



# 100kW<sup>1</sup> STANDBY GENERATOR

208-480 V NATURAL GAS



## BRIGGS & STRATTON® THE SMART CHOICE

For the discerning business owner that is looking for the smartest, most reliable permanent backup power solution.



### Standard Features

- UL 2200 Listed
- Rugged seven-gauge steel base and protected by an enclosure made from Galvannealed Steel
- Generators are powered by EPA Certified 1800 RPM industrial grade PSI engine
- Sound attenuated enclosures for reduced noise output
- Marinco 6A Battery Charger
- DSE 7310 MKII Controller
- High performance, durable alternator
- Industry leading 3 year standard limited warranty. 3 years parts, labor and travel<sup>2</sup>



### GENERATOR SET RATINGS

BRIGGS & STRATTON MODEL	ALTERNATOR MODEL	VOLTAGE	PHASE	HZ	NATURAL GAS 125°C STANDBY RATING		LIMITED WARRANTY <sup>2</sup>
					kW / kVA	AMPS	PARTS, LABOR, TRAVEL
080011	ESP34-2L4	120/208	3	60	100 / 125	347	3 Year
080012	ESP34-2L4	120/240	3	60	100 / 125	301	
080013	ESP34-2L4	277/480	3	60	100 / 125	150	
080010	ESP34-2L/4	120/240	1	60	100 / 125	417	

<sup>1</sup> This generator is rated in accordance with UL (Underwriters Laboratories) 2200 (stationary engine generator assemblies) and CSA (Canadian Standards Association) standard C22.2 No. 100-14 (motors and generators). All units are rated at a 0.8 power factor.

<sup>2</sup> Warranty details available at [www.briggsandstratton.com](http://www.briggsandstratton.com)

**ENGINE SPECIFICATIONS**

ENGINE	
<b>Manufacturer</b>	PSI
<b>Aspiration</b>	Turbocharged
<b>Model Type</b>	5.7, Industrial Powertrain, 4-Cycle
<b>Speed (RPM)</b>	1800
<b>Cylinder Arrangement</b>	V8
<b>Displacement (L / ci)</b>	5.7 / 350
<b>Bore &amp; Stroke (mm / in)</b>	101.6 x 88.4 / 4.00 x 3.48
<b>Compression Ratio</b>	9:4:1
<b>Rated HP</b>	129
<b>Governor Type</b>	Electronic
<b>Frequency Regulation Steady State</b>	+/- 0.5%
<b>Frequency Regulation No-load to Full-load</b>	Isochronous
<b>Air Filter Type</b>	Dry

LUBRICATION SYSTEM	
<b>Type</b>	Full Pressure
<b>Oil Capacity (L / qt)</b>	4.7 / 5.0
<b>Oil Filter (Quantity / Type)</b>	1, Cartridge

COOLING SYSTEM	
<b>Heat Rejected to Cooling Water at Rated Load (kcal/sec / Btu/min)</b>	17.2 / 4100
<b>Water Pump Type</b>	Centrifugal

ELECTRICAL SYSTEM	
<b>Ignition System</b>	HVS Distributor
<b>Battery Quantity</b>	1
<b>Battery Voltage (VDC)</b>	12
<b>Battery CCA (A)</b>	630
<b>Battery Charging Alternator</b>	
<b>Ground (Negative/Positive)</b>	Negative
<b>Voltage (VDC)</b>	12
<b>Amperage (A)</b>	70
<b>Starter Motor Voltage (VDC)</b>	12

EXHAUST SYSTEM	
<b>Exhaust Manifold Type</b>	Dry
<b>Exhaust Flow at Rated Load (m<sup>3</sup>/min / cfm)</b>	23.95 / 845.9
<b>Exhaust Temperature at Rated Load (°C / °F)</b>	732 / 1350
<b>Maximum Allowable Back Pressure, (kPa / in Hg)</b>	10.2 / 3.0

