EPA Emissions Certification: Final Tier 4



Standby Power Rating 144 kW, 180 kVA, 60 Hz

**Prime Power Rating** 120 kW, 150 kVA, 60 Hz







Image used for illustration purposes only

# **Codes and Standards**

Generac Mobile products are designed to the following standards:



**CSA CERTIFIED** 



NATM



**TIER 4 FINAL EMISSIONS** 



ISO 8528-5

# **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.



#### STANDARD FEATURES

#### **ENGINE SYSTEM**

- John Deere<sup>®</sup> 6068HFG05
- 6 cylinder
- · Variable-geometry turbocharged (VGT), after-cooled
- Displacement: 415 in<sup>3</sup> (6.8 L)
- EPA Final Tier 4 (DOC and SCR)
- Power @ 1,800 rpm hp (kW):
  - Prime: 196 (146)
  - Standby: 215 (160)
- · Iso mounted engine supports
- Paper element air filter with safety cartridge
- Electronic isochronous governing
- Variable speed fan drive
- · Spin-on cartridge oil filter

#### **FUEL SYSTEM**

- Fuel tank capacity gal (L):
  - Total: 358 (1,355)
  - · Usable: 343 (1,298)
- Maximum run time @ 100% load: 39 hr
- DEF tank capacity gal (L):
  - Total: 28.5 (107.9)
  - Usable: 34.5 (130.6)

#### **COOLING SYSTEM**

- Coolant capacity: 44 qt (42 L)
- Capable of operating at 120 °F (49 °C) ambient
- Radiator and oil drains plumbed to exterior

#### SYSTEM OUTPUTS

· Voltage selection switch: 3-position, lockable

#### **GENERATOR**

- · 60 Hz engine-driven alternator
- Marathon Electric<sup>®</sup> 363CSL1607
  - Brushless
  - 4-pole
  - Class H insulation

#### **ENCLOSURE**

- · Aluminum, sound attenuated enclosure
  - · UV and fade resistant, high temperature cured, white polyester powder paint
  - · Insulated and baffled
- Fully lockable including doors, fuel fill and DEF fill
- · Exterior emergency stop switch
- Central lifting point
- · Multi-lingual operating and safety decals
- Document holder with owner's manual includes AC and DC wiring diagrams

#### **TRAILER**

- Two 7,000 lb (3,175 kg) axles
- · Surge brakes
- 3 in (76.2 mm) ring hitch
- · Safety chains with spring loaded safety hooks
- · Transportation tie downs
- 10,000 lb (4,536 kg) tongue jack with footplate
- · DOT approved tail, side, brake, and directional lights; recessed rear lights
- Tires: ST215/75R17.5, tubeless, 10-ply

#### WARRANTY

- 2 year limited or 2,000 hours
  - · Unlimited hours covered in first year

#### CONTROL SYSTEM

Model DSE7310 MKII

· Heated display

· 4-line back-lit LCD text display

Multiple language options

Configurable timers & alarms

Configurable start/stop timers

Configurable maintenance alarms



Deep Sea® CONTROLLER AND DISPLAY

-40 to 158 °F (-40 to 70 °C) operating temperature

010643

#### 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 & 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**
- Alarm list warnings/shutdowns; 250 event history log - date/time stamp
  - Fuel level: warning 15%; shutdown 5%
  - Overspeed protection: shutdown 110%
  - Engine diagnostic warnings communicated through J1939 CANbus
  - Battery voltage: over 15 VDC; under 11 VDC
  - Generator over voltage: warning 110%; electrical trip - 115%

- Generator under voltage: warning 90%; shutdown - 85%
- Generator over frequency: warning 105%; electrical trip - 110%
- Generator under frequency: warning 95%; electrical trip - 90%
- Auto-schedule
- Status

#### **ELECTRICAL CONTROLS**

- Remote start/stop contacts in receptacle box
- Lockable control box door with diagnostics window
- Lockable lug box with safety switch
  - · Trips main breaker when door is opened
  - · Disables voltage regulator
- Output ground connection lug inside lug box
- 600 A main breaker with shunt trip
- · Convenience receptacles with individual breakers (restricted use in high wye mode)
  - . Two 120 V, 20 A, GFCI, duplex outlets (NEMA 5-20R type)
  - · Three 240 V, 50 A, 3-pole, 4-wire, twistlock outlets (Non-NEMA 6369)
- Voltage adjustment ±10%
- One 12 V, 1,000 CCA, wet cell battery

2 of 6

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#### **OPTIONS\***

#### **ENGINE SYSTEM**

- Block heater
- O Two fuel filter heaters
- Oil pan heater
- CCV heater
- O 60/40 coolant
- O Positive air shutdown

#### **FUEL SYSTEM**

- O 513 gal (1,941.9 L) fuel tank
- O Auxiliary fuel and DEF system
- O 110% fluid containment

#### **TRAILER**

- O Full size spare tire
- O Tool box/storage bin
- O 2-5/16 in (58.7 mm) ball hitch
- O Electric brakes
- O Stabilizer jacks

