# 80kW<sup>1</sup> Natural Gas Standby Generator





### **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
- Marinco 6A battery charger
- DSE 4520 MKII controller

# 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.



- · 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**

		Natural Gas				Limited Warranty <sup>3</sup>	
Voltage	Power Factor	Phase <sup>2</sup>	Hz	kW <sup>1</sup> / kVA	Amps	Circuit Breaker Amps	Parts, Labor, Travel
120 / 240	1.0	1	60	80 / 80	333	350	3 Year
120 / 208	0.8	3	60	80 / 100	277	300	3 Year
120 / 240	0.8	3	60	80 / 100	240	300	3 Year
277 / 480	0.8	3	60	80 / 100	120	150	3 Year
347 / 600	0.8	3	60	80 / 100	96	100	3 Year
	120 / 240 120 / 208 120 / 240 277 / 480	Voltage         Factor           120 / 240         1.0           120 / 208         0.8           120 / 240         0.8           277 / 480         0.8	Voltage         Factor         Phase <sup>2</sup> 120 / 240         1.0         1           120 / 208         0.8         3           120 / 240         0.8         3           277 / 480         0.8         3	Voitage         Factor         Phase <sup>2</sup> Hz           120 / 240         1.0         1         60           120 / 208         0.8         3         60           120 / 240         0.8         3         60           120 / 240         0.8         3         60           277 / 480         0.8         3         60	Voltage         Power Factor         Phase <sup>2</sup> Hz         kW <sup>1</sup> / kVA           120 / 240         1.0         1         60         80 / 80           120 / 208         0.8         3         60         80 / 100           120 / 240         0.8         3         60         80 / 100           120 / 240         0.8         3         60         80 / 100           277 / 480         0.8         3         60         80 / 100	Voltage         Power Factor         Phase <sup>2</sup> Hz         kW <sup>1</sup> / kVA         Amps           120 / 240         1.0         1         60         80 / 80         333           120 / 208         0.8         3         60         80 / 100         277           120 / 240         0.8         3         60         80 / 100         240           277 / 480         0.8         3         60         80 / 100         120	Voltage         Power Factor         Phase <sup>2</sup> Hz         kW <sup>1</sup> / kVA         Amps         Circuit Breaker Amps           120 / 240         1.0         1         60         80 / 80         333         350           120 / 208         0.8         3         60         80 / 100         277         300           120 / 240         0.8         3         60         80 / 100         240         300           120 / 240         0.8         3         60         80 / 100         10         10           120 / 240         0.8         3         60         80 / 100         120         100         300           120 / 240         0.8         3         60         80 / 100         120         150

<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>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.

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



#### **Engine Specifications**

Engine	
Manufacturer	PSI
Туре	5.7L Industrial Powertrain 4 Cycle, Turbocharged
Speed (RPM)	1800
Cylinder Arrangement	V8
Displacement (L)	5.7
Bore & Stroke (in / mm)	4.00 x 3.48 / 101.6 x 88.4
Compression Ratio	9.4:1
Governor Type	Electronic
Frequency Regulation Steady State	+/- 0.5%
Frequency Regulation No-load to Full-load	Isochronous
Air Filter Type	Dry
Limited Warranty <sup>3</sup>	3 Years Parts, Labor and Travel
Lubrication System	
Туре	Full Pressure
Oil Capacity (qt / L)	5.0 / 4.7
Oil Filter (Quantity / Type)	1 / Cartridge
Cooling System	
Heat Rejected to Cooling Water at Rated Load (BTU/min / kcal/sec)	3525 / 14.8
Water Pump Type	Centrifugal
Sound Rating at 7 Meters	
No Load	79 dB(A)²
Air Induction System	

Electrical System					
Ignition System	HVS Distributor				
Battery Quantity		1			
Battery Voltage (VDC)		12			
Battery CCA (A)		630			
Battery Charging Alternator					
Ground (Negative/Positive	e)	Negative			
Voltage (VDC)		12			
Amperage (A)		70			
Starter Motor Voltage (VDC)		12			
Exhaust System					
Exhaust Manifold Type		Dry			
Exhaust Flow at Rated Load (cfm / m³/min)	787 / 22				
Exhaust Temperature at Rate	1350 / 732				
Maximum Allowable Back Pre	essure (in Hg / kPa)	3.0 / 10.2			
Fuel System					
Fuel Type		Natural Gas			
Fuel Supply Line Inlet		1-1/4 NPT			
Recommended Fuel, Lower H (BTU/ft³ / MJ/m³)	leating Value Minimum	904 / 34.3			
Fuel Supply Pressure (in H <sub>2</sub> O	/ mbar)	7-11 / 17-28			
Fuel Consumption <sup>4</sup>					
Full Load	1/2 Load	No Load			
<b>BTU/hr</b> 1,259,000	732,000	267,000			
<b>ft³/hr</b> 1,259	732	267			
<b>m³/hr</b> 35.7	20.8	7.6			
Engine Output Deratings					
Rated Temperature (°F / °C)	77 / 25				
Rated Altitude	1200 ft (366 m) Above Sea Le	vel			

