

SZ-100



8.8L Gaseous Generator— Natural Gas/LPG

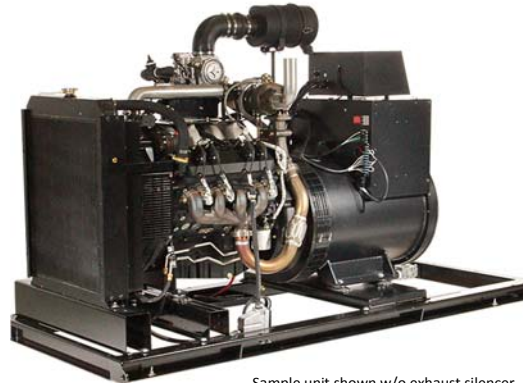
SZ Series 100kW



EPA Emissions Compliant

Standard Features

- Zenith Engine Model **ZPP NA 690**
- 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—6 Amp
- Complete set owner/operator, engine, alternator and accessory manuals



Sample unit shown w/o exhaust silencer

Generator Ratings—1800 RPM Natural Gas/LPG

Voltage	Ph	Hz	Standby Output kW (kVA) LPG	Standby Output kW (kVA) Natural Gas	Standby Max Amp Output	Wires
120/240	1	60	80 (80)	100 (100)	416	12
120/208	3	60	100 (125)	100 (125)	347	12
120/240	3	60	100 (125)	100 (125)	301	12
277/480	3	60	100 (125)	100 (125)	151	12

Optional Equipment

Deluxe Enclosure—Features

- Weather Protective Enclosure constructed of 0.125" marine grade aluminum
- Sound attenuating insulation
- Weather proof and wind resistant up to 150mph
- Powder coat finished exterior and interior (standard grey)
- Removable, hinged doors (pictured) with keyed alike locks
- Interior mounted, residential grade exhaust silencer
- Battery Charger—6 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

SZ-100 Technical Data



Engine Specifications

Model: **ZPP NA 690**

Direct injected, In-line 6 Cylinder, Naturally Aspirated, Dry type Air Cleaner

Max. Power.....108 kWm (145 bhp) @ 1800 RPM
 Cubic Capacity.....537 in³ / 8.8 L
 Bore & Stroke.....4.48" x 5.66" (114.00 mm x 144.00mm)
 Compression Ratio.....10.5:1
 Governor type.....Electronic
 Frequency Regulation.....Isochronous, Steady-State ± 0.5%
 Oil capacity Total system.....9 Qts. (8.8 liters)
 Coolant capacity w/ Radiator.....4.38 Gal. (16.6 liters)

Installation Data

Air requirement:

Air Flow for Rad CFM (m³/min.).....12,112 (343)

Exhaust System:

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

Gas Temp. (stack).....1075°F / 579°C
 Gas Volume @ stack Temp. CFM (m³/min.).....330 (9.3)
 Max. allowable back pressure.....40.7 in. H₂O / 10.1kPa

Fuel Consumption:

Load Percentage (%)	NG 1000 Btu/ft ³			LPG 2500 Btu/ft ³		
	50	75	100	50	75	100
Cu ft./h	1078	1234	1591	429	487	628

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

General:

Electronic Ignited, Breaker less

12V Starter, 70 Amps Alternator DC output Electric System

Recommended Battery.....12V, 950 CCA

Recommended Oil.....SAE 5W-30 for 0°F and above

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

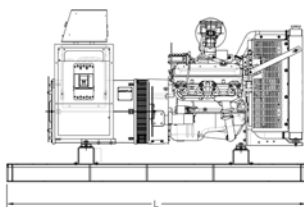
- Microprocessor Based, Navigation key with large LCD display
- Event Recording
- Transfer Switch Control (main failures)
- SAE J1939 CANBUS Communication
- Multilingual Capability
- Suitable for Rental application
- Remote Communication capability

Operational features

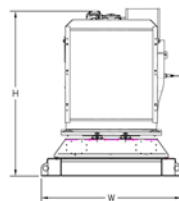
- Alternator Protection: under/over voltage, under/over frequency and Over Load
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Sender Unit failure, Fuel Leak / Fuel sender Failure, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms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

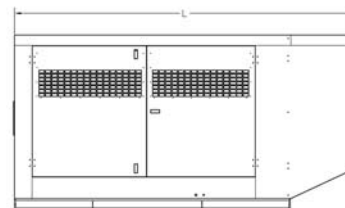
Dimensions & Weight



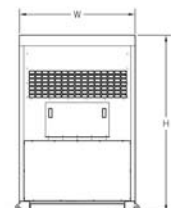
Open: (inches) 102L x44W x48H



Weight (lbs.) 2830



Deluxe: (inches) 131.5L x44W x67H



Weight (lbs.) 3250