

150
kW

LIQUID COOLED
Standby Generators



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Standby Generators



SPECIFICATIONS

OVERVIEW				
Brand	Briggs & Stratton®			
Model Number	080020	080021	080022	080023
Rated Countries	US / Canada			
Rated AC Voltage (Volts)	120 / 240	120 / 208	120 / 240	277 / 480
Frequency (Hz)	60			
Generator Breaker (Amps)	700	600	500	250
Operating Ambient Temperature (°C / °F)	-28 - 40 / -20 - 104			
Running Amperage (Amps)	625	520	451	226
Running Watts¹ (NG / LP)	150 / 150	150 / 1875		
Phase	1	3		
Engine				
Engine Brand/Manufacturer	PSI			
Model Type	8.8L Industrial Powertrain, 4-cycle			
Aspiration	Turbo Charge Air Cooled			
Speed (RPM)	1800			
Displacement (L / ci)	8.8 / 535			
Compression Ratio	10.1:1			
Rated Horsepower (gross hp)	261			
Governor Type	Electronic			
Bore & Stroke (mm / in)	110.5 x 114.3 / 4.35 x 4.5			
Number of Cylinders	8			
Cylinder Arrangement	V8			
Start Type	Automatic			
Frequency Regulation Steady State, No Load to Full Load (%)	+/- 0.5			

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Engine	
Frequency Regulation, No Load to Full Load	Isochronous
Air Filter Type	Dry
Low Oil Pressure Sensor	Yes
Low Coolant Sensor	Yes
Engine Block Heater	Yes
Engine - Output Deratings	
Rated Temperature (°C / °F)	25 / 77
Rated Altitude (Above Sea Level) (m / ft)	366 / 1200
Temperature Derate	1.5% for every 5.6°C (10°F) above rated temp
Altitude Derate	2.5% for every 305m (1000ft) above rated altitude
Sound Rating ²	
No Load dB(A)	77
Air Induction System	
Combustion Air (m ³ /min / cfm)	10.3 / 365
Lubrication System	
Type	Full Pressure
Oil Capacity (L / qt)	7.6 / 8
Oil Filter (Quantity / Type)	1 / Cartridge
Cooling System	
Cooling System Type	Radiator, Closed-loop
Coolant Capacity (Engine Only) (L / qt)	13.7 / 14.5
Coolant Capacity (System Total) (L / qt)	49.2 / 52
Heat Rejected to Cooling Water at Rated Load (kcal/sec / BTU/min)	21.1 / 5021
Water Pump Type	Centrifugal
Electrical System	
Ignition System	Individual Ignition Coil
Battery Quantity	1
Battery Voltage (VDC)	12
Battery CCA (Amps)	925
Starter Motor Voltage (VDC)	12
Battery Charging Alternator	
Ground (Negative / Positive)	Negative
Nominal Voltage (VDC)	12
Maximum Amperage (Amps)	70

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Exhaust System

Exhaust Manifold Type	Dry
Exhaust Flow at Rated Load (m³/min / cfm)	33 / 1178
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 1/2" 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 Consumption³

No Load, NG (BTU/hr)	387,000
No Load, NG (ft³/hr)	387
No Load, NG (m³/hr)	11.0
Half Load, NG (BTU/hr)	1,088,000
Half Load, NG (ft³/hr)	1,088
Half Load, NG (m³/hr)	30.9
Full Load, NG (BTU/hr)	1,868,000
Full Load, NG (ft³/hr)	1,868
Full Load, NG (m³/hr)	52.9

Alternator Specifications

Alternator Type	Brushless, 4-Lead	Brushless, 12-Lead
Alternator Manufacturer	MeccAlte	
Alternator Model Number	ECO38-1LN/4	ECO38-1SN/4
Frequency (Hz)	60	
Exciter Type - Primary Alternator	Auxiliary Winding	
Insulation Rating (Class)	H	
Designed Temperature Rise (°C)	125	
Bearing (Quantity / Type)	1 / Sealed	
Coupling	Flexible Disk	
Amortisseur Windings	Full	
Number of Poles	4	
Voltage Regulator	Digital, 1-phase Sensing	
Voltage Regulation, No Load to Full Load (%)	+/- 1.0	

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Alternator Specifications			
One-step Load Acceptance	100% of Rating		
Sustained Short-Circuit Current	300% of Rated Current for 20 Seconds		
Total Harmonic Distortion (THD), No Load to Full Load (%)	< 4.5	< 3.5	
Controls/Instrumentation			
Controller Manufacturer	Deep Sea		
Controller	DSE 7310 MKII		
Charger	Marinco 6 Amp		
Starting	2-wire		
Alternator Frequency	Yes		
Real Time Clock	Yes		
Single & 3-phase Sensing	Yes		
Accumulated Power Monitoring	Yes		
Runtime & Downtime Monitoring	Yes		
Configurable Outputs	Yes		
Configurable Inputs	Yes		
Engine Maintenance Alarms	Yes		
Engine Hour Counter	Yes		
Engine Runtime Scheduler	Yes		
Event Log	Yes		
Web-based Monitoring	Yes		
Controller Features			
Heated Display Option	Yes		
True 3-phase Generator Sensing	Single-phase	Yes	
Power Monitoring (kW, kVA, kVAR)	Yes		
Remote Communications (RS232 & RS485) Capable	Yes		
Configurable Inputs / Outputs	Yes		
CAN Sensing	Yes		
Configurable Display Languages	Yes		
Power Save Mode	Yes		
Integral PLC Editor	Yes		
Flexible Sender Inputs	Yes		
DSE Configuration Suite PC Software	Yes		
Configurable Event Log (250)	Yes		
Load Switching, Load Shedding & Dummy Load Outputs	Yes		

