

# SD-140

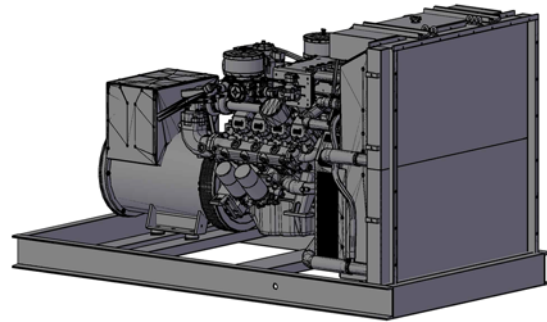


## 8.1L NGE Powered Generator— Natural Gas

SD Series 140kW



EPA Emissions Compliant



Sample unit shown w/o exhaust silencer, control and fuel inlet

### Standard Features

- NGE Engine Model D8.1L CAC
- AC, Single Bearing direct coupled Alternator with Class 'H' insulation, Sized for 130°C Temperature Rise.
- Control Panel with Auto-Start -Stop Basler DGC-2020
- Engine and Alternator mounted to steel base on vibration isolators.
- Radiator sized for 120°F ambient clearance
- Thermostatically controlled Jacket Water Heater
- High Coolant Temp., Low Oil pressure safety shutdowns
- Dry Type Air Cleaner
- 24-VDC Starter, Engine mounted Battery Charging Alternator, Battery Cables and Rack along with Grounding Strap
- Battery Charger—10 Amp
- Complete set owner/operator, engine, alternator and accessory manuals



### Generator Ratings—1800 RPM Natural Gas

Voltage	Ph	Hz	Standby Output kW (kVA) Natural Gas	Standby Max Amp Output	Wires
120/208	3	60	140 (175)	485	12
120/240	3	60	140 (175)	420	12
277/480	3	60	140 (175)	210	12

### Optional Equipment

#### Deluxe Enclosure—Features

- Weather Protective Enclosure constructed of 0.125" marine grade aluminum
- Sound attenuating insulation
- Weather proof and high-wind resistant construction
- Powder coat finished exterior and interior (standard grey)
- Removable, hinged doors (pictured) with keyed alike locks
- Interior mounted, residential grade exhaust silencer
- Battery Charger—10 Amp
- 120V Receptacle for battery charger and / or coolant heater
- Vertical radiator and exhaust discharge
- Oil & coolant drain lines with brass ball valves



Sample Deluxe model shown

#### Deluxe Enclosure—Options

- Custom color options
- Exterior mounted Emergency stop button with clear cover
- Exterior accessible GFCI outlet (s) with weather protective cover

#### Additional Gen-set Options

- Mainline circuit breaker (s)
- Permanent Magnet Generators (PMG) with Voltage Regulator upgrade
- Low coolant level switch
- Starting batteries
- 17 Light remote enunciator panel
- 120V Receptacle for battery charger and / or coolant heater
- Transfer switches
- UL 2200 Certification (Ask your representative for availability)

\*Stand by ratings are applicable for the duration of any power outage. No overload is available at these ratings. Prime ratings are continuous per BS 5514, DIN 6271, ISO3046 & IEC 34-1. Overload capacity on prime-power ratings is 10% for one hour in each twelve hours of operation. All single phase ratings are based on a 1.0 power factor, three (3) phase ratings based on a 0.8 power factor. Ratings are established based on 85°F (29°C) and an elevation of 1,000 feet (305 meters). Please consult your Stateline representative for information concerning derates for temperature, altitude & humidity.

