## MOBILE DIESEL GENERATOR SET

EPA Emissions Certification: Final Tier 4



# MOBILE

Standby Power Rating 44 kW, 55 kVA, 60 Hz

Prime Power Rating 38 kW, 47 kVA, 60 Hz



Image used for illustration purposes only

# **Codes and Standards**

Generac Mobile products are designed to the following standards:



CSA



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.

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## **STANDARD FEATURES**

#### **ENGINE SYSTEM**

- Isuzu<sup>®</sup> 4LE2XAGV01
- 4 cylinder
- Turbocharged
- 134 in<sup>3</sup> (2.2 L) displacement
- EPA Final Tier 4 approved
- Power @ 1,800 rpm hp (kW):
  - Prime: 57 (42.8)
  - Standby: 63.7 (47.5)
- Iso mounted engine supports
- Paper element air filter with safety cartridge
- Electronic isochronous governing
- Fixed speed fan drive
- Spin-on cartridge oil filter
- Containment

#### **FUEL SYSTEM**

- Fuel tank capacity gal (L):
  - Total: 100 (379)
  - Usable: 90 (341)
- Maximum run time @ 100% load: 27 hr

#### **COOLING SYSTEM**

- Capable of operating at 120 °F (49 °C) ambient
- Oil filter: Spin-on cartridge, full flow
- Air filter: Disposable paper element
- · Radiator and oil drains plumbed to exterior

#### **CONTROL SYSTEM**



#### Deep Sea<sup>®</sup> CONTROLLER AND DISPLAY

- Model DSE7310 MKII
- 4-line back-lit LCD text display
- -40 to 158 °F (-40 to 70 °C) operating temperature range
- Multiple language options
- Configurable timers & alarms
- Configurable start/stop timers
- Configurable maintenance alarms
- Heated display

#### SYSTEM OUTPUTS

• Voltage selection switch: 3-position, lockable

#### GENERATOR

- 60 Hz engine/generator
- Marathon Electric<sup>®</sup> 285PSL1700
  - Brushless
  - 4-pole
  - Class H insulation

#### ENCLOSURE

- Aluminum, sound attenuated
  - Paint: UV and fade resistant, high temperature cured, white polyester powder
  - Insulated and baffled
- Fully lockable including doors and fuel 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

- DOT approved tail, side, brake, and directional lights; recessed rear lights
- Surge brakes
- Transportation tie downs

**GENERAC**<sup>®</sup> MOBILE

- · Safety chains with spring loaded safety hooks
- 2 in (50.8 mm) ball hitch
- Single axle 5,000 lb (2,269 kg)
- 2,000 lb (907 kg) tongue jack with footplate
- Tires: 15 in (38.1 cm), 6-ply, tubeless

#### WARRANTY

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

- 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 located in receptacle box
- Lockable control box door with diagnostics window
- Lockable lug box with safety switch
  - Trips main breaker when door is opened

Convenience receptacles with individual breakers

Three 240 V, 50 A, 3-pole, 4-wire twistlock

• Two 120 V, 20 A, GFCI duplex outlets

SPEC SHEET

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Disables voltage regulator

225 A main breaker with shunt trip

(restricted use in high wye mode)

outlets (non-NEMA 6369)

• One 12 V, 720 CCA, wet cell battery

(NEMA 5-20R type)

• Voltage adjustment ±10%

Output ground connection lug inside lug box

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## **OPTIONS\***

#### **ENGINE SYSTEM**

- O Block heater
- 60/40 coolant
- Heated fuel filter
- $\,\circ\,\,$  Electronic positive air shutdown
- $\circ~$  OVR heater

#### **FUEL SYSTEM**

- Extended run tank: 160 gal (606 L), with containment
- $\,\circ\,$  Auxiliary 3-way fuel valve
- $\,\circ\,$  Leak detection

## **RATING DEFINITIONS**

## TRAILER

- $\,\circ\,$  Tandem axle
- Electric brakes
- Toolbox: Black polymer or aluminum, 49×15×18.5 in (125×38×47 cm)
- $\,\circ\,$  Rear stabilizer jacks
- 2 in (50.8 mm) BULLDOG<sup>®</sup> hitch
- $\odot~$  2-5/16 in (58.7 mm) BULLDOG hitch
- $\odot~$  3 in (76.2 mm) lunette ring
- $\circ~$  Spare tire

#### CABINET

○ Fire extinguisher

#### **CONTROL SYSTEM**

- 4-position phase switch
- $\circ$  PMG
- Buck transformer
- Cam locks: Single set, female
- 10 A battery charger
- AGM sealed battery (Optima) 720 CCA

*Standby*: Applicable to varying emergency load for the duration of a utility power outage. *Prime*: Applicable to supplying power to a varying load in lieu of utility for an unlimited amount of running time.

