

SZ-45



4.4L Gaseous Generator— Natural Gas/LPG

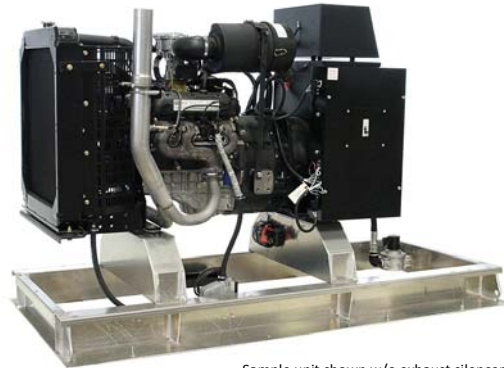
SZ Series 45kW



EPA Emissions Compliant

Standard Features

- Zenith Engine Model **ZPP NA 644**
- 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 aluminum 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	45 (45)	40 (40)	187	12
120/208	3	60	45 (56)	40 (50)	156	12
120/240	3	60	45 (56)	40 (50)	135	12
277/480	3	60	45 (56)	40 (50)	66	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 (pictured)
- 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
- Powder coated steel sub base
- 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-45 Technical Data



Engine Specifications

Model: ZPP NA 644

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

Max. Power.....45 kWm (61 bhp) @ 1800 RPM
Cubic Capacity.....263 in³ / 4.3 L
Bore & Stroke.....4.00" x 3.48" (101.6mm x 88.39mm)
Compression Ratio.....9.1:1
Governor type.....Electronic
Frequency Regulation.....Isochronous, Steady-State ± 0.5%
Oil capacity Total system.....5 Qts. (4.7 liters)
Coolant capacity w/ Radiator.....4.2 Gal. (16.58 liters)

Installation Data

Air requirement:

Air Flow for Rad CFM (m³/min.).....5157 (146)

Exhaust System:

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

Gas Temp. (stack).....1350°F / 732°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	360	486	584	147	202	246

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

General:

Electronic Ignited, Breaker less
12V Starter, 70 Amps Alternator DC output Electric System
Recommended Battery.....12V, 780 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

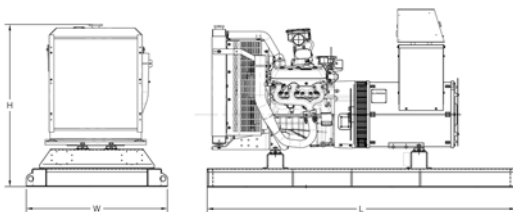
- Microprocessor Based, Navigation key with large LCD display
- Event Recording
- Transfer Switch Control (main failures)
- SAE J1939 CANBUS Communication
- Multilingual Capability
- Suitable for Rental application
- Remote Communication capability

Operational features

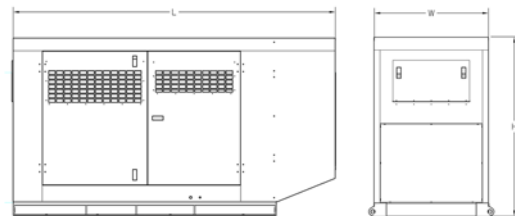
- Alternator Protection: under/over voltage, under/over frequency and Over Load
- Engine Protection: Low oil pressure, High coolant temperature, Over speed & over crank, Sender Unit failure, Fuel Leak / Fuel sender Failure, Battery Charger Failure
- All protections are programmable as Alarms or Pre-alarms
- 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) 84L x36W x48H Weight (lbs.) 1568



Deluxe: (inches) 103L x36W x57H Weight (lbs.) 1990