Manufactured by:

Stateline Power Corp • 650 Pine Street • Greenville, OH 45331 • 800-524-8344 [www.statelinepower.com](http://www.statelinepower.com)

# SD-140 Technical Data



## Engine Specifications

**Model: NGE 8.1L CAC**

*Direct injected, In-line 4 cycle, 6 Cylinder*

*Turbocharged & Air cooled, Dry type Air Cleaner*

Max. Power.....178 kWm (237 Hp) @ 1800 RPM

Cubic Capacity.....8.071 L

Bore & Stroke.....4.37" x 5.47" (111mm x 139mm)

Compression Ratio.....10.5:1

Governor type.....Electronic

Frequency Regulation.....Isochronous, Steady-State ± 0.5%

Oil capacity Total system.....25.0 Qts. (23.7 liters)

Coolant capacity w/ Radiator.....22 Gal. (100 liters)

### Installation Data

*Air requirement:*

Air Flow for Rad CFM (m<sup>3</sup>/min.).....15,100 (427.6)

*Exhaust System:*

Recommended Outlet size.....3" (76.2mm)

Gas Temp. (stack).....1382°F / 750°C

Gas Volume @ stack Temp. CFM (m<sup>3</sup>/min.).....1129 (31.9)

Max. allowable back pressure.....3.0 in. H<sub>2</sub>O / 10.2kPa

### Fuel Consumption:

Load Percentage (%)	50	75	100
Cu ft./h	882	1,225	1,569

*NG 1000 Btu/ft<sup>3</sup>*

Fuel Supply Line inlet.....1-1/4" NPT

Pressure.....7-11 in. H<sub>2</sub>O

### General:

*Electronic Ignited, Breaker less*

*24V Starter, 70 Amps Alternator DC output Electric System*

Recommended Battery.....24V, 950 CCA

Recommended Oil: SAE 15W-40 (.25-.5% by wt.), API CD/CF or higher

## Alternator Specifications

Type	Pole	Voltage Regulation	Class Insulation	Rated Temp. Standby	Coupling	Load Acceptance
Brushless	4 Pole Rotating Field	+/- 1%, Volts/Hz, Electronic, EMI filtered	'H' to NEMA MG-1 -1.66	130°C Rise / 40°C Ambient	SAE Adapter, Flexible Disc, Direct.	One Step, 100% per NFPA 110
Features	Self ventilated drip-proof construction. Superior voltage waveform achieved by a 2/3 pitch and skewed rotor. Vacuum-impregnated windings with fungus-resistant epoxy for dependability and long-life. Compliance with NEMA, IEEE and ANSI standards for temp. rise. Sustained short-circuit capability enabling down-line circuit breakers to trip without collapsing the generator field. No load to full-load regulation of +/- 2%.					

## Control Panel Specifications

### DGC2020

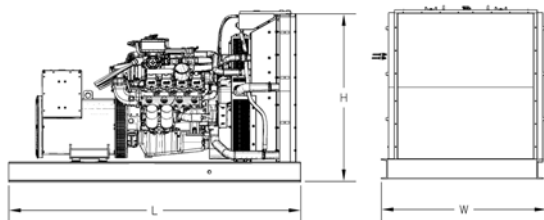
- Microprocessor Based, Navigation key with large LCD display
- Event Recording
- Transfer Switch Control (main failures)
- SAE J1939 CANBUS Communication
- Multilingual Capability
- Suitable for Rental application
- Remote Communication capability

### Operational features

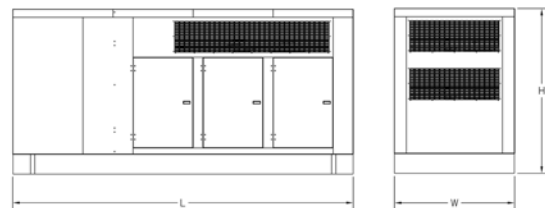
- Alternator Protection: under/over voltage, under/over frequency and Over Load.
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Sender Unit failure, Fuel Leak / Fuel sender Failure, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms
- Operating Power: Nominal 12-24 Vdc

- Consumption 14.2W run Mode
- Metering ( ample range ): Volts, Current, Hz, Watts, VA, Pf Oil Pressure, Coolant Temperature, RPM, DC Volts, Fuel Level, Engine running time
- Engine Control with Timers
- External remote start input (on or off load)
- 16 programmable contact inputs
- 4 Contact outputs

## Dimensions & Weight



**Open:** (inches) 120L x60W x72H Weight (lbs.) 7200



**Deluxe:** (inches) 180L x66W x82H Weight (lbs.) 8700