\*Consult factory for availability





# MMG45IF4 | 2.2 L | 45 kVA MOBILE DIESEL GENERATOR SET



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## **APPLICATION AND ENGINEERING DATA**

#### **ENGINE SPECIFICATIONS**

#### General

Make (Model)	Isuzu (4LE2XAGV01)	
EPA Emissions Compliance	Final Tier 4	<u> </u>
After Treatment System	DOC	
Cylinders – Qty	4	
Туре	In-Line	
Displacement – in <sup>3</sup> (L)	134 (2.2)	
Bore – in (mm)	3.35 (85)	
Stroke – in (mm)	3.78 (96)	
Compression Ratio	17.6:1	
Intake Air Method	Turbo/Air-To-Air	
Engine Governing		
Governor	Electronic	
Frequency Regulation (Steady State)	±2%	
Lubrication System		
Oil Pump Type	Gear Driven	
Oil Filter Type	Spin-On Cartridge, Full Flow	
Crankcase Capacity – qt (L)	12 (11.4)	

#### Cooling System

Cooling System Type	Radiator and CAC
Water Pump Type	Belt Driven
Fan Type	Pusher
Fan Speed – rpm	2,016
Fan Diameter – in (cm)	19.0 (48.3)
Cooling System Capacity – qt (L)	18 (17)

### uel System

Fuel Type	Ultra Low Sulfur Diesel	
Fuel Specifications	EN 590 / ASTM D975	
Fuel Filtering – $\mu$	5	
Fuel Inject Pump – Make (Model)	Denso (HP3)	
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 Charger Alternator – VDC (A)	12 (50)
Battery Size – CCA	720
Battery Voltage (Battery Qty)	12 (1)
Ground Polarity	Negative (-)

#### **ALTERNATOR SPECIFICATIONS**

Make (Model)	Marathon Electric (285PSL1700)
Poles – Qty	4
Field Type	Rotating
Insulation Class - Rotor	Class H
Insulation Class - Stator	Class H
Total Harmonic Distortion	<5%
Telephone Interference Factor	<50

Standard Excitation	Brushless
Bearings	Single Bearing
Coupling	Direct Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	AVR
Quantity of Sensed Phases	1
Regulation Accuracy (Steady State)	±0.5%

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**OPERATING DATA** 

#### **POWER RATINGS**

	Standby: kW/kVA (A)	Prime: kW/kVA (A)
1-phase, 120/240 VAC @ 1.0pf*	40/40 (167)	33/33 (138)
3-phase, 120/208 VAC @ 0.8pf	44/55 (153)	38/47 (130)
3-phase, 120/240 VAC @ 0.8pf**	44/55 (132)	38/47 (114)
3-phase, 277/480 VAC @ 0.8pf	44/55 (66)	38/47 (57)

\*Alternator limited.

\*\*Power ratings achieved through use of optional 4-position phase switch.

#### **FUEL CONSUMPTION RATES**

Load	Fuel: gph (Lph)	
	Standby	Prime
50%	NA	1.7 (6.4)
75%	NA	2.5 (9.4)
100%		3.3 (12.5)

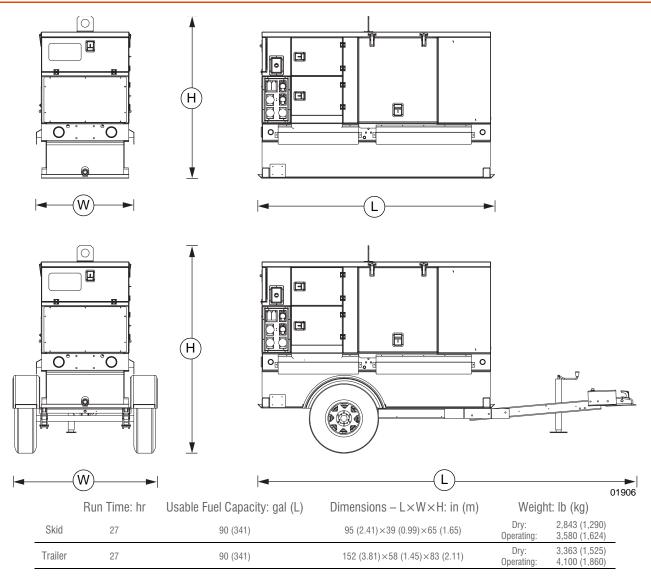
Deration - Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Mobile Products Authorized Service Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, ISO8665, SAE J1228, SAE J1995, and DIN6271 standards.



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## **DIMENSIONS AND WEIGHTS\***



## **SOUND RATING**

• 66 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.

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