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Other Features	
Alternator Protection	Yes
Battery Rack and Cables	Yes
Battery	Yes
Electronic, Isochronous Governor	Yes
Gas Fuel System	Yes
Integral Vibration Isolation	Yes
Operation and Installation Manuals	Yes
Steel Sound Enclosure	Yes
Accessories	
Battery Charger, 9461-02	6463-00
Remote Annunciator, DSE 2548-01	6465-00
Remote Display, DSE 2510-32	6466-00
Emergency Stop Switch, NEMA 4X	6360-00
Emergency Stop Switch, w/ Cover	6361-00
Battery Warmer	6343-00
Battery Cable Lockout	6335-00
Engine Communication Cable	6350-00
AVR Communication Cable	6472-00
Controller Communication Cable, USB-A to USB-B	6428-00
Remote Annunciator Kit, DSE 2548-01	6468-00
Limited Warranty ⁴	
Warranty: Generator, incl engine (Parts / Labor / Travel) (Years)	3
Warranty: Enclosure, Rust Through (Parts / Labor / Travel) (Years)	2
Certifications	
UL	Yes
cUL	Yes

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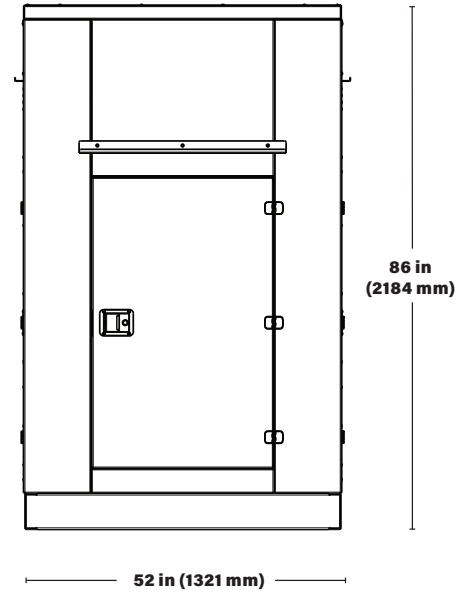
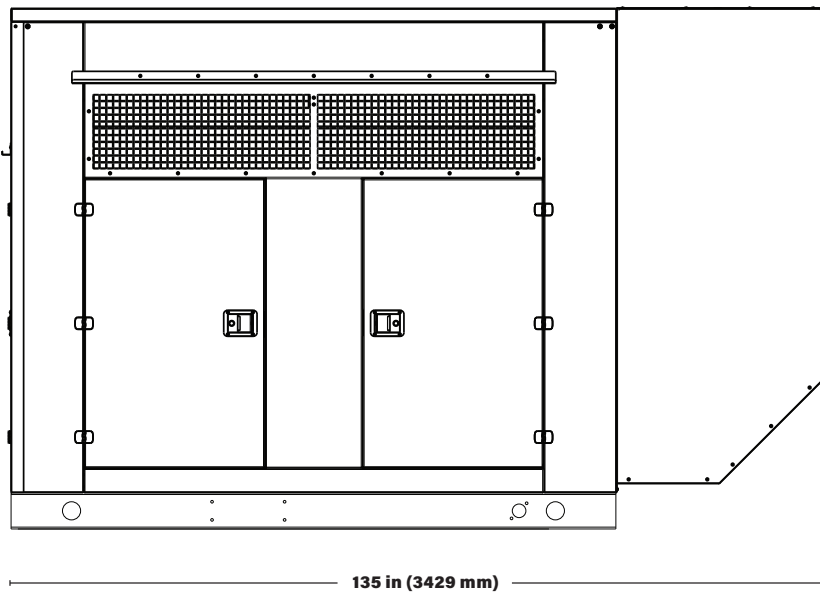
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Weights & Dimensions

Assembled Dimensions (Length x Width x Height) (in / mm)	135 x 52 x 86 / 3429 x 1321 x 2184
Assembled Weight (lbs / kg)	5380 / 2440
Packaged Dimensions (Length x Width x Height) (in / mm)	144 x 58 x 92 / 3658 x 1473 x 2337
Packaged Weight (lbs / kg)	5563 / 2523



¹ This generator is listed 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).

² Per ISO 3744. Sound level measurement at other locations around generator may differ depending on installation, based on lowest microphone at 7m. Normal operation based on average household usage.

³ 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.

⁴ See operator's manual or energy.briggsandstratton.com for complete warranty details.

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.

Please visit energy.briggsandstratton.com for the latest information.

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BRIGGS & STRATTON
POST OFFICE BOX 702
MILWAUKEE, WI 53201 USA

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