters are Monitored and Displayed Simultaneously for Full Visibility
- View Controller Parameters (Configuration, Firmware Version, Connections)

#### LCD ALARM INDICATION

- Generator Diagnostic Display
  - System kVA Output Display
  - Line Output and Frequency Display
- Alarm Types: Warning, Shutdown, Electrical Trip, Engine

- Three 120/240 V, 50 A, 3 Pole, 4 Wire Twistlock Receptacles (CS6369)
- Buck Transformer

**GENERAC** MOBILE

#### ENCLOSURE

- All Steel Construction
- UV and Fade Resistant White Polyester Powder
  Paint
- Central Lifting Point
- 4 Point Lift
- Fully Lockable Enclosure
- Multi Lingual Operating and Safety Decals
- Document Holder with Owner's Manual Includes AC and DC Wiring Diagrams
- Control Panel Lights

#### TRAILER

Lights

WARRANTY

- Electric Brakes
- 3 in (76.2 mm) Pintle Ring
- Two 10,000 lb (4,535 kg) Axles
- 17.5 in. Tires, Tubeless, 10 ply
- Heavy Duty Trailer Jack
- Safety Chains with Spring Loaded Safety Hooks

DOT Approved Tail, Side, Brake, and Directional

· Unlimited Hours Covered in First Year

• Alarm List – Warnings/Shutdowns; 250 Event

• Fuel Level: Warning - 15%; Shutdown - 5%

· Engine Diagnostic Warnings Communicated

Battery Voltage: Over – 32 VDC; Under – 18

Generator Over Voltage: Warning – 110%;

• Generator Under Voltage: Warning - 90%;

• Generator Over Frequency: Warning - 105%;

Generator Under Frequency: Warning – 95%;

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Overspeed Protection: Shutdown – 110%

History Log - Date/Time Stamped

Through J1939 CANbus

Electrical Trip - 115%

Electrical Trip - 110%

Electrical Trip - 90%

ELECTRICAL CONTROLS

Lockable Control Box Door

Voltage Adjustment ±10%

Shutdown - 85%

VDC

Auto Schedule

Status

Transportation Tie Downs
Plug Adapter, Round 7 Spade (SAE J2863)

2 year Limited or 2,000 Hours

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#### **CONFIGURABLE OPTIONS\***

#### **ENGINE SYSTEM**

- Positive Air Shutoff (PAS), Electronic
- Engine Oil Level Maintainer

#### **COLD WEATHER**

- Standard Package
- Extreme Package
- 2,250 W Engine Block Heater
- Two Heated Fuel Filters
- 1,000 W Oil Heater
- Crankcase Ventilation System Heater
- 30 A Battery Charger
- Two 1,100 CCA Batteries (12 V, Group 4D)
- 60/40 Coolant (60% Ethylene Glycol)

#### **FUEL SYSTEM**

- Double Wall Fuel Tank
  - 110% Containment
  - Fuel Detection
  - UN31A Certification
  - UL142 / ULC-S601 Certification
- Fuel Tank Capacity gal(L)
  - Total: 421 (1594)
  - Usable: 365 (1381)
- Runtime @ 75% Load: 25.2 hr
- Auxiliary Fuel Tank Connection
  - 3-Way Manual Fuel Valve

#### **CONTROL SYSTEM**

- Paralleling Capability
  - Deep Sea Electronics 8610 MKII Controller (Paralleling)
  - 1,000 A Main Circuit Breaker (MCB), Motorized
  - Mobile Switching Center (MSC) Cable Connections
- Telemetry
- LoJack Equipment Recovery System

#### **GENERATOR SYSTEM**

- SUPERSTART<sup>®</sup>
- VFLEX (600 V)

#### **POWER DISTRIBUTION**

○ Camlocks—Two Sets, Female (US or Canada Color Code)

#### **ENCLOSURE**

- Interior Enclosure Lights
- O 5 Lb Fire Extinguisher

#### TRAILER

- Hydraulic Surge Brakes
- Skidded (Non-trailered)
- Rear Jack Group
- Toolbox—Aluminum, 49×15×18.5 in  $(125 \times 38 \times 47 \text{ cm})$
- One Spare Tire
- Two Spare Tires

### **RATING DEFINITIONS**

Standby: Applies to varying emergency load for the duration of a utility power outage.

Prime: Applies to supplying power to a varying load in lieu of utility for an unlimited amount of running time.

\*Consult factory for availability





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# GENERAC<sup>®</sup> MOBILE

#### **APPLICATION AND ENGINEERING DATA**

#### **ENGINE SPECIFICATIONS**

#### General

Make (Model)	Perkins (1706J-E93TAG2)	Cooling System Type	Water Cooled		
EPA Emissions Compliance	Tier 4 Final	Water Pump Type	Engine Gear Driven		
After-Treatment System	DOC, SCR, & DPF	Fan Type	Pusher		
Cylinders – Qty	6	Fan Speed – rpm	Variable Speed Clutch		
Туре	In-Line	Fan Diameter – in (mm)	33 (838.2)		
Displacement – in <sup>3</sup> (L)	567.52 (9.3)	Coolant System Capacity – gal (L)	10.0 (37.9)		
Bore – in (mm)	4.52 (115)				
Stroke – in (mm)	5.86 (149)	Fuel System			
Compression Ratio	17.0:1		Ultra Low Sulfur Diesel		
Intake Air Method	Turbocharged, Aftercooled		ASTM D975 D2		
		Fuel Specifications			
Engine Governing		Fuel Filtering – $\mu$	Primary: 10 Final: 4		
Governor	Electronic	Fuel Pump Type	Engine Gear Driven Lift Pump		
Frequency Regulation (Steady State)	±1%	Injector Type	Electronically Controlled Unit Injector (MEUI)		
Lubrication System		English Electrical Oratory			
	Coor	Engine Electrical System			
Oil Pump Type	Gear	System Voltage – VDC	24		
Oil Filter Type	Spin-On Cartridge	Battery – CCA	950		
Crankcase Capacity – qt (L)	31.7 (30)				
		Battery – V (Qty)	12 (2)		
		Ground Polarity	Negative (-)		

