

150
kW



YOU.POWERED.

LIQUID COOLED Standby Generators



SPECIFICATIONS

OVERVIEW					
Brand	Briggs & Stratton®				
Model Number	080020	080021	080022	080023	080024
Rated Countries	US / Canada				
Rated AC Voltage (Volts)	120 / 240	120 / 208	120 / 240	277 / 480	347 / 600
Frequency (Hz)	60				
Generator Breaker (Amps)	700	600	500	250	225
Operating Ambient Temperature (°C / °F)	-28 - 40 / -20 - 104				
Running Amperage (Amps)	625	520	451	226	180
Running Watts¹ (NG) (kW / kVA)	150 / 150	150 / 187.5			
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	Isynchronous
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 (m ³ /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/m ³ / BTU/ft ³)	34.3 / 904		
Fuel Supply Pressure (mbar / in H ₂ O)	17-28 / 7-11		
Fuel Consumption ³			
No Load, NG (BTU/hr)	387,000		
No Load, NG (ft ³ /hr)	387		
No Load, NG (m ³ /hr)	11.0		
Half Load, NG (BTU/hr)	1,088,000		
Half Load, NG (ft ³ /hr)	1,088		
Half Load, NG (m ³ /hr)	30.9		
Full Load, NG (BTU/hr)	1,868,000		
Full Load, NG (ft ³ /hr)	1,868		
Full Load, NG (m ³ /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	ECP34-3L4
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
Controller Remote Communication Module, DSE 890-01	6464-00
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 Warranty⁴

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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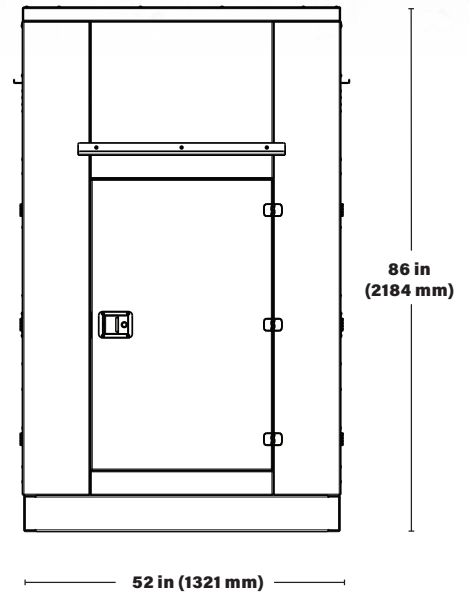
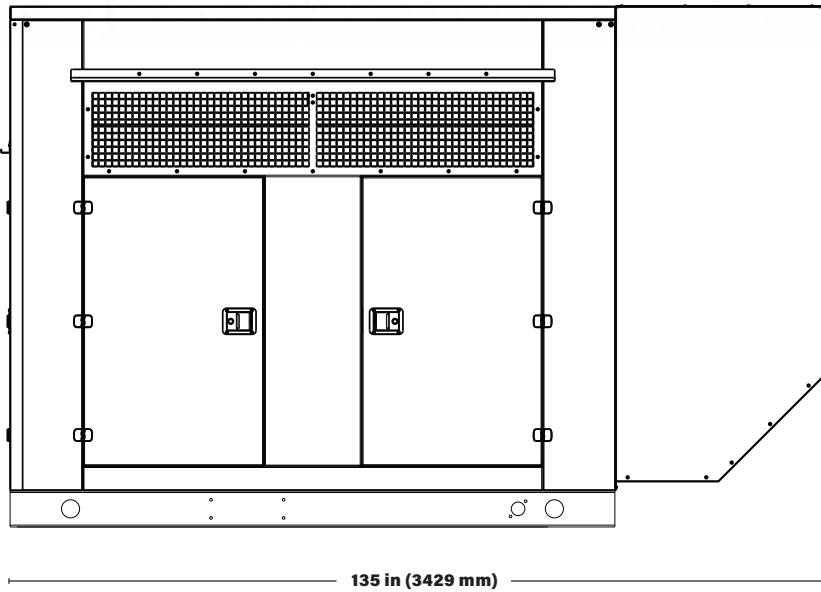
080022

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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 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 BRIGGSandSTRATTON.com for the latest information.

BS1381 - 4/22

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