FUEL SYSTEM	
<b>Fuel Type</b>	Natural Gas
<b>Fuel Supply Line Inlet</b>	1 1/4 NPT
<b>Recommended Fuel, Lower Heating Value Minimum (MJ/m<sup>3</sup> / Btu/ft<sup>3</sup>)</b>	33.2 / 890
<b>Fuel Supply Pressure (mbar / in H<sub>2</sub>O)</b>	17-28 / 7-11

FUEL CONSUMPTION			
	Full Load	1/2 Load	No Load
<b>BTU/hr</b>	1,389,000	546,000	222,000
<b>ft<sup>3</sup>/hr</b>	556	218	89
<b>m<sup>3</sup>/hr</b>	15.73	6.18	2.51

ENGINE OUTPUT DERATINGS	
<b>Rated Temp</b>	104°F / 25°C
<b>Rated Altitude (Above Sea Level) ft/m</b>	1200 / 366
<b>Temperature Derate</b>	1% for each 10°F (5.6°C) above rated temp
<b>Altitude Derate</b>	2.5% for each 305m (1000ft) above rated altitude

SOUND RATING AT 7 METERS, LOWEST SIDE	
<b>Full Load</b>	81 dB(A)

AIR INDUCTION SYSTEM	
<b>Combustion Air (m<sup>3</sup>/min / cfm)</b>	7.42 / 262

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**ADDITIONAL STANDARD FEATURES**

**AVAILABLE ACCESSORIES**

- 6335** Battery Cable Lockout, NFPA 110 Compliant
- 6350** Engine Communication Cable
- 6360** Emergency Stop Switch, NFPA 110 Compliant, NEMA 4X
- 6361** Emergency Stop Switch, NFPA 110 Compliant, With Cover
- 6428** Controller Communication Cable, USB-A to USB-B
- 6463** Battery Charger, NFPA 110 Compliant, DSE 9461-02
- 6464** Communication Interface, DSE 890-01
- 6465** Remote Annunciator, DSE 2548-01
- 6466** Remote Display, DSE 2510-32
- 6468** Remote Annunciator Kit NFPA 110 Compliant, DSE 2548-01
- 6469** Silencer, Super Critical Grade
- 6470** Silencer, Hospital Grade

**OTHER FEATURES**

- Alternator Protection
- Battery Rack and Cables
- Electronic, Isochronous Governor
- Gas Fuel System (includes fuel mixer, electronic secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop Switch
- Oil Drain Extension
- Operation and Installation Literature<sup>2</sup>
- Steel Sound Enclosure

**SOUND ENCLOSURES**

- Sound level ratings with no load: 80 dB(A)\*
- Sound attenuating enclosure uses acoustic insulation that meets UL 94 HF1 flammability classification and repels moisture absorption
- Lockable, stainless steel door latches
- Critical grade silencer
- Steel enclosure standard with hinged doors

**WEIGHT & DIMENSIONS**

<b>Assembled Weight (lbs)</b>	4125
<b>Overall Dimensions (in)</b>	120 x 52 x 86
<b>Packaged Weight (lbs)</b>	4295
<b>Packaged Dimensions (in)</b>	127 x 60 x 92

