

SD-400



21.9L NGE Powered Generator— Natural Gas

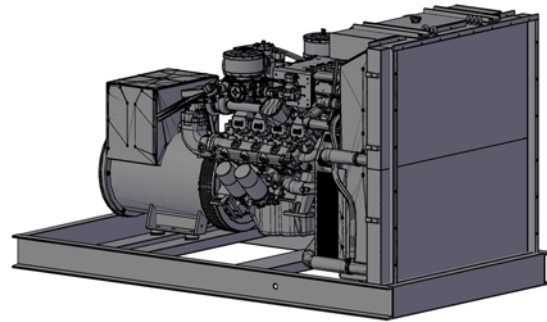
SD Series 395kW



EPA Emissions Compliant

Standard Features

- NGE Engine Model D219L
- 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
- 12-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



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

Generator Ratings—1800 RPM Natural Gas

Voltage	Ph	Hz	Standby Output kW (kVA) Natural Gas	Standby Max Amp Output	Wires
120/208	3	60	395 (494)	1368	12
120/240	3	60	395 (494)	1186	12
277/480	3	60	395 (494)	593	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
- Gen-set operating sound level range at 70-78 dba



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

SD-400 Technical Data



Engine Specifications

Model: NGE 14.6L CAC

Direct injected, V-type 4 cycle, 12 Cylinder
Turbocharged & Air cooled, Dry type Air Cleaner

Max. Power.....455 kWm (605 Hp) @ 1800 RPM
Cubic Capacity.....21.93 L
Bore & Stroke.....5.04" x 5.59" (128mm x 142mm)
Compression Ratio.....10.5:1
Governor type.....Electronic
Frequency Regulation.....Isochronous, Steady-State ± 0.5%

Oil capacity Total system.....42.25 Qts. (40.0 liters)
Coolant capacity w/ Radiator.....64 Gal. (291 liters)

Installation Data

Air requirement:

Air Flow for Rad CFM (m³/min.).....40,000 (1142.6)

Exhaust System:

Recommended Outlet size.....6" (152.4mm)

Gas Temp. (stack).....1382°F / 750°C
Gas Volume @ stack Temp. CFM (m³/min.).....2995 (84.8)
Max. allowable back pressure.....3.0 in. H₂O / 10.2kPa

Fuel Consumption:

Load Percentage (%)	50	75	100
Cu ft./h	2,255	3,137	4,118

NG 1000 Btu/ft³

Fuel Supply Line inlet.....2 x 1-1/4" NPT
Pressure.....7-11 in. H₂O

General:

Electronic Ignited, Breaker less

24V Starter, 70 Amps Alternator DC output Electric System

Recommended Battery.....24V, 1000 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

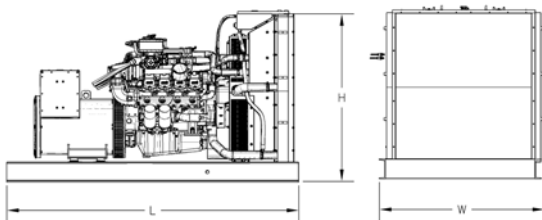
- Microprocessor Based, Navigation key with large LCD display
- Event Recording
- Transfer Switch Control (main failures)
- SAE J1939 CANBUS Communication
- Multilingual Capability
- Suitable for Rental application
- Remote Communication capability

Operational features

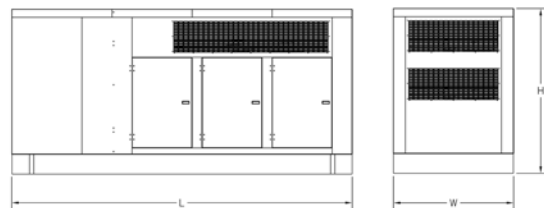
- Alternator Protection: under/over voltage, under/over frequency and Over Load.
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Sender Unit failure, Fuel Leak / Fuel sender Failure, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms
- 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) 144L x86W x82H Weight (lbs.) 7800



Deluxe: (inches) 204L x86W x106H Weight (lbs.) 9300