#### **CABINET**

Fire extinguisher

### **CONTROL SYSTEM**

- O 4-position selector switch
- O PMG/DVR
- Paralleling
- O Buck transformer
- O Battery disconnect switch
- O Cam locks
- O 10 A battery charger

# **GENERATOR SYSTEM**

- SUPERSTART®
- O VFLEX (600 V)

### **CAN PACKAGE**

- O Two fuel filter heaters
- Oil pan heater
- O Battery heater
- O CCV multi-heater system
- O 60/40 coolant
- O Double-wall fuel tank

#### **CAN6 PACKAGE**

- O Two fuel filter heaters
- Oil pan heater
- O Battery heater
- O CCV multi-heater system
- O 60/40 coolant
- VFLEX
- O Double-wall fuel tank

#### **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





# MOBILE DIESEL GENERATOR SET

EPA Emissions Certification: Final Tier 4



### **APPLICATION AND ENGINEERING DATA**

# **ENGINE SPECIFICATIONS**

| _    |       |
|------|-------|
| I-Δr | naral |
|      |       |

| Make (Model)                       | John Deere® (6068HFG05)    |  |
|------------------------------------|----------------------------|--|
| EPA Emissions Compliance           | Final Tier 4               |  |
| After Treatment System             | DOC and SCR                |  |
| Cylinders – Qty                    | 6                          |  |
| Туре                               | In-Line                    |  |
| Displacement – in <sup>3</sup> (L) | 415 (6.8)                  |  |
| Bore – in (cm)                     | 4.2 (10.6)                 |  |
| Stroke – in (cm)                   | 5.0 (12.7)                 |  |
| Compression Ratio                  | 17.2:1                     |  |
| Intake Air Method                  | Turbocharged, After-Cooled |  |

### **Engine Governing**

| Governor                            | Electronic |  |
|-------------------------------------|------------|--|
| Frequency Regulation (Steady State) | ±2%        |  |
|                                     |            |  |

# **Lubrication System**

| Oil Pump Type               | Gear              |
|-----------------------------|-------------------|
| Oil Filter Type             | Spin-On Cartridge |
| Crankcase Capacity – qt (L) | 34.3 (32.5)       |

# Cooling System

| Cooling System Type              | Pressurized Closed    |
|----------------------------------|-----------------------|
| Water Pump Type                  | Engine Belt Driven    |
| Fan Type                         | Pusher                |
| Fan Speed – rpm                  | Variable Speed Clutch |
| Fan Diameter – in (cm)           | 28 (71)               |
| Cooling System Capacity – gt (L) | 44 (42)               |

# Fuel System

| Fuel Type                           | Ultra low Sulfur Diesel                    |
|-------------------------------------|--|
| Fuel Specifications                 | EN 590 / ASTM D975                         |
| Fuel Filtering $-\mu$               | Primary: 10<br>Final: 2                    |
| Fuel Inject Pump – Make (Model)     | Denso (HP6)                                |
| Fuel Pump Type                      | Engine Gear Driven                         |
| Injector Type                       | Electronic                                 |
| Engine Type                         | Direct Injection High Pressure Common Rail |
| Fuel Supply Line Diameter – in (mm) | 0.375 (9.5)                                |
| Fuel Return Line Diameter – in (mm) | 0.375 (9.5)                                |

# Engine Electrical System

| System Voltage – VDC | 12           |
|----------------------|--------------|
| Battery Size – CCA   | 1,000        |
| Battery – V (Qty)    | 12 (1)       |
| Ground Polarity      | Negative (-) |

# **ALTERNATOR SPECIFICATIONS**

| Make (Model)                  | Marathon Electric (363CSL1607) |
|-------------------------------|--------------------------------|
| Poles                         | 4                              |
| Field Type                    | Rotating                       |
| Insulation Class – Rotor      | Н                              |
| Insulation Class – Stator     | Н                              |
| Total Harmonic Distortion     | <5%                            |
| Telephone Interference Factor | <50                            |

| Standard Excitation                | Brushless                      |
|------------------------------------|--------------------------------|
| Bearings                           | Double Shielded, Prelubricated |
| Coupling                           | Direct Flexible Disc           |
| Prototype Short Circuit Test       | Yes                            |
| Voltage Regulator Type             | AVR                            |
| Quantity of Sensed Phases          | 1                              |
| Regulation Accuracy (Steady State) | +0.5%                          |

# SUPERSTART® ALTERNATOR SPECIFICATIONS

| Make (Model)                  | Marathon Electric (431CSL6208) |
|-------------------------------|--------------------------------|
| Poles                         | 4                              |
| Field Type                    | Rotating                       |
| Insulation Class – Rotor      | Н                              |
| Insulation Class – Stator     | Н                              |
| Total Harmonic Distortion     | <5%                            |
| Telephone Interference Factor | < 50                           |

| Standard Excitation                | Brushless                      |
|------------------------------------|--------------------------------|
| Bearings                           | Double Shielded, Prelubricated |
| Coupling                           | Direct Flexible Disc           |
| Prototype Short Circuit Test       | Yes                            |
| Voltage Regulator Type             | AVR                            |
| Quantity of Sensed Phases          | 1                              |
| Regulation Accuracy (Steady State) | ±0.5%                          |