1.5% for Every 10°F (5.6°C) Above Rated Temperature

2.5% for Every 1000 ft (305 m) Above Rated Altitude

**Temperature Derate** 

**Altitude Derate** 

<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> Lowest no-load measurement per ISO 3744. 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. 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 Features**

Weights & Dimensions	
Assembled Weight (lbs / kg)	2590 / 1175
Overall Dimensions (in / mm)	110 x 40 x 60 / 2794 x 1016 x 1524
Packaged Weight (lbs / kg)	2760 / 1252
Packaged Dimensions (in / mm)	120 x 43 x 67 / 3048 x 1092 x 1702
Controller Features	
<ul> <li>Heated display option</li> <li>True 3 Phase generator sensing</li> <li>Power monitoring (kW, kVA, kVAR)</li> </ul>	<ul><li>Configurable display languages</li><li>Power save mode</li><li>Flexible sender inputs</li></ul>

- Remote communication (RS232 & RS485) provides secure and simple off site monitoring. All ports are continuously active.
- Configurable inputs/outputs
- CAN sensing

- - DSE Configuration Suite PC Software

Available	Accessories
6335	Battery Cable Lockout
6343	Battery Warmer
6350	Engine Communication Cable
6360	Emergency Stop Switch, NEMA 4X
6361	Emergency Stop Switch, with Cover
6428	Controller Communication Cable, USB-A to USB-B
6463	Battery Charger, DSE 9461-02
6464	Communication Interface, DSE 890-01

#### **Other Features**

- Battery rack and cables
- Electronic, isochronous governor
- Battery included
- · Gas fuel system (includes fuel mixer, electronic secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skidmounted fuel system components)
- Integral vibration isolation
- Operation and installation literature<sup>2</sup>
- Galvanneal enclosure



<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).

<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 home.

	1 Phase	3 Phase	3 Phase	3 Phase	3 Phase
Model	080080	080081	080082	080083	080084
Alternator Model	80BSPP-0A	80TBSPP-2A	80TBSPP-2A	80TBSPP-2A	80TBSPP-1A
Manufacturer	Coliseum	Coliseum	Coliseum	Coliseum	Coliseum
Туре	Brushless, 4-Lead	Brushless, 12-Lead	Brushless, 12-Lead	Brushless, 12-Lead	Brushless, 12-Lead
Frequency (Hz)	60	60	60	60	60
Phase	1	3	3	3	3
Alternator Configuration	-	Wye	Delta	Wye	Wye
Exciter Type	Auxiliary Winding	Auxiliary Winding	Auxiliary Winding	Auxiliary Winding	Auxiliary Winding
Number of Poles	4	4	4	4	4
Voltage Regulator	Analog, 1-Phase Sensing	Analog, 1-Phase Sensing	Analog, 1-Phase Sensing	Analog, 1-Phase Sensing	Analog, 1-Phase Sensin
Insulation Rating	Class H	Class H	Class H	Class H	Class H
Designed Temperature Rise Limit	125°C	125°C	125°C	125°C	125°C
Bearing (Quantity / Type)	1 / Sealed	1 / Sealed	1 / Sealed	1 / Sealed	1 / Sealed
Coupling	Flexible Disk	Flexible Disk	Flexible Disk	Flexible Disk	Flexible Disk
Amortisseur Windings	Full	Full	Full	Full	Full
Voltage Regulation, NL to FL	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%	+/- 1.0%
One Step Load Acceptance	100% of Rating	100% of Rating	100% of Rating	100% of Rating	100% of Rating
Total Harmonic Distortion (THD), NL to FL	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

- Superior voltage waveform from a two-thirds pitch stator

## Support every step of the way

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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

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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 generator is not for prime power applications. BS1180 - 10/18

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