

# 150kW<sup>1</sup> Natural Gas Standby Generator



## Briggs & Stratton<sup>®</sup> The Smart Choice

Durable back-up power for businesses and luxury homes. Guard against losses due to power outages with a Briggs & Stratton Standby Generator.



Parts • Labor • Travel  
Limited  
Warranty<sup>3</sup>



### 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 1,800 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>3</sup>

### NFPA-110

- May be used in NFPA-110, Level 2, applications with appropriate accessories<sup>4</sup>

### Generator Set Rating

Model	Voltage	Power Factor	Phase <sup>2</sup>	Hz	Natural Gas			Limited Warranty <sup>3</sup>
					kW / kVA	Amps	Circuit Breaker Amps	Parts, Labor, Travel
080020	120 / 240	1.0	1	60	150 / 150	625	700	3 Year
080021	120 / 208	0.8	3	60	150 / 188	520	600	3 Year
080022	120 / 240	0.8	3	60	150 / 188	451	500	3 Year
080023	277 / 480	0.8	3	60	150 / 188	225	250	3 Year
080024	347 / 600	0.8	3	60	150 / 188	180	225	3 Year

<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).

<sup>2</sup> Single phase units are rated at 1.0 power factor and three phase units are rated 0.8 power factor.

<sup>3</sup> See operator's manual or BRIGGSandSTRATTON.com for complete warranty details.

<sup>4</sup> This unit must be installed, by licensed contractor, in accordance with requirements of NFPA-110 codes and standards as defined in NEC Article 701, in addition to local AHJ requirements. This generator set is not authorized by Briggs & Stratton for use in NFPA-110, Level 1 applications.



## Engine Specifications

Engine	
<b>Manufacturer</b>	PSI
<b>Type</b>	8.8L Industrial Powertrain 4 Cycle, Turbo Charge Air Cooled
<b>Speed (RPM)</b>	1800
<b>Cylinder Arrangement</b>	V8
<b>Displacement (L)</b>	8.8
<b>Bore &amp; Stroke (in / mm)</b>	4.35 x 4.5 / 110.5 x 114.3
<b>Compression Ratio</b>	10.1:1
<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
<b>Limited Warranty<sup>3</sup></b>	3 Years Parts, Labor and Travel
Lubrication System	
<b>Type</b>	Full Pressure
<b>Oil Capacity (qt / L)</b>	8 / 7.6
<b>Oil Filter (Quantity / Type)</b>	1 / Spin-On
Cooling System	
<b>Heat Rejected to Cooling Water at Rated Load (BTU/min / kcal/sec)</b>	5021 / 211
<b>Water Pump Type</b>	Centrifugal
Sound Rating at 7 Meters, Lowest Side	
<b>No Load</b>	77 dB(A) <sup>2</sup>
Air Induction System	
<b>Combustion Air (cfm / m<sup>3</sup>/min)</b>	365 / 10.3

Electrical System	
<b>Ignition System</b>	Individual Ignition Coil
<b>Battery Quantity</b>	1
<b>Battery Voltage (VDC)</b>	12
<b>Battery CCA (A)</b>	925
Battery Charging Alternator	
<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 (cfm / m<sup>3</sup>/min)</b>	1178 / 33.3
<b>Exhaust Temperature at Rated Load (°F / °C)</b>	1350 / 732
<b>Maximum Allowable Back Pressure (in Hg / kPa)</b>	3 / 10.2

Fuel System	
<b>Fuel Type</b>	Natural Gas
<b>Fuel Supply Line Inlet</b>	1-1/2 NPT
<b>Recommended Fuel, Lower Heating Value Minimum (BTU/ft<sup>3</sup> / MJ/m<sup>3</sup>)</b>	904 / 34.3
<b>Fuel Supply Pressure (in H<sub>2</sub>O / mbar)</b>	7-11 / 17-28

Fuel Consumption <sup>4</sup>			
	Full Load	1/2 Load	No Load
<b>BTU/hr</b>	1,970,000	1,105,000	290,000
<b>ft<sup>3</sup>/hr</b>	1,970	1,105	290
<b>m<sup>3</sup>/hr</b>	55.8	31.3	8.2

Engine Output Deratings	
<b>Rated Temperature (°F / °C)</b>	77 / 25
<b>Rated Altitude</b>	1200 ft (366 m) Above Sea Level
<b>Temperature Derate</b>	1.5% for Each 10°F (5.6°C) Above Rated Temperature
<b>Altitude Derate</b>	2.5% for Each 1000 ft (305 m) Above Rated Altitude

<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).