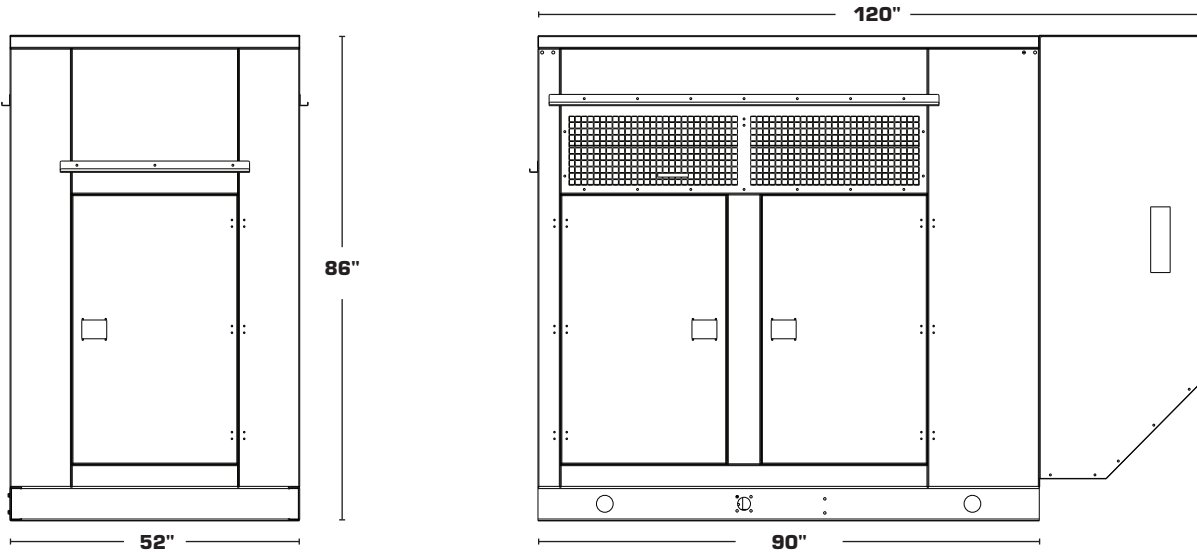
**CONTROLLER FEATURES**

- Heated display option
- True 3 Phase generator sensing
- Power monitoring (kW, kVA, kVAR)
- Remote communications (RS232 & RS485) provides secure and simple off site monitoring. All ports are continuously active
- Configurable inputs/outputs (9/8)
- CAN sensing
- Configurable display languages
- Power save mode
- Integral PLC editor
- Flexible sender inputs
- DSE Configuration Suite PC Software
- Configurable event log (250)
- Load switching, load shedding & dummy load outputs

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<sup>2</sup> The installation manual contains specific instructions related to generator placement in addition to NFPA 37, including the requirement that carbon monoxide detectors be installed and maintained in your business and home.

\* Sound measured at 7M. Sound levels at various points around generator may be higher depending on installation parameters.



ALTERNATOR SPECIFICATIONS

	1 Phase	3 Phase
<b>Manufacturer</b>	Mecc Alte	Mecc Alte
<b>Type</b>	4-Pole, Rotating-Field	4-Pole, Rotating-Field
<b>Exciter Type</b>	Brushless, Auxiliary Winding	Brushless, Auxiliary Winding
<b>Voltage Regulator</b>	Digital, Volts/Hz	Digital, Volts/Hz
<b>Insulation Rating</b>	Class H	Class H
<b>Designed Temperature Rise Limit</b>	125°C	125°C
<b>Bearing (Quantity / Type)</b>	1 / Sealed	1 / Sealed
<b>Coupling</b>	Flexible Disk	Flexible Disk
<b>Amortisseur Windings</b>	Full	Full
<b>Voltage Regulation, NL to FL</b>	+/- 1.0%	+/- 1.0%
<b>One Step Load Acceptance</b>	100% of Rating	100% of Rating
<b>Total Harmonic Distortion</b>	< 4.5%	< 3.5%

- 12 - Wire reconnectable starter.
- Windings are insulated using the latest vacuum pressure impregnation technologies.
- 2/3rds winding pitch to eliminate triplen harmonics with the voltage waveform.
- Fully programmable digital AVR with alarm memory.
- Manufactured according to the following standards: UL1004, NEMA MG1, IEC 60034-1.
- > 300% sustained short circuit current for up to 20 seconds.

SUPPORT EVERY STEP OF THE WAY

NEED HELP? Just call 800-759-2744  
Our technical support team is trained to answer questions on our generators, transfer switches and accessories.

FOR MORE INFORMATION PLEASE CONTACT YOUR LOCAL BRIGGS & STRATTON DEALER.

To find a dealer visit [www.briggsandstratton.com](http://www.briggsandstratton.com)

Disclaimer: Not for Prime Power or use where standby systems are legally required, for serious life safety or health hazards, or where lack of power hampers rescue of fire-fighting operations.

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