# MDG150DF4 | 6.8L | 150kVA

# MOBILE DIESEL GENERATOR SET

EPA Emissions Certification: Final Tier 4



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

### **VFLEX ALTERNATOR SPECIFICATIONS**

| Make (Model)                  | Marathon Electric (431PSL6611) |
|-------------------------------|--------------------------------|
| Poles                         | 4                              |
| Field Type                    | Rotating                       |
| Insulation Class – Rotor      | Н                              |
| Insulation Class – Stator     | Н                              |
| Total Harmonic Distortion     | <5%                            |
| Telephone Interference Factor | <50                            |

| Standard Excitation                | Brushless                      |
|------------------------------------|--------------------------------|
| Bearings                           | Double Shielded, Prelubricated |
| Coupling                           | Direct Flexible Disc           |
| Prototype Short Circuit Test       | Yes                            |
| Voltage Regulator Type             | AVR                            |
| Quantity of Sensed Phases          | 1                              |
| Regulation Accuracy (Steady State) | ±0.5%                          |

### **OPERATING DATA**

#### **POWER RATINGS**

|   | Standby: kW/kVA (A) | Prime: kW/kVA (A) |
|---|---------------------|-------------------|
| 1-phase, 120/240 VAC @ 1.0 pf—zig zag*    | 95/95 (395)         | 95/95 (395)       |
| 3-phase, 120/208 VAC @ 0.8 pf—low wye     | 144/180 (503)       | 120/150 (416)     |
| 3-phase, 120/240 VAC @ 0.8 pf—delta**     | 144/180 (433)       | 120/150 (360)     |
| 3-phase, 277/480 VAC @ 0.8 pf—high wye    | 144/180 (218)       | 120/150 (180)     |
| 3-phase, 346/600 VAC @ 0.8 pf—high wye*** | 144/180 (173)       | 120/150 (145)     |

<sup>\*</sup>Alternator limited.

#### **FUEL AND DEF CONSUMPTION RATES**

| Load | Fuel: gph (Lph) |             | DEF: gph (Lph) |            |
|------|-----------------|-------------|----------------|------------|
|      | Standby         | Prime       | Standby        | Prime      |
| 25%  | 3.6 (13.7)      | 3.4 (12.9)  | NA             | NA         |
| 50%  | 5.8 (22.1)      | 5.25 (19.8) | NA             | NA         |
| 75%  | 7.8 (29.7)      | 7.1 (26.8)  | NA             | NA         |
| 100% | 9.5 (36.1)      | 8.7 (33.3)  | NA             | 0.34 (1.3) |

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.

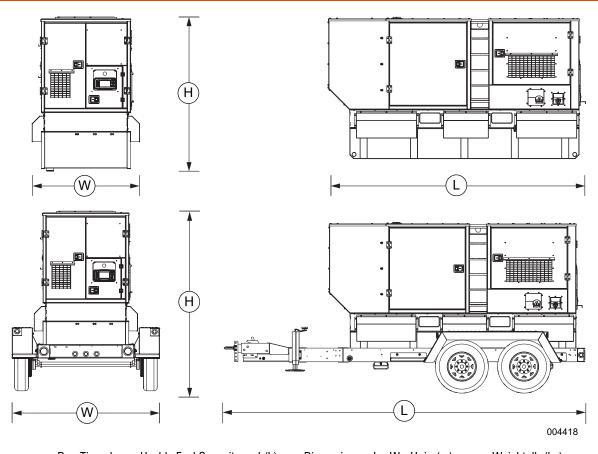
<sup>\*\*</sup>Power ratings achieved through use of optional 4-position phase switch.

<sup>\*\*\*</sup>Power ratings achieved through use of optional VFLEX alternator.

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



|         | Run Time: hr | Usable Fuel Capacity: gal (L) | Dimensions – L $\times$ W $\times$ H: in (m) | Weigh              | nt: Ib (kg)                     |
|---------|--------------|-------------------------------|--|--------------------|---------------------------------|
| Skid    | 39           | 343 (1,298)                   | 145 (3.7) ×60 (1.5)×92 (2.3)                 | Dry:<br>Operating: | 6,219 (2,820)<br>9,075 (4,116)  |
| Trailer | 39           | 343 (1,298)                   | 208 (5.3)×86 (2.2)×104(2.6)                  | Dry:<br>Operating: | 8,184 (3,712)<br>11,040 (5,007) |

# **SOUND RATING**

- 75 dB(A) @ 23 ft (7 m) @ prime power
- \* All measurements are approximate and for estimation purposes only.

| YOUR FACTORY RECOGNIZED GENERAC MOBILE DEALER |  |  |
|---|--|--|
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |
|   |  |  |

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.

6 of 6