<sup>2</sup> No-load measurement, 7 meters from enclosure alternator end, Sound level measurement at other locations around generator may be different depending upon installation configuration.

<sup>3</sup> See operator's manual or BRIGGSandSTRATTON.com for complete warranty details.

<sup>4</sup> Fuel consumption rates are estimated based on normal operating conditions at 1/2 load. Generator operation may be greatly affected by elevation and the cycling operation of multiple electrical appliances – fuel flow rates may vary depending on these factors.



**Additional Standard Features**

**Sound Enclosure**

- Sound level ratings with no load: 77 dB(A)<sup>2</sup>
- 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 / kg)</b>	5380 / 2440
<b>Overall Dimensions (in / mm)</b>	135 x 52 x 86 / 3429 x 1321 x 2184
<b>Packaged Weight (lbs / kg)</b>	5563 / 2523
<b>Packaged Dimensions (in / mm)</b>	144 x 58 x 92 / 3658 x 1473 x 2337

**Controller Features**

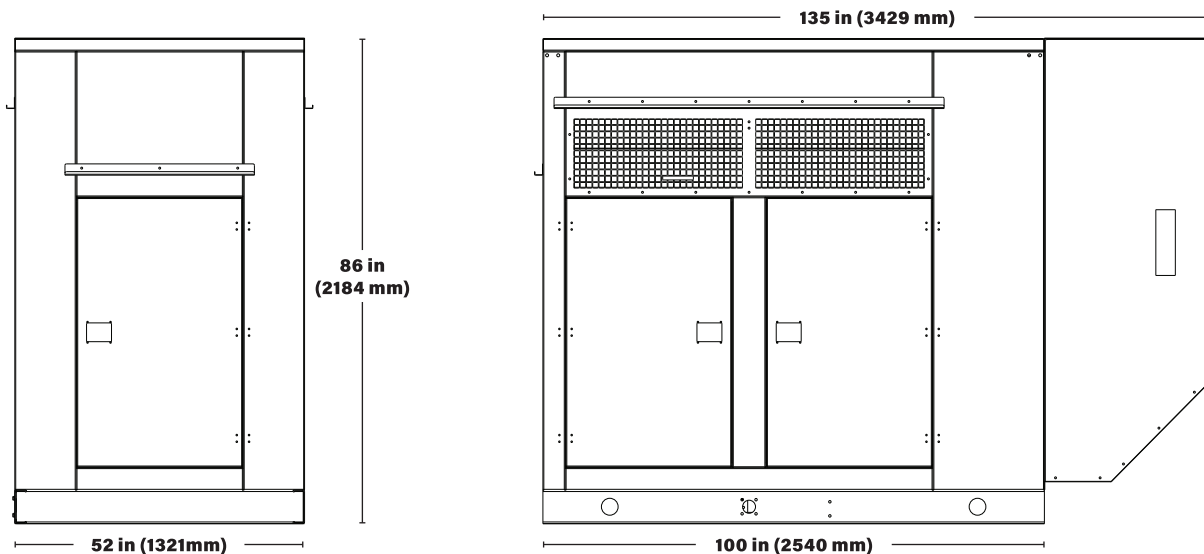
- Heated display option
- True 3 Phase generator sensing
- Power monitoring (kW, kVA, kVAR)
- Remote communication (RS232 and RS485) provides secure and simple off site monitoring. All ports are continuously active
- Configurable inputs/outputs (9/8)
- CANBus speed sensing
- Configurable display languages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

**Available Accessories**

<b>6335</b>	Battery Cable Lockout
<b>6350</b>	Engine Communication Cable
<b>6360</b>	Emergency Stop Switch, NEMA 4X
<b>6361</b>	Emergency Stop Switch, with Cover
<b>6428</b>	Controller Communication Cable, USB-A to USB-B
<b>6463</b>	Battery Charger, DSE 9461-02
<b>6464</b>	Communication Interface, DSE 890-01
<b>6465</b>	Remote Annunciator, DSE 2548-01
<b>6466</b>	Remote Display, DSE 2510-32
<b>6468</b>	Remote Annunciator Kit, DSE 2548-01
<b>6472</b>	AVR Communication Cable

**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
- Operation and installation literature<sup>3</sup>
- Galvanneal enclosure



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<sup>2</sup> No-load measurement, 7 meters from enclosure alternator end, Sound level measurement at other locations around generator may be different depending upon installation configuration,

<sup>3</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 home.



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## Alternator Specifications

	1 Phase	3 Phase	3 Phase	3 Phase	3 Phase
<b>Model</b>	080020	080021	080022	080023	080024
<b>Alternator Model</b>	ECO38-1LN/4	ECO38-1SN/4	ECO38-1SN/4	ECO38-1SN/4	ECP34-3L4
<b>Manufacturer</b>	Mecc Alte	Mecc Alte	Mecc Alte	Mecc Alte	Mecc Alte
<b>Type</b>	Brushless, 4-Lead	Brushless, 12-Lead	Brushless, 12-Lead	Brushless, 12-Lead	Brushless, 12-Lead
<b>Frequency (Hz)</b>	60	60	60	60	60
<b>Phase</b>	1	3	3	3	3
<b>Alternator Configuration</b>	-	Wye	Delta	Wye	Wye
<b>Exciter Type</b>	Auxiliary Winding	Auxiliary Winding	Auxiliary Winding	Auxiliary Winding	Auxiliary Winding
<b>Number of Poles</b>	4	4	4	4	4
<b>Voltage Regulator</b>	Digital, 1-Phase Sensing	Digital, 1-Phase Sensing	Digital, 1-Phase Sensing	Digital, 1-Phase Sensing	Digital, 1-Phase Sensing
<b>Insulation Rating</b>	Class H	Class H	Class H	Class H	Class H
<b>Designed Temperature Rise Limit</b>	125°C	125°C	125°C	125°C	125°C
<b>Bearing (Quantity / Type)</b>	1 / Sealed	1 / Sealed	1 / Sealed	1 / Sealed	1 / Sealed
<b>Coupling</b>	Flexible Disk	Flexible Disk	Flexible Disk	Flexible Disk	Flexible Disk
<b>Amortisseur Windings</b>	Full	Full	Full	Full	Full
<b>Voltage Regulation, NL to FL</b>	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%
<b>One Step Load Acceptance</b>	100% of Rating	100% of Rating	100% of Rating	100% of Rating	100% of Rating
<b>Sustained Short-Circuit Current</b>	300% of Rated Current for 20 Seconds	300% of Rated Current for 20 Seconds	300% of Rated Current for 20 Seconds	300% of Rated Current for 20 Seconds	300% of Rated Current for 20 Seconds
<b>Total Harmonic Distortion (THD), NL to FL</b>	< 4.5	< 3.5	< 3.5	< 3.5	< 3.0
	<ul style="list-style-type: none"> <li>Windings are insulated using the latest vacuum pressure impregnation technologies</li> <li>Superior voltage waveform from a two-thirds pitch stator and skewed main stator</li> </ul>	<ul style="list-style-type: none"> <li>Fully programmable digital AVR with alarm memory</li> <li>Manufactured according to the following standards: UL1004, NEMA MG1, IEC 60034-1</li> </ul>			

## Support every step of the way

Need help? Visit [BRIGGSandSTRATTON.com](http://BRIGGSandSTRATTON.com)

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

Call today for a **FREE**  
in-home estimate!  
**800-743-4115**

<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 (motor and generators).

Briggs & Stratton has a policy of continuous product improvement and reserves the right to modify its specifications at any time and without prior notice.

This standby is Not for Prime Power applications.

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