Cooling System

#### STANDARD ALTERNATOR SPECIFICATIONS

Make (Model)	Leroy Somer (LSA 46.3 L10)		
Poles – Qty	4		
Field Type	Revolving		
Insulation Class – Rotor	Н		
Insulation Class – Stator	Н		
Total Harmonic Distortion	<2.5%		
Telephone Interference Factor	<50		

Standard Excitation	PMG
Bearings	1
Coupling	14
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	0.50%

#### SUPERSTART ALTERNATOR SPECIFICATIONS

Make (Model)	Leroy Somer (LSA 46.3 L11)			
Poles – Qty	4			
Field Type	Revolving			
Insulation Class – Rotor	Н			
Insulation Class – Stator	Н			
Total Harmonic Distortion	<2.5%			
Telephone Interference Factor	<50			

Standard Excitation	PMG
Bearings	1
Coupling	14
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	0.50%



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#### **APPLICATION AND ENGINEERING DATA (CONTINUED)**

#### **VFLEX ALTERNATOR SPECIFICATIONS**

Make (Model)	Leroy Somer (LSA 46.3 L11)
Poles – Qty	4
Field Type	Revolving
Insulation Class – Rotor	Н
Insulation Class – Stator	Н
Total Harmonic Distortion	<2%
Telephone Interference Factor	<50

Standard Excitation	PMG
Bearings	1
Coupling	14
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	0.50%

#### **OPERATING DATA**

#### **POWER RATINGS**

	Standard Alternator		SUPERSTART Alternator		VFLEX Alternator	
	Standby: kW/kVA (A)	Prime: kW/kVA (A)	Standby: kW/kVA (A)	Prime: kW/kVA (A)	Standby: kW/kVA (A)	Prime: kW/kVA (A)
3-phase, 208/120 VAC @ 0.8 pf	288/360 (1000)	264/330 (917)	288/360 (1000)	264/330 (917)	288/360 (1000)	264/330 (917)
3-phase, 240/139 VAC @ 0.8 pf	290/363 (873)	264/330 (795)	290/363 (873)	264/330 (795)	290/363 (873)	264/330 (795)
3-phase, 480/277 VAC @ 0.8 pf	290/363 (437)	264/330 (397)	290/363 (437)	264/330 (397)	290/363 (437)	264/330 (397)
3-phase, 600/346 VAC @ 0.8 pf	NA	NA	NA	NA	290/363 (349)	264/330 (318)

#### FUEL AND DEF CONSUMPTION RATES

Prime Load	Fuel: gph (L/hr)	DEF: gph (L/hr)
25%	5.8 (22.0)	0.5 (1.8)
50%	10.1 (38.2)	0.8 (3.1)
75%	14.5 (54.9)	1.2 (4.4)
100%	19.7 (74.6)	1.6 (6.1)
110% (Standby)	22.0 (83.1)	1.6 (6.1)

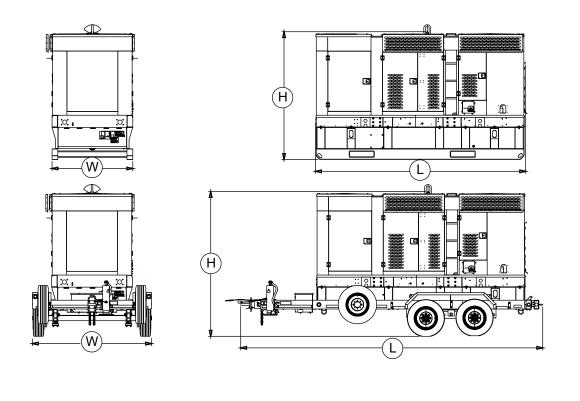
Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Mobile Authorized Service Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, ISO 8665, ISO 3046 SAE J1228, SAE J1995, and DIN6271 standards.



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#### **DIMENSIONS AND WEIGHTS\***



	Run Time: hr*	Usable Fuel Capacity: gal (L)	Dimensions – $L \times W \times H$ : in (m)	Weig	ht: lb (kg)
Skid	25.2	365 (1381)	165.0 (4.2) × 64.0 (1.6) × 101.0 (2.6)	Dry: Operating:	Contact Factory
Trailer	25.2	365 (1381)	240.0 (6.1) x 102.0 (2.6) x 112.0 (2.8)	Dry: Operating:	Contact Factory
	*Run time based on	75% of prime rated power.			

**SOUND RATING** 

- Contact Factory
- \* All measurements are approximate and for estimation purposes only.

YOUR F	ACTORY RECO	GNIZED GEN	ERAC MOBIL	E DEALER	

SPEC SHEET

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Mobile Authorized Service Dealer for detailed installation drawings.