



SYNERGY ELECTRIC INC.

80kW¹ 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
- Maringo 6A Battery Charger
- DSE 7310 MKII Controller
- High performance, durable alternator
- Industry leading 3 year standard limited warranty. 3 years parts, labor and travel²



GENERATOR SET RATINGS

BRIGGS & STRATTON MODEL	ALTERNATOR MODEL	VOLTAGE	PHASE	HZ	NATURAL GAS 125°C STANDBY RATING		STANDARD LIMITED WARRANTY ²
					kW / kVA	AMPS	
080001	ECP34-2S/4	120/208	3	60	80 / 100	277	3 Year
080002	ECP34-2S/4	120/240	3	60	80 / 100	240	
080003	ECP34-2S/4	277/480	3	60	80 / 100	120	
080000	ECP34-2S/4	120/240	1	60	80 / 100	333	

¹ 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.

² Warranty details available at www.briggsandstratton.com

ENGINE SPECIFICATIONS

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

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

COOLING SYSTEM	
Heat Rejected to Cooling Water at Rated Load (kcal/sec / Btu/min)	14.8 / 3525
Water Pump Type	Centrifugal

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

EXHAUST SYSTEM	
Exhaust Manifold Type	Dry
Exhaust Flow at Rated Load (m³/min / cfm)	22 / 787
Exhaust Temperature at Rated Load (°C / °F)	732 / 1350
Maximum Allowable Back Pressure (kPa / in Hg)	10.2 / 3.0

FUEL SYSTEM	
Fuel Type	Natural Gas
Fuel Supply Line Inlet	1 1/4 NPT
Recommended Fuel, Lower Heating Value Minimum (MJ/m³ / Btu/ft³)	34.3 / 904
Fuel Supply Pressure (mbar / in H₂O)	17-28 / 7-11

FUEL CONSUMPTION			
	Full Load	1/2 Load	No Load
BTU/hr	858,000	498,000	210,000
ft³/hr	858	498	210
m³/hr	24.30	14.10	5.95

ENGINE OUTPUT DERATINGS	
Rated Temp (°C / °F)	25 / 77
Rated Altitude (Above Sea Level) ft/m	1200 / 366
Temperature Derate	1.5% for each 5.6°C (10°F) above rated temp
Altitude Derate	2.5% for each 305m (1000ft) above rated altitude

SOUND RATING AT 7 METERS, LOWEST SIDE	
No Load	79 dB(A)

AIR INDUCTION SYSTEM	
Combustion Air (m³/min / cfm)	6.9 / 244

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ADDITIONAL STANDARD FEATURES

AVAILABLE ACCESSORIES

- 6335** Battery Cable Lockout, NFPA 110 Compliant
- 6343** Battery Warmer
- 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
- 6469** Silencer, Super Critical Grade
- 6470** Silencer, Hospital Grade
- 6472** AVR Commutation 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
- Local Emergency Stop Switch
- Oil Drain Extension
- Operation and Installation Literature²
- Steel Sound Enclosure

SOUND ENCLOSURES

- Sound level ratings with no load: 79 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

Assembled Weight (lbs)	2500
Overall Dimensions (in)	120 x 52 x 86
Packaged Weight (lbs)	2670
Packaged Dimensions (in)	127 x 60 x 92

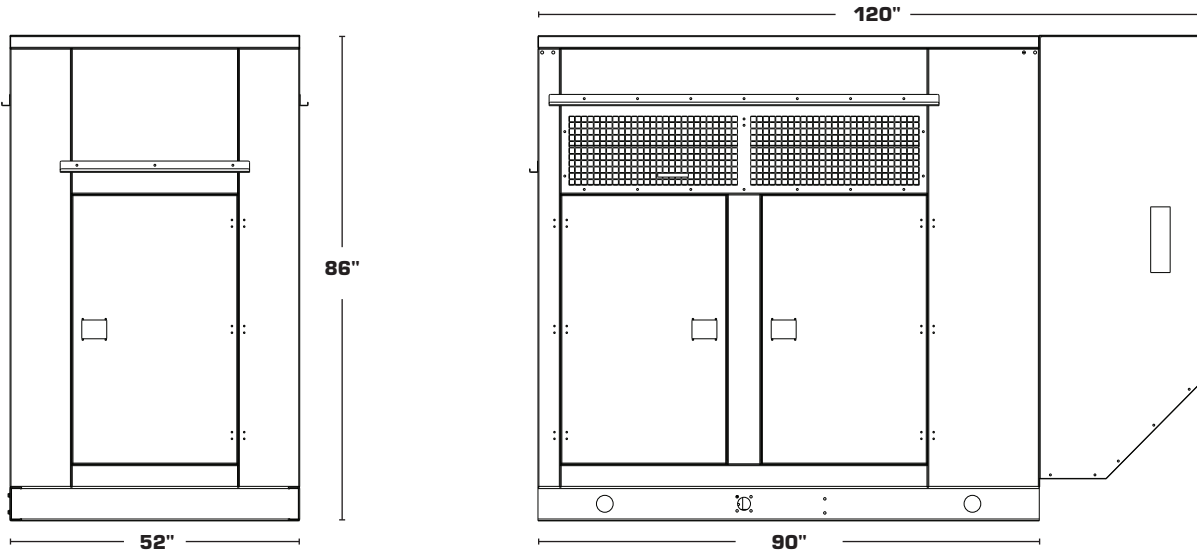
CONTROLLER FEATURES

- 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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² 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
Manufacturer	Mecc Alte	Mecc Alte
Type	4-Pole, Rotating-Field	4-Pole, Rotating-Field
Exciter Type	Brushless, Auxiliary Winding	Brushless, Auxiliary Winding
Voltage Regulator	Digital - Phase Sensing	Digital - Phase Sensing
Insulation Rating	Class H	Class H
Designed Temperature Rise Limit	125°C	125°C
Bearing (Quantity / Type)	1 / Sealed	1 / Sealed
Coupling	Flexible Disk	Flexible Disk
Amortisseur Windings	Full	Full
Voltage Regulation, NL to FL	+/- 1.0%	+/- 1.0%
One Step Load Acceptance	100% of Rating	100% of Rating
Total Harmonic Distortion	< 4.5%	< 3.5%

- 12 - Wire reconnectable alternator.
- 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.



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**CALL TODAY FOR A FREE
ON-SITE ESTIMATE!
978.